



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

John E. Skvarla, III
Secretary

November 20, 2014

MEMORANDUM

TO: Environmental Review Commission
The Honorable Brent Jackson, Chair
The Honorable Ruth Samuelson, Co-Chair
The Honorable Mike Hager, Co-Chair

FROM: Neal Robbins, Office of Legislative Affairs

SUBJECT: Annual Report of the State Water Infrastructure Authority

Pursuant to § 159G-72, the State Water Infrastructure Authority shall submit a report no later than November 1 of each year on its activity and findings, including any recommendations or legislative proposals, to the Senate Appropriations Committee on Natural and Economic Resources, the House of Representatives Appropriations Subcommittee on Natural and Economic Resources, and the Fiscal Research Division of the Legislative Services Commission.

On behalf of the Authority, please find attached a courtesy copy to the Environmental Review Commission.

The Authority would be pleased to respond to questions or provide additional information as may be requested by the General Assembly.

The State Water Infrastructure Authority thanks the North Carolina General Assembly for its support throughout 2014 and looks forward to working to continue to streamline and unify the water infrastructure funding available to the residents of North Carolina.

If you have any questions or need additional information, please contact me by phone at 919-707-8618 or via e-mail at neal.robbsins@ncdenr.gov.

cc: Mitch Gillespie, Assistant Secretary for Environment, NCDENR
Kim H. Colson, Director, Division of Water Infrastructure

NORTH CAROLINA STATE WATER INFRASTRUCTURE AUTHORITY

November 1, 2014 Annual Report to:

- **Senate Appropriations Committee on
Natural and Economic Resources**
 - **House of Representatives
Appropriations Subcommittee on
Natural and Economic Resources**
 - **Fiscal Research Division of the
Legislative Services Commission**
-

Prepared by
The North Carolina State Water Infrastructure Authority
November 1, 2014

The State Water Infrastructure Authority gratefully acknowledges the support provided by the staff of the NCDENR Division of Water Infrastructure, in conducting the Authority's business and in preparing this report.

NORTH CAROLINA STATE WATER INFRASTRUCTURE AUTHORITY

November 1, 2014 Annual Report

The nine-member State Water Infrastructure Authority (Authority) was created by the North Carolina General Assembly in 2013 to assess and make recommendations about the state's water and wastewater infrastructure needs and the funding programs available to the state's local governments. Session Law 2013-360 established the Authority and also the Division of Water Infrastructure (Division) within the North Carolina Department of Environment and Natural Resources, thereby consolidating the major water-related infrastructure funding programs within one division and one department. A list of the Authority members appointed in 2013-2014 is provided in Appendix A.

The purpose of this report is to provide the legislative bodies with an overview of the Authority's activities to date, to summarize concerns and issues discussed by the Authority regarding the state of North Carolina's water infrastructure and available funding, and to provide recommendations to address some of those issues.

State Water Infrastructure Authority Activities

The Authority began work in January 2014 and has made rapid progress toward meeting the many objectives defined in North Carolina General Statute 159G (NCGS 159G – the enabling legislation) as the Authority's powers and duties:

1. Review recommendations for grants and loans submitted to it by the Division of Water Infrastructure
 - Determine the rank of applications
 - Select the applications that are eligible to receive grants and loans
2. Establish priorities for making loans and grants, consistent with federal law
3. Review the criteria for making loans and grants and make recommendations, if any, for additional criteria or changes to the criteria
4. Develop guidelines for making loans and grants
5. Develop a master plan to meet the State's water infrastructure needs
6. Assess and make recommendations on the role of the State in the development and funding of wastewater, drinking water, and stormwater infrastructure
7. Analyze the adequacy of projected funding to meet projected needs over the next five years
8. Make recommendations on ways to maximize the use of current funding resources (federal, State, local) and ensure that funds are used in a coordinated manner
9. Review the application of management practices in wastewater, drinking water, and stormwater utilities and to determine the best practices
10. Assess the role of public-private partnerships in the future provision of utility service
11. Assess the application of the river basin approach to utility planning and management
12. Assess the need for a "troubled system" protocol

The twelve duties can be grouped into four primary areas. Each focus area is described below along with the Authority's activities in each area:

Focus Area 1 (Authority Duties 1 through 4) – Distribution of loan and grant funds. The first four objectives focus on the distribution of loan and grant funds from the five funding programs administered by the Division: the federal-state Clean Water State Revolving Fund (CWSRF loan program), the federal-state Drinking Water State Revolving Fund (DWSRF loan program), the federal Community Development Block Grant-Infrastructure (CDBG-I) grant program, the State Wastewater Reserve program (grants and loans) and the State Drinking Water Reserve program (grants and loans).

- **Authority activities:** The Authority learned about the eligibility requirements for each funding program, both for eligibility of applicants and for types of projects, and the project priority criteria used by the Division to score and rank projects for funding. The Authority set as its top priority maintaining the flow of loan and grant funds to applicants in order to initiate projects to protect public health and the environment. The Authority awarded a total of \$225.8 million in loan and grant funds for projects from the fall 2013 application round and the spring 2014 application rounds; the requests totaled nearly \$720 million. In addition, the application process and priority criteria for all funding programs have been streamlined and unified to the extent possible at this time (additional efforts to be reviewed), given that each program has its own unique requirements.

Focus Area 2 (Authority Duties 5 through 8) – Define water infrastructure needs and funding. The goal of these objectives is to define the statewide water and wastewater infrastructure needs and examine funding sources and their adequacy to meet the identified needs.

- **Authority activities:** The Authority learned about several recent infrastructure master planning reports that may serve as background for developing an updated statewide needs assessment. The plans include the EPA's infrastructure needs survey reports for clean water and drinking water; the American Society of Civil Engineers 2013 Infrastructure Report Card; and the Water 2030 Initiative. In addition, the Authority received a presentation by the Environmental Finance Center at the UNC School of Government – "An Overview of Financial Management of NC's Drinking Water & Wastewater Utilities" which focused on utility debt, rates, and financial performance, which provided insight into the issues to be examined regarding the state's role in funding infrastructure and the adequacy of projected funding to meet projected needs.

Focus Area 3 (Authority Duties 9 through 11) – Assess emerging practices in utility planning and funding. These objectives concentrate on investigating methods of utility planning, management and funding that have not been traditionally utilized or applied extensively in North Carolina. Specific areas to be assessed include best management practices, alternative methods of infrastructure funding, and watershed planning approaches.

- **Authority activities:** The Authority received comprehensive presentations about infrastructure asset management and public-private partnerships for water and wastewater services in North Carolina and around the country in "Management Practices in Wastewater, Drinking Water, and Stormwater Utilities – An Overview" and "The Role of Public-Private Partnerships (PPP) in the Future Provision of Utility Service." The presentations provided introductions to these emerging techniques and will serve as a basis for statutory change suggestions and further Authority investigation.

Focus Area 4 (Authority Duty 12) – Assess need for "troubled systems" protocol. This objective focuses on the reasons that some utilities may struggle to remain viable and to determine the need for and types of activities to assist such systems.

- **Authority activities:** The Local Government Commission (LGC) presented to the Authority on the "LGC Oversight of Municipal Water and Sewer Enterprise Operations" to review some of the reasons that utilities may be viewed as "troubled" such as lack of audited financials, low fund or cash

balances, over-expenditures, unbalanced budgets and internal control issues. The presentation by the Environmental Finance Center at the UNC School of Government described above addressed some of these issues as well. This information has helped the Authority understand the issues that such systems face and provided the foundation to consider the potential role of the state in assisting troubled systems. Further, the Authority recognizes that potential non-viability may result from a number of different circumstances that may be unique to each community and require approaches tailored to individual community's needs.

Issues Identified by the Authority and Recommendations

Through the Authority's work in awarding project funding and learning about the other focus areas, a number of issues and concerns regarding water and wastewater infrastructure funding in North Carolina have been identified. The key issues are listed below:

1. A significant gap exists between infrastructure needs and available funding via either grants or loans
2. The State Reserve program funds may not all be reaching the most economically distressed communities
3. Incentives should be provided to encourage water and wastewater utilities to become more proactive in the management and financing of their systems
4. The Division's application review priorities should be consistent with the Authority's review priorities

The following sections describe the issues, why they are of concern, and the Authority's recommendations for potential solutions.

1. The Significant Funding Gap

It is estimated that the water and wastewater infrastructure needs in North Carolina total over \$16 billion based on the EPA's needs survey. The Authority's development of the statewide water and wastewater infrastructure master plan will help update these numbers. In the meantime, it is clear that this magnitude of funding is not currently available through either federal or state infrastructure funding programs. As a result many communities, especially larger ones, seek financing through more costly private markets.

The amount of funding requested in the applications submitted to the Division for loan and grant funds during the fall 2013 and the spring 2014 funding rounds far exceeded the amount of funds available. This trend occurred in each of the five funding programs. Figures 1 and 2 present the number of applications received and funded, and the dollar amounts requested and funded, respectively. Only a small percentage of the total requests were able to be funded across all programs.

The General Assembly provides all of the funding for the State Wastewater Reserve and State Drinking Water Reserve programs and targets the funds to projects in rural, economically distressed communities. The \$3.5 million in grant funding provided by the legislature for fiscal year 2013-2014 and the \$5 million provided for fiscal year 2014-2015 (and now a recurring \$5 million per year) is the first new money allocated to these programs in well over a decade.

Issue: Requests for funding will likely continue to outpace the availability of both loan and grant funds across all programs

Why an Issue: The ability of local governments to provide adequate water and wastewater services and to accommodate economic growth is crucial to the state's economy

Figure 1. Number of Applications Received and Funded – Fall 2013 and Spring 2014 Application Rounds
(Total number applications received: 328; total number applications funded: 95; see Appendix B for data)

