



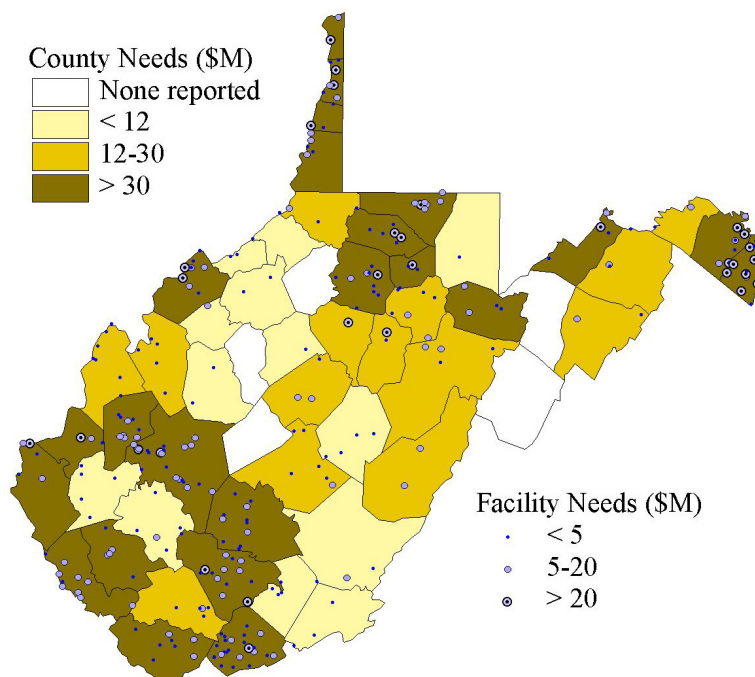
West Virginia

Clean Watersheds Needs Survey 2004

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 Sections 205(a) and 516 (b)(1).

West Virginia reported needs totaling \$2.5 billion in 2004. This is a ten percent decrease from the \$2.8 billion in needs reported in 2000.



Reported Needs in West Virginia

Type of Need	Needs (2004 Dollars, Millions)		
	2000	2004	Percent Change
Wastewater treatment plant improvements	\$345	\$359	4%
Wastewater collection and conveyance improvements	\$1,504	\$1,398	-7%
Combined sewer overflow correction	\$968	\$767	-21%
Stormwater management controls	nr ^b	\$14	n/a
Home sewage treatment system improvements	n/a	\$5	n/a
Recycled wastewater distribution ^a	n/a	\$3	n/a
Total Wastewater Treatment Needs	\$2,817	\$2,546	-10%
Agriculture best management practices (BMPs)	nr	nr	n/a
Forestry BMPs	nr	nr	n/a
Residential/ business development BMPs	nr	nr	n/a
Ground water protection BMPs	nr	nr	n/a
Marinas and boating BMPs	nr	nr	n/a
Mining and quarrying BMPs	nr	nr	n/a
Contaminated industrial site (Brownfield) remediation	nr	nr	n/a
Leaking storage tank remediation	nr	nr	n/a
Sanitary landfill BMPs	nr	nr	n/a
Water resource restoration and protection	nr	nr	n/a
Total Nonpoint Source Pollution Control Needs	nr	nr	n/a
Total Needs	\$2,817	\$2,546	-10%

^a The CWNS did not collect data on recycled water distribution in 2000

^b Not reported

¹ Costs in the CWNS are generally eligible for funding under the Clean Water Act State Revolving Fund (CWSRF). All needs are capital needs except stormwater management needs, which include program development costs. The survey is a “snapshot” of data and needs; needs are as of January 1, 2004, and all costs are in January 2004 dollars.



West Virginia

Clean Watersheds Needs Survey 2004

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.
- Level of effluent treatment from wastewater treatment plants.

In 2004, 55% of West Virginia residents received centralized wastewater treatment services at the secondary, greater than secondary, or no discharge treatment level, compared to 20% in 1972.

Number of Centralized Treatment Facilities and Population Served								
Treatment Level	Number of Facilities			Population Served				
	1972	2004	Projected ^a	1972	% Total Population 1972	2004	% Total Population 2004 ^b	Projected ^a
Less than Secondary	57	2	0	344,000	19.1%	861	< 0.1%	0
Secondary	65	143	308	197,000	10.9%	623,922	34.4%	1,056,031
Greater than Secondary	8	64	94	160,000	8.9%	375,042	20.7%	501,509
No Discharge	0	2	0	0	0%	1,117	< 0.1%	0
Total	130	211	402	701,000	38.9%	1,000,942	55.1%	1,557,540

^aNumber of facilities and population served if all needs documented in the CWNS 2004 are met.

^bThe remaining population is largely served by home and cluster sewage treatment systems. (Number of facilities from Tables C-7 and C-8 of the CWNS 2004 Report to Congress)

What are treatment levels?

- *Less than secondary treatment* removes solids by filtration, sedimentation, and chemical coagulation.
- *Secondary treatment* removes most of the organic matter in wastewater using biological processes.
- *Greater than secondary treatment* removes additional organic matter, nitrogen, phosphorus, or toxics.
- *No discharge facilities* include facilities that reuse wastewater, discharge to an underground aquifer, or dispose of wastewater via methods such as irrigation or evaporation.

The CWA goals of fishable, swimmable and drinkable waters require secondary or greater treatment.

Small communities often need additional assistance to meet CWA requirements, because they often lack adequate financing, training, and economies of scale to efficiently manage and maintain wastewater treatment systems.

In West Virginia, small community wastewater facilities serve 49% of the population and comprise 57% 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				
Population	Facilities		Needs (2004 Dollars, Millions)	
	2000	2004	2000	2004
< 1,000	100	101	\$336	\$325
1,000-3,499	104	93	\$606	\$552
3,500-10,000	51	44	\$553	\$555
Total	255	238	\$1,495	\$1,432

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

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