Wastewater Facility Types

Treatment plant: A combination of unit processes designed to receive and treat wastewater and then discharge the treated wastewater (effluent) into the environment. This type includes both mechanical plants and lagoons or ponds (other than honey bucket lagoons). It also includes unit processes intended to remove pollutants from CSOs prior to the discharge of the overflow to the environment. It can also include package plants, although it is up to the state if these are reported as treatment plants (wastewater) or clustered systems (decentralized). This type does not include unit processes intended to thicken, stabilize, dewater, or store biosolids; those processes should be designated as "biosolids handling facilities".

Collection: combined sewers: Infrastructure designed to collect and transport a combination of wastewater and stormwater. This type does not include sewers that were designed to carry only wastewater and infiltration/inflow, which should be designated as "collection: separate sewers".

Collection: separate sewers: Infrastructure designed to collect and transport wastewater. Although this type includes sewer systems that collect and transport infiltration and inflow, it does not include sewers designed to carry both stormwater and wastewater; they should be designated as "collection: combined sewers".

Collection: interceptor sewers: Large sewer lines that collect the flows from smaller main and trunk sewers and carry them to the treatment plant.

Collection: pump stations: Mechanical devices designed to move waste and other fluid from underground pipelines and storage areas to higher elevations to reach the treatment plant.

Honey bucket lagoon: A shallow artificial lagoon where human waste from homes is transported to for disposal.

Storage facility: A facility that temporarily holds wastewater until it is transported and treated elsewhere.

Biosolids handling facility: A combination of unit processes designed to thicken, stabilize, dewater, or store biosolids prior to disposal.

Water reuse: The combination of unit processes used to convey treated wastewater that will be reused.

Desalination: A facility to separate dissolved salts and other minerals from water for a water quality benefit.

Decentralized Facility Types

Onsite wastewater treatment system (OWTS): A combination of natural and mechanical processes designed to collect, treat, and disperse or reclaim wastewater from a single dwelling or building. Septic tanks and drainfields or holding tanks are examples.

Clustered System: A combination of unit processes under some form of common ownership designed to collect wastewater from two or more dwellings or buildings and convey it to a treatment and dispersal system on a suitable site near the dwellings or buildings. Clustered systems include multifamily septic systems as well as package treatment plants.

Stormwater Facility Types

Phase I MS4: A combination of unit processes or BMPs designed to collect, treat, and transport stormwater for entities regulated under the NPDES Phase I permit process. Phase I permits are required for medium (population 100,000–249,999) and large (population 250,000 or more) MS4s in incorporated places or counties with populations of 100,000 or more. Capital projects to address primarily water-quality-related needs are allowable for CWNS 2022. Projects with integrated water quality and water quantity benefits are also permitted if the primary purpose is water quality. Only processes or practices that address water quality or public health problems are included in the CWNS.

Phase II MS4: A combination of unit processes or BMPs designed to collect, treat, and transport stormwater for entities regulated under the NPDES Phase II permit process. Phase II permits were required for small MS4s (population 99,999 or less) located in "urbanized areas" as defined by the Bureau of the Census, as well as small MS4s outside urbanized areas that are designated by NPDES permitting authorities. Capital projects to address primarily water-quality-related needs are allowable for CWNS 2022. Projects with integrated water quality and water quantity benefits are also

permitted, if the primary purpose is water quality. Only processes or practices that address water quality or public health problems are included in the CWNS.

Non-traditional MS4: A combination of unit processes or BMPs designed to collect, treat, and transport stormwater for regulated MS4s owned by non-municipal, public entities (e.g., universities, Departments of Transportation, prisons, school districts). Capital projects to address primarily water-quality-related needs are allowable for CWNS 2022. Projects with integrated water quality and water quantity benefits are also permitted, if the primary purpose is water quality. Only processes or practices that address water quality or public health problems are included in the CWNS.

Unregulated community stormwater: In areas not regulated by NPDES permits, a combination of unit processes or BMPs designed to address stormwater 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.

Nonpoint Source Facility Types

Agriculture—cropland: A combination of BMPs designed to address water quality or public health problems caused by agricultural activities such as plowing, pesticide spraying, irrigation, fertilizing, planting, and harvesting. The primary agricultural NPS pollutants are nutrients, sediment, animal wastes, salts, and pesticides. Agricultural activities also have the potential to directly affect the habitat of aquatic species through physical disturbances of adjacent land caused by equipment or water management activities (e.g., dams, irrigation).

Agriculture—animals: A combination of BMPs designed to address water quality or public health problems caused by agricultural activities related to grazing and animal production such as animal feeding operations that are not subject to the concentrated animal feeding operation regulations. Animal waste includes the fecal and urinary wastes of livestock and poultry; process water (such as that from a milking parlor); and the feed, bedding, litter, and soil with which they become intermixed. Pollutants such as organic solids, salts, bacteria, viruses, and other microorganisms, and sediments might be contained in animal waste transported by runoff water and process wastewater.

Silviculture: A combination of BMPs designed to address water quality or public health problems caused by forestry activities such as removal of streamside vegetation, road construction and use, timber harvesting, and site preparation for the planting of trees. Silvicultural activities can cause degradation of water quality and habitat quality if care is not taken to prevent adverse effects. Sediment from erosion due to tree harvesting activities and access road construction, temperature increases due to riparian shade removal, and pesticides and fertilizer used during timber operations are some of the major pollutants from timber harvesting sites. Silviculture BMPs include measures that control erosion from access roads, maintain the stability of stream banks, ensure the revegetation of harvested areas, and control the introduction of pesticides and fertilizers into waterways.

Marinas: A combination of BMPs designed to address water quality or public health problems associated with boating and marinas, such as poorly flushed waterways; boat maintenance activities; discharge of sewage from boats; stormwater runoff from marina parking lots; and the physical alteration of shoreline, wetlands, and aquatic habitat during the construction and operation of marinas.

