
2022 Clean Watersheds Needs Survey (CWNS)

State Coordinator Manual

**Submitted to:
U.S. Environmental Protection Agency
William Jefferson Clinton Building, 4204M
1200 Pennsylvania Avenue, NW
Washington, DC 20460**

May 2022

Contents

	Page
List of Acronyms and Abbreviations	xi
Glossary	xiii
1. Background, History, and Purpose	1-1
1.1 Congressional Mandate.....	1-1
1.2 Tie to the CWSRF	1-1
1.3 Data Users.....	1-2
1.4 Updates from the 2012 CWNS.....	1-2
1.5 State Coordinating Committee and Subcommittees.....	1-3
1.5.1 Data Elements and Data Entry Portal Subcommittee.....	1-3
1.5.2 Documentation Subcommittee	1-3
1.5.3 Cost Modeling Subcommittee.....	1-3
1.6 Roles and Responsibilities	1-3
1.6.1 EPA Headquarters	1-3
1.6.2 EPA Regions.....	1-4
1.6.3 State Coordinators	1-4
1.6.4 Municipality Staff	1-4
1.6.5 Small Communities	1-4
1.6.6 EPA Contractor	1-5
2. 2022 CWNS Scope, Terminology, and Data Structure	2-1
2.1 Information Structure	2-1
2.2 CWNS ID	2-2
2.3 Need Category.....	2-2
2.4 Infrastructure Type.....	2-3
2.5 Facility Type	2-4
2.6 Change Type.....	2-4
3. CWNS Policies.....	3-1
3.1 Allowable Projects	3-1
3.2 American Indian and Alaska Native Village Needs.....	3-2
3.3 Unallowable Costs	3-2
3.4 Documentation Guidelines	3-3
3.4.1 Document Annotation	3-4
3.4.2 Clarification Statement for Potentially Unallowable Costs.....	3-4
3.5 Designated Documents List.....	3-5
3.5.1 Document Guidance	3-7
3.5.2 Older Documentation Guidelines	3-11
3.6 Cost of Previous Comparable Construction.....	3-12

Contents *(continued)*

	Page
3.7 Documentation Guidelines for Using the SCF.....	3-12
3.7.1 Using the SCF to Document Technical Data.....	3-13
3.7.2 Using the SCF to Document Projects.....	3-13
3.7.3 Using the SCF to Document Costs.....	3-13
3.8 Requirements for State Needs Surveys and Other State Forms.....	3-13
3.8.1 Document Types.....	3-14
3.8.2 Survey Submittal Requirements.....	3-14
3.8.3 Survey Submittal Process.....	3-14
3.9 Requirements for State-Specific Approaches.....	3-15
3.9.1 Document Types.....	3-15
3.9.2 Approach Submittal Requirements.....	3-16
3.9.3 Approach Submittal Process.....	3-16
3.9.4 Associating the Outputs of an Approved Methodology with Specific CWNS IDs.....	3-16
3.10 Requirements for CETs.....	3-17
4. Data Collection Processes and Procedures.....	4-1
4.1 2022 CWNS Schedule and Milestones.....	4-1
4.2 Data Prepopulated in DEP.....	4-2
4.3 Technical Data.....	4-2
4.3.1 Technical Data for Wastewater Facilities.....	4-2
4.3.2 Technical Data for Stormwater, NPS, and Decentralized Treatment Facilities.....	4-3
4.4 Needs Data.....	4-3
4.4.1 Checkbox of Compliance-Related Reasons for Need.....	4-3
4.4.2 Document Annotation.....	4-4
4.4.3 Documented Costs.....	4-5
4.4.4 Cost Estimation Tools.....	4-6
4.5 Data Review.....	4-8
4.5.1 Automated Data Validation.....	4-8
4.5.2 Manual Review.....	4-8
5. Navigating the Data Entry Portal.....	5-1
5.1 Gaining Access.....	5-1
5.1.1 Registering for DEP Access.....	5-1
5.1.2 Entering the DEP.....	5-1
5.2 Roles.....	5-2
5.3 Welcome Page.....	5-2
5.3.1 State-Specific Approaches.....	5-3

Contents *(continued)*

	Page
5.3.2 DEP Home Page.....	5-3
5.3.3 CWNS DEP Table Filtering and Sorting	5-3
5.3.4 Contact Us.....	5-4
5.4 Icons	5-4
5.5 Document Management	5-5
5.5.1 Navigating the Document Library.....	5-5
5.5.2 Delete a Document.....	5-6
5.5.3 Adding a New Document.....	5-6
5.6 Data Entry Statuses	5-8
5.7 CWNS IDs List.....	5-9
5.7.1 Searching for an Existing CWNS ID	5-10
5.7.2 Archiving an Existing CWNS ID	5-10
5.7.3 Adding a New CWNS ID.....	5-11
5.7.4 Updating CWNS ID List Data for an Existing CWNS ID	5-13
5.7.5 Entering the Survey for a CWNS ID	5-13
5.8 Data Entry Workflow	5-13
5.8.1 CWNS ID Top Menu and Data Entry Notes	5-15
5.8.2 Sidebar Navigation.....	5-16
5.9 Facility Types and Change Types	5-16
5.9.1 Facility Types List	5-16
5.9.2 Adding a New Facility Type and Associated Change Types	5-16
5.9.3 Confirming Selected Facility Types	5-18
5.10 Permits.....	5-18
5.10.1 Adding a NPDES Permit.....	5-19
5.10.2 Adding a Non-NPDES Permit	5-20
5.11 Point of Contact.....	5-20
5.11.1 Point of Contact List	5-20
5.11.2 Point of Contact Search	5-21
5.11.3 Add Point of Contact	5-21
5.12 Location	5-23
5.12.1 Adding a Physical Location	5-23
5.12.2 Areas Related to Needs	5-26
5.12.3 Adding Areas Related to Needs	5-26
5.13 Documents.....	5-27
5.13.1 Linking Documents to a CWNS ID	5-28

Contents *(continued)*

	Page
5.14 Costs by Category	5-31
5.14.1 Entering Costs	5-32
5.15 CET Inputs	5-33
5.15.1 Wastewater: Treatment Plant CET	5-34
5.15.2 Wastewater: Collection CET	5-34
5.15.3 Decentralized CET	5-35
5.15.4 CSO CET	5-35
5.15.5 Stormwater CET	5-36
5.15.6 NPS: Agriculture CET	5-37
5.15.7 NPS: Silviculture CET	5-37
5.16 Population and Flow	5-38
5.16.1 Population	5-39
5.16.2 Flow	5-41
5.16.3 Flow to Population Ratio	5-43
5.17 Discharge	5-44
5.17.1 Discharges List	5-44
5.17.2 Adding a Type of Discharge	5-44
5.17.3 Building and Editing a Sewershed in Discharge	5-47
5.18 Sewersheds	5-47
5.18.1 Sewershed at a Glance	5-48
5.18.2 Sewershed Table	5-48
5.19 Effluent	5-49
5.20 Unit Process	5-51
5.20.1 Adding a Unit Process	5-52
5.21 Asset Management	5-52
5.21.1 Adding an Asset Management Practice	5-53
5.22 Small Community Form	5-54
5.22.1 Indicating a CWNS ID Is a Small Community	5-55
5.22.2 Managing SCFs	5-56
5.22.3 Adding a CWNS ID to the SCF List	5-57
5.22.4 Editing Small Community Data Before the Form Is Sent	5-58
5.22.5 SCF Workflow	5-58
5.22.6 Sending a New SCF	5-59
5.22.7 Uploading a Returned Form	5-61
5.22.8 Making Corrections	5-62

Contents (continued)

	Page
5.22.9 Sending and Receiving Word Versions of the SCF	5-63
5.23 State Correction Requests.....	5-63
5.23.1 Viewing CWNS IDs with an SCR Status.....	5-64
5.23.2 Responding to an SCR	5-64
5.23.3 Resubmitting.....	5-65
6. Post-Survey Data Availability	6-67
6.1 Data Dashboard.....	6-67
6.2 Data Reports and Facility Factsheets.....	6-67
6.3 Publicly Available Access Database	6-68
6.4 DEP Available for States	6-69

List of Appendices

Appendix A. Need Categories

Appendix B. Facility Types

Appendix C. Change Types

Appendix D. Facility Type and Change Type Associations

Appendix E. Facility Type Associations

Appendix F. Facility Types and Need Categories Associations

Appendix G. Designated Document Types

Appendix H. Small Community Form

Appendix I. State-Specific Approach and State Needs Survey and Other State Forms Templates

Appendix J. Data Areas Table

Appendix K. 301(h) Ocean Discharge Waivers

Appendix L. Unit Process Lists

Appendix M. State Correction Requested Findings

List of Tables

	Page
Table 3-1. Examples of Funding Commitments.....	3-2
Table 3-2. List of Designated Documents	3-5
Table 4-1. CWNS Schedule and Milestones	4-1
Table 4-2. Wastewater Treatment CETs by Practice Type and Change Type.....	4-6
Table 4-3. Wastewater Conveyance CETs by Conveyance Category	4-6
Table 4-4. CSO Storage CET ^a	4-7
Table 4-5. Stormwater CETs by Practice Type.....	4-7
Table 4-6. NPS Control CETs.....	4-7
Table 4-7. Decentralized Treatment CETs.....	4-7
Table 4-8. Audit Rate Error and Corresponding Score Deductions.....	4-12
Table 4-9. Average Score and Corresponding Audit Rate.....	4-13
Table 5-1. User Permissions.....	5-2
Table 5-2. CWNS Contact Information.....	5-4
Table 5-3. Icons and Descriptions	5-5
Table 5-4. Data Entry Statuses	5-9
Table 5-5. Descriptions of Data Fields to Create a New CWNS ID.....	5-12
Table 5-6. Data Area Dependencies	5-14
Table 5-7. Descriptions of Data Fields to Create a New Facility Type.....	5-18
Table 5-8. Descriptions of Data Fields to Add a New Non-NPDES Permit	5-20
Table 5-9. Descriptions of Data Fields to Create a New Point of Contact.....	5-23
Table 5-10. Location Options by Infrastructure Type.....	5-24
Table 5-11. Descriptions of Discharge Data Fields.....	5-46
Table 5-12. Discharge Type Options.....	5-46
Table 5-13. Effluent Treatment Level Definitions	5-50
Table 5-14. Descriptions of Data Fields to Create an Asset Management Practice	5-54
Table 5-15. Example Findings, Comments, and Responses.	5-64

List of Figures

	Page
Figure 2-1. 2022 CWNS data structure.....	2-1
Figure 4-1. CWNS schedule and milestones.....	4-1
Figure 4-2. Types of review based on total dollar value, document types submitted, and infrastructure type.....	4-9
Figure 4-3. Review workflow.....	4-10
Figure 5-1. DEP welcome page.....	5-2
Figure 5-2. Document management list.....	5-5
Figure 5-3. “Upload New Document/Edit Document” window.....	5-7
Figure 5-4. Older documentation certification statement.....	5-7
Figure 5-5. Cost of previous comparable construction certification statement.....	5-8
Figure 5-6. CWNS ID list.....	5-10
Figure 5-7. “Add/Edit CWNS ID” window.....	5-12
Figure 5-8. “Enter Survey” icon.....	5-13
Figure 5-9. CWNS ID data entry workflow diagram.....	5-14
Figure 5-10. CWNS ID top menu.....	5-15
Figure 5-11. “Data Entry Notes” window.....	5-15
Figure 5-12. Facility types list.....	5-16
Figure 5-13. “Add/Edit Facility Type” window.....	5-17
Figure 5-14. Facility types and change types confirmation window.....	5-18
Figure 5-15. Permits associated with a facility.....	5-19
Figure 5-16. NPDES permit search window.....	5-19
Figure 5-17. “Add/Edit Non-NPDES Permit” window.....	5-20
Figure 5-18. Point of contact list.....	5-21
Figure 5-19. Point of contact search.....	5-21
Figure 5-20. “Add/Edit Point of Contact” window.....	5-22
Figure 5-21. Physical location data area.....	5-23
Figure 5-22. “Add/Edit Physical Location” window.....	5-25
Figure 5-23. Physical location mapping tool.....	5-25
Figure 5-24. Areas related to needs data area.....	5-26
Figure 5-25. Mapping feature for areas related to needs.....	5-27
Figure 5-26. Documents library.....	5-28
Figure 5-27. “Document Search” window.....	5-29

Figure 5-28. “Upload New Document/Edit Document” window.....	5-30
Figure 5-29. Adding documents to the “Cost by Category” table.....	5-31
Figure 5-30. “Cost by Category” table.....	5-32
Figure 5-31. Adding costs by document and category.	5-33
Figure 5-32. CET data area.....	5-34
Figure 5-33. Wastewater treatment plant CET window.	5-34
Figure 5-34. Wastewater collection CET window.	5-35
Figure 5-35. Decentralized CET window.....	5-35
Figure 5-36. CSO CET window.	5-36
Figure 5-37. Stormwater CET window.	5-36
Figure 5-38. Agriculture CET window.....	5-37
Figure 5-39. Silviculture CET window.	5-38
Figure 5-40. Population and flow data areas.....	5-39
Figure 5-41. Adding/editing population information.	5-41
Figure 5-42. “Add/Edit Flow Information” window for disaggregated flows.	5-42
Figure 5-43. Total flow warning.	5-42
Figure 5-44. “Add/Edit Flow Information” window for total flow.....	5-43
Figure 5-45. Population to flow ratio.....	5-43
Figure 5-46. Discharge data area.....	5-44
Figure 5-47. “Add/Edit Discharge Method” window.	5-45
Figure 5-48. Facility CWNS ID search.....	5-45
Figure 5-49. Sewershed at a Glance example.....	5-48
Figure 5-50. Sewershed table.....	5-49
Figure 5-51. “Edit Effluent” window.	5-51
Figure 5-52. Unit processes list.....	5-51
Figure 5-53. “Add/Edit Unit Process” window.	5-52
Figure 5-54. Asset management data area.	5-53
Figure 5-55. “Add/Edit Asset Management” window.	5-53
Figure 5-56. Indicating a CWNS ID serves a small community.....	5-55
Figure 5-57. “Manage Small Community Forms” in the CWNS top menu.	5-56
Figure 5-58. Adding state information to the SCF.	5-57
Figure 5-59. SCF list.....	5-58
Figure 5-60. Searching for a small community to add to the email list.....	5-58
Figure 5-61. SCF workflow.	5-59
Figure 5-62: Default small community email.....	5-60

Figure 5-63. SCF email information..... 5-61

Figure 5-64. Small Community Form View and Upload. 5-62

Figure 5-65. SCR custom report. 5-64

Figure 5-66. Example review section in the survey. 5-65

Figure 5-67. State response view. 5-65

Figure 6-1. 2012 data dashboard..... 6-67

Figure 6-2. Example 2012 facility fact sheet (page 1 of 5)..... 6-68

List of Acronyms and Abbreviations

ARPA	American Rescue Plan Act
BMP	best management practice
BOD₅	biochemical oxygen demand
CEAP-Cropland	Conservation Effects Assessment Project National Assessment for Cropland Report
CET	cost estimation tool
CFR	Code of Federal Regulations
CIP	Capital Improvement Plan
CSO	combined sewer overflow
CWA	Clean Water Act
CWNS	Clean Watersheds Needs Survey
CWSRF	Clean Water State Revolving Fund
DEP	Data Entry Portal
eFOTG	Electronic Field Office Technical Guide
EPA	U.S. Environmental Protection Agency
ft	foot
gpcd	gallons per capita per day
HUC	Hydrologic Unit Code
ICIS-NPDES	Integrated Compliance Information System–National Pollutant Discharge Elimination System
I/I	infiltration and inflow
IUP	Intended Use Plan
LTCP	Long-Term Control Plan
MG	million gallons
MGD	million gallons per day
mg/L	milligrams per liter
MS4	municipal separate storm sewer system
NEP	National Estuary Program
NPDES	National Pollutant Discharge Elimination System
NPS	nonpoint source
NRCS	USDA’s Natural Resources Conservation Service
O&M	operations and maintenance
OWTS	on-site wastewater treatment system
PE	Professional Engineer
POTW	publicly owned treatment works
SCF	Small Community Form
SEMS	Superfund Enterprise Management System

SSES	sewer system evaluation survey
SSO	sanitary sewer overflow
TMDL	total maximum daily load
USDA	U.S. Department of Agriculture
WAM	web application management
WIFIA	Water Infrastructure Finance and Innovation Act

Glossary

Adjustment factor	Calculated based on cost-related errors found in CWNS IDs that undergo an audit review and applied to the state’s total official auditable needs.
Allowable	Refers to projects meeting the criteria of the CWNS needs definition.
Alternate document	A document that might not include all project and cost documentation guidelines. Alternate documents commonly have information to document the project only (requirement #3) and can be used in conjunction with other documents that include costs or EPA cost estimation tools to document requirements #4 and #5. See Appendix G for the full list of alternate documents and their descriptions.
Auditable	Refers to a CWNS ID with a cost of \$40 million or less that uses at least one primary document and was partially reviewed.
Audit rate	The percentage of federally accepted auditable CWNS IDs that EPA randomly selects for an audit review. The audit rate can range from 2 to 20 percent, based on the findings from full and audit reviews of a state’s CWNS IDs that were submitted during previous quarters of the data entry period.
Authority	Owner and/or operator of a facility and/or facilities linked to a CWNS ID.
Capital costs	Fixed, one-time expenses incurred on the purchase of land, buildings, construction, and equipment used in the production of goods or in the rendering of services.
Change type	Term and categorization to describe one or more planned projects to be accomplished at a CWNS ID within the survey period.
Cost	Estimated dollars needed to implement one or more projects.
CWNS ID	The unique 11-digit identification number, either assigned by the Data Entry Portal or edited by the state, to identify each facility or group of related facilities. The first two digits of the code are required to be the state’s two-digit Federal Information Processing Standards code. This is the basic unit of organization and identifier for the survey and is used to refer to the facility or facilities with which it is associated.
Decentralized wastewater treatment infrastructure	A system relying on natural processes and/or mechanical components to collect, treat, and disperse or reclaim wastewater from a single dwelling or building <i>or</i> a wastewater collection and treatment system under some form of common ownership that collects wastewater from two or more dwellings or buildings and conveys it to a treatment and dispersal system on a suitable site near the dwellings or buildings. For the purposes of the CWNS, decentralized systems may be on-site (individual) or clustered. Clustered systems may include multifamily septic systems or package plants.
Eligible	Refers to projects meeting the criteria of one of the 12 Clean Water State Revolving Fund eligibilities that can receive a loan under the federal guidelines for State Revolving Fund programs.
Facility	An infrastructure asset or program that addresses a current or projected water quality or water-related public health problem.

Facility type	Describes the infrastructure purpose, stormwater regulatory category, and water-quality-related action of the infrastructure asset or program (e.g., treatment, collection, stormwater categorization, nonpoint source control measure, or decentralized treatment type).
Infrastructure type	Used to categorize groups of facility types based on pollution mitigation measures. Infrastructure types are wastewater, stormwater, nonpoint source, and decentralized treatment.
Need	Unfunded project(s) (or portions thereof) and associated capital costs that address a water quality or water-quality-related public health problem existing as of January 1, 2022, or expected to occur within the next 20 years.
Need category	Categorization of capital investment project types that can be funded through the Clean Water State Revolving Fund and included in the CWNS. CWNS categories generally follow the Clean Water State Revolving Fund funding categories.
Needs data	Data collected for each CWNS ID that pertain to needs. These data include needs by document, areas related to needs, and cost model inputs.
Nonpoint source control infrastructure	Infrastructure used to manage and/or treat nonpoint source pollution.
Nonpoint source pollution	Any source of water pollution that does not meet the legal definition of “point source” in Section 502(14) of the Clean Water Act. Nonpoint source pollution is caused when rainfall or snowmelt, moving over and through the ground, picks up and carries natural and human-made pollutants, depositing them into lakes, rivers, wetlands, coastal waters, and groundwater.
Official needs	Projects and associated costs that meet the definition of “need” and are reported in the main body of the Report to Congress.
Operations and maintenance (O&M)	The functions, duties, and labor associated with daily operations and normal repairs, replacement of parts and structural components, and other activities needed to preserve an asset so that it continues to provide acceptable services and achieves its expected life.
Primary document	A document that is likely to meet all three need documentation guidelines (describing the project that solves the water quality or public health problem, the cost for each project, and the source of the cost). See Appendix G for the full list of primary documents and their descriptions.
Project	A capital investment to an asset or program that addresses a water-quality or public health problem.
Sewershed	A group of facilities that ultimately discharge to a single point or multiple shared points. Sewersheds are automatically created by the Data Entry Portal when the state sets the discharge method to “Discharge to Another CWNS ID.” Sewersheds are only created for wastewater facility types.
Stormwater infrastructure	Infrastructure used to collect, convey, treat, or infiltrate stormwater. Stormwater is rainwater or melted snow that runs off streets, lawns, and other sites. See “Stormwater infrastructure (gray)” and “Stormwater infrastructure (green)” also.

Stormwater infrastructure (gray)	Infrastructure that collects and conveys stormwater from impervious surfaces, such as roadways, parking lots, and rooftops, into a series of pipes and ultimately discharges untreated stormwater into a local water body.
Stormwater infrastructure (green)	Infrastructure that uses plant or soil systems, permeable pavement or other permeable surfaces or substrates, stormwater harvesting and reuse, or landscaping to store, infiltrate, or evapotranspire stormwater and reduce flows to sewer systems or to surface waters.
Technical data	Refers to data collected for each CWNS ID that provide information about the CWNS ID. These data include information such as wastewater or stormwater flow; population served; and descriptive data on the discharge, effluent, unit process, and utility management. They do not pertain to needs.
Wastewater infrastructure	A managed system consisting of collection sewers and a treatment plant used to collect and treat wastewater from a service area. When publicly owned, such a system has been called a publicly owned treatment works, as defined at Title 40 of the Code of Federal Regulations, Section 122.2.

This document contains information for state coordinators to reference when providing the U.S. Environmental Protection Agency (EPA) with information about the capital investment needs and technical information of wastewater, stormwater, nonpoint source (NPS) control, and decentralized treatment facilities in their states. EPA will use this information to complete the 17th Clean Watersheds Needs Survey (CWNS) and report the findings to Congress. This document includes background on CWNS policies and procedures, as well as instructions for navigating the CWNS Data Entry Portal (DEP).

1. Background, History, and Purpose

The 2022 CWNS is EPA’s 17th. This survey communicates to Congress current estimates for the Clean Water Act (CWA)–related needs of the nation and each state, including territories. EPA conducted the first survey in 1972 and continued biennially until 1992. From 1996 to 2012, EPA conducted the survey every four years. The last survey was conducted in 2012.

1.1 Congressional Mandate

EPA, in partnership with the states, conducts the CWNS to identify and document the cost of each state’s capital needs to meet the water quality and water-quality-related public health goals of the CWA. The CWNS is required under Section 609 of the Infrastructure Investment and Jobs Act of 2021,¹ which amended the CWA. The Act requires EPA to “conduct and complete an assessment of capital improvement needs for all projects that are eligible under Section 603(c) for assistance from State water pollution control revolving funds; and submit to Congress a report describing the results of the assessment.” The Report to Congress is currently used as part of the allotment formula for the Sewer Overflow and Stormwater Reuse Municipal Grants Program.²

Section 516 of the Water Quality Act of 1987 also requires the Report to Congress to include a comprehensive analysis of the national requirements for treating wastewater to meet water quality objectives. Therefore, EPA collects information (regardless of existing need) on the type of treatment systems already in place or needed to support this analysis.

1.2 Tie to the CWSRF

The Clean Water State Revolving Fund (CWSRF) program was established under Section 603(c) of the CWA to fund water quality protection efforts. The program was established in 1987 with three eligibilities: the construction of publicly owned treatment works (POTWs), implementation of a nonpoint source (NPS) management program, and the development and implementation of a National Estuary Program (NEP) Comprehensive Conservation and Management Plan. Since then, the CWSRF eligibilities have expanded, first through the Water Resources Reform and Development Act of 2014 and again with the passage of America’s Water Infrastructure Act of 2018.

¹ <https://www.govinfo.gov/content/pkg/BILLS-117hr3684enr/html/BILLS-117hr3684enr.htm>

² <https://www.epa.gov/cwsrf/sewer-overflow-and-stormwater-reuse-municipal-grants-program>

Early on, the CWNS focused on providing an estimate of construction costs of POTWs and an inventory of existing and proposed wastewater conveyance and treatment facilities in the United States. As the CWSRF has broadened its funding eligibilities, EPA has also broadened the scope of the survey, reflecting the expansion of types of projects eligible for funding. In the 2012 CWNS, EPA reported technical and needs data for:

- POTWs (including information on combined sewer overflows [CSOs] and sanitary sewer overflows [SSOs])
- Municipal stormwater programs
- Decentralized wastewater treatment

The 2022 CWNS collects technical and needs data for the same projects, plus NPS best management practice (BMP) implementation, desalination, water efficiency, and renewable energy projects, to encompass needs for all projects that are eligible for the CWSRF.

1.3 Data Users

The CWNS data are collected and managed by EPA's Office of Water/Office of Wastewater Management. The main use of the CWNS data is by Congress and state legislatures in their budgeting efforts; however, the data are available to the public and are used to measure environmental progress, contribute to academic research, and help local and state governments implement water quality programs.

To communicate the 2012 CWNS results to the public, EPA created a data dashboard where users could generate custom data reports or download raw survey data. EPA will continue to make survey data available to the public via the data dashboard and will begin requesting the user's affiliation (e.g., academia, nonprofit, state government) for data downloads in order to better understand how the data are used.

1.4 Updates from the 2012 CWNS

In addition to the changes to the need categories and change types (see Sections 2.3 and 2.6), EPA made the following notable updates for the 2022 CWNS:

- Revised the statewide population audit to ensure the population is not double-counted
- Revised which data areas are optional for states to complete
- Modified the requirement for documenting water-quality-related need
- Clarified the definition of "funded"
- Updated the designated documents list
- Updated wastewater cost estimation tools (CETs) and inputs
- Developed new stormwater management, agriculture, and silviculture CETs

1.5 State Coordinating Committee and Subcommittees

In preparation for the 2022 CWNS, EPA and state coordinators worked together to review and improve the policies and procedures for conducting the CWNS, including data entry, the procedures to ensure data quality, and data accessibility. Three subcommittees were convened to support this process.

1.5.1 Data Elements and Data Entry Portal Subcommittee

This subcommittee evaluated the need for and assessed the value of each data area and element collected through the CWNS and made recommendations for data element requirements. It also provided input on the development of a new DEP to maximize usability for state coordinators. Topics addressed included data entry approach, population audit, and optional data areas.

1.5.2 Documentation Subcommittee

This subcommittee evaluated the usefulness and accessibility of the types of documentation that could be used to support reported needs and recommended requirements for such documentation. It also explored related topics, including the designated documents list and the definition of “funded.”

1.5.3 Cost Modeling Subcommittee

This subcommittee provided input to EPA on the development of CETs to be used for approximating CWNS costs when the documented costs of identified needs are not readily available. The subcommittee made recommendations on the size and type of facilities to be modeled, the size of facilities for which state-specific approaches will be considered, cost modeling approaches, and appropriate modeling parameters. Topics addressed included wastewater, stormwater, decentralized, and NPS CETs.

1.6 Roles and Responsibilities

The CWNS is conducted through collaboration between federal, EPA Region, state, municipality, and small community staff. This section outlines the roles and responsibilities for all collaborators.

1.6.1 EPA Headquarters

Implement the CWNS:

- Ensure national consistency by establishing sound policies and procedures.
- Approve development and ensure implementation of the Quality Assurance Project Plan.
- Manage contractors.
- Prepare the Report to Congress.
- Act as final arbitrator in disputes.
- Manage and control data security requirements.

Manage the CWNS DEP and database:

- Coordinate within EPA to ensure a proper environment for the DEP is maintained.

- Coordinate DEP training sessions.
- Ensure DEP concerns are prioritized and resolved as resources allow.
- Provide CWNS administrative and technical support.
- Provide user support to state coordinators (with assistance of EPA Regions) on issues related to the DEP.

1.6.2 EPA Regions

Assist EPA headquarters in regional management of the CWNS and provide support to states:

- Ensure state coordinators have a thorough understanding of the CWNS and are documenting needs.
- Communicate with state coordinators on data submission status and milestones.
- Provide and/or coordinate mentoring for novice state coordinators.
- For some states, the EPA Region may serve as the state coordinator.

1.6.3 State Coordinators

Update, review, and submit CWNS data:

- Collect and enter data for all need categories.
- Analyze current data and update cost, technical information, and documentation.
- Coordinate and submit any state specific methods for estimating projects and costs for EPA review.
- Collect and enter data on new facilities.
- Submit any documentation to the DEP.
- Adhere to schedule for updating technical data.
- Address questions about data anomalies.
- Provide DEP access for other state staff and other applicable entities so they can submit their data electronically to the state.

1.6.4 Municipality Staff

Respond to requests from state coordinators:

- Provide state coordinators with planning documents.
- Support technical data collection by providing requested data.

1.6.5 Small Communities

Provide technical and needs data for their communities that might not be publicly available:

- Access the web-based Small Community Form (SCF) through the emailed link.
- Update technical and needs data.
- Provide documentation, signatures, or CET inputs for needed projects.

1.6.6 EPA Contractor

Analyze state-provided CWNS data:

- Develop the Quality Assurance Project Plan.
- Review data submitted to the DEP to ensure accuracy and compliance with CWNS policies.
- Ensure national consistency through established documentation procedures.
- Perform quality control checks on needs, population, and other technical data.
- Analyze needs estimates at the end of data collection.
- Update CETs using data reported through the survey.
- Provide data analysis for the CWNS Report to Congress.

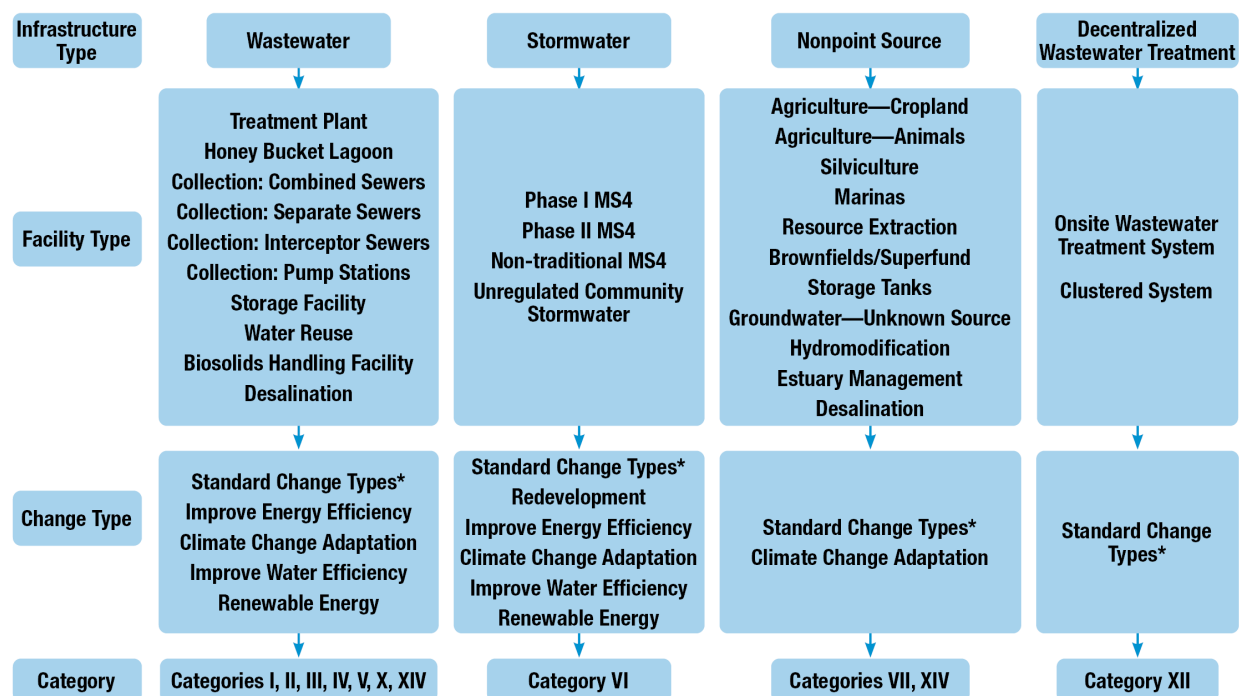
Provide CWNS administrative and technical support:

- Help EPA maintain the DEP and correct programming errors.
- Provide advice to EPA headquarters and guidance to EPA Regions on technical issues involving the CWNS.
- Support CWNS meetings (briefings, startup, mid-survey, etc.).
- Follow all EPA policies and procedures.

2. 2022 CWNS Scope, Terminology, and Data Structure

2.1 Information Structure

The CWNS collects information about water pollution control facilities (technical data) as well as any projects and costs documented for those facilities (needs data). CWNS ID data are classified by infrastructure type, facility type, change type, and need category. State coordinators enter technical data for each CWNS ID and its associated infrastructure type, facility types, and change types. State coordinators also enter needs and assign them to need categories. Figure 2-1 shows the structure of information entered in the DEP.



* Standard change types: no change, abandonment, new, increase capacity, increase level of treatment, rehabilitation, replacement, process improvement, expansion, instrumentation/electrical/laboratory.

Figure 2-1. 2022 CWNS data structure.

2.2 CWNS ID

As the state enters a new facility into the DEP, it is assigned a unique CWNS ID. The CWNS ID is either auto-generated by the DEP or assigned by the state (see Section 5.7.3 for more details).

Entries from previous surveys retain their CWNS IDs from survey to survey. Each CWNS ID can include only one infrastructure type. The state can determine how facilities are reported for a CWNS ID, but guidance for each infrastructure type is as follows:

- **Wastewater:** A CWNS ID can include multiple wastewater facility types. However, each treatment plant must be assigned a unique CWNS ID to track the technical information associated with the plant. For example, a CWNS ID can include one treatment plant and also one or more collection systems. Alternately, plants and collection systems can be entered as separate CWNS IDs that are linked through a discharge method (see Section 5.17 for more discussion of discharge methods) to become part of the same sewershed.
- **Stormwater:** Since some stormwater facility types can potentially cover larger areas (i.e., whole counties), each CWNS ID should only include one facility type.
- **NPS:** EPA recommends that each CWNS ID associated with an NPS control infrastructure have only one facility type (e.g., “brownfield” or “groundwater”). However, a state can enter multiple facility types under a given CWNS ID if that accommodates the specific situation. EPA anticipates that a state using the CETs for “agriculture (cropland)” or “silviculture” will do so under a single CWNS ID that represents either the whole state or multiple counties. If the state coordinator has documented needs, those should be entered under one or more separate CWNS IDs whose locations do not overlap with CWNS IDs used for CETs to ensure needs are not double-counted.
- **Decentralized:** Individual decentralized systems can be reported as individual CWNS IDs, but it is more likely—and encouraged—that states would want to report the needs of a group of decentralized systems (such as all on-site systems within a county) as one CWNS ID. The state will still need to enter the total number of individual units within the system.

2.3 Need Category

States will assign needs to categories that generally align with the CWSRF as shown below. Note that needs associated with categories VIII, IX, XI, and XIII (grayed out and marked with asterisks) had been collected in past surveys, but are no longer collected. Detailed descriptions of the need categories are included in Appendix A.

- I Secondary Wastewater Treatment
- II Advanced Wastewater Treatment
- III Conveyance System Repair
 - III-A Infiltration/Inflow (I/I) Correction
 - III-B Sewer Replacement/Rehabilitation
- IV New Conveyance Systems
 - IV-A New Collector Sewers and Appurtenances
 - IV-B New Interceptor Sewers and Appurtenances

- V Combined Sewer Overflow (CSO) Correction
- VI Stormwater Management
 - VI-A Gray Infrastructure
 - VI-B Green Infrastructure
 - VI-C General Stormwater Management
- VII Nonpoint Source (NPS) Control
 - VII-A NPS Control: Agriculture (Cropland)
 - VII-B NPS Control: Agriculture (Animals)
 - VII-C NPS Control: Silviculture
 - VII-E NPS Control: Groundwater Protection (Unknown Source)
 - VII-F NPS Control: Marinas
 - VII-G NPS Control: Resource Extraction
 - VII-H NPS Control: Brownfields/Superfund
 - VII-I NPS Control: Storage Tanks
 - VII-J NPS Control: Sanitary Landfills
 - VII-K NPS Control: Hydromodification
 - VII-M NPS Control: Other Estuary Management Activities
- VIII Confined Animals (Point Source)*
- IX Mining (Point Source)*
- X Water Reuse
- XI Estuary Management*
- XII Decentralized Wastewater Treatment Systems
- XIII Planning*
- XIV Desalination

Note that the CWSRF categories “improve energy efficiency,” “climate change adaptation,” “renewable energy,” and “improve water efficiency” are applied in the CWNS as change types rather than need categories.

The categories above were modified from the 2012 categories based on changes to CWSRF categorization:

- Categories V-A and V-B combined into V
- Categories VI-A and VI-B combined into VI-A
- Category VI-C changed to VI-B
- Category VI-D changed to VI-C
- Category X renamed (“Recycled Water Distribution” to “Water Reuse”)
- Category XIV added

2.4 Infrastructure Type

Each CWNS ID must be classified as one of four types of infrastructure:

- **Wastewater infrastructure:** A managed system consisting of collection sewers and a single treatment plant used to collect and treat wastewater from a service area. When publicly

owned, such systems have been called POTWs, as defined at 40 Code of Federal Regulations (CFR) 122.2.

