North Carolina Clean Watersheds Needs Survey 2008

The Clean Watersheds Needs

Survey (CWNS) is a comprehensive assessment of needs¹ to meet the water quality and water-related public health goals of the Clean Water Act (CWA). States and the U.S. Environmental Protection Agency (EPA) conduct the CWNS every four years under CWA Section 516 (b). North Carolina documented needs totaling \$6.8 billion in 2008. This is an 11 percent increase from the \$6.1 billion in needs documented in 2004.



Documented Needs in North Care	olina			
	Needs (2008 Dollars, Millions)			
Type of Need	2004	2008	Percent Change	
Wastewater treatment	\$2,326	\$2,543	9%	
Pipe repair and new pipes	\$3,660	\$3,672	0%	
Recycled water distribution	\$55	\$245	345%	
Combined sewer overflow correction	\$4	\$4	0%	
Total Wastewater Treatment Needs	\$6,045	\$6,464	7%	
Conveyance infrastructure	n/a	\$27	n/a	
Treatment systems	n/a	\$13	n/a	
Green infrastructure	n/a	\$8	n/a	
General stormwater management	\$21	\$39	86%	
Total Stormwater Management Needs ^b	\$21	\$87	314%	
Agriculture (cropland) best management practices (BMPs)	nr ^a	<\$0.5	n/a	
Agriculture (animals) BMPs	nr	\$1	n/a	
Silviculture (forestry) BMPs	nr	nr	0%	
Ground water protection: unknown source BMPs	nr	nr	0%	
Marinas BMPs	\$1	\$1	0%	
Resource extraction BMPs	nr	nr	0%	
Brownfields remediation	nr	<\$0.5	n/a	
Storage tank remediation	nr	nr	0%	
Sanitary landfills BMPs	\$4	\$3	-25%	
Hydromodification (Water resource restoration and protection)	\$58	\$229	295%	
Other estuary management activities ^c	n/a	nr	n/a	
Total Nonpoint Source Control Needs ^{b,d}	\$63	\$234	271%	
Total Decentralized Wastewater Treatment Needs ^{b,d}	\$1	\$6	500%	
Total Needs	\$6,130	\$6,791	11%	

^aNot reported; ^bActual needs may be higher, since documenting these needs is difficult; ^cIn 2004, Other Estuary Management Needs were reported under Separate State Estimates (SSEs); ^dNot included in Official Needs in the Report to Congress.

¹ Documented needs in the CWNS include the unfunded capital costs of projects as of January 1, 2008 that address a water quality or a water quality-related public health problem existing as of January 1, 2008, or expected to occur within the next 20 years; and meet the seven CWNS documentation criteria. All needs are in January 2008 dollars.



Wastewater Treatment Facilities

The enactment of the Clean Water Act (CWA) in 1972 resulted in dramatic improvements in the:

- Number of wastewater treatment plants.
- Percentage of the population served by wastewater treatment plants.
- Quality of effluent treatment from wastewater treatment facilities.

In 2008, 47% of North Carolina residents received centralized wastewater treatment services at the secondary, advanced, or no discharge treatment level, compared to 33% in 1972.

Number of Centralized Treatment Facilities and Population Served									
	Number of Facilities			Population Served					
				%Total			%Total		
					Population		Population		
Treatment Level	1972	2008	Projected ^a	1972	1972	2008	2008	Projected ^a	
Less than Secondary	29	0	0	265,000	5	0	0	0	
Secondary	39	140	126	724,000	13	894,515	10	942,900	
Advanced	62	146	165	1,083,000	20	3,292,015	36	5,481,088	
No Discharge	0	39	56	0	0	109,606	1	294,005	
Total	130	325	347	2,072,000	38	4,296,136	47	6,717,993	

^aNumber of facilities and population served if all needs documented in the CWNS 2008 are met.

Small Communities

In North Carolina, small community wastewater facilities serve 11% of the population and comprise 11% of total wastewater treatment and collection needs. EPA small community support information is available at: www.epa.gov/owm/mab/smcomm

Reported Needs for Facilities in Small Communities						
Fac	ilities		Needs (2008 Dollars, Millions)			
Population	2004	2008	2004	2008		
0-999	75	66	\$311	\$243		
1,000-3,499	85	79	\$404	\$232		
3,500-10,000	36	35	\$275	\$213		
Total	196	180	\$990	\$688		

Visit www.epa.gov/cwns for more information including:

- Detailed Reports to Congress
- Other state fact sheets
- Maps, charts, and data downloads for projects, facilities, watersheds, counties, congressional districts, cities, states, and regions