# Glossary

*Note*: Definitions are provided to help the reader understand the terms used throughout the report. They are not intended to be used for legal purposes.

# 301(h) Waiver of Secondary Treatment for Marine Discharges

A variance (authorized under section 301(h) of the Clean Water Act) from secondary treatment requirements for treatment facilities that discharge to marine waters.

#### advanced treatment

A level of treatment that is more stringent than secondary treatment or produces a significant reduction in nonconventional pollutants present in the wastewater treated by a facility. Needs reported in this category (Category II) are necessary to attain incremental reductions in pollutant concentrations beyond basic secondary treatment. See Appendix G, Table G-1, Category II.

#### best management practice (BMP)

A practice or combination of practices determined to be an effective and practicable (including technological, economic, and institutional considerations) means of controlling point and nonpoint source pollutants at levels compatible with environmental quality goals.

#### brownfields

Land that was developed for industrial purposes and then abandoned, which might have residual contamination. See Appendix G, Table G-1, Category VII-H.

# Clean Water State Revolving Fund (CWSRF)

A State-managed revolving fund that provides loans for specific water pollution control purposes. Under

the CWSRF Program, States and municipalities are primarily responsible for financing, constructing, and managing wastewater treatment facilities. The CWSRF Program is based on the 1987 Amendments to the Clean Water Act, which replaced the Construction Grants program with the CWSRF Program.

# collection system

A system of collector and/or interceptor sewers that collects wastewater from a community.

#### collector sewers

Pipes used to collect and carry wastewater from a sanitary or industrial wastewater source to an interceptor sewer that conveys the wastewater to a treatment facility. See Appendix G, Table G-1, Category IV-A.

#### combined sewer overflow (CSO)

Discharge of a mixture of storm water and untreated wastewater that occurs when the capacity of a combined sewer system is exceeded during a rainstorm. See Appendix G, Table G-1, Category V.

# combined sewer system

Sewer system designed to convey both domestic sanitary wastewater and storm water.

#### community

With respect to wastewater treatment, a group of residences, businesses, and/or industries sharing a common treatment or conveyance facility.

# Comprehensive Conservation and Management Plan (CCMP)

A management plan that summarizes findings, identifies and establishes priorities for addressing environmental problems, identifies environmental quality goals, and presents action plans and compliance schedules for pollution control and resource management.

# concentrated animal facility (feedlot)

A facility for the controlled feeding of animals that tends to concentrate large amounts of animal waste that cannot be absorbed by the soil and therefore might be carried to nearby streams or lakes by rainfall runoff. Facilities with fewer than 1,000 animal units are generally considered nonpoint sources. Facilities with more than 1,000 animal units or facilities with water quality problems that discharge directly to waters of the United States are considered point sources and are regulated through National Pollutant Discharge Elimination System permitting.

#### conveyance needs

The cost estimate to construct, expand, or upgrade sewer collection systems for transporting wastewater to treatment facilities. See Appendix G, Table G-1, Categories IV-A and IV-B.

#### design year needs

The cost estimate for building publicly owned wastewater treatment facilities eligible for assistance under the Clean Water Act to serve the population expected within 20 years. For the CWNS 2000, the design year is 2020.

#### drainage basin

A geographic area in which water, sediments, and dissolved materials drain to a common outlet, typically a point on a larger stream, a lake, an underlying aquifer, an estuary, or an ocean. A watershed is also sometimes referred to as the "drainage basin" of the receiving water body. See *watershed*.

#### estuarine protection

Activities necessary to develop and implement Comprehensive Conservation and Management Plans (CCMPs) for protecting estuaries under the National Estuary Program created by Clean Water Act section 320. Estuary protection activities focus on restoring and maintaining the chemical, physical, and biological integrity of the estuary and controlling nonpoint sources of pollution.

#### estuary

The zone along a coastline where freshwater systems and rivers meet and mix with salty ocean waters (such as a bay, mouth of a river, salt marsh, or lagoon).

# facility

A project and location involved in water quality management, such as a wastewater treatment plant or sewer system, a municipal separate storm sewer system, or a nonpoint source (NPS) pollution control project. Although the term *facility* is typically construed as wastewater treatment facility or some other structure, for NPS pollution control it refers to a place. Data in the CWNS 2000 were collected and organized by facility for all types of water pollution control.