- **Stormwater infrastructure:** Infrastructure used to collect, convey, treat, and infiltrate stormwater. Stormwater is rainwater or melted snow that runs off streets, lawns, and other sites. Includes gray and green infrastructure.
- **NPS control infrastructure:** Infrastructure used to manage and/or treat NPS pollution. NPS pollution is any source of water pollution that does not meet the legal definition of “point source,” per CWA Section 402(14). It generally results from land runoff, precipitation, atmospheric deposition, drainage, seepage, or hydrologic modification.
- **Decentralized treatment infrastructure:** A system relying on natural processes and/or mechanical components to collect, treat, and disperse or reclaim wastewater from a single dwelling or building *or* a wastewater collection and treatment system under some form of common ownership that collects wastewater from two or more dwellings or buildings and conveys it to a treatment and dispersal system on a suitable site near the dwellings or buildings. For the purposes of the CWNS, decentralized systems may be on-site (individual) or clustered; clustered systems may include multifamily on-site systems or package plants.

2.5 Facility Type

As shown in Figure 2-1, each infrastructure type is divided into facility types that describe infrastructure assets or programs grouped by infrastructure purpose, stormwater regulatory category, and/or water-quality-related action. See Appendix B for a full list of facility types and definitions. Facility types are associated with needs through the need category.

2.6 Change Type

States will assign one or more change types to each CWNS ID. Change types describe the planned capital investments to be achieved within the survey period and align with the categories of need (see Appendix C for the full list of change types). States should only enter one entry for each change type. For example, if the CWNS ID includes projects for both new pump stations and those to be replaced, choose “replacement” – do not enter “new” and “replacement” for pump stations under a single CWNS ID.

The following change types are each mutually exclusive of any other change type:

- No change (no planned changes)
- Abandonment (full decommissioning of a facility)
- New (construction of a new facility)

The following change types can be reported in combination with each other:

- Increase capacity
- Increase level of treatment
- Rehabilitation
- Replacement

- Redevelopment
- Process improvement
- Expansion
- Instrumentation/electrical/laboratory
- Improve energy efficiency
- Climate change adaptation
- Renewable energy
- Improve water efficiency

See Appendix C for descriptions of each change type.

Appendix D shows which change types can be associated with each facility type, Appendix E shows which facility types can be associated with other facility types, and Appendix F shows which facility types can be associated with each need category.

3. CWNS Policies

3.1 Allowable Projects

To be included in the 2022 CWNS, a project must be:

- **CWSRF eligible.** A CWSRF eligible project is a solution to a water quality problem that is eligible for funding according to national CWSRF eligibility criteria.
 - Note that stormwater projects that do not have water quality benefits are not eligible, as defined in the CWSRF guidance. Examples of projects that do not have a water quality benefit are construction of a dam and acquisition of properties in flood-prone areas.
 - Note that planning activities that have a reasonable prospect of resulting in a capital project are eligible.
 - CWSRF eligibility for wastewater facilities is generally limited to publicly owned facilities; however, privately owned reuse, stormwater, NPS, and decentralized facilities are generally CWSRF eligible. Pilot projects for increased resilience of treatment works and energy or water conservation projects can also be privately owned.
 - Note that federally owned facilities are not CWSRF eligible.
- **Unfunded.** For the 2022 survey, a project is considered funded—and therefore not a need—if by January 1, 2022, either construction has started or external funds (e.g., a grant or executed loan) are committed to the project, even if construction has not yet begun.
 - Projects scheduled to begin construction prior to January 1, 2022, are considered “funded” and therefore may not be included in the CWNS, as they are no longer considered to be needs. If a project was scheduled to begin construction but did not start before 2022, EPA recommends the state include a clarification statement or annotation in the provided documentation (e.g., the intended use plan [IUP] or capital improvement plan [CIP] containing the project) explaining that it did not begin construction as scheduled. Similarly, if only a phase of the construction has started, the state may enter needs for the future phases and explain this in the clarification statement. If only part of the project is funded as of January 1, 2022, that portion is excluded, but the remaining unfunded costs or unfunded phases may be included. By entering a need into the CWNS, state coordinators are indicating that they have confirmed that the needs have not been funded and are therefore eligible for the CWNS.
 - Table 3-1 provides some examples of external funding commitment. Commitment to fund a project or CWNS ID is typically indicated by formal letter or award documents. These documents do not need to be submitted or annotated; they are listed here as examples.
- **Within the survey period.** The CWNS captures costs associated with capital investment projects that have not begun construction before January 1, 2022, and that are planned to be completed by December 31, 2041; it cannot include costs that fall outside this period.

Resource:

EPA’s [Overview of Clean Water State Revolving Fund Eligibilities](#) (2016)

Table 3-1. Examples of Funding Commitments

Funding Type	Agency/Source	Commitment Indicator
Grants	<ul style="list-style-type: none"> ● Department of Housing and Urban Development (HUD) Community Development Block Grant (CDBG) ● Sewer Overflow and Stormwater Reuse Municipal Grant ● State-specific grant programs ● American Rescue Plan Act (ARPA) Grant 	Award letter
Loans	<ul style="list-style-type: none"> ● CWSRF loan ● U.S. Department of Agriculture (USDA) Rural Development Loan ● Water Infrastructure Finance and Innovation Act (WIFIA) loan 	Signed commitment letter

3.2 American Indian and Alaska Native Village Needs

The Indian Health Service (IHS) conducts a survey and prepares a Report to Congress annually under Public Law 86-121 on the capital investment needs for wastewater infrastructure on tribal reservations and in Alaska Native Villages. Those needs are based on the Sanitation Deficiency System (SDS) within the [IHS Sanitation Tracking and Reporting System \(STARS\)](#). For more information about the IHS data collection and the SDS, refer to the [IHS website](#).

So as not to duplicate this effort, the CWNS does not include wastewater treatment or decentralized treatment projects planned on American Indian or Alaska Native Village land. However, because IHS does not collect information about needs associated with stormwater and NPS control, those needs can be included in the CWNS.

3.3 Unallowable Costs

The CWNS does not allow non-capital costs, including:

- Costs for ongoing operations and maintenance (O&M)
- Payroll or fringe benefits for typical facility operations

In some cases, documentation of need for an eligible project may include costs that are not CWSRF eligible. These costs cannot be reported as needs in the CWNS and should be deducted from the total project cost. Examples include:

- Land acquisition that is *not* integral to an eligible project. An example of eligible acquisition is land purchased for the location of the project or for siting a treatment process as part of the eligible project. An example of ineligible acquisition would be land purchased to be used as a recreational area adjacent to the project.
- Road improvements that are *not* integral to an eligible project.

- Abandonment/demolition as a stand-alone project with no water quality benefit. However, demolition of infrastructure (such as a treatment plant) that is an integral part of an eligible project (such as a treatment plant replacement) is eligible. Similarly, replacement of gray infrastructure with green infrastructure—including purchase and demolition costs—is eligible.

3.4 Documentation Guidelines

States are required to provide information supporting project and cost information for all needs reported in the CWNS. Documentation must have the following elements, through either data entered into the DEP or documents submitted:

1. **A description of the current or potential water quality impairment or human health issue (problem).** Given that projects must be CWSRF eligible and fall within the need categories to be included in the survey, the existence of a current or potential water quality impairment or human health problem is implied by inclusion in the survey. States will enter this documentation element within the DEP by choosing one or more options from the checklist to describe the problem (see Section 4.4.1 for a checklist options).
2. **The location of the CWNS ID (location).** The state must identify the physical location of the CWNS ID as a single latitude/longitude point, county, watershed, or town within the DEP. If the location is already noted in the CWNS database from previous surveys or other outside data, the state must verify/correct the location. A general location, such as a state or county, does not meet this criterion except for stormwater, decentralized, or NPS CWNS IDs. See Section 5.12 for options to include additional areas of need when a project spans multiple counties, watersheds, or congressional districts.
3. **A description of the project(s) that will solve the problem (project description).** The state must provide documents describing one or more specific projects that address the identified problem or threat. The project must be specific to the CWNS ID (i.e., the provided document must cover the geographic area indicated for the CWNS ID instead of a general area). There must be a reasonable expectation that construction of the project will be completed within 20 years.
4. **The cost of each project (project cost).** The state must provide the cost to implement each project. Costs should be reported in base year dollars and not adjusted to 2022 costs to account for inflation. (EPA will make this adjustment after data entry using the base date indicated by the state.) Generally, only site-specific cost data are acceptable, although the CWNS does allow for states to provide cost of previous comparable construction (document type 5). Costs from comparable construction projects must be based on at least three projects that were bid or completed within the last six years; are similar in size, scope, and geographic area; and have detailed construction cost data available. See Section 3.6 for further guidance.

If there are no documented costs, EPA-developed CETs for certain categories are provided within the DEP with certain constraints. *Modeling may only be used when no documented cost is available and still requires documentation for the project description.* See Section 3.10 for CET requirements.
5. **The source of the cost (source).** The state must identify the source of the cost (e.g., engineer's estimates, costs from comparable practices, estimates from equipment suppliers) for each project.

6. **Current documentation (current).** For all needs, the document must be “current.” The document date must be January 1, 2016, or later (within six years of survey launch). Guidelines for potential exceptions to this requirement can be found in Section 3.5.2.

Documentation of the first two elements is in the form of information entered in the DEP. The other elements must be provided in the form of the specific document types listed in Table 3-2 and Appendix G, such as the SCF (discussed below). See Sections 4.4.2 and 5.5.3 for more information on how to meet documentation guidelines.

In general, costs must be generated through a process independent of the CWNS. Allowable exceptions are the use of the EPA-developed CETs, CETs developed by states and approved by EPA (state-specific approaches), or costs submitted through the SCF that are certified by a Professional Engineer (PE) at the local or state level.

Some documents present several alternatives to address the identified water quality problem. If there is a recommended alternative, the state must use that alternative’s costs. If there is no recommended alternative, the state must use the average cost across all non-zero cost alternatives. All documented costs must be adjusted to reflect known funding that occurred between the document date and January 1, 2022. For details on requirements for specific documents, refer to Appendix G.

3.4.1 Document Annotation

States must annotate all documents (i.e., highlight or otherwise identify relevant information such as cost, project title, year, in them) associated with CWNS IDs with costs greater than \$40 million, that are only supported by alternate documentation, or that are chosen for audit, to facilitate EPA’s review. See Section 4.4.2 for detailed annotation procedures.

3.4.2 Clarification Statement for Potentially Unallowable Costs

Some documents may have outdated information or may not provide complete information for EPA’s review; for others, EPA may be unable to determine if the state has correctly applied all CWNS policies. For example, a document might indicate that a project was scheduled to begin construction before January 1, 2022, and is therefore considered “funded.” If no clarification statement is provided and EPA cannot determine that no unallowable costs were included in the survey, EPA will request a state correction for CWNS IDs undergoing full review (see Section 4.5.2.1) or, in the case of audit reviews, assume the project is “funded” and apply audit deductions (for audit reviews, see Section 4.5.2.3).

To expedite review and prevent potential exclusion of eligible needs, the state coordinator is encouraged to provide statements or additional information to clarify why a cost that may appear to be unallowable has been included. State coordinators can provide this information to EPA either in annotation (with a comment bubble or text box in the PDF file, in the “Comments” field in the DEP annotation table, or in the comments column in the spreadsheet template) or by adding pages within the PDF file with the explanatory information. For the example above, a simple statement of “Project did to proceed as scheduled” would be adequate.

3.5 Designated Documents List

The CWNS requires supporting documentation to confirm the projects and costs for each CWNS ID. The designated documents, including documents used in previous surveys and those new to the 2022 CWNS, are listed in Table 3-2 and defined in Appendix G. EPA also identified which of the designated documents are primary or alternate.

- **Primary documents** are those that are likely to contain information satisfying the three need documentation guidelines required in documentation (the project that solves the problem, the cost for each project, and the source of the cost).
- **Alternate documents** are those that might not include the three project and cost documentation guidelines. Alternate documents commonly have information to document the project only (requirement #3) and can be used in conjunction with other documents that include costs or EPA CETs to document requirements #4 and #5.

States can use either a primary document *or* a combination of alternate documents to support the inclusion of a project and its costs for a given CWNS ID.

Other terms and concepts related to documentation and requirements include:

- **Independent:** Refers to documents that were generated for a purpose other than the survey and through a process independent of the survey.
- **Generated for the purposes of the survey:** Refers to data collection methods or forms that were developed specifically to support needs submitted to the CWNS.
- **Supplemental:** Refers to documents that provide more information to explain or add to a designated document. These can be either independent or generated for the purposes of the survey. Specific guidance is discussed in Section 3.5.1 below.
- **Prior approved:** Refers to documents that EPA has determined are applicable to reporting needs for the CWNS.
- **Requires EPA prior approval:** Refers to documents that require EPA's input and approval before they may be submitted for the CWNS. In the prior approval process, EPA will review the document to determine if it meets project and/or cost documentation guidelines and designate it as primary or alternate. The document can then be associated with one or more CWNS IDs. Prior approval does not include a complete review of CWNS policies; this will occur during full or audit review.

Table 3-2. List of Designated Documents

Document No.	Document Type	Designation
Preapproved Documents		
1	CWSRF IUP/Project Priority List	Primary
2	Non-CWSRF Governmental Loan and Grant Application	Primary
3	CWSRF Loan Pre-application/Final Application	Primary
4	Non-governmental Grant Application	Alternate

Document No.	Document Type	Designation
5	Cost of Previous Comparable Construction	Alternate
6	State-Approved Area-Wide or Regional Basin Plan	Alternate
7	State-Approved Local Comprehensive Water and Sewer Plan	Alternate
8	Total Maximum Daily Load (TMDL)	Alternate
9	NEP Comprehensive Conservation and Management Plan	Alternate
12a	Completed State Needs Surveys and other state forms (approved as primary)	Primary
12b	Completed State Needs Surveys and other state forms (approved as alternate)	Alternate
13	Wastewater/Stormwater User Rate Study	Alternate
14	Climate Resilience Evaluation and Awareness Tool Report	Alternate
15	Regional Water Plan	Alternate
16	Hazard Mitigation Plan	Alternate
17	Integrated Stormwater and Wastewater Plan	Alternate
20	CIP or Master Plan	Primary
21	Facility Plan or Preliminary Engineering Report	Primary
22	Engineer's Study	Alternate
23	Final Engineer's Estimate/Lowest Bid	Primary
24	Sewer System Evaluation Document	Alternate
25	Diagnostic Evaluation	Alternate
26	Sanitary Survey	Alternate
27	State-Approved Municipal Wasteload Allocation Plan	Alternate
28	Recently Promulgated Municipal, State, or Federal Regulation	Alternate
30	Administrative Order, Court Order, or Consent Decree	Alternate
31	National Pollutant Discharge Elimination System (NPDES) or State Permit Requirement (with Schedule)	Alternate
32	Draft CSO Long-Term Control Plan (LTCP)	Alternate
33	Approved CSO LTCP/Annual Report	Primary
34	Signed Draft LTCP from CSO LTCP-EZ Template	Alternate
35	State-Approved LTCP from CSO LTCP-EZ Template	Primary
40	Watershed-Based Plan	Alternate
41	Section 319 Funded or EPA Reviewed Watershed-Based Plan	Primary
42	Approved State Annual 319 Workplan	Alternate
43	Approved State 319 Project Implementation Plan	Primary
44	NPS Management Program/Assessment Report	Alternate
45	NPS Management Program/Groundwater Protection Strategy Report	Alternate
46	NPS Management Program/Wellhead Protection Program and Plan	Alternate
47	NPS Management Program/Delegated Underground Injection Control Program Plan	Alternate
48	Source Water Assessment/Source Water Protection Plan	Alternate

Document No.	Document Type	Designation
49	Natural Resources Conservation Service (NRCS) Conservation Plan or Farm Plan	Alternate
50	Electronic Field Office Technical Guide (eFOTG)	Alternate
51	State/Federal Agricultural Cost-Share Program Cost Tables	Alternate
52	Professional Appraisal	Alternate
53	Census of Agriculture	Alternate
54	Conservation Effects Assessment Project National Assessment for Cropland Report (CEAP-Cropland)	Alternate
55	U.S. Forest Service Forest Inventory and Analysis Database	Alternate
56	National Association of State Foresters BMP Survey	Alternate
60	Municipal Storm Water Management Program Plan	Alternate
61	Stormwater Utility Feasibility Study	Alternate
71	Small Community Form	Primary
72	Information from an Assistance Provider	Alternate
73	Asset Management Plan	Alternate
96	Excel Spreadsheet Annotations	n/a
101c	CWNS ID–Specific Output to State-Specific Approach (approved as primary)	Primary
101d	CWNS ID–Specific Output to State-Specific Approach (approved as alternate)	Alternate
Requires EPA Prior Approval		
99a	Other—Undesignated (submitted as primary)	Primary
99b	Other—Undesignated (submitted as alternate)	Alternate
100a	State Needs Surveys and other state forms (submitted as primary)	n/a
100b	State Needs Surveys and other state forms (submitted as alternate)	n/a
101a	State-Specific Approach (submitted as primary)	n/a
101b	State-Specific Approach (submitted as alternate)	n/a

3.5.1 Document Guidance

General guidance covering all document types:

- For documents that require a local government official’s signature (2, 4, 12, 71), “local” means city, community, town, borough, village, township, parish, or county. A local government official does not mean just the elected representative (e.g., mayor); it can be any other qualified official (e.g., public works manager).
- For documents that are developed based on fiscal years, the expenditures for the fiscal year that includes the official data entry date (January 1, 2022) must be pro-rated. For example, if fiscal year 2022 goes from July 2022 to June 2023, the needs under fiscal year 2022 must be divided by two.
- If more than one alternative is listed in a document, only costs for the recommended alternative may be used for the cost estimate.

- The state coordinator should check the funding status of all projects to make sure that the need has not already been satisfied.
- For alternate documentation that contains projects but not costs, projects with specific locations should be identified. For example, a watershed management plan with a proposal for a 2-acre constructed wetland next to a town's municipal building would be acceptable. However, a plan that generally listed a constructed wetland as a potential solution to the city's stormwater issues without any specifics (i.e., the size or location) would not. Documentation of cost is assessed on a case-by-case basis depending on the amount of detail reported and the source of the information. Related documents that can justify costs commonly used in conjunction with these document types include cost of previous comparable construction (5), CIPs (20), or engineer's estimates (22 and 23).
- State coordinators can submit supplemental documents with information that explains or adds to a designated document (e.g., justifying that projects in an old IUP have not been funded). These should be combined with the main document and submitted as one document. Note that loan or grant applications have specific guidance for their supplemental documentation (outlined below).
- If informal or internal documentation (e.g., EPA's small community form, state needs survey) references a formal planning document such as an engineer's plan, the state coordinator is encouraged to obtain that document and use it instead. If it cannot be obtained, the state coordinator should briefly explain through annotation in the document submitted or within the DEP.

The following designated documents have additional guidance:

Documents 71 and 72 are specific to small communities.

- **CWSRF IUP/Project Priority List (1):** If a state rolls unfunded projects from one IUP to the next, they need to submit only their current IUP. If a state does not roll projects into subsequent IUPs, then they may submit past IUPs if the projects are still considered active and remain unfunded. If the IUP is not current (i.e., not the most recent IUP), the state must submit supplemental documentation to indicate that the projects are still needed. This supplemental documentation may include relevant sections of documents submitted in support of the funding application, such as detailed project descriptions, engineer's reports, or project applications. Alternatively, the state may provide supplemental internal documentation generated during the determination of the funding allocation that explains why a CWSRF-eligible project was not funded (e.g., a memo that lists all projects that have been reviewed and cleared for funding). If no supplemental documentation is available, the state may include a clarification statement (see Section 3.4.2) to indicate that the projects are still needed.
- **Loan or grant application (2, 3, 4):** A loan or grant application may be used to document projects and costs for the categories for which the grant or loan funding is requested. The application should contain clearly written narrative that defines the project and its cost. All supporting documentation to the application must be submitted. If the grant or loan application supplemental information includes a Facility Plan or Preliminary Engineering Report (21), Engineer's Study (22), or Final Engineer's Estimate/Lowest Bids (23), or another of the designated documents, the documents should be uploaded separately under that

document number and costs should be entered under that document and not as document type 2. Other supplemental documentation may be submitted with the application itself.

- **Cost of Previous Comparable Construction (5):** This document type may be used to justify costs, but documentation describing the project as a solution to the problem is still required. Section 3.6 presents guidance on how to use this document type, along with specific criteria for each need category.
- **CIP or Master Plan (20):** When using a CIP or Master Plan to document projects, the state coordinator should keep the following items in mind:
 - Planning documents often include projects with little specific detail; therefore, state coordinators should be careful to choose the correct category of need.
 - CIPs typically include a capital budget for the first year and are updated annually, so projects scheduled after the first year may not have started as planned. If the state coordinator is using a CIP for a year prior to 2021, they should include a clarification statement (see Section 3.4.2) noting which projects did not begin construction as scheduled.
- **Informal spreadsheet CIP (20):** Internal planning documents such as spreadsheet CIPs may be submitted as this document type, but do not inherently meet CWNS documentation standards. States should consider whether these spreadsheets are independently generated, meet the documentation guidelines, contain high quality data produced by a reputable source (e.g., city staff, professional engineer), have been reviewed and approved by an entity (e.g., city council, regional board, public works director), and whether the projects contained in the spreadsheet are expected to occur within the planning period. Before submitting informal spreadsheet CIPs, states should communicate with the facility to find out if the spreadsheet is acceptable documentation per the above considerations. States should review the spreadsheet to ensure it contains adequate project descriptions and annotate the following information within a ReadMe tab added to the beginning of the spreadsheet. The required information can be as text or as a screenshot of communication with the facility:
 1. Document author
 2. Document date (created and/or last modified)
 3. Base date of the costs (if different than the document date)
 4. Source of the cost (e.g., planning software used to generate costs, engineer's name)
 5. Purpose of this document (e.g., internal planning, external budget presentations)
 6. Any general clarification statements (e.g., project start dates, eligibility)
- **Sewer System Evaluation Document (24):** Sewer system evaluations included within a Facility Plan or a CSO Report should be reported under the corresponding document type. An I/I analysis or a sewer system evaluation survey (SSES) not included in one of those documents should be listed as document type 24.
- **Diagnostic Evaluation (25):** This type of evaluation may be used to document a project if the results indicate that construction is necessary to achieve compliance.
- **Sanitary Survey (26):** The Sanitary Survey must document high, areawide decentralized system failure rates that are considered serious enough to be a health hazard (such as groundwater contamination caused by malfunctioning on-site wastewater treatment systems

[OWTSs]). A community with a population of 10,000 or fewer may use a letter from a registered state or county sanitarian or PE with documentation or other evidence of a site visit as this document type.

- **State-Approved Municipal Wasteload Allocation Plan (27):** This plan may be used to document the project for a treatment plant expansion or upgrade as long as the study identifies a specific wastewater treatment point source and appropriate design flows and treatment levels. This plan may be used to document the project and may be used to document costs if the project descriptions identify specific costs.
- **Recently Promulgated Municipal, State, or Federal Regulation (28):** Recently promulgated regulations can document the project but not the cost. This documentation should include a copy of the regulation and a statement signed by a municipal operator or state permitting authority employee indicating which facilities are affected (electronic signatures are acceptable). State coordinators need only to reference federal regulations and do not need to submit them.
- **CSO LTCP (32, 33):** These plans may be used to document projects and costs for category V (CSO) needs only. LTCPs not yet approved by the state or EPA but that have been adopted/signed by the municipality should be entered as document type 32; state-approved or EPA-approved LTCPs should be entered as document type 33.
- **LTCP from CSO LTCP-EZ Template (34, 35):** This document type may only be used when a standard LTCP is not available. A draft LTCP must be accompanied by supplemental documentation in the form of a signed, written statement from a local official (34). These state- or EPA-approved LTCPs must be accompanied by supplemental documentation that demonstrates state or EPA approval (35).
- **Approved State 319 Annual Workplans (42) or Project Implementation Plans (43):** To make use of these document types, the state coordinator must also submit supplemental documentation to demonstrate the EPA Region's approval of the State Annual 319(h) Workplan or each individual 319(h) Project Implementation Plan. The most recent Approved State Annual 319(h) Workplans for the state may be used as standard documentation. A 319(h) Project Implementation Plan or State Annual 319(h) Workplan not approved by the state's EPA Region may still potentially be used as a document to justify projects and costs. "Unapproved" 319(h) Project Implementation Plans and State Annual 319(h) Workplans need to be reviewed on a case-by-case basis for inclusion in the CWNS and should be submitted as document type 99 instead of document type 42 or 43.
- **NRCS Conservation Plan or Farm Plan (49):** Only those practices recommended to address potential water quality problems should be included in the CWNS. Some plans might include cost information. When using a Conservation Plan or Farm Plan, state coordinators must be aware that some of the estimates of areas needing treatment and conservation practices are to protect the agricultural capability of the soil, not water quality. Therefore, they should not be included in the CWNS.
- **eFOTG (50):** When using eFOTG information, state coordinators must be aware that some of the estimates of areas needing treatment and conservation practices are to protect the agricultural capability of the soil, not water quality related. Therefore, those should not be included in the CWNS.

- **State/Federal Agricultural Cost-Share Program Cost Tables (51):** Each program has cost tables of the predetermined average costs for BMPs and/or summaries of projects implemented by county. These unit costs can be used to estimate the total cost of a project.
- **Professional Appraisal (52):** State coordinators should be aware that these costs will be accepted only in those situations where the easement or land purchase is done with the primary purpose to solve a water quality or human health problem.
- **Small Community Form (71):** For use only by communities with populations of 10,000 or fewer. See Section 3.7 for guidance on use of the SCF.
- **Information from an Assistance Provider (72):** For use only by communities with populations of 10,000 or fewer. This is an additional alternative document type that can be used by small communities and submitted if other acceptable document types are not available.
- **Asset Management Plan (73):** This plan must be specific to a facility and must identify the timeframe within which projects are needed.
- **Excel Spreadsheet Annotations (96):** This document type is an EPA-developed or state-generated spreadsheet template designed to help expedite the annotation process and must be submitted with one or more of the other designated document types. Both templates (single CWNS ID and single document) and spreadsheets developed by the state to show cost calculations should be submitted under this document type. In situations where documents are used to support needs for more than one CWNS ID, such as the state's IUP or CIPs for multiple facilities, the state coordinator should use the template for a single document.
- **State Needs Surveys and other state forms (12/100):** This document type can be used to justify projects and/or costs. Detailed guidance on how to use this document type is presented in Section 3.8.
- **State-Specific Approach (101):** This document type can be used to justify projects and/or costs. Detailed guidance on how to use this document type is presented in Section 3.9.

3.5.2 Older Documentation Guidelines

The primary concern associated with accepting documentation more than six years old is that the conditions for which the facility/project was designed have changed and therefore the need for the infrastructure projects may have changed. If a state coordinator wishes to use older documentation to support needs, they will have to confirm via a checkbox in the DEP that:

- Construction has not started
- The project(s) are not funded
- The project(s) are still needed and the scope is the same

In addition, the state coordinator should confirm that no substantial changes to technology or conditions at the facility have occurred that would preclude the proposed project(s) as a reasonable solution to the problem presented. This confirmation could include that:

- The technology is still relevant and not outdated as the solution to the problem.

- Facility population has not changed substantially since development of the costs.
- There have been no substantive changes to environmental conditions since the original solution was developed.

The process for certifying older documentation is discussed in Section 5.5.3.1.

3.6 Cost of Previous Comparable Construction

Document type 5 (Cost of Previous Comparable Construction) may be used to document costs, but not the need for the project itself. Any project that is supported by the cost of previous comparable construction must also be accompanied by an approved document that contains a description of the project that will solve the water quality/human health problem. The document date entered in the system should be the date when EPA headquarters approved the use of the document. The base date should be the date the state judges to be the best fit for the group of documents that are being used. Ideally, the base date should be the date of one of the documents used for the analysis.

If a document of this type will be used to estimate costs for more than one CWNS ID, the state coordinator must submit the document for prior approval from EPA (see section 5.5.3.2 for instructions). If it will be used to estimate costs for only one CWNS ID, the state coordinator may request prior approval or decline prior approval review and submit the document. The state will be asked to confirm that they understand that EPA may find issues with the document when the full CWNS ID is reviewed and that the needs might be rejected.

This estimate of cost must be based on at least three projects that:

- Were bid or completed within the last six years.
- Are similar in size, scope, and geographic area (e.g., county, watershed). The size of the project (e.g., population served, pipe lengths, flow treated) must be within 25 percent of the size of the comparable construction. Generally, projects should be in the same county or watershed. In some cases, it may be appropriate to use document type 5 to determine costs for larger geographic areas (e.g., region, state).
- Have detailed construction cost data available.

The specific rules for using document type 5 for each need category are:

- Any projects being used to estimate costs for categories I, II, V, VI, and X must have design parameters be within 25 percent of the project being estimated (i.e., flow treated, volume treated, surface area, or population served).
- Any projects being used to estimate costs for categories III and IV must have used the same pipe type/grade combination as the CWNS ID project(s).

3.7 Documentation Guidelines for Using the SCF

EPA has developed a web-based small community form (SCF) (document type 71) through which a community with a population of 10,000 or fewer can document its technical and needs data. The form includes instructions and data input sections similar to the data areas within the DEP. It is

intended to capture the needs of small communities that do not have other acceptable forms of documentation for needs.

States can send communities the form (as a link) via email. In order to provide the form, the state needs to be able to confirm that the CWNS ID is owned by and serves a small community within the DEP. See Section 5.7.3 for information on the small community confirmation, Section 5.22 for instructions on the use of the form, and Appendix H for an example form.

3.7.1 Using the SCF to Document Technical Data

The SCF includes inputs for technical data. If available, the DEP will pre-populate the form with the most current technical data (see Section 4.2 for more details). The community can update any technical data that are not current.

3.7.2 Using the SCF to Document Projects

If the small community has acceptable documentation of projects, that documentation should be submitted, and the form should include the document type and title.

If no documentation of needed projects exists, small communities can enter free text to describe the needed projects for applicable categories. A local official can sign the form to certify that the project descriptions are accurate.

3.7.3 Using the SCF to Document Costs

If the small community has acceptable documentation of costs, that documentation should be submitted, and the form should include the document type, title, base date, and cost.

If no cost documentation exists, small communities have three options for estimating costs:

- A local PE develops a cost estimate and certifies it by electronically signing the form and providing their PE number.
- A local official develops a cost estimate and signs the cost certification, and a state PE certifies the cost as reasonable after reviewing the estimate. This state PE will also electronically sign the form and provide their PE number.
- A local official provides inputs to EPA's CETs by completing the "Cost Estimation" tab on the form.

The state coordinator can choose whether to offer the second option and name the state PE responsible for signing the form in the DEP. *If the state coordinator prefers not to offer this option for their state's SCFs, it will not be included as an option in the template generated for their communities.*

3.8 Requirements for State Needs Surveys and Other State Forms

Wastewater infrastructure surveys or similar assessments conducted by states can be used as documentation of projects and/or costs for CWNS IDs. State coordinators must request approval from EPA to use a state survey as documentation; such a request must include whether the state intends to use the survey to document needs for all CWNS IDs or only those associated with small communities.

3.8.1 Document Types

State Needs Surveys and other state forms (document types 100a and 100b) must be preapproved by EPA before a state may use them to document CWNS ID–specific needs. Once the state survey has been approved, the state will be allowed to upload the results of the survey and link those needs to one or more CWNS IDs (document types 12a and 12b). See Table 3-2 for a summary of the state survey document types and their uses.

3.8.2 Survey Submittal Requirements

A state survey serving as primary documentation for a large community (i.e., a CWNS ID that is owned by or serves a community with population of more than 10,000) must contain sufficient detail to satisfy the document guidelines outlined in Section 3.4. EPA encourages the same level of detail for CWNS IDs with total needs greater than \$40 million. If the state survey is only used to document the needs for CWNS IDs associated with small communities (populations 10,000 or fewer), the required level of detail is similar to that seen in the SCF.

State surveys must include the following elements (note the difference in requirements between large communities [greater than 10,000 persons] and small communities [10,000 persons or fewer]):

- Project-specific descriptions (large) **or** infrastructure-level project descriptions (small).
- Cost breakdown by project (large) **or** costs identifiable by need category (small).
- Description of how costs are validated (e.g., an audit process, required PE signature) and affirmation that submitted costs are not otherwise documented (large) **or** a description of how the state ensures the community representative(s) have knowledge of the infrastructure needs for the completed survey (small).

The following elements are *not* required to be gathered using a State Needs Survey but would help states gather technical data required for the CWNS. If not included in the state's survey, they need to be collected through another means if they are required for the CWNS ID.

- Flow
- Population served
- Effluent treatment level
- Discharge types
- Location

3.8.3 Survey Submittal Process

States must email the following elements to CWNS@epa.gov before May 31, 2022:

- Copy of the survey and any instructions for use
- Description of the required elements
- Description of the recommended elements

The state coordinator can also use the State Needs Survey Submission Template found in Appendix I as part of their submission package to ensure all the required elements are included.

EPA will review the state survey and communicate with the state to gather more information or clarify, if necessary. EPA will post the approved document in the state's document library and the state will receive an email alert that the collection method has been approved. Once the collection method is approved, the state may upload completed surveys or an annotated spreadsheet containing the survey results as document type 12a/b and associate with a specific CWNS ID.

3.9 Requirements for State-Specific Approaches

A state coordinator may want to propose approaches to estimating needs specific to their state. State-specific approaches that serve as primary documentation are used where a state does not have any needs documentation but has data available to create a methodology to identify needed projects and estimate costs associated with those projects. State-specific approaches can also be used as alternate documentation to identify projects and provide inputs for a CET to estimate costs.

Examples of past state-specific approaches to documenting projects are:

- Demonstrating projects for decentralized systems on a county basis by determining the number of systems per county and the average failure rate (and related replacement rate) by county.
- Demonstrating projects for an increased level of wastewater treatment due to a revised state water quality standard that affected certain wastewater treatment facilities statewide.

Examples of past state-specific approaches to documenting costs are:

- Providing the average costs for decentralized systems per county or region within the state based on collected survey data.
- Providing a state engineer's cost analysis associated with installing wastewater treatment system components to address new statewide water quality standards.

EPA will document approved state-specific approaches and share them with other states. See Section 5.3.1 for more details on how to navigate to the available state-specific approaches within the DEP.

3.9.1 Document Types

Any state-specific approach project identification or cost estimation methodology (document type 101a or 101b) must be approved by EPA before a state may use it to identify CWNS ID-specific needs. Once the methodology has been approved, the state will be allowed to upload a document (or documents) summarizing its outputs and associate the needs to specific CWNS IDs (document types 101c and 101d). See Table 3-2 for a summary of the state-specific approach document types and their uses.

3.9.2 Approach Submittal Requirements

The submittal requirements for document types 101a and 101b are the same. State coordinators must provide the following:

- The category(ies) of need that the approach will be documenting. Note that each approach should only apply to one infrastructure type but may apply to multiple categories of need.
- A thorough description of the proposed approach that includes:
 - Why the state believes the approach is necessary and/or the best method to estimate needs. This rationale should be concise, but detailed enough for a thorough review.
 - The basis of the method, such as another approved state-specific approach or a similar accepted model or estimation method.
 - Information on whether the state has used this approach for other planning purposes.
 - A description of the data set(s) that will be used in the method.
 - Any supporting references such as tables, graphs, or values used, as applicable. If a state database is used, a description of the data available may be provided in lieu of a copy of the data. If a state coordinator submits accompanying Excel spreadsheet annotations (document type 96), formulae and references must be present. Hardwired/static values with no reference to external sources are not acceptable. Units and other modeling parameters should be clear and relevant.

If the approach is not based on an accepted method or one that the state has already used outside the CWNS, the submittal should also include hypothetical output examples with associated inputs for EPA to review.

3.9.3 Approach Submittal Process

States must email the submittal document to CWNS@epa.gov before May 31, 2022. States adapting other states' approved methods for their own use must request approval by September 1, 2022. The state coordinator can use the State-Specific Approach Submission Template found in Appendix I to document their submission.

EPA will review the approach and communicate with the state to gather more information or clarify any data. EPA will post the approval status to the DEP and the state will receive an email alert that the collection method has been approved. Once the collection method is approved, EPA will post the approved approach to the DEP home page and the state's document library. The state may then upload the completed approach (e.g., the updated method results with any requested revisions or a document containing the results of applying the method) as document type 101c/d.

3.9.4 Associating the Outputs of an Approved Methodology with Specific CWNS IDs

As previously mentioned, once a state-specific approach is approved, the state will upload either a 101c or a 101d document that contains the outputs of the methods (e.g., cost estimates for CWNS IDs, numbers of projects and costs). The state can then link the 101 c/d document to the applicable CWNS IDs as the supporting documentation and it will be reviewed by EPA in the same manner as other documented needs.

3.10 Requirements for CETs

EPA has developed tools to estimate costs for facilities with documented needs but no cost documentation. Each tool requires data inputs provided by the state coordinator to run. The tools also have limits in terms of practice types, size, or capacity for which they can be used. Specific information requirements and limits for each tool are provided in Section 4.4.4.

The following cost modeling tools will be provided in the DEP:

- Wastewater infrastructure
 - Treatment plant (categories I and II)
 - Collection (categories III and IV)
 - Pipe
 - Pump stations
 - CSO correction (category V)
 - Storage facility
 - Permeable pavement
 - Green roof
 - Bioretention
 - Buffer strip
 - Infiltration trench
 - Vegetated swale
 - Constructed wetland
 - Wet pond
 - Dry pond
- Stormwater (category VI)
 - Permeable pavement
 - Green roof
 - Bioretention
 - Buffer strip
 - Infiltration trench
 - Vegetated swale
 - Constructed wetland
 - Wet pond
 - Dry pond
- NPS control (category VII)
 - Cropland agriculture BMPs
 - Silviculture BMPs
- Decentralized treatment (category XII)
 - On-site or clustered

To use the tools, the state must provide a current document (requirement #6) that includes the inputs entered in the CET, such as the project size, and a description of the project (requirement #3). See Section 3.4 for further details on document requirements.

