

**Report to the North Carolina General Assembly's Joint
Legislative Oversight Committee on Agriculture and
Natural and Economic Resources and the Fiscal Research
Division**



Stormwater Grants Report

September 1, 2022

**Division of Water Infrastructure
NORTH CAROLINA DEPARTMENT OF
ENVIRONMENTAL QUALITY**

Pursuant to S.L. 2021-180, Sec. 12.14.(j)

North Carolina Department of Environmental Quality

FY 2021-2022 Report to the Chairs of the Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources and the Fiscal Research Division on the projects and activities funded by Section 12.14. of the Current Operations Appropriations Act of 2021 (S.L. 2021-180):

The Local Assistance for Stormwater Infrastructure Investments Fund

September 1, 2022

Background

Session Law 2021-180 established the Local Assistance for Stormwater Infrastructure Investments (LASII) Fund as a special fund in the Department of Environmental Quality (Department). It further established that the LASII Fund shall be used to provide grants to eligible entities, as defined in Section 12.14 of the Session Law, for projects that will improve or create infrastructure for controlling stormwater quantity and quality.

The Department's Division of Water Infrastructure (Division) is responsible for managing and administering the LASII Fund. The Division is managing the LASII Fund similarly to its management of the Drinking Water Reserve and the Wastewater Reserve, working with the State Water Infrastructure Authority (Authority). The Authority establishes priorities for making grants, makes recommendations to the Department on criteria for making grants, and ranks, then selects eligible applications to receive funds after reviewing the Division's recommendations.

A total of \$103,625,000 in nonrecurring funds, allocated from the American Rescue Plan Act State Fiscal Recovery Fund, was appropriated to the LASII Fund in November 2021. Up to three percent may be used for administrative costs by the Department. Session Law 2021-180 directed \$18,450,000 to 11 municipalities. Local governments can apply for approximately \$82 million in available funding. Seventy percent of the \$82 million remaining funds will be awarded as grants to cities and counties (or Councils of Government or nonprofit entities partnering with cities and counties) for construction and the development and implementation of new stormwater utilities, and thirty percent will be awarded as grants for planning.

Activities, Establishment of the New Funding Program

Since the passage of the Session Law in November, the Department developed a new stormwater funding program with processes that allow local governments to apply for the stormwater grants in the Fall 2022 funding round. An administration plan for the LASII Funds was finalized in August 2022, after significant public input. The *NC DEQ Division of Water Infrastructure's Plan to Administer American Rescue Plan Act's State Fiscal Recovery Fund*

Appropriated in the State Budget for Stormwater Projects (Local Assistance for Stormwater Infrastructure Investments Fund) is attached as Appendix A to this report. The Plan was presented by the Department Secretary and by the Division in a statewide webinar on August 16, 2022. Applications for funding are now available.

In developing this plan and the application processes for the new stormwater funding program, the Division solicited and received significant input from the public and stakeholders. Between November 2021 and June 2022, the Division:

- Contacted the 11 local governments with Directed Projects in Section 12.14.(b) to solicit information about the stormwater projects in “Request for Funding” forms. Request for Funding forms were reviewed to ensure project eligibility. Funding offers listing the federal and state conditions that apply to the funds were sent to the local governments with completed Request for Funding forms, requiring governing board approval to receive funds. The Division is working with those local governments to initiate their projects (listed in a table below).
- Met frequently with Department leadership and other Divisions in the Department that manage stormwater programs or have stormwater-related projects to solicit information and input on stormwater funding needs, priorities, and proposed plans for managing the stormwater funding program.
- Met with the Environmental Finance Center at the University of North Carolina School of Government and met with other stakeholders, including funding programs and resource agency partners, to solicit information to help in developing the initial plans for the funding program.
- Developed a Plan for managing all of the American Rescue Plan Act (ARPA) State Fiscal Recovery Fund appropriated in SL 2021-180 for water, wastewater and stormwater infrastructure. A proposed plan was published in December 2021 for public review and finalized in February 2022 after public review. The plan included a timeline for developing application materials and Priority Rating Systems for the LASII funds through July 2022 in anticipation of a first round of applications for funding in Fall 2022. The timeline has been met.
- Conducted two virtual public listening sessions (total attendance exceeding 200 people) in March 2022 to solicit input from local governments, nonprofits, Councils of Governments, resource agency partners, consulting firms, and any interested parties on ideas for prioritization of funding for stormwater quantity and quality needs.
- Created the State Water Infrastructure Authority Stormwater Funding Committee (Committee) in December 2021. The Committee met twice in March 2022 to develop initial plans for proposed Priority Rating Systems for construction grants and planning grants, using the input from the public listening sessions, and to make recommendations on determining eligibility for funding.
- The Authority met in April 2022 and approved proposed Priority Rating Systems to undertake public review.
- A proposed plan for administering the LASII funds, including establishing eligibility criteria, proposed Priority Rating Systems, grant limits, and application timeline was

published for public review between May 4 and June 3. More than 130 comments were received from 23 entities. The Division reviewed all of the comments and considered adjustments to the proposed plan and Priority Rating Systems.

- The Committee met on June 23, 2022 to review the public comments and the recommendations made by the Division to adjust the Priority Rating Systems and eligibility considerations. The Committee approved changes to the Priority Rating Systems to be presented to the Authority for final approval. The Committee made recommendations to the Division on eligibility criteria.
- The Authority met on July 13-14, 2022 and approved the Priority Rating Systems for stormwater construction and stormwater planning grants, which are now active for the Fall 2022 funding round.
- Developed application forms and materials for stormwater construction, stormwater planning, and developing and implementing a new stormwater utility, to be used in LASII grant applications. All forms and materials were posted on the Division's website by August 2. Applications are due September 30.
- Conducted in-person trainings on how to apply for funding in six statewide locations between August 2 and August 10. The August 10th training was conducted as a hybrid training with a virtual option. In total, more than 200 people attended application trainings. The virtual training was recorded and is available online for potential applicants to watch prior to applying.
- Posted the final plan to administer the LASII funds, revised from the May 2022 proposed plan, to include changes to the Priority Rating Systems and eligibility criteria, on August 15, 2022. A new stormwater funding program webpage was created on the Division's website.
- The Department and the Division presented a statewide webinar on August 16, 2022 to announce applications for the LASII stormwater funding program. Excluding speakers and panelists, 172 people attended the webinar. The webinar was recorded and will be posted on the Division's website.
- Since November 2021, the Division has addressed questions from the public and interested parties and presented at conferences and events on the LASII stormwater funding program.