# facility plan

Any plan or study that directly relates to the construction of treatment works necessary to comply with the Clean Water Act. A facility plan investigates needs and provides information on the cost-effectiveness of alternatives. A recommended plan and an environmental assessment of the recommendations are also presented in a facility plan. A facility plan includes a description of the treatment works for which construction drawings and specifications are to be prepared. The description includes preliminary engineering data, cost estimates for design and construction of the treatment works, and a schedule for completion of design and construction.

#### fertilizer

Any organic or inorganic material of natural or synthetic origin that is added to soil to supply elements essential to plant growth.

#### ground water protection

Activities addressed in a State's ground water protection strategy that must be a part of the Nonpoint

Source Management Program under section 319(i) of the Clean Water Act to build State institutional capabilities to protect ground water resources from nonpoint sources of contamination. Activities include demonstrations, enforcement, technical assistance, education, and training. Wellhead protection and underground injection control for Class V wells, as well as water conservation programs, may be included.

#### headworks

With respect to a treatment facility, the initial component into which the influent wastewater flows.

#### herbicide

A chemical substance designed to kill or inhibit the growth of plants, especially weeds.

# hydromodification

Alteration of the hydrologic characteristics of waters and of their aquatic habitat, including flows, morphology, bottom sediments, and riparian vegetation and related characteristics. Subcategories of hydromodification include channelization and channel modification, dams, and streambank and shoreline erosion. Needs to address some aspects of hydromodification are addressed in the CWNS 2000.

#### hypoxia

Oxygen deficiency in aquatic ecosystems, which is a symptom of eutrophication. Eutrophication is the process by which a water body becomes rich in organic nutrients such as phosphate and nitrate from runoff, treatment plant discharges, and other sources, thereby promoting the growth of algae. The rapid growth of algae depletes the water body of oxygen and impedes the survival of other species.

#### infiltration/inflow correction

Control of the problem of penetration into a sewer system of water other than wastewater from the ground through such means as defective pipes or manholes (infiltration) or from drains, storm sewers, and other improper means of entry into the system (inflow). See Appendix G, Table G-1, Category III-A.

#### interceptor sewer

A major sewer line that receives wastewater flows from collector sewers. An interceptor sewer carries wastewater directly to the treatment facility or to another interceptor. See Appendix G, Table G-1, Category IV-B.

# lagoon

With respect to wastewater treatment, a pond in which algae, sunlight, and oxygen interact to restore wastewater to a quality often equal to that of the effluent from the secondary treatment stage. Lagoons are widely used by small communities to provide wastewater treatment. A lagoon might not have a discharge to surface waters under normal (dry-weather) operation.

# Municipal Compliance Plan (MCP)

A strategy that describes the necessary treatment technology and estimated costs and also outlines the proposed sources, methods, and schedules of financing the wastewater treatment facility needed for a municipality to achieve compliance with regulations (including both construction and operation and maintenance).

#### municipal separate storm sewer system (MS4)

Any pipe, ditch, or gully, or system of pipes, ditches, or gullies, that is owned or operated by a governmental body or other entity and used for collecting and conveying storm water.

# National Pollutant Discharge Elimination System (NPDES)

A provision under sections 301 and 402 of the Clean Water Act that prohibits discharge of pollutants into waters of the United States unless authorized by a permit issued by EPA or (where delegated) a State or a Tribal government on an Indian reservation.

#### need

A water quality or public health problem and an associated abatement cost that is eligible for funding under the CWSRF.

#### nonpoint source (NPS)

Technically, a source of water pollution that is not regulated as a point source. More colloquially, the term *nonpoint source* refers to any source of water pollution that results from land runoff, precipitation, atmospheric deposition, drainage, seepage, or hydrologic modification. The primary categories of pollution treated as nonpoint sources are agriculture, silviculture, urban runoff (including on-site wastewater treatment systems, but excluding storm water discharges regulated under section 402(p) of the Clean Water Act), hydromodification, marinas and recreational boating, and abandoned mines (except where regulated by a permit issued under section 402 of the Clean Water Act).

#### nutrient

An element or compound that is essential for the growth and development of an organism; for example, carbon, nitrogen, or phosphorus.

#### on-site wastewater treatment system

Any combination of unit processes or best management practices designed to receive, treat, and dispose of wastewater from individual structures (such as homes and businesses). Examples are septic tanks and holding tanks.

# pesticide

Any chemical agent used to control plant or animal pests. Pesticides include insecticides, herbicides, fungicides, nematocides, and rodenticides.

#### point source

A single point of origin for pollutants or a specific outlet through which pollutants are introduced into a receiving water body. Wastewater treatment plant outfalls and combined sewer overflow points of discharge are typical point sources of pollution.