4. Data Collection Processes and Procedures

The CWNS is a national effort, so data comparability is extremely important to the overall consistency and quality of the CWNS data set. To ensure data comparability, data collection procedures must follow a set of guidelines and criteria for gathering, documenting, and entering data.

The CWNS is a major data collection effort and states are encouraged to take a methodical approach to collecting information. To get started, state coordinators might want to refer to in-house documents such as the state’s IUP Project Priority List (being careful to exclude any projects that are already funded). Other in-house or readily available documents may be grant and loan applications for the CWSRF or other state or national grant and loan programs. Once the in-house data sources are exhausted, states may want to reach out to their largest municipalities for planning documents such as CIPs or Master Plans. Planning documents for many cities and towns may also be publicly available online.

4.1 2022 CWNS Schedule and Milestones

Table 4-1 and Figure 4-1 show the schedule and milestone for the 2022 CWNS.

Table 4-1. CWNS Schedule and Milestones

November 17, 2021	OMB approval
December 1, 2021	State-specific approach and state survey submittal period begins
March 1, 2022	Official data entry begins
May 31, 2022	State-specific approach and state survey submittal period ends
September 1, 2022	Deadline for requests to adapt another state’s approved state-specific approach
December 31, 2022	Prior approval period for documents 5 and 99 ends
February 28, 2023	Official data entry period ends
March 2022–June 2023	EPA reviews state data (rolling basis)
Summer 2023	EPA hosts CWNS 2022 end-of-survey meeting
Late 2023/early 2024	EPA delivers CWNS 2022 Report to Congress

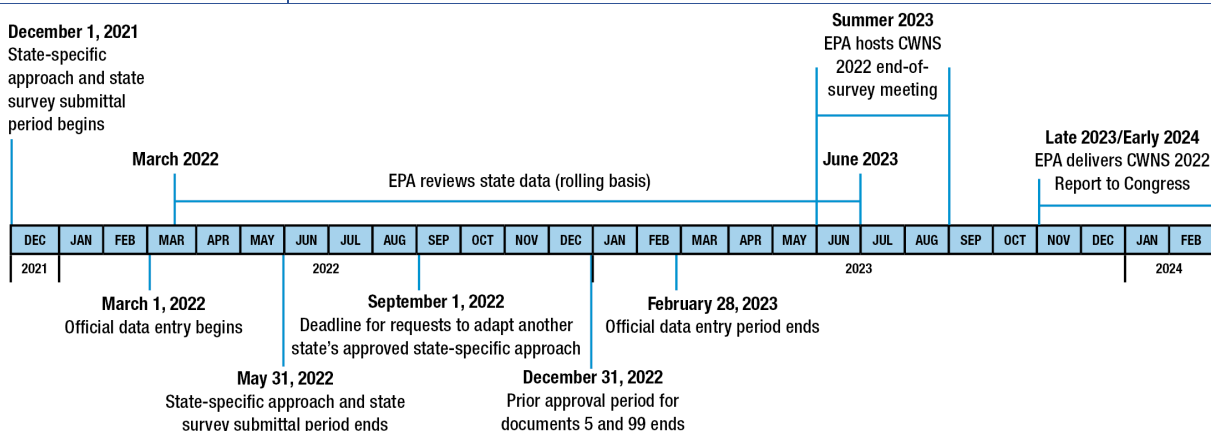


Figure 4-1. CWNS schedule and milestones.

4.2 Data Prepopulated in DEP

To reduce data entry burden on states, EPA is prepopulating data within the DEP wherever possible. The two sources of data that will be used to prepopulate information are the 2012 CWNS and the Integrated Compliance Information System–National Pollutant Discharge Elimination System (ICIS-NPDES) database. The ICIS-NPDES database is maintained by EPA’s Office of Compliance and tracks permit compliance for facilities regulated by NPDES.

EPA will prepopulate the DEP with technical data from past surveys. For wastewater facilities, EPA will also update technical data with information from the ICIS-NPDES database including permit number, permit type, facility address, and county. State coordinators will need to approve the data before they may be included in the 2022 CWNS.

Due to the long period since the last CWNS, EPA will not prepopulate needs data from the last survey. For future surveys, needs data will likely be prepopulated for states to approve. For the current survey, EPA will make the document types and titles submitted for the 2012 CWNS available to states for reference.

4.3 Technical Data

For the 2022 CWNS, “technical data” refers to permit, point of contact, location, population, flow, discharge, effluent, unit processes, and asset management data areas. See Appendix J for a table showing which data areas are required and which are optional for each infrastructure type.

4.3.1 Technical Data for Wastewater Facilities

In addition to estimating the capital investment needed to meet the water quality goals of the CWA, an objective of the CWNS is to evaluate trends in the nation’s ability to provide wastewater treatment. The Report to Congress includes the following information:

- Data on the number of people served by the nation’s POTWs.
- Population served by level of treatment (raw, less than secondary, secondary, advanced, and no discharge) to demonstrate the trends in the nation’s ability to provide wastewater treatment.
- Population served by each level of treatment for past surveys, in the current survey, and in the future (projected) if all needs reported in the survey are met.

To track the trends in wastewater treatment, the CWNS collects technical data for all wastewater facilities, regardless of whether there are documented needs for those facilities. States are asked to review and update technical data for all wastewater facilities, with an emphasis on population, flow, effluent, and discharge data areas, which are used to link facilities within a **sewershed**.

A **sewershed** is a group of facilities that ultimately discharge to a single point or multiple shared points. Sewersheds are automatically created by the DEP when the state sets the discharge method to “Discharge to Another CWNS ID.” Sewersheds are only created for wastewater facility types.

For the 2022 CWNS, EPA has prepopulated the population receiving treatment for each wastewater collection facility with data from the 2012 survey, adjusted to account for population change

between surveys. The adjustment is based on the percent population change for each state according to U.S. Census Bureau data. The statewide average change in population is applied to each wastewater collection CWNS ID. States should review and update these data, understanding that not all communities in the state increased or decreased at the average rate. This is important to ensure that EPA can accurately report the population served by level of treatment.

4.3.2 Technical Data for Stormwater, NPS, and Decentralized Treatment Facilities

States will also be required to enter technical data for stormwater, NPS, and decentralized treatment facilities with needs, or to review and update any technical data prepopulated from the previous survey for facilities with current needs.

4.4 Needs Data

States will collect information about needs from a variety of sources including in-house documents such as their CWSRF IUPs, grant and loan applications (CWSRF or others), or other state-generated documents and plans; from documents generated by the facility such as CIPs, Facilities Plans, or LTCPs; or from other independent documentation such as NPS Management Plans.

For the 2022 CWNS, needs data are entered in the DEP in the form of data from submitted documentation, CET inputs, and identifying additional areas related to needs where applicable.

- **Areas related to needs:** This data area follows location within the technical data, and is for noting other geographic data, including county(ies), congressional district(s), and watershed(s), associated with the facility and its reported needs.
- **Needs by document:** This data area is for linking documents to the CWNS ID to support needs and to enter information about the documents.
- **Costs by Category:** This data area is for inputting the capital costs associated with each category by document.
- **CET inputs:** This optional data area is for inputs to CETs for CWNS IDs that have identified projects, but no documented costs are available.

See Appendix J for a table listing all data areas, identifying which are required and which are optional for each infrastructure type. See Section 5 for instructions on entering these data into the DEP.

4.4.1 Checkbox of Compliance-Related Reasons for Need

To document the water quality or human health problem/impairment that the project is addressing, the state is required to choose one or more compliance-related needs from a list:

- The project(s) is required to maintain compliance with a NPDES permit.
- The project(s) is necessary to obtain compliance with a new permit requirement.
- The project(s) is to increase capacity or improve treatment in advance of anticipated new permit requirements.
- The project(s) is to achieve or maintain compliance with a TMDL.
- The project(s) will prevent unregulated water quality or human health impacts.

- The project(s) improves water efficiency, improves energy efficiency, improves water conservation, addresses climate change, or improves resiliency.

4.4.2 Document Annotation

For CWNS IDs with costs greater than \$40 million or not supported by primary documents, states are required to annotate the following information in the documentation to help the EPA reviewer identify where the information can be found:

- The document title, date, and author if the first page does not clearly identify these items.
- The recommended alternative (if more than one is presented).
- A description of the project(s) needed.
- Associated costs and category(ies) of costs (costs should be labeled with the same cost category(ies) entered into the DEP). If there are projects with costs that fall under multiple categories, state coordinators should attempt to work with the facility to split out costs and/or use their best professional judgement on how to report needs by category. Annotations must include a description of how costs were broken out.
- The base date for the costs (i.e., the year in which the dollars are being reported) if different from the document publication date. If a document contains multiple base dates and a state intends to report needs for projects with different base dates, they will need to upload the document multiple times, once for each base date used. The state should also annotate the document with the correct base date for each project to prevent confusion during EPA review.

If a document is supporting multiple CWNS IDs, states should clearly indicate which CWNS ID each project and/or associated cost is for. If it appears that unallowable costs are included in a document (e.g., the project start date is outside the survey period), the state coordinator is encouraged to clarify why the cost has been included to prevent back-and-forth during federal review. Clarification statements can be included within annotations or attached to the document (see Section 3.4.2 for more guidance on when and how to use clarification statements).

The state can annotate documentation in any of three ways:

- Within the PDF before uploading to the DEP. States are encouraged to provide supplemental documentation for documents with many projects to demonstrate how costs were summed by category (submitted as document type 96).
- Within the annotation table in the DEP for each document. See Section 5.14.1 for details.
- Within a separate spreadsheet. State coordinators can use the two spreadsheet templates developed by EPA (document type 96) that allow the state to provide required and optional inputs for either 1) a single CWNS ID supported by multiple documents or 2) a single document to support multiple CWNS IDs. See Appendix G for a description of the templates. Templates can be accessed through and downloaded from the home page of the DEP. States may also generate similar spreadsheets to provide required and optional inputs and submit them as document type 96.

Link to download
Adobe Acrobat:
[Adobe](#)

Note that the state coordinator can only select one annotation method in the DEP. If multiple annotation methods are used, the state coordinator should select the method that they want the reviewers to use.

For CWNS IDs with costs of \$40 million or less supported by at least one primary document, states are *not* required to annotate the supporting documents. If a CWNS ID is later selected for audit (detailed in Section 4.5.2.3), the state will be notified at that time, via email and within the DEP, that they must annotate the associated documents.

4.4.3 Documented Costs

Once the state has found documentation containing costs for a CWNS ID to be entered in the DEP, they should review their documents to ensure costs meet all requirements listed in Section 3.1. *Eligible costs should be summed by need category, with the need category annotated (within the document, the DEP annotation table, or the spreadsheet, depending on the chosen form of annotation) for EPA review.* If the document includes costs for more than one CWNS ID, the state should annotate which CWNS ID the costs are for.

If documentation includes costs that may contain ineligible components, (e.g., the project includes both wastewater and drinking water infrastructure), the state should contact the facility to request further information on the cost split between the eligible and ineligible components of the project or make their best professional judgement if unable to contact the facility. Approximate amounts or percentages are acceptable (e.g., 25-75 split). State coordinators should indicate in annotations, either in the DEP or document, the name and title of the person consulted at the utility, as well as the date of their estimate (e.g., “Confirmed with [contact name and title] on [date] that costs for [project name] are split 65-35% for the water and wastewater system respectively”). Shared costs such as contingencies should also be adjusted to account for portions of the project cost that are not allowable.

Similarly, if there are projects with shared costs (e.g., contingencies, design, inspection) and not all projects are allowable for the survey such as because some are funded or have started construction, the portion of those shared costs that are related to the unallowable projects should be removed and annotation provided to explain to the reviewer what shared costs are applicable. Once costs are summed, the state will enter the total costs into the DEP under “Costs by Category.” See Section 5.14 for detailed instructions on entering costs into the DEP and Appendix G for designated document types.

The most common documents used to support the following infrastructure types in the 2012 CWNS were:

- **Wastewater:** IUPs, CIPs, and Facility Plans. Although in-house documents such as IUPs are the most readily available to states, documents prepared by the facility such as CIPs are likely to provide a more comprehensive assessment of needs.
- **Stormwater:** State-specific approaches (approved by EPA), CIPs, and IUPs.
- **NPS:** NPS management program/assessment reports, state-specific approaches (approved by EPA), and IUPs.

- **Decentralized:** State Needs Surveys and other state forms, Sanitary Surveys, and state-specific approaches (approved by EPA).

4.4.4 Cost Estimation Tools

EPA provides several CETs through the DEP, which states can use if they have identified needs that *do not* have documented costs and that match one of the CET types. For each tool, acceptable inputs have been defined based either on the data used to develop the tools or on input from EPA and the Cost Modeling Subcommittee. Tables 4-2 through 4-7 below present the tools available by infrastructure type, inputs, and allowable capacities.

When using CETs for facility types that may involve larger areas (e.g., decentralized and NPS CWNS IDs that cover entire counties or watersheds), states should take care to ensure that needs are not double-counted by entering overlapping needs under separate CWNS IDs. For example, a state may submit “NPS Control: Agriculture (Cropland)” needs documented with a watershed management plan for certain counties and use the CET to estimate the needs in the state’s remaining counties. These needs should be entered under separate CWNS IDs: one for the areas covered by the CET and one (or more) covering the documented needs. EPA will pay particular attention to these CWNS IDs during federal review to ensure that needs are not double-counted.

Table 4-2. Wastewater Treatment CETs by Practice Type and Change Type

Inputs in MGD, ^a Maximum Acceptable Inputs Listed					
Practice Type	Construction Type				
	New or Replace	Rehabilitation	Treatment Upgrade	Expansion	Add Disinfection
Lagoon	5	2	2	2	30
Aerated lagoon	5	2	2	2	
Secondary mechanical	5	8	3	3	
Advanced	5	11	12	12	

^a Million gallons per day

Table 4-3. Wastewater Conveyance CETs by Conveyance Category

Inputs in ft or MGD, ^a Maximum Acceptable Inputs Listed			
Conveyance Category	Construction Type	Total Project Length (ft) ^b	Pump Station (MGD) ^a
III-A: I/I Correction	Rehabilitation	195,000	n/a
III-B: Sewer Replacement/Rehabilitation	Replace/rehabilitation	195,000	n/a ^c
IV-A: New Collector System	New	450,000	10
IV-B: New Interceptor System	New	450,000	10

^a Million gallons per day; ^b Feet; ^c State coordinators can estimate the costs for constructing a new pump station or replacing an existing pump station under Category III-B using EPA’s spreadsheet CET, available through the DEP

Table 4-4. CSO Storage CET^a

Inputs in MG, ² Maximum Acceptable Inputs Listed		
Practice Type	Construction Type	Total Storage Volume (MG) ^b
Combined sewage storage facility	New/replace	38

^a Tools for practices listed in Table 4-5 will also be made available for estimation of project-specific category V (CSO) needs; ^b Million gallons

Table 4-5. Stormwater CETs by Practice Type

Inputs Can Be Either Area, Volume, or Acreage—Maximum Acceptable Inputs Listed					
Practice Type	Construction Type	Practice Area (ft ²) ^a	Practice Volume (ft ³) ^b	Drainage Area (Acres)	Quantity ^c
Permeable pavement	New development/ redevelopment	10,000	10,000	NA	Unlimited
Green roof		43,560	10,000	NA	Unlimited
Bioretention		15,000	26,000	5	Unlimited
Buffer strip		440,000	260,000	NA	Unlimited
Infiltration trench		11,000	26,000	5	Unlimited
Vegetated swale		29,000	26,000	5	Unlimited
Constructed wetland		100,000	140,000	50	Unlimited
Wet pond		50,000	250,000	50	Unlimited
Dry pond		50,000	250,000	50	Unlimited
Underground detention or retention		n/a	250,000	50	Unlimited

^a Square feet; ^b Cubic feet; ^c The DEP will not allow an entry greater than 99, but the state can enter more than one given practice if necessary.

Table 4-6. NPS Control CETs

No Size Criteria or Limitations		
Practice	Acres of Need Limitation	Notes
Agriculture	< state total harvested acres	EPA to provide CET and Acres Estimation Tool to estimate acres of need
Silviculture	< state total harvested acres	EPA to provide CET and guidance on how to estimate acres of need

Table 4-7. Decentralized Treatment CETs

Parameters Are Population or Dwelling Unit—No Model Range Limits			
Practice	New	Rehabilitate/Repair/Replace	Notes
On-site and clustered	\$ per dwelling unit	\$ per dwelling unit	Costs adjusted to location (county) based on construction cost index

4.5 Data Review

EPA will review states' data through two processes. First, a series of automated data checks in the DEP will let the state know if there is a problem with data entry, such as an incomplete required field, entered data that do not fall within certain ranges, or entries that do not align with other entered data as expected. Second, EPA will manually review data entered into the DEP as well as documents submitted to support needs.

This section briefly summarizes the data checks performed both automatically within the DEP and manually by reviewers. It also touches on the different types of review and the audit process. Section 5 provides more detail about the automated checks that states will encounter during data entry. The *2022 Reviewer Manual* will thoroughly explain all manual checks that reviewers will conduct.

4.5.1 Automated Data Validation

A series of data validation checks in the DEP will automatically ensure all required fields have been completed and flag values outside expected ranges. The state may be required to provide an explanation in these cases (see Section 5).

For wastewater CWNS IDs, the DEP calculates the flow to population ratio and prompts the state for an explanation if it is outside the expected range of 25–300 gallons per capita per day (gpcd). For more information, see Section 5.16.3.

4.5.2 Manual Review

Due to resource limitations, EPA is unable to review every document submitted for the CWNS. Instead, review will be prioritized based on the total dollar value of the CWNS ID and the type of supporting documentation submitted. For CWNS IDs with no needs that are infrastructure types other than wastewater, review will be limited to automated data checks. For all other CWNS IDs, each CWNS ID receives either a partial or full review, as shown in Figure 4-2. See Table 3-2 and Appendix G for definitions and descriptions of primary and alternate documents.

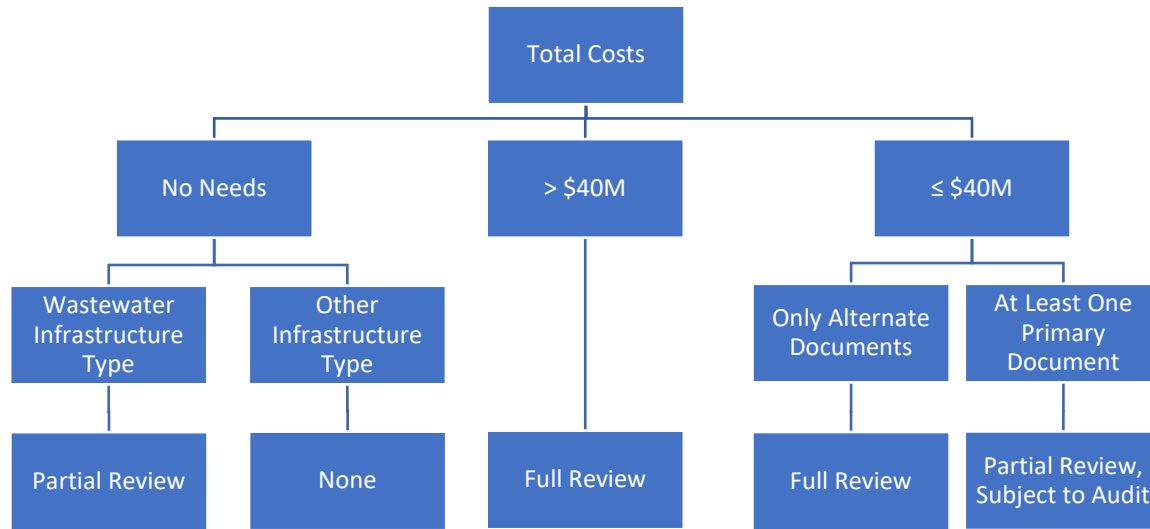


Figure 4-2. Types of review based on total dollar value, document types submitted, and infrastructure type.

4.5.2.1 Full Review

For CWNS IDs with costs greater than \$40 million or those with costs \$40 million or less but are supported by only alternate documentation, EPA will conduct a full review of the CWNS ID. When EPA conducts a full review, they will review required technical data for completeness and associated needs data for appropriateness and consistency across states and sewersheds. They will also examine the project and costs documentation to ensure that:

- Each cost entered into the DEP matches the documentation.
- Costs are acceptable (eligible for the CWSRF).
- Costs are appropriate (no inflation, O&M, or other non-capital costs are included).
- Costs are entered under the correct need category.

If EPA finds errors in data entry, or incorrect application of CWNS policies, they will request that the state correct the errors and resubmit the CWNS ID for federal review. EPA requests that the state coordinator respond in a timely manner, ideally within 10 business days of a state correction request. If the state does not respond in a timely manner, limited EPA resources at the end of the survey period may not allow for a re-review of the updated information. See Figure 4-3 for the review workflow between the states and EPA.

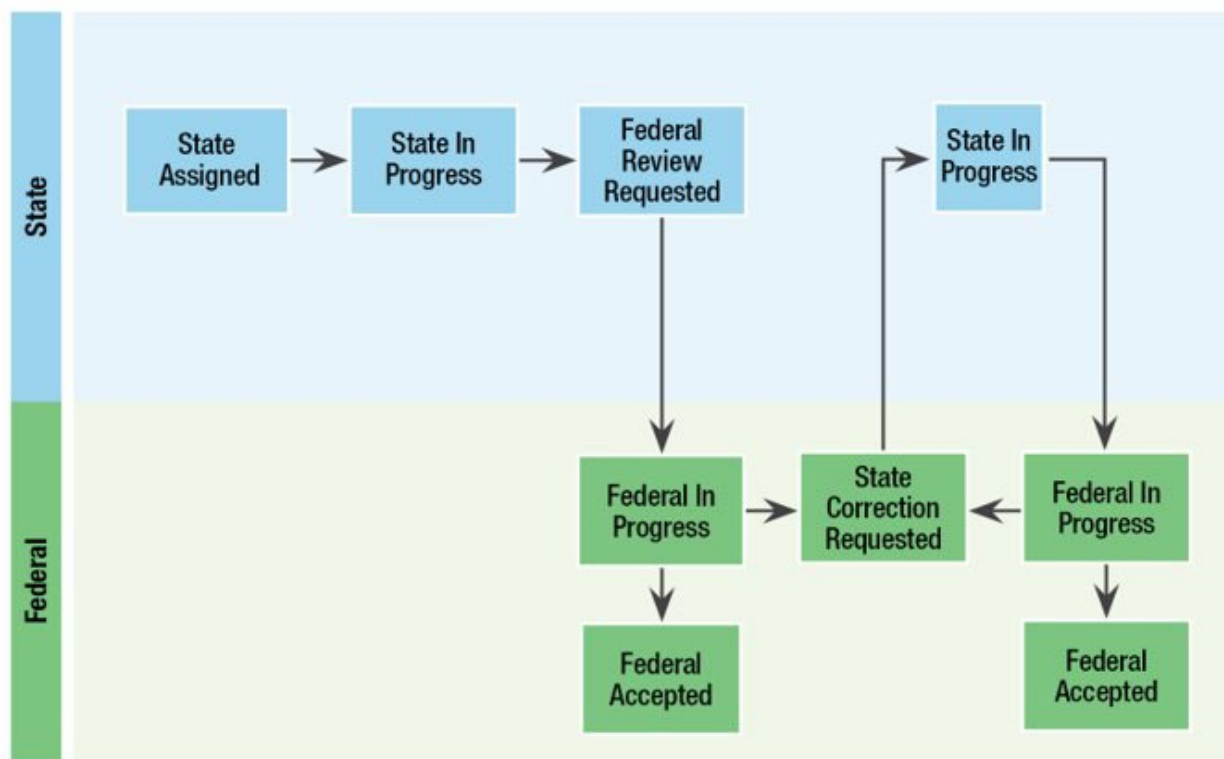


Figure 4-3. Review workflow.

During review, CWNS IDs will receive a score based on the accuracy of data entry. The scores for federally accepted CWNS IDs will affect the state’s audit rate but *not* their needs (see Section 4.5.2.3 for details).

For wastewater facilities, EPA will review technical data for all facilities in the sewershed together. If there is an error in the technical data for any CWNS ID, all CWNS IDs within the sewershed will be returned to the state for correction. EPA will review the needs data for CWNS IDs in the sewershed individually. If there is an error in the needs data for a CWNS ID, EPA will return only that CWNS ID to the state for correction.

4.5.2.2 Partial Review

EPA does not have the resources to conduct a full review of all CWNS IDs. For CWNS IDs that do not receive a full review (those with costs \$40 million or less and that are supported by at least one primary document), EPA will conduct a partial review of each CWNS ID and an audit review of a subset of these CWNS IDs and supporting documentation. Partial reviews include examination of all technical and needs data entered into the DEP, but do not include review of documentation submitted. For more details on the partial review process, see the *2022 Reviewer Manual*.

4.5.2.3 Audit Review

A CWNS ID is **auditable** if its cost is \$40 million or less, it uses at least one primary document, and it has been federally accepted after a partial review.

To ensure data collected are of high quality, EPA will audit federally accepted, partially reviewed CWNS IDs. These are referred to as **auditable** CWNS IDs. Each state's audit rate starts at 5 percent but can increase or decrease quarterly during the data entry period, as discussed below. States will be informed through the DEP which CWNS IDs have been selected for audit. If documents associated with the selected CWNS IDs have not already been annotated, the

state will be notified via the DEP and an email alert that they must annotate the documentation within five business days. If documents have already been annotated, states have that time as an opportunity to review and revise the annotation if necessary.

If EPA makes changes to data during the audit, such as correcting non-cost errors (e.g., missing document title or wrong date), the state will be notified through the review portlet that changes have been made. However, the state will not need to take any action.

There are two main components to the CWNS audit process:

- **Scoring CWNS IDs to determine the audit rate:** Each CWNS ID that undergoes a full review (detailed in Section 4.5.2.1) or an audit review will receive a score based on the accuracy of the state's data entry with respect to the submitted documentation. The purpose is to determine the level of confidence in the state's understanding of CWNS policies and to adjust the percentage of CWNS IDs pulled for audit review accordingly.
- **Cost adjustment:** Cost-related errors found during an audit review are used to calculate a cost ratio that will be applied to the state's total official needs for auditable CWNS IDs only. EPA assumes that cost-related errors found during an audit review reflect consistent errors across all auditable CWNS IDs submitted for the state. CWNS IDs that underwent full review will *not* be affected.

Determining the Audit Rate

All states will be audited at a 5 percent rate in the first quarter of data collection. For subsequent quarters, EPA will use full review and audit review scores from the previous quarter to revise this **audit rate**. EPA reserves the right to change the audit rate for the fourth quarter based on available resources and other potential outside factors.

For the second, third, and fourth quarters, EPA will assign a state's audit rate by averaging full review and audit scores for a state. A CWNS ID's audit score starts at 100 and is reduced based on three types of errors found during review: unreviewable documentation errors, cost errors, and non-cost errors. As previously stated, the audit rate has no impact on the reported needs.

The **audit rate** is the percentage of auditable CWNS IDs selected for an audit review. The quarterly audit rate percentage is based on the state's full and audit review performance during previous quarters and ranges from 2 to 20 percent of CWNS IDs entered by the state coordinator.

- **Unreviewable documentation errors** occur when a document submitted cannot be reviewed by EPA. This error could result from issues with the document itself (e.g., it does not match its description in the DEP) or if a document is not annotated. These documents

cannot be reviewed as submitted, so the CWNS ID's survey status will be changed to "State Correction Requested" and a description of the error(s) will be provided to the state. States are required to correct the error within five business days so that EPA can review the document. If the error is corrected, it does not affect the state's audit score; however, if it is not addressed within five business days, the CWNS ID will receive a score of 0, which is likely to increase the state's audit rate. The costs for that CWNS ID will be adjusted to \$0.

- **Cost errors** include cost data entered into the DEP incorrectly. This can be due to an error in data entry (e.g., value does not match what is in the documentation or costs are not annotated) or a misunderstanding of CWNS policies (e.g., ineligible or duplicative costs were entered). Each cost error will decrease the audit score by 10.
- **Non-cost errors** include minor errors such as a missing signature, an error in a document title, or an error in a document date. Each non-cost error will decrease the audit score by 5.

As a reminder, the audit score does not affect needs—it is only used to determine the number of CWNS IDs that are selected for review.

Table 4-8 provides the list of documentation checks and corresponding deductions associated with each of the findings. Deductions are based on the relative importance of the finding.

For CWNS IDs supported by multiple documents, EPA will review each document and score the CWNS ID based on

documentation checks completed in series. Deductions will be made to the single score for the CWNS ID; however, no CWNS ID will receive a score less than 0.

EPA will use the score assigned to CWNS IDs during the full or audit review to calculate an average score for the state, which will determine the audit rate for subsequent quarters. See Table 4-9 for the average audit score and corresponding audit rate. EPA reserves the right to change the score ranges corresponding to each audit rate based on available resources.

To maintain data integrity, EPA will correct non-cost errors identified through the audit review within the DEP. The CWNS ID's score does not change after errors are corrected. As previously mentioned, the state will be notified through the DEP communication area that changes were made to the data based on the audit and will receive a summary of all findings.

Table 4-8. Audit Rate Error and Corresponding Score Deductions

Audit Rate Error	Deduction
<input type="checkbox"/> Document not annotated or annotations are unreviewable. <i>Any documents not annotated will not be reviewed.</i>	100
<input type="checkbox"/> Document unreviewable (e.g., undesignated, not associated with correct CWNS ID.).	100
<input type="checkbox"/> Document title, author, or date not annotated if not on first page.	5
<input type="checkbox"/> Project description(s) and/or selected alternative not clearly annotated.	5
<input type="checkbox"/> Base date not clearly annotated (if different than document date).	5
<input type="checkbox"/> Document includes more than one designated document type.	5
<input type="checkbox"/> Document type does not accurately describe the document or document prior approval requirements have not been met.	5
<input type="checkbox"/> Costs in DEP incorrect due to typographical or data entry error.	5

Audit Rate Error	Deduction
<input type="checkbox"/> Annotations do not clearly indicate costs and associated categories.	10
<input type="checkbox"/> One or more submitted costs were allocated to incorrect categories within the DEP.	10
<input type="checkbox"/> Overlapping costs (either in multiple documents or between CETs and documented costs) entered into DEP.	10
<input type="checkbox"/> Projects that are unallowable (e.g., not SRF eligible, outside the survey period, funded) entered into DEP.	10
<input type="checkbox"/> Unallowable costs (e.g., O&M) entered into DEP.	10

Table 4-9. Average Score and Corresponding Audit Rate

Average Score	Audit Rate
> 90	2 percent
70–90	5 percent ^a
< 70	10–20 percent

^aStandard rate

Adjusting the State’s Needs Related to Auditable CWNS IDs

During the full review process, EPA works with states to identify and correct errors in submitted costs on a CWNS ID basis to ensure an accurate estimation of needs. CWNS IDs that are only partially reviewed will not receive this level of review scrutiny; therefore, EPA will use the results of the audit to adjust a state’s total auditable needs by reviewing needs documentation for a representative sample.

The **adjustment factor** is calculated based on cost-related errors found during an audit review and applied to the state’s total official needs associated with auditable CWNS IDs not audited.

To do this fairly and consistently, EPA will compare the total correct needs (based on the provided supporting documentation) to the needs entered in the DEP by the state coordinator for each CWNS ID. The ratio of these two values will be used to develop the adjustment factor for each audited CWNS ID. EPA will update incorrect costs for audited CWNS IDs within the DEP and calculate the weighted average of all adjustment factors for a given state. The weighted adjustment factor will be used to calculate the portion of that state’s total auditable needs that will be included in the Report to Congress as official needs for all CWNS IDs that did not receive a full or audit review. EPA will apply the weighted average as an adjustment factor to *only* the state’s total needs for auditable CWNS IDs that were not audited. This means the needs of CWNS IDs that received full or audit reviews will not be affected. EPA will not apply any adjustment factor greater than 100 percent or less than 50 percent.

Example:CWNS ID #1:

Entered needs: \$9,000,000

Correct needs: \$8,000,000

Adjustment factor: $(8,000,000 \div 9,000,000) = 0.89$ CWNS ID #2:

Entered needs: \$10,000,000

Correct needs: \$1,000,000

Adjustment factor: $(1,000,000 \div 10,000,000) = 0.10$ CWNS ID #3:

Entered needs: \$11,000,000

Correct needs: \$12,000,000

Adjustment factor: $(12,000,000 \div 11,000,000) = 1.09$ Weighted Average

$$= \frac{(0.89 \times 8,000,000) + (0.1 \times 1,000,000) + (1.09 \times 12,000,000)}{8,000,000 + 1,000,000 + 12,000,000}$$

$$= 0.97$$

4.5.2.4 Population Audit

Once data collection is complete, EPA will compare each state's population receiving treatment to the population receiving treatment in the 2012 CWNS and the total population of the state. EPA performs the population audit to ensure that populations are not double-counted. If the audit results indicate potential errors, EPA will work with the state to reconcile population data.

4.5.2.5 Special Requests

Outside the traditional review process, states will be able to make special requests for help from EPA through the "Contact Us" button in the DEP. Examples of special requests include:

- **Early training reviews:** In order to help ensure states have a solid understanding of the CWNS policies and procedures and DEP functionality, and to help states avoid confusion in collecting and entering data, EPA plans to provide one early training review to each state in the first month of data collection, pending time and resources. This early training review will be a full review of one CWNS ID, to be selected by the state. Any errors or issues found during this review will not affect the state's audit rate. EPA will determine if the review should be followed by a summary email or conference call with the state coordinator(s).
- **Ad hoc document reviews:** States are encouraged to make specific requests for reviews if they have a certain type of document that they want feedback on before entering successive facilities. They are also encouraged to provide advanced communication when submitting documents for complicated or previously problematic facilities. EPA will try to accommodate all ad hoc document review requests but will prioritize requests made in the first six months of data collection (i.e., through August 2022). After that time, requests that require extensive review might not be honored due to resource and time constraints.
- **Audit detailed findings requests:** If the state wants more information about an audit than what is shown in the DEP, they can request more detailed audit findings.

- **Re-opening a CWNS ID:** If a state wishes to reopen a CWNS ID after it has been federally assigned or federally accepted, they can request this from EPA via the “Contact Us” button in the DEP. Requests should include the reason addition to or modification of the CWNS ID data is required and will be considered on a case-by-case basis. The state will be required to resubmit the ID for federal review.

5. Navigating the Data Entry Portal

After gaining access to the DEP, a state will be able to view the CWNS ID list from the previous survey. The state will also be able to upload documents, view state-specific approaches, and access useful resources.

This section provides detailed information about each section of the DEP, including screen shots, and demonstrates actions required for data entry. Its subsections generally follow the order of sections in the DEP. Although the state is not required to follow this order (except in certain cases where there is data dependency), EPA recommends completing the sections sequentially to avoid errors or a possible need to restart data entry. For instance, the state would have to restart data entry if a change to the infrastructure type or facility type resulted in different data entry requirements.

5.1 Gaining Access

5.1.1 Registering for DEP Access

State and EPA DEP users will first register to request access to the CWNS DEP through EPA's web application management (WAM) system. If the user already has an EPA WAM account, they can follow the second set of instructions below to request access to the CWNS DEP community.

For State and External Users Without EPA Accounts

1. Create a new account at Login.gov by following the on-screen instructions.
2. Go to <https://waa.epa.gov/> using the Login.gov username and password.
3. Request access to the "Clean Watersheds Needs Survey DEP" Community. Go to "Community Access" → "Request Web Community Access" → "Clean Watersheds Needs Survey DEP."
4. Click "Submit."
5. Wait to receive EPA approval of the request (this is not instantaneous).
6. After this approval, you will receive an email informing you that you have been given access.

For EPA Users or External Users Who Already Have EPA Accounts

1. Log in to <https://waa.epa.gov/> using Login.gov username and password or PIV card.
2. Go to "Community Access" → "Request Web Community Access" → "Clean Watersheds Needs Survey DEP."
3. Click "Submit."
4. Wait to receive EPA approval of your request (this is not instantaneous).
5. After this approval, you will receive an email informing you that you have been given access.

5.1.2 Entering the DEP

After gaining access to the community, the user can navigate to the DEP by going to <https://cwnsdep.epa.gov/>.

Log in to the DEP using the same information used to access WAM. The recommended web browser is Google Chrome or Microsoft Edge.

5.2 Roles

Once the user is registered in WAM, the CWNS administrator can specify which permissions the user will have (Table 5-1) and which state(s) the user will have access to. In general, state coordinators and their contractors will have access to view and edit all the CWNS IDs within their state; if a state coordinator needs access to multiple states, they should contact CWNS Support to request additional permissions.

Other state staff and contractors can also be given access to their relevant states. State coordinators should provide EPA with contractors' contact information so they can be assigned to the correct state. Contractors should set up access using the steps in Section 5.1. If a state user is to be assigned a "view only" role, the state should contact CWNS Support describing the need for the role.

EPA Regional staff can also request access and will be assigned a view-only role for each of the states in their region.

Table 5-1. User Permissions

User Role	Permission
State coordinators and their contractors	Default permission: edit within state (or other states if given permission by a CWNS administrator)
	By request: view only
EPA regional staff	Default permission: view only within multiple states
	By request: edit

5.3 Welcome Page

Once inside the DEP, states will be greeted with a welcome page that contains links to various resources (Figure 5-1), including DEP help, document annotation templates, training recordings, and reference documents. Important announcements and dates will appear in the "Announcements" area.

