

**State Water Infrastructure Authority
North Carolina Department of Environmental Quality**

September 21, 2016

**Hotel Indigo
151 Haywood Street
Asheville, North Carolina**

The State Government Ethics Act (North Carolina General Statute § 138A) mandates that the Chair inquire as to whether there is any known conflict of interest or potential conflict of interest with respect to any matters before the Authority today. If any member knows of a conflict of interest or potential conflict of interest, please identify the conflict at the time the conflict becomes apparent.

The times indicated for each Agenda Item are merely for guidance. The Authority will proceed through the Agenda until completed.

AGENDA

Kim H. Colson, Authority Chair, Presiding

9:00 A. Call to Order – Chair Colson

1. Welcome
2. Reminder of Conflict of Interest and Compliance with State Government Ethics Act
3. Please set electronic devices to off or vibrate

9:05 B. Approval of July 20, 2016 Minutes (Action Item)

9:10 C. Attorney General’s Office Report – Mary Lucase

9:15 D. Chair’s Remarks – Chair Colson

9:25 E. Legislative Update – Chair Colson

Session Law 2016-95, House Bill 630: An Act to...require a coal combustion residuals impoundment owner to provide permanent alternative water supplies for residents in areas surrounding coal combustion residuals surface impoundments...

9:35 F. CDBG-I Funds for Public Schools – Julie Cubeta

9:40 G. Communications Update – Cathy Akroyd, Division Public Information Officer

9:50 H. Proposed 2017 Authority Meeting Schedule – Francine Durso (Action Item)

9:55 I. Presentations by Western NC Local Governments and Councils of Government

- Tuckasegee Water & Sewer Authority – Dan Harbaugh, Executive Director
- Southwestern Commission – Sarah Thompson, Executive Director
- Land of Sky Council of Government – Karen Kiehna, Principal Planner for Economic and Community Development
- High Country Council of Government – Phillip Trew, Director of Planning & Development
- City of Hickory – Kevin Greer, Assistant Public Services Director

12:15 Lunch Break

1:15 J. Master Plan Committee Report – Committee Chair Maria Hunnicutt

1:30 K. Draft 2016 Annual Report – Francine Durso

2:00 L. Informal Comments from the Public

2:15 M. Concluding Remarks by Authority Members, Chair and Counsel

2:30 N. Adjourn

Reminder to All Authority Members: Members having a question about a conflict of interest or potential conflict should consult with the Chair or with legal counsel.

Reminder to Authority Members Appointed by the Governor: Executive Order 34 mandates that in transacting Commission business each person appointed by the Governor shall act always in the best interest of the public without regard for his or her financial interests. To this end, each appointee must recuse himself or herself from voting on any matter on which the appointee has a financial interest.

State Water Infrastructure Authority
North Carolina Department of Environmental Quality
July 20, 2016
Meeting Minutes

State Water Infrastructure Authority Members Attending Meeting

- Kim Colson, Chair; Director, Division of Water Infrastructure
- Johnnie Carswell, Burke County Commissioner
- Leila Goodwin, Water Resources Engineer
- Robin Hammond, Assistant General Counsel, Local Government Commission
- Maria Hunnicutt, Manager, Broad River Water Authority
- JD Solomon, Vice President, CH2M
- Cal Stiles, Cherokee County Commissioner
- Charles Vines, Mayor of Bakersville

Division of Water Infrastructure Staff Attending Meeting

- Julie Haigler Cubeta, Community Block Development Grant – Infrastructure Unit Supervisor
- Francine Durso, Special/Technical Issues Senior Program Manager
- Seth Robertson, State Revolving Fund Section Chief
- Jennifer Haynie, Environmental and Special Projects Unit Supervisor
- Anita Reed, SRF Wastewater Unit Supervisor
- Vince Tomaino, SRF Drinking Water Unit Supervisor
- Amy Simes, Senior Program Manager
- Jessica Leggett, Project Manager, Environmental and Special Projects Unit
- Cathy Akroyd, Public Information Officer
- Carol McDermott, Administrative Services Supervisor

Department of Justice Staff Attending Meeting

- Mary Lucasse, NC Department of Justice; Special Deputy Attorney General, Environmental Division

Item A. Call to Order

Mr. Colson opened the meeting and reminded the members of the State Water Infrastructure Authority (SWIA) of General Statute 138A-15, which states that any member who is aware of a known conflict of interest or an appearance of a conflict of interest with respect to matters before the Authority today is required to identify the conflict or appearance of a conflict at the time the conflict becomes apparent. Members stated potential conflicts of interest as follows:

- Mr. Solomon: Will identify projects during the applicable Agenda Item.
- Ms. Hunnicutt: Will identify projects during the applicable Agenda Item.

Item B. Approval of Meeting Minutes

Mr. Colson presented the draft meeting minutes from the April 2016 Authority meeting for approval.

Action Item B:

- Mr. Vines made a motion to approve the April 20, 2016 Authority meeting minutes. Mr. Carswell seconded the motion. The motion passed unanimously.

Item C. Attorney General's Office Report

Ms. Mary Lucasse substituted for Phillip Reynolds today. She had no items to report.

Item D. Chair's Remarks

The next funding application deadline is Sept. 30, 2016. Staff will hold application training at eight locations across the state during the first two weeks of August. The press release about the training was provided to the Authority members. Staff provided details about the Authority's next meeting to be held on Sept. 21, 2016 in Asheville.

Funding decisions will be made today for the Clean Water State Revolving Fund (CWSRF) loan program, State Wastewater Reserve projects, State Drinking Water Reserve projects, and – for the first time – the new Asset Inventory and Assessment grants and new Merger/Regionalization Feasibility study grants (Agenda Item J). The Chair requested feedback from the members during discussion of the new grants as to the quality of the applications, how the projects were described by the applicants, whether the priority system is working as intended, and any additional information that staff could present to applicants during training to help clarify the Authority's expectations for these applications.

Item E. Legislative Update

The governor signed the fiscal year 2016-2017 budget. The budget contains a non-recurring additional appropriation of nearly \$18.8 million. However, four projects are specified to be funded using these funds, leaving a net increase of \$2.1 million. The specified projects are for wastewater infrastructure improvements to a municipality located in a development tier three county, where the municipality has a population under 100 and has been issued Notices of Violation by the County and the Division of Water Resources (i.e., Love Valley), B.F. Grady Elementary School, the Town of Fontana Dam, and an as-yet-to-be-formed water and sewer authority in Rockingham and Guilford counties. The budget also transferred some de-obligated CDBG funds from the Department of Commerce to the Department of Environmental Quality, specifically for water and sewer infrastructure for public schools; more details will be presented during Agenda Item F.

A bill to consolidate the Authority's and Division's annual reports to the General Assembly was not passed during the session. The Authority had been included in a new coal ash bill but that portion was removed and the Authority will not be involved in determining water line extensions around coal ash basins.

Authority members Mr. Solomon, Mr. Stiles and Mr. Vines have been reappointed to the Authority with appointments ending in June 2018.

Authority member Ms. Hammond explained that House Bill 1059 allows the Local Government Commission (LGC) to put in place minimum education requirements for finance officers. The LGC has seen issues with small towns not having resources to hire or train staff. Rulemaking may be needed. The LGC is starting a pilot program at two community colleges and is working with the UNC School of Government and the community colleges to set up the pilot program. It is anticipated that the course would be similar to continuing education programs at the community colleges.

The Blue Ribbon Commission to Study the Building and Infrastructure Needs of the State will meet on August 1, 2016. Authority member Mr. Solomon is a member of the Commission and explained that before the short session began, the Commission conducted informational sessions. The Commission will begin planning for a decision-making process at their next meeting.

Item F. CDBG-I Funds for Public Schools

The fiscal year 2016-2017 budget transferred about \$4.5 million in de-obligated CDBG funds from the Department of Commerce to the Department of Environmental Quality for water and sewer infrastructure improvements for public schools. These funds have accumulated over about the past ten years. It will be necessary to amend the Annual Action Plans for each of these years and conduct public hearings for the amendments.