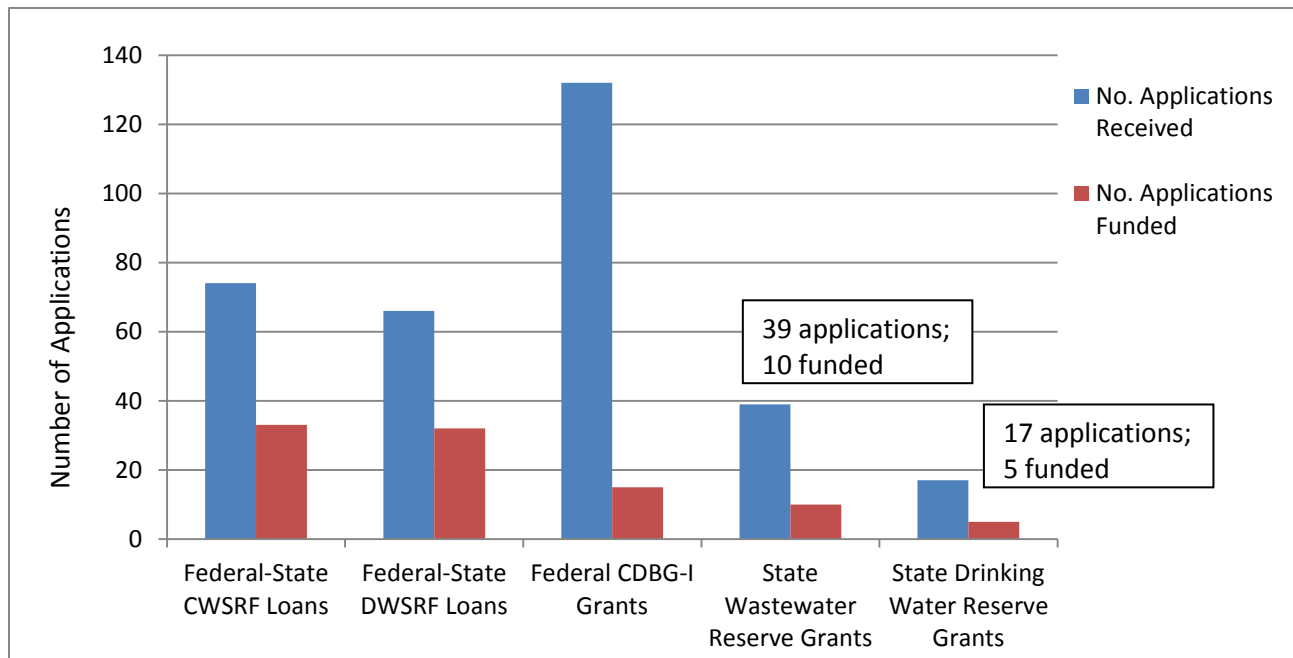
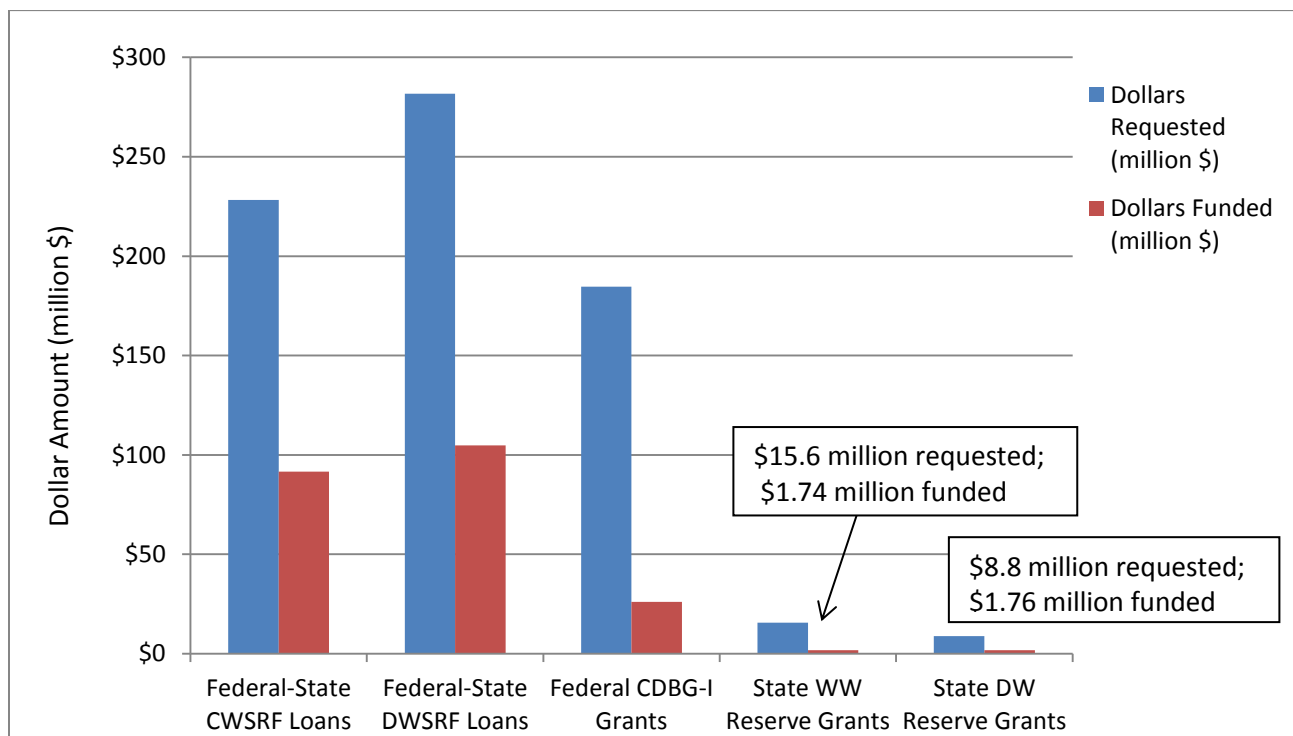


Figure 2. Dollar Amount Requested in Applications and Funded (millions of dollars) – Fall 2013 and Spring 2014 Application Rounds
(Total amount requested: \$719.1 million; total amount funded: \$225.8 million; see Appendix B for data)



2. Ensure that State Reserve Program Funds are Targeted to the Most Economically Distressed Communities

The legislature requires that the funds from the State Wastewater Reserve and State Drinking Water Reserve programs be targeted to projects in rural, economically distressed communities (SL 2013-360). Through the Authority's review of applications for these funds, concerns have been identified that perhaps these funds may not all be reaching the most economically distressed communities. The key issue appears to be the way in which "rural, economically distressed communities" are defined in the legislation. Currently and in the past, "economic distress" has been quantified in only two ways:

- The economic tier of the county in which the applicant is located, and
- The percentage of median household income spent on water and/or sewer service.

The State Reserve programs provide for four specific types of grants that can be awarded as listed below. The high unit cost (HUC) grants are provided for the construction of critical infrastructure projects. The technical assistance grants (TAG) are designated for only two purposes, both of which involve a study or analysis related to non-compliance.

- Wastewater High Unit Cost Grants (WW-HUC)
- Wastewater Technical Assistance Grants (WW-TAG)
- Drinking Water High Unit Cost Grants (DW-HUC)
- Drinking Water Technical Assistance Grants (DW-TAG)

Under the current statutes, an applicant is eligible for a HUC grant only if the applicant's residential annual average combined water and sewer bill exceeds 1.5% of the median household income (MHI) of the community. If only water or only sewer service is provided, then the annual average water or sewer bill must exceed 0.75% of the MHI. The water and sewer rates are set by the applicant and the MHI values are established by the American Community Survey (ACS) which has replaced census data on income.

In the 2013 Budget Bill, the legislature further narrowed the eligibility for the \$3.5 million and the \$5 million to applicants located in Tier 1 and Tier 2 counties only, in an effort to direct funding to the rural, most economically distressed communities.

The Authority has two primary concerns about establishing economic distress based on only these factors.

County Economic Tiers

First, the economic tier of a county may not accurately reflect the economic conditions within individual communities in a county. The NC Department of Commerce annually ranks the state's 100 counties based on economic well-being and assigns each a Tier designation. The 40 most distressed counties are designated as Tier 1, the next 40 as Tier 2 and the 20 least distressed as Tier 3.

If eligibility were limited solely to Tier 1 and 2 counties, the needs of an individual community within an overall "least distressed" county could be overlooked and the community would be ineligible for grant

Issue: Economic distress is quantified in only two ways

- Economic tier of the county
- Percentage of MHI spent on water/sewer

Why an Issue: These factors may not accurately represent the economic conditions within individual communities

Recommendation: Base applicant eligibility on affordability using factors such as water and/or sewer service rates, median household income, poverty rates, unemployment rates, or population of the served community

funding when in fact that specific community may be rural and highly economically distressed. In addition, while a county's tier may improve due to overall economic indicators in the county as a whole, an individual community could remain economically distressed; this is particularly possible for small, rural communities within counties that are located adjacent to growing urban centers.

Figures 3 and 4 present examples of several Tier 3 counties (least distressed) and local governments within those counties that have high economic distress indicators. For example, Johnston County is designated as Tier 3 (least distressed) but communities within the county (Benson and Kenly) have median household incomes (MHI) well below the state and county MHI, and poverty rates well above the state and county poverty rates. The local governments shown below do not qualify for State Reserve grant funds because they are located in a Tier 3 county, despite having these high economic distress indicators.

Figure 3. Comparison of Median Household Income (MHI) of Tier 3 Counties (least distressed) and Towns within those Counties with State of North Carolina MHI: The Towns would not Qualify for State Reserve Grants due to County Tier
(See Appendix C for data)

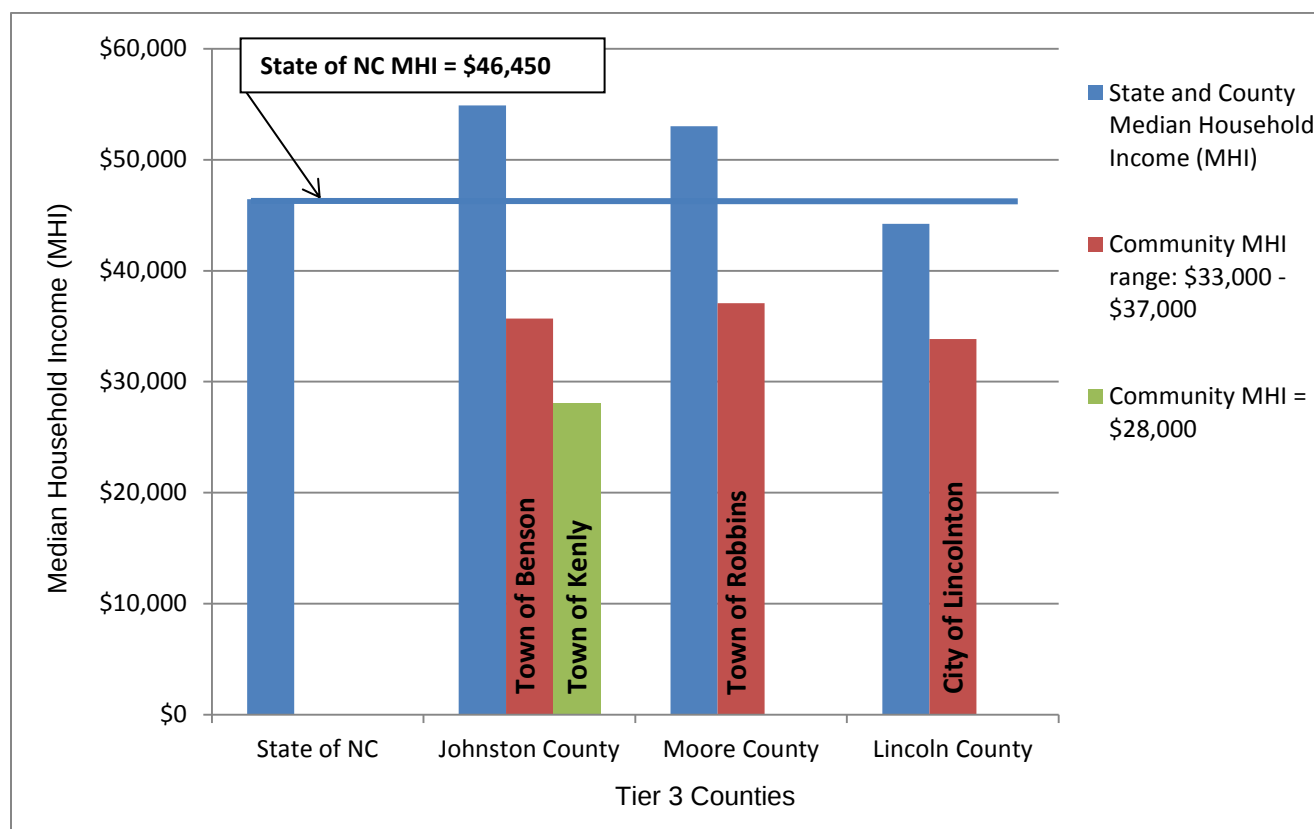
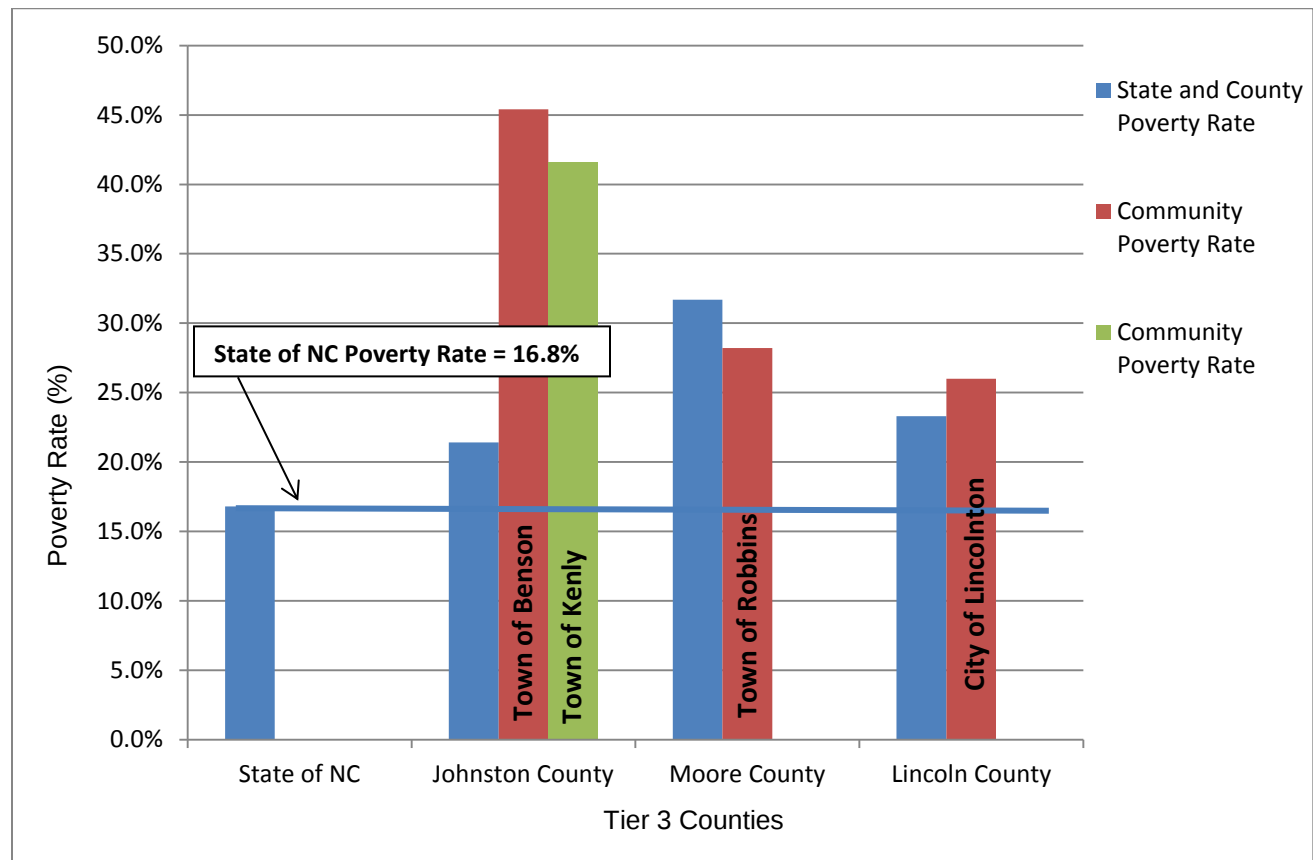