The screenshot shows the EPA CWNS Data Entry Portal (DEP) interface. At the top, there is a blue header with the EPA logo and the text 'CWNS Data Entry Portal (DEP)'. Below the header is a navigation bar with links for 'Home', 'Enter Survey Data', 'Documents', 'Manage Small Community Forms', and 'Administration'. The main content area is titled 'Welcome to the CWNS Data Entry Portal' and is divided into several sections:

- Announcements:** This section includes a note about updates and a list of state-specific approaches and surveys due May 31st, 2022.
- DEP Quick Access:** This section provides links to 'View CWNS ID List and Enter Survey Data', 'View and Add Survey Documents', and 'Manage Small Community Forms'.
- DEP Help:** This section provides links to 'Training information - view schedule and past recordings', 'State Coordinator's Manual', 'Frequently Asked Questions', 'Nonpoint Source Resource Guide', and 'Nonpoint Source Points of Contact'.
- State Specific Approaches:** This section includes a table of approved state-specific approaches.

State	Name	Infrastructure Type	Status	Document
AL	Example County Health Department Decentralized Survey.	Decentralized	Approved	Example state approach (PDF) (50 KB)
GA	Silviculture Nonpoint Source example approach.	Nonpoint Source	Approved	

Figure 5-1. DEP welcome page.

5.3.1 State-Specific Approaches

Approved state-specific approaches are highlighted on the welcome page so states can view the approaches. This area includes directions for creating an approach, how to submit an approach, and what to expect after upload. The State-Specific Approaches Submission Template found in Appendix I can also be accessed on this page. It includes a table of state-specific approaches approved for use in the 2022 survey, including the state, name of approach, infrastructure type, status, and link to associated documents. For more information on state-specific approach requirements and submittal process, see Section 3.9.

5.3.2 DEP Home Page

States will be able to access pages with additional CWNS resources within the DEP Home Page, including:

- Tools and resources, including annotation templates, Category III-B Pump Station Spreadsheet, and Word versions of small community forms
- State Coordinator Manual
- Frequently asked questions
- CET resources, including the draft CET Methods Document
- Training information, including training materials and recorded sessions
- NPS resource guide
- Announcements, including application release notes and newsletters

5.3.3 CWNS DEP Table Filtering and Sorting

For every table within the DEP, states can use various actions to filter and sort visible rows. Table functions include:

- **Search:** The text typed into a search bar, including numbers and letters, will be searched across all columns. The search does not look for each typed element separately.
 - For example, if “federal 01000” is typed in, the search function will look for that phrase, rather than “federal” and “01000” as two separate terms.
 - The search is not case sensitive.
- **Reports:** In the CWNS ID list, two reports have already been generated: the “Primary Report” that shows all facilities that have not been archived and the “Archived Facilities” report that shows all archived facilities.
- **Choose number of rows to view:** The value shown in this dropdown is the number of rows visible on the page and can be adjusted.
- **Filters:** Any filter applied to the table will appear at the top of the table next to a green funnel icon. By unchecking the box next to the funnel, the filter will be unapplied to the table. The state can re-check it to reapply the filter. In the “Primary Report,” the “Review Status not in ‘Archived’” filter is already applied.

- **Download:** Some data can be downloaded in comma-separated value (CSV) files. If download is available, a “Download Data Table (CSV)” button will appear. This will download the data shown on the page (all rows, not just the first 100) as they are filtered and sorted.
- **Column header filter and sort:** In many of the tables in the DEP, states can select a column header. This contains a filter option that will only filter based on values in that column. The sort value will allow the state to sort based on that column. Sort is alphabetical for letters.
- **Reset:** This button will remove all filters. In the case of the CWNS ID list, it will show the default values of the last selected report.

5.3.4 Contact Us

For questions before the beginning of the survey, states should send questions to cwns@epa.gov. Once the survey has started, states should request assistance from EPA through the “Contact Us” button in the top right corner of the DEP application.

Clicking the “Contact Us” button opens a “Support Requests” window that includes the user’s support requests and allows them to create a new support request. EPA responses to support requests can be viewed directly through the window. Email notifications are sent to the user when EPA has responded.

Contact information for EPA staff and contractors supporting the CWNS is listed in Table 5-2.












Table 5-2. CWNS Contact Information

Role	Headquarters Staff	Phone	Email
Team Leader	Joshua Klein	202-564-8616	klein.joshua@epa.gov
Assistant Team Leader	Elisabeth Schlaudt	202-564-8934	schlaudt.elisabeth@epa.gov
EPA Region	Regional Coordinator	Phone	Email
1	Katie Marrese	617-918-1658	marrese.katie@epa.gov
2	Mike Shaw	212-637-3785	shaw.michael@epa.gov
3	Ken Pantuck	215-814-5769	pantuck.kenneth@epa.gov
4	Amy Kuhs	404-562-9311	kuhs.wasan@epa.gov
5	Steffanie Crossland	312-353-4779	cossa.laura@epa.gov
6	Miranda Penn	214-665-7417	penn.miranda@epa.gov
7	Kelly Beard-Tittone	913-551-7217	beard-tittone.kelly@epa.gov
8	Jenn Berig	303-312-6262	berig.jennifer@epa.gov
9	D. Isaiah Larsen	415-972-3182	larsen.david@epa.gov
10	David Carcia	206-553-1566	carcia.david@epa.gov
Role	Contractor Name	Phone	Email
Reviewer (ERG)	Linda Hills	781-674-7366	linda.hills@erg.com

5.4 Icons

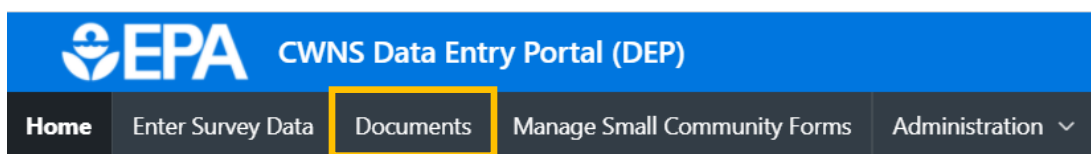
Icons for the DEP are shown in Table 5-3.

Table 5-3. Icons and Descriptions

Icon	Description
	Enter survey
	Edit
	Archive
	Remove
	Help text
	Download
	Select columns to search
	Expand navigation pane
	Collapse navigation pane
	Saved report
	Filter

5.5 Document Management

5.5.1 Navigating the Document Library



The “Documents” area allows states to see all documents that have been uploaded for any CWNS IDs within their state. Using the document list, states can download documents, upload new documents, archive documents, and update information (Figure 5-2) before entering the main survey. The DEP is not prepopulated with documents from the previous survey, but a download of the metadata from previous documents is available in this area.

! Note that uploading a new document in the document area will not link it to a CWNS ID. To link the document to a CWNS ID, follow the instructions in Section 5.13.1.

The image shows the 'Documents' management interface. At the top right is a '+ Add New Document' button. Below is a search bar with a 'Go' button and an 'Actions' dropdown. There are also 'Reset' and 'Download Data Table (CSV)' buttons. The main part of the interface is a table with the following data:




Title	Document Type	Published Date	Author	Notes	Base Month/Year for Cost	Approval Status	Download	Edit	Delete
Nutrients	Nutrient Criteria Studies - 10	6/2/2021			6/1/2021				

Figure 5-2. Document management list.

5.5.2 Delete a Document

Clicking the trashcan icon will allow the state to delete an outdated or duplicated document. A document cannot be deleted if it is linked to a CWNS ID. To unlink a document and remove all associated costs, see Section 5.13.1.3. If a document is linked to a CWNS ID that has been submitted for federal review, it cannot be deleted.

5.5.3 Adding a New Document

Clicking the “Add New Document” button will open the “Upload New Document/Edit Document” window (Figure 5-3). *Note that the state coordinator can add a new document during needs data entry for a specific CWNS ID in the Needs section of the CWNS ID survey.*

To upload a new document:

1. Indicate how the document will be annotated.
 - a. If unknown, select “Not Annotated.” Annotation is required for CWNS IDs with costs greater than \$40 million or that use only alternate documents. The state coordinator will have the chance to edit the document metadata or annotation method when linking it to a CWNS ID in the survey.
 - b. If annotating in the DEP, page number fields will appear next to document metadata that must be filled in. Select the checkbox next to “Title, author, and published date on first page” if the metadata are on the first page of the document.
 - c. If annotating in Excel, click the appropriate radio button and be sure to also upload the Excel spreadsheet annotations (document type 96) separately.
2. Select the document type. Some document types require certifications (see Section 5.5.3.2).
3. Enter document metadata. For Excel spreadsheet annotations (document type 96), enter the document date and base month/year as the date the document was created. Indicate in the document title which documents or CWNS IDs are annotated within the spreadsheet (e.g., “Annotation for IUP”) and list the state coordinator who created the spreadsheet as the author. If not indicated in the document title, note which documents are annotated within the spreadsheet in the “Notes” field.
4. (Optional) Include any notes about the document that might be helpful to you or the CWNS review team.
5. Select “Upload document.” Navigate the computer’s file system to select the correct document. Confirm that the correct document has been loaded.
6. Select “Save” to upload the document to the DEP. Once saved, the document will show up in the document list and in the document search for any CWNS ID.

Upload New Document/Edit Document

* indicates required field.

* Annotation **Not Annotated**
 Annotate in DEP
 Annotated in PDF
 Annotated in Excel

Annotation is required when total needs for CWNS ID are above 40 million dollars, or if no primary documents are included.

* Document Type

* Title

* Author

* Published Date

* Base Month/Year of Cost Information

Notes

* Upload document (Preferred) - PDF and XLSX files only Mail hard copy to EPA - use the [Contact Us](#) link to request instructions

Browse

Save

Figure 5-3. “Upload New Document/Edit Document” window.

5.5.3.1 Older Documentation

If the state selects a document date before January 1, 2016, they will have to certify via a checkbox that the document meets the eligibility criteria listed in Section 3.5.2. The certification statement is shown in Figure 5-4.

Certification Statement

This document is older than six years and must be accompanied by a certification statement that indicates the document meets eligibility criteria. Please certify that this document meets the eligibility criteria below and provide an explanation in the Notes. Please contact CWNS Support if you have questions.

Eligibility Criteria (see State Coordinator Manual for more information):

- Construction has not started.
- The project(s) are not funded.
- The project(s) are still needed and the scope is the same.
- Technology is still relevant and not outdated as the solution to the problem.
- Facility population has not changed substantially since development of the costs.
- There have been no substantive changes to environmental conditions since the original solution was developed.

I certify that this document meets the eligibility criteria.

Figure 5-4. Older documentation certification statement.

5.5.3.2 Cost of Previous Comparable Construction

If the state selects Cost of Previous Comparable Construction as a document type, they will have to certify that it meets all eligibility criteria (see Section 3.6) via a checkbox. For documents being used to support only one CWNS ID, the state can waive prior approval via a checkbox. For documents being used to support more than one CWNS, the state will need to submit the document for prior approval. See Section 3.6 for more guidance. The certification statement is shown in Figure 5-5.

Certification Statement

Please certify that this Cost of Previous Comparable Construction (Document Type 5) document meets the eligibility criteria below. Please contact CWNS Support if you have questions.

Eligibility Criteria (see State Coordinator Manual section 3.6 for more details):

- At least three comparable projects are included in the documentation.
- The comparable projects were bid or completed after January 1, 2016.
- The comparable projects are similar in size, scope, and geographic area to the submitted CWNS facility.
- The documentation has detailed construction cost data for all the projects.

Please provide an explanation of why this document meets eligibility criteria in the Notes section.

- Example of confirmation statement: “The comparable construction projects are in the same county as the CWNS facility and have flows in the range of -0.5% to +12% of the CWNS facility. The costs for xyz equipment from project X will not be included since that is not in the scope of this project, but all other equipment matches.”

I certify that this document meets the eligibility criteria and understand that this document must be approved before the costs associated with it are accepted.

Figure 5-5. Cost of previous comparable construction certification statement.

5.5.3.3 Mailing Documents

EPA strongly recommends that all documents be transmitted electronically. If a hard copy is all that is available, please contact EPA using the “Contact Us” button in the DEP. In this unlikely event, please follow steps 1–3 above, then for step 4 select “Mail hard copy to EPA (Contingency)—follow instructions.” Then select “Save.” This will allow the state to save the metadata without uploading a document.

5.6 Data Entry Statuses

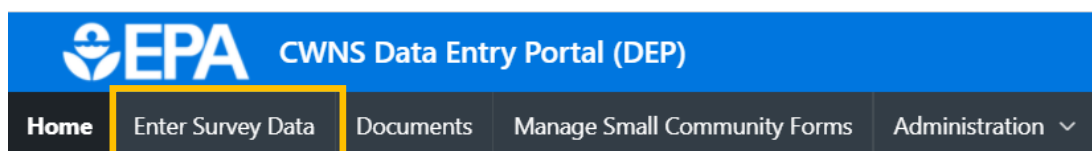
Every state will begin with a prepopulated list of CWNS IDs in the DEP based on previous surveys. The statuses of these facilities will all begin with either “State Assigned” or “Archived.” Archived CWNS IDs were marked as “DE” or deleted in 2012. “State Assigned” CWNS IDs were federally accepted or unsubmitted in the 2012 survey.

Each CWNS ID will go through several statuses (listed in Table 5-4) before becoming federally accepted and included in the Report to Congress. These statuses will help states track the progress of each CWNS ID. The survey status for each CWNS ID will be shown in the CWNS ID list (see Section 5.7) and at the top menu of the survey page (see Section 5.8.1).

Table 5-4. Data Entry Statuses


Data Entry Status	Description
Archived	The CWNS ID is saved but cannot be changed or submitted for federal review.
State Assigned	CWNS IDs migrated from the 2012 CWNS database start with this status. The CWNS ID is available to the state for updating for the 2022 survey.
State in Progress	The state is actively updating the CWNS ID.
Federal Review Requested	The state has completed all updates to the CWNS ID and submitted it associated data for federal review.
Federal in Progress	The federal reviewer is actively reviewing the CWNS ID.
State Correction Requested	EPA has reviewed the data and found errors, and the CWNS ID has been sent back to the state for corrections. The state can view errors and edit the CWNS ID data.
Federal Accepted	EPA has accepted the CWNS ID for inclusion into the Report to Congress.
Federal Audit Requested	EPA has selected the CWNS ID for audit.
Federal Audit Assigned	EPA has assigned the CWNS ID to an audit reviewer.
State Annotation Requested	The CWNS ID reviewer has requested that documents for the CWNS ID be annotated.
Federal Audit in Progress	The CWNS ID is actively being reviewed by an audit reviewer.

5.7 CWNS IDs List



The bulk of the data entry will begin in the “Enter Survey Data” section. Selecting this link in the header will navigate the state to their CWNS ID list. This list will initially contain CWNS IDs from previous surveys that were not purged (marked for permanent deletion). States are encouraged to archive (see Section 5.7.2) any CWNS IDs that are no longer relevant because the facility either is duplicated in another CWNS ID or has been decommissioned.

! Not all CWNS IDs from previous surveys in a state’s CWNS ID list were federally accepted in 2012. Refer to <https://www.epa.gov/cwns/clean-watersheds-needs-survey-cwns-2012-report-and-data> for information on federally accepted 2012 facilities and data. It is imperative that all CWNS IDs be reviewed for accuracy and completeness before being submitted for federal review.

The CWNS ID list will be automatically filtered to remove archived CWNS IDs from view. All active CWNS IDs are listed in the primary report. States can select “X” next to the filter to view all CWNS IDs, including archived ones. Alternatively, states can select the dropdown  icon next to the primary report and select the “Archived CWNS IDs” report to only view archived CWNS IDs.

Before data can be entered, an existing CWNS ID must be selected or a new one created. States can search for all the CWNS IDs within their state, add new CWNS IDs, archive outdated CWNS IDs,

or update basic CWNS ID information through the CWNS ID list before entering the main survey (Figure 5-6).

All CWNS IDs for Alabama
Use this table to create and update facility records, before entering the survey.

Enter Survey Data + Add New CWNS ID

Search 1. All Records Rows: 25 Actions

Reset Current View Download Data Table (CSV)

Row Filter

CWNS ID	CWNS Name	Authority Name	Infrastructure Type	Review Status	Small Community Form Request Status	Total Needs	Enter Survey	Archive CWNS ID
0100000007	Standard Test Case 7		Stormwater	State In Progress	Not Sent			
0100000006	Standard Test Case 4	Stormwater Test	Stormwater	Federal Review Requested	Not Applicable	\$103,756		

1 - 25 of 334

Figure 5-6. CWNS ID list.

5.7.1 Searching for an Existing CWNS ID

States can search for a CWNS ID that is already in the CWNS ID list using multiple tools, as described in Section 5.3.2. Some suggested search functions are:

- Using the search bar to search for the CWNS ID or its name.
- Selecting the table headers (e.g., infrastructure type) and filtering the table.
- Selecting the table headers and sorting the information alphabetically or numerically.

To remove the search filters, click the “Reset” button at the top right corner of the table. This will display the primary report.

Some states may find it useful to organize CWNS ID information in an Excel table. The “Download Data Table (CSV)” button at the top right corner of the table allows the state to download a CSV file with a list of all the CWNS IDs, using the same columns presented in the CWNS ID list. CSV files can be opened with Excel.

5.7.2 Archiving an Existing CWNS ID

Selecting the “Archive CWNS ID” trashcan icon will allow the state to change the status of an outdated or duplicated CWNS ID to “Archived.” The DEP will archive the information so it can be retrieved during the data entry period if the removal was in error. To unarchive a CWNS ID, select the unarchive icon and the CWNS ID survey status will be changed to “State Assigned.”

5.7.3 Adding a New CWNS ID

Selecting “Add New CWNS ID” will open the window shown in Figure 5-7. Information about data fields can be found in Table 5-5. To add a new CWNS ID:

The **CWNS ID** is the unique 11-digit identification number, either assigned by the DEP or edited by the state to identify each facility or group of related facilities. The first two digits of the code are required to be the state’s two-digit Federal Information Processing Standards (FIPS) code. This is the basic unit of organization and identifier for the survey and is used to refer to the facility or facilities with which it is associated.




1. Enter the CWNS ID name.
2. The CWNS ID will be auto-generated by the DEP, but is not saved until the “Save” button is selected. Click the  icon to edit the CWNS ID if desired. Click the  icon again after editing the ID number to complete the process and run a check to confirm that the CWNS ID is unique. If another facility has the same CWNS ID (including archived CWNS IDs), it will not save.
 - ! Once a CWNS ID has been saved, it cannot be edited again. This is to ensure consistency of IDs between surveys. Contact CWNS Support if you need to alter an existing CWNS ID.
3. Fill in remaining required fields.
 - ! The CWNS ID’s infrastructure type is an important piece of information that determines the flow of data entry and which data elements are required. Changing infrastructure types for older CWNS IDs or for new CWNS IDs after beginning data entry is *not* recommended.
4. (Optional) Enter a description of the CWNS ID and projects. This can be helpful when coming back to a CWNS ID entry many months later.
5. (Optional) Select if the project is for a Superfund site. If selected, the DEP will open an optional field for entering the Superfund Enterprise Management System (SEMS) ID. See <https://www.epa.gov/enviro/sems-search> for more information on SEMS IDs.
6. If the CWNS ID is for a small community, toggle on “Owned by and serves a small community (10,000 persons or fewer).” This will allow the state to send this CWNS ID a SCF (see Section 5.22).
7. Save.

Figure 5-7. “Add/Edit CWNS ID” window.

Table 5-5. Descriptions of Data Fields to Create a New CWNS ID


Field	Description	Required/Optional
CWNS ID Name	Name of the CWNS ID.	R
CWNS ID	The unique 11-digit identification number assigned by the state to each facility or group of related facilities. The first two digits are required to be the state’s two-digit Federal Information Processing Standards (FIPS) code. For a new CWNS ID, the DEP will automatically generate one that is random and unique. Clicking the  icon makes the CWNS ID editable.	R
Infrastructure Type	For the CWNS, infrastructure types are used to categorize groups of facility types based on pollution mitigation measures. Infrastructure types are wastewater, stormwater, NPS, and decentralized treatment.	R
Description	Description of the CWNS ID.	O
Owner	Select “Public,” “Private,” ^a or “Federal.” ^b	R
Superfund checkbox	If the CWNS ID is for a Superfund site, you can indicate this by selecting this box.	O

Field	Description	Required/Optional
SEMS ID	If you have selected the Superfund checkbox, an input box will appear where a SEMS ID can be entered. See https://www.epa.gov/enviro/sems-search to search for a SEMS ID.	O
Small community toggle	Select if the population serviced by the CWNS ID is 10,000 or fewer.	R

^a CWSRF eligibility for wastewater facilities is generally limited to publicly-owned facilities; however, privately-owned reuse, stormwater, NPS, and decentralized facilities are eligible. If the state selects “Private” for a wastewater CWNS ID, there will be a pop-up noting that needs associated with this facility may not be eligible.

^b Needs associated with federal facilities are not CWSRF eligible, but technical data for wastewater facilities may still be collected and reported. If the state selects “Federal,” there will be a pop-up noting that needs associated with this facility may not be eligible.

5.7.4 Updating CWNS ID List Data for an Existing CWNS ID

To edit the CWNS ID metadata, click the  icon next to the CWNS ID name in the CWNS ID list. This will open the same screen shown in Figure 5-7, with all the data populated. Edit the desired information and select “Save.”

5.7.5 Entering the Survey for a CWNS ID

After selecting a CWNS ID, the state can enter the survey and begin data entry. Each CWNS ID has a unique link to the survey data entry area. To navigate to this area, select the “Enter Survey” icon in the CWNS ID list (Figure 5-8).




CWNS ID	CWNS Name	Infrastructure Type	County	Review Status	Authority Name	Total Needs	Enter Survey	Archive CWNS ID
2488888909	Test 	Wastewater		State In Progress				

Figure 5-8. “Enter Survey” icon.

5.8 Data Entry Workflow

All data fields for a single CWNS ID survey are available on a scrollable page. Some sections of the survey contain pop-up windows to facilitate data entry. The data are saved in each section so that users do not have to complete the survey in one session.

EPA recommends that states complete data entry for a CWNS ID in the order the sections appear on the page, from top to bottom, as shown in Figure 5-9. This is because later data fields can be dependent on earlier fields. Completing sections out of order may require the state to revisit a section that was previously completed, though the flexibility exists to work on most sections independently.

To help states understand where dependencies occur, Table 5-6 lists out the major data area dependencies by section.

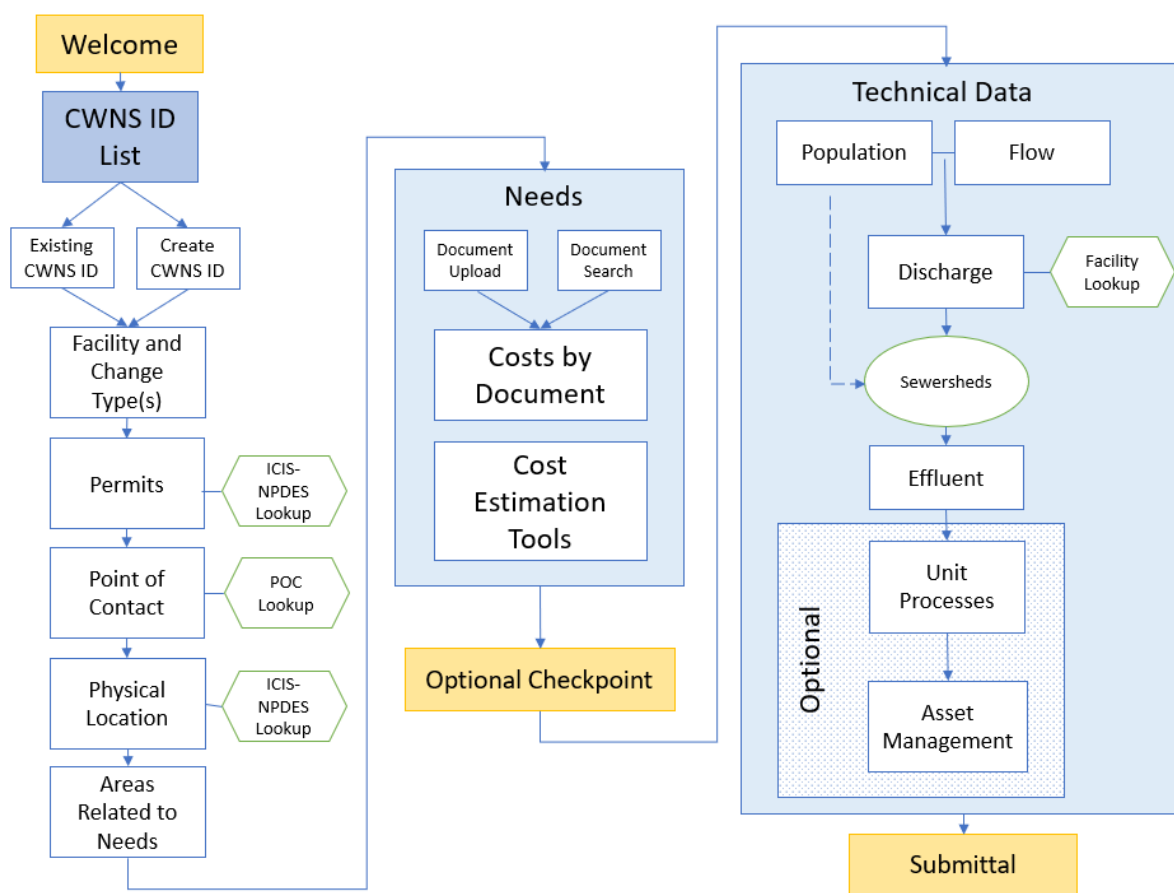


Figure 5-9. CWNS ID data entry workflow diagram.

Table 5-6. Data Area Dependencies

Data Area	Dependency	Helpful For
Facility and change types	None	All sections
Permits	None	Physical location
Point of contact	None	
Physical location	Facility types	Areas related to needs
Areas related to needs	None	CET's
Documents	Change types	
Costs by document	Change types	
CET's	Change types, areas related to needs	
Population	Facility types	
Flow	Facility types	
Flow to population ratio	Population, flow	
Discharge	Facility types	
Sewersheds	Facility types, population, discharge	
Effluent	Facility types	

Data Area	Dependency	Helpful For
Unit processes	Facility types	
Asset management	None	

5.8.1 CWNS ID Top Menu and Data Entry Notes

After the state coordinator clicks on the “Enter Survey” button for a CWNS ID, a top menu will appear to help the state easily identify which CWNS ID they are currently working on (Figure 5-10). There are also two useful links:

- The link on the top left side of the bar will return the state to their CWNS ID list.
- The top right side contains a link to “Data Entry Notes” (Figure 5-11), which opens a window where a state can enter useful notes about the CWNS ID. Notes must be saved using the “Save” button when finished.

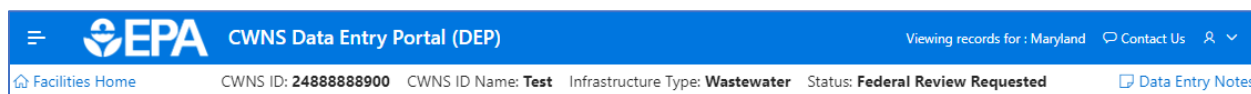




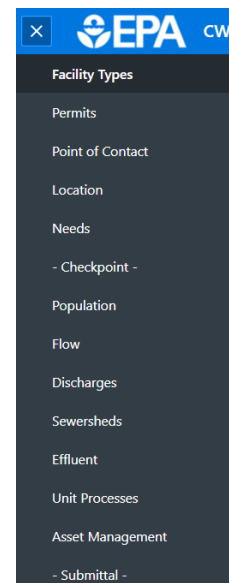
Figure 5-10. CWNS ID top menu.

Figure 5-11. “Data Entry Notes” window.

5.8.2 Sidebar Navigation

The state can use the navigation pane on the left of the screen to move between sections of the survey page. This pane will automatically open when the state enters a survey.





- Click the close  icon in the top left corner of the screen to close the pane.
- Click the hamburger  icon to reopen the navigation pane.



5.9 Facility Types and Change Types

5.9.1 Facility Types List

The state must select facility types and change types for each CWNS ID to indicate the types of facilities and planned changes for the CWNS ID (see Appendix B for the full list of facility types with definitions and Appendix C for the full list of change types with definitions). Clicking the “Edit” pencil icon will allow the state to modify facility types and change types (Figure 5-12). The “Delete” button will remove the selected row.

Facility Type	Change Types	Edit	Delete
Treatment Plant	Process Improvement		
Collection: Separate Sewers	Expansion		

[Add New Facility Type](#)

Figure 5-12. Facility types list.

5.9.2 Adding a New Facility Type and Associated Change Types

Selecting “Add New Facility Type” will open a window (shown in Figure 5-13 with data fields listed in Table 5-7) where the state can add facility types and associated change type(s). The options for the facility types will be filtered based on the infrastructure type indicated in the “Add/Edit Facility” window shown in Section 5.7.3. Facility types must be unique, but a facility type can have multiple change types if applicable. Selecting a change type other than “no change” is an indication that one or more capital investments are needed for that facility and suggests that the state will be entering needs data later in the portal. If “no change” and/or “abandonment” is selected for all facility types within the CWNS ID, needs data will not be required later in the survey.

If the facility does not currently exist but will be constructed during the survey period, select “new.” If the facility is to be completely abandoned and not replaced, select “abandonment.” Those two change types cannot be used in conjunction with any other change types. Existing facilities can have multiple change types.

To add new facility and change type(s):

1. Click the “Add New Facility Type” button under the facility types table.
2. Select the desired facility type from the available options in the dropdown (already filtered based on indicated infrastructure type).
3. Select change type(s). If the facility already exists and has planned changes, select “Existing” and choose one or more options from the list of change types.
4. Save.
5. Repeat steps 1–4 to add another facility/change type combination if desired. Available options will be filtered based on previous choices.



Only enter one entry for each facility type per CWNS ID. Within that facility there can be many change types to cover all of the planned activities. For example, if you have a collection system with two different projects, enter only one “Collection: Separate Sewer” facility type. There should be only one of a given facility type within a CWNS ID. The change type for new infrastructure as part of an existing facility should be “Expansion,” not “New.” “New” should only be used to describe the construction of a completely new facility.

Add/Edit Facility Type [Close]

* indicates required field. [Help ?]

Infrastructure Type: **Wastewater**

* Facility Type: Biosolids Handling Facility [v]

* Select Change Type:

- No Change
- New
- Abandonment
- Existing**
 - Rehabilitation
 - Replacement
 - Increase Capacity
 - Expansion
 - Process Improvement
 - Instrumentation/Electrical/Laboratory
 - Increase Level Of Treatment
 - Improve Energy Efficiency
 - Climate Change Adaptation
 - Improve Water Efficiency
 - Renewable Energy

[Save]

Figure 5-13. “Add/Edit Facility Type” window.

Table 5-7. Descriptions of Data Fields to Create a New Facility Type

Field	Description	Required/Optional
Facility type	For the full list and definitions of facility types, see Appendix B.	R
Change type	For the full list and definitions of change types, see Appendix C.	R
	If “existing” is chosen as a change type, one or more of the checkboxes that appear must be selected.	R

5.9.3 Confirming Selected Facility Types

After modifying the facility types and change types, the state is prompted to click “Confirm Facility Types and Continue Survey” (Figure 5-14) and continue data entry.

! Facility types and change types are important pieces of information that determine the flow of data entry. Changing the facility and change types after editing later sections of the survey for a CWNS ID is *not* recommended. To the extent possible, finalize all facility types and change types before continuing through the survey.

Facility Type	Change Types	Edit	Delete
Treatment Plant	No Change		

Add New Facility Type

Confirm Facility Types and Continue Survey

Figure 5-14. Facility types and change types confirmation window.

5.10 Permits

Both NPDES and non-NPDES permits associated with the CWNS ID can be entered into the DEP. A typical NPDES permit number is a state abbreviation, followed by up to seven numbers and letters (e.g., OH1234567). If the state knows the permit number, they can look up information reported by the facility (such as flow or location) to fill in other survey fields using data from the NPDES program database. The DEP retrieves NPDES program data from a web service provided by the Enforcement Compliance History Online website (<https://echo.epa.gov/>).

States can view all the permits currently associated with the CWNS ID in the permits list (Figure 5-15). They can also add NPDES and non-NPDES permits, delete permit associations, and update permit information. Linked NPDES permits can be used to enter or update location data, including address (see Section 5.12.1).

The DEP is prepopulated with data from the previous survey; some information may be out of date. States should review and remove any permits that are no longer relevant.

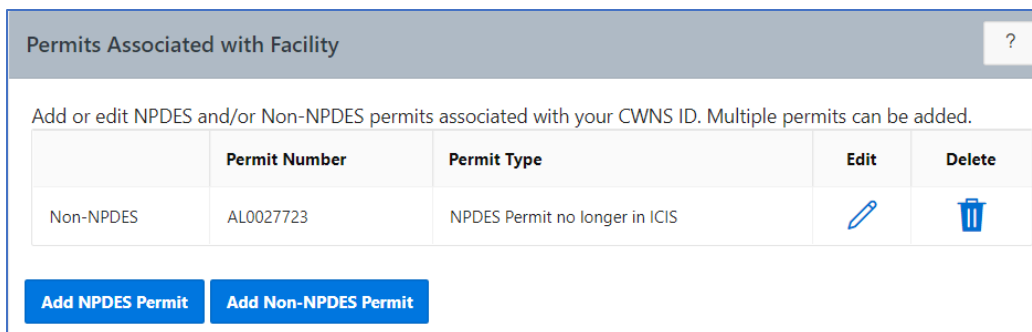


Figure 5-15. Permits associated with a facility.

5.10.1 Adding a NPDES Permit

Clicking “Add NPDES Permit” will open the window shown in Figure 5-16 with data fields listed in Table 5-8. To add a NPDES permit:

1. Search for the permit number or facility name and select it from the search results.
 - a. The default search results only include active permits within ICIS-NPDES. Unchecking “Active Permits” will allow the state to view terminated permits.
 - b. Multiple permits can be associated at once by selecting multiple check boxes.
2. Select “Add Selected Permit(s)” to associate the permit with the current CWNS ID.

If a permit is not in ICIS-NPDES, the state can add it as a non-NPDES permit (see Section 5.10.2).

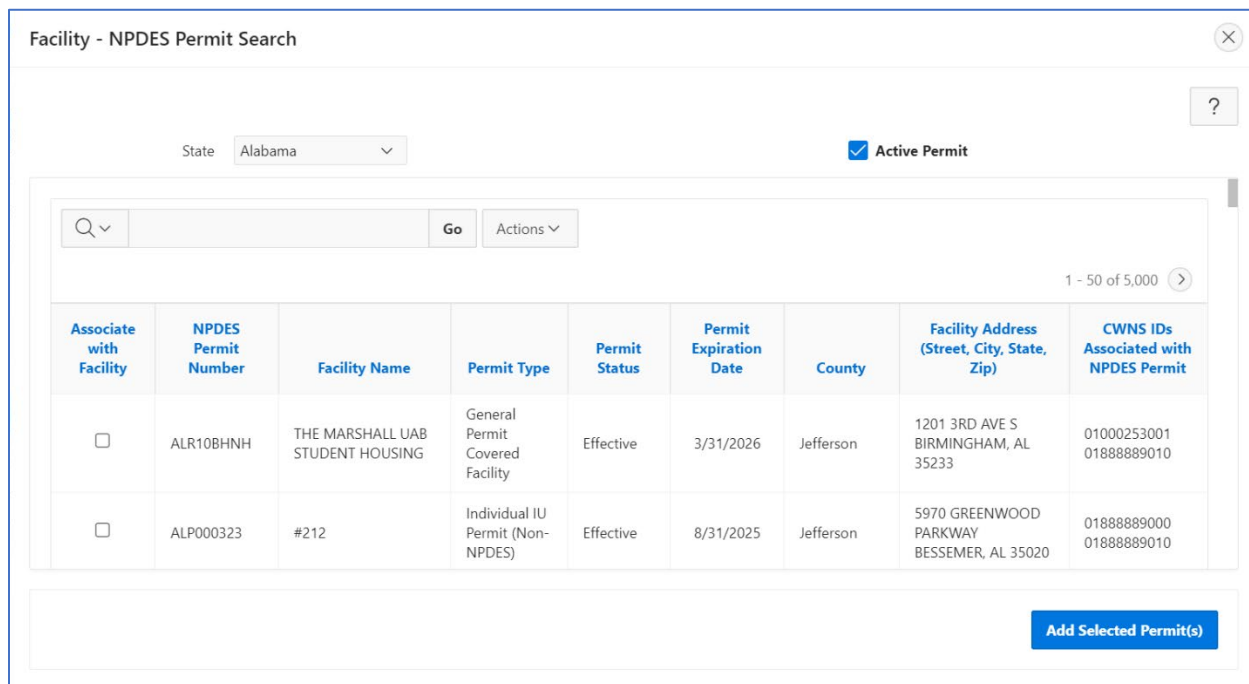


Figure 5-16. NPDES permit search window.

5.10.2 Adding a Non-NPDES Permit

To add a non-NPDES permit, select “Add Non-NPDES Permit.” In the window that opens (Figure 5-17):

1. Enter the permit number.
2. Select the permit type from the dropdown (choose the most appropriate option).
3. Save.

This is also where NPDES permits that are no longer in ICIS should be added. This can be indicated using the permit type dropdown.

Figure 5-17. “Add/Edit Non-NPDES Permit” window.

Table 5-8. Descriptions of Data Fields to Add a New Non-NPDES Permit

Field	Description	Required/Optional
Permit number	A unique number for the permit	R
Permit type	Select from the dropdown list: NPDES permit no longer in ICIS, other, state—groundwater, state—land application, state—other	R

5.11 Point of Contact

The state can view associated facility points of contacts and add, edit, delete, or search for new or previously entered points of contact. The DEP is prepopulated with data from the 2012 survey; some information may be out of date. States should review and remove any points of contact that are no longer relevant.