Typical problems include onsite wastewater systems and drinking water wells. Funds can be used to address issues with lead, but these funds will not re-plumb schools. The grantees must contribute a 10% match to cover the cost of grant administration, which consists of conducting the environmental review, preparing the engineering report, and ensuring compliance with the Fair Housing Act, the Davis-Bacon Act, and Section 3 requirements for hiring low income people for the project. The Division is working with the Department of Public Instruction to determine where there are schools with both a student population where 51% of students receive free or reduced cost lunches, and also a need for assistance resolving a water or sewer problem. Staff is working with the U.S. Department of Housing and Urban Development (HUD) to establish possible criteria for ranking potential projects.

Item G. Communications Update

The Division's Public Information Officer, Cathy Akroyd, presented an update on the Division's efforts to communicate the work of the Authority and the Division. These efforts have been extensive and include communication through press releases, print and broadcast media, the Department's blog and website, the Division's website, and Facebook and Twitter. The Division is developing a funding application webinar and holds training sessions, attends ribbon-cutting ceremonies, and attends and presents at conferences and meetings where a staff-designed booth with displays and informational materials is used.

Item H. Funding Program Decision Flow Charts

Staff presented recently-developed flow charts designed to provide more transparent information for the public about the Division's funding programs including the new Connect NC bonds funding. Three flow charts were presented: (1) Funding Program Applicability Decision Tree; (2) Connect NC Bonds Information; and (3) Affordability Criteria Applicability.

Item I. Funding Programs Cash Flow

The Chair presented an overview of the funding programs cash flow anticipated for the Fall 2016, Spring 2017 and Fall 2017 funding rounds. The cash flow includes both the anticipated federal and state funding levels and includes the Connect NC bond funds. The Connect NC bonds provide that any projects that will address wastewater-related EPA Administrative Orders (AO) will be eligible to receive up to one-third of the grant funds that are part of the bonds. To date, the Division is aware of two systems under an AO. As a result, it is possible that there could be relatively few wastewater bond grant funds available for systems that are not under an AO. The Division's loan fees are at 2%, which is slightly under the cost of administering the federal SRF programs; note that the Division administers these loans for 20 years as the loans are paid back. The fee is offset because interest is not charged during the several-year project construction period. The Division's loan and grant fees are one-and one-half percent and are set by statute.

Item J. Funding Decisions for April 29, 2016 Funding Round

Staff presented an overview of the funding decisions to be made for the CWSRF program, the State Reserve projects, the new Asset Inventory and Assessment (AIA) grants and new Merger/Regionalization Feasibility (MRF) grants.

- Ms. Hunnicutt identified a conflict of interest with AIA Project No. 7 and with MRF Project No. 3 because the applicant for both of these projects is the Broad River Water Authority.
- Mr. Solomon identified potential conflicts of interest with AIA Project No. 1 and No. 8 (the applicant for both of these projects is the City of Rocky Mount) and with AIA Project No. 31 (the applicant is the Town of Carolina Beach).

Ms. Lucasse stated that the test for Authority members regarding conflict of interest is whether they or their employers would benefit financially from a project being funded and/or whether the applicant was related to the Authority member. She noted that, as always, the determination of whether there is a conflict of interest is a personal decision. In response to a question, Ms. Lucasse explained that the mere fact that an applicant is located within a particular county does not automatically create a conflict of interest for the County Commissioners on the Authority who represent the county in which the applicant is based.

Item J.1 – Clean Water SRF

Sixteen complete, eligible applications were received with requests totaling \$117.8 million; the approximate amount available for this round is \$120 million. Question: if several large dollar projects are funded, how will it impact the amount available for the fall CWSRF funding round? Answer: approximately \$60 million will be available for the fall round and it is critical to obligate the federal funds because unobligated funds can signal that a state does not need the funds awarded to it. In addition, wastewater loan funds will be available from the Connect NC bonds. Question: Should there be a requirement for a minimum number of project benefit points for SRF projects? Answer: No; a low project benefit score does not indicate that there is no benefit from the project; it indicates that the particular benefit is not specifically prioritized in the criteria. In addition, this program loans funds that will be paid back; if a community is willing to take on this debt at the local level, it sees value in the project.

Action Item J.1:

- Mr. Solomon made a motion to approve as eligible for funding CWSRF Project Nos. 1 through 16. Mr. Stiles seconded the motion. The motion passed unanimously.

Federal Clean Water State Revolving Funds (CWSRF) Project Funding Approved by Authority on July 20, 2016

Project No.	Applicant Name	Project Name	Funding Approved
1	Lake Lure	Greenline	\$12,580,261
2	Albemarle	Sanitary Sewer Rehab. Phase 2 & WWTP Rehab.	\$4,384,000
3	Lumberton	Sanitary Sewer System Rehab.; 2016 Repairs	\$1,000,000
4	Charlotte	Sugar Creek WWTP Reliability Improvements	\$20,881,929
5	Cape Fear Public Utility Authority	Air Relief Valve Replacement	\$2,046,200

6	Cape Fear Public Utility Authority	Southside WWTP Interim Rehabilitation	\$6,158,625
7	Goldsboro	Phase 4 Sewer Collection Rehabilitation Project	\$6,268,382
8	Mocksville	Dutchman's Creek WWTP Renovation	\$3,000,000
9	Raleigh	Neuse River RRF Bioenergy Recovery Program - Anaerobic Digester Project	\$50,000,000
10	Hendersonville	Multi-area Streambank Restoration Project	\$2,982,484
11	Cape Fear Public Utility Authority	PS 137 Quail Woods Elimination	\$461,950
12	Johnston County	Swift Creek Interceptor	\$1,675,000
13	Taylorsville	Taylorsville WWTP Renewable Energy Project	\$306,500
14	Cape Fear Public Utility Authority	Pump Station 10 Force Main Replacement	\$3,923,500
15	Cape Fear Public Utility Authority	Pump Station 12 Force Main Replacement	\$1,766,000
16	Cape Fear Public Utility Authority	Greenfield Lake Outfall Phase 3 Sewer Replacement	\$344,451
Total CWSRF Funding Approved:			\$117,779,282

Item J.2 – State Reserve Projects – Drinking Water and Wastewater

Four complete, eligible applications were received for drinking water projects with requests totaling \$7.2 million. Thirteen complete, eligible applications were received for wastewater projects, with requests totaling \$26.8 million. A wastewater grant application was received from the Town of Fremont. Staff suggested that the Authority could add a condition that, if funded, the Town would need to participate in an analysis of consolidation with the Town of Eureka and/or Wayne County as a path toward a permanent infrastructure solution for both towns.

Item J.3 – Asset Inventory and Assessment Grants

One-hundred-eighty-two complete, eligible applications were received for AIA projects with requests totaling \$20 million. The priority system includes points for Project Benefits, System Management and Affordability. The Authority commented that the logic used by staff for project review and scoring was consistent with the intent of the Authority when it approved the priority criteria. Division staff noted that some applicants had applied for an AIA grant for drinking water and separately from an AIA grant for wastewater. During training, staff had told applicants that this was an acceptable approach that the Authority had previously discussed and approved. Division staff noted that several of the potential funding scenarios included funding only one type of AIA grant per applicant. The Authority discussed the possibility of partial funding of applications so that more applicants could receive some amount of funding.

Item J.4 – Merger/Regionalization Feasibility Grants

Ten complete, eligible applications were received for MRF projects with requests totaling \$490,000. The priority system includes points for Technical Status, Organizational Status and Affordability. The Authority commented that the quality of the applications and the number received was as anticipated.

Funding Decisions for Agenda Items J.2, J.3 and J.4

The total funding requested for Agenda Items J.2, J.3 and J.4 equals \$54.5 million; the amount available is \$8.69 million. Staff presented four potential funding scenarios that were discussed by the Authority.