Applications for funding are due September 30, 2022. If LASII funds remain available after the Fall 2022 funding round, a second round of applications will be taken in Spring 2023, with applications due May 1, 2023.

FY 2021-2022 Fund Balance

Funds were appropriated into the new LASII Fund midway in the fiscal year, in November 2021. Between then and June 30, 2022, the Division initiated Directed Projects (see table below) and developed the new stormwater funding program, but no stormwater grants were awarded except to those with Directed Projects.

Fund Balance Beginning of FY 2021-2022: \$0

Funds Added During the FY: \$103,625,000

Funds Expended During the FY: \$101,985.21

Fund Balance End of FY 2021-2022: \$103,523,014.79

Grant Recipients and Description of Funded Projects

Since applications for the new stormwater funding program were being developed through July 2022, the only LASII grant recipients by the end of FY 2021-2022 were the 11 municipalities with Directed Projects in S.L. 2021-180, Section 12.14.(b). Ten of the 11 recipients submitted Requests for Funding to the Division describing eligible projects, as shown in the table below. Obligations were made to eight of the municipalities by the end of FY 2022 (and two more after June 30, 2022). None of the projects expended LASII funds by the end of FY 2021-2022. Project activities are expected to occur during FY 2022-2023 and beyond. All LASII grants from the State Fiscal Recovery Fund must be expended by December 31, 2026 to comply with the American Rescue Plan Act.

Grant Recipient	Project Description	Direct Appropriation in SL 2021-180 and amended in SL 2021-189	Requested Amount (Obligated) by June 30, 2022	Expended by June 30, 2022
Town of Angier	Southwest Angier drainage basin flood mitigation measure #3 (increase capacity for road culverts at South Broad St and Hidden Acres Estates)	\$400,000	\$400,000	\$0
Town of Autryville	Identify and implement stormwater improvements along five streets	\$350,000	\$350,000	\$0
City of Brevard	Estatoe Trail SW improvements and Times Arcade Alley SW Improvements	\$700,000	None (requested full amount after July 1, 2022)	\$0
City of Dunn	Dunn GIS Stormwater Map	\$500,000	\$500,000	\$0
City of Fayetteville	Draining improvements along five roads	\$10,550,000	\$10,550,000	\$0

Grant Recipient	Project Description	Direct Appropriation in SL 2021-180 and amended in SL 2021-189	Requested Amount (Obligated) by June 30, 2022	Expended by June 30, 2022
Town of Four Oaks	Stormwater upgrade to improve capacity and minimize flooding	\$1,500,000	\$1,500,000	\$0
City of Hope Mills	Update master plan, sliplining of high ranked areas, pipe cleaning, Woodland Hills stormwater replacement	\$600,000	None (requested full amount after July 1, 2022)	\$0
Town of Madison	Downtown Stormwater Improvements	\$2,200,000	\$2,200,000	\$0
City of Mooresville	W. Catawba Avenue Improvements	\$1,500,000	\$1,500,000	\$0
City of New Bern	Hydrologic study of frequently flooded areas, analysis of SCMs and engineering concept plan for best solutions	\$75,000	\$75,000	\$0
Town of Pine Level	Unknown	\$75,000	None (as of yet)	\$0
Total		\$18,450,000	\$17,075,000 (more after July 1, 2022)	\$0

Recommendations

SL 2021-180 Section 12.14.(j) requires the Department to include in this report, and may include in subsequent reports, recommendations regarding legislative changes or additional funding needed to assist small and financially distressed communities to comply with stormwater standards and requirements and to mitigate the adverse impacts of extreme weather events on stormwater-related flood events. The Department proposes the following recommendations at this time. In subsequent reports, after receiving applications for funding and initiating more projects, the Department will provide more detailed recommendations.

- 1) **Provide additional, recurring funding to the Local Assistance for Stormwater Infrastructure Investments Fund**

There is a very high level of interest in the LASII stormwater grants, as evidenced by hundreds of individuals participating in the public listening sessions, high attendance of webinars, high attendance in the application trainings, and receiving over 130 comments from 23 entities during the public review of the proposed plan to administer LASII funds. Local government staff and representatives expressed significant interest in the grants to address both stormwater quality and stormwater quantity concerns. The \$82 million currently available for LASII stormwater funding will likely be awarded in one or two funding rounds and must all be expended by the recipients by December 2026. Recurring funds will be essential to meet the demand for funding assistance to create and improve infrastructure to control stormwater quantity and quality. The infrastructure needs of local governments are high. The Environmental Finance Center at the University of North Carolina's School of Government conducted a *Pilot North Carolina Stormwater Needs Assessment* for Fiscal Years 2020-2034, which is attached as Appendix B. Using data from local governments' Capital Improvement Plans, the authors estimated that **“there is \$2.76 billion in stormwater capital spending needs between 2020 and 2034” just for municipalities with populations greater than 2,500**, representing the stormwater needs for municipalities whose populations account for 54 percent of North Carolina's population. Total needs, including those for small and financially distressed communities, are even greater. The authors further indicate that stormwater capital needs are likely to increase over time due to urbanization, regulatory drivers, and climate resiliency pressures.

After the initial funding rounds, the Department will report on the number of applications received and the total funding requested from the applicants, in order to provide more detailed recommendations on recurring funding amounts.

2) Create the authority to provide loan funding from the LASII Fund (non-ARPA)

Enable the Department to administer low-interest loans from the LASII Fund (not using ARPA State Fiscal Recovery Funds) in the future, in addition to grants, in order to create a revolving loan program that can support local governments' stormwater funding needs for longer periods. This would be similar to the authority the Department has to provide loans and grants from the Drinking Water Reserve and the Wastewater Reserve.

3) Include duties for the State Water Infrastructure Authority in NC GS 159G-71.

Make explicit the duties of the Authority in reviewing recommendations for LASII loans and grants submitted to it by the Division, establish priorities for making loans and grants for LASII, review the criteria for making loans and grants for LASII, and develop guidelines for making loans and grants for LASII under NC GS 159G-71.(1)-(4).

APPENDIX A

**NC DEQ Division of Water Infrastructure’s Plan to Administer American Rescue Plan Act’s
State Fiscal Recovery Fund Appropriated in the State Budget for Stormwater Projects
(Local Assistance for Stormwater Infrastructure Investments Fund)**

Last updated August 15, 2022.