5.11.1 Point of Contact List

The point of contact list (Figure 5-18) will display relevant information for each point of contact associated with the CWNS ID, including when it was last updated.

- ! Note that while most point of contact information is optional, the state must select one responsible entity (and associated authority name) for each CWNS ID.

Point of Contact

Add or edit the contact information for all contacts related to your CWNS ID. Multiple contacts can be added.

Responsible Entity	Authority Name	Contact Name	Role Title	Phone	Phone Ext	Email	Edit	Delete
Yes	Test Authority	Contact	Mayor			TestEmail@email.com		

Point of Contact Search Add Point of Contact

Figure 5-18. Point of contact list.

5.11.2 Point of Contact Search

Selecting “Point of Contact Search” will open the window shown in Figure 5-19. This feature allows states to search across all previously entered points of contact and quickly add them to the current CWNS ID. States can search the list by state or keyword to associate points of contact.

Point of Contact Search

State: Alabama

Search

1 - 50 of 891

Associate with Facility	Authority Name	Contact Name	Role Title	Address	County	Phone	Fax	Email
<input type="checkbox"/>	Authority Name		Mayor	PO Box 99				mayor@email.com
<input checked="" type="checkbox"/>	Utility Name		Utilities Director					utilitydirector@email.com

Add Selected Point of Contact(s)

Figure 5-19. Point of contact search.

5.11.3 Add Point of Contact

Selecting “Add Point of Contact” will open the window shown in Figure 5-20 with the data fields listed in Table 5-9. To add a point of contact:

1. Fill in the authority name.
2. If the authority is the responsible entity for the CWNS ID, indicate this by clicking the checkbox next to “Responsible Entity.” One point of contact entry must be specified as the responsible entity.
3. (Optional) Fill in the remaining fields.
4. Save.

The point of contact will be added to the DEP and will be available in the point of contact search for other CWNS IDs.

! This contact information may be published as part of facility fact sheets, so only provide publicly available numbers or contact information that can be shared with the public.

Add/Edit Point of Contact ✕

* indicates required field. ?

* Authority Name: **Responsible Entity**

Contact Name:

Role/Title:

Phone Number: Ext:

Fax Number:

Email:

Address:

Address 2:

City:

State: ▼

County: ▼

Zip:

Save

Figure 5-20. “Add/Edit Point of Contact” window.

Table 5-9. Descriptions of Data Fields to Create a New Point of Contact

Field	Description	Required/Optional
Authority name	Name of the authority for this CWNS ID	R
Contact name	Name of the point of contact	O
Role/title	Role or title of the listed point of contact	O
Phone number	10-digit phone number for the listed point of contact	O
Ext	Extension for the phone number	O
Fax number	10-digit fax number for the listed point of contact	O
Email	Email address for the listed point of contact	O
Address	Street address for the listed point of contact	O
Address 2	Additional street address information for the listed point of contact	O
City	City for the listed point of contact	O
State	State for the listed point of contact	O
County	County for the listed point of contact	O
Zip	5-digit ZIP code or ZIP+4 digit code for the listed point of contact	O
Responsible entity	Check this box to indicate that this point of contact is the primary authority responsible for the CWNS ID (one responsible entity must be selected per CWNS ID)	O

5.12 Location

The location data area (Figure 5-21) allows the state to view, add, edit, or delete the physical location of the CWNS ID. The physical location should represent either the point location of the facility (e.g., treatment plant) or the area covered by the CWNS ID (e.g., OWTS). Latitude and longitude information must be provided for all CWNS IDs (either point location or approximate centroid). States can also identify additional areas related to needs within the location data area.

Location ?

Add or edit physical location information for your CWNS ID.

Physical Location [Add / Edit Physical Location](#)

Location Type	Latitude	Longitude	Datum	Cities	County	Zip Code	Watershed	Address
Point	32.352123	-86.286621	NAD 83	Montgomery		36106		

Figure 5-21. Physical location data area.

5.12.1 Adding a Physical Location

The state must update the physical location type based on infrastructure type. Wastewater CWNS IDs require coordinates and an address, while other infrastructure types can have locations that cover larger areas, such as cities and towns, countries, or an entire watershed or state. Refer to Table 5-10 for the location options available for each infrastructure type.

Table 5-10. Location Options by Infrastructure Type

Infrastructure Type	Single Latitude/Longitude	City(ies)/Towns	Indicate Entire County	Indicate Entire Watershed	Indicate Entire State
Wastewater	Available	n/a	n/a	n/a	n/a
Stormwater	Available	Available	Available	n/a	n/a
NPS	Available	n/a	Available	Available	Available
Decentralized	Available	Available	Available	n/a	n/a

Selecting “Add/Edit Physical Location” will open the window shown in Figure 5-22. To add a physical location:

1. Select the type of physical location to be entered (list is filtered based on infrastructure type).
2. Update the coordinates by either:
 - a. Selecting “Confirm or Update Coordinates on Map.” This button will open a map where the state can search for an address or select a point on the map (Figure 5-23).
 - b. Selecting “Use location from associated NPDES Permit” (only available if the state has already associated a NPDES permit with the CWNS ID). If multiple permits have been associated, the dropdown will list each permit. Selecting a permit number will autofill location information, including the address.
 - ! Note that not all NPDES permits have location information. If this is the case for the selected permit, this information will not populate.
3. Enter the required location fields (i.e., city[ies] or towns, zip code, county, watershed, or state).
4. Save.

Using the map tool will autofill information in “Areas Related to Needs” (see Section 5.12.1).

Add/Edit Physical Location ✕

* indicates required field. ?

Type of Physical Location: **Single Point**

Populate Location and Coordinate data based on an associated NPDES permit, if applicable and update data as needed

Use location from associated NPDES Permit: ▼

Map Coordinates: Select center of location

Confirm or Update
Map Coordinates on Map

* Latitude:

* Longitude:

* Datum: **NAD 83**

Address:

* City: Montgomery ▼

* Zip Code:

Save

Figure 5-22. “Add/Edit Physical Location” window.

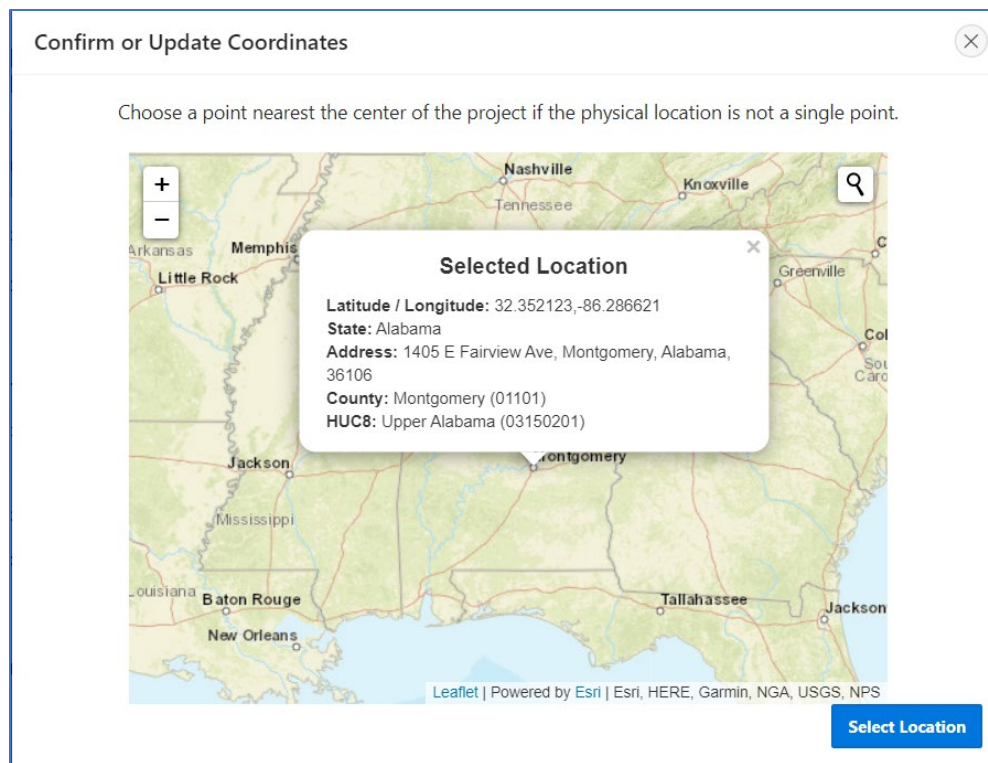


Figure 5-23. Physical location mapping tool.

5.12.2 Areas Related to Needs

The areas related to needs data area (Figure 5-24) allows states to associate additional locations, including county(ies), congressional district(s), and watershed(s) with the need, if beyond the primary location identified in the previous “Locations” window. As previously mentioned, this window will be autofilled based on the location selected in the physical location window. States must indicate the primary county, congressional district, and watershed where the majority of needs occur, and can select additional counties, congressional districts, and watersheds if necessary. If the state does not indicate any other locations in the table, it will include the locations based on the map selection by default. Any auto-generated areas can be removed if the information is not accurate.

! EPA recognizes that the congressional districts may change during the data entry period. If this is the case, the primary congressional district will be updated based on the coordinates provided in the physical location. EPA may reach out to states to clarify location requirements if needed.

? Area Related to Needs
Map Area Related to Needs

Add the area related to needs for your facility or project. The "primary" area related to needs is usually the area corresponding to the Physical Location. Include additional areas if the facility or project encompasses areas beyond the primary area. Selecting the primary location using "Map Area Related to Needs" populates data for Counties, Congressional District, and Watershed.

Counties
Add Counties

Primary Area	County	FIPS Code	Edit	Delete
Yes	Frederick	24021		

Congressional Districts
Add Congressional District

Primary Area	Congressional District	Code	Edit	Delete
Yes	06	2406		

Watersheds
Add Watershed


Primary Area	Watershed	HUC-8	Edit	Remove
Yes	Monocacy	02070009		

Figure 5-24. Areas related to needs data area.

5.12.3 Adding Areas Related to Needs

There are two ways to add an area related to needs: using a map or manually. To use the map feature:

1. Select “Map Areas Related to Needs.” This will open the map shown in Figure 5-25.

- a. The map will open to the coordinates provided in the physical location section.
 - b. States can change the map layers by selecting the appropriate radio button in the top right corner of the map. The available layers are congressional districts, Hydrologic Unit Code (HUC) (watersheds at the HUC 8 level), and counties.
2. Review the information provided in the pop-up. If the location is incorrect or is not provided, click the correct area on the map. If needed, used the search feature on the map to find the location.
 3. Once the location information is correct, click “Submit.” All three tables will update (though duplicate entries will not be added).
 - a. If no other areas are indicated in the three tables, the first selection using the map will automatically assign these areas as “primary.” This will not happen if the map is used again.
 - b. The state can edit the primary locations by clicking the pencil  icon next to the desired primary location and selecting the primary checkbox. This will remove the primary indicator from another area if it was previously selected.

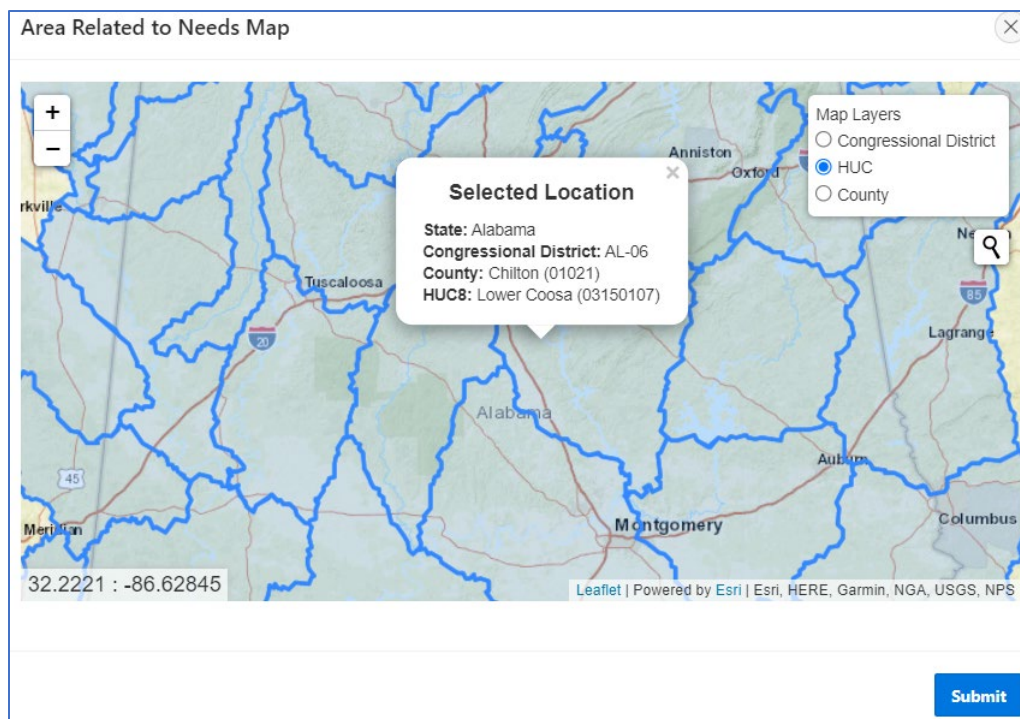


Figure 5-25. Mapping feature for areas related to needs.

To manually add an area related to needs, click the “Add” button for counties, congressional districts, and watersheds. Select the desired location from the dropdown and indicate if it is the primary location by selecting the primary checkbox.

5.13 Documents

The documents library (Figure 5-26) allows the state to use one or more documents to support the needs data entered into the DEP for each CWNS ID. To do this, the state must link all relevant

documents to the CWNS ID, then assign costs by category to the linked documents, either directly or by using CETs.

Title	Document Type	Published Date	Author	Notes	Base Month/Year for Cost	CWNS IDs Associated with Document	Annotation Type	Approval Status	Download	Edit	Delete
CIP Test	CIP or Master Plan - 20	1/1/2021	MD		1/1/2021	24888888910 24888888911	Annotated in PDF	Not Applicable			

Figure 5-26. Documents library.

5.13.1 Linking Documents to a CWNS ID

The state can link a document to a CWNS ID by searching for a document that was previously uploaded (see Section 5.5) or by uploading a new document. The following sections will describe both processes.

! The document metadata (data entered during document upload) will be the same for all CWNS IDs linked to the document. If the state edits the document metadata for one CWNS ID, it will change for all CWNS IDs. If the state needs to indicate different metadata for a single document (such as different annotation methods), they must upload the document again as a separate document. It is recommended that states include information about this in the “Notes” section in the document upload area.

5.13.1.1 Searching for an Already-Uploaded Document

Clicking “Documents Search” will open the window shown in Figure 5-27. The document search allows the state to search for all previously uploaded documents (described in Section 5.5). To associate a previously uploaded document:

1. Search for documents by name or other metadata using the search bar or by filtering and sorting using the table column headers.
2. Select one or more documents.
3. Click “Add selected document(s) to this CWNS ID.”

	Document Title	Type	Published Date	Author	Base Month Cost Info	Notes
<input type="checkbox"/>	Title 99 test	99 - EPA-HQ Approved	6/7/2021	Author test	6/1/2021	
<input type="checkbox"/>	An Excel workbook	05 - Cost of Previous Comparable Construction	5/3/2021	Gomez	5/1/2021	The comparable construction projects are in the same county as the CWNS facility and have flows in the range of -0.5% to +12% of the CWNS facility. The costs for xyz equipment from project X will not be included since that is not in the scope of this proj
<input type="checkbox"/>	6-14-21 test	04 - Non-governmental Grant Applications	7/6/2011	author test	7/1/2011	Testing notes and older documentation.

Figure 5-27. “Document Search” window.

5.13.1.2 Adding a New Document

Clicking “Add Document” will open the window shown in Figure 5-28. To upload a new document and automatically associate it with the current CWNS ID:

1. Indicate how the document will be annotated. Annotation is required for CWNS IDs with costs greater than \$40 million or that only use alternate documentation.
 - a. If the annotation method is unknown, the state can select “Not Annotated.” If the CWNS ID that is linked to the document has costs greater than \$40 million or none of the linked documents are primary, the document will need to be annotated. Note that if this document is linked to other CWNS IDs, its annotation must include information for those CWNS IDs if they also meet the above criteria.
 - b. If annotating within the DEP, page number fields will appear next to document metadata that must be filled in. Select the checkbox next to “Title, author, and published date on first page” if applicable.
 - c. If annotating in Excel, indicate this for the PDF and for the Excel annotation document that will be uploaded as a separate document (document type 96).
2. Select the document type. This may open additional fields (see Section 5.5.3 for more information).
3. Enter all required fields for the document metadata. If the base month/year of the costs presented in the document is unknown, it should be the same as the document’s published date. For Excel spreadsheet annotations (document type 96), enter the document date (and base month/year) as the date the document was created. Indicate in the document title which documents or CWNS IDs are annotated within the spreadsheet (e.g., “Annotation for IUP”); alternately, note that information in the “Notes” field. List the state coordinator who created the spreadsheet as the author.

4. (Optional) Include any notes about the document that might be helpful to the state or to the CWNS review team such as whether the uploaded document is supporting another or if it is a duplicate of a previously uploaded document.
5. Select “Upload document (Preferred) – PDF and XLSX files only.” Navigate the computer’s file system to select the correct document.
6. Save to upload the document to the DEP. Once saved, the document will show up in the document list and any document search.

Figure 5-28. “Upload New Document/Edit Document” window.

5.13.1.3 Unlinking a Document from a CWNS ID

To unlink a document from a CWNS ID, the state should click the **X** icon under “Remove.” This will remove the document and any associated costs from the CWNS ID, but it will not delete the document from the system. All CWNS IDs must be unlinked from a document before the document can be deleted from the system.

5.14 Costs by Category

To add costs, the state must first select a document that was previously linked to a CWNS ID and then assign it to categories. To add a document to the costs by category table, select “Add Documented Cost.” This will open the window shown in Figure 5-29. Then:

1. Select the document from the dropdown. This list is filtered based on documents linked to the CWNS ID.
2. Select the need category(ies) that are relevant to the costs in the document.
3. Save.

Note that all needs for treatment plants that provide advanced treatment should generally be entered under Category II, including needs associated with unit processes early in the treatment train. Since the plant produces advanced treatment effluent, all of the unit processes within the plant contribute to this treatment level and should be considered advanced treatment.

Figure 5-29. Adding documents to the “Cost by Category” table.

! Do not add Excel spreadsheet annotations (document type 96) to the “Costs by Category” table. It is important to associate costs with the document that has the correct base month/year for the cost being entered so that EPA can correctly account for inflation.

When that is done, the “Cost by Category” table will update to include the document and each selected category (see Figure 5-30). The state can then add costs to the document and category.

Cost by Category								
Add Documented Cost		Add Estimated Cost						
Needs Category : I - Secondary Wastewater Treatment								
Title	Type	Designation	Published Date	Cost Method	Base Amount (\$)	Amount (Jan 2022 \$)	Edit Costs	Remove from List
title	2 - Non-CWSRF Governmental Loan and Grant Applications	Primary	02/02/2022	Documented	\$1,000,000	1,000,000		
Needs Category : III-A - Infiltration/Inflow (I/I) Correction								
Title	Type	Designation	Published Date	Cost Method	Base Amount (\$)	Amount (Jan 2022 \$)	Edit Costs	Remove from List
title	2 - Non-CWSRF Governmental Loan and Grant Applications	Primary	02/02/2022	Documented	\$5,200,000	5,200,000		
Total Needs for Each Category					Total Amount (Jan 2022 \$)			
III-A - Infiltration/Inflow (I/I) Correction					5,200,000			
I - Secondary Wastewater Treatment					1,000,000			
					6,200,000			
Download Documented Cost Data								

Figure 5-30. “Cost by Category” table.

5.14.1 Entering Costs

The state can add costs by clicking “Add Documented Cost” in the “Cost by Category” table. This will open the window shown in Figure 5-31. Then:

1. If treatment plant is indicated as a facility type, the form will ask for the type of treatment plant. Select the appropriate option from the dropdown.
 - a. If the costs are not for the treatment plant, indicate this by selecting “Not Applicable.”
2. If the state would like to use the annotation table to sum costs, they can select the “Use Table to Sum Cost?” toggle to open the annotation table.
 - a. If the state indicated that they were annotating in the DEP when uploading the selected document, the table will be automatically set to open and must be used to annotate costs.
3. Enter project cost information line by line. Click “Add Project” to add a new line. When a line is highlighted, clicking “Remove Project” will remove it.
4. If the table is open, the state will not be able to enter an amount directly in the “Base Amount” field. This will automatically be summed from the cost column in the table.
5. The adjusted amount for inflation is a view-only field automatically calculated using the base month/year indicated in the document metadata.
6. (Optional) Enter project start and end years.
7. Indicate if the cost addresses an SSO. This field may not display based on previous selections.

Eligible costs should be summed by need category, with the need category annotated (within the document, the DEP’s annotation table, or the spreadsheet) for EPA review.

8. (Optional) Enter notes about the costs that may not be clear in either the annotation or the document itself. This field is especially important if the costs are from a document with a mix of eligible and ineligible projects or if it is unclear whether the project has been funded.
9. Save.

Figure 5-31. Adding costs by document and category.

5.15 CET Inputs

CETs are available for states to use based on earlier DEP inputs and if a facility does not have any existing documents that include costs. State coordinators can provide inputs for estimated costs by clicking “Add Estimated Cost” in the “Cost by Category” table. This will open the window shown in Figure 5-32. The dropdown list will include the CETs available based on the infrastructure and facility types selected at the beginning of data entry. The state will be prompted to select the document used to justify projects and the need category associated with the cost. The document must contain the values used to calculate the cost estimate, such as the future design flow for the treatment plant CET.

Figure 5-32. CET data area.

5.15.1 Wastewater: Treatment Plant CET

As discussed in Section 4.4.4 and shown in Figure 5-33 below, the treatment plant CET required inputs are zip code, practice type (lagoon, aerated lagoon, secondary mechanical, disinfection only), construction type (new/replace, rehabilitation, treatment upgrade, expansion, add disinfection), and future design flow in MGD. Limits on acceptable flows depend on practice and construction type and are also covered in Section 4.4.4.

Add/Edit Cost Estimation Tool - Wastewater: Treatment Plant

* indicates required field.

Needs Category **1 - Secondary Wastewater Treatment**

* Zipcode

* Practice Type

* Construction Type

* Future Design Flow million gallons per day

Save

Figure 5-33. Wastewater treatment plant CET window.

5.15.2 Wastewater: Collection CET

As discussed in Section 4.4.4 and shown in Figure 5-34 below, the wastewater collection CET required inputs are need category and construction type (new, replace, or rehabilitation). For pipe projects, inputs also include total length of pipe. For pump station projects, inputs also include capacity in MGD and number of pump stations. Limits on acceptable parameters depend on practice and construction type and are also covered in Section 4.4.4.

Figure 5-34. Wastewater collection CET window.

5.15.3 Decentralized CET

As discussed in Section 4.4.4 and shown in Figure 5-35, the decentralized CET required inputs are county, construction type (new or rehabilitation/repair/replace), and sizing method (either population or number of homes served). When using the population, states will be asked to estimate the population per household.

Figure 5-35. Decentralized CET window.

5.15.4 CSO CET

As discussed in Section 4.4.4 and shown in Figure 5-36, the CSO CET allows states to estimate costs to control CSOs using a storage facility or stormwater practice. The required input(s) are volume in MG for storage facilities and zip code, practice type, construction type (new development

or redevelopment), and quantity for stormwater practices. Stormwater inputs must also include one of the following sizing methods: practice area, practice volume, or drainage area and drainage area impervious surface. Limits on acceptable parameters depend on practice and construction type and are also covered in Section 4.4.4.

Figure 5-36. CSO CET window.

5.15.5 Stormwater CET

As discussed in Section 4.4.4 and shown in Figure 5-37, the stormwater CET required inputs are zip code, practice type, construction type (new development or redevelopment), and quantity. Inputs must also include one of the following sizing methods: practice area, practice volume, or drainage area and drainage area impervious surface. Limits on acceptable parameters dependent are also covered in Section 4.4.4.

Figure 5-37. Stormwater CET window.

5.15.6 NPS: Agriculture CET

As discussed in Section 4.4.4 and shown in Figure 5-38, the NPS agriculture CET required inputs are total harvested acres and percent acres of need. This tool is designed to estimate needs for the entire state (for states for which those data exist) or multiple counties. If the state coordinator has documented needs in addition to those estimated by the agriculture CET, those needs should be entered under one or more separate CWNS IDs; the locations associated with the separate IDs should not overlap to ensure needs are not double-counted.

States have the option to use EPA’s Cropland Acres Tool to estimate acres of need on a state or county basis. They can do this by entering the total number of cropland acres in the state, and the tool will populate the “Acres of Need” field. The total number of cropland acres in a state or county can be found using USDA’s Census of Agriculture at <https://www.nass.usda.gov/AgCensus/>. The Acres Tool calculates the proportion of acres requiring conservation practices using NRCS’s Conservation Effects Assessment Project data, which can be found at <https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/technical/nra/ceap/>. For more information, see Section 6.2 in *2022 Cost Estimation Tool Methods*.

If states have their own estimates of needed acres, they can indicate that they would not like to use EPA’s Acres Tool and enter their estimate in the “Acres of Need” field. However, if using this approach, states must ensure that their estimate of “Acres of Need” matches the assumptions in the agriculture cropland CET. For more information see Section 6.2 in *2022 Cost Estimation Tool Methods*.

Figure 5-38. Agriculture CET window.

5.15.7 NPS: Silviculture CET

As discussed in Section 4.4.4 and shown in Figure 5-39, the NPS silviculture CET required inputs are total harvested acres and percent BMP implementation rate. This tool is designed to estimate needs for the entire state for states for which those data exist. To estimate a state’s total harvested acres, visit <https://www.fia.fs.fed.us/tools-data/index.php>; to estimate a state’s percent BMP implementation rate, visit <https://www.stateforesters.org/bmps/>. For more information, see Section 7.2 in *2022 Cost Estimation Tool Methods*.

If the state coordinator has documented needs in addition to those estimated by the silviculture CET, those needs should be entered under one or more separate CWNS IDs; the locations associated with the separate IDs should not overlap to ensure needs are not double-counted.

Cost Estimation Tool - Nonpoint Source: Silviculture

* indicates required field.

Needs Category **VII-C - NPS Control: Silviculture**

* Acres of forest land treated by cutting (harvesting, thinning, etc.) annually and requiring BMPs for water quality protection: acres

* Page Number

* BMP Implementation Rate %

* Page Number

Save

Figure 5-39. Silviculture CET window.

5.16 Population and Flow

The population and flow data areas allow the state to view, edit, and update the population and flow for the CWNS ID (Figure 5-40) and review the corresponding flow to population ratio.

Population Information ?

Add or edit the population information for your CWNS ID, entering residential and non-residential numbers separately. Note that where available, 2012 population values were updated based on census growth rates to provide initial inputs for 2022, please confirm.

	Residential Population		Non-Residential Population	
	2022	Projected Design Population	2022	Projected Design Population
Receiving Collection	300	400	20	30
Upstream Collection	30	0	20	0
Total Receiving Treatment	330	400	40	30

Edit Population Information

Flow Information ?

Add or edit the current design flow and future design flow information for your CWNS ID.

	Current Design Flow (MGD)	Future Design Flow (MGD)
Flow Information		
Municipal Flow	0.10	0.10
Industrial Flow	0.00	0.00
Infiltration Flow	0.10	0.10
Total Flow	0.20	0.20
Wet Weather Flow (Peak)	1.20	
Flow to Population Ratio Information		
Flow to Population Ratio (GPCD)	641.00	478.00

Edit Flow Information

Figure 5-40. Population and flow data areas.

5.16.1 Population

Selecting “Edit Population” allows the state to update the population information for the CWNS ID.

For this data area:

- “Residential Population” applies to people who live within the service area of the selected facility.
- “Non-Residential Population” applies to people who do not live within the service area of the facility but still use or are served by the associated sewers, treatment plants, or decentralized treatment systems. This population includes transient, seasonal, or commuting workers and tourists.

Population is required for:

- Collection: separate sewers
- Collection: combined sewers
- OWTS
- Clustered system

- Upstream population—that is, the population sent downstream from a linked upstream facility in a sewershed—is automatically calculated by the DEP. This information can be seen by clicking “View Upstream Details.”
- “Projected Design Population” refers to the estimated population in 2042, when planned changes are complete. This is particularly important where reported needs are to increase the population served by the CWNS ID. If the state does not have future population data for a CWNS ID, they should default to the 2022 population value.



The DEP will not allow states to enter population for CWNS IDs with treatment plant as the only facility type. Each treatment plant must receive its population from an associated collection system to prevent double-counting population from collection systems and treatment plants.

Note that the 2012 population data have been updated to reflect each state’s population change based on the 2020 Census. Population changes at the community level will vary from the state’s average, so state coordinators should still review and update population for each wastewater CWNS ID.

Selecting “Add/Edit Population” will open the window shown in Figure 5-41 and allow the state to update the population information for the CWNS ID. To edit the population:

Decentralized CWNS IDs also have data for population per unit. If there was data in 2012, that has been carried over unchanged. If there was no data available, the default is the average population per unit for the state.

1. Enter the current and projected residential design population for the receiving collection: that is, the population received (or collected) directly by the CWNS ID.
2. If available, enter the current and projected non-residential design population for the receiving collection.
3. Save.



For CWNS IDs with “New” as the only change type, meaning that this is truly a new collection and treatment system, the state should enter the 2022 population as 0 and the population it will be serving under “Projected Design Population”. Be sure to report the existing 2022 population under the CWNS ID that is currently serving that population. For example, a new treatment plant that is replacing on-site systems would have a 2022 population of 0 and the decentralized CWNS ID would report the population currently served by those on-site systems. That decentralized CWNS ID would have a projected population and needs of zero since the needs associated with construction of the new centralized system are accounted for in this CWNS ID.

Add/Edit Population Information Wastewater ✕

* indicates required field. ?

	Residential Population		Non-Residential Population	
	2022	Projected Design Population 2042	2022	Projected Design Population 2042
Receiving Collection	300	400	20	30
Upstream Collection	30	0	20	0
Total Receiving Treatment	330	400	40	30

View Upstream Details
Save

Figure 5-41. Adding/editing population information.

5.16.2 Flow

After clicking “Edit Flow Information,” the state has two options for inputting flow based on the information they have available: either by entering individual flows by category or by entering total flow:

1. If information on individual flow types (e.g., municipal contribution) is available, use the “Disaggregated Flow Options” radio button and enter values for municipal, industrial, and/or infiltration flow (Figure 5-42). The DEP will automatically sum the values in each row to calculate a total flow.
2. If disaggregated flow information is not available, change the input type to “Total Flow Only” and only enter information in this row.
 - a. Toggling between the two options will cause a warning to appear (Figure 5-43), requiring approval to delete previously entered information. Clicking “Yes” will refresh the previous window and allow the state to only enter total flow information (Figure 5-44).



The DEP will not allow states to enter current flow for CWNS IDs with “New” as the only change type because a newly constructed plant would have no current flow. If reporting a new treatment plant, enter “0” for current flow and report the design flow of the new treatment plant as the future flow.

Add/Edit Flow Information
✕

?

* Select level of detail to input/enter: **Disaggregated Flow Options** Total Flow Only

	Current Design Flow (MGD)	Future Design Flow (MGD)
Flow Information		
Municipal Flow	5	6
Industrial Flow	1	1
Infiltration Flow	0.5	0.5
Total Flow	7	8
Wet Weather Flow (Peak)		

Save

Figure 5-42. “Add/Edit Flow Information” window for disaggregated flows.

✕

Manually entering Total Flow will delete the following information:

- Municipal (current, future)
- Industrial (current, future)
- Infiltration (current, future)

Do you wish to continue?

Yes
Cancel

Figure 5-43. Total flow warning.

Figure 5-44. “Add/Edit Flow Information” window for total flow.

5.16.3 Flow to Population Ratio

The DEP calculates the flow to population ratio based on the population and flow previously entered by the state.

$$Flow\ to\ Population\ Ratio\ (gpcd) = \frac{(Total\ Flow \times 1,000,000)}{Resident\ Receiving\ Collection\ Population + (0.6 \times Non-resident\ Receiving\ Collection\ Population)}$$

If the ratio is outside 25–300 gpcd for current design flow or future design flow, the DEP will prompt the state to explain by selecting a reason from a dropdown menu (Figure 5-45). If more than one flow value is outside the range, only one reason is needed.

Figure 5-45. Population to flow ratio.

5.17 Discharge

The discharge data area allows the state to add, delete, or update the different types of discharge for the CWNS ID. The DEP will be prepopulated with data from the previous survey; some information may be out of date. The state should review and remove any data that are no longer relevant.

Discharge is required for:

- Treatment plant
- Collection: combined sewer
- Collection: separate sewer

Discharge is optional for:

- Decentralized
- Stormwater
- Other facility types under wastewater

5.17.1 Discharges List

In the discharge area (Figure 5-46), the state can review the type(s) of discharge, percent of discharge (2022 or 2042 estimated), and receiving facility associated with the CWNS ID. The state can also edit, add, or delete types of discharge as needed. The percent discharge must sum to 100 percent or 0; a total percent discharge of 0 indicates that the type of discharge does not exist either in 2022 (this facility is closing) or is not estimated to exist in 2042 (the facility will close).

! Note that if a CWNS ID includes multiple facility types, enter the discharge data of the downstream facility (e.g., for a collection system and treatment plant, enter the treatment plant's discharge).

Type of Discharge	2022 % of Discharge	2042 Estimated % of Discharge	Receiving Facility	Edit	Delete
Outfall To Surface Waters	100%	100%			
Total	100%	100%			

Add or edit the type of discharge for your CWNS ID. Multiple types of discharge can be added and must sum to 100% (or 0% for new or abandoned facility types).


[Add Discharge Type](#)

Figure 5-46. Discharge data area.

5.17.2 Adding a Type of Discharge

Clicking “Add Discharge Method” will open the window shown in Figure 5-47 with fields listed in Table 5-11. To add a type of discharge:

1. Select the type of discharge from the dropdown menu.
2. If “Discharge to Another Facility” is selected, a data entry field will appear with a “Look up Facility CWNS Number” button that will allow the state to search for a CWNS ID (Figure 5-48).
3. Enter the current percent discharge.
4. Enter future estimated percent discharge.
5. Save.
6. Repeat steps 1–4 to add as many types of discharges as needed.

- If the sum of the discharge methods is not 100% (or 0%), the DEP will display a warning in red text. Use the edit pencil  icon to edit the values in the discharge methods as needed.

Add/Edit Discharge Method ✕

* indicates required field. ?

Type of Discharge: *	2022 % of Discharge: *	2042 Estimated % of Discharge: *	CWNS Number: *
<input style="width: 100%;" type="text" value="Discharge To Another Fac"/>	<input style="width: 100%;" type="text" value="0"/>	<input style="width: 100%;" type="text" value="0"/>	<input style="width: 100%;" type="text"/>

Look up Facility CWNS Number

Save

Figure 5-47. “Add/Edit Discharge Method” window.

Facility CWNS ID Search ✕

State

Search Actions ▾

1 - 50 of 595 ▶

Associate with Facility	CWNS ID	Facility Name	County
<input type="checkbox"/>	01000783001	HOLLIS CROSSROADS SEPTIC	Cleburne
<input type="checkbox"/>	01000785001	STEWARTVILLE SEPTIC TANKS	Coosa
<input type="checkbox"/>	01000786001	BALLPLAY SEPTIC TANKS	Etowah
<input type="checkbox"/>	01000787001	RIDGEVILLE SEPTIC TANKS	Etowah
<input type="checkbox"/>	01000788001	GOLDVILLE SEPTIC TANKS	Choctaw

Add Selected Facility

Figure 5-48. Facility CWNS ID search.

Table 5-11. Descriptions of Discharge Data Fields

Field	Description	Required/Optional
Type of discharge	Select one of the discharge types from the dropdown list. Only methods that are valid for the facility type are listed. Only the discharge method “Discharge to Another Facility” may be selected multiple times.	R
2022 % of discharge	Input the percent of discharge that is being sent to the selected type of discharge.	R
2042 estimated % of discharge	Input the estimated percent of discharge for 2042 to the selected type of discharge.	R
CWNS ID	The CWNS ID of the facility receiving the discharge.	R* (when discharge to another CWNS ID is selected as the type of discharge)

Table 5-12. Discharge Type Options

Discharge Type	Discharge Type Description
Outfall To Surface Waters	Discharge of treated municipal wastewater to waters of the United States.
Ocean Discharge	Discharge of treated municipal wastewater to an ocean, sea, or contiguous zone.
Deep well disposal (UIC Class I)	Discharge of hazardous and nonhazardous municipal waste into deep, confined rock formations below all underground sources of drinking water using a Underground Injection Control (UIC) Class I permit. Does not include discharge of treated municipal wastewater into groundwater aquifers that may potentially be used as drinking water sources.
Reuse: Industrial	Discharge of treated municipal wastewater to an industrial facility for any application.
Evaporation	Facility allows for evaporation of water to the atmosphere.
Reuse: Landscape-related irrigation	Discharge of treated municipal wastewater for irrigation of parks, golf courses, road medians, and other landscapes. This reuse application excludes all agriculture-related water reuse.
Overland Flow, No Discharge	Discharge of treated municipal wastewater to the ground surface with no ultimate discharge
Overland Flow With Discharge	Discharge of treated municipal wastewater to the ground surface that ultimately discharges to a surface water
Discharge To Another Facility	Discharge of untreated, partially treated, or fully treated effluent to another facility, including to the collection system of another facility.
CSO Discharge	Discharge of stormwater and untreated municipal wastewater from a combined sewer system at a point prior to the POTW treatment plant.
Other	Discharge of treated municipal wastewater to a location unknown or not defined by the options provided.