Action Item J.2 for State Reserve Projects:

- Ms. Goodwin made a motion to approve as eligible for grant funding the Wastewater Reserve Projects No. 1 and No. 2 using grant funds, with no condition added for the Town of Fremont. Ms. Hunnicutt seconded the motion. The vote was 3 for and 4 against. The motion failed.
- Mr. Solomon made a motion to approve as eligible for grant funding Wastewater Reserve Project No. 1. Mr. Stiles seconded the motion. The motion passed unanimously.

State Wastewater Reserve Project Grant Approved by Authority on July 20, 2016

Project No.	Applicant Name	Project Name	Funding Approved
1	Trenton	2016 Wastewater Improvements Project	\$3,000,000

Action Item J.3 for Asset Inventory and Assessment Grants:

- Mr. Stiles made a motion to fund staff Scenario No. 4 which included only one application per applicant. The motion was not seconded.
- Mr. Solomon made a motion that the Authority could, as a matter of policy, allow a single applicant to receive separate funding for both a drinking water AIA grant and a wastewater AIA grant based on the Authority’s review of the points received for each project and that applicants would not be limited to receiving funding for only one type of AIA project. Ms. Hunnicutt seconded the motion. The vote was 6 for and 1 against. The motion passed.
- Ms. Goodwin made a motion to either fund an application in the full amount requested by the applicant or not fund an application at all (no partial funding of applications). The motion was not seconded.
- Ms. Hunnicutt made a motion to approve as eligible for funding AIA Project Nos. 1 through 6 and Nos. 8 through 39. Ms. Goodwin seconded the motion. Mr. Solomon recused himself from discussion of the motion and the vote. The motion passed.
- Ms. Goodwin made a motion to approve as eligible for funding AIA Project No. 7. Mr. Vines seconded the motion. Mr. Solomon recused himself from discussion of the motion and the vote. Ms. Hunnicutt recused herself from discussion of the motion and the vote. The motion passed.
- Ms. Hunnicutt made a motion to approve as eligible for funding AIA Project No. 40. Mr. Vines seconded the motion. Mr. Solomon recused himself from discussion of the motion and the vote. The motion passed.

- Ms. Goodwin made a motion to approve as eligible for funding AIA Project Nos. 41 and 42. Mr. Stiles seconded the motion. Mr. Solomon recused himself from discussion of the motion and the vote. The motion passed.

State Reserve Asset Inventory and Assessment Grants Approved by Authority on July 20, 2016

Project No.	Applicant Name	Project Name	Funding Approved
1	Rocky Mount	2016 AIA Wastewater Project	\$ 150,000
2	Henderson	Wastewater Infrastructure Assessment	\$ 125,000
3	Salisbury	Asset Inventory and Assessment Grant for Water	\$ 130,000
4	Lenoir	Sewer AIA Grant	\$ 140,000
5	Kinston	Wastewater Asset Management Plan	\$ 150,000
6	Pittsboro	Sewer Asset Inventory, Condition Assessment and Asset Management Planning	\$ 150,000
7	Broad River Water Authority	Water Asset Inventory and Assessment	\$ 150,000
8	Rocky Mount	2016 AIA Drinking Water Project	\$ 150,000
9	Mount Olive	Asset Inventory & Assessment Grant for Sewer	\$ 150,000
10	Winterville	Sanitary Sewer System Asset Inventory and Assessment	\$ 150,000
11	Tuckaseegee Water and Sewer Authority	Drinking Water Asset Inventory and Assessment - Phase 1	\$ 75,225
12	Tuckaseegee Water and Sewer Authority	Wastewater Asset Inventory and Assessment - Phase 1	\$ 74,801
13	Lenoir	Water AIA Grant	\$ 80,000
14	Wilson	Wastewater System Asset Inventory and Assessment	\$ 108,200
15	Lumberton	Sewer Mapping and Asset Management Plan	\$ 150,000
16	Newton	Water System Asset Management	\$ 150,000
17	Dublin	FY 16 Asset Management Plan - Wastewater System	\$ 15,000
18	Smithfield	Water Asset Inventory and Assessment	\$ 150,000

19	Montgomery County	Water Asset Management Plan	\$ 150,000
20	Salisbury	Asset Inventory and Assessment Grant for Sewer	\$ 130,000
21	Wilson	Water System Asset Inventory and Assessment	\$ 106,700
22	Roper	System-wide Wastewater Asset Inventory and Assessment	\$ 100,225
23	Newton	Wastewater System Asset Management	\$ 150,000
24	Smithfield	Wastewater Asset Inventory and Assessment	\$ 150,000
25	Taylorsville	Drinking Water AIA	\$ 54,268
26	Robbins	Water Asset Management Plan	\$ 97,587
27	Burlington	Sewer Asset Inventory, Condition Assessment and Asset Management Planning	\$ 150,000
28	Stantonsburg	Sewer System Asset Inventory & Assessment	\$ 100,000
29	Plymouth	Wastewater Asset Management Plan	\$ 146,585
30	Stoneville	Sewer Asset Inventory & Assessment Program	\$ 90,000
31	Carolina Beach	2016 AIA Wastewater Project	\$ 150,000
32	Pembroke	Wastewater AIA	\$ 150,000
33	Granite Falls	Water System Asset Management	\$ 150,000
34	Williamston	Water System Asset Inventory Assessment	\$ 150,000
35	Rutherford College	Drinking Water AIA	\$ 52,541
36	Bertie County Water District IV	Drinking Water Asset Inventory and Assessment	\$ 88,800
37	Sanford	Sewer Asset Inventory, Condition Assessment and Asset Management Planning	\$ 150,000
38	Hendersonville	Sanitary Sewer System Asset Inventory and Assessment	\$ 150,000
39	Wilkesboro	Water System Asset Inventory and Condition Assessment	\$ 150,000

40	Wilson County - Southeast Water District	Drinking Water District Asset Inventory and Assessment	\$ 90,000
41	Clyde	Water System Asset & Inventory Assessment	\$ 50,000
42	Robersonville	Water Asset Management Plan	\$124,512
Total Asset Inventory and Assessment Funding Approved:			\$5,129,444

Action Item J.4 for Merger/Regionalization Feasibility Grants:

- Mr. Vines made a motion to approve as eligible for funding MRF Project Nos. 1 through 2 and Nos. 4 through 10. Ms. Goodwin seconded the motion. The motion passed unanimously.
- Mr. Solomon made a motion to approve as eligible for funding MRF Project No. 3. Mr. Carswell seconded the motion. Ms. Hunnicutt recused herself from discussion of the motion and the vote. The motion passed.

State Reserve Merger/Regionalization Feasibility Grants Approved by Authority on July 20, 2016

Project No.	Applicant Name	Project Name	Funding Approved
1	Grover	Wastewater Treatment Merger/ Regionalization Feasibility Study	\$ 50,000
2	Handy Sanitary District	Sewer System Merger Study	\$ 50,000
3	Broad River Water Authority	Merger/Regionalization Study	\$ 50,000
4	Cleveland County	Merger/Regionalization Feasibility Grant for Sewer	\$ 50,000
5	Claremont	Wastewater Treatment Merger/ Regionalization Study	\$ 50,000
6	Handy Sanitary District	Water System Merger Study	\$ 50,000
7	Laurel Park	Water System Merger Feasibility Study	\$ 40,000
8	Pilot Mountain	Water Merger/Regionalization Feasibility Grant	\$ 50,000
9	Pilot Mountain	Sewer Merger/Regionalization Feasibility Grant	\$ 50,000
10	Lumberton	Regional Wastewater Study	\$ 50,000
Total Merger/Regionalization Feasibility Funding Approved:			\$490,000

Item J.5 – Duplin County Wastewater State Reserve Project No. 12

House Bill 1030 – 2016 State Appropriations Act provided an appropriation of \$1 million in grant funding to the Duplin County B. F. Grady Elementary School project. Duplin County had applied for a \$2.175 million grant for the same project (State Wastewater Reserve Program Project No. 12). Staff recommended that the Authority approve a loan in the amount of \$1.175 million for the project.