Figure 4. Comparison of Poverty Rate of Tier 3 Counties (least distressed) and Towns within those Counties with State of North Carolina Poverty Rate: The Towns would not Qualify for State Reserve Grants due to County Tier
(See Appendix C for data)



Percentage of MHI Spent on Water/Sewer

Second, the percentage of median household income spent on water and/or sewer service may not accurately reflect economic conditions within a community. Figures 5 and 6 present examples of Tier 1 counties (most distressed) and local governments within those counties that would not qualify for grant funds because the residential annual average combined water and sewer bill does not exceed 1.5% of the MHI of the community.

For example, Scotland County is the most distressed county in North Carolina based on tier designations. The Town of Laurinburg has high economic distress indicators for MHI and poverty rates. However, the percentage of MHI spent on water/sewer is low (less than 1.5%). Despite Laurinburg's high economic distress indicators and its location in the most distressed county in the state, it does not qualify for State Reserve grant funds. Information is presented in the figures for the City of Rockingham in Richmond County, the sixth most distressed county based on tier designations, which also does not qualify for State Reserve grant funds.

Figure 5. Comparison of Median Household Income (MHI) of Tier 1 Counties (most distressed) and Towns within those Counties with State of North Carolina MHI: The Towns would not Qualify for State Reserve Grants due to Water/Sewer Costs Less than 1.5% of MHI
(See Appendix D for data)

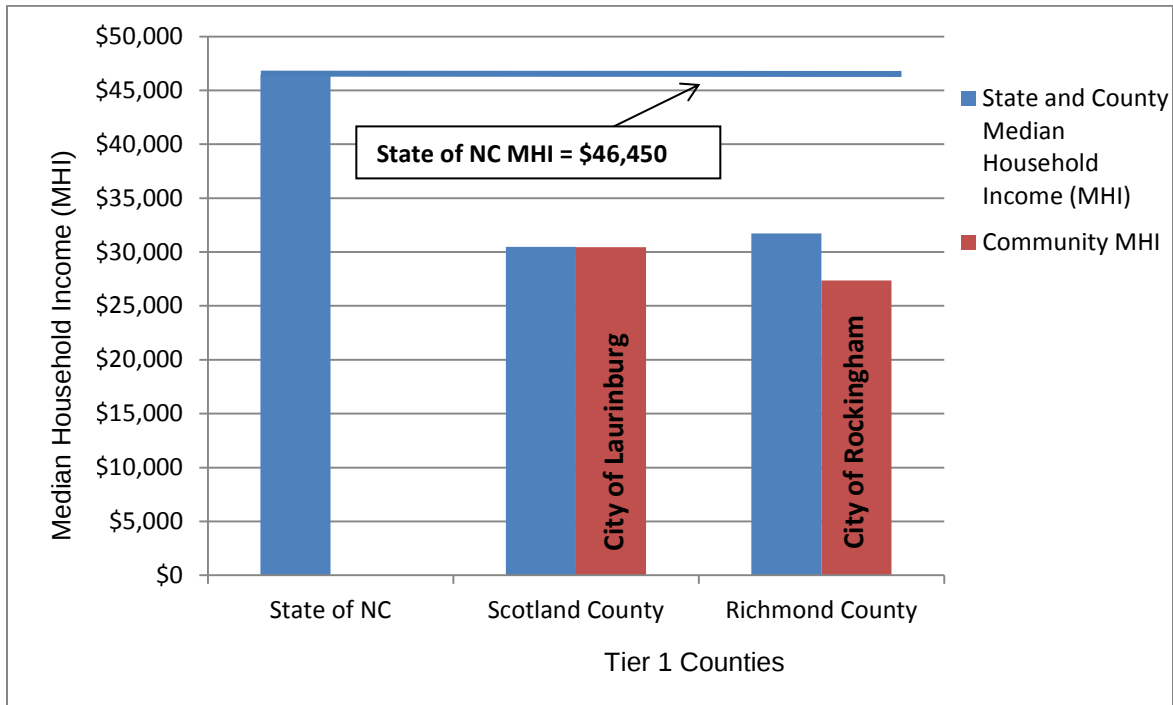
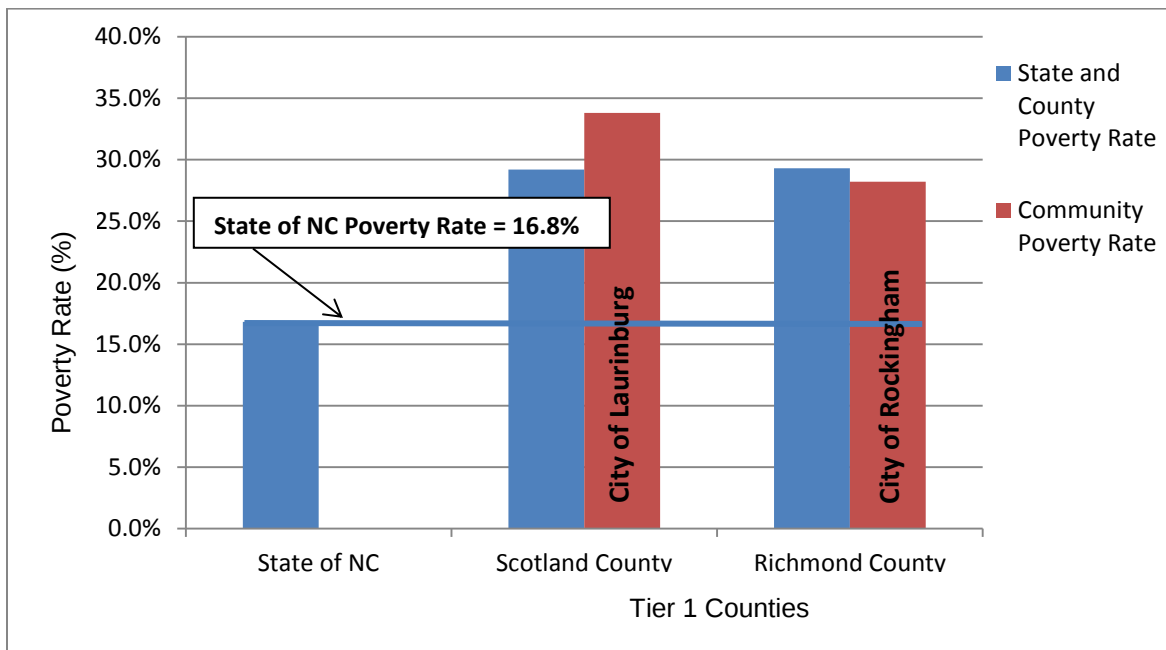


Figure 6. Comparison of Poverty Rate of Tier 1 Counties (most distressed) and Towns within those Counties with State of North Carolina Poverty Rate: The Towns would not Qualify for State Reserve Grants due to Water/Sewer Costs Less than 1.5% of MHI
(See Appendix D for data)



To ensure that grant funds are truly being awarded to the most economically distressed communities, the Authority recommends that applicant eligibility be based on the relative affordability of a project for a community compared to other communities in North Carolina. Affordability would be based on factors that may include water and/or sewer service rates, median household income, poverty rates, unemployment rates, or population of the served community. This approach would allow the basis of eligibility to be established using the most recent and applicable economic information available when determining the affordability a project. The details of this approach would be developed by the Authority with assistance from the Division and would be presented annually to the public for review and comment. Under this recommendation, the terms “high-unit-cost project” and “high-unit-cost threshold” would no longer be utilized and would be removed from the legislation.

3. Broaden the Use of Grant Funds

Currently, the Technical Assistance Grants (TAG) are limited in scope to determining how to correct deficiencies in infrastructure that are not in compliance with/at risk of violating permit limits or State law. There is no provision for grant funds to assist an applicant with studies or analyses before it violates or is at risk of violating permits or laws. In addition, the amount of recurring grant funds is currently limited to \$5 million per year, which is split between the HUC and TAG projects.

Based on the current criteria, grant funds are not provided for any type of proactive activities or analyses, and are not made available to utilities that are in compliance but perhaps are struggling to remain viable or with other issues. The Authority also notes that grants are not available to assist an applicant – especially a “troubled system” – in becoming more self-sufficient and less reliant on grants.