This document describes the administration plan for administering the appropriated American Rescue Plan Act (ARPA) State Fiscal Recovery Fund as grants for stormwater projects from the newly-created Local Assistance for Stormwater Infrastructure Investments (LASII) fund. The plan includes eligibility requirements, Priority Rating Systems to evaluate stormwater grant applications, and grant limits.

Summary

The North Carolina General Assembly appropriated \$1.69 billion from the state’s allocation of the American Rescue Plan Act for drinking water, wastewater, and stormwater investments in Sections 12.13 and 12.14 of the Current Operations Appropriations Act of 2021 ([S.L. 2021-180](#)).

The North Carolina Department of Environmental Quality’s (NC DEQ’s) Division of Water Infrastructure (Division) will administer approximately \$100.5 million for stormwater projects in the Local Assistance for Stormwater Infrastructure Investments fund, which excludes three percent of the appropriated amounts that may be used for administrative costs. The fund amounts, following statutory and budgetary requirements, are shown in the table below. In addition, federal requirements for the use of American Rescue Plan Act appropriations will apply. All funds must be expended by December 31, 2026.

NC DEQ Fund	Purpose	Allocated directly for specific local governments (directed projects), approx.	Approximate remaining for grant funding (undirected funds)
Local Assistance for Stormwater Infrastructure Investments Fund (ARPA stormwater grants)	Grants for local governments for projects that will improve or create infrastructure for controlling stormwater quantity and quality	\$18.5 million	\$82.0 million
		Total funds: approx. \$100.5 million	

Administration plan for ARPA grants for directed projects

Approximately \$18.5 million has been directly allocated by the General Assembly to 11 recipients for stormwater projects in Section 12.14 of the Current Operations Appropriations Act of 2021. The grants are subject to eligibility and federal and statutory requirements and will be processed on a reimbursement basis. Following S.L. 2022-43, directed grant recipients must provide a complete Request for Funding form with a budget describing a project that is eligible for funding under applicable federal and State law no later than June 30, 2023. Directed allocations that are in excess of the budgets for eligible projects included in Request for Funding forms will revert to the Department on July 1, 2023.

Administration plan for ARPA grants for all other stormwater funding from the LASII Fund

Approximately \$82 million will be available for cities and counties (and their regional councils of government and nonprofit entity partners) for projects that will improve or create infrastructure for controlling stormwater quantity and quality. The funds will be awarded through the Division's competitive funding process. Eligibility requirements, Priority Rating Systems by which applications for funding will be evaluated, and maximum funding amounts are listed below.

A. Entity Eligibility Requirements

As defined in Session Law 2021-180 Section 12.14.(d), an eligible entity for a grant is a city¹ or county that (i) documents in a form and manner as the Department may specify a stormwater quality or quantity issue and (ii) demonstrates that it would experience a significant hardship raising the revenue necessary to finance stormwater management activities within its jurisdiction based on income and unemployment data, population trends, and any other data determined relevant by the Department. A regional council of government created pursuant to Part 2 of Article 20 of Chapter 160A of the General Statutes or a nonprofit entity is also an eligible entity under this section if the regional council of government or nonprofit entity partners with a city or county. **These eligibility considerations apply to funding through the Local Assistance for Stormwater Infrastructure Investments (LASII) fund; they do not apply to Clean Water State Revolving Fund (CWSRF) funding for stormwater projects.**

The State Water Infrastructure Authority (SWIA) approved eligibility requirements necessary to implement Session Law 2021-180 Section 12.14.(d). Eligibility is determined in two parts.

Part 1) Documentation of a Stormwater Quality or Quantity Issue – Required by Session Law 2021-180 Section 12.14.(d)(i)

For all stormwater grant applications, applicants will be required to provide:

- A. A narrative that describes the stormwater quality issue and/or stormwater quantity issue based on historic or projected precipitation, and how the grant will be used to address the issue;
- B. A map and/or a narrative that identifies the location of the stormwater quality and/or stormwater quantity issue. The map and/or narrative must show or describe the watershed above the location, and if possible, identify the acreage, percentage of impervious area and land use cover in the watershed above the location; and
- C. If available, photographs of the stormwater quality and/or stormwater quantity issue and identification of the amount of rainfall that caused the issue, based on the nearest reliable rain gauge, news articles about the issue, or other information that clearly demonstrates the issue.

To complete Part (1), applicants are required to complete the LASII Fund Entity Eligibility Certification Form (Stormwater Funding Eligibility Form) and submit it along with the Application for Funding. The application forms, including the LASII Stormwater Funding Eligibility Certification Form, are available on the Division's website at <https://deq.nc.gov/about/divisions/water-infrastructure/i-need-funding/application-forms-and-additional-resources>.

In addition, applicants must demonstrate that they meet Part 2, described below.

¹ "City" means municipality and includes towns and villages. For brevity, "city" is used throughout this document.

Part 2) Demonstration of “Significant Hardship Raising the Revenue ...” – Required by Session Law 2021-180 Section 12.14.(d)(ii)

The criteria that will be considered when making the determination of significant hardship raising the revenue necessary to finance stormwater management activities will vary by the type of stormwater grant application as follows.

I. For applications for Stormwater Construction Grants and applications for Stormwater Planning Grants (except applications to Develop and Implement a New Stormwater Utility)

An applicant will demonstrate eligibility by meeting either of the two criteria below:

Criterion 1: At least one (1) of the five (5) Local Government Unit (LGU) Indicators for the city or county are worse than the state benchmarks shown in the table below. Information on how to calculate these indicators is provided in the Priority Rating System Guidance and Form for the LASII Fund, posted along with application forms on the Division’s website. An LGU Indicator Calculator for Stormwater Funding Eligibility is also posted online as a spreadsheet calculator to assist the application in calculating these values.

Local Government Unit Indicator		State Benchmarks for Fall 2022 Applications
Population Change	< =	4.5%
Poverty Rate	> =	14.0%
Median Household Income	< =	\$56,642
Unemployment Rate	> =	7.1%
Per Capita Appraised Value of Property	< =	\$125,015

OR

Criterion 2: The city or county as a whole does not meet Criterion 1 but has stormwater projects that benefit disadvantaged areas within the city’s or county’s jurisdiction. To be eligible, 75 percent or more of the project construction costs (as delineated in the Project Budget of the application) must be used to directly benefit disadvantaged areas.