Action Item J.5:

- Mr. Solomon made a motion to approve as eligible for loan funding Wastewater Reserve Project No. 12. Mr. Stiles seconded the motion. The motion passed unanimously.

State Wastewater Reserve Project Loan Approved by Authority on July 20, 2016

Project No.	Applicant Name	Project Name	Funding Approved
12	Duplin County	B. F. Grady Elementary School Sanitary Sewer Improvements	\$ 1,175,000

Item K. Connect NC Bond Administration

Item K.1 – State Drinking Water Reserve Priority Rating System Proposed Modification

Staff recommended that a line item be added to the State Drinking Water Priority Rating System to make it consistent with the Drinking Water State Revolving Fund (DWSRF) Priority Rating System. The change will facilitate the development of clear and simplified application materials.

Action Item K.1:

- Ms. Goodwin made a motion to approve the change to the State Drinking Water Priority Rating System so that it is consistent with the DWSRF Priority Rating System. Mr. Stiles seconded the motion. The motion passed unanimously.

Item K.2 – Grant Percentage Matrix Proposed Modification

During application training for the April 2016 funding cycle, Division staff received comments and feedback about the affordability criteria. While no comments were received about Steps 1 through 3 of the methodology, several commented that the grant percentage matrix (Step 4) was too restrictive for small communities. Had Division staff received these comments during the public comment period, the comments would have been considered before the Authority approved the methodology.

The proposed modified matrix would provide 25% grant funding for some entities that have higher than median debt service per connection but lower than median monthly bills, as opposed to 0% grant funding using the current matrix. Division staff presented an example illustrating the difference in funding scenarios when using the current matrix and when using the proposed modified matrix.

Action Item K.2:

- Ms. Hunnicutt made a motion to approve the use of the modified matrix in Step 4 of the affordability criteria methodology during the funding rounds in which Connect NC bond funds will be available. Mr. Solomon seconded the motion. The motion passed unanimously.

Item L. Master Plan Committee Report

The Committee reported that since the Authority’s review of the Master Plan at its April 20, 2016 meeting, it has incorporated the Authority’s comments and made revisions, including the addition of an Executive Summary. The plan identifies near-term and longer-term activities for the Authority and the Division. A formatted version of Section 4 of the plan, which includes infographics, was provided to the

Authority. As the next step, staff will engage with key stakeholders to receive comments about the draft plan and continue working with the Master Plan Committee to finalize the draft document.

Item M. Proposed 2017 Authority Meeting Schedule

Staff proposed the following dates for regular meetings of the Authority in 2017: January 18, April 19, July 19, September 20, October 18, and December 13 or 20. The Authority preferred December 13. The Authority will take action to approve the 2017 regular meeting schedule at its September 2016 meeting.

Item N. Informal Comments from the Public

Chair Colson stated that public comments could be made at this time with the reminder that in accordance with the Authority's Internal Operating Procedures, comments must be limited to the subject of business falling within the jurisdiction of the Authority and should not be project-specific. There were no informal comments from the public.

Item O. Concluding Remarks by Authority Members, Chair, and Counsel

The Authority appreciated receiving the applications electronically well in advance of the meeting date and had a better grasp on the time taken by applicants to prepare the applications and the time and level of detail with which staff reviewed the applications. The Authority remarked that it is evident when an applicant takes ownership and is involved in developing an application. The applicant's detailed understanding of the project may be reflected in a higher score for the application.

The next Authority meeting date is September 21, 2016; the meeting will be held in Asheville, NC.

Item P. Adjourn – The meeting was adjourned.

State Water Infrastructure Authority
Meeting Date: September 21, 2016
Agenda Item H – Proposed 2017 Authority Meeting Schedule

Division of Water Infrastructure Staff Report

Background

Under the Internal Operating Procedures for the North Carolina State Water Infrastructure Authority, adopted by the Authority on February 20, 2014, Article III, Section 2 provides that prior to the first meeting of each calendar year the Authority shall approve a schedule of regular meetings for the subsequent calendar year (regular meetings).

Note, however, that after the year’s schedule has been approved, the Chair is authorized under Article III, Section 2 to make changes to the meeting dates if required with at least 7 calendar days’ notice.

The Authority is required to meet at least four times per year according to NCGS 159G-70.(e).

Staff Recommendation

Staff recommends that the Authority approve the following schedule of regular meetings for the calendar year 2017:

Dates of Regular Meetings in 2017	
January 18	3rd Wed
April 19	3rd Wed
July 19	3rd Wed
September 20	3rd Wed
October 18	3rd Wed
December 13	<u>2nd</u> Wed

NORTH CAROLINA STATE WATER INFRASTRUCTURE AUTHORITY

November 1, 2016 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, 2016

As a result of legislative changes made by the North Carolina General Assembly, the State Water Infrastructure Authority, in 2016, has been better able to 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.

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 consider this as the formal submission of the 2016 State Water Infrastructure Authority Annual Report.

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 2016 and looks forward to working to continue to streamline and unify the water infrastructure funding available to the residents of North Carolina.

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

NORTH CAROLINA STATE WATER INFRASTRUCTURE AUTHORITY

November 1, 2016 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. A list of the current Authority members is provided in Appendix A. In 2013, the General Assembly also established the Division of Water Infrastructure (Division) in the North Carolina Department of Environmental Quality. The state’s major water-related infrastructure funding programs are located within the Division.

The purpose of this report is to provide the legislative bodies with an overview of the Authority’s activities in fiscal year 2016, to summarize concerns and issues discussed by the Authority regarding North Carolina’s water infrastructure, and to provide recommendations to further study and address some of those issues.

State Water Infrastructure Authority Activities in FY 2016

The Authority’s 2014 Annual Report contained a number of recommendations designed to enable the Authority to better carry out its assigned duties and to improve coordination of the monetary resources entrusted to it. In 2015, the General Assembly incorporated the recommendations into the biennium budget. The Authority implemented the new legislation in 2016 and began to realize some of its most important goals by:

- Broadening the use of grant funds to encourage water and wastewater utilities to become more proactive in system management and financing by implementing the Asset Inventory and Assessment grants, and Merger/Regionalization Feasibility grants
- Implementing affordability criteria to:
 - Achieve the maximum beneficial impact from the limited funding resources available and stretch the use of limited grant funds by pairing grants with loans when financially feasible for a community
 - Increase access to low-cost or no-cost capital by the most economically distressed utilities in the state that already have high water and/or sewer rates

The newly implemented affordability criteria, Asset Inventory and Assessment grants, and Merger/Regionalization Feasibility grants are described in more detail on pages 8 and 9 of this Report

The Authority’s twelve powers and duties defined in North Carolina General Statute 159G-71 (provided in Appendix B) can be grouped into four primary areas:

1. Distribute loan and grant funds
2. Define water infrastructure needs and funding; develop a State Water Infrastructure Master Plan
3. Assess emerging practices in utility planning and funding
4. Assess need for a “troubled system” protocol

The focus areas are described below along with the Authority’s activities in each area.

Focus Area 1 – Distribute loan and grant funds

The first four of the Authority’s duties focus on distributing loan and grant funds from the funding programs administered by the Division:

1. Federal-state Clean Water State Revolving Fund (CWSRF loan program)
2. Federal-state Drinking Water State Revolving Fund (DWSRF loan program)
3. Federal Community Development Block Grant-Infrastructure (CDBG-I grant program)
4. State Reserve program (grants and loans) for both water and wastewater, including Asset Inventory and Assessment grants, and Merger/Regionalization Feasibility grants

In Fiscal Year (FY) 2015-2016, the General Assembly appropriated \$7.4 million in grant funds to be dispensed through the State Reserve program. Additional funds were made available by allowing the Division to move excess matching funds not needed for the two SRF programs into the state reserve program for grants. This, along with reconciliation of closed grant projects, made \$8.69 million available for the spring 2016 funding round. Note that these figures do not include funds designated to certain projects through special budget provisions.