The Authority recommends that the use of grant funds be broadened to provide incentives to encourage water and wastewater utilities to become more proactive in the management and financing of their systems and to lead to improved understanding of the infrastructure needs and financial requirements which could help reduce or eliminate their continued reliance on grant funds. This recommendation also supports the state’s development of methods to assist “troubled systems.”

While many types of studies and analyses could be useful to communities, two are recommended at this time:

- Provide grant funds to investigate the feasibility of voluntary merger/regionalization. Such an analysis could help utilities that may be non-compliant or non-viable or seeking to improve their operations efficiency/become a more competitive utility provider by defining a potential option of joining with another utility. It is recognized that non-viability could be attributed to a number of factors including inadequate utility revenue or loss of qualified operators which could potentially be remedied by merging or regionalizing operations.
- Provide grant funds to identify and assess a utility’s water and/or sewer infrastructure. The state’s (and United States’ as a whole) water infrastructure is approaching and sometimes exceeding its useful life. At the same time many utilities are facing lower revenues due to a loss of manufacturing customers and conservation. A utility may be unaware of the exact location, extent or condition of

Issue: TAGs are only allowed to be used for studies/analyses to determine how to correct infrastructure deficiencies that have led to non-compliance or to risk of violating permit limits or state law

Why an Issue: Grant funds are not available for any type of proactive activities including the development of methods to allow utilities (including “troubled systems”) to become more self-sufficient and avoid future or continued reliance on grant funds

Recommendation: Broaden the use of grant funds to provide incentives to encourage water and wastewater utilities to become more proactive in the management and financing of their systems

its infrastructure possibly due to inheriting the system from a private entity such as a manufacturing facility or due to the loss of staff that are knowledgeable of the infrastructure. Without this knowledge, a utility may not be fully aware of its monetary needs in order to operate and maintain its system and may rely on grants to ‘fix’ problems as they are identified – often by catastrophic failure – and for which the utility has not budgeted; this could lead to a potentially continuous cycle of relying upon grant funding to ‘band aid’ a system.

By providing a grant to inventory and assess its infrastructure, a utility would gain knowledge of its system, be able to develop costs for replacement/repairs/upgrades and continuous maintenance, evaluate its rate structure, and begin a capital improvement program (CIP) to make the best decisions regarding the replacement of critical infrastructure.

As utilities better understand their infrastructure and quantify needs, the Authority will be able to develop a more comprehensive master plan to meet the State’s water infrastructure needs. In addition, the Division will also have more complete information on which to base input to the Clean Water State Revolving Fund and Drinking Water State Revolving Fund needs surveys, which could then result in higher federal allocations to these programs in North Carolina.

4. Align the Division’s Application Review Priorities with the Authority’s Review Priorities

The General Assembly authorized the Authority to establish priorities and develop guidelines for making loans and grants, and to make recommendations for changes to the criteria, all consistent with federal law. Under the current legislation, however, the Division is required to assign points to the State Reserve program applications based on thirteen common criteria. The current legislation has created a discrepancy between how the Division must evaluate applications and the flexibility provided to the Authority to evaluate the same applications. This variation is confusing to applicants and may be viewed as adding complexity in the transparent decision-making process for which the Authority is striving.

The Authority recommends that the Division and the Authority utilize the same application review priorities. The Authority recommends that the 13 common criteria (defined in NCGS 159G-23) which must currently be applied by the Division be designated instead as priority considerations to be applied by the Division. Since the Authority has the flexibility to utilize these priority considerations, the evaluation by the Division and the Authority will be aligned and maintain decision-making transparency throughout the review process.

Issue: The Division is required to use application review priorities that differ from those the Authority can use

Why an Issue: The differing priorities are confusing to applicants and add an element of complexity to the Authority’s transparent decision-making process

Recommendation: Designate the 13 common criteria (NCGS 159G-23) as priority considerations to be applied by the Division

Next Steps

The Authority recommends that the legislature implement the recommendations contained in this report. The recommendations will enable the Authority to better carry out its assigned duties and to provide enhanced coordination of the use of the monetary resources entrusted to it by the General Assembly to improve public health and the environment for all North Carolinians.

Should the legislature wish to implement the recommendations, the Authority has provided suggested modifications to the text of North Carolina General Statute 159G for consideration. The suggestions are included in Appendix E of this report.

APPENDIX A

State Water Infrastructure Authority Members appointed in 2013-2014

The State Water Infrastructure Authority was created within the North Carolina Department of Environment and Natural Resources by Session Law 2013-360. The nine members of the Authority that were appointed in 2013-2014 are listed in Table A.1.

Table A.1. State Water Infrastructure Authority Members Appointed in 2013-2014

Cite § 159G- 70.(b)	Position Requirements	State Water Infrastructure Authority Members appointed in 2013-2014		
		Name	Title	Appointing Authority
(1)	Director of Division of Water Infrastructure and Serves as Authority Chair	Kim Colson – Chair	Director, Division of Water Infrastructure	Ex-Officio
(2)	Secretary of Commerce / Familiar with Water or other Infrastructure Improvements	Dr. Patricia Mitchell	Assistant Secretary, Rural Development Division; Dept. of Commerce	Ex-Officio
(3)	Director of Local Government Commission (Office of the State Treasurer)	Vance Hollomon	Deputy Treasurer, Local Government Commission	Ex-Officio
(4)	Professional Engineer in Private Sector Familiar with Wastewater Systems	JD Solomon	Vice President, CH2MHILL	Governor
(5)	Knowledgeable about Federal Funding for Wastewater and Water Systems	Gwen Baker	President, CDM Federal Programs, CDM Smith	Governor
(6)	Knowledgeable about Urban Wastewater or Water Systems	Leila Goodwin	Water Resources Manager, Town of Cary	Senate Pro Tempore
(7)	Knowledgeable about Rural Wastewater or Water Systems	Charles Vines	Mitchell County Manager	Senate Pro Tempore
(8)	County Commissioner or Resident of a Rural County Knowledgeable about Public Health Services	Cal Stiles	Cherokee County Commissioner	Speaker of the House
(9)	Familiar with Wastewater, Drinking Water and Stormwater Issues and State Funding Sources	Maria Hunnicutt	Manager, Broad River Water Authority	Speaker of the House

APPENDIX B

2013-2014 Loan and Grant Program Applications Received and Awarded Funding in 2014

Table B.1 provides a summary of the applications received by the Division in September 2013, April 2014, and May 2014 and awarded funding by the Authority in January, May and July 2014. Given the amount of funding available in each program, it is apparent that only a small percentage of the total requests were able to be funded.

Table B.1. 2013-2014 Loan and Grant Program Applications Received and Awarded Funding in 2014

Funding Program and Application Round	Number Applications Received	Number Applications Funded	Dollar Amount Requested	Dollar Amount Funded
Federal-State CWSRF (Sept. 2013 and April 2014 Application Rounds)	74	33	\$228.3 million	\$91.6 million
Federal-State DWSRF (Sept. 2013 Application Round)	66	32	\$281.7 million	\$104.7 million
Federal CDBG-I (April and May 2014 Application Rounds)	132	15	\$184.7 million	\$26 million
State Wastewater Reserve (includes High Unit Cost grants and Technical Assistance grants) (April 2014 Application Round)	39	10	\$15.6 million	\$1.74 million
State Drinking Water Reserve (includes High Unit Cost grants and Technical Assistance grants) (April 2014 Application Round)	17	5	\$8.8 million	\$1.76 million
Totals	328	95	\$719.1 million	\$225.8 million

APPENDIX C

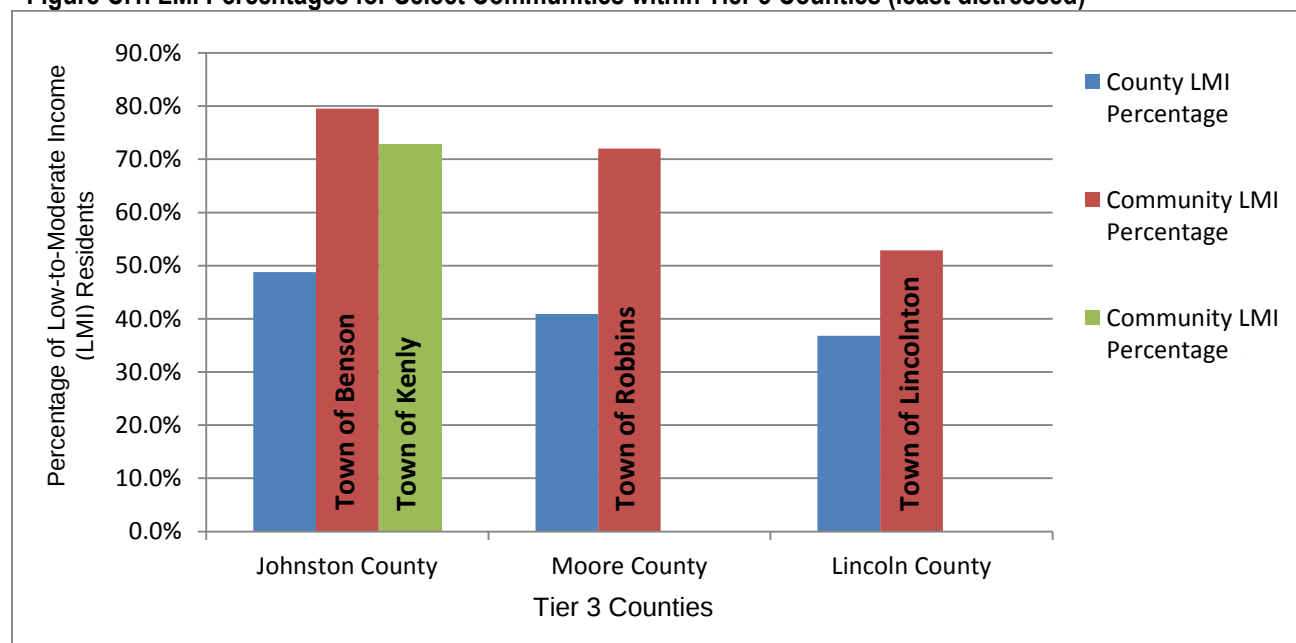
Selected Data for Tier 3 Counties and Towns within those Counties

Table C.1 presents examples of several Tier 3 counties (least distressed) and local governments within those counties that have high economic distress indicators. Johnston County is designated as Tier 3 but communities within the county (Benson and Kenly) have low-to-moderate income (LMI) percentages that are well above the county LMI percentages. The local governments shown below do not qualify for State Reserve grant funds because they are located in a Tier 3 county, despite having high economic distress indicators. Figures 3 and 4 in the report present the MHI and poverty rates for the communities shown in Table C.1. Figure C.1 presents the LMI percentages for these communities.