Discharge Type	Discharge Type Description
Reuse: Environmental restoration and groundwater discharge	Discharge of treated municipal wastewater to create, enhance, sustain, or augment water bodies such as wetlands, aquatic habitats, or stream flow. Includes groundwater recharge, deep injection for salinity control, protection from saltwater intrusion, stream flow augmentation and wildlife habitat, and source water protection. Also includes groundwater recharge through Underground Inject Control (UIC) Class V wells.
No Discharge, unknown	Facility has no discharge, and location or type of discharge is unknown.
Reuse: Agricultural-related and livestock watering	Discharge of treated municipal wastewater for the production of crops for human consumption, non-food crops of commercial value, and for drinking water for livestock. This discharge category excludes landscape irrigation.
Reuse: Other Centralized Non-Potable	Discharge of treated municipal wastewater for miscellaneous non-potable applications such as dust control, soil compaction, fire protection, commercial laundries, vehicle washing, street cleaning, snowmaking, and others. This discharge category excludes agriculture-related reuse and landscape irrigation.
Reuse: Potable	Discharge of treated municipal wastewater to an environmental buffer or full advanced treatment facility with the intention of eventually reusing it for drinking water purposes. This includes both indirect potable reuse through introduction of recycled water into an environmental buffer such as a surface reservoir or groundwater aquifer, and direct potable reuse through introduction of recycled water into a drinking water system.
Reuse: Impoundments	Discharge of treated municipal wastewater in an impoundment (body of water within an enclosure). This includes both unrestricted (use of reclaimed water in an impoundment in which no limitations are imposed on body-contact water recreation activities) and restricted (use of reclaimed water in an impoundment where body contact is restricted). Includes recreational impoundments and aesthetic impoundments.

5.17.3 Building and Editing a Sewershed in Discharge

The discharge data area is the only section where sewershed linkages can be built. The amount of wastewater sent on, and to where, is determined when a state enters a percent discharge for a discharge type of “Discharge to Another Facility.” That percent discharge is applied to the total population.

- ! Note that only downstream linkages from the current CWNS ID can be added. To add upstream linkages, go to the upstream facility and create downstream links.

5.18 Sewersheds

As indicated above, a sewershed is a network of linked facilities that indicates the number of people being treated by a particular facility. Especially important is the total number of people being treated by wastewater treatment plants. Wastewater treatment plants are generally the “end facility” in the

network of the sewershed (where the flow ends up). To calculate the total population served by a plant, the DEP sums the upstream population values based on the indicated discharge linkages.

5.18.1 Sewershed at a Glance

The DEP includes a “Sewershed at a Glance” feature that maps the sewershed network so the state can quickly visualize if the linkages are correct. The feature displays the current CWNS ID with a bright blue highlight and indicates the direction of flow using arrows from facility to facility with the percent of discharge being sent onwards. Figure 5-49 shows a network of six example CWNS IDs.

Double clicking on a facility in the sewershed visualization will send the state to that CWNS ID survey. This is a quick way to move around the sewershed.

- ! Sewershed linkages can only be completed in the discharge data area (Section 5.17). Population must be edited in the population data area (Section 5.16.1).

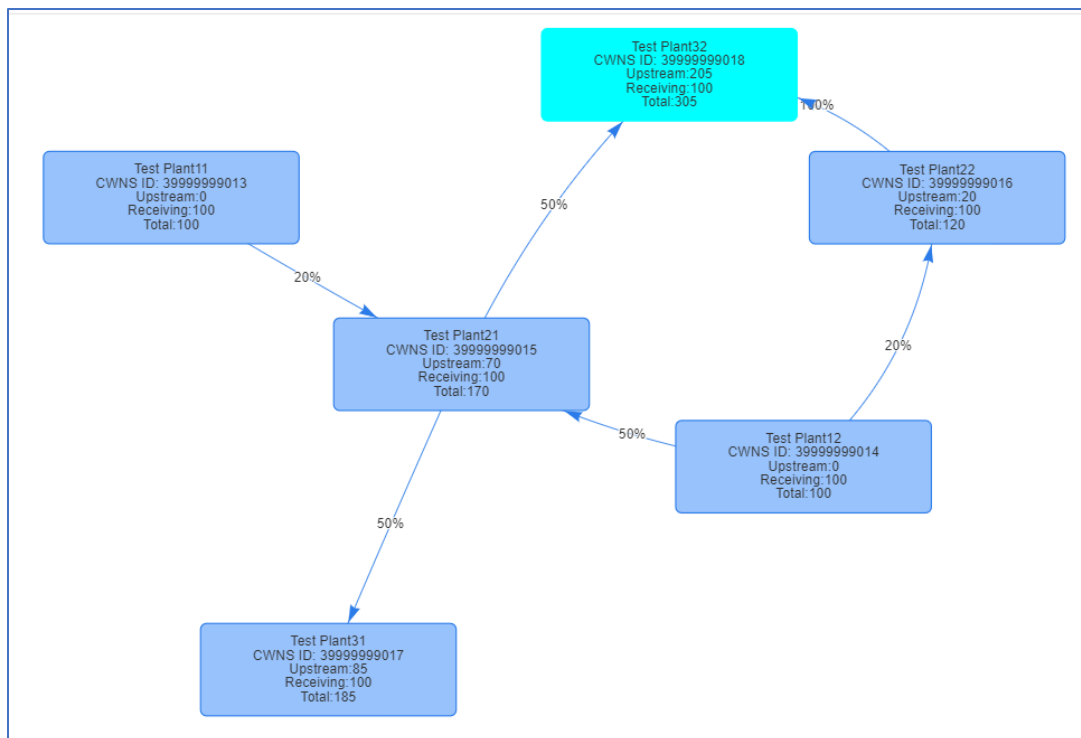



Figure 5-49. Sewershed at a Glance example.

5.18.2 Sewershed Table

The sewershed table (Figure 5-50) displays population and discharge percentage for each facility in the sewershed. The selected CWNS ID is indicated in bold. States can click the “Enter Survey”  icon for discharge or population to be redirected to that survey section for the CWNS ID they selected to quickly edit sewershed details.

! Editing information for a CWNS ID that is far upstream in the sewershed may have cascading effects on the population values for all downstream facilities. It is easiest to build and update sewersheds by moving from upstream to downstream facilities, editing the final “End Facility(ies)” last.

Note that the total population is not the population value treated by the facility. The total population is *all* population (wastewater) that moves through the facility. The population that is treated by the facility is the percent of discharge not discharged to another facility multiplied by the total population.

Current <input type="radio"/>		Future <input type="radio"/>						Edit	
CWNS ID	Name	Discharges To	Discharge %	Receiving Population	Upstream Population *	Total Population *	Discharge Population		
39999999014	Test Plant12	Test Plant21	50%	100	0	100			
39999999013	Test Plant11	Test Plant21	20%	100	0	100			
39999999014	Test Plant12	Test Plant22	20%	100	0	100			
39999999015	Test Plant21	Test Plant31	50%	100	70	170			
39999999015	Test Plant21	Test Plant32	50%	100	70	170			
39999999016	Test Plant22	Test Plant32	100%	100	20	120			
39999999018	Test Plant32	End Facility	NA	100	205	305			
39999999017	Test Plant31	End Facility	NA	100	85	185			

* Calculated by the DEP

Figure 5-50. Sewershed table.

5.19 Effluent

The effluent data area allows the state to indicate the effluent treatment level for the CWNS ID. For CWNS IDs with a change type of abandoned, only current treatment level data can be entered; for CWNS IDs with a change type of new, only future treatment level data can be entered. Change types are set at the beginning of the survey with facility types. It is important to set the change types before beginning this section—or, at the very least, to know if the facility is new or being abandoned.

Effluent is required for:

- Treatment plant

Effluent is optional for:

- Honey bucket lagoon
- Storage facility

Effluent treatment levels are defined in Table 5-13. To edit the effluent data, click “Edit Effluent” to open the window shown in Figure 5-51, then:

1. Enter the current effluent treatment level.
2. Indicate if there is currently disinfection in place.
3. Enter the future effluent treatment level.
4. Indicate if there will be disinfection in place.
 - a. If current disinfection is marked “Yes” and future disinfection is marked “No,” the DEP will display a warning indicating that it seems like disinfection is being removed. Make sure this is correct before continuing.
5. Save.

If the treatment plant provides two different effluent treatment levels (secondary and advanced) and discharges to surface waters, enter the treatment level discharged to surface waters. If there is no surface water discharge, enter the treatment level that the majority of the flow receives.

Table 5-13. Effluent Treatment Level Definitions

Effluent Treatment Level	Definition
Raw	No treatment.
Primary	Typically, less than 45 milligrams per liter (mg/L) 30-day average concentration of biochemical oxygen demand (BOD ₅), achieved by removing floating debris and solids by screening, sedimentation, and skimming. The primary treatment must remove at least 30 percent of BOD ₅ and total suspended solids from the influent wastewater.
Secondary	Typically, 30 mg/L 30-day average concentration of both BOD ₅ and total suspended solids and pH 6–9 (secondary treatment levels required for some waste stabilization ponds and trickling filter systems may be less stringent). In addition, the secondary treatment must remove at least 85 percent of BOD ₅ and total suspended solids from the influent wastewater. Secondary treatment is the minimum treatment required for discharges from all municipal wastewater treatment facilities by the CWA; facilities granted ocean discharge waivers under Section 301(h) are exempt from this requirement (listed in Appendix K).
Advanced	A level of treatment that is more stringent than secondary treatment or produces a significant reduction in nonconventional or toxic pollutants present in the facility’s effluent. Examples of advanced treatment indicators are nitrogen removal, phosphorus removal, ammonia removal, metal removal, and synthetic organic removal.

Edit Effluent ✕

* indicates required field. ?

* Current Effluent Treatment Level:

* Is there Disinfection (e.g.,chlorine, UV) currently in place? No Yes

* Future Effluent Treatment Level:

* Will there be Disinfection (e.g., chlorine, UV) in the future? No Yes

[Save](#)

Figure 5-51. “Edit Effluent” window.

5.20 Unit Process

The unit process data area allows the state to view, edit, and add new unit processes to the CWNS ID (Figure 5-52). The DEP will be prepopulated with data from the previous survey; some information may be out of date. This section is *optional*—not required to submit the CWNS ID for federal review.

Unit process is optional for:

- Treatment plant
- Phase I municipal separate storm sewer system (MS4)
- Phase II MS4
- Non-traditional MS4
- Unregulated community stormwater
- NPS

Unit Processes ?

This is the Unit Process intro text.

Treatment Stage	Unit Process	Existing Flag	Planned Flag	Notes	Edit	Delete
Preliminary	Grit Removal	Y				
Preliminary	Microstrainer, Primary	Y				
Primary	Equalization, Flow	Y				
Primary	Sedimentation, Primary	Y				
Secondary	Trickling Filter, Biofilter	Y				

[Add Unit Process](#)

Figure 5-52. Unit processes list.

5.20.1 Adding a Unit Process

Clicking “Add Unit Process” will open a new row of the unit process table for the state to edit (Figure 5-53). To add a unit process:

1. Indicate the treatment type. Treatment type and unit process data elements are dropdowns. For the full list of unit processes for each infrastructure type, see Appendix L.
2. Select the unit process. This list is filtered based on the treatment type selection.
3. Indicate if the process currently exists or is planned to be installed.
4. (Optional) Add any notes about the process that may be useful to the state or EPA in understanding the facility.
5. Save.

Figure 5-53. “Add/Edit Unit Process” window.

5.21 Asset Management

The asset management data area allows the state to view, edit, and update the asset management practices for the CWNS ID (Figure 5-54). This section is *optional*—not required to submit CWNS IDs for federal review. The costs entered should not be added as a part of the CWNS ID’s needs; rather, this is to inform EPA about the state of asset management plans for the country’s utilities.

Asset management is optional for:

- All wastewater CWNS IDs
- All stormwater CWNS IDs
- All decentralized CWNS IDs

Asset Management

Please enter information about utility plan(s) for managing infrastructure capital assets to minimize the total cost of owning and operating them while maintaining service levels:

Asset Management Plans and Programs ↑	Implementation	Remaining Cost to Develop Program (\$)	Annual Cost to Develop Program (\$)
Asset Management Plans and Programs	In Processes of Developing	\$1,000,000.00	\$250,000.00

Edit Asset Management

Figure 5-54. Asset management data area.

5.21.1 Adding an Asset Management Practice

Clicking “Edit Asset Management” will open the window shown in Figure 5-55. To add asset management information:

1. Select the level of implementation from the dropdown. See Table 5-14 for a description of these choices.
2. Input the dollar values for the fields that appear below the implementation choice. The “Remaining Cost to Develop Program (\$)” and “Annual Cost to Develop Program (\$)” inputs are updated based on which level of implementation is selected from the dropdown.
3. Save.

Add/Edit Asset Management
×

?

Please enter information about utility plan(s) for managing infrastructure capital assets to minimize the total cost of owning and operating them while maintaining service levels:

* indicates required field.

Asset Management Practice: **Asset Management Plans and Programs**

* Implementation: In Processes of Developing ▼

* Remaining Cost to Develop Program (\$): 10000

* Annual Cost to Implement Program (\$): 2500

Save

Figure 5-55. “Add/Edit Asset Management” window.

Table 5-14. Descriptions of Data Fields to Create an Asset Management Practice

Field	Description	Required/Optional
Implementation	Select one of the implementation statuses from the dropdown list.	R
Remaining costs to develop program	Input the remaining costs. This is only available for “In Processes of Developing” or “Considering Implementation” selections.	R
Annual costs to develop program	Input annual costs for the program. This is only available for “Fully Implemented,” “In Process of Developing,” or “Considering Implementation” selections.	R

5.22 Small Community Form

EPA has developed a web-based form (document type 71) to capture the needs of small communities that do not have other acceptable forms of documentation for needs.

In order to provide the form, the state needs to be able to confirm that the CWNS ID is owned by and serves a small community within the DEP. A state should not use the SCF if a community is not considered “small.” A CWNS facility is considered small if it meets all of the following criteria:

- It is not one of several facilities serving a community of more than 10,000 persons.
- It and its wastewater system are not within an urbanized area, so it is not a component of (and virtually indistinguishable from) surrounding adjacent entities that are not small.
- Its wastewater system is not physically connected to a regional treatment authority serving more than 10,000 persons.

If a returned SCF indicates that the community does not meet one of these criteria (e.g., the facility now serves more than 10,000 persons), the state should instruct the community to submit other documentation, as the SCF will no longer be accepted as documentation for that community.




Communities do not need access to the DEP to update the SCF. A small community will receive a unique URL that contains a copy of the data in the DEP to review and update. This copy is separate from the DEP data, so any data edited in it will not be reflected in the DEP. Once the form is returned, the state can upload the data into the DEP after reviewing them.

If the small community requests a paper copy of the SCF, see Section 5.5.3.3 for how to download and send the paper copy. Then, manually review, scan, and upload a PDF version of the completed form.

The 2022 SCF can be uploaded into the DEP and used to populate the CWNS ID survey with data completed by the small community. This can only be done if the small community completes and submits the form online. Data from hardcopy or PDF forms must be entered manually like all other document types.

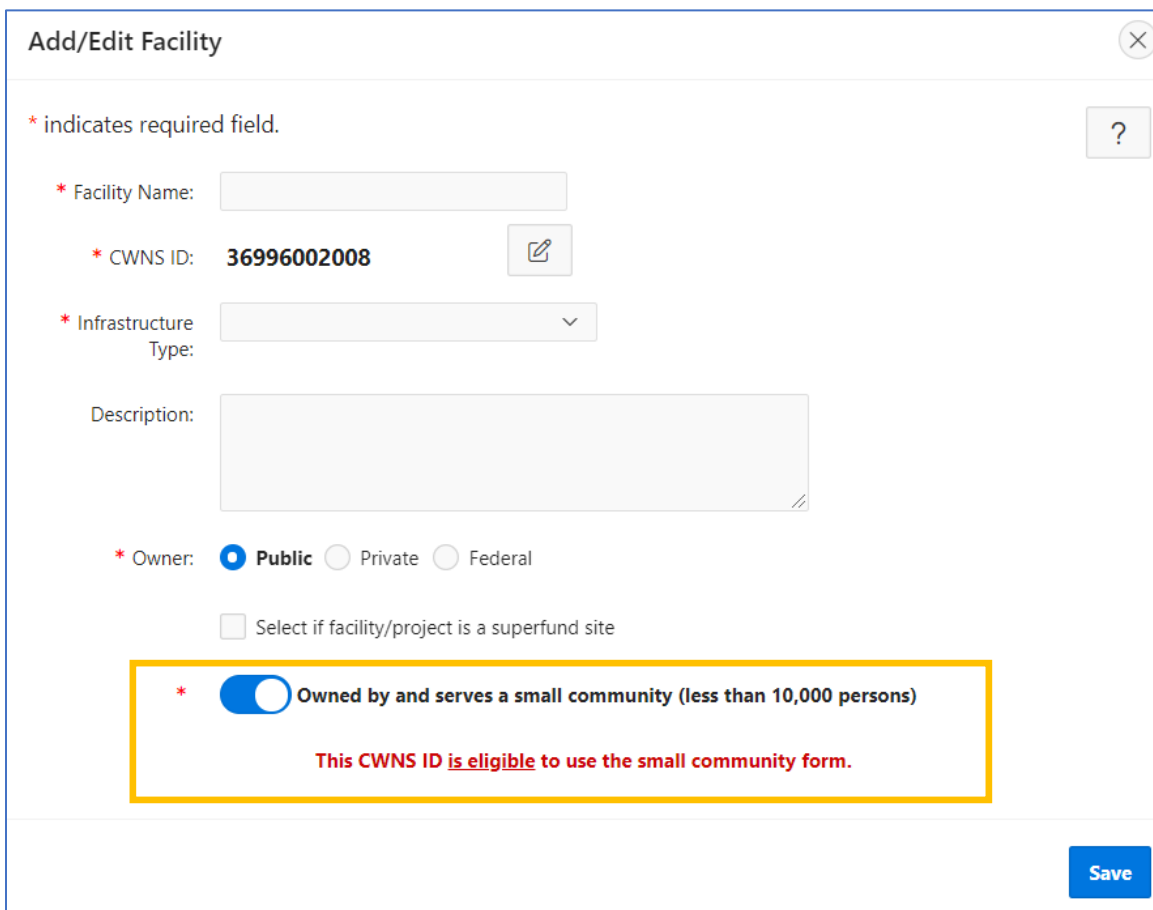
5.22.1 Indicating a CWNS ID Is a Small Community

Before they may send a community an SCF, the state must indicate that the CWNS ID is a small community by navigating to the “Enter Survey Data” tab and clicking on the edit icon next to the facility name under the “CWNS Name” column of the CWNS ID table (Figure 5-56).


1. Click on the  icon next to the facility name.
2. Select the toggle for “Owned by and serves a small community (10,000 persons or fewer).” *This must be selected to send and receive the SCF using the DEP.*
3. Save.

! All CWNS IDs that were indicated as small communities in the 2012 survey will be indicated as small communities in the 2022 survey. The state should verify their status and, if necessary, change it by unselecting the small community toggle in the “Add/Edit Facility” menu in the CWNS ID list. See the steps above.

Once a state has indicated a community is small, that CWNS ID will be available to select in the next steps.



The screenshot shows the 'Add/Edit Facility' form with the following fields and options:

- * Facility Name:
- * CWNS ID: **36996002008** 
- * Infrastructure Type:
- Description:
- * Owner: Public Private Federal
- Select if facility/project is a superfund site
- * Owned by and serves a small community (less than 10,000 persons)

A yellow box highlights the selected toggle and the text: **This CWNS ID is eligible to use the small community form.**

At the bottom right, there is a blue **Save** button.

Figure 5-56. Indicating a CWNS ID serves a small community.

5.22.2 Managing SCFs

States can manage SCFs in the “Manage Small Community Forms” area. This can be found in the top menu of the DEP (Figure 5-57). This area will allow states to manage forms that are sent out to and returned by small communities.

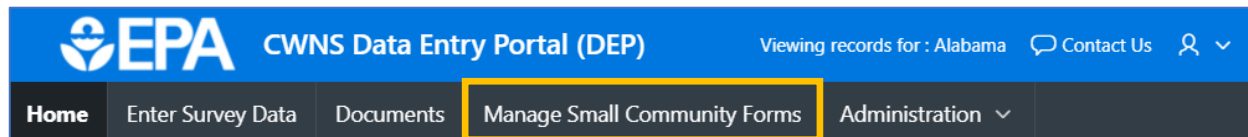



Figure 5-57. “Manage Small Community Forms” in the CWNS top menu.

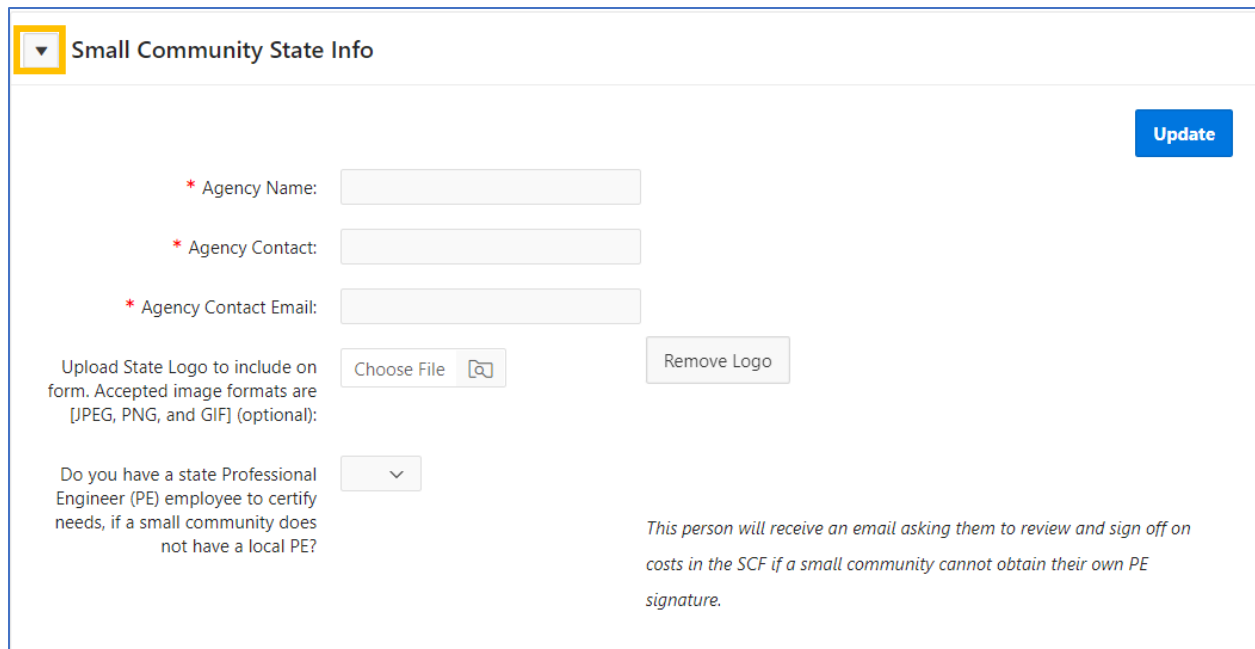
The state can add their state logo and state agency name to personalize the form and let small communities know the request is coming from the state. This logo will appear at the top of the page on the electronic version of the SCF.

The state also has the option to indicate if they have a state PE who is willing to certify costs if the small community does not have one. If so, the state can enter the PE’s contact information so that once the community has completed the SCF, it will be sent to the PE for certification. If the small community does not have a PE and the state has not provided an alternative PE, the form cannot be used to document costs (however, it can be used to provide inputs for a CET to generate costs).

In the “Manage Small Community Forms” area:

1. Click on the  icon to expand the “Small Community State Info” section (see Figure 5-58).
2. Enter the name of the state environmental agency and agency contact information. This is the information that will be presented to the communities on their SCFs.
3. Select the “Choose file” option and upload the state logo.
4. If desired, select “Yes” to indicate there is a state PE that can certify needs. This will open fields for the state PE’s contact information.
5. Enter the state PE’s name, email, and phone number. This information will not be available to the small communities but will allow the DEP to automatically send the form to the state PE via an online form if the community does not have a local PE to certify costs.
6. Click “Update” to save this information.

! The logo should be a small square or round photo of good quality.



Small Community State Info


Update

* Agency Name:

* Agency Contact:

* Agency Contact Email:

Upload State Logo to include on form. Accepted image formats are [JPEG, PNG, and GIF] (optional):

Choose File  Remove Logo

Do you have a state Professional Engineer (PE) employee to certify needs, if a small community does not have a local PE?

This person will receive an email asking them to review and sign off on costs in the SCF if a small community cannot obtain their own PE signature.

Figure 5-58. Adding state information to the SCF.

5.22.3 Adding a CWNS ID to the SCF List

The SCF list is where the state can send and receive electronic SCFs. The list indicates if a form has been sent and received, as well as the total amount indicated in the form by the small community.



Small communities do not have to use the electronic version of the SCF. The paper version can be sent to states and, once returned, scanned and uploaded as like any other document type (see Section 5.22.9). It is still helpful to indicate if the CWNS ID is a small community in the CWNS ID list, but the following process does not need to be used if a small community can only use paper documents.

To add a CWNS ID to this list:

1. Click “Add Small Community Form” (see Figure 5-59).
2. Use the search feature to find the CWNS ID. Only CWNS IDs that have been indicated as small communities will show in the search feature (see Figure 5-60). If one appears to be missing, return to the “Enter Survey Data” tab and search for the CWNS ID to confirm its “small community” is turned on (see Section 5.22.1).
3. Select the check box next to the CWNS ID.
4. Click “Add Selected Facility” to add the selected facility(ies) to the SCF list.

Small Community Form List ? + Add Small Community Form

Search Actions

Send All Selected Delete Selected

Selected	CWNS Number	Name	Infrastructure Type	Contact Name	Contact Email	CC	Status	Last Status Update	Total Amount (Not modeled)	Add Recipient Email	View SCF	Upload SCF
<input type="checkbox"/>	0100000074	New SCF upload test 1	Wastewater	Tara	stout.tara@epa.gov	knoth.eva-marin@epa.gov	Uploaded	03/29/2022 08:27	\$0			
<input type="checkbox"/>	0100000086	Test SCF	Wastewater	E	schlaudt.elisabeth@epa.gov	kleinjoshua@epa.gov	Sent to State PE	04/05/2022 16:54	\$0			
<input type="checkbox"/>	0100000097	test	Wastewater				Not Sent		\$0			

Figure 5-59. SCF list.

Search Actions

1 - 50 of 894 >

Select	CWNS ID	Name	Authority Name	Infrastructure Type	Total Resident Population
<input checked="" type="checkbox"/>	36008252001	Walworth (T) SD #1 STP & Onsites	Wayne	Wastewater	0
<input type="checkbox"/>	36001960050	Blooming Grove (T) San. Sewers 2	Orange	Wastewater	0
<input type="checkbox"/>	36006074001	Kirkland (T) San. Sewers & On-Sites	Oneida	Wastewater	0
<input type="checkbox"/>	36008052005	Gorham (T) San.Sewers (Canandiagua)	Ontario	Wastewater	0
<input type="checkbox"/>	36005021002	Westport (T) Wadhams SD STP	Essex	Wastewater	0

Add Selected Facility

Figure 5-60. Searching for a small community to add to the email list.

To delete an SCF, select the delete icon next to the CWNS ID in the SCF list. Note that this will not delete the CWNS ID, just the SCF associated with the ID. If a SCF is deleted from the list while the community has access to the link (i.e., after it is sent and before it is returned), the link will become “broken” and they will not be able to edit the data from the deleted SCF.

5.22.4 Editing Small Community Data Before the Form Is Sent

The state may want to edit the data in the SCF before sending the form to the small community to update. To do this, return to the main CWNS ID list and select “Enter Survey” as if updating any other CWNS ID. It is best that data be updated in the DEP this way before the form is sent. *Data cannot be edited in the “Manage Small Community Forms” area.*

5.22.5 SCF Workflow

The workflow presented in Figure 5-61 below can help states facilitate the process of sending and receiving SCFs. As the form is updated, the state can track its status in the SCF list (shown in purple), which can help states determine where a particular form is in the workflow.

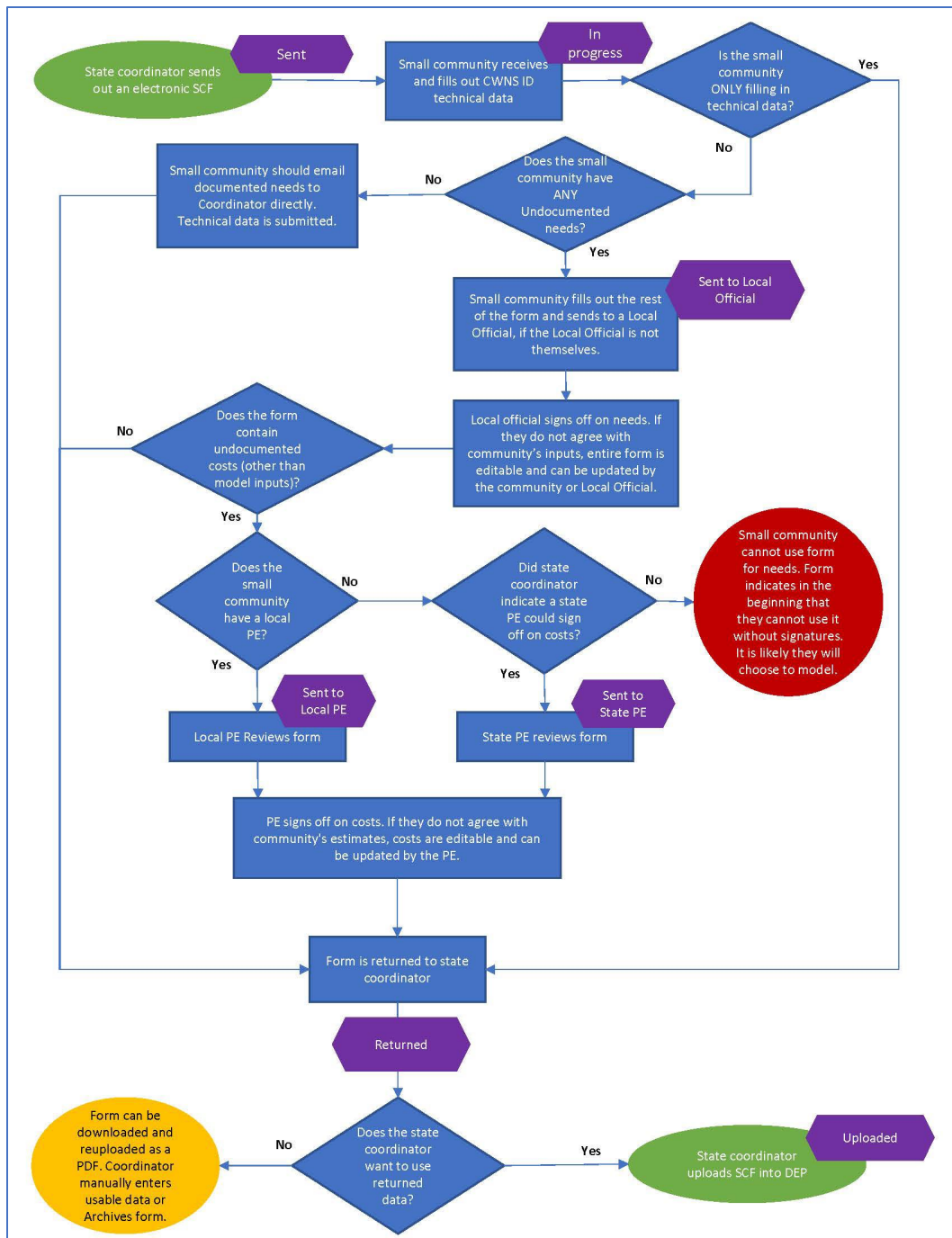


Figure 5-61. SCF workflow.

5.22.6 Sending a New SCF

Once a CWNS ID has been added to the SCF list, the state can send the form to the small community via email. Each form will need to have a small community contact added to it before it can be sent. States can also add a personalized message to each email as desired. The default email is shown in Figure 5-62.

Hello [Name],

You're receiving this email because we need your assistance with EPA's Clean Watersheds Needs Survey (CWNS or 'survey'). EPA, in partnership with the states, conducts this survey to identify and document the expected cost of each state's capital investments needed (needs) to meet the water quality and water-quality-related public health goals of the Clean Water Act. This survey communicates to Congress the needs of the nation and each state, including the District of Columbia and territories.

Needs are projects or portions of projects and associated capital costs that address a water quality or water-quality-related public health problem. **Projects included in the survey must not have external funding in place, cannot have been started as of January 1, 2022, and should be expected to occur within the next 20 years.**

Small communities may not have planning documents that address their infrastructure needs. Therefore, EPA has developed a web-based form, provided in the link below, that your community can use to include your needs in the survey. **To qualify to use this form, your community must have a population of 10,000 people or fewer.**

There are several ways to provide costs for your projects:

- Existing planning documents: If cost estimates already exist for projects at your facility, please send the documents containing the estimates to me, your State Coordinator.
- Estimates certified by a local or state professional engineer: Use this small community form.
- EPA's cost estimation tools: Use this small community form.

Please follow the instructions and complete the form to the best of your ability with information about your facilities and needs. To keep our records up to date, the survey also collects technical information on existing infrastructure and facilities, so please complete the form even if your system does not currently have any infrastructure improvement needs.

[Use this link to complete the Small Community Needs Form for \[Name of CWNS ID\]](#)

We are hopeful that the form is intuitive - instructions, definitions, and additional information can be found at the top of each section and your progress through the form can be saved along the way. Your community may receive multiple requests because a unique form is required for each infrastructure type: wastewater, stormwater, nonpoint source, and decentralized wastewater treatment.

If you have any questions or if you think your community does not qualify to use the form, please contact me at: [state coordinator email]

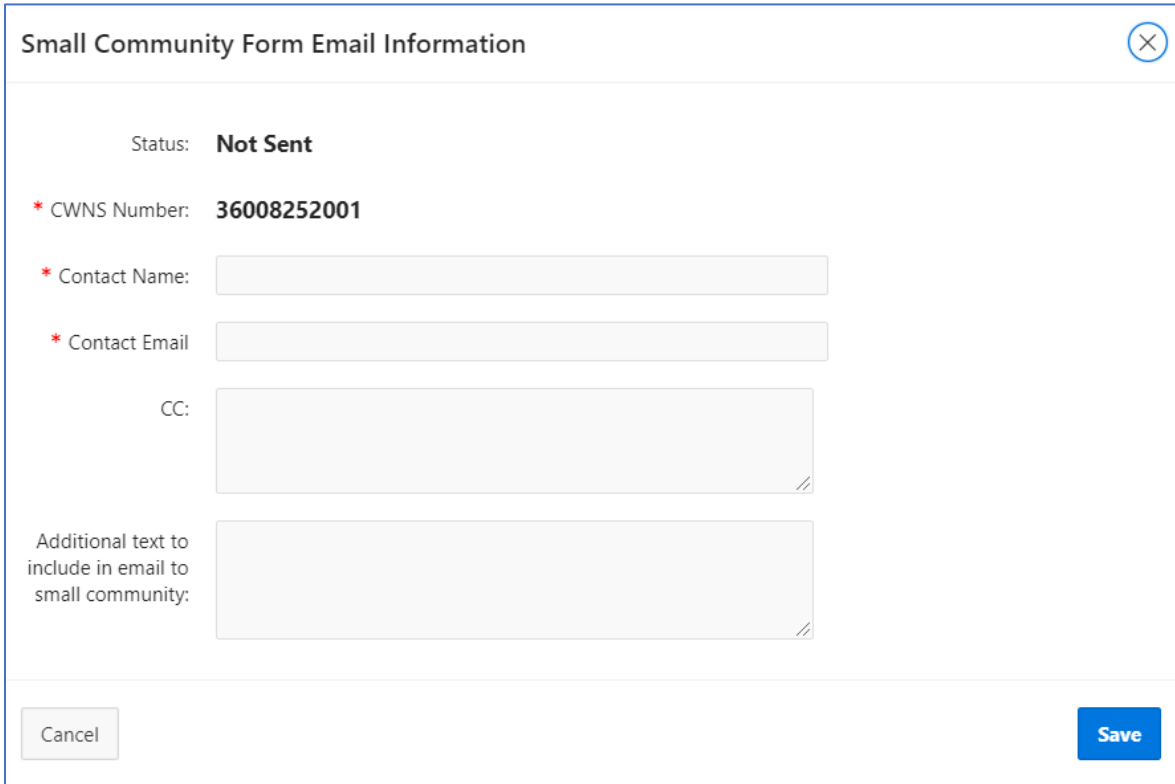
Thank you,
[State Coordinator Name]

P.S. If you are interested in more information about the survey, visit epa.gov/cwns.

Figure 5-62: Default small community email.

To add a small community contact, go to “Manage Small Community Forms” and click the email  icon (Figure 5-59), then:

1. Enter the contact information of the small community (Figure 5-63).
2. (Optional) Add other recipient email addresses of the email. These emails must be comma separated.
3. (Optional) Add a personalized message.
4. Save.



Small Community Form Email Information ✕

Status: **Not Sent**

* CWNS Number: **36008252001**

* Contact Name:

* Contact Email:

CC:

Additional text to include in email to small community:

Figure 5-63. SCF email information.

After entering this information, the state can send the email with a unique URL the small community can follow to view and update its form. Once the small community has completed the form and it is returned via one of the routes in the workflow, the state can view and upload the data into the DEP.

5.22.7 Uploading a Returned Form

Once a small community (or state PE) returns an SCF, the state will need to review the returned data. If the entered data are acceptable to the state, they can upload the form into the DEP.