#### primary treatment

The first stage of wastewater treatment, which includes removal of floating debris and solids by screening and sedimentation.

### publicly owned treatment works (POTW)

A wastewater treatment facility owned by a public entity, such as a city, a county, or a special sanitary district.

#### redocumentation

The process by which documentation dated prior to 1990 supporting an individual facility's needs was updated or revised for the CWNS 2000. Facilities with needs in excess of \$20 million had to be updated or revised as necessary by documentation dated January 1, 1994, or later.

#### replacement/rehabilitation of sewers

Reinforcement or reconstruction of structurally deteriorating sewers (beyond normal maintenance). See Appendix G, Table G-1, Category III-B.

### riparian vegetation

Vegetation present on the banks of a river or stream or on the shore of a lake.

#### sanitary sewer

A sewer designed to carry only domestic sanitary sewage and no storm water.

#### sanitary sewer overflow (SSO)

A discharge of raw domestic sewage from a separate sewer system before the sanitary wastewater reaches the headworks of a wastewater treatment facility.

#### secondary wastewater treatment

The minimum level of treatment that must be maintained by all treatment facilities except those facilities granted waivers under section 301(h) of the Clean Water Act. Treatment levels are specific in terms of the concentration of conventional pollutants in the wastewater effluent discharged from a facility after treatment. Secondary treatment typically requires a treatment level that will meet an effluent quality of 30 mg/L of both BOD<sub>5</sub> and total suspended solids, although secondary treatment levels required for some lagoon systems might be less stringent. In addition, the secondary treatment must remove 85 percent of BOD<sub>5</sub> and total suspended solids from the influent wastewater. See Appendix G, Table G-1, Category I.

# separate sewer system/sanitary sewer system

A sewer system designed to exclude storm water and used to convey only domestic sanitary wastewater.

### Separate State Estimates (SSE)

Needs that are not included in EPA's estimates for the CWNS 2000 because the needs are justified with documents other than the established documentation types or they have no written documentation.

#### silviculture

Care and cultivation of forest trees (e.g., forestry). See Appendix G, Table G-1, Category VII-C.

# small community

A community with a population of fewer than 10,000 people and a total wastewater flow of less than 1 million gallons per day.

#### storm sewer

A sewer that carries only runoff from storm events.

#### storm water

Runoff water resulting from precipitation. See Appendix G, Table G-1, Category VI.

#### treatment facility

A structure designed to treat wastewater, storm water, or flows from combined sewers prior to their discharge to the environment. Treatment is accomplished by subjecting the wastewater to a combination of physical, chemical, and/or biological processes that reduce the concentration of contaminants.

#### urban nonpoint source runoff

Wet weather runoff from urbanized areas not included in Phase I or Phase II of the Storm Water Permit Program. Includes runoff from construction activities occupying less than 1 acre. See Appendix G, Table G-1, Category VII-D.

# urbanized area

As defined by the U.S. Census Bureau, densely settled territory that contains 50,000 or more people.

#### wastewater

Dissolved or suspended waterborne waste material. Sanitary or domestic wastewater refers to liquid material collected from residences, offices, and institutions. Industrial wastewater refers to wastewater from manufacturing facilities. Municipal wastewater is a general term applied to any liquid treated in a municipal treatment facility and usually includes a mixture of sanitary and pretreated industrial wastes.

#### wastewater infrastructure

The pipes and appurtenances for the collection, treatment, and disposal of sewage in a community. The level of treatment depends on the size of the community, the type of discharge, or the designated use of the receiving water.

# water quality criteria

Specific levels of water quality that, if achieved, are expected to render a body of water suitable for its designated use. The criteria are based on specific levels of pollutants that would make the water harmful if used for purposes such as drinking, swimming, farming, fish production, or industrial processes.

#### water quality standards

State-adopted and EPA-approved ambient standards for water bodies. The standards cover the use of the water body and the water quality criteria that must be met to protect the designated use or uses.

#### watershed

A geographic area in which water, sediments, and dissolved materials drain to a common outlet, typically a point on a larger stream, a lake, an underlying aquifer, an estuary, or an ocean. A watershed is sometimes referred to as the "drainage basin" of the receiving water body.

#### wetland protection

Activities to protect and restore wetlands that are an integral part of a Nonpoint Source Management Program or part of implementation or development of a Comprehensive Conservation and Management Plan under the Clean Water Act section 320 National Estuary Program.

Glossary-6	Clean Watersheds Needs Survey 2000 Report to Congress