

Appendix G

*Clean Watersheds Needs Survey 2000  
Needs Categories*

**Table G-1.** CWNS 2000 Needs Categories

Category	Name	Description
I	Secondary Wastewater Treatment	<p>The minimum level of treatment that must be maintained by all treatment facilities except those facilities granted waivers of Secondary Treatment for Marine Discharges 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 produce 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 may be less stringent than this. In addition, the secondary treatment must remove 85 percent of BOD<sub>5</sub> and total suspended solids from the influent wastewater. Needs necessary to achieve a secondary treatment level should be included in this category.</p> <p>Costs associated with the construction of individual or community septic tanks and the treatment portion of decentralized types of facilities should be included in Category I.</p>
II	Advanced Wastewater 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 are necessary to attain incremental reductions in pollutant concentrations beyond basic secondary treatment.
III-A	Infiltration/Inflow (I/I) 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 sources such as drains, storm sewers, and other improper entries into the system (inflow). Included in this category are costs for correction of sewer system infiltration/inflow problems. Costs are also reported for preliminary sewer system analysis and for detailed sewer system evaluation surveys.
III-B	Sewer Replacement/Rehabilitation	Reinforcement or reconstruction of structurally deteriorating sewers. This category includes cost estimates for rehabilitation of existing sewer systems beyond those for normal maintenance. Costs are reported if the corrective actions are necessary to maintain the structural integrity of the system.
IV-A	New Collector Sewers and Appurtenances	Pipes used to collect and carry wastewater from a sanitary or industrial wastewater source to an interceptor sewer that will convey the wastewater to a treatment facility. The needs in this category include the costs of constructing new collector sewer systems and appurtenances.
IV-B	New Interceptor Sewers and Appurtenances	Major sewer lines receiving wastewater flows from collector sewers. The interceptor sewer carries wastewater directly to the treatment facility or to another interceptor. The needs in this category include costs for constructing new interceptor sewers and pumping stations necessary for conveying wastewater from collection sewer systems to a treatment facility or to another interceptor sewer. Costs for relief sewers should be included in this category.
V	Combined Sewer Overflow (CSO) Correction	Measures used to achieve water quality objectives by preventing or controlling periodic discharges of a mixture of storm water and untreated wastewater (combined sewer overflows) that occur when the capacity of a sewer system is exceeded during a rainstorm. This category does not include costs for overflow control allocatable to flood control or drainage improvement, or for treatment or control of storm water in separate storm and drainage systems.
VI	Storm Water Management Programs	Storm water is defined as runoff water resulting from precipitation. This needs category includes activities to plan and implement municipal storm water management programs pursuant to National Pollutant Discharge Elimination System permits for discharges from municipal separate storm sewer systems. These include structural and nonstructural measures that (1) reduce pollutants from runoff from commercial, industrial, and residential areas that are served by the storm sewer, (2) detect and remove illicit discharges and improper disposal into storm sewers, (3) establish and implement public outreach and involvement activities and prevent pollutants from entering municipal separate storm sewer systems, and (4) reduce pollutants in construction site runoff.
VII-A	NPS Control: Agriculture (Cropland)	All costs that address nonpoint source pollution control needs associated with agricultural activities such as plowing, pesticide spraying, irrigation, fertilizing, planting and harvesting. Some typical best management practices that could be used to address agriculture (cropland) needs are conservation tillage, nutrient management, irrigation water management, and structural best management practices (e.g., terraces, waterways).
VII-B	NPS Control: Agriculture (Animals)	All costs that address NPS pollution control needs associated with agricultural activities related to animal production such as confined animal facilities and grazing. Some typical best management practices that could be used to address agriculture (animal) needs are animal waste storage facilities, animal waste nutrient management, composting facilities, and planned grazing. If the facility has a National Pollutant Discharge Elimination System permit, these needs are classified as Category VIII, Confined Animal-Point Source.