Applications received in FY 2015-2016 for both loans and grants totaled \$345 million; the Authority awarded \$251 million (see Figures 1 and 2). The funds available through the loan programs met most of the loan requests. As in previous years, the total requests for grant funds outpaced the total availability.

As demonstrated in Figures 1 and 2, there is a significant demand for the Asset Inventory and Assessment grants as well as the Merger/Regionalization Feasibility grants. The purpose of both of these grants is to encourage utilities to become more proactive in the management and financing of their systems, so that they can ultimately end long-term reliance on grant funding. The requests for these grants indicates the real need for these types of state programs to help foster the long-term viability of utilities. These grants are discussed in more detail in Focus Area 3 of this report.

Focus Area 1 Accomplishments

Awarded a total of \$251 million in grant and loan funds (73 % of requests)

- CWSRF loan funds – \$180 million (\$180 million requested)
- DWSRF loan funds – \$47 million (\$49 million requested)
- CDBG-I grant funds – \$14 million (\$62 million requested)
- State Reserve loan and grant funds for both water and wastewater – \$4.2 million (\$34 million requested)
- Asset Inventory and Assessment grant funds – \$5.13 million (\$20 million requested)
- Merger/Regionalization Feasibility grant funds – \$490,000 (\$490,000 requested)

The requests for Asset Inventory and Assessment grants and Merger/Regionalization Feasibility grants indicate the significant need for these types of programs to help foster utilities that are viable for the long-term

Figure 1. Number of Applications Received and Funded – Fall 2015 and Spring 2016 Application Rounds
 (Total number applications received: 311; total number applications funded: 121; see Appendix C for data)

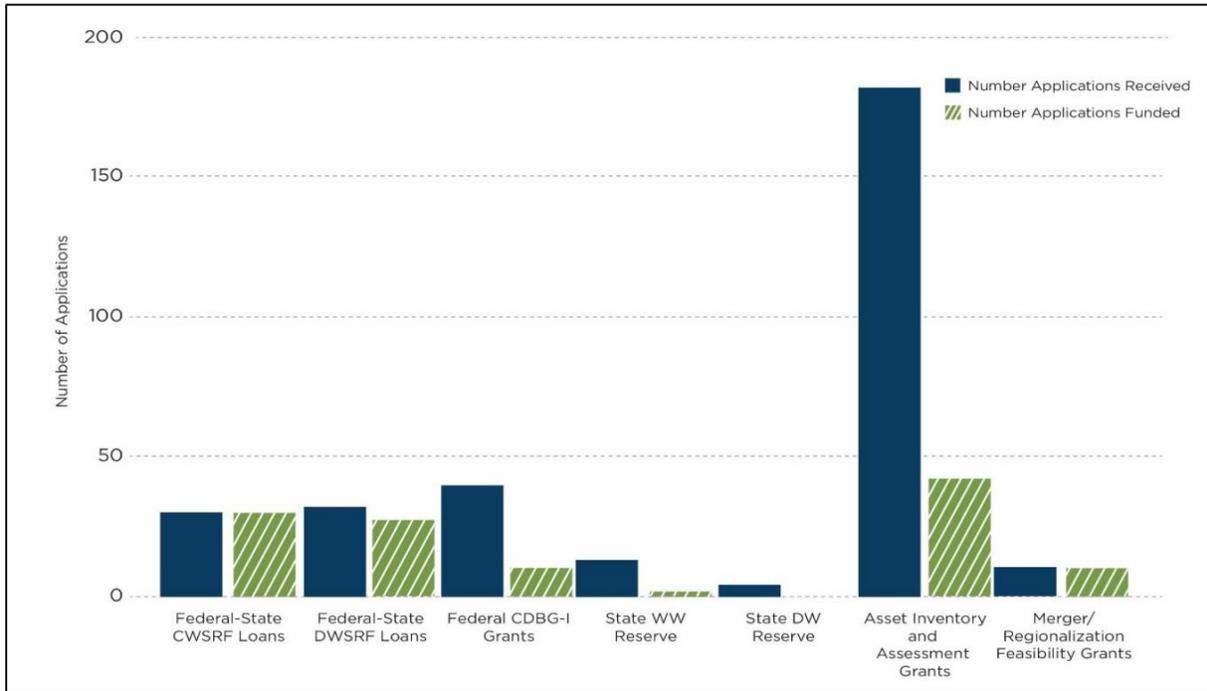
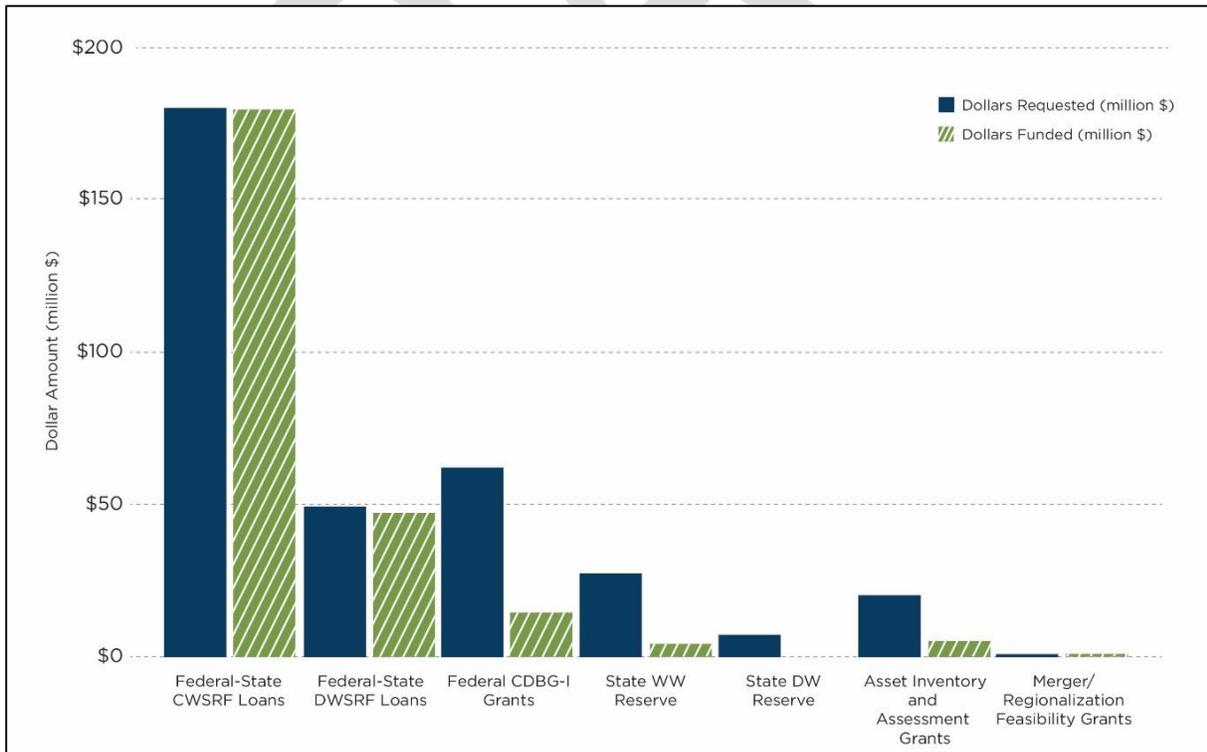


Figure 2. Amount Requested in Applications and Funded (\$ million) – Fall 2015 and Spring 2016 Application Rounds
 (Total amount requested: \$345 million; total amount funded: \$251 million; see Appendix C for data)



Focus Area 2 – Define water infrastructure needs and funding; develop Master Plan

The next four duties encompass defining the statewide water and wastewater infrastructure needs, examining funding sources and their adequacy to meet the identified needs, and assessing the role of the State to develop and fund water infrastructure.

Affordability Criteria

This focus area includes determining ways to realize the greatest beneficial impact from the currently available funding resources and to ensure that funds are used in a coordinated manner.