Disadvantaged areas may be subsections or pockets of a city’s or county’s jurisdiction, rather than the entire city or county. For instance, disadvantaged areas may be census block groups that meet qualifying characteristics. The targeted project area will be determined a “disadvantaged area” based on factors that shall include:

- Median household income, poverty rates, per capita appraised property values of property, and/or employment rates of the targeted project area,
- Additional factors that may qualify the targeted project area as disadvantaged, such as but not limited to demographic, historical, cultural, linguistic, socioeconomic stressors, or cost-of-living stressors may also be considered.

Use of federal or state-generated maps to demonstrate that a targeted project area is disadvantaged is encouraged. For instance, using screenshots or printouts of NC DEQ's [Community Mapping System](#), labeling and identifying on the map the targeted project area overlapping "Potentially Underserved Block Groups" and/or "Tribal Boundaries" that appear on the online map as shaded areas (these are considered disadvantaged areas).

For Criterion 2, the proposed project is not required to be located *within* a disadvantaged area, but the project *must result in* water quality improvements within the disadvantaged area and/or reduce water quantity impacts within the disadvantaged area. Over 75 percent of the project's construction costs must be used to provide these benefits to the disadvantaged areas to qualify under Criterion 2.

II. For applications to Develop and Implement a New Stormwater Utility

If the city or county does not have a stormwater utility with a Stormwater Enterprise Fund, and the project purpose described in the application is to develop and implement a new Stormwater Utility, the city or county will have met the requirement to demonstrate that there is a significant hardship in raising the revenue necessary to finance stormwater management activities within its jurisdiction. The grant amount for which a city or county will be eligible will be capped at different levels based on the number of LGU Indicators (from Criterion 1) that are worse than the state benchmarks. See Section D for more information.

Applicants will indicate on the LASII Fund Entity Eligibility Certification Form (Stormwater Funding Eligibility Form) whether they are using Method I or Method II to complete Part (2), demonstrating that the applicant would experience a significant hardship raising the revenue necessary to finance stormwater management activities within its jurisdiction. The application forms, including the LASII Stormwater Funding Eligibility Certification Form, are available on the Division's website at <https://deq.nc.gov/about/divisions/water-infrastructure/i-need-funding/application-forms-and-additional-resources>.

B. Types of Grants

Session Law 2021-180 Section 12.14.(e) provides for two types of grants from the Local Assistance for Stormwater Infrastructure Investments fund:

(1) Construction grants. – A construction grant is available for the development and implementation of a new stormwater utility or stormwater control measure (SCM), the rehabilitation of existing SCMs, the retrofitting of existing stormwater conveyances to provide SCMs for quantity and quality control purposes, or the installation of innovative technologies or nature-based solutions. The Department shall allow nature-based solutions where feasible and possible.

(2) Planning grants. – A planning grant is available for research or investigative studies, alternatives analyses, the preparation of engineering concept plans or engineering designs, and similar activities intended to help an eligible entity determine the best solutions for the entity's stormwater quality or quantity issue and to engineer and permit the solutions. The Department shall allow nature-based solutions where feasible and possible.

Session Law 2021-180 Section 12.14.(h) provides the following definition: "For purposes of this section, "nature-based solutions" are sustainable planning, design, environmental management, and engineering practices that weave natural features or processes into the built environment to store, infiltrate, and

treat water by enlisting natural features and processes in efforts to promote resilience, reduce flood risks, improve water quality, protect coastal property, restore and protect wetlands, stabilize shorelines, and add recreational space.”

C. Priority Rating Systems to Evaluate Stormwater Grant Applications

Applications for funding for stormwater projects will be evaluated and scored according to two Priority Rating Systems established by SWIA: a Priority Rating System for Stormwater Construction Projects and a Priority Rating System for Stormwater Planning Studies.

The [Division’s website](#) provides the Stormwater Construction and Planning Priority Rating Systems and Guidance (For LASII) in one document. The “Guidance” document presents each Priority Rating System, includes detailed information about each of the line items in each Priority Rating System, and instructions on how applicants can document their claims under each line item in the Application Narrative. Please refer to that Guidance for more information.

The Priority Rating System for Stormwater Construction Projects, used to evaluate applications for LASII funds only, is shown below:

Priority Rating System Score Sheet for Stormwater Construction Projects Funded with the Local Assistance for Stormwater Infrastructure Investment (LASII) Grants			
Instructions for Applicant: For each line item, place an “X” to claim the points for that line item . Be sure that the required narrative includes justification for every line item claimed. At the end of each category, provide the total points claimed for each program in the subtotal row for that category. Then add the subtotals from each category and enter the Total Points for All Categories in the last line. <i>Note that some categories have a maximum allowed points that may be less than the total of individual line items.</i>			
Line Item #	Category 1 – Project Purpose Points will be awarded for <u>only one</u> Project Purpose: 1.A or 1.B or 1.C	Place “X” in this box if claimed	Points
1.A	More than 50 percent of the construction cost of the project will be used to create new stormwater control measures (SCMs) or to improve, retrofit, repair, rehabilitate or replace existing SCM infrastructure to control stormwater quality		
1.A.1	Proposed SCMs are nature-based solutions, OR		35
1.A.2	Proposed SCMs are not nature-based solutions		25
1.B	Restoration of streams, wetlands, buffers, or estuaries to control stormwater quality		25
1.B.1	Project includes restoration of a first order stream and includes stormwater infiltration SCMs		2 (additional points)
1.B.2	Project includes restoration of permanent riparian buffers to at least 30 feet on both sides of the stream		2 (additional points)

Priority Rating System Score Sheet for Stormwater Construction Projects
 Funded with the Local Assistance for Stormwater Infrastructure Investment (LASII) Grants

1.C	More than 50 percent of the construction cost of the project will be used to create or improve, retrofit, repair, rehabilitate or replace existing stormwater infrastructure to control stormwater quantity		25
Maximum points available for Category 1 – Project Purpose			35
Subtotal claimed by Applicant for Category 1 – Project Purpose			
Line Item #	Category 2 – Project Benefits	Place “X” in this box if claimed	Points
2.A	Water Quality Improvement		
2.A.1	Project <u>directly benefits</u> subwatersheds that are impaired as noted on the most recent final version of the Integrated Report, OR		15
2.A.2	Project <u>directly benefits</u> specific classified waters, OR		10
2.A.3	Achieves at least 35% reduction in both Total Nitrogen (TN) and Total Phosphorus (TP) in Nutrient Sensitive Waters, OR		10
2.A.4	Achieves at least 35% reduction in both Total Nitrogen (TN) and Total Phosphorus (TP) in Non-Nutrient Sensitive Waters, OR		5
2.A.5	Directly benefits a NC Natural Heritage Program natural area		3
2.B	Flood Reduction		
2.B.1	Increases public safety by improving the applicant’s ability to access and operate critical infrastructure during flood events such as water and/or wastewater treatment infrastructure, schools, hospitals, and/or emergency response facilities, including NC Department of Transportation (NCDOT) Evacuation Routes, OR		15
2.B.2	Reduces structural flooding in habitable structures or improves ability to access habitable structures during a flood event, OR		8
2.B.3	Reduces street flooding		5