continued

**Table G-1.** (continued)

Category	Name	Description
VII-C	NPS Control: Silviculture	All costs that address NPS pollution control needs associated with forestry activities, such as removal of streamside vegetation, road construction and use, timber harvesting, and mechanical preparation for the planting of trees. Some typical best management practices that could be used to address silviculture needs are preharvest planning, streamside buffers, road management, revegetation of disturbed areas and structural practices, and equipment (e.g., sediment control structures, timber harvesting equipment).
VII-D	NPS Control: Urban	All costs that address NPS pollution control needs associated with new or existing development in urban or rural settings, such as erosion, sedimentation, and discharge of pollutants (e.g., inadequately treated wastewater, oil, grease, road salts, and toxic chemicals) into water resources from construction sites, roads, bridges, parking lots, and buildings. This category also includes the remediation of privately owned individual sewage disposal systems. Some typical best management practices that could be used to address urban needs are wet ponds, construction site erosion and sediment controls, sand filters, detention basin retrofit, and new on-site sewage disposal systems. If the individual sewage disposal system is owned by a public entity, the costs should be included in Category I, Secondary Treatment, instead.
VII-E	NPS Control: Ground Water Protection (Unknown Source)	All costs that address ground water protection NPS pollution control needs such as wellhead and recharge area protection activities. Any need that can be attributed to a specific cause of ground water pollution, such as leaking storage tanks, soil contamination in a brownfield, or leachate from a sanitary landfill, should be reported in that more specific category.
VII-F	NPS Control: Marinas	All costs that address NPS pollution control needs associated with boating and marinas, such as poorly flushed waterways, boat maintenance activities, discharge of sewage from boats, and the physical alteration of shoreline, wetlands, and aquatic habitat during the construction and operation of marinas. Some typical best management practices that could be used to address needs at marinas are bulkheading, pumpout systems, and oil containment booms.
VII-G	NPS Control: Resource Extraction	All costs that address NPS pollution control needs associated with mining and quarrying activities. Some typical best management practices that could be used to address resource extraction needs are detention berms, adit closures, and seeding or revegetation. Any costs associated with facilities or measures that address point source discharges from mining and quarrying activities that have an identified owner should be included in Category IX, Mining-Point Source.
VII-H	NPS Control: Brownfields	All costs that address NPS pollution control needs associated with land that was developed for industrial purposes and then abandoned, which might have residual contamination. All costs for work at brownfields should be included in Category VII-H regardless of the activity. Some typical best management practices that could be used to address needs at brownfields are ground water monitoring wells, in situ treatment of contaminated soils and ground water, and capping to prevent storm water infiltration.
VII-I	NPS Control: Storage Tanks	All costs that address NPS pollution control needs associated with tanks designed to hold gasoline or other petroleum products or chemicals. The tanks may be located above or below ground level. Some typical best management practices that could be used to address storage tank needs are spill containment systems; in situ treatment of contaminated soils and ground water; and upgrade, rehabilitation, or removal of petroleum/chemical storage tanks. If these facilities or measures are part of addressing NPS needs at abandoned, idle, and underused industrial sites (brownfields), the costs go in Category VII-H, Brownfields.
VII-J	NPS Control: Sanitary Landfills	All costs that address NPS pollution control needs associated with sanitary landfills. Some typical best management practices that could be used to address needs at landfills are leachate collection, on-site treatment, gas collection and control, capping, and closure.
VII-K	NPS Control: Hydromodification	Costs that address NPS pollution control needs associated with best management practices for any alteration of the hydrologic characteristics of coastal and noncoastal waters, which in turn could cause degradation of water resources. Examples of such activities include channelization and channel modification, dams, and stream bank and shoreline erosion. In the case of a stream channel, hydromodification is the process whereby a stream bank is eroded by flowing water, typically resulting in the suspension of sediments in the watercourse. Some typical best management practices that could be used to address hydromodification needs are conservation easements, swales, filter strips, shore erosion control, wetland development or restoration, and bank or channel (grade) stabilization. Any work involving wetland or riparian area protection or restoration is included under this category.
VIII	Confined Animal-Point Source	Costs that address a combination of unit processes or best management practices designed to address water quality or public health problems caused by point source pollution from animal production activities that are subject to the concentrated animal feeding operations (CAFO) regulations.
IX	Mining-Point Source	Costs that address a combination of unit processes or best management practices designed to address water quality and/or public health problems caused by point source pollution from mining and quarrying activities.