To review and upload an SCF:

1. In “Manage Small Community Forms,” click the view icon. This will open the SCF in the browser.

2. Review the data, noting any errors. (Section 5.22.8 describes how to address errors.)
3. Once the data has been reviewed, click the “Upload SCF” icon.
4. Read the warning message that indicates all data in the form will overwrite what is currently in the DEP and other fields you may need to complete after the upload:

Are you sure you want to upload the data from this Small Community Form?

After the upload completes, it is the state’s responsibility to verify the data by entering the survey for this CWNS ID within the DEP.

The following fields are NOT automatically populated by the DEP and must be filled manually by you based on the information provided by the community and your best professional judgment:

- Physical location - select a latitude and longitude based on the address provided
- Areas Related to Needs - select at least one county, congressional district, and watershed
- For wastewater infrastructure types: link to the relevant CWNS ID if the Type of Discharge "Discharge to Another Facility" was selected. Check for and make other updates, as applicable, to connect the CWNS ID within a sewershed.
- Add any relevant information or additional detail to what was provided by the community and submit the survey for Federal Review.

5. Click “OK” if you would like the continue.
6. Open the CWNS ID and fill in the information that cannot be imported by the form (i.e., latitude/longitude, areas related to need, discharge to another facility).

Selected	CWNS Number	Name	Infrastructure Type	Contact Name	Contact Email	CC	Status	Last Status Update	Total Amount (Not modeled)	Add Recipient Email	View SCF	Upload SCF
<input type="checkbox"/>	01000000095	test 8	Wastewater	Test	cwns_support@erg.com		Returned	04/18/2022 13:35	\$0			

Figure 5-64. Small Community Form View and Upload.

5.22.8 Making Corrections

If the state finds errors in the SCF data, there are two ways to correct them:

1. Ask the small community to fix the errors. For this method, the form would have to be deleted and a new form generated that would go back through the entire workflow (including getting a new signature from the local or state PE).
2. Upload the data with the errors and fix them within the DEP.

If the form will not upload due to validation errors, the state can download the form as is and update the data manually, noting corrections in annotations or note fields in the corresponding data fields in the DEP.

5.22.9 Sending and Receiving Word Versions of the SCF

If a small community cannot access the online SCF, the state can download a Word version of the form to send to the community to fill out manually. Hardcopy forms are available for each infrastructure type through the DEP Home Page in both English and Spanish.

To send and upload a Word version:

1. Download the appropriate version(s) of the small community form from the DEP Home Page.
2. Send the form to the small community (either via email or by mail as a hardcopy). The community can make edits using a pen or edit functions within Word. Update or remove the text in red if a state Professional Engineer will be available to sign off on the costs.
3. When the form is returned (either by email or mail), scan the hardcopy document or publish the updated Word document as a PDF.
4. Upload the form as a PDF in the DEP as a document type 71 using the process described in section 5.5.3.

Note: All new data received in the form will need to be entered manually by the state.

5.23 State Correction Requests

After a CWNS ID has been submitted for federal review, EPA will review it for errors (as discussed in Section 4.5.2). If EPA finds no errors during the full review of a CWNS ID, the federal reviewer will change its status to “Federal Approved.” If the federal reviewer finds errors (referred to as findings) or requires clarification from the state, they will change the CWNS ID status to “State Correction Requested” (SCR). This means the state coordinator is asked to address any findings within 10 business days of receiving the notification. If the state does not respond in a timely manner, limited EPA resources at the end of the survey period may not allow for a re-review of the updated information. The state will be notified of this request via email, in addition to the visible status change in the CWNS IDs list.

Many different types of finding can trigger an SCR. EPA has developed standard text for commonly expected issues. Because this text may not provide the state coordinator with enough information about the errors found, EPA will also add customized comments to provide more information. States will also have the option to respond directly to each of the findings. See Table 5-15 for examples of findings, additional text that EPA might provide for clarity, and potential state responses. See also Appendix M for a full list of findings.

Table 5-15. Example Findings, Comments, and Responses.

Finding	EPA Comment	State Response
Costs appear to account for inflation. Please update costs to the base date.	The base date of the document is 2019. The inflated costs for future construction dates should not be used as EPA will adjust all costs to January 2022 dollars.	Updated to base date costs.
Entered costs appear to have been double-counted. Please remove duplicate costs.	It appears that the \$350,000 rehabilitation project was counted twice.	Those are actually two phases of the same project (one for each year), so both should be included.
The uploaded document includes more than one designated document type (e.g., IUP and Engineer's Study). Please upload each document type separately.	Please provide each of the files as separate documents and resubmit.	The second document had better project descriptions. I did not use it for cost, but I uploaded it separately.

5.23.1 Viewing CWNS IDs with an SCR Status

The state will be able to view all CWNS IDs that have a status of SCR through the “State Correction Requests” custom report in their CWNS IDs list (see Figure 5-65). By clicking on the “Enter Survey” icon next to a CWNS ID that has the SCR status, the state can review feedback and make corrections to the CWNS ID.

CWNS ID	CWNS Name	Infrastructure Type	County	Review Status	Authority Name	Total Needs	Enter Survey	Archive CWNS ID
0188889019	Test Small Community	Wastewater		State Correction Requested				

Figure 5-65. SCR custom report.

5.23.2 Responding to an SCR

State coordinators can address SCRs by updating information in the portal and responding directly to a finding in the optional comment areas for each finding. Each section in the survey will contain a review area (Figure 5-66) with three possible statuses:

- **No Findings:** This section does not need to be reviewed by the state.
- **Errors Found/Clarification Needed:** This section has findings that the state should review and make any required edits.

- **Resolved:** Any errors found in this section have been resolved and the state no longer needs to review it (this will only display if the CWNS ID goes through multiple rounds of SCRs).

Facility Type	Change Types	Edit	Delete
Honey Bucket Lagoon	Rehabilitation		

Review - Facility Types

Section Status: **Errors Found/Clarification Needed**

Findings	Comment To State	State Response	Resolved?	Edit
Honey bucket lagoon selected in urban area.	Please check the location and facility type of this CWNS ID.			

[Add Facility Type](#)

Figure 5-66. Example review section in the survey.

Once the finding is addressed, the state can include a comment in the “State Response” field to explain or supplement any edits they made. To include a comment, select the “Edit” icon next to the finding. A pop-up will appear where the state can add their response (see Figure 5-67).

Add/Edit Finding ✕

Please let us know what values you changed (if any), and any other useful information to help us continue the review.

State Response:

[Cancel](#) [Apply Changes](#)

Figure 5-67. State response view.

5.23.3 Resubmitting

Once any errors and/or questions have been addressed, the state can provide any additional information in the free text comment area (located in the overview section at the bottom of the survey). They will then need to re-submit the CWNS ID, which will set the status back to “Federal Review Requested.” EPA will re-review the CWNS ID and, if all issues are resolved, they will

change the status to “Federal Accepted.” If there are any additional questions or errors, they will change the CWNS ID status back to SCR. The state would then repeat the process outlined above until all errors are resolved.

If the state needs clarification on a finding before re-submitting the CWNS ID, they can send questions through the “Contact Us” button. This will prevent multiple SCRs on the same CWNS ID. If a question is about a specific CWNS ID, the state should include that information in the request.

6. Post-Survey Data Availability

Once findings are reported to Congress, EPA will make data publicly available at the CWNS website (<https://www.epa.gov/cwns>). EPA will develop online data visualization tools that allow users to view and download specific data. Users will be asked to identify their affiliation and the intended use of the data before being able to download any databases. This information will be used to help identify the usefulness of data areas and elements. States will also have access to a database file with their complete survey submission.

6.1 Data Dashboard

The data dashboard will be an interactive display that allows users to select CWNS data for chosen geographic areas in bar graphs and pie charts. Users will be able to filter by state and see the total documented needs by category; official needs by category; number of facilities by size, flow, or treatment; small versus large communities; total needs over time; and the number of facilities with needs. See Figure 6-1 for the 2012 data dashboard.

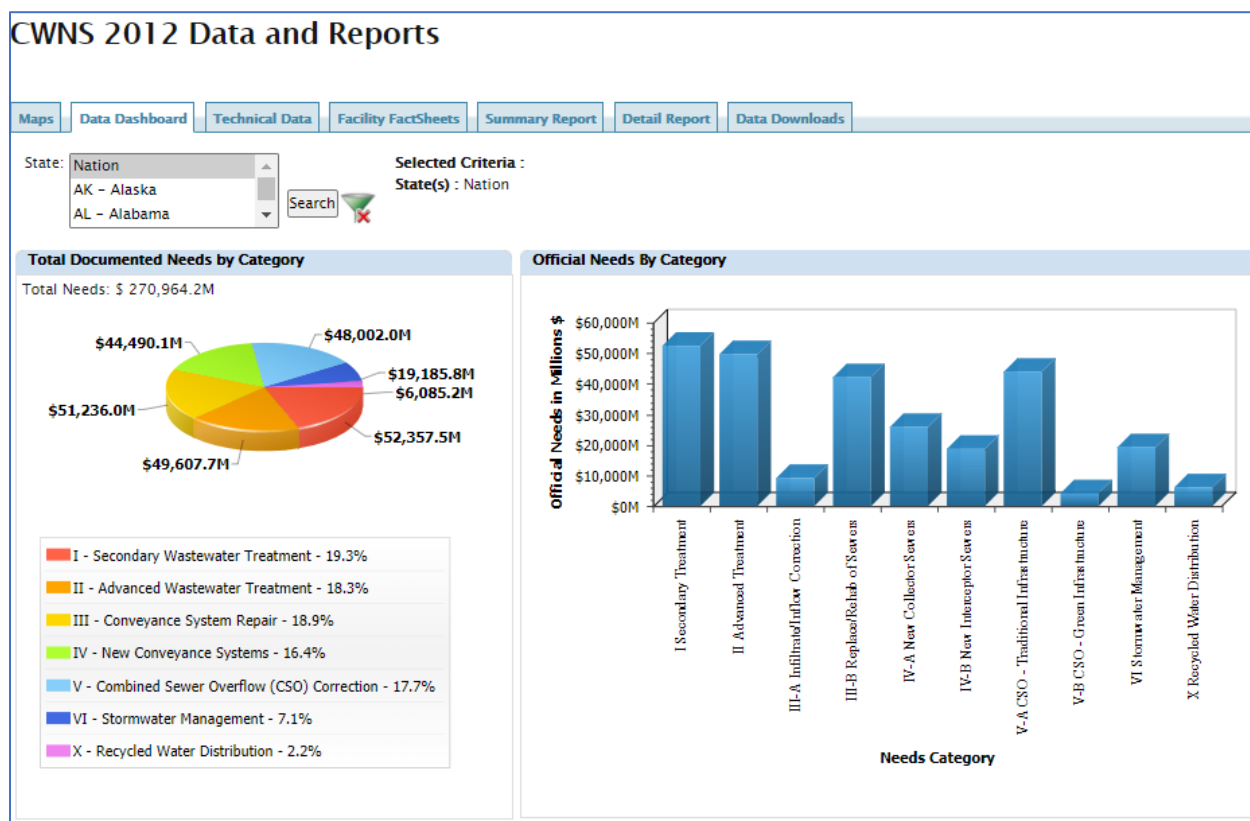


Figure 6-1. 2012 data dashboard.

6.2 Data Reports and Facility Factsheets

Users will be able to view interactive summary reports of needs data by geographic area (state, region, watershed, county, or congressional district). Examples of summary reports include official needs by category, total documented needs, total official needs by state, and number of facilities with needs by state.

In addition to summary reports, users will be able to download detailed reports that provide needs, wastewater treatment plant flows, centralized and decentralized population, discharge methods, and unit process data at the CWNS ID level. The detailed reports include CWNS ID information such as CWNS ID, CWNS ID name, permit number and type, and location data.

EPA intends to create the same facility fact sheets that show CWNS data available for an individual wastewater treatment plant, collection system, stormwater management facility, decentralized wastewater management project, or NPS pollution prevention project. See Figure 6-2 for an example of a facility fact sheet from 2012.



BLUE PLAINS STP

2012 Clean Watersheds Needs Survey

Description: The Blue Plains Wastewater Treatment Plant is the largest advanced wastewater treatment plant in the world, with a capacity of 370 million gallons per day (mgd)

Point of Contact: District of Columbia Water and Sewer Authority
202-787-4172

CWNS Number: 11000001001

Permit Number(s): DC0021199*

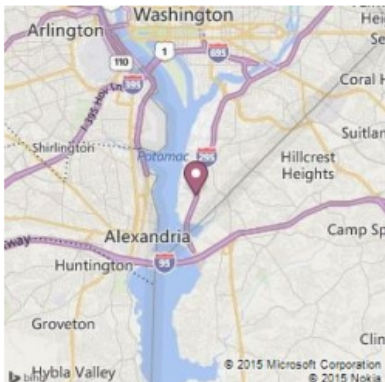
County: District of Columbia (Primary)

Watershed(s): Middle Potomac-Anacostia-Occoquan (Primary)

Congressional District: 98th CONGRESSIONAL DISTRICT (Primary)

Address: 5000 OVERLOOK AVE, SW, WASHINGTON, DC,20372

Total Documented Needs:** \$2,797,706,089



Facility Description

Type	Present	Projected	Changes Needed
Biosolids Handling Facility	Y	Y	Rehabilitation, Replacement, Process Improvement
Collection: Combined Sewers	Y	Y	Rehabilitation, Process Improvement
Collection: Pump Stations	Y	Y	Rehabilitation, Replacement, Process Improvement
Collection: Separate Sewers	Y	Y	No Change
Treatment Plant	Y Mechanical	Y Mechanical	Increase Level Of Treatment, Rehabilitation, Replacement, Process Improvement, Instrumentation/Electrical/Laboratory

Figure 6-2. Example 2012 facility fact sheet (page 1 of 5).

6.3 Publicly Available Access Database

EPA will develop a clean version of the database (scrubbed of personal identifying information) and make it available for download, similar to the 2012 publicly available database. This database will include summary data for each data area and allow users to query data for their specific purposes.

6.4 DEP Available for States

Information input to the DEP will be kept as “read only” and states will continue to have access between surveys. Each state will be able to download an Access database version of their entire survey submission that they can work in locally. Any changes to this version will not be reflected in EPA’s version.

Appendices

Appendix A. Need Categories

Table A-1 provides the full list of need categories and definitions.³ Categories were updated from 2012 to generally align with CWSRF categories. Four CWSRF categories are reported as change types in the CWNS: “improve energy efficiency,” “climate change adaptation,” “renewable energy,” and “improve water efficiency.”

Table A-1. Need Categories and Definitions

2022 Category Number	Category Name	Description
I	Secondary Wastewater Treatment	<p>This category includes needs necessary to meet secondary treatment criteria. Secondary treatment typically requires a treatment level that produces an effluent quality of 30 mg/L of both BOD₅ and total suspended solids (secondary treatment levels required for some lagoon systems may be less stringent). In addition, the secondary treatment must remove 85 percent of BOD₅ and total suspended solids from the influent wastewater.</p> <p>Although they do not provide secondary treatment, facilities granted waivers of secondary treatment for marine discharges under Section 301(h) of the CWA and “honey bucket lagoons” are also included in this category.</p>
II	Advanced Wastewater Treatment	<p>This category includes needs necessary to attain or maintain a level of treatment that is more stringent than secondary treatment or produce a significant reduction in nonconventional or toxic pollutants present in the wastewater treated by a facility. A facility is considered to have advanced wastewater treatment if it achieves one or more of the following: BOD₅ less than 20 mg/L, nitrogen removal, phosphorus removal, ammonia removal, metal removal, or synthetic organic removal.</p>
III-A	Infiltration/Inflow (I/I) Correction	<p>This category includes needs for correction of sewer system I/I problems. For infiltration, this includes controlling the penetration of water into a sanitary or combined sewer system from the ground through defective pipes or manholes. For inflow, it includes controlling the penetration of water into the system from drains, storm sewers, and other improper entries. It also includes costs for preliminary sewer system analysis and detailed SSESs.</p>
III-B	Sewer Replacement/ Rehabilitation	<p>This category includes needs for the maintenance (above and beyond ongoing O&M), reinforcement, or reconstruction of structurally deteriorating sanitary or combined sewers. The corrective actions must be necessary to maintain the structural integrity of the system.</p>

³ Note that categories VIII, IX, XI, and XIII are no longer collected.

2022 Category Number	Category Name	Description
IV-A	New Collector Sewers and Appurtenances	This category includes needs for new 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.
IV-B	New Interceptor Sewers and Appurtenances	This category includes needs for constructing new interceptor sewers and pumping stations to convey wastewater from collection sewer systems to a treatment facility or to another interceptor sewer. Needs for relief sewers are included in this category.
V	Combined Sewer Overflow (CSO) Correction	This category includes needs to prevent or control the periodic discharges of mixed stormwater and untreated wastewater (CSOs) that occur when the capacity of a sewer system is exceeded during a wet weather event. This category does not include needs for overflow control allocated to flood control, drainage improvement, or the treatment or control of stormwater in separate storm systems.
VI-A	Gray Infrastructure	This category includes needs for stormwater management program activities associated with the planning, design, and construction of conveying stormwater via pipes, inlets, roadside ditches, and other similar mechanisms. This category also includes needs associated with the planning, design, and construction of treating stormwater with wet ponds, dry ponds, manufactured devices, and other similar means.
VI-B	Green Infrastructure	This category includes needs for stormwater management program activities associated with the planning, design, and construction of low-impact development and green infrastructure, such as bioretention, constructed wetlands, permeable pavement, rain gardens, green roofs, cisterns, rain barrels, vegetated swales, restoration of riparian buffers and flood plains, etc.
VI-C	General Stormwater Management	This category includes needs for stormwater management program activities associated with implementing a stormwater management program, such as geographic information systems (GIS) and tracking systems, equipment (e.g., street sweepers, vacuum trucks), stormwater education program startup costs (e.g., setting up a stormwater public education center, building a traveling stormwater education display), and stormwater management plan development.
VII-A	NPS Control: Agriculture (Cropland)	This category includes costs to address NPS pollution control needs associated with agricultural activities related to croplands, such as plowing, pesticide spraying, irrigation, fertilizing, planting, and harvesting. Some examples of BMPs used to address these needs are conservation tillage, nutrient management, and irrigation water management.

2022 Category Number	Category Name	Description
VII-B	NPS Control: Agriculture (Animals)	This category includes 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 BMPs used to address agriculture (animal) needs are animal waste storage facilities, animal waste nutrient management, composting facilities, and planned grazing. Any costs associated with facilities or measures that address point source pollution discharges are not reported in this category.
VII-C	NPS Control: Silviculture	This category includes 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 BMPs used to address silviculture needs are pre-harvest planning, streamside buffers, road management, revegetation of disturbed areas and structural practices, and equipment (e.g., sediment control structures, timber harvesting equipment).
VII-E	NPS Control: Groundwater Protection (Unknown Source)	This category includes all costs that address groundwater protection NPS pollution control needs, such as wellhead and recharge area protection activities. Any need that can be attributed to a specific cause of groundwater pollution, such as leaking storage tanks, soil contamination in a brownfield, or leachate from a sanitary landfill, is reported in that more specific category.
VII-F	NPS Control: Marinas	This category includes 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 BMPs used to address needs at marinas are bulk heading, pump-out systems, and oil containment booms.
VII-G	NPS Control: Resource Extraction	This category includes all costs that address NPS pollution control needs associated with mining and quarrying activities. Some typical BMPs used to address resource extraction needs are detention berms, adit (mine entrance) closures, and seeding or revegetation. Any costs associated with facilities or measures that address point source discharges are not reported in this category.
VII-H	NPS Control: Brownfields/Superfund	This category includes all costs that address NPS pollution control needs associated with abandoned industrial sites that might have residual contamination (brownfields) and hazardous waste sites covered under the Comprehensive Environmental Response, Compensation, and Liability Act (Superfund sites). All costs for work at brownfield or Superfund sites, regardless of the activity, should be included in this category. Some typical BMPs used to address needs at brownfield or Superfund sites are excavation, removal, and disposal of contaminated sediment/soil; cleanup of contaminated groundwater or surface water; and capping of wells to prevent stormwater infiltration.

2022 Category Number	Category Name	Description
VII-I	NPS Control: Storage Tanks	This category includes all costs that address NPS pollution control needs associated with tanks designed to hold gasoline, other petroleum products, or chemicals. The tanks may be above or below ground level. Some typical BMPs used to address storage tank needs are spill containment systems; in situ treatment of contaminated soils and groundwater; and upgrade, rehabilitation, or removal of petroleum/chemical storage tanks. If these facilities or measures are part of addressing NPS needs at brownfields, the costs go in category VII-H, "NPS Control: Brownfields/Superfund."
VII-J	NPS Control: Sanitary Landfills	This category includes all costs that address NPS pollution control needs associated with sanitary landfills. Some typical BMPs used to address needs at landfills are leachate collection, on-site treatment, gas collection and control, capping, and closure.
VII-K	NPS Control: Hydromodification	This category includes needs to address the degradation of water resources as a result of altering the hydrological characteristics of coastal and non-coastal waters. For a stream channel, hydromodification is the process of the stream bank being eroded by flowing water, typically resulting in the suspension of sediments in the watercourse. Examples of such hydromodification activities include channelization and channel modification, dams, and stream bank and shoreline erosion. Some typical BMPs 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.
VII-M	NPS Control: Other Estuary Management Activities	This category is only used for management activities in the study areas of the 28 NEPs designated under Section 320 of the CWA. It includes costs associated with a limited number of estuary management activities that may not be appropriately included in other need categories. Some typical estuary BMPs are habitat protection 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. Point source technologies included in the NEP's Comprehensive Conservation and Management Plans should not be included in this category.

2022 Category Number	Category Name	Description
X	Water Reuse	<p>This category includes needs associated with conveyance of treated wastewater that is being reused, including associated rehabilitation/ replacement needs. Examples are pipes to convey treated water from the wastewater facility to the drinking water distribution system or the drinking water treatment facility and equipment for application of effluent on publicly owned land.</p> <p>The needs associated with additional unit processes to increase the level of treatment to potable, or less than potable but greater than that normally associated with surface discharge needs, are reported in category II.</p>
XII	Decentralized Wastewater Treatment Systems	<p>This category includes needs associated with the rehabilitation, replacement, or new installation of OWTs or clustered (community) systems. It also includes the treatment portion of other decentralized sewage disposal technologies. Costs related to the development and implementation of on-site management districts are included (but not the costs of ongoing operations of such districts). Costs could also include the limited collection systems associated with the decentralized system. Public ownership is not required for decentralized systems.</p> <p>This category does not include the needs to change a service area from decentralized wastewater treatment to a publicly owned centralized treatment system. Needs to construct a publicly owned centralized collection and treatment system should be reported in category I, “Secondary Wastewater Treatment,” and/or category II, “Advanced Wastewater Treatment.” Needs to install sewers to connect the service area to an existing collection system are reported in category IV-A, “New Collector Sewers and Appurtenances,” and category IV-B, “New Interceptor Sewers and Appurtenances.”</p>
XIV	Desalination	<p>This category includes needs for treatment and disposal of brine, desalination of brackish water to augment water supply, aquifer recharge using desalinated sea water, and treatment/reinjection of brackish groundwater.</p>

Appendix B. Facility Types

Table B-1 provides the full list of facility types and definitions.

Table B-1. Definitions of Facility Types

Facility Type	Definition
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; they 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.
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.

Facility Type	Definition
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.
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.

Facility Type	Definition
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.

Facility Type	Definition
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.

Appendix C. Change Types

Table C-1 provides the full list of change types and definitions.

Table C-1. Change Types and Definitions

Facility Change	Definition
No change	There are no planned modifications. <i>Note that this change type cannot be used in combination with any other change type.</i>
New	A new facility is being proposed or implemented. <i>Note that this change type cannot be used in combination with any other change type.</i>
Abandonment	<p>All unit processes or BMPs that make up the facility type will no longer be used or will be demolished in the future. Examples are:</p> <ul style="list-style-type: none"> • Taking a treatment plant out of service. Its flows are redirected to another treatment plant. • Taking a biosolids handling facility out of service and centralizing all biosolids treatment at one regional biosolids handling facility. • Replacing OWTs with a central collection and treatment system. <p>Abandonment does <i>not</i> 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.”</p> <p>If a facility is to be demolished and replaced in the same location, the change should be categorized as “replacement.”</p> <p><i>Note that this change type cannot be used in combination with any other change type.</i></p>
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	<p>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 OWTs with the rehabilitation change type.</p> <p>This change does not include the construction of an entirely new sewer system, which should be categorized as “new.”</p> <p>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.”</p>

Facility Change	Definition
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 (new for 2022 survey)	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	<p>Increasing the treatment capacity of existing treatment plants, biosolids handling facilities, MS4s, decentralized treatment systems, and NPS BMPs with respect to flow or tonnage. Examples are:</p> <ul style="list-style-type: none"> ● Increasing a wastewater treatment plant’s design flow from 1 to 2 MGD. ● Increasing a biosolids handling facility’s capacity from 0.25 to 0.35 tons per day. ● Increasing the size of a multiple-unit leach field to handle additional flow. ● Increasing the size of a sediment basin used to capture runoff from a construction site. ● Replacing existing sewers with larger-capacity sewers or expanding existing pump stations to pump more flow. <p>This change <i>does not</i> include:</p> <ul style="list-style-type: none"> ● Increasing the level of treatment to meet more stringent effluent limits. This change should be categorized as “increase level of treatment.” ● Increasing the size of a sewer system by adding new sewers and expanding the service area. This change should be categorized as “expansion.” ● Adding sand filtration to an existing non-centralized treatment system. This change should be categorized as “process improvement.”
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.

Facility Change	Definition
Process improvement	<p>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. Examples are:</p> <ul style="list-style-type: none"> ● Replacing coarse bubble diffusers with fine bubble diffusers at a wastewater treatment plant. ● Upgrading membranes at a desalination facility. ● Replacing pumps in a pump station. ● Adding sand filters to an existing decentralized cluster system. <p>If a more detailed or more appropriate change type is available, it should be used.</p>
Redevelopment	Expanding, modifying, or otherwise upgrading existing gray or green stormwater management measures.
Rehabilitation	<p>Restoring or repairing parts of existing treatment plants, combined or separate sewer systems, biosolids handling facilities, MS4s, individual on-site systems, and NPS BMPs with no increase in capacity or level of treatment. Examples are:</p> <ul style="list-style-type: none"> ● Performing extensive repair of existing sewers beyond the scope of normal maintenance programs. ● Repairing deteriorating tank walls at a treatment plant. ● Replacing a deteriorated cover on an anaerobic digester. ● Adding a forebay to prevent sediment from entering a retention pond. ● Replacing membranes at a desalination facility. <p>This change does <i>not</i> include:</p> <ul style="list-style-type: none"> ● Replacing of one or more sewers with another while maintaining the same capacity. These changes should instead be categorized as “replacement.” ● Performing any work that could be considered normal O&M.
Renewable energy (new for 2022 survey)	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.

Appendix D. Facility Type and Change Type Associations

There are limitations to which change types can be associated with each facility type in the DEP. Table D-1 provides these association rules.

“New,” “abandonment,” and “no change” change types cannot be used in combination with any other change type, shown by gray highlighting. Facilities with a change type of “new” can only have facility information for the newly proposed infrastructure. Facilities with a change type of “abandonment” cannot also have change types to improve or modify the facility to be abandoned. Facilities with “no change” as their change type are by definition not also incurring other changes. All other change types can be combined as noted in the table.

Table D-1. Facility Type and Change Type Associations

Facility Type	Change Type														
	New	Abandonment	No Change	Increase Capacity	Increase Level of Treatment	Rehabilitation	Replacement	Redevelopment	Expansion	Process Improvement	Instrumentation/Electrical/Laboratory	Improve Energy Efficiency	Climate Change Adaptation	Improve Water Efficiency	Renewable Energy
Treatment Plant	*	*	*	*	*	*	*			*	*	*	*	*	*
Honey Bucket Lagoon	*	*	*	*	*	*	*			*	*	*	*	*	*
Storage Facility	*	*	*	*		*	*			*	*	*	*	*	*
Biosolids Handling	*	*	*	*	*	*	*		*	*	*	*	*	*	*
Collection: Combined Sewers		*	*			*	*			*	*	*	*	*	*
Collection: Separate Sewers	*	*	*	*		*	*		*	*	*	*	*	*	*
Collection: Interceptor Sewers	*	*	*	*	*	*	*		*	*	*	*	*	*	*
Collection: Pump Stations	*	*	*	*		*	*		*	*	*	*	*	*	*
Water Reuse	*	*	*	*	*	*	*		*	*	*	*	*	*	*
Desalination (Wastewater Infrastructure)	*	*	*	*	*	*	*		*	*	*	*	*	*	*
OWTS	*	*	*			*	*			*	*				
Clustered System	*	*	*	*	*	*	*		*	*	*				
Phase I MS4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Phase II MS4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Non-traditional MS4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Facility Type	Change Type														
	New	Abandonment	No Change	Increase Capacity	Increase Level of Treatment	Rehabilitation	Replacement	Redevelopment	Expansion	Process Improvement	Instrumentation/Electrical/Laboratory	Improve Energy Efficiency	Climate Change Adaptation	Improve Water Efficiency	Renewable Energy
Unregulated Community Stormwater	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Agriculture—Cropland	*	*	*	*	*	*	*		*	*	*		*		
Agriculture—Animals	*	*	*	*	*	*	*		*	*	*		*		
Silviculture	*	*	*	*	*	*	*		*	*	*		*		
Marinas	*	*	*	*	*	*	*		*	*	*		*		
Resource Extraction	*	*	*	*	*	*	*		*	*	*		*		
Brownfields/Superfund		*	*	*	*	*	*		*	*	*		*		
Storage Tanks	*	*	*	*	*	*	*		*	*	*		*		
Sanitary Landfills	*	*	*	*	*	*	*		*	*	*		*		
Groundwater—Unknown Source	*	*	*	*	*	*	*		*	*	*		*		
Hydromodification	*	*	*	*	*	*	*		*	*	*		*		
Estuary Management	*	*	*	*	*	*	*		*	*	*		*		
Desalination (NPS Control Infrastructure)	*	*	*	*	*	*	*		*	*	*	*	*	*	*

Appendix E. Facility Type Associations

There are limitations to which facility types can be combined with other facility types for one CWNS ID in the DEP. Tables E-1 through E-4 provide these association rules.

Table E-1. Wastewater Facility Type Associations

Facility Type	Treatment Plant	Collection: Interceptor Sewers	Collection: Combined Sewers	Collection: Separate Sewers	Storage Facility	Collection: Pump Stations	Biosolids Handling	Water Reuse	Desalination (Wastewater Infrastructure)	Honey Bucket Lagoon
Treatment Plant	*	*	*	*	*	*	*	*	*	
Collection: Interceptor Sewers	*	*	*	*	*	*	*	*	*	
Collection: Combined Sewers	*	*	*	*	*	*	*	*	*	
Collection: Separate Sewers	*	*	*	*	*	*	*	*	*	
Collection: Pump Stations	*	*	*	*	*	*	*	*	*	
Storage Facility	*	*	*	*	*	*	*	*	*	
Biosolids Handling	*	*	*	*	*	*	*	*	*	
Water Reuse	*	*	*	*	*	*	*	*	*	
Desalination (Wastewater Infrastructure)	*	*	*	*	*	*	*	*	*	
Honey Bucket Lagoon										*

Table E-2. Decentralized Facility Type Associations

Facility Type	OWTS	Clustered System
OWTS	*	*
Clustered System	*	*

Table E-3. Stormwater Facility Type Associations

Facility Type	Phase I MS4	Phase II MS4	Non-traditional MS4	Unregulated Community Stormwater
Phase I MS4	*			
Phase II MS4		*		
Non-traditional MS4			*	
Unregulated Community Stormwater				*

Table E-4. NPS Control Facility Type Associations

Facility Type	Agriculture—Cropland	Agriculture—Animals	Silviculture	Marinas	Resource Extraction	Brownfields/Superfund	Storage Tanks	Sanitary Landfills	Groundwater—Unknown Source	Hydromodification	Estuary Management	Desalination (NPS Control Infrastructure)
Agriculture—Cropland	*	*	*	*	*	*	*	*	*	*	*	*
Agriculture—Animals	*	*	*	*	*	*	*	*	*	*	*	*
Silviculture	*	*	*	*	*	*	*	*	*	*	*	*
Marinas	*	*	*	*	*	*	*	*	*	*	*	*
Resource Extraction	*	*	*	*	*	*	*	*	*	*	*	*
Brownfields/Superfund	*	*	*	*	*	*	*	*	*	*	*	*
Storage Tanks	*	*	*	*	*	*	*	*	*	*	*	*
Sanitary Landfills	*	*	*	*	*	*	*	*	*	*	*	*
Groundwater—Unknown Source	*	*	*	*	*	*	*	*	*	*	*	*
Hydromodification	*	*	*	*	*	*	*	*	*	*	*	*
Estuary Management	*	*	*	*	*	*	*	*	*	*	*	*
Desalination (NPS Control Infrastructure)	*	*	*	*	*	*	*	*	*	*	*	*

Appendix F. Facility Types and Need Categories Associations

There are limitations to which facility types can be associated with each need category in the DEP. Table F-1 provides these association rules.

As an example of how to use this table, consider a “collection: interceptor sewers” facility type. This can only be associated with III-A, III-B, IV-A, and IV-B.

Table F-1. Facility Types and Need Categories Associations

Facility Type	Need Category																							
	I	II	III-A	III-B	IV-A	IV-B	V	VI-A	VI-B	VI-C	VII-A	VII-B	VII-C	VII-E	VII-F	VII-G	VII-H	VII-I	VII-J	VII-K	VII-M	X	XII	XIV
Treatment Plant	*	*					*															*		*
Honey Bucket Lagoon	*	*																						
Collection: Combined Sewers			*	*			*																	
Collection: Separate Sewers			*	*	*	*																		
Collection: Interceptor Sewers			*	*	*	*																		
Collection: Pump Stations			*	*	*	*																		
Storage Facility	*	*	*	*	*	*	*																	
Biosolids Handling	*	*																						
Water Reuse																						*		*
Desalination (Wastewater Infrastructure)																						*		*
OWTS																							*	
Clustered System																							*	
Phase I MS4								*	*	*														
Phase II MS4								*	*	*														
Non-traditional MS4								*	*	*														
Unregulated Stormwater Management								*	*	*														
Agriculture—Cropland											*													
Agriculture—Animals												*												

Facility Type	Need Category																								
	I	II	III-A	III-B	IV-A	IV-B	V	VI-A	VI-B	VI-C	VII-A	VII-B	VII-C	VII-E	VII-F	VII-G	VII-H	VII-I	VII-J	VII-K	VII-M	X	XII	XIV	
Silviculture													*												
Groundwater—Unknown Source														*											*
Marinas															*										
Resource Extraction																*									
Brownfields/Superfund																	*								
Storage Tanks																		*							
Sanitary Landfills																			*						
Hydromodification																				*					
Estuary Management																					*				
Desalination (NPS Control Infrastructure)																						*			*

Appendix G. Designated Document Types

Table G-1 provides the full list of document types, designations, and definitions. See Section 3.5.1 for guidance on how to use certain document numbers. Note that alternate documents, with the exception of document type 5 (Cost of Previous Comparable Construction), may only be used to document projects and require additional documentation to support costs.

Document No.	Document Type	Designation	Description
Preapproved Documents			
1	CWSRF IUP/ Project Priority List	Primary	States prepare an annual IUP as part of their capitalization grant application process. This plan identifies the intended uses of the funds and how they support the goals of the CWSRF, including specific activities the state intends to support. It includes a list of projects—the Project Priority List—that may receive CWSRF assistance. The plan also includes NPS and estuary protection activities that the state expects to fund. A state’s IUP, which is prepared annually, uses state-assigned criteria to identify which projects (for Section 212 projects) or which project categories (for Section 319 or 320 projects) the state intends to fund with CWSRF money.
2	Non-CWSRF Governmental Loan and Grant Application	Primary	A grant or loan application for another federal and state program. Examples include ARPA grants, EPA’s WIFIA loans, USDA’s Rural Development Grant and Loan Program, EPA’s 319 NPS Grants, Housing and Urban Development’s Community Development Block Grant, USDA Rural Utilities Service funding and Federal Emergency Management Agency Hazard Mitigation Grants (including Flood Mitigation Assistance and Building Resilient Infrastructure and Communities Grants), the Sewer Overflow and Stormwater Reuse Municipal Grant Program, and the Virginia Department of Environmental Quality’s Water Quality Improvement Fund.
3	CWSRF Loan Pre- application/Final Application	Primary	An application for a CWSRF loan.
4	Non-governmental Grant Application	Alternate	A grant application written to a non-governmental organization, such as the Chesapeake Bay Trust.
5	Cost of Previous Comparable Construction	Alternate	This document type is used to estimate costs for projects that do not have documented costs based on similar projects within the same geographic region.

Document No.	Document Type	Designation	Description
6	State-Approved Area-Wide or Regional Basin Plan	Alternate	A CWA Section 208 Area-Wide Plan or 309 Basin Plan is a broad-based water quality management plan written primarily to identify future planning for areas within a state. These reports study large areas such as basins or counties and usually recommend general solutions to current or anticipated wastewater needs within the planning area.
7	State-Approved Local Comprehensive Water and Sewer Plan	Alternate	This document type is similar to a State-Approved Area-Wide Basin Plan (document type 6) but is not required under the CWA.
8	TMDL	Alternate	A TMDL is an estimation of the maximum amount of a pollutant that an impaired waterbody—listed on a state’s 303(d) list—can receive and still meet water quality standards. It includes an allocation of the allowable pollutant discharge amount from different point and nonpoint sources and a plan for complying that includes specific projects and an implementation schedule.
9	NEP Comprehensive Conservation and Management Plan	Alternate	A Comprehensive Conservation and Management Plan is a management plan developed for an estuary that has been nominated for the CWA Section 320 NEP. The plan summarizes findings, determines environmental quality goals and objectives, identifies and establishes priorities for addressing problems, identifies action plans and compliance schedules for pollution control and resource management, and ensures that designated uses of the estuary are protected for each of the 28 estuaries (in 18 states and Puerto Rico) in the NEP.
12a	Completed State Needs Surveys and other state forms (approved as primary)	Primary	This document type allows states to submit state-specific forms that are used to collect project and cost information for the CWNS or other state uses. This document type is used to provide CWNS ID-specific information using the form approved under document type 100.
12b	Completed State Needs Surveys and other state forms (approved as alternate)	Alternate	This document type allows states to submit state-specific forms that are used to collect project data for the CWNS or other state uses. This document type is used to provide CWNS ID-specific information using the form approved under document type 100.

