



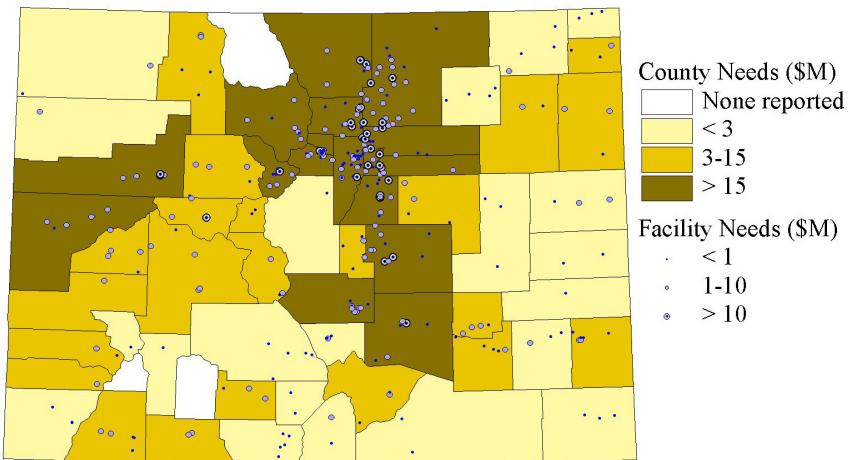
Colorado

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).

Colorado reported needs totaling \$2.4 billion in 2004. This is a sixty-two percent increase from the \$1.5 billion in needs reported in 2000.



Reported Needs in Colorado

Type of Need	Needs (2004 Dollars, Millions)		
	2000	2004	Percent Change
Wastewater treatment plant improvements	\$1,108	\$1,772	60%
Wastewater collection and conveyance improvements	\$263	\$354	35%
Combined sewer overflow correction	\$11	\$0	-100%
Stormwater management controls	\$54	\$100	85%
Home sewage treatment system improvements	n/a	\$2	n/a
Recycled wastewater distribution ^a	n/a	\$14	n/a
Total Wastewater Treatment Needs	\$1,436	\$2,242	56%
Agriculture best management practices (BMPs)	nr ^b	nr	n/a
Forestry BMPs	nr	nr	n/a
Residential/ business development BMPs	\$56	\$125	123%
Ground water protection BMPs	\$2	nr	n/a
Marinas and boating BMPs	nr	nr	n/a
Mining and quarrying BMPs	nr	\$49	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	\$1	n/a
Total Nonpoint Source Pollution Control Needs^c	\$58	\$175	202%
Total Needs	\$1,494	\$2,417	62%

^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.



Colorado 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, 79% of Colorado residents received centralized wastewater treatment services at the secondary, greater than secondary, or no discharge treatment level, compared to 73% in 1972.

Treatment Level	Number of Facilities			Population Served				
	1972	2004	Projected ^a	1972	% Total Population		2004 ^b	Projected ^a
					1972	2004		
Less than Secondary	26	0	0	120,000	4.7%	0	0%	0
Secondary	70	221	218	1,360,000	53.7%	1,333,330	29.0%	1,744,660
Greater than Secondary	36	42	57	502,000	19.8%	2,303,870	50.1%	3,000,234
No Discharge	0	36	38	0	0%	14,437	0.3%	27,865
Total	132	299	313	1,982,000	78.2%	3,651,637	79.4%	4,772,759

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

^b The 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 Colorado, small community wastewater facilities serve 10% of the population and comprise 19% 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	98	104	\$86	\$104
1,000-3,499	55	74	\$69	\$184
3,500-10,000	24	26	\$92	\$121
Total	177	204	\$247	\$409

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