Priority Rating System Score Sheet for Stormwater Construction Projects
 Funded with the Local Assistance for Stormwater Infrastructure Investment (LASII) Grants

2.C	By working together, <u>two or more units of local government</u> improve stormwater quality and/or quantity control through collaborative efforts that are necessary in order to accomplish the project		10
2.D	Project has been identified through a local or regional resilience planning process that included a vulnerability assessment for future conditions and long-term strategies for addressing flooding, sea level rise, or other environmental changes		3
2.E	Includes an innovative stormwater project to address stormwater quality or stormwater quantity		5
2.F	Includes a public education component such as signage describing the function of the stormwater quality or quantity infrastructure		1
Maximum points available for Category 2 – Project Benefits			30
Subtotal claimed by Applicant for Category 2 – Project Benefits			
Line Item #	Category 3 – System Management	Place “X” in this box if claimed	Points
3.A	Local Planning		
3.A.1	Applicant has developed or is developing a local flood resiliency plan, watershed plan, stormwater management plan, stream restoration plan, or estuary restoration plan, and the proposed project is included in the plan, as of the date of application, OR		5
3.A.2	Applicant has implemented an Operation and Maintenance Plan for stormwater infrastructure which includes inspections, repairs, and maintenance, as of the date of application		3
3.B	Applicant has a current Stormwater Capital Improvement Plan (CIP) that spans at least 5 years and proposed project is included in the CIP		2
3.C	Stormwater Utility		
3.C.1	Applicant has established or is developing or implementing a Stormwater Utility with a Stormwater Enterprise Fund, OR		5

Priority Rating System Score Sheet for Stormwater Construction Projects
 Funded with the Local Assistance for Stormwater Infrastructure Investment (LASII) Grants

3.C.2	Applicant has established or is developing or implementing a Stormwater Management Program without a Stormwater Enterprise Fund		3
Maximum points available for Category 3 – System Management			10
Subtotal claimed by Applicant for Category 3 – System Management			
Line Item #	Category 4 – Affordability	Place “X” in this box if claimed	Points
4.A	Population		
4.A.1	Population is less than 10,000, OR		3
4.A.2	Population is greater than or equal to 10,000 but less than 20,000		2
4.B	Local Government Unit (LGU) Indicators		
4.B.1	1 out of 5 LGU indicators worse than state benchmark, OR		4
4.B.2	2 out of 5 LGU indicators worse than state benchmark, OR		6
4.B.3	3 out of 5 LGU indicators worse than state benchmark, OR		8
4.B.4	4 out of 5 LGU indicators worse than state benchmark, OR		10
4.B.5	5 out of 5 LGU indicators worse than state benchmark		12
4.C	Project benefits disadvantaged areas: 50 percent or more of the total project cost will benefit disadvantaged areas		10
Maximum points available for Category 4 – Affordability			25
Subtotal claimed by Applicant for Category 4 – Affordability			
Total Points Claimed by Applicant for All Categories for Stormwater Construction Project			
Maximum Points Available for All Categories for Stormwater Construction Project			100

The Priority Rating System for Stormwater Planning Projects, used to evaluate applications for LASII funds only, is shown below. Although the development and implementation of a new stormwater utility is identified in Section 12.14.(e) as a Construction project, the application for grants and activities related to the development and implementation of a new stormwater utility more closely resembles those of Planning projects. The Division and SWIA will evaluate applications to develop and implement a new stormwater utility using the Stormwater Planning Grant Priority Rating System, and SWIA will fund the awarded projects with Construction grants.

Priority Rating System Score Sheet for Stormwater Planning Study Funded with the Local Assistance for Stormwater Infrastructure Investment (LASII) Grants		
Line Item #	Category 1 – Project Benefits	Points
1.A	Link between challenges and how the study will help address the challenges	Range from 0 – 5
1.B	How the study will be used to develop and prioritize future projects that address the challenges	Range from 0 – 3
1.C	Study will investigate new procedures to implement, add to, or make improvements to at least one (1) of the six (6) Stormwater Minimum Control Measures	2
1.D	Study is a collaborative effort with other local government units which is necessary in order to accomplish the goals of the study	3
1.E	Study will evaluate potential projects that will benefit: a subwatershed that is impaired as noted on the most recent final version of the Integrated Report; specific classified waters; Nutrient Sensitive Waters such that the project will achieve at least 35% reduction in both Total Nitrogen (TN) and Total Phosphorus (TP); or a NC Natural Heritage Program natural area	2
1.F	Study will evaluate nature-based stormwater solutions to address the identified stormwater quality or stormwater quantity issue	2
1.G	Study will investigate the applicability of an innovative stormwater project to address stormwater quality or stormwater quantity	2
1.H	Study will evaluate potential projects that will address flooding, sea level rise, or other environmental changes with the goal to decrease vulnerability to future conditions	1
Line Item #	Category 2 – System Management	Points
2.A	At least one person working for or with the applicant is designated as responsible for stormwater management and provides at least 0.5 Full Time Equivalents (FTEs) on stormwater management activities	1

Priority Rating System Score Sheet for Stormwater Planning Study
 Funded with the Local Assistance for Stormwater Infrastructure Investment (LASII) Grants

2.B	Status of implementing results of previous planning study or studies	1
2.C	Level of applicant’s staff involvement in planning project development and implementation	1
2.D	Applicant has already adopted a stormwater management plan for the study area or by the completion of this project will have adopted a stormwater management plan for the study area	4
2.E	Stormwater Utility and Stormwater Enterprise Fund	
2.E.1	Applicant has a Stormwater Utility with a Stormwater Enterprise Fund, OR	4
2.E.2	Applicant has a Resolution to Develop and Implement a Stormwater Utility with a Stormwater Enterprise Fund	5
Line Item #	Category 3 – Affordability	Points
3.A	Population	
3.A.1	Population is less than 10,000, OR	2
3.A.2	Population is greater than or equal to 10,000 but less than 20,000	1
3.B	Local Government Unit (LGU) Indicators	
3.B.1	1 out of 5 LGU indicators worse than state benchmark, OR	2
3.B.2	2 out of 5 LGU indicators worse than state benchmark, OR	4
3.B.3	3 out of 5 LGU indicators are worse than the state benchmark, OR	6
3.B.4	4 out of 5 LGU indicators are worse than the state benchmark, OR	8
3.B.5	5 out of 5 LGU indicators are worse than the state benchmark	10
3.C	Study benefits disadvantaged areas	8
Maximum Points Available for All Categories for Stormwater Planning Study		52

D. Grant Limits

Per Section 12.14.(c), of the approximately \$82 million in undirected funds, seventy percent of the funds are allocated for construction grants (approximately \$57.4 million) and thirty percent of the funds are allocated for planning grants (approximately \$24.6 million). There will be no match requirements for grants from the Local Assistance for Stormwater Infrastructure Investments Fund.

