



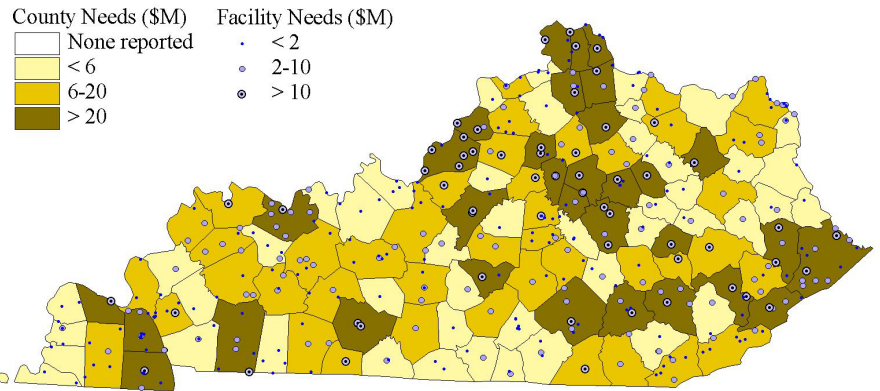
Kentucky

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).

Kentucky reported needs totaling \$2.8 billion in 2004. This is a nine percent decrease from the \$3.1 billion in needs reported in 2000.



Reported Needs in Kentucky

Type of Need	Needs (2004 Dollars, Millions)		
	2000	2004	Percent Change
Wastewater treatment plant improvements	\$841	\$656	-22%
Wastewater collection and conveyance improvements	\$2,027	\$1,978	-2%
Combined sewer overflow correction	\$241	\$181	-25%
Stormwater management controls	\$3	\$27	800%
Home sewage treatment system improvements	n/a	nr ^b	n/a
Recycled wastewater distribution ^a	n/a	nr	n/a
Total Wastewater Treatment Needs	\$3,112	\$2,842	-9%
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	\$1	\$1	0%
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^c	\$1	\$1	0%
Total Needs	\$3,113	\$2,843	-9%

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

^b Not reported

^c The actual NPS pollution control needs are expected to be higher since documenting and reporting their costs is difficult.

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.



Kentucky

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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, 60% of Kentucky residents received centralized wastewater treatment services at the secondary, greater than secondary, or no discharge treatment level, compared to 18% 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	17	0	0	280,000	8.2%	0	0%	0
Secondary	43	149	196	463,000	13.6%	1,566,266	37.8%	2,381,558
Greater than Secondary	16	91	101	164,000	4.8%	912,458	22.0%	1,572,554
No Discharge	0	1	4	0	0%	435	< 0.1%	1,927
Total	76	241	301	907,000	26.7%	2,479,159	59.8%	3,956,039

^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 Kentucky, small community wastewater facilities serve 15% of the population and comprise 24% 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	89	86	\$177	\$166
1,000-3,499	112	99	\$297	\$247
3,500-10,000	51	50	\$259	\$259
Total	252	235	\$733	\$672

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