Document No.	Document Type	Designation	Description
13	Wastewater/ Stormwater User Rate Study	Alternate	A User Rate Study analyzes the adequacy of a utility's wastewater rates. It typically has three components: <ul style="list-style-type: none"> • Overall revenue requirements and financial plan • Cost-of-service for each customer class • Rate structure design
14	Climate Resilience Evaluation and Awareness Tool Report	Alternate	The Climate Resilience Evaluation and Awareness Tool (CREAT) Plan Report is a summary of the risk reduction possible that can be compared with the cost of implementing the adaptation plan. The report includes the results of the risk assessment for a specific adaptation plan selected by the user and can be used as decision support to inform adaptation planning or to determine if there is a need for further assessment.
15	Regional Water Plan	Alternate	A Regional Water Plan describes current and projected water resource needs of the region and summarizes water management strategies to meet needs. Although these plans typically describe drinking water resources, they may include stormwater and wastewater as water supply sources and describe projects to reuse or manage these sources.
16	Hazard Mitigation Plan	Alternate	A Hazard Mitigation Plan reviews the current and possible risks and the community capabilities for a geographic area, then assigns long-term mitigation strategies to address vulnerabilities.
17	Integrated Stormwater and Wastewater Plan	Alternate	An Integrated Stormwater and Wastewater Plan identifies efficiencies from separate wastewater and stormwater programs to best prioritize capital investments and achieve human health and water quality objectives per EPA's Integrated Stormwater and Wastewater Management Planning Framework.
20	CIP or Master Plan	Primary	A CIP is a fiscal planning document used by local governments (e.g., authorities, cities, counties, districts) to anticipate and plan for capital improvement projects or equipment purchase and schedule them over a period of time. The planning period of CIPs can span from one to 20 or more years. Most CIPs contain project- and cost-specific information. A Master Plan is similar to a CIP but is typically a more comprehensive municipality-wide planning document. Most Master Plans also have project- and cost-specific information.
21	Facility Plan or Preliminary Engineering Report	Primary	A Facility Plan or Preliminary Engineering Report addresses a specific problem (e.g., the need for a new treatment plant) and includes several alternatives to solve the problem along with an alternatives analysis and a recommended alternative (project).
22	Engineer's Study	Alternate	An Engineer's Study assesses the scope and feasibility of a project before more detailed planning occurs. This document type encompasses documents ranging from a memo to a formal engineer's estimate.

Document No.	Document Type	Designation	Description
23	Final Engineer's Estimate/Lowest Bid	Primary	An Engineer's Estimate contains a specific description of the project scope and a list of work to be done, along with detailed itemized costs. The Final Engineer's Estimate is typically submitted as a result of detailed facility design.
24	Sewer System Evaluation Document	Alternate	This document type includes I/I analyses, SSESs, and CSO studies. An I/I analysis is a document that identifies excessive flow problems due to infiltration or inflow into the sewerage. An SSES is a document that contains the results of a sewer system survey, manhole inspection, smoke testing, and flow monitoring. It is used to evaluate the physical condition of a sewer system and identifies areas of combined sewers, downspout connections, and locations where the sewer system is at capacity.
25	Diagnostic Evaluation	Alternate	A Diagnostic Evaluation is usually performed when a wastewater treatment facility cannot achieve effluent discharge permit limits or when it experiences design, operational, analytical, or financial problems that limit the performance of the facility.
26	Sanitary Survey	Alternate	A Sanitary Survey is a logical, investigative approach to gather information to evaluate the condition of existing decentralized wastewater treatment systems, such as on-site or clustered systems.
27	State-Approved Municipal Wasteload Allocation Plan	Alternate	A Municipal Wasteload Allocation Plan is a water quality analysis done to determine the level of treatment that a specific project needs to provide, which is ultimately translated into an effluent limit or BMP in the NPDES permit.
28	Recently Promulgated Municipal, State, or Federal Regulation	Alternate	This document type is only for approved municipal, state, or federal regulations, not future or proposed regulations.
30	Administrative Order, Court Order, or Consent Decree	Alternate	These official enforcement documents are usually issued as the result of continued violation of a NPDES permit or other pollution control requirements.
31	NPDES or State Permit Requirement (with Schedule)	Alternate	Every point source discharging to waters of the United States is required to have a NPDES permit establishing effluent limitations (and other permit conditions) designed to protect the designated uses of the receiving waterbody.

Document No.	Document Type	Designation	Description
32	Draft CSO LTCP	Alternate	EPA requires communities with combined sewer systems to comply with the CSO Control Policy. To achieve this, most communities are required to develop and implement LTCPs. Annual CSO Reports for facilities without approved LTCPs are considered to be of this document type.
33	Approved CSO LTCP/Annual Report	Primary	EPA requires communities with combined sewer systems to comply with the CSO Control Policy. To achieve this, most communities are required to develop and implement LTCPs. Annual CSO Reports for facilities with approved LTCPs are considered to be of this document type.
34	Signed Draft LTCP from CSO LTCP-EZ Template	Alternate	The CSO LTCP Template for Small Communities (termed the “LTCP-EZ Template”) is a planning tool for small communities—defined by the CSO program as communities of 75,000 or fewer—that must develop LTCPs to address CSOs. A state may submit an LTCP-EZ as long as it has been signed by a local official.
35	State-Approved LTCP from CSO LTCP-EZ Template	Primary	The CSO LTCP Template for Small Communities (termed the “LTCP-EZ Template”) is a planning tool for small communities—defined by the CSO program as communities of 75,000 or fewer—that must develop LTCPs to address CSOs. A state may submit a state- or EPA-approved LTCP developed using the CSO LTCP-EZ Template to document projects.
40	Watershed-Based Plan	Alternate	A watershed-based plan that has not received Section 319 grant funding or has not been reviewed by EPA is considered to be of this document type. A “319 Watershed-Based Plan” is a plan that meets all nine minimum elements prescribed in EPA’s <i>Supplemental Guidelines for the Award of Section 319 Nonpoint Source Grants to States and Territories in FY 2003</i> .
41	Section 319 Funded or EPA Reviewed Watershed-Based Plan	Primary	An approved 319 Watershed-Based Plan that has been funded with Section 319 grant money or is reviewed by EPA is considered to be of this document type.
42	Approved State Annual 319 Workplan	Alternate	This document type includes statewide NPS Management Program Workplans and project implementation plans approved for Section 319(h) funding. A State Annual 319(h) Workplan is essentially the 319(h) grant application that a state has approved to obtain money from EPA. A 319(h) Project Implementation Plan is a specific plan for each NPS project on which the state has proposed to spend money.
43	Approved State 319 Project Implementation Plan	Primary	

Document No.	Document Type	Designation	Description
44	NPS Management Program/ Assessment Report	Alternate	An NPS Management Program is a four-year plan developed by a state to address NPS pollution problems. Elements in the program include identification of the BMPs and measures to reduce pollutant loading, programs to achieve implementation, a schedule with annual milestones, costs and identification of specific projects, certification that the laws of the state will provide adequate authority to implement the plan, and sources of funding and assistance.
45	NPS Management Program/ Groundwater Protection Strategy Report	Alternate	The goals of this major federal initiative addressing groundwater protection are to strengthen state groundwater programs; deal with significant, poorly addressed groundwater problems; create a policy framework within EPA for the guidance of groundwater policy; and strengthen the groundwater organization within EPA. Included in such a strategy are programs established under the Safe Drinking Water Act such as regulation of the injection of wastes into deep wells, the Wellhead Protection Program, and the Sole Source Aquifer program. Provisions in the Resource Conservation and Recovery Act for leaking underground storage tanks; goals in the Comprehensive Environmental Response, Compensation, and Liability Act for contaminated groundwater sites; and state grant programs in the CWA for groundwater protection activities are covered by this strategy.
46	NPS Management Program/Wellhead Protection Program and Plan	Alternate	As part of its overall groundwater protection strategy, each state must delineate wellhead protection areas for wells or well fields used for public water supply. Contaminant sources within the wellhead protection area must be identified and a management plan developed to protect the water supply in that area from contamination. Contingency plans for each public water supply system must be developed to ensure an appropriate response in the event that contamination occurs, and standards must be established for locating new wells so as to minimize the potential for contamination of the water supply.
47	NPS Management Program/Delegated Underground Injection Control Program Plan	Alternate	This plan describes EPA and state underground injection control programs established to protect potential underground sources of drinking water from contamination by injection wells.

Document No.	Document Type	Designation	Description
48	Source Water Assessment/Source Water Protection Plan	Alternate	<p>This plan describes the areas that supply public tap water, inventories contaminants and assess water system susceptibility to contamination, and informs the public of the results. Once completed, these assessments can be used to focus prevention resources on drinking water protection. EPA strongly encourages linking them to implementation of source water protection programs.</p> <p>Source Water Assessments identify the major potential sources of contamination to drinking water supplies. This information is used to determine how susceptible the water system is to contamination and could be helpful in justifying CWNS projects.</p>
49	NRCS Conservation Plan or Farm Plan	Alternate	<p>NRCS Farm Plans and Conservation Plans are documents developed by NRCS (or Conservation Districts) and farmers or landowners. Each one is a series of actions developed to meet a farmer's goals while protecting water quality and the natural resources. Some of the things considered in a plan are farm size, soils type, slope of the land, proximity to streams or water bodies, type of livestock or crops, the farmer's goals, resources such as machinery or buildings, and finances available. Farm Plans and Conservation Plans recommend practices to improve farm productivity, reduce the impact on the natural resources, and address potential water quality concerns.</p>
50	eFOTG	Alternate	<p>eFOTGs are the primary scientific references for NRCS. They contain technical information about the conservation of soil, water, air, and related plant and animal resources. eFOTGs used in each field office are localized so that they apply specifically to the geographic area for which they are prepared. Section I of the eFOTGs contains conservation practice costs, which might include the unit cost of some agricultural BMPs.</p>
51	State/Federal Agricultural Cost-Share Program Cost Tables	Alternate	<p>Some state and federal programs address agriculture's contribution to the NPS water pollution problem by providing financial incentives to farmers to install BMPs on their property.</p> <p>The Agriculture Cost-Share Program is one of the most common financial incentives used. Participating farmers receive a percentage of predetermined average costs of installed BMPs with the remaining fraction paid by farmers directly or through in-kind contributions.</p>
52	Professional Appraisal	Alternate	<p>The purchase of land or easements—usage rights—can be used to protect water quality or human health by preserving a determined level of ecosystem functions.</p>
53	Census of Agriculture	Alternate	<p>The Census of Agriculture is a complete count of U.S. farms and ranches and the people who operate them. The Census is conducted once every five years and looks at land use and ownership, operator characteristics, production practices, income, and expenditures. For more information, visit https://www.nass.usda.gov/AgCensus/.</p>

Document No.	Document Type	Designation	Description
54	CEAP-Cropland	Alternate	CEAP-Cropland is a sampling and modeling approach using data from representative crop fields, the National Resources Inventory, and farmer surveys to estimate impacts of conservation practices on the environment. Its goals are to 1) estimate the effects of conservation practices currently present on the landscape, 2) estimate the need for conservation practices and the potential benefits of additional conservation treatment, and 3) simulate alternative options for implementing conservation programs on cropland in the future. For more information, visit https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/technical/nra/ceap/na/?cid=nrcs143_014144 .
55	U.S. Forest Service Forest Inventory and Analysis Database	Alternate	The Forest Inventory and Analysis Program of the U.S. Forest Service provides the information needed to assess America's forests. The data provide critical status and trend information to resource managers, policy makers, investors, and the public through a system of annual resource inventory that covers both public and private forest lands across the United States. Forest Inventory and Analysis reports on status and trends in forest area and location; in the species, size, and health of trees; in total tree growth, mortality, and removals by harvest; in wood production and utilization rates by various products; and in forest land ownership. Find the database at https://apps.fs.usda.gov/fia/datamart/datamart.html .
56	National Association of State Foresters BMP Survey	Alternate	In order to provide a national-level evaluation of the effectiveness of BMPs, the National Association of State Foresters conducts periodic surveys of all state programs. The survey goals include identifying which silvicultural activities are covered by BMPs, cataloguing the approaches to BMP implementation adopted by each state and the agencies responsible, determining to what extent effectiveness monitoring is being carried out, summarizing BMP implementation rates, and determining the current level of budget and staffing dedicated to forest-related water quality protection. Find the survey at https://www.stateforesters.org/wp-content/uploads/2018/10/Protecting-Water-Quality-through-State-Forestry-BMPs-FINAL.pdf .
60	Municipal Storm Water Management Program Plan	Alternate	A Municipal Storm Water Management Program Plan is a plan submitted as part of a municipality's NPDES stormwater permit application or with a general permit notice of intent. It includes a description of the structural and source control measures to be implemented to reduce pollutants discharged in stormwater.
61	Stormwater Utility Feasibility Study	Alternate	A stormwater utility feasibility study assesses whether establishing a stormwater utility to pay for stormwater infrastructure costs would be beneficial to a community. The study could include anticipated capital projects and/or programmatic requirements, anticipated schedule and costs, and assessments of potential billing rates.


Document No.	Document Type	Designation	Description
71	Small Community Form	Primary	The DEP generates this document specifically to ask communities with 10,000 or fewer persons to provide states with information about their facilities and their clean watershed needs.
72	Information from an Assistance Provider	Alternate	For communities with populations of 10,000 or fewer, a statement of need from a technical assistance provider (e.g., state training center, health department, circuit rider) may be used to document projects. A health department report may also be included as supplemental documentation to demonstrate need. The technical assistance provider's signature must be included. If this document does not have cost, CETs can be used to estimate costs.
73	Asset Management Plan	Alternate	Asset management is the practice of managing infrastructure capital assets to minimize the total cost of owning and operating these assets while delivering the desired service levels. Many utilities use asset management to pursue and achieve sustainable infrastructure. A high-performing asset management program includes detailed asset inventories, O&M tasks, and long-range financial planning.
96	Excel Spreadsheet Annotations	n/a	This document type is used for spreadsheet templates developed by EPA, or similar state-generated templates, to annotate documents and show how costs are summed by category. Using one of the two EPA-developed templates, states can provide required and optional inputs for either 1) a single CWNS ID supported by multiple documents or 2) a single document to support multiple CWNS IDs.
101c	CWNS ID–Specific Output to State-Specific Approach (approved as primary)	Primary	This document type is used in conjunction with an EPA-approved state-specific approach for projects and costs to provide CWNS ID–specific information, if needed, to supplement information in the approach.
101d	CWNS ID–Specific Output to State-Specific Approach (approved as alternate)	Alternate	This document type is used in conjunction with an EPA-approved state-specific approach for projects or costs to provide CWNS ID–specific information, if needed, to supplement information in the approach.
Requires EPA Prior Approval			
99a	Other—Undesignated (submitted as primary)	Primary	A document that discusses a CWNS ID's projects and costs but is not listed as a preapproved document requires EPA headquarters approval before being used to support both projects and costs.

Document No.	Document Type	Designation	Description
99b	Other— Undesignated (submitted as alternate)	Alternate	A document that discusses a CWNS ID's projects or costs but is not listed as a preapproved document requires EPA headquarters approval before being used to support projects or costs.
100a	State Needs Surveys and other state forms (submitted as primary)	n/a	This document type allows states to submit state-specific forms that are used to collect project and cost information for the CWNS or other state uses. Document designation type is determined after EPA review; if approved, individual completed forms are submitted as document number 12a.
100b	State Needs Surveys and other state forms (submitted as alternate)	n/a	This document type allows states to submit state-specific forms that are used to collect project or cost information for the CWNS or other state uses. Document designation type is determined after EPA review; if approved, individual completed forms are submitted as document number 12b.
101a	State-Specific Approach (submitted as primary)	n/a	This document type allows states to propose approaches to assigning projects and costs that are specific to their state and not covered under a preapproved document. Document designation type is determined after EPA review.
101b	State-Specific Approach (submitted as alternate)	n/a	This document type allows states to propose approaches to assigning projects or costs that are specific to their state and not covered under a preapproved document. Document designation type is determined after EPA review.

Appendix H. Small Community Form

EPA allows small communities (with populations of 10,000 or fewer) to submit survey-generated documentation for needs. EPA has found that although these small communities have needs related to their wastewater, stormwater, decentralized systems, and NPS controls, they are less likely to have planning and costing documents available. The following pages show the inputs to the SCF that will be available in the form of an online form or hardcopy document.

State View: SCF Management Page


CWNS Data Entry Portal (DEP)
Viewing records for : Alabama [Contact Us](#)

Home
Enter Survey Data
Documents
Manage Small Community Forms
Administration ▼

All Small Community Forms for State

Use this table to create, monitor and process small community forms for loading the survey.

▼
Small Community Info

The Small Community Form (SCF) is meant for small communities that may have a difficult time fulfilling documentation requirements. You should not use the SCF if a community has documentation or is not considered "small." A CWNS facility is considered small if it meets the following criteria:

- The facility is **not** one of several facilities serving a community of 10,000 persons or more.
- The facility's wastewater system and its location is **not** within an urbanized area, so it is not a component of, and virtually indistinguishable from, surrounding adjacent entities (which are not small).
- The facility's wastewater system is **not** physically connected to a regional treatment authority serving 10,000 persons or more.

If a returned SCF indicates that one of the above does not apply to a community (e.g., the facility now serves more than 10,000 persons), then you should instruct the community to submit other documentation, as the SCF will no longer be accepted as documentation for that community.

▶
Small Community State Info

Small Community Form List
+ Add Small Community Form

Search

Actions ▼
✉ Send All Selected
🗑 Delete Selected

Selected	CWNS Number	Name	Contact Name	Contact Email	Status	Last Status Update	Total Amount (Not modeled)	Add Recipient Email	View
<input type="checkbox"/>	01000783001	HOLLIS CROSSROADS SEPTIC	Test		Sent to Local PE	12/14/2021 08:19	\$0		
<input type="checkbox"/>	01000785001	STEWARTVILLE SEPTIC TANKS	Test		In progress	10/07/2021 12:26	\$0		

Public View: SCF, Wastewater Example

Clean Watersheds Needs Survey Small Community Form

1. Does your facility have water-quality-related capital improvement needs? **Yes**

2. Do you have planning documents that report any of your needs (such as in a capital improvements plan or engineering report)? **Yes**

Please e-mail those documents to your state coordinator. The state environmental agency will enter your documented needs separately.

3. Do you have any undocumented needs? **Yes**

Please use this form to communicate those needs.

4. Do you have access to a Professional Engineer (consulting with or on staff) who will certify the costs of the undocumented needs? **Yes**

Please enter the contact information for the local professional engineer (PE).

Once you finish filling out the form, it will be sent to this person for their digital signature.

Local PE Name **PE Name**

Local PE Email **PE@email.com**

5. Do you want to use EPA cost estimation tools to estimate any of the costs? **Yes**

- Select Cost Estimation Tool(s):
- Wastewater: Treatment Plant Cost Estimation Tool
(Estimates the costs for constructing a new treatment plant or replacing, rehabilitating, upgrading treatment, expanding, or adding disinfection at an existing one.)
 - Combined Sewer Overflow Cost Estimation Tool**
(Estimates the cost for constructing a new CSO storage basin.)
 - Wastewater: Collection Cost Estimation Tool
(Estimates the costs for constructing a new wastewater conveyance facility or replacing/rehabilitating an existing one.)

Facility Information

Please complete the required fields and contact information.

* Indicates required field

CWNS ID **7888888892**Infrastructure Type **Wastewater*** Facility Name: **Test - SCF WWTP and Collection*** Authority Name: **Authority Name*** Facility Address: **Facility Address**

P.O. Box is not allowed. If a facility doesn't have an address, please indicate physical location with description instead (e.g., '5 miles south down Rt. 9 from City Hall'). Thank you!

* City: **City*** State: **VI*** Zipcode: **00000*** County: **County*** Owner Type: **Public** Private FederalContact Name: **Contact Name**Role/Title: **Role/Title**Phone: **#####** Extension: **###**

Fax:

Email: **email@email.com****Facility Types** [?]

Please select the facility type(s) for the infrastructure in your community. To add a facility, click the "Add a Facility" button and select facility type from the dropdown menu. To see more information about the facility types, click the "?" icon.

Facility Type	Planned Changes
Treatment Plant	Process Improvement Increase Level Of Treatment
Collection: Combined Sewers	Rehabilitation

Facility Discharges [?]

To add a facility discharge, click on the "Add Discharge" button and select from the dropdown menu. If your facility discharges to another facility, indicate the name and location so the state coordinator can clearly identify the facility.

Discharge	% of Discharge	Discharges To
Outfall To Surface Waters	100	
Total	100	

Effluent Information ?

Please complete the following fields for effluent information. Effluent information is required for wastewater treatment plant facilities and optional for honey bucket lagoons and storage facilities.

* Current Effluent Treatment Level: **Secondary**

* Is there Disinfection (e.g.,chlorine, UV) currently in place? No Yes

* Future Effluent Treatment Level: **Secondary**

* Will there be Disinfection (e.g., chlorine, UV) in the future? No Yes

Population Information (Wastewater) ?

Please complete the following fields for population information. Population information is required for separate and combined sewer collection facilities (for wastewater infrastructure types). Population is also required for decentralized facilities.

	Residential Population	
	2022	Projected Design Population 2042
Receiving Collection	7,100	7,800

**Flow Information** ?

Please complete the following fields for flow information.

	Current Design Flow (MGD)
Total Flow	1.00

Needs ⓘ

Report your community's needs by category.

If you have documents describing these costs, please send them to your state CWNS coordinator: .

*** Please select reason(s) for needed changes:**

- The project(s) is required to maintain compliance with a NPDES permit.
- The project(s) is necessary to obtain compliance with a new permit requirement.
- The project(s) is to increase capacity or improve treatment in advance of anticipated new permit requirements.
- The project(s) is to achieve or maintain compliance with a TMDL.
- The project(s) will prevent unregulated water quality or human health impacts.
- The project(s) improves water efficiency, improves energy efficiency, improves water conservation, addresses climate change, or improves resiliency.

Needs Category : Needs Category: I - Secondary Wastewater Treatment

Cost Method	Adjusted Amount	Project Description
Your estimate	1,200,000	Adding disinfection to the plant, along with improving the processes related to...

Needs Category : Needs Category: V - Combined Sewer Overflow (CSO) Correction

Cost Method	Adjusted Amount	Project Description
EPA's Cost Estimation Tool: CSO	100,000	Equalization basin

Local Official Certification

- I am the local official Please send to a local official for review

Name **Name**

Email **local.official@email.com**

Appendix I. State-Specific Approach and State Needs Survey and Other State Forms Templates

State-Specific Approach Submissions Template for Document Type 101a or 101b

Please indicate general information in the table below.

General Data Element	Response
State	
Author Name	
Date Created	
Infrastructure Type <i>(only one may be indicated)</i>	
Proposed Document Type <i>(only one may be indicated)</i>	<input type="checkbox"/> Approach identifying needed projects <u>and</u> estimating costs (101a) <input type="checkbox"/> Approach identifying needed projects <u>or</u> estimating costs (101b)

The required data elements for each approach are outlined below. Please respond to each as clearly and concisely as appropriate. If EPA review finds missing information with your approach, you will be requested to respond with the required information *within five business days*.

Please select the CWNS category(ies) the approach applies to in the table below. The approach may cover multiple categories. See Appendix A of the State Coordinator Manual for definitions.

2022 Category Number	Category Name	Applicable
I	Secondary Wastewater Treatment	<input type="checkbox"/>
II	Advanced Wastewater Treatment	<input type="checkbox"/>
III-A	Infiltration/Inflow (I/I) Correction	<input type="checkbox"/>
III-B	Sewer Replacement/Rehabilitation	<input type="checkbox"/>
IV-A	New Collector Sewers and Appurtenances	<input type="checkbox"/>
IV-B	New Interceptor Sewers and Appurtenances	<input type="checkbox"/>
V	Combined Sewer Overflow (CSO) Correction	<input type="checkbox"/>
VI-A	Gray Infrastructure	<input type="checkbox"/>
VI-B	Green Infrastructure	<input type="checkbox"/>
VI-C	General Stormwater Management	<input type="checkbox"/>
VII-A	NPS Control: Agriculture (Cropland)	<input type="checkbox"/>
VII-B	NPS Control: Agriculture (Animals)	<input type="checkbox"/>
VII-C	NPS Control: Silviculture	<input type="checkbox"/>
VII-E	NPS Control: Groundwater Protection (Unknown Source)	<input type="checkbox"/>
VII-F	NPS Control: Marinas	<input type="checkbox"/>
VII-G	NPS Control: Resource Extraction	<input type="checkbox"/>
VII-H	NPS Control: Brownfields/Superfund	<input type="checkbox"/>
VII-I	NPS Control: Storage Tanks	<input type="checkbox"/>

2022 Category Number	Category Name	Applicable
VII-J	NPS Control: Sanitary Landfills	<input type="checkbox"/>
VII-K	NPS Control: Hydromodification	<input type="checkbox"/>
VII-M	NPS Control: Other Estuary Management Activities	<input type="checkbox"/>
X	Water Reuse	<input type="checkbox"/>
XII	Decentralized Wastewater Treatment Systems	<input type="checkbox"/>
XIV	Desalination	<input type="checkbox"/>

Please provide a brief rationale for this approach: why is the approach needed and/or the best method to estimate your state's needs?

Please describe if your approach is based on another state-specific approach or based on another accepted model or estimation method. If neither, please describe how the method was created and any relevant supporting information (e.g., the credentials of the approach authors).

Describe if and how this method is used for planning purposes within your state.

Please either provide the supporting data set or describe databases that are or will be used in the approach. For example, if you have a state database for failing decentralized systems, you do not need to provide access to the database. Rather, describe the applicable records, what information is available for each record, and how that relates to your approach. Include any validation processes the state may engage in, if applicable.

If applicable, provide or describe supporting references for any data used.

For approaches that estimate costs, if applicable, provide the formulae or calculations you plan to use for your approach. (An Excel spreadsheet—though not required—is likely the most appropriate format.)

If your approach is not based on another state-specific approach approved by EPA (for the 2022 CWNS) or previously used for state planning purposes (as indicated above), please provide example output(s) for this methodology. The output may be generated using hypothetical data, rather than an actual CWNS ID's data, if needed.

State Needs Survey and Other State Forms Submissions Template for Document Type 100a or 100b

Please indicate general information in the table below.

General Data Element	Response
State	
Contact Name	
Date Created	
Infrastructure Type(s)	
Community Size(s) Included in Survey	<input type="checkbox"/> Small <input type="checkbox"/> Non-small <input type="checkbox"/> Both
Proposed Document Type (<i>only one may be indicated</i>)	<input type="checkbox"/> Approach identifying needed projects <i>and</i> estimating costs (100a) <input type="checkbox"/> Approach identifying needed projects <i>or</i> estimating costs (100b)
<input type="checkbox"/> I have ensured that the submitted costs are not otherwise documented in the 2022 CWNS (e.g., in an existing CIP).	

Please provide a copy of your survey along with any instructions provided to the recipient. Use this template to describe how your survey aligns with CWNS policies. The submittal requirements for prior approval of a state survey are outlined below and differ based on the community size(s) being surveyed. Please complete:

- Section I if you will be only collecting and reporting needs data from small communities. (Section 5.22 of the State Coordinator Manual defines “small community.”)
- Section II if you will only be collecting needs data for non-small communities, or if you are collecting needs data with no differentiation of data collection requirements based on community size.
- Both Section I and II if you plan to collect and report needs data for both small and non-small communities and you have different data collection requirements based on community size.

Please respond to each question as clearly and concisely as appropriate. If EPA needs to request missing or additional information, you will be requested to respond with the required information *within five business days*.

I. Small Communities

Please describe how your state ensured only small communities respond to the survey or how your state plans to only report data for small communities. Provide your state’s definition for “small community” (if different from the CWNS definition).

Describe how your state collected or plans to collect costs. Does the survey request costs at the category level (e.g., “Secondary Wastewater Treatment”) at a minimum? If not, describe how you will assign costs to the CWNS categories and annotate the category for each cost when you upload the documentation.

Describe how your state ensured that the community representatives completing the surveys had knowledge of needed infrastructure projects and their estimated costs (e.g., by including a certification statement, requiring only certain survey recipients be allowed to complete).

Describe any technical data—such as flow, population served, effluent treatment level, discharge type, or location—that your survey collects (optional).

II. Non-small Communities

Describe how your state collected or plans to collect project descriptions detailed enough to meet the documentation requirements outlined in Section 4.4.2 of the State Coordinator Manual.

Describe how your state validated or will validate the submitted costs in the state survey (e.g., an audit process, required PE signature).

List any technical data—such as flow, population served, effluent treatment level, discharge type, or location—that your survey collects (optional).

Appendix J. Data Areas Table

Not all data areas and elements are required for or applicable to all facilities reported in the CWNS. Table J-1 indicates which data areas are required (R), optional (O), and not applicable (n/a) for each facility type. Required areas are shown in red, optional in yellow, and n/a in gray (these will not be accessible in the DEP).

As an example of how to use this table, consider a CWNS ID with a “collection: interceptor sewers” facility type. For this CWNS ID, the required elements are facility information, point of contact, location, areas related to need, needs by document, and capital costs. Optional areas in yellow are permits, discharge, unit processes, asset management, and CETs. Fields in gray that do not apply are population, flow, and effluent treatment. Fields that do not apply will not appear in the DEP for this CWNS ID.

Table J-1. Data Areas by Infrastructure Type

Infrastructure Type	Facility Type	Data Area													
		Technical Data											Needs Data ^a		
		Facility Information	Permits	Point of Contact	Location	Areas Related to Needs	Population	Flow	Discharge	Effluent Treatment	Unit Process	Asset Management	Needs by Document	Capital Costs	CETs
Wastewater	Treatment plant	R	O	R	R	R	n/a	R	R	R	O	O	R	R	O
	Collection: separate sewers	R	O	R	R	R	R	n/a	R	n/a	O	O	R	R	O
	Collection: combined sewers	R	O	R	R	R	R	n/a	R	n/a	O	O	R	R	O
	Collection: interceptor sewers	R	O	R	R	R	n/a	n/a	R	n/a	O	O	R	R	O
	Water reuse	R	O	R	R	R	n/a	n/a	O	n/a	O	O	R	R	n/a
	Biosolids handling	R	O	R	R	R	n/a	n/a	O	n/a	O	O	R	R	n/a
	Honey bucket lagoon	R	O	R	R	R	n/a	O	O	O	O	O	R	R	n/a
	Storage facility	R	O	R	R	R	n/a	O	O	O	O	O	R	R	O
	Collection: pump stations	R	O	R	R	R	n/a	n/a	O	n/a	O	O	R	R	O
	Desalination (wastewater infrastructure)	R	O	R	R	R	n/a	R	O	n/a	O	O	R	R	n/a

Infrastructure Type	Facility Type	Data Area													
		Technical Data											Needs Data ^a		
		Facility Information	Permits	Point of Contact	Location	Areas Related to Needs	Population	Flow	Discharge	Effluent Treatment	Unit Process	Asset Management	Needs by Document	Capital Costs	CETs
Stormwater	Phase I MS4	R	O	R	R	R	n/a	n/a	O	n/a	O	O	R	R	O
	Phase II MS4	R	O	R	R	R	n/a	n/a	O	n/a	O	O	R	R	O
	Non-traditional MS4	R	O	R	R	R	n/a	n/a	O	n/a	O	O	R	R	O
	Unregulated community	R	O	R	R	R	n/a	n/a	O	n/a	O	O	R	R	O
Decentralized Wastewater	OWTS	R	O	R	R	R	R	n/a	O	n/a	O	O	R	R	O
	Clustered system	R	O	R	R	R	R	n/a	O	n/a	O	O	R	R	O
NPS Pollution	Agriculture—Cropland	R	O	R	R	R	n/a	n/a	n/a	n/a	O	n/a	R	R	n/a
	Agriculture—Animals	R	O	R	R	R	n/a	n/a	n/a	n/a	O	n/a	R	R	n/a
	Silviculture	R	O	R	R	R	n/a	n/a	n/a	n/a	O	n/a	R	R	n/a
	Marinas	R	O	R	R	R	n/a	n/a	n/a	n/a	O	n/a	R	R	n/a
	Resource extraction	R	O	R	R	R	n/a	n/a	n/a	n/a	O	n/a	R	R	n/a
	Brownfields/Superfund	R	O	R	R	R	n/a	n/a	n/a	n/a	O	n/a	R	R	n/a
	Storage tanks	R	O	R	R	R	n/a	n/a	n/a	n/a	O	n/a	R	R	n/a
	Sanitary landfills	R	O	R	R	R	n/a	n/a	n/a	n/a	O	n/a	R	R	n/a
	Groundwater—unknown source	R	O	R	R	R	n/a	n/a	n/a	n/a	O	n/a	R	R	n/a
	Hydromodification	R	O	R	R	R	n/a	n/a	n/a	n/a	O	n/a	R	R	n/a
	Estuary management	R	O	R	R	R	n/a	n/a	n/a	n/a	O	n/a	R	R	n/a
Desalination (NPS control infrastructure)	R	O	R	R	R	n/a	O	n/a	n/a	O	n/a	R	R	n/a	

^a Not required if change type is “no change.”

Appendix K. 301(h) Ocean Discharge Waivers

Secondary treatment is the minimum level of treatment required for discharges from all municipal wastewater treatment facilities by the CWA. Facilities granted ocean discharge waivers under Section 301(h) are exempt from this requirement. Table K-1 lists facilities with 301(h) waivers that may report less than secondary treatment effluent level in the DEP.

Table K-1. Facilities with 301(h) Waivers

301 (h) Waiver Recipients	State	2012 CWNS ID	Facility Name in 2012 CWNS
Skagway	Alaska	02000122001	SKAGKWAY WWTP
Haines	Alaska	02000120001	HAINES WWTP
Ketchikan	Alaska	02000108001	KETCHIKAN STP
Petersburg	Alaska	02000112001	Petersburg WWTP
Wrangell	Alaska	02000118001	WRANGELL
Sitka	Alaska	02000105001	SITKA WASTEWATER FACIL
Anchorage	Alaska	02000106001	POINT WORONZOF, JOHN ASPLUND WWTP
Whittier	Alaska	02000300001	WHITTIER STP
Pelican	Alaska	02000279001	PELICAN STP
Tafuna (Pago Pago)	American Samoa	60000001002	TAFUNA WWTF
Utulei	American Samoa	60000001001	UTULEI WWTF
San Diego	California	06009031001	Point Loma WWTF
Bayville	Maine	23000164001	BAYVILLE WWTF
Eastport	Maine	23000097001	EASTPORT WWTF
Eastport/Quoddy	Maine	23000097002	QUODDY VILLAGE WWTF
Lubec	Maine	23000129001	LUBEC WWTP
North Haven	Maine	23000134001	NORTH HAVEN, WWTF
Northport Village (Belfast)	Maine	23000094001	Northport Village Corp.(akaBAYSIDE)
Searsport	Maine	23000103001	SEARSPORT WWTF
Stonington	Maine	23000146001	STONINGTON WPCF

Appendix L. Unit Process Lists

Table L-1. List of Wastewater Unit Processes

Treatment Stage	Unit Process
Preliminary treatment	Screening
	Flow Equalization
Primary treatment	Flotation
	Primary Clarification or Sedimentation
Secondary treatment	Attached Growth, Aerobic
	Attached Growth, Anaerobic
	Biological Treatment, Other
	Lagoon, Aerobic
	Lagoon, Anaerobic
	Lagoon, Facultative
	Suspended Growth, Aerobic
	Suspended Growth, Anaerobic
	Sludge Blanket, Anaerobic
Nutrient removal and additional treatment	Chemical Addition, Alum
	Chemical Addition, Ferric Chloride
	Chemical Addition, Polymer
	Chemical N Removal
	Chemical P Removal
	Constructed Wetland
	Biological N Removal
	Biological P Removal
	Filtration
Full advanced treatment for potable reuse	Coagulation
	Flocculation
	Media Filtration
	Sedimentation
	Microfiltration (MF)
	Ultrafiltration (UF)
	Reverse Osmosis (RO)
	Electrodialysis (ED)
	Electrodialysis reversal (EDR)
	Nanofiltration (NF)
	Granular activated carbon (GAC)
	Ion exchange
	Biologically Active Filtration (BAF)
	Stabilization, Sodium hydroxide
	Lime stabilization
Stabilization, Calcium chloride for stabilization	
Disinfection	Dechlorination
	Disinfection, Chlorine/chloramine

Treatment Stage	Unit Process
	Disinfection, Thermal
	Disinfection, UV
	Advanced oxidation process
	Disinfection, ozone
	Disinfection, other chemical
Solids handling	Biosolids Aerobic Digestion
	Biosolids Anaerobic Digestion with Energy Recovery
	Biosolids Anaerobic Digestion without Energy Recovery
	Biosolids Chemical Addition
	Biosolids Drying
	Biosolids Incineration
	Biosolids Mechanical Dewatering
Biosolids Thickening	

Table L-2. List of Stormwater Unit Processes

Treatment