Affordability is defined in the statutes as the relative affordability of a project for a community compared to other communities in the state based on the following factors, at a minimum: water and sewer service rates, median household income (MHI), poverty rates, employment rates, the population of the community served, and past expenditures by the community on water infrastructure compared to that community's capacity for financing water infrastructure improvements.

The Authority developed and implemented affordability criteria to help stretch the state's limited grant funds by pairing grants with loans when financially feasible for a community. The priority systems that incorporate the affordability criteria were first implemented in the spring 2016 funding round. The affordability criteria methodology evaluates four key measures: population; local government unit parameters (population change, percent of population below poverty, median household income, unemployment, and property valuation per capital); future operating ratio incorporating current debt load as well as the impact of the proposed project; and rates and future debt per connection. These four criteria are used for funding prioritization and, for project grants, to determine the percentage of loan/grant mix available to the local government unit.

A detailed report about the affordability criteria implementation was submitted to the Environmental Review Commission and the Fiscal Research Division in April 2016. The report is available here: [add link](#)

North Carolina's Statewide Water and Wastewater Infrastructure Master Plan: The Road to Viability

One of the Authority's most significant accomplishments in 2016 was the preparation of the draft of "North Carolina's Statewide Water and Wastewater Infrastructure Master Plan: The Road to Viability."

The purpose of the Master Plan is to provide the North Carolina General Assembly, utility governing boards, and the public with a roadmap for water and wastewater utility viability. The draft Master Plan is available here: [add link](#)

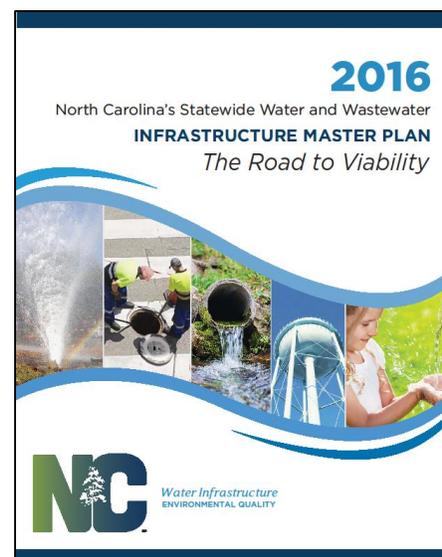
Vision for the Future

The Authority's vision is for viable water utilities across North Carolina. The goal is for all utilities to:

- Recognize that users of water infrastructure must pay, to the greatest extent possible, for the cost of operating, maintaining, and renewing that infrastructure

Focus Area 2 Accomplishments

- Developed and implemented affordability criteria to help stretch limited grant funds by pairing grants with loans when financially feasible for a community
- Prepared draft of ***North Carolina's Statewide Water and Wastewater Infrastructure Master Plan: The Road to Viability***



- Be proactive in the management of water infrastructure by understanding the condition of infrastructure, identifying the most critical components, and establishing prioritized long-term renewal and modernization plans; this process promotes transparent decision-making with customers and stakeholders
- Establish financial plans that enable the utility to fund both operation and maintenance as well as long-term infrastructure renewal without long-term reliance on grant funds

Master Plan Vision

The state will best be able to meet its water infrastructure needs by ensuring individual utilities are, or are on a path to be, viable systems

A viable system is one that functions as a long-term, self-sufficient business enterprise, establishes organizational excellence, and provides appropriate levels of infrastructure maintenance, operation, and reinvestment that allow the utility to provide reliable water services now and in the future

Best practices in utility management are essential for viable utility systems that are robust in three key integrated focus areas:

- **Infrastructure Management** – By taking proactive approaches to enable the right investments to be made in the right projects at the right time, taking into consideration life-cycle costs and risk management
- **Organizational Management** – Through governing boards (elected officials, appointed officials and owners) understanding the long-term nature of water/wastewater systems and prioritizing the financing and completion of the most critical infrastructure projects
- **Financial Management** – Through sufficient revenue generation to fund infrastructure construction, maintenance, operations and renewal/replacement without long-term reliance on grant funds

The state’s role is to foster the long-term viability of individual water and wastewater utilities by providing access not only to capital funds but also to resources that help utilities address organizational and financial management challenges that may be contributing to physical infrastructure limitations

By supporting utilities as they implement the three management focus areas, the state can help assure that its limited capital resources are used most effectively and, in many cases, the improvements achieved will ultimately allow many utilities to access non-subsidized forms of capital.

Achieving the Vision

Achieving viable water utilities across North Carolina requires actions by the state, local governments and water utility providers to:

- Ensure that, to the greatest extent practicable, water utilities operate as enterprise systems that generate sufficient revenue to cover all operating, maintenance, and capital expenditures, as well as funding reserves for unexpected events
- Promote viable water utilities through the state water infrastructure funding programs by:

- Assisting utilities that operate in some of the state’s most rural, economically distressed areas, and that have some of the highest utility rates in the state, in creating permanent management and infrastructure solutions
- Making project funding decisions that recognize that many entities can afford to incur some amount of debt or obligate some amount of funding toward a project
- Prioritizing applications for funding that represent best practices for utility management
- Acknowledge that when water utilities are not viable or are not on a path to become viable, permanent solutions are needed that go beyond simply constructing or repairing infrastructure

Grant funds are targeted to projects to help utilities transition to permanent local funding solutions and eventually the ability to access non-subsidized forms of capital

Focus Area 3 – Assess emerging practices in utility planning and funding

These activities concentrate on investigating methods of utility planning, management and funding such as best management practices and alternative methods of infrastructure funding. This year, for the first time, the State Water Infrastructure Authority made available two new types of grants to encourage proactive management activities: Asset Inventory and Assessment grants, and Merger/Regionalization Feasibility grants.

Focus Area 3 Accomplishments

Implemented two new grant programs to incentivize system viability through:

- Asset Inventory and Assessment
- Merger/Regionalization Feasibility

Asset Inventory and Assessment Grants

For many local government units, water and sewer infrastructure is an amalgam of old, buried infrastructure that a town or industry such as a textile mill may have installed 50 or 100 years ago. This aspect of infrastructure management is a major challenge for utility staff. Asset inventory and Assessment (AIA) grants are available to inventory the existing water and/or sewer system, document the condition of the inventoried infrastructure, and enable utilities to take steps to define and prioritize critical projects. The information gained from these projects can then be maintained (usually with modern asset management software) and enable utilities to become more proactive in management and financing of their systems. The tasks included in these grants are:

- Identify system components and where they are located
- Determine the condition of critical components

“Our customers expect water and sewer service to always be available, but the infrastructure required to provide these services are very much “out-of-sight-out-of-mind.” Also, retaining existing industry while simultaneously attracting economic development to Rocky Mount depends on having reliable well-maintained infrastructure. The AIA grant will help us better understand what we have, what work needs to be done and when, and what it will cost. As a result, we’ll be able to present a business case to our City Council including how to “right-size” our utility rates to better prepare both our water and our sewer utility for the future.”

Jonathan Boone, P.E.
Director of Public Works & Water Resources
City of Rocky Mount

- Establish costs for replacement/repairs/upgrades (capital) as well as for continuous operations and maintenance (O&M)
- Prioritize the most critical projects to be completed
- Prepare a realistic Capital Improvement Plan (CIP) that includes the identified critical projects

AIA grant applications are ranked based on project benefits, system management and affordability with the goal of prioritizing applications that reflect the greatest likelihood that information obtained through the grant will be utilized for future management of the system.

These grants are available through the State Reserve Programs to local government units and nonprofit water corporations. Affordability criteria do not limit eligibility or grant percentage for these grants, but a match is required. Grants are limited to \$150,000 over a period of three years.

Merger/Regionalization Feasibility Grants

Utilities may operate more efficiently under different organizational structures or by gaining economies of scale for treatment facilities. Merger/Regionalization Feasibility (MRF) grants are available to voluntarily investigate the feasibility of: consolidating management of multiple utilities into a single utility operation; utilizing management companies; developing shared resources with other local government units; providing regional treatment; and the best way of carrying out the consolidation or regionalization alternatives. The MRF grants provide funds for a utility to identify the challenges, benefits, implications and costs of each alternative and then work with potential partners to implement a permanent solution. These grants may be especially helpful for systems that are non-compliant or non-viable.