Resource extraction: A combination of BMPs designed to address water quality or public health problems caused by mining, quarrying, hydraulic fracking, and oil/gas operations. Eligible water quality projects that remediate or prevent contamination from these sites, whether active or abandoned, include projects to treat drainage (e.g., acid mine drainage) and wastewater (e.g., fracking wastewater), prevent aquifer contamination, excavate and remediate contaminated soil at the site, remove contamination from water or soil that is not part of the site (e.g., removal of mine tailings from stream beds), or prevent runoff.

Brownfields/Superfund: A combination of BMPs designed to address water quality or public health problems at abandoned, idle, or underused industrial and commercial sites. Brownfields or Superfund sites can be in urban, suburban, or rural areas.

Storage tanks: A combination of BMPs designed to address water quality or public health problems caused by tanks designed to hold gasoline or other petroleum products or chemicals. The tanks may be above or below ground level.

Sanitary landfills: A combination of BMPs designed to address water quality or public health problems at sanitary landfills. Sanitary landfills are landfills designed as disposal sites for nonhazardous solid wastes rather than hazardous solid waste or biosolids.

Groundwater—unknown source: A combination of BMPs designed to address groundwater protection needs from an unknown or otherwise undefined source. Any need that can be attributed to a specific cause of groundwater pollution should be indicated with a more specific type, such as storage tanks, brownfields, or sanitary landfills.

Hydromodification: A combination of BMPs designed to address water quality or public health problems associated with channelization and channel modification, dams, and stream bank and shoreline erosion.

Estuary management: A combination of BMPs designed to protect the estuarine ecosystem. Examples include habitat for aquatic species, fisheries, oyster bed, and shellfish restocking and restoration; fish ladders; rejuvenation of submerged aquatic vegetation; artificial reef establishment; control of invasive vegetative and aquatic species; and water control structures for flow regime and salinity.

Desalination: A facility to separate dissolved salts and other minerals from water for a water quality benefit.

Change (Construction) types

Projects are also categorized by the construction type. Please select one or more construction type(s) that match(es) the project you are entering.

No change: There are no planned modifications.

New: A new facility is being proposed or implemented.

Abandonment: All unit processes or BMPs that make up the facility type will no longer be used or will be demolished in the future. Abandonment does not include taking single unit processes or BMPs out of service while still maintaining the overall type of the facility (e.g., switching from chlorination to ultraviolet disinfection). This change should be categorized as "process improvement."

Existing: Changes to the existing facilities. Which further classifies:

Climate change adaptation: Implementing changes at the facility to mitigate the impacts (e.g., floods, hurricanes) of climate change. The climate change adaptation strategies are sufficient in and of themselves to document need for projects. The strategies do not need to be linked to a water quality or public health benefit.

Expansion: Increasing the service area of an existing sewer system or NPS BMP. It also includes the addition of new OWTS in a municipality where there are presently OWTSs with the rehabilitation change type. This change does not include the construction of an entirely new sewer system, which should be categorized as "new." Increasing the treatment capacity for existing treatment plants, biosolids handling facilities, MS4s, decentralized treatment systems, NPS BMPs, and desalination facilities. These changes should be categorized as "increase capacity."

Improve energy efficiency: Implementing improvements to the facility to be more energy efficient (e.g., measures to reduce chemical needs or O&M costs at a facility). The energy and other economic efficiencies will be sufficient in and of themselves to document need for projects. The energy efficiencies are not required to be linked to a water quality or public health benefit.

Improve water efficiency: Implementing improvements to the facility that reduce the demand for POTW capacity through reduced water consumption (e.g., water meters, plumbing fixture retrofits or replacement, water-efficient appliances, water-efficient irrigation equipment, education programs). The water efficiency strategies will be sufficient in and of themselves to document need for projects.

Increase capacity: Increasing the treatment capacity of existing treatment plants, biosolids handling facilities, MS4s, decentralized treatment systems, and NPS BMPs with respect to flow or tonnage.

Increase level of treatment: Improving the degree of treatment. This refers to any improvement in unit processes or BMPs that improves the effluent quality or decreases the concentration of most water quality variables from runoff or nonpoint sources. The addition of nutrient removal is considered to be an improvement in effluent quality (e.g., secondary effluent with nutrient removal represents higher-quality effluent than secondary effluent without nutrient removal).

Instrumentation/electrical/laboratory: Adding new or modifying existing instrumentation systems (e.g., SCADA [supervisory control and data acquisition]), electrical systems, or laboratory facilities at an existing facility of any type.

Process improvement: Any improvement to a facility that does not increase the capacity, increase the level of treatment, expand the service area, or make a similar change for existing treatment plants, biosolids handling facilities, MS4s, decentralized treatment systems, and NPS BMPs. If a more detailed or more appropriate change type is available, it should be used.

Redevelopment: Expanding, modifying, or otherwise upgrading existing gray or green stormwater management measures.

Rehabilitation: Restoring or repairing parts of existing treatment plants, combined or separate sewer systems, biosolids handling facilities, MS4s, individual onsite systems, and NPS BMPs with no increase in capacity or level of treatment.

Renewable energy: Implementing renewable energy production (e.g., wind, solar, methane capture and energy conversion equipment, biosolids drying/dewatering and energy conversion equipment, co-digestion, combined heat and power systems, hydroelectric systems). The renewable energy strategies will be sufficient in and of themselves to document need for projects. The strategies do not need to be linked to a water quality or public health benefit.

Replacement: An existing facility is considered obsolete and is demolished, and a new facility is constructed on the same site. For treatment plants, this generally implies the same degree of treatment as the demolished plant.