



Overview of Clean Water and Drinking Water Infrastructure Needs in NC

Agenda Item M

State Water Infrastructure Authority Meeting

February 2014

Outline

- SWIA responsibilities
- A look at work that has already been done to define needs

SWIA Responsibilities

- NCGS § 159G-71. – Powers and duties:
 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

Defining the Needs

- Considerable body of work exists
- Use as starting point for master plan and funding needs considerations
- 4 key publications
 - 2008 Clean Watersheds Needs Survey (EPA)
 - 2011 Drinking Water Infrastructure Needs Survey and Assessment (EPA)
 - 2013 Report Card for North Carolina's Infrastructure (NC-ASCE)
 - Water 2030 Report (North Carolina Rural Economic Development Center)

2008 Clean Watersheds Needs Survey

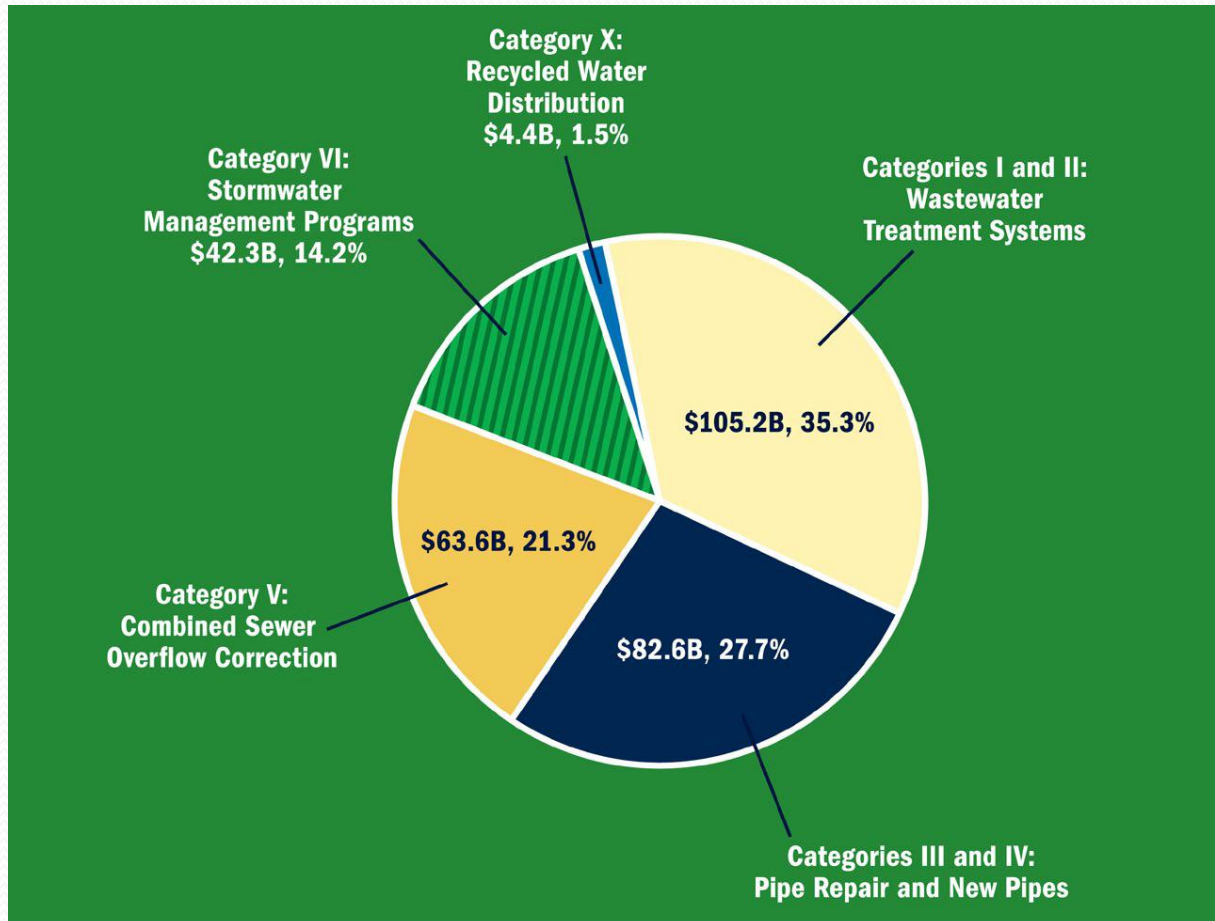
- Collaborative effort between the states and EPA
- Defines costs for projects eligible for SRF funding only
- Defines unfunded capital cost needs as of Jan 2008
 - Nationwide = \$298 billion
 - NC = \$6.2 billion; 13th neediest state
 - Included stormwater
- EPA working on 2012 Needs Survey
 - For 2012 Survey, NC reported need of \$6.1 billion
 - Does not include stormwater

NC Estimated Needs for 2012

EPA Needs Survey

- *Wastewater Treatment: \$2.8 billion*
- *Sewer Systems: \$3.1 billion*
- *Reclaimed Water Systems: \$200 million*
- ***Total Needs Eligible for CWSRF Funds: \$6.1 billion***

2008 Clean Watershed Needs Survey – National Information



2011 Drinking Water Infrastructure Needs Survey and Assessment

- Collaborative effort between the states and EPA
- Defines costs for projects eligible for SRF funding only
- Defines unfunded capital cost needs as of Jan 2011
 - Nationwide = \$384 billion
 - NC = \$10 billion; 9th neediest state

Type of Need	NC Estimated Needs	National Estimated Needs
Transmission and Distribution	\$6.7 billion	\$248 billion
Source	\$482 million	\$20 billion
Treatment	\$1.8 billion	\$72 billion
Storage	\$936 million	\$40 billion
Other	\$150 million	\$4 billion
Total Needs Eligible for DWSRF Loans	\$10 billion	\$384 billion

2013 Report Card for North Carolina's Infrastructure

- Prepared by the NC Section of the American Society of Civil Engineers (ASCE)
- Assigned a grade to 11 discrete infrastructure categories
- Grade based not only on physical condition but also on levels of funding available
 - Compares current level of funding to estimated needs

Grade Comparison – NC with National		
	North Carolina	National
Overall	C	D+
Drinking Water	C+	D
Stormwater	C-	D along with WW
Wastewater	C	D

2013 Report Card for North Carolina's Infrastructure

- Drinking Water = C+
 - Number of systems with regulatory violations is on the rise due to water supply challenges, water quality degradation, tightened regulations
- Stormwater = C-
 - Funding is largest issue impeding progress
- Wastewater = C
 - Key issues are population growth, tightened discharge limits, and aging infrastructure

Water 2030 Report

- Statewide initiative launched in 2004; engaged local government leaders and citizens in discussion about NC's water future
- Prepared by NC Rural Economic Development Center
- Defines NC infrastructure needs through 2030

Water 2030 – NC's Capital Needs Projections (in billions of dollars)			
	2005 – 2010	2011 – 2030	Totals
Water	\$2.84	\$4.80	\$7.64
Sewer	\$3.44	\$4.08	\$7.52
Stormwater	\$0.57	\$0.90	\$1.47
Totals	\$6.85	\$9.78	\$16.63

Water 2030 Report Recommendations

- Fund critical water, sewer, stormwater (W, S, SW) needs
- Create permanent funding source for W, S, SW improvements
- Improve operations and maintenance of W, S, SW systems
- Ensure that rate structures are soundly developed and fair to all citizens and operators
- Address competition for water resources within NC and with other states
- Strengthen environmental education programs

Summary

- Use these documents as a starting point for master plan and funding needs considerations



Questions