MRF grant applications are ranked based on technical, organizational and affordability status with the goal of prioritizing systems with fewer connections, more compliance issues, smaller staffs, greater financial barriers, or any combination of the above that may hinder system viability and the ability to self-fund or conduct a feasibility study.

These grants are available through the State Reserve Programs and are limited to \$50,000 over a period of three years. Affordability criteria do not limit eligibility or grant percentage for this grant program, but a match is required.

“Making sound decisions about the short term operational and long term capital needs of our physical assets requires timely and accurate information about those assets. The AIA grant will allow us to build this core of critical information in support of an Asset Management system that will serve our needs for many years to come. Decisions on investments in modernization of our existing infrastructure as well as system expansion projects will be made in a more fully informed environment, utilizing limited financial resources in a timely and efficient manner. Our success in these efforts is a critical aspect of economic development in our service area.”

Dan Harbaugh
Executive Director
Tuckasegee Water and Sewer Authority

Through the grants for merger/regionalization feasibility analyses, an entity will be able to investigate the possibility of voluntary merger/regionalization options as a pathway to viability

Focus Area 4 – Assess need for “troubled system” protocol

One of the Authority’s specific tasks is to assess the need for a “troubled system” protocol. However, it is recognized that most utilities throughout the state are probably somewhere within a range between “viable” and “troubled.”

The new grant program to analyze the benefits of a voluntary merger/ regionalization opportunity might be an appropriate first step to investigate potential solutions for more troubled units.

The Local Government Commission (LGC) of the Department of State Treasurer uses multiple benchmarks to evaluate the financial condition of a utility. The data for comparison to the established benchmarks are reported in the audited financial statements of each unit of local government that operates a water and/or wastewater system. In its reviews of the audited financial statements, LGC staff also look for indications of poor operational and internal controls over the utility system and often the entire governmental entity.

The LGC and the Division of Water Infrastructure recognize that a community’s issues in funding its water and wastewater utility can be related to its overall financial management issues. The agencies have found that a system more on the “troubled” end of the range may lack sufficient organizational and/or financial management tools as evidenced by:

- Internal control issues, lack of timely audited financials, accounting and reporting issues, and low cash balances, based on information gathered by the LGC
- Issues related to water and wastewater system billing/revenue generation policies, utility rates, condition assessments, lack of enforcement of collection and cut-off policies, and affordability considerations

While an overarching protocol that could be applied to any system would be ideal, the Authority recognizes that the potential to be “troubled” may result from a number of different circumstances that may be unique to each community and require approaches tailored to an individual community’s needs.

In partnership with the LGC and other agencies and organizations, the Authority will continue its work to develop a troubled system protocol.

Focus Area 4 Accomplishments

The Authority and the Local Government Commission are working to develop scalable strategies and practices to assist “troubled” systems, with the goal of seeking permanent solutions to their water infrastructure issues

Issues Identified by the Authority

Through the Authority’s work this year, key issues for water and wastewater utilities continued to emerge. Many of these issues have been addressed broadly in the draft Master Plan but further work is needed in order to implement approaches, strengthen partnerships and enhance communications resources.

1. Integrated best practices in utility management are essential for viable utility systems

Best practices for water and wastewater utilities encompass:

- **Infrastructure Management** which involves long-term master planning and includes:
 - Knowing the risk of failure of key water infrastructure components

- Taking proactive approaches and making informed decisions to construct, operate, maintain and renew/replace infrastructure that will minimize long-term costs
- Having funding in place so that the right investments are made at the right time
- **Organizational Management** which involves all levels of a utility’s organization in understanding the long-term nature of water and wastewater infrastructure needs, supporting the plan to address and finance needs in a prioritized manner, and building customer and stakeholder support
- **Financial Management** which involves planning to generate the revenues needed to construct, operate, maintain, and repair/replace utility infrastructure – including reserves for unexpected events – without long-term reliance on grant funds

Providing grant funds simply to construct or repair infrastructure – without requiring that long-term management plans are in place for infrastructure, organization and finances – does not move a utility toward viability

While the draft Master Plan provides a roadmap for utilities to move toward viability through integrating these best practices, the challenge is to better communicate to utility providers about the resources available from agencies, water and wastewater organizations, and professional societies.

2. The Funding Road Ahead

Water and wastewater infrastructure needs for North Carolina over the next 20 years are estimated to range from \$17 billion to \$26 billion. Over the next two fiscal years, including the additional funds provided by the Connect NC Bond funds for water infrastructure, approximately \$700 million will be available through the funding programs administered by the Division. The Authority will continue to critically assess the prioritization of the projects applying for these limited funds. overseen by the Authority.

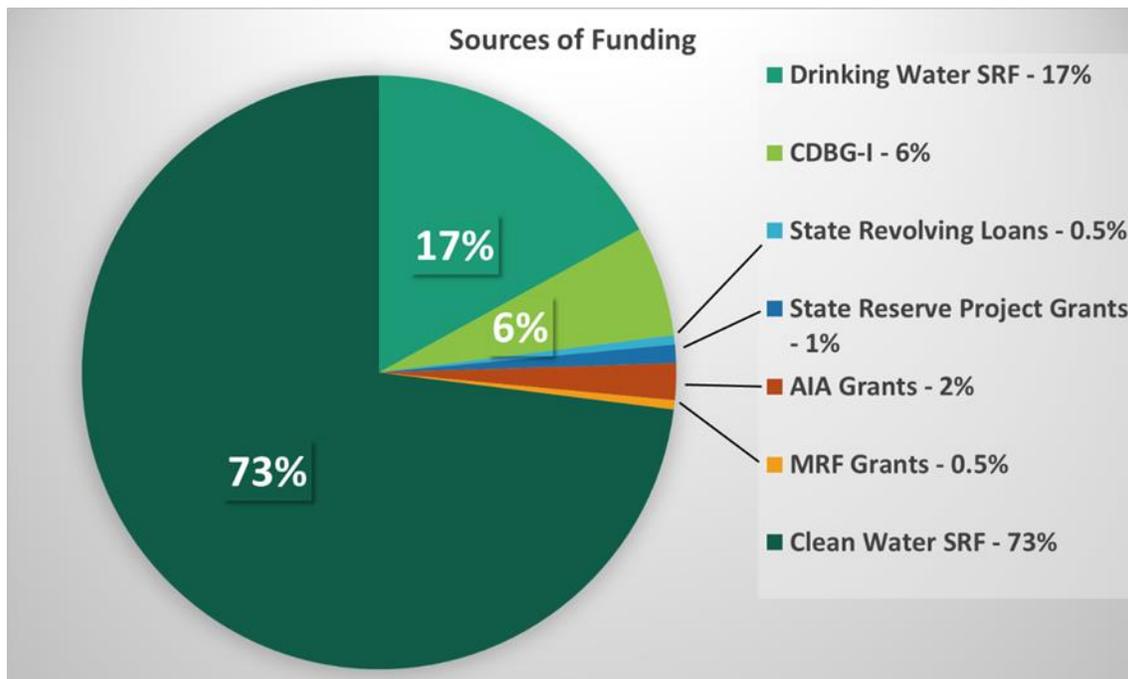
Over the next two fiscal years, approximately 77% of drinking water infrastructure funding needs and 55% of wastewater infrastructure funding needs cannot be met with publicly subsidized funds

Federal loan programs, such as the CWSRF and DWSRF programs, provide substantial savings to almost every system in the state and must continue to be the primary means of infrastructure funding for the vast majority of utilities in the state.

As demonstrated in Figure 3, of the \$251 million in funding provided for projects in 2016, approximately 90% of these funds were comprised of CWSRF and DWSRF loans. The remaining 10% of funds were comprised of CDBG-I grants and the State Reserve Programs (state revolving loans, state reserve project grants, AIA grants and MRF grants).

