



# Water Quality Conditions in the United States

## A Profile from the 1998 National Water Quality Inventory Report to Congress

*States, tribes, territories, and interstate commissions report that, in 1998, about 40% of U.S. streams, lakes, and estuaries that were assessed were not clean enough to support uses such as fishing and swimming. About 32% of U.S. waters were assessed for this national inventory of water quality. Leading pollutants in impaired waters include siltation, bacteria, nutrients, and metals. Runoff from agricultural lands and urban areas are the primary sources of these pollutants. Although the United States has made significant progress in cleaning up polluted waters over the past 30 years, much remains to be done to restore and protect the nation's waters.*

### Findings

Recent water quality data find that more than 291,000 miles of assessed rivers and streams do not meet water quality standards. Across all types of waterbodies, states, territories, tribes, and other jurisdictions report that poor water quality affects aquatic life, fish consumption, swimming, and drinking water. In their 1998 reports, states assessed 840,000 miles of rivers and 17.4 million acres of lakes, including 150,000 more river miles and 600,000 more lake acres than in their previous reports in 1996.



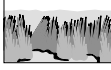
Of the assessed ocean shoreline miles, 12% are impaired, primarily because of bacteria, turbidity, and excess nutrients. Primary sources of pollution include urban runoff, storm sewers, and land disposal of wastes. States assessed only 5% of the nation's ocean shoreline miles.

States also found that 96% of assessed Great Lakes shoreline miles are impaired, primarily due to pollutants in fish tissue at levels that exceed standards to protect human health. States assessed 90% of Great Lakes shoreline miles.

Wetlands are being lost in the contiguous United States at a rate of about 100,000 acres per year. Eleven states and tribes listed sources of recent wetland loss; conversion for agricultural uses, road construction, and residential development are leading reasons for loss.

The states found that ground water quality is good and can support many different uses. However, measurable negative impacts have been detected and are commonly traced back to sources such as leaking underground storage tanks, septic systems, and landfills.

### Summary of Quality of Assessed Rivers, Lakes, and Estuaries

| Waterbody Type  | Total Size | Amount Assessed* (% of Total) | Good (% of Assessed) | Good but Threatened (% of Assessed) | Polluted (% of Assessed) |
|---|------------|-------------------------------|----------------------|-------------------------------------|--------------------------|
|  Rivers (miles)        | 3,662,255  | 842,426 (23%)                 | 463,441 (55%)        | 85,544 (10%)                        | 291,264 (35%)            |
|  Lakes (acres)         | 41,593,748 | 17,390,370 (42%)              | 7,927,486 (46%)      | 1,565,175 (9%)                      | 7,897,110 (45%)          |
|  Estuaries (sq. miles) | 90,465     | 28,687 (32%)                  | 13,439 (47%)         | 2,766 (10%)                         | 12,482 (44%)             |

\*Includes waterbodies assessed as not attainable for one or more uses.

Note: percentages may not add up to 100% due to rounding.

## Leading Pollutants and Sources\* Causing Impairment in Assessed Rivers, Lakes, and Estuaries

|            | Rivers and Streams        | Lakes, Ponds, and Reservoirs | Estuaries                                   |
|------------|---------------------------|------------------------------|---|
| Pollutants | Siltation                 | Nutrients                    | Pathogens (Bacteria)                        |
|            | Pathogens (Bacteria)      | Metals                       | Organic Enrichment/<br>Low Dissolved Oxygen |
|            | Nutrients                 | Siltation                    | Metals                                      |
| Sources    | Agriculture               | Agriculture                  | Municipal Point Sources                     |
|            | Hydromodification         | Hydromodification            | Urban Runoff/Storm Sewers                   |
|            | Urban Runoff/Storm Sewers | Urban Runoff/Storm Sewers    | Atmospheric Deposition                      |

\*Excluding unknown, natural, and "other" sources.

### Reporting Under the Clean Water Act

This *National Water Quality Inventory* is the twelfth biennial report to Congress prepared under Section 305(b) of the Clean Water Act. It contains information from each state on the quality of our nation's rivers, lakes, wetlands, estuaries, coastal waters, and ground water, along with information on public health and aquatic life concerns. It serves as a snapshot of water quality conditions across the country.

To assess water quality, states and other jurisdictions compare their monitoring results to the water quality standards they have set for their waters. These standards consist of designated uses (such as drinking, swimming, or fishing), criteria to protect those uses (such as chemical-specific thresholds that should not be exceeded), and an antidegradation policy intended to keep waters that do meet standards from deteriorating from their current condition.

Under Section 303(d) of the Clean Water Act, there is a second reporting requirement—that states provide lists of all of their impaired waters. These lists are then used to prioritize state restoration activities. This is accomplished through the development of Total Maximum Daily Loads (TMDLs), calculations of the amount of a pollutant that a waterbody can receive and still meet water quality standards. A TMDL is the sum of all avail-

able loads of a single pollutant from all contributing point and nonpoint sources. It includes reductions needed to meet water quality standards and allocates these reductions among sources in the watershed.

Information reported by the states under the two Clean Water Act reporting requirements is generally consistent, although the 303(d) lists often include specific information from more targeted monitoring activities. This information clearly points to the need to restore polluted waters and maintain the quality of waters that currently meet standards. In August 1999, EPA announced a new proposal for a strengthened TMDL program. Since August, EPA has worked to incorporate comments from stakeholders and to refine the proposal to be an effective, common-sense approach to water restoration led by states, territories, and tribes in partnership with federal and local governments and local communities.

### For Further Information

For a copy of the *National Water Quality Inventory: 1998 Report to Congress* (EPA841-R-00-001), visit [www.epa.gov/305b](http://www.epa.gov/305b) or call EPA's National Service Center for Environmental Publications at 1-800-490-9198.