Table C.1. Selected Data for Tier 3 Counties (least distressed) and Towns within those Counties: The Towns would not Qualify for State Reserve Grants due to County Tier

Entity	Percentage of Low-to-Moderate Income (LMI) Residents	Median Household Income (MHI) and % Spent on Water/Sewer	Poverty Rate (%)
State of North Carolina	--	\$46,450	16.8 %
Johnston County	Tier 3 with LMI of 48.8 %	\$54,885 (1.63%)	21.4%
○ Town of Benson	79.5 %	\$35,700 (1.88 %)	45.4 %
○ Town of Kenly	72.9 %	\$28,022 (3.67 %)	41.6 %
Moore County	Tier 3 with LMI of 40.9 %	\$53,023 (1.26%)	31.7 %
○ Town of Robbins	72 %	\$37,073 (2.63 %)	28.2 %
Lincoln County	Tier 3 with LMI of 36.8 %	\$44,233 (1.73%)	23.3 %
○ City of Lincolnton	52.9 %	\$33,839 (2.33%)	26 %

Figure C.1. LMI Percentages for Select Communities within Tier 3 Counties (least distressed)



APPENDIX D

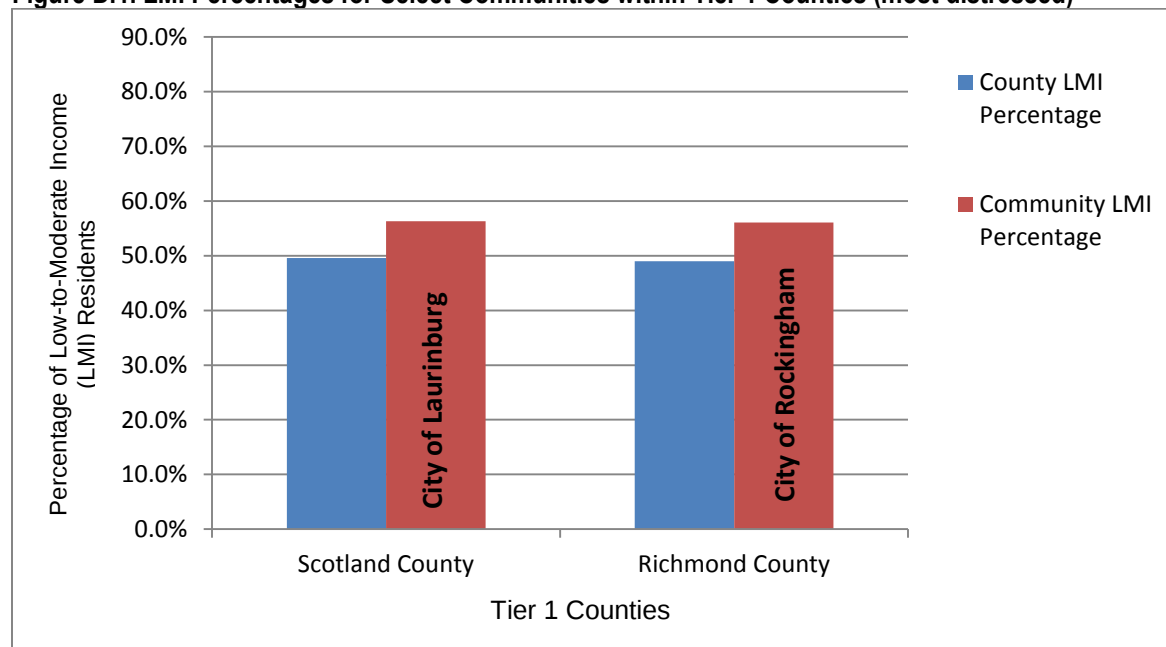
Selected Data for Tier 1 Counties and Cities within those Counties

Table D.1 presents examples of Tier 1 counties (most distressed) and local governments within those counties that would not qualify for grant funds because the residential annual average combined water and sewer bill does not exceed 1.5% of the MHI of the community. Scotland County is the most distressed county in North Carolina based on tier designations and communities within those counties have low-to-moderate income (LMI) percentages that are above the county LMI percentages. The local governments shown below do not qualify for State Reserve grant funds because the percentage of MHI spent on water/sewer is less than the currently required 1.5%. Figures 5 and 6 in the report present the MHI and poverty rates for the communities shown in Table D.1. Figure D.1 presents the LMI percentages for these communities.

Table D.1. Selected Data for Tier 1 Counties (most distressed) and Towns within those Counties: The Towns would not Qualify for State Reserve Grants due to Water/Sewer Costs Less than 1.5% of MHI

Entity	Percentage of Low-to-Moderate Income (LMI) Residents	Median Household Income (MHI) and % Spent on Water/Sewer	Poverty Rate (%)
State of North Carolina	--	\$46,450	16.8 %
Scotland County (most distressed county based on tier rankings)	Tier 1 with LMI of 49.6 %	\$30,472 (county has no water/sewer systems)	29.2 %
○ City of Laurinburg	56.3 %	\$30,459 (1.44 %)	33.8 %
Richmond County	Tier 1 with LMI of 49 %	\$31,726 (rates not available)	29.3 %
○ City of Rockingham	56.1 %	\$27,371 (1.14 %)	28.2 %

Figure D.1. LMI Percentages for Select Communities within Tier 1 Counties (most distressed)



APPENDIX E

Suggested Modifications to North Carolina General Statute 159G to Implement the Recommendations of the State Water Infrastructure Authority

Appendix E contains the State Water Infrastructure Authority's suggested modifications to the text of North Carolina General Statute 159G for consideration; these modifications would implement the recommendations presented in this report. Implementation of the recommendations will enable the Authority to better carry out its assigned duties and to provide enhanced coordination of the use of the monetary resources entrusted to it by the General Assembly to improve public health and the environment.

Chapter 159G.

Water Infrastructure.

Article 1.

General Provisions.

§§ 159G-1 through 159G-18: Repealed by Session Laws 2005-454, s. 2, effective January 1, 2006.

§ 159G-19. Reserved for future codification purposes.

§ 159G-20. Definitions.

The following definitions apply in this Chapter:

- (1) Asset management plan. - The strategic and systematic application of management practices applied to the infrastructure assets of a local government unit in order to minimize the total costs of acquiring, operating, maintaining, improving, and replacing the assets while at the same time maximizing the efficiency, reliability, and value of the assets.
- (?) Affordability. – The relative affordability of a project for a community compared to other communities in North Carolina based on factors that may include water and/or sewer service rates, median household income, poverty rates, unemployment rates, or population of the served community.
- (?) Authority. – The State Water Infrastructure Authority created within the Department and established pursuant to SL2013-360.
- (1a) Construction costs. - The costs of planning, designing, and constructing a project for which a loan or grant is available under this Chapter. The term includes the following:
 - a. Excess or reserve capacity costs attributable to no more than 20-year projected domestic growth plus ten percent (10%) unspecified industrial growth.
 - b. Legal, fiscal, administrative, and contingency costs.
 - c. The fee imposed under G.S. 159G-24 to obtain a loan or grant for a project.
 - d. A fee payable to the Department for a permit to implement a project for which a loan or grant is obtained.
 - e. The cost to acquire real property or an interest in real property.
- (2) CWSRF. - The Clean Water State Revolving Fund established in G.S. 159G-22 as an account in the Water Infrastructure Fund.
- (3) Department. - The Department of Environment and Natural Resources.
- (4) Repealed by Session Laws 2011-145, s. 13.3(ggg), effective July 1, 2011.

- (5) Repealed by Session Laws 2013-360, s. 14.21(d), effective July 1, 2013 and Repealed by Session Laws 2013-413, s. 57(q), effective August 23, 2013.
- (5a) Repealed by Session Laws 2013-360, s. 14.21(d), effective July 1, 2013.
- (5b) Division. - Division of Water Infrastructure.
- (6) Drinking Water Reserve. - The Drinking Water Reserve established in G.S. 159G-22 as an account in the Water Infrastructure Fund.
- (7) DWSRF. - The Drinking Water State Revolving Fund established in G.S. 159G-22 as an account in the Water Infrastructure Fund.
- (8) Grant. - A sum of money given to an applicant without any obligation on the part of the applicant to repay the sum.
- ~~(9) High unit cost project. - A project that results in an estimated average household user fee for water and sewer service in the area served by the project in excess of the high unit cost threshold. The average household user fee is calculated for a continuous 12-month period.~~
- ~~(10) High unit cost threshold. - Either of the following amounts determined on the basis of data from the most recent federal decennial census and updated by the U.S. Department of Housing and Urban Development's annual estimated income adjustment factors:
 - a. - One and one half percent (1.5%) of the median household income in an area that receives both water and sewer service.
 - b. - Three fourths of one percent (3/4%) of the median household income in an area that receives only water service or only sewer service.~~
- (10a) Investor-owned drinking water corporation. - A corporation owned by investors and incorporated solely for the purpose of providing drinking water services for profit.
- (11) Loan. - A sum of money loaned to an applicant with an obligation on the part of the applicant to repay the sum.
- (12) Local Government Commission. - The Local Government Commission of the Department of the State Treasurer, established in G.S. 159-3.
- (13) Local government unit. - Any of the following:
 - a. A city as defined in G.S. 160A-1.
 - b. A county.
 - c. A consolidated city-county as defined in G.S. 160B-2.
 - d. A county water and sewer district created pursuant to Article 6 of Chapter 162A of the General Statutes.
 - e. A metropolitan sewerage district or a metropolitan water district created pursuant to Article 4 of Chapter 162A of the General Statutes.
 - f. A water and sewer authority created under Article 1 of Chapter 162A of the General Statutes.

- g. A sanitary district created pursuant to Part 2 of Article 2 of Chapter 130A of the General Statutes.
 - h. A joint agency created pursuant to Part 1 of Article 20 of Chapter 160A of the General Statutes.
 - i. A joint agency that was created by agreement between two cities and towns to operate an airport pursuant to G.S. 63-56 and that provided drinking water and wastewater services off the airport premises before 1 January 1995.
- (?) Merger. – The consolidation of two or more water and/or sewer systems into one system with common ownership, management, and operation.
- (14) Nonprofit water corporation. - A nonprofit corporation that is incorporated under Chapter 55A of the General Statutes solely for the purpose of providing drinking water or wastewater services and is an eligible applicant for a federal loan or grant from the Rural Utility Services Division, U.S. Department of Agriculture.
- (15) Public water system. - Defined in G.S. 130A-313.
- (?) Regionalization. – The physical interconnecting of an eligible entity’s wastewater system to another entity’s wastewater system for the purposes of providing regional treatment or the physical interconnecting of an eligible entity’s public water system to another entity’s water system for the purposes of providing regional water supply.
- (16) Reserved.
- (17) Reserved.
- (18) Secretary. - The Secretary of Environment and Natural Resources.
- (19) State. - The State of North Carolina.
- (20) Stormwater quality project. - A project whose primary purpose is to prevent or remove pollution from stormwater rather than collect, store, or convey stormwater for drainage or flood control purposes.
- (21) Targeted interest rate project. - Either of the following types of projects:
- a. ~~A high-unit cost project that is awarded a loan.~~ A project that is awarded a loan from the Drinking Water Reserve or the Wastewater Reserve, based on affordability.
 - b. A project that is awarded a loan from the CWSRF or the DWSRF and is in a category for which federal law encourages a special focus.
- (22) Treasurer. - The Treasurer of the State elected pursuant to Article III, Section 7, of the Constitution.
- (23) Wastewater collection system. - A unified system of pipes, conduits, pumping stations, force mains, and appurtenances for collecting and transmitting water-carried human wastes and other wastewater from residences, industrial establishments, or any other buildings.

- (24) Wastewater Reserve. - The Wastewater Reserve established in G.S. 159G-22 as an account in the Water Infrastructure Fund.
- (25) Wastewater system. - A wastewater collection system, wastewater treatment works, stormwater quality project, or nonpoint source pollution project.
- (26) Wastewater treatment works. - The various facilities and devices used in the treatment of sewage, industrial waste, or other wastes of a liquid nature, including the necessary interceptor sewers, outfall sewers, nutrient removal equipment, pumping equipment, power and other equipment, and their appurtenances.
- (27) Water Infrastructure Fund. - The fund established in G.S. 159G-22. (2005-454, s. 3; 2010-151, s. 1; 2011-145, ss. 13.3(ggg), 13.11A(a); 2013-360, s. 14.21(d); 2013-413, s. 57(q).)

§ 159G-21. Revenue for water projects.