Session Law 2021-180 Section 12.14.(f) defines the statutory maximum limits that apply to grants from this Fund as: “(1) Construction grants may not exceed fifteen million dollars (\$15,000,000), and (2) Planning grants may not exceed five hundred thousand dollars (\$500,000)”. To extend access of the limited available stormwater grant funds to more units of local government, the Division will limit stormwater construction grants, stormwater planning grants, and new stormwater utility grants as follows:

1. Stormwater Construction Grants

Stormwater construction grants, except for the development and implementation of a new stormwater utility, will be limited to up to \$5,000,000 per applicant per grant cycle. If two or more units of local government work together to improve stormwater quality and/or quantity control under one project, the total amount of the stormwater construction grant will be limited to up to \$7,500,000 per grant cycle.

2. Stormwater Planning Grants

Stormwater planning grants will be limited to up to \$400,000 per applicant per grant cycle. If the study is a collaborative effort with other local government units, the total amount of the stormwater planning grant will be limited to up to \$500,000 per grant cycle.

3. Development and Implementation of New Stormwater Utility Grants

The grant amount for an eligible entity to develop and implement a new stormwater utility will be limited to different amounts based on the number of Local Government Unit (LGU) Indicators that are worse than the state benchmarks shown in the table below:

Local Government Unit (LGU) Indicator		State Benchmarks for Fall 2022 Applications
Population Change	< =	4.5%
Poverty Rate	> =	14.0%
Median Household Income	< =	\$56,642
Unemployment Rate	> =	7.1%
Per Capita Appraised Value of Property	< =	\$125,015

- If an entity demonstrates that 0, 1, or 2 of its five LGU Indicators are worse than the state benchmark, the amount of grant funds that may be awarded for the development and implementation of a new stormwater utility is limited to up to \$400,000.
- If an entity demonstrates that 3, 4 or 5 of its five LGU Indicators are worse than the state benchmark, the amount of grant funds that may be awarded for the development and implementation of a new stormwater utility is limited to up to \$500,000.

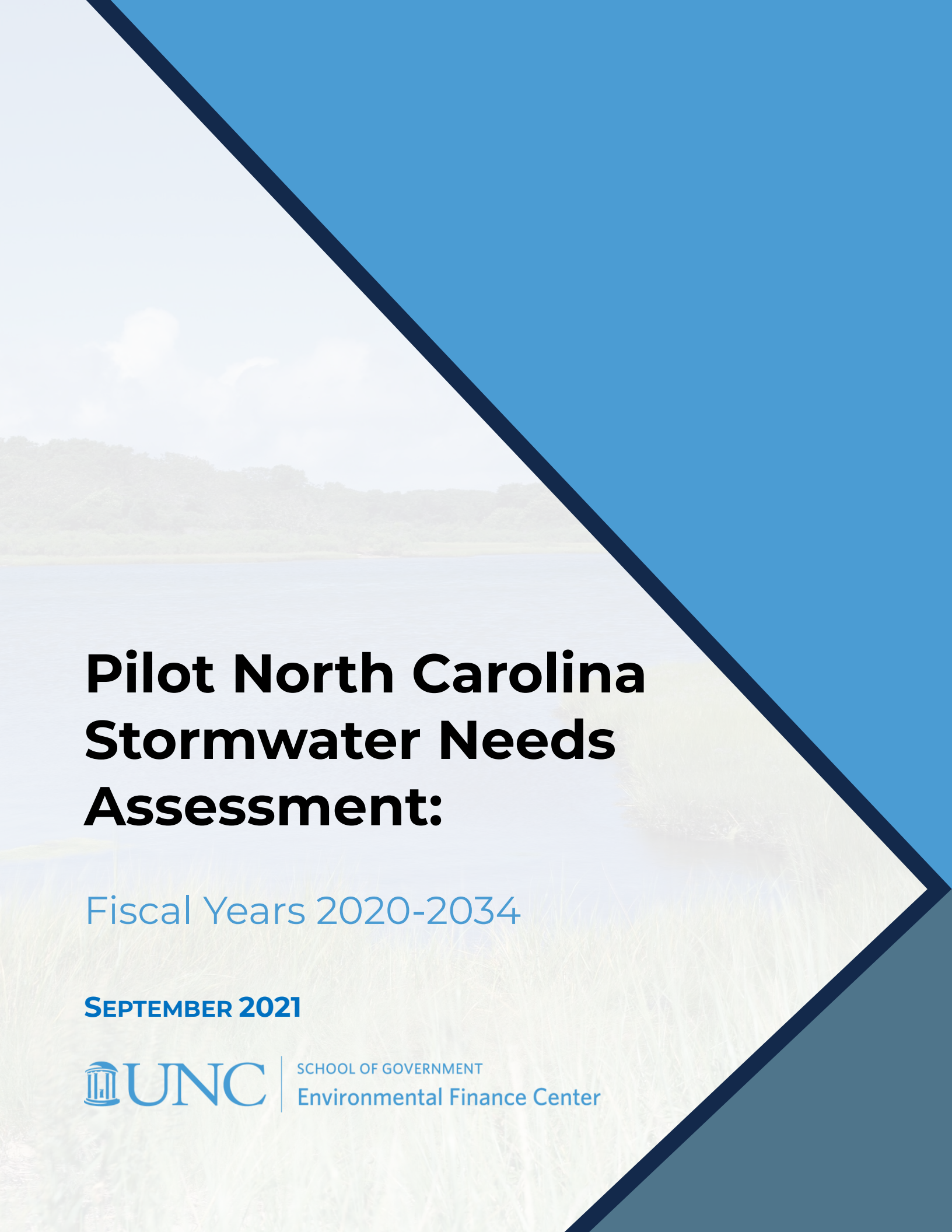
A city or county is eligible for both the construction grant limit and the planning grant limit. Any ARPA funds directly allocated to recipients in the Current Operations Appropriations Act of 2021 for directed projects under Section 12.14.(b) will count towards an entity's initial award and additional incremental awards.