Some utilities have limited access to the loan capital sources because they may lack the infrastructure management, organizational management, and/or financial management practices to support loan debt. For these utilities, the challenge is to strengthen their management in order to increase their access to these programs.

Figure 3. State Water Infrastructure Authority 2016 Approved Funding Shown by Source of Funds



3. Utility Revenues Must Provide Appropriate Infrastructure Funding Levels

To function well over the long term, utilities must establish and maintain an environment in which the rates and fees that it charges are adequate to pay bills, put funds away for both future capital expenditures and unanticipated issues, and maintain, repair, and replace equipment and infrastructure before it reaches the end of its useful life. These revenues are essential to delivering safe and reliable drinking water and wastewater services that protect public health and the environment.

The Authority developed and implemented affordability criteria to help stretch the state's limited grant funds by pairing grants with loans when financially feasible for a community. Since grant funds are limited, utilities need strategies to generate revenue.

Several State-supported resources that assist utilities with such strategies are:

- The State and Local Finance Division of the Department of State Treasurer. The Division assists local governments in determining the effectiveness of their financial management and offers broad assistance in financial administration to local governments
- The Environmental Finance Center at the University of North Carolina's School of Government. The Center provides a wide variety of capital planning and rate setting tools designed to help utilities assess and implement improved financial practices

Both policymakers and experienced water and wastewater infrastructure professionals in North Carolina agree that the days of plentiful federal or state grant funds are a thing of the past

A gap between the funding needed and the funding available through federal and state grants and loans obviously exists and local governments are taking on more and more of the share of expenses

The challenge is to communicate these available resources to utility providers through partnerships with other agencies, water and wastewater organizations, and professional societies.

Next Steps

In the coming year, the Authority will explore the following issues and will provide recommendations to the General Assembly to help improve the state's infrastructure as well as the decision-making processes used for investing in them:

- Monitoring and evaluating recent changes in funding programs and levels
- Strengthening partnerships in planning, training and communications
- Developing a troubled system protocol

Monitoring and Evaluating Recent Funding Program Changes

A great deal of change has taken place in the state's approach to assistance with water and wastewater infrastructure funding. A key activity in the near term will be managing these changes and evaluating their impacts to ensure that funding is linked to supporting a utility's viability. Future recommendations for modifications to the funding programs may be a result.

The Authority recognizes that the new approach of evaluating affordability criteria and making combination grant/loan awards based on these criteria will need to be closely monitored and evaluated, with the help of stakeholders and those receiving the awards. As with any major program change, this will likely require some modification as experience is gained with the new approach. The Authority will continue its work to maximize the effective use of the state's water infrastructure investments and ensure that the state realizes the most benefit over the long term through the best use of both state and federal funds.

Beginning with the 2013 creation of the Authority and including the 2016 Connect NC bond funding, there has already been a great deal of change in the state's approach to assistance with water and wastewater infrastructure funding

Strengthening Partnerships

Multiple opportunities exist for strengthening partnerships among agencies such as the LGC and the Division. Partnerships with the university and community college systems, water and wastewater organizations, local governments and utility governing boards can be enhanced to leverage and expand on many existing resources and programs. Such partnerships will lead to creative solutions for utility viability and will enhance the long-term success of the state's funding programs.

Division staff are and will continue to promote discussions on planning, training and communications programs with these and other partners that may include:

- University of North Carolina School of Government and the School's Environmental Finance Center
- North Carolina Rural Water Association

Topics and issues that may be addressed with these partners include:

- Affordability
- Water and sewer rates
- Training in:
 - Infrastructure management
 - Asset management
 - Financial management
 - Technical issues
- Building the capacity of utility governing boards
- Communicating complex utility management issues

- Southeast Rural Community Assistance Project
- North Carolina Waterworks Association and Water Environment Association
- North Carolina League of Municipalities
- North Carolina Association of County Commissioners
- North Carolina Councils of Government
- University of North Carolina System
- North Carolina Community College System
- North Carolina Department of Commerce

Developing a troubled system protocol

In partnership with the Local Government Commission and other agencies and organizations, the Authority will work to develop a troubled system protocol. The goal of a troubled system protocol is to seek permanent solutions to water infrastructure issues. While a protocol that could be applied to any system would be ideal, the Authority recognizes that the potential to be “troubled” may result from a number of different circumstances that may be unique to each community and require approaches tailored to an individual community’s needs.

Longer-Term Subjects

There are a number of longer-term subjects that the Authority will continue to research and monitor for future study. These may include communications resources, regional coordination, managing other types of water resources, partnership solutions, and improved procurement policies as follows:

- Resources available for communication to help engage and increase understanding of and support for infrastructure funding by utility governing boards, utility staff, customers and stakeholders
- Regional coordination
 - The potential role of metropolitan and rural planning organizations
 - Interstate water sharing
 - Basinwide water resources management issues such as interbasin transfers and water quality
- Management of reclaimed water, grey water, stormwater, and other types of water
- Partnership solutions such as inter-local agreements, contracts, engaging private entities, shared management opportunities and other types of mutually-beneficial arrangements
- Improvement of procurement policies including laws, regulatory frameworks, communications, and universal practices
- Development of project monitoring practices to ensure that the finished project meets its specific objectives, such as reducing inflow/infiltration, reducing water loss, and providing levels of treatment required to meet permit limits

The recommendations developed by the Authority in the next year 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.

APPENDIX A

State Water Infrastructure Authority Members

The nine-member State Water Infrastructure Authority (Authority) was created by the North Carolina General Assembly in 2013. The current members of the Authority are listed in Table A.1.

Table A.1. Current State Water Infrastructure Authority Members

Cite § 159G-70.(b)	Position Requirements	Name	Title	Appointing Authority
(1)	Director of Division of Water Infrastructure* / 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 for the Purpose of Promoting Economic Development	Dr. Patricia Mitchell	Assistant Secretary, Rural Development Division; Dept. of Commerce	Ex-Officio
(3)	Director of Local Government Commission* (Dept. of State Treasurer)	Robin Hammond	Assistant General Counsel, 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	Johnnie Carswell	Burke County Commissioner	Governor
(6)	Knowledgeable about Urban Wastewater or Water Systems	Leila Goodwin	Water Resources Engineer	Senate Pro Tempore
(7)	Knowledgeable about Rural Wastewater or Water Systems	Charles Vines	Mayor, Town of Bakersville	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

* Or designee

APPENDIX B

Powers and duties of the State Water Infrastructure Authority (NCGS 159G-71)

North Carolina General Statute 159G-71 lists the following 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
-

APPENDIX C**2015-2016 Loan and Grant Program Applications Received and Funding Awarded in 2016**

Table C.1 provides a summary of the applications received by the Division in September 2015 and March 2016 and funding awarded by the Authority in January 2016 and July 2016 respectively.

Table C.1. 2015-2016 Loan and Grant Program Applications Received and Funding Awarded in 2016

Funding Program and Application Round	Number Applications Received	Number Applications Funded	Dollar Amount Requested	Dollar Amount Funded
Federal-State Clean Water State Revolving Fund (CWSRF): Sept. 2015 and March 2016 Application Rounds	30	30	\$180 million	\$180 million
Federal-State Drinking Water State Revolving Fund (DWSRF): Sept. 2015 Application Round	32	27	\$49.3 million	\$46.9 million
Federal CDBG-I: Sept. 2015 Application Round	40	10	\$61.7 million	\$14.1 million
State Reserve Program:				
• State Wastewater Reserve (grants and loans): March 2016 Application Round	13	2	\$26.8 million	\$4.2 million
• State Drinking Water Reserve (grants and loans): March 2016 Application Round	4	0	\$7.2 million	\$0 million
• Asset Inventory and Assessment Grants: March 2016 Application Round	182	42	\$20 million	\$5.1 million
• Merger/Regionalization Feasibility Grants: March 2016 Application Round	10	10	\$490,000	490,000
Totals	311	121	\$345 million	\$251 million