This Chapter governs the use of the following revenue:

- (1) Revenue appropriated to the Department to match federal funds received for loans and grants for wastewater and drinking water projects and revenue received by the Department from the repayment of loans made with the use of the federal funds.
- (2) Revenue appropriated to the Department to provide a source of State funds to make loans and grants for wastewater and drinking water projects and revenue received by the Department from the repayment of loans made with the use of these funds. (2005-454, s. 3.)

§ 159G-22. Water Infrastructure Fund.

(a) Fund Established. - The Water Infrastructure Fund is established as a special revenue fund. The Fund is comprised of the accounts set out in this section. The Fund provides revenue through its accounts for loans and grants as provided in this Chapter to meet the water infrastructure needs of the State. The Treasurer is responsible for distributing and investing all revenue received by the Fund. Interest and other investment income earned by the Fund accrues to it and must be allocated to the account to which the income is attributable. Accounts to which federal funds are credited must be kept separate from accounts that do not receive federal funds. A payment of the principal of or interest on a loan made from an account of the Fund must be credited to the account from which the loan was made.

(b) CWSRF. - The Clean Water State Revolving Fund is established as an account within the Water Infrastructure Fund. The account receives federal funds for wastewater projects and the State funds required to match the federal funds. The account is established under and must be managed in accordance with Title VI of the Federal Water Quality Act of 1987, Pub. L. 100-4, to achieve the purposes of that act and the Federal Water Pollution Control Act of 1972, 33 U.S.C. §§ 1251 through 1387. The account must comply with these federal acts and the federal regulations adopted to implement the acts. Revenue credited to the account is available in perpetuity and must be used only to provide construction loans and other assistance allowed under federal law. Grants are available from this account only to the extent allowed under federal law.

(c) DWSRF. - The Drinking Water State Revolving Fund is established as an account within the Water Infrastructure Fund. The account receives federal funds for public water systems and the State funds required to match the federal funds. The account is established under and must be managed in accordance with section 130 of Title 1 of the federal Safe Drinking Water Act of 1996 as amended, 42 U.S.C. § 300J-12, to achieve the purposes of that act. The account must comply with that act and the federal regulations adopted to implement the act. Revenue credited to the account is available in perpetuity and must be used only to provide construction loans and other assistance allowed under federal law. Grants are available from this account only to the extent allowed under federal law.

(d) Wastewater Reserve. - The Wastewater Reserve is established as an account within the Water Infrastructure Fund. The account is established to receive State funds that are to be used for loans and grants for wastewater systems. Revenue credited to the Reserve is neither received from the federal government nor provided as a match for federal funds.

(e) Wastewater Accounts. - The Department is directed to establish accounts within the Wastewater Reserve to administer loans and grants for wastewater collection systems, wastewater treatment works, stormwater quality projects, and nonpoint source pollution projects. The wastewater accounts must include an account for each type of loan or grant set out in G.S. 159G-33.

(f) Drinking Water Reserve. - The Drinking Water Reserve is established as an account within the Water Infrastructure Fund. The account is established to receive State funds that are to be used for loans and grants for public water systems. Revenue credited to the Reserve is neither received from the federal government nor provided as a match for federal funds.

(g) Drinking Water Accounts. - The Department is directed to establish accounts within the Drinking Water Reserve to administer loans and grants for public water systems. The drinking water accounts must include an account for each type of loan or grant set out in G.S. 159G-34. (2005-454, s. 3.)

§ 159G-23. Priority considerations ~~Common criteria~~ for loan or grant from Wastewater Reserve or Drinking Water Reserve.

The ~~considerations for priority criteria~~ in this section apply to a loan or grant from the Wastewater Reserve or the Drinking Water Reserve. The Division of Water Infrastructure must consider the following items when evaluating applications: ~~establish a system of assigning points to applications based on the following criteria:~~

- (1) Public necessity. - ~~An applicant must explain how the project~~ A project that promotes public health and protects the environment. ~~A project that improves a system that is not in compliance with permit requirements or is under orders from the Department, enables a moratorium to be lifted, or replaces failing septic tanks with a wastewater collection system.~~ has priority.
- (2) Effect on impaired waters. - A project that improves designated impaired waters of the State. ~~has priority.~~
- (3) Efficiency. - A project that achieves efficiencies in meeting the State's water infrastructure needs or reduces vulnerability to drought consistent with Part 2A of Article 21 and Article 38 of Chapter 143 of the General Statutes by one of the following methods: ~~has priority.~~

- a. The combination of two or more wastewater or public water systems into a regional wastewater or public water system by merger, consolidation, or another means.
 - b. Conservation or reuse of water, including bulk water reuse facilities and waterlines to supply reuse water for irrigation and other approved uses.
 - c. Construction of an interconnection between water systems intended for use in drought or other water shortage emergency.
 - d. Repair or replacement of leaking waterlines to improve water conservation and efficiency or to prevent contamination.
 - e. Replacement of meters and installation of new metering systems.
- (4) Comprehensive land-use plan. - A project that is located in a city or county that has adopted or has taken significant steps to adopt a comprehensive land-use plan under Article 18 of Chapter 153A of the General Statutes or Article 19 of Chapter 160A of the General Statutes, ~~has priority over a project located in a city or county that has not adopted a plan or has not taken steps to do so.~~ The existence of a plan has more priority than steps taken to adopt a plan, such as adoption of a zoning ordinance. A plan that exceeds the minimum State standards for protection of water resources has more priority than one that does not. A project is considered to be located in a city or county if it is located in whole or in part in that unit. A land-use plan is not considered a comprehensive land-use plan unless it has provisions that protect existing water uses and ensure compliance with water quality standards and classifications in all waters of the State affected by the plan.
- (5) Flood hazard ordinance. - A project that is located in a city or county that has adopted a flood hazard prevention ordinance under G.S. 143-215.54A, ~~has priority over a project located in a city or county that has not adopted an ordinance.~~ A plan that exceeds the minimum standards under G.S. 143-215.54A for a flood hazard prevention ordinance has more priority than one that does not. A project is considered to be located in a city or county if it is located in whole or in part in that unit. If no part of the service area of a project is located within the 100-year floodplain, the project has equal consideration ~~the same priority~~ under this subdivision as if it were located in a city or county that has adopted a flood hazard prevention ordinance. The most recent maps prepared pursuant to the National Flood Insurance Program or approved by the Department determine whether an area is within the 100-year floodplain.
- (6) Sound management. - A project submitted by a local government unit that has demonstrated a willingness and ability to meet its responsibilities through sound fiscal policies and efficient operation and management, ~~has priority.~~
- (6a) Asset management plan. - A project submitted by a local government unit with more than 1,000 service connections that has developed and is implementing an asset management plan, ~~has priority over a project submitted by a local government unit with more than 1,000 service connections that has not developed or is not implementing an asset management plan.~~
- (7) Capital improvement plan. - A project that implements the applicant's capital improvement plan for the wastewater system or public water system it manages; the

~~has priority over a project that does not implement a capital improvement plan. To receive priority, a capital improvement plan must set out the applicant's expected water infrastructure needs for at least 10 years.~~

- (8) Coastal habitat protection. - A project that implements a recommendation of a Coastal Habitat Protection Plan adopted by the Environmental Management Commission, the Coastal Resources Commission, and the Marine Fisheries Commission pursuant to G.S. 143B-279.8. ~~has priority over other projects that affect counties subject to that Plan. If no part of the service area of a project is located within a county subject to that Plan, the project has equal consideration to a project that receives priority under this subdivision.~~
- (9) ~~High unit cost threshold. - A high unit cost project has priority over projects that are not high unit cost projects. The priority given to a high unit cost project shall be set using a sliding scale based on the amount by which the applicant exceeds the high unit cost threshold.~~ Affordability - The relative affordability of a project for a community compared to other communities in North Carolina.
- (10) Merger/Regionalization. - A project to provide for the planning of regional public water and wastewater systems, to provide for the orderly coordination of local actions relating to public water and wastewater systems, or to help realize economies of scale in regional public water and wastewater systems through consolidation, management, merger, or interconnection of public water and wastewater systems. ~~has priority.~~ If an applicant demonstrates that it is not feasible for the project to include regionalization, the funding agency shall assign the project the same priority as a project that includes regionalization.
- (11) State water supply plan. - A project that addresses a potential conflict between local plans or implements a measure in which local water supply plans could be better coordinated, as identified in the State water supply plan pursuant to G.S. 143-355(m). ~~has priority.~~
- (12) Water conservation measures for drought. - A project that includes adoption of water conservation measures by a local government unit that are more stringent than the minimum water conservation measures required pursuant to G.S. 143-355.2. ~~has priority.~~
- (13) Low-income residents. - A project that is located in an area annexed by a municipality under Article 4A of Chapter 160A of the General Statutes in order to provide water or sewer services to low-income residents. ~~has priority. For purposes of this section, low income residents are those with a family income that is eighty percent (80%) or less of median family income.~~

(2005-454, s. 3; 2008-143, s. 15; 2010-151, s. 2; 2011-145, s. 13.3(hhh); 2011-396, s. 11.2; 2013-360, s. 14.21(e); 2013-413, s. 57(r).)

§ 159G-24. Fee imposed on a loan or grant from Water Infrastructure Fund.

(a) A loan awarded from the Water Infrastructure Fund is subject to a fee of two percent (2%) of the loan. A grant awarded from the Water Infrastructure Fund is subject to a fee of one and one-half percent (1 1/2%) of the grant. The fee is payable when a loan or grant is awarded.

(b) Departmental Receipt. - The fee on a loan from the Water Infrastructure Fund is a departmental receipt and must be applied to the Department's and the Local Government Commission's costs in administering loans from these Reserves. The Department and the Local Government Commission must determine how to allocate the fee receipts between their agencies. The fee on a grant from the Water Infrastructure Fund is a departmental receipt of the Department and must be applied to the Department's costs in administering grants from these Reserves. (2005-454, s. 3; 2012-142, s. 12.01.)

§ 159G-25. Expenditure for emergency corrective action at a wastewater treatment works.

(a) The Department may use revenue in any account of the Wastewater Reserve to provide funds for emergency corrective action at a wastewater treatment works under the circumstances set out in this section. The amount expended in a fiscal year for corrective action under this section may not exceed two hundred thousand dollars (\$200,000). An expenditure for emergency corrective action is authorized only under the following circumstances:

- (1) A person holding a wastewater discharge or nondischarge permit issued under Article 21 of Chapter 143 of the General Statutes is violating the terms of the permit.
- (2) The wastewater treatment works operated under the permit has a design flow capacity of no more than 100,000 gallons a day.
- (3) The Department has given the permit holder written notice of the violation.
- (4) The permit holder refuses to take the action required to comply with the permit.
- (5) The inaction by the permit holder poses a threat to public health.
- (6) The Department has informed the permit holder in writing that the Department plans to take emergency corrective action and then bring a civil action against the permit holder to recover the cost of the emergency corrective action.

(b) The Department may bring a civil action against the holder of the permit for the wastewater treatment works to recover the amount expended from the Wastewater Reserve for the emergency corrective action. The amount recovered in a civil action must be credited to the account in the Wastewater Reserve from which the funds were expended. (2005-454, s. 3.)

§ 159G-26. Annual reports on Water Infrastructure Fund.

(a) Requirement. - The Department must publish a report each year on the accounts in the Water Infrastructure Fund that are administered by the Division of Water Infrastructure. The report must be published by 1 November of each year and cover the preceding fiscal year. The Department must make the report available to the public and must give a copy of the report to the Environmental Review Commission and the Fiscal Research Division of the Legislative Services Commission.