E. Applications for Funding

The Division will accept applications for stormwater funding to be awarded from the Local Assistance for Stormwater Infrastructure Investments fund starting with the Fall 2022 funding round, with applications due September 30, 2022 and awards determined in February 2023. LASII (ARPA) funds may not all be awarded after one funding round. Future funding rounds will be used to award any remaining LASII (ARPA) funds not awarded in the Fall 2022 round. The Spring 2023 applications are due May 1, 2023.

Applicants must complete the Application for Funding form, the Stormwater Funding Eligibility Certification Form, provide a resolution by the governing body, include a narrative and provide documentation to support claims of specific line items in the relevant Priority Rating System following the Guidance. All forms and Guidance documents are on the Division's website at <https://deq.nc.gov/about/divisions/water-infrastructure/i-need-funding/application-forms-and-additional-resources>.

APPENDIX B



Pilot North Carolina Stormwater Needs Assessment:

Fiscal Years 2020-2034

SEPTEMBER 2021



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Executive Summary

Just like water and wastewater, stormwater is a capital-intensive service. Understanding future stormwater capital needs will help the North Carolina Department of Environmental Quality Division of Water Infrastructure and other programs that provide stormwater funding in North Carolina support stormwater management programs. This pilot needs assessment uses data collected from capital improvement plans (CIPs) from 49 North Carolina municipalities to extrapolate a 15-year estimate of stormwater capital needs for the State of North Carolina between 2020 and 2034 for municipalities with populations greater than 2,500. The process used for this assessment can inform a more comprehensive needs assessment in the future.

We estimate that there is \$2.76 billion in stormwater capital spending needs between 2020 and 2034. The total 15-year stormwater capital spending needs for the entire state is likely higher than \$2.76 billion as this estimate does not include municipalities with fewer than 2,500 people, nor does it include unincorporated county areas. Additionally, our methodology relied on estimating needs into the future for municipalities for which we have CIP data by averaging the most recent years for which we have capital improvement projections. This means we assume that needs in real dollars will not grow in the future for the municipalities for which we have CIP data. In reality, annual stormwater capital needs in North Carolina are likely to increase over time due to urbanization, regulatory drivers, and climate resiliency pressures.

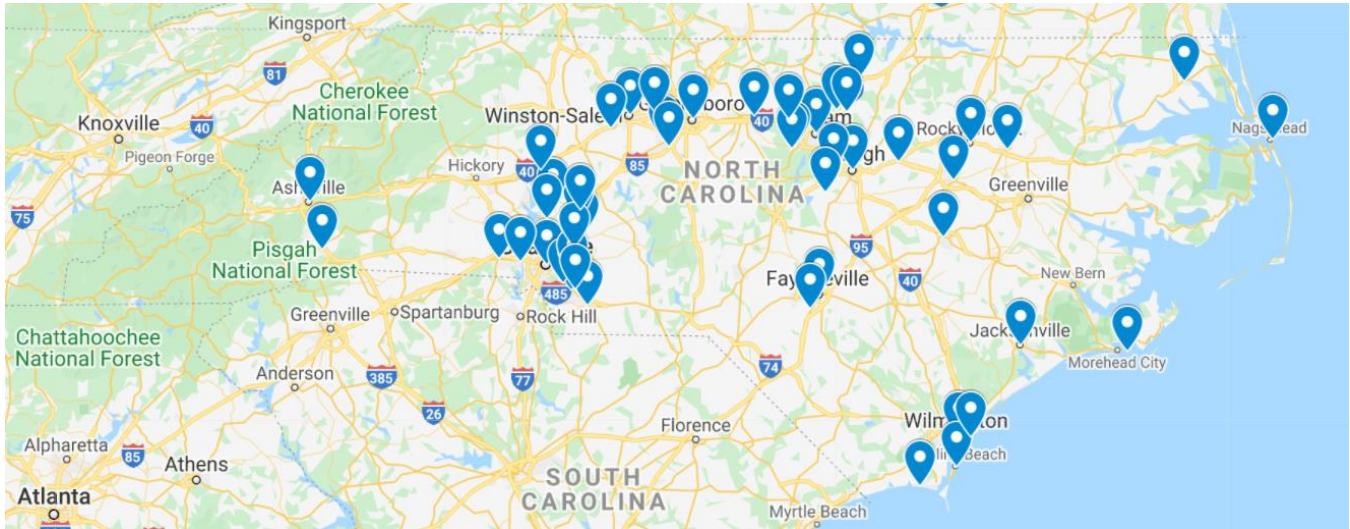
Acknowledgements

This pilot needs assessment was funded by the North Carolina Department of Environmental Quality Division of Water Infrastructure with support from the North Carolina League of Municipalities and the Stormwater Association of North Carolina.



Methods

Figure 1: Municipalities in North Carolina with Stormwater CIPs



Capital improvement plan collection

We collected 49 CIPs from municipal websites across the State that include stormwater capital spending (Figure 1). Since CIPs list projected capital costs in the nominal dollars, we adjust for inflation using expected Consumer Price Index values.¹ All dollar amounts in this assessment are presented in 2020 dollars. The 49 municipalities for which we have CIPs are the sample municipalities. All other municipalities are outside the sample.

First extrapolation: Extrapolation of needs to 2034 for municipalities within the sample

Most of the CIPs do not project stormwater capital costs out to 2034. Therefore, we average annual stormwater capital expenditures for each municipality for the available years and use those annual averages for the remaining years between 2020 and 2034 from which there was not projected capital needs. For example, for a municipality with a 5-year CIP from 2020 to 2024 with \$500,000 total capital needs, we apply the \$100,000 annual average to each of the rest of the years 2025–2034, to get a total 15-year estimate for the municipality. This means we extrapolated capital costs for each municipality for years that fall outside the scope of the CIP. This is the first extrapolation in this methodology.

¹ An alternative approach is to use Construction Cost Index (CCI). Since 2002, CCI has been higher than CPI, but CCI is much more variable.