(b) Content. - The report required by this section must contain the following information concerning the accounts of the Water Infrastructure Fund:

- (1) The beginning and ending balance of the account for the fiscal year.
- (2) The amount of revenue credited to the account during the fiscal year, by source.

- (3) The total amount of loans and grants awarded from the account, by type, and the amount of any expenditure for emergency corrective action made from the account.
- (4) For each loan or grant awarded, the recipient of the award, the amount of the award, the amount of the award that was disbursed, and the amount of the award remaining to be disbursed in a subsequent fiscal year.
- (5) The amount disbursed for loans and grants awarded but not disbursed in a prior fiscal year and the amount remaining to be disbursed in a subsequent fiscal year.
- (6) An assessment of the expected impact on water quality and water supply of the projects for which the loans and grants were awarded. (2005-454, s. 3; 2011-145, s. 13.3(iii); 2013-360, s. 14.21(f); 2013-413, s. 57(s).)

§ 159G-27. Reserved for future codification purposes.

§ 159G-28. Reserved for future codification purposes.

§ 159G-29. Reserved for future codification purposes.

Article 2.

Water Infrastructure Loans and Grants Administered by Department.

§ 159G-30. Department's responsibility.

The Department, through the Division of Water Infrastructure, administers loans and grants made from the CWSRF, the DWSRF, the Wastewater Reserve, and the Drinking Water Reserve. (2005-454, s. 3; 2011-145, s. 13.3(jjj); 2013-360, s. 14.21(g); 2013-413, s. 57(t).)

§ 159G-31. Entities eligible to apply for loan or grant.

(a) A local government unit or a nonprofit water corporation is eligible to apply for a loan or grant from the CWSRF, the DWSRF, the Wastewater Reserve, or the Drinking Water Reserve. An investor-owned drinking water corporation is also eligible to apply for a loan or grant from the DWSRF. Other entities are not eligible for a loan or grant from these accounts. (2005-454, s. 3; 2011-145, s. 13.11A(b).)

(b) Entities eligible in paragraph (a) for grants from the Wastewater Reserve and the Drinking Water Reserve may be limited, based on affordability, to a portion of the total construction costs for the project types defined in GS 159G-33(a)(2) and GS 159G-34(a)(2).

(c) To the extent that funds are available, loans shall be considered for the portion of construction costs not eligible for grant funding.

§ 159G-32. Projects eligible for loan or grant.

(a) CWSRF and DWSRF. - Federal law determines whether a project is eligible for a loan or grant from the CWSRF and the DWSRF. A project must meet the eligibility requirements set under federal law.

(b) Wastewater Reserve. - The Department is authorized to make loans and grants from the Wastewater Reserve for the following types of projects:

- (1) Wastewater collection system.
- (2) Wastewater treatment works.

- (3) Stormwater quality projects, including innovative stormwater management projects and pilot projects.
- (4) Nonpoint source pollution project.

(c) Drinking Water Reserve. - The Department is authorized to make loans and grants from the Drinking Water Reserve for public water system projects. (2005-454, s. 3; 2013-360, s. 14.21(h).)

§ 159G-33. Loans and grants available from Wastewater Reserve.

(a) Types. - The Department is authorized to make the types of loans and grants listed in this subsection from the Wastewater Reserve. Each type of loan or grant must be administered through a separate account within the Wastewater Reserve.

- (1) General Loan. - A loan ~~or grant~~ is available for a project authorized in G.S. 159G-32(b).
- (2) High-unit-cost Project grant. - A ~~high-unit-cost project grant~~ is available for the portion of the construction costs of a wastewater collection system project, ~~or a wastewater treatment works project, or a stormwater quality project as authorized in G.S. 159G-32(b).~~ that results in an estimated average household user fee for water and sewer service in the area served by the project that exceeds the high-unit-cost threshold.
- (3) Technical Merger/Regionalization Feasibility assistance grant. - A ~~merger/regionalization technical assistance grant~~ is available to determine the feasibility of and, if feasible, the best way to consolidate the management of multiple utilities into a single utility operation or to provide regional treatment. ~~correct the deficiencies in a wastewater collection system or wastewater treatment works that either is not in compliance with its permit limits or, as identified in the most recent inspection report by the Department under G.S. 143-215.3, is experiencing operational problems and is at risk of violating its permit limits.~~
- (4) Asset Inventory and Assessment grant. - An asset inventory and assessment grant is available to inventory the existing water and/or sewer system and document the condition of the inventoried infrastructure.
- (5) Emergency loan. - An emergency loan is available in the event the Secretary certifies that a serious public health hazard related to the inadequacy of an existing wastewater collection system or wastewater treatment works is present or imminent in a community.

(b) Interaccount Transfer. - The Secretary may use revenue in any account in the Wastewater Reserve to provide funds for an emergency loan. (2005-454, s. 3.)

§ 159G-34. Loans and grants available from Drinking Water Reserve.

(a) Types. - The Department is authorized to make the types of loans and grants listed in this section from the Drinking Water Reserve. Each type of loan or grant must be administered through a separate account within the Drinking Water Reserve.

- (1) General Loan. - A loan ~~or grant~~ is available for a project for a public water system.

- (2) ~~High-unit-cost Project grant.~~ - A project grant is available for the portion of the construction costs of a public water system project as defined in G.S. 159G-32(c).~~that results in an estimated average household user fee for water and sewer service in the area served by the project that exceeds the high-unit-cost threshold.~~
- (3) ~~Technical Merger/Regionalization Feasibility assistance grant.~~ - A merger/regionalization technical assistance grant is available to determine the feasibility of and, if feasible, the best way to consolidate the management of multiple utilities into a single utility operation or to provide regional water supply.~~correct the deficiencies in a public water system that does not comply with State law or the rules adopted to implement that law.~~
- (4) Asset Inventory and Assessment grant. - An asset inventory and assessment grant is available to inventory the existing water and/or sewer system and document the condition of the inventoried infrastructure.
- (5) Emergency loan. - An emergency loan is available to an applicant in the event the Secretary certifies that either a serious public health hazard or a drought emergency related to the water supply system is present or imminent in a community.

(b) Interaccount Transfer. - The Secretary may use revenue in any account in the Drinking Water Reserve to provide funds for an emergency loan. (2005-454, s. 3.)

§ 159G-35. Criteria for loans and grants.

(a) CWSRF and DWSRF. - Federal law determines the criteria for awarding a loan or grant from the CWSRF or the DWSRF. An award of a loan or grant from one of these accounts must meet the criteria set under federal law. The Department is directed to establish through negotiation with the United States Environmental Protection Agency the criteria for evaluating applications for loans and grants from the CWSRF and the DWSRF and the priority assigned to the criteria. The Department must incorporate the negotiated criteria and priorities in the Capitalization Grant Operating Agreement between the Department and the United States Environmental Protection Agency. The criteria and priorities incorporated in the Agreement apply to a loan or grant from the CWSRF or the DWSRF. ~~The considerations common criteria in G.S. 159G-23 do not apply to a loan or grant from the CWSRF or the DWSRF.~~

(b) Reserves. – ~~The considerations common criteria in G.S. 159G-23 apply to a loan or grant from the Wastewater Reserve or the Drinking Water Reserve.~~ The Department may establish by rule other criteria that apply to a loan or grant from the Wastewater Reserve or the Drinking Water Reserve. (2005-454, s. 3.)

§ 159G-36. Limits on loans and grants.

(a) CWSRF and DWSRF. - Federal law governs loans and grants from the CWSRF and the DWSRF. An award of a loan or grant from one of these accounts must be consistent with federal law.

(b) Reserve Cost Limit. - The amount of a loan or grant from the Wastewater Reserve or the Drinking Water Reserve may not exceed the construction costs of a project. A loan or grant from one of these Reserves is available only to the extent that other funding sources are not reasonably available to the applicant.

(c) Reserve Recipient Limit. - The following limits apply to a loan or grant made from the Wastewater Reserve or the Drinking Water Reserve to the same local government unit or nonprofit water corporation.

- (1) The amount of loans awarded for a fiscal year may not exceed three million dollars (\$3,000,000).
- (2) The amount of loans awarded for three consecutive fiscal years for targeted interest rate projects may not exceed three million dollars (\$3,000,000).
- (3) The amount of Project high-unit-cost grants awarded for three consecutive fiscal years may not exceed three million dollars (\$3,000,000).
- (4) The amount of Merger/Regionalization Feasibility technical assistance grants awarded for three consecutive fiscal years may not exceed fifty thousand dollars (\$50,000). (2005-454, s. 3.)
- (5) The amount of Asset Inventory and Assessment grants awarded for three consecutive fiscal years may not exceed one hundred fifty thousand dollars (\$150,000).

§ 159G-37. Application to CWSRF, Wastewater Reserve, DWSRF, and Drinking Water Reserve.

(a) Application. – An application for a loan or grant from the CWSRF, the Wastewater Reserve, the DWSRF, or the Drinking Water Reserve must be filed with the Division of Water Infrastructure of the Department. An application must be submitted on a form prescribed by the Division and must contain the information required by the Division. An applicant must submit to the Division any additional information requested by the Division to enable the Division to make a determination on the application. An application that does not contain information required on the application or requested by the Division is incomplete and is not eligible for consideration. An applicant may submit an application in as many categories as it is eligible for consideration under this Article.

(b) Certification. – The Division shall require all local governments applying for loans or grants for water or wastewater purposes to certify that no funds received from water or wastewater utility operations have been transferred to the local government's general fund for the purpose of supplementing the resources of the general fund. The prohibition in this section shall not be interpreted to include payments made to the local government to reimburse the general fund for expenses paid from that fund that are reasonably allocable to the regular and ongoing operations of the utility, including, but not limited to, rent and shared facility costs, engineering and design work, plan review, and shared personnel costs. (2005-454, s. 3; 2011-145, s. 13.3(kkk); 2013-360, s. 14.21(i); 2013-413, s. 57(u).)

§ 159G-38. Environmental assessment and public hearing.

(a) Required Information. - An application submitted under this Article for a loan or grant for a project must state whether the project requires an environmental assessment. If the application indicates that an environmental assessment is not required, it must identify the exclusion in the North Carolina Environmental Policy Act, Article 1 of Chapter 113A of the General Statutes, that applies to the project. If the application does not identify an exclusion in the North Carolina

Environmental Policy Act, it must include an environmental assessment of the project's probable impacts on the environment.

(b) Division Review. - If, after reviewing an application, the Division of Water Infrastructure determines that a project requires an environmental assessment, the assessment must be submitted before the Division continues its review of the application. If, after reviewing an environmental assessment, the Division concludes that an environmental impact statement is required, the Division may not continue its review of the application until a final environmental impact statement has been completed and approved as provided in the North Carolina Environmental Policy Act.

(c) Hearing. - The Division of Water Infrastructure may hold a public hearing on an application for a loan or grant under this Article if it determines that holding a hearing will serve the public interest. An individual who is a resident of any county in which a proposed project is located may submit a written request for a public hearing. The request must set forth each objection to the proposed project or other reason for requesting a hearing and must include the name and address of the individual making the request. The Division may consider all written objections to the proposed project, any statement submitted with the hearing request, and any significant adverse effects the proposed project may have on the environment. The Division's decision on whether to hold a hearing is conclusive. The Division must keep all written requests for a hearing on an application as part of the records pertaining to the application. (2005-454, s. 3; 2011-145, s. 13.3(III), (mmm); 2013-360, s. 14.21(j); 2013-413, s. 57(v).)

§ 159G-39. Review of applications and award of loan or grant.

(a) Point Assignment. - The Division of Water Infrastructure must review all applications filed for a loan or grant under this Article for an application period. The Division must rank each application in accordance with the points assigned to the evaluation criteria. The Division must make a written determination of an application's rank and attach the determination to the application for the Authority's review. The Authority must consider the Division's determination of rank when the Authority determines an application's rank. The Authority's determination of rank is conclusive.

(b) Initial Consideration. - The Division may consider an application for an emergency loan from the Wastewater Reserve or the Drinking Water Reserve at any time. The Division must consider all other loan applications and all grant applications filed during an application period at the same time in order to rank the applications. The Division shall forward all applications received for the application period to the State Water Infrastructure Authority.

(c) Reconsideration. - When the Authority determines an application's rank is too low to receive an award of a loan or grant for an application period, the Division must include the application with those considered for the next application period. If the application's rank is again too low to receive an award, the application is not eligible for consideration in a subsequent application period. An applicant whose application does not receive an award after review in two application periods may file a new application.

(d) Notification of Decision. - When the Authority determines that an application's rank makes it eligible for an award of a loan or grant, the Division must send the applicant a letter of intent to award the loan or grant. The notice must set out any conditions the applicant must meet to receive an award of a loan or grant. When the applicant satisfies the conditions set out in the letter of intent, the Division must send the applicant an offer to award a loan or grant. The

applicant must give the Division written notice of whether it accepts or rejects the offer. A loan or grant is considered awarded when an offer to award the loan or grant is issued. (2005-454, s. 3; 2011-145, s. 13.3(nnn); 2013-360, s. 14.21(k); 2013-413, s. 57(w).)

§ 159G-40. Terms of loan and execution of loan documents.

(a) Approval by Local Government Commission. - The Department may not award a loan under this Article unless the Local Government Commission approves the award of the loan and the terms of the loan. The terms of a loan awarded from the CWSRF and the DWSRF must be consistent with federal law. In reviewing a proposed loan to a local government unit, the Local Government Commission must consider the loan as if it were a bond proposal and review the proposed loan in accordance with the factors set out in G.S. 159-52 for review of a proposed bond issue. The Local Government Commission must review a proposed loan to a nonprofit water corporation and to an investor-owned drinking water corporation in accordance with the factors set out in G.S. 159-153.

(b) Interest Rate and Maturity. - The interest rate payable on and the maximum maturity of a loan are subject to the following limitations:

- (1) Interest rate. - The interest rate for a loan may not exceed the lesser of four percent (4%) or one half the prevailing national market rate for tax-exempt general obligation debt of similar maturities derived from a published indicator. When recommended by the Department, the Local Government Commission may set an interest rate for a loan for a targeted interest rate project at a rate that is lower than the standard rate to achieve the purpose of the target.
- (2) Maturity. - The maximum maturity for a loan for a project that is not a high-unit-cost project may not exceed 20 years or the project's expected life, whichever is shorter. The maximum maturity for a loan for a high-unit-cost project is 30 years or the project's expected life, whichever is shorter.

(c) Security for Loan. - A local government unit may pledge any of the following, alone or in combination, as security for an obligation to repay the principal of and interest on a loan awarded under this Article:

- (1) User fee revenues derived from operation of the wastewater system or public water system that benefits from the project for which the loan is awarded.
- (2) A mortgage, deed of trust, security interest, or similar lien on part or all of the real and personal property comprising the wastewater system or public water system that benefits from the project for which the loan is awarded.
- (3) Its full faith and credit if it meets the requirements of Article 4 of Chapter 159 of the General Statutes.
- (4) Nontax revenue not included in subdivision (1) of this subsection.

(d) Debt Instrument. - A local government unit, a nonprofit water corporation, and an investor-owned drinking water corporation may execute a debt instrument payable to the State to evidence an obligation to repay the principal of and interest on a loan awarded under this Article. The Treasurer, with the assistance of the Local Government Commission, must develop debt instruments for use by local government units, nonprofit water corporations, and investor-owned drinking water corporations under this section. The Local Government Commission must

develop procedures for loan recipients to deliver debt instruments to the State without public bidding. (2005-454, s. 3; 2011-145, s. 13.11A(c).)

§ 159G-41. Withdrawal of loan or grant.

A letter of intent to offer an award for a loan or grant for a project is withdrawn if the applicant fails to enter into a construction contract for the project within two years after the date of the letter, unless the Department finds that the applicant has good cause for the failure. An award for a loan or grant for a project is withdrawn if the applicant fails to enter into a construction contract for the project within one year after the date of the award, unless the Department finds that the applicant has good cause for the failure. If the Department finds good cause for an applicant's failure, the Department must set a date by which the applicant must take action or forfeit the loan or grant. (2005-454, s. 3.)

§ 159G-42. Disbursement of loan or grant.

The Department must disburse the proceeds of a loan or grant to a recipient in a series of payments based on the progress of the project for which the loan or grant was awarded. To obtain a payment, a loan or grant recipient must submit a request for payment to the Department and document the expenditures for which the payment is requested. (2005-454, s. 3.)

§ 159G-43. Inspection of project.

(a) Authority. - The Department may inspect a project for which it awards a loan or grant under this Article to determine the progress made on the project and whether the construction of the project is consistent with the project described in the loan or grant application. The inspection may be performed by personnel of the Department or by a professional engineer licensed under Chapter 89C of the General Statutes.

(b) Disqualification. - An individual may not perform an inspection of a project under this section if the individual meets any of the following criteria:

- (1) Is an officer or employee of the local government unit, nonprofit water corporation, or investor-owned drinking water corporation that received the loan or grant award for the project.
- (2) Is an owner, officer, employee, or agent of a contractor or subcontractor engaged in the construction of the project for which the loan or grant was made. (2005-454, s. 3; 2011-145, s. 13.11A(d).)

§ 159G-44. Rules.

The Department may adopt rules to implement this Chapter. Chapter 150B of the General Statutes, the Administrative Procedure Act, governs the adoption of rules by the Department. A rule adopted to administer a loan or grant from the CWSRF or the DWSRF must be consistent with federal law. The Department must give a copy of the rules adopted to implement this Article without charge to a person who requests a copy. (2005-454, s. 3.)

§ 159G-45. Reserved for future codification purposes.

§ 159G-46. Reserved for future codification purposes.

§ 159G-47. Reserved for future codification purposes.

§ 159G-48. Reserved for future codification purposes.

§ 159G-49. Reserved for future codification purposes.

§ 159G-50. Reserved for future codification purposes.

Article 3.

[Reserved.]

§§ 159G-51 through 159G-64: Reserved for future codification purposes.

Article 4.

State Water Infrastructure Commission.

§§ 159G-65 through 159G-67: Repealed by Session Laws 2013-360, s. 14.21(c), effective July 1, 2013.

§ 159G-68: Reserved for future codification purposes.

§ 159G-69: Reserved for future codification purposes.

Article 5.

State Water Infrastructure Authority.

§ 159G-70. State Water Infrastructure Authority created.

(a) Authority Established. - The State Water Infrastructure Authority is created within the Department of Environment and Natural Resources.

(b) Membership. - The Authority consists of nine members as follows:

- (1) The Director of the Division of Water Infrastructure of the Department or the Director's designee who is familiar with the water infrastructure financing, regulatory, and technical assistance programs of the Department.
- (2) The Secretary of Commerce or the Secretary's designee who is familiar with the State programs that fund water or other infrastructure improvements for the purpose of promoting economic development.
- (3) The Director of the Local Government Commission or the Director's designee who is familiar with the functions of the Commission.
- (4) One member who is a professional engineer in the private sector and is familiar with the development of infrastructure necessary for wastewater systems, to be appointed by the Governor to a term that expires on July 1 of even-numbered years.
- (5) One member who is knowledgeable about, and has experience related to, direct federal funding programs for wastewater and public water systems, to be appointed by the Governor to a term that expires on July 1 of odd-numbered years.
- (6) One member who is knowledgeable about, and has experience related to, urban local government wastewater systems or public water systems, to be appointed by the General Assembly upon the recommendation of the President Pro Tempore of the Senate to a term that expires on July 1 of even-numbered years.
- (7) One member who is knowledgeable about, and has experience related to, rural local government wastewater systems or public water systems, to be appointed by the

General Assembly upon the recommendation of the President Pro Tempore of the Senate to a term that expires on July 1 of odd-numbered years.

- (8) One member who either (i) is a county commissioner of a rural county or (ii) resides in a rural county and is knowledgeable about, and has experience related to, public health services, to be appointed by the General Assembly upon the recommendation of the Speaker of the House of Representatives to a term that expires on July 1 of even-numbered years.
- (9) One member who is familiar with wastewater, drinking water, and stormwater issues and related State funding sources, to be appointed by the General Assembly upon the recommendation of the Speaker of the House of Representatives to a term that expires on July 1 of odd-numbered years.

(c) Terms. - The members appointed by the Governor, the President Pro Tempore of the Senate, and the Speaker of the House of Representatives shall serve two-year terms. The other members, who are ex officio members or designees of those members, shall serve until they are no longer in office or are replaced with another designee.

(d) Chair. - The Director of the Division of Water Infrastructure, or the Director's designee, shall serve as Chair of the Authority. The Chair must call the first meeting. The Chair shall serve as a nonvoting member, provided, however, that the Chair shall vote to break a tie.

(e) Meetings. - The Authority shall meet at least four times a year and may meet as often as needed. A majority of the members of the Authority constitutes a quorum for the transaction of business. The affirmative vote of a majority of the members present at a meeting of the Authority is required for action to be taken by the Authority.

(f) Vacancies. - A vacancy in the Authority or as Chair of the Authority resulting from the resignation of a member or otherwise is filled in the same manner in which the original appointment was made. The term of an appointment to fill a vacancy is for the balance of the unexpired term.

(g) Compensation. - Each member of the Authority shall receive no salary as a result of serving on the Authority but shall receive per diem, subsistence, and travel expenses in accordance with the provisions of G.S. 120-3.1, 138-5, and 138-6, as applicable. (2013-360, s. 14.21(b); 2013-363, s. 5.12.)

§ 159G-71. State Water Infrastructure Authority; powers and duties.

The Authority has the following additional duties:

- (1) After reviewing the recommendations for grants and loans submitted to it by the Division, to determine the rank of applications and to select the applications that are eligible to receive grants and loans, consistent with federal law.
- (2) To establish priorities for making loans and grants under this Chapter, consistent with federal law.
- (3) To review the criteria for making loans and grants under G.S. 159G-23 and make recommendations, if any, to the Department for additional criteria or changes to the criteria, consistent with federal law.

- (4) To develop guidelines for making loans and grants under this Chapter, consistent with federal law.
- (5) To develop a master plan to meet the State's water infrastructure needs.
- (6) To 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.
- (7) To analyze the adequacy of projected funding to meet projected needs over the next five years.
- (8) To make recommendations on ways to maximize the use of current funding resources, whether federal, State, or local, and to ensure that funds are used in a coordinated manner.
- (9) To review the application of management practices in wastewater, drinking water, and stormwater utilities and to determine the best practices.
- (10) To assess the role of public-private partnerships in the future provision of utility service.
- (11) To assess the application of the river basin approach to utility planning and management.
- (12) To assess the need for a "troubled system" protocol. (2013-360, s. 14.21(b).)

§ 159G-72. State Water Infrastructure Authority; reports.

No later than November 1 of each year, the Authority shall submit a report of its activity and findings, including any recommendations or legislative proposals, to the Senate Appropriations Committee on Natural and Economic Resources, the House of Representatives Appropriations Subcommittee on Natural and Economic Resources, and the Fiscal Research Division of the Legislative Services Commission. (2013-360, s. 14.21(b).)