Second extrapolation: Extrapolation of needs to municipalities outside the sample

We then used a stratified statistical sampling methodology. In this context, stratified sampling means dividing the population of stormwater systems into separate groups (i.e., strata) based on population size, such that the stormwater systems within each stratum are like the other systems in the stratum. We assume that the systems within each stratum for which we have CIP data are sufficiently like the systems in the stratum for which we do not have CIP data and thus must estimate stormwater needs. For this method, we split the municipalities into three strata based on population size: large (>100,000), medium (10,000-99,999), and small (2,500-9,999) (Table 1).

Table 1: Number of municipalities inside and outside the sample of CIPs by population stratum

Stratum	Municipalities In Sample	Municipalities Outside Sample
Large (>100,000)	7	0
Medium (10,000-100,000)	27	50
Small (<10,000)	13	131

We have CIP data for all nine North Carolina municipalities with populations over 100,000, meaning we do not have to extrapolate needs to other municipalities for this stratum. However, we must still extrapolate needs out to 2034 within the “large” stratum. We have CIPs for 27 “medium” municipalities and 13 “small” municipalities. Since we do not have any CIPs for municipalities smaller than 2,500 people, we do not include needs estimates for these municipalities as part of our calculations. There are 320 municipalities of fewer the 2,500 people, accounting for 265,262 North Carolinians. We also do not have a CIP from any counties, so we cannot include stormwater needs for unincorporated county areas in our assessment. In total, our final needs estimates cover stormwater needs for municipalities whose populations account for 54 percent of North Carolina’s population.²

We then calculated estimated 15-year stormwater needs per person for each municipality by dividing 15-year stormwater capital needs estimates by population to get a needs per capita estimate in the sample. We then calculated the median 15-year stormwater needs per capita for each population stratum. The median needs per

² Based on 2019 American Community Survey (ACS) estimates. 2020 ACS data was not available at the time of this analysis.

capita are \$220.58 for large municipalities, \$300.32 for medium municipalities, and \$462.63 for small municipalities. We then used these values to extrapolate stormwater capital needs to the medium and small municipalities outside the sample. For all other municipalities within each group, we multiply the population by the calculated median 15-year needs per capita for the respective group to achieve a total 15-year needs estimate for each municipality. This is the second extrapolation in this methodology.

Summing estimated stormwater capital needs

Finally, we summed the municipal 15-year needs estimates for the municipalities inside and outside the sample to get a total needs estimate for municipalities with greater than 2,500 people. Total estimated 15-year needs are the needs identified within the CIPs in the sample, the results of the first extrapolation within the sample, and the results of the second extrapolation to municipalities outside the sample.

Results

The final estimate is \$2.76 billion in total stormwater capital needs for the 15-year period 2020–2034 for municipalities with a population over 2,500.³ This total can be further broken down by stratum, where the nine large municipalities account for \$1.67 billion of the total, the 77 medium municipalities have estimated needs of \$667 million, and the 144 small municipalities have estimated needs of \$432.3 million. See Table 2 for a breakdown of needs identified in the CIPs, extrapolated needs, and total needs by stratum.

We used population in our stratified statistical sampling methodology to extrapolate stormwater capital needs to municipalities outside the sample. However, there are other variables that may influence a municipality’s stormwater capital needs. These include NPDES MS4 permit status, population density, propensity to flooding, and stakeholder demands. Due to the nature of this analysis as a pilot assessment, we did not explore these variables. A more comprehensive needs assessment would explore these variables for inclusion within the stratified statistical sampling methodology.

Table 2: Needs identified in CIPs, needs extrapolated within sample (first extrapolation), needs extrapolated to municipalities outside sample (second extrapolation), and total estimated 15-year needs

Strata	Needs Identified in CIPs	First Extrapolation	Second Extrapolation	Total Estimated 15-year Needs
Large	\$317 million	\$1.35 billion	\$0	\$1.67 billion
Medium	\$72 million	\$243 million	\$352 million	\$667 million
Small	\$34 million	\$102 million	\$296 million	\$432 million
Statewide Total	\$423 million	\$1.69 billion	\$648 million	\$2.76 billion

³ Using CCI instead of CIP, the 15-year stormwater capital needs for NC are \$2.742 billion.

Table 3: Municipalities in sample by stratum and years for which CIP data was available

Municipality	Population	Stratum	Years in CIP
Charlotte	885,708	Large	2018-2021
Raleigh	474,069	Large	2021-2025
Greensboro	296,710	Large	2021-2025
Durham	278,993	Large	2019-2024
Winston-Salem	247,945	Large	2021-2026
Fayetteville	211,657	Large	2020-2025
Cary	170,282	Large	2021-2025
Wilmington	123,744	Large	2022-2023
High Point	112,791	Large	2020-2022
Concord	96,341	Medium	2020-2024
Asheville	92,870	Medium	2017-2020
Gastonia	77,273	Medium	2015-2020
Jacksonville	72,436	Medium	2020-2021
Chapel Hill	64,051	Medium	2021-2025
Rocky Mount	53,922	Medium	2019-2024
Kannapolis	50,841	Medium	2021-2028
Wilson	49,459	Medium	2022-2026
Indian Trail	40,252	Medium	2021
Mooresville	39,132	Medium	2020-2024
Holly Springs	37,812	Medium	2021-2025
Monroe	35,540	Medium	2021-2026
Goldsboro	34,186	Medium	2020-2021
Matthews	33,138	Medium	2019-2021
Mint Hill	27,617	Medium	2021
Statesville	27,528	Medium	2021-2026
Kernersville	24,660	Medium	2022-2026
Carrboro	21,190	Medium	2021-2026
Clemmons	20,867	Medium	2019-2021
Elizabeth City	17,751	Medium	2018-2021
Harrisburg	16,576	Medium	2021-2030
Hope Mills	15,849	Medium	2020-2024
Hendersonville	14,157	Medium	2021-2030
Davidson	13,054	Medium	2023-2025
Belmont	12,558	Medium	2021-2025
Archdale	11,513	Medium	2020-2021
Tarboro	10,715	Medium	2021-2026
Oxford	8,886	Small	2022-2026
Oak Island	8,386	Small	2019-2021
Butner	7,859	Small	2021
Hillsborough	7,161	Small	2019-2021
Carolina Beach	6,399	Small	2019-2021
Zebulon	5,917	Small	2021-2025
Creedmoor	4,612	Small	2020-2021
Beaufort	4,452	Small	2021-2025
Lake Park	3,909	Small	2021
Landis	3,138	Small	2021
Nags Head	2,975	Small	2022-2025
Wrightsville Beach	2,556	Small	2020-2021
Haw River	2,535	Small	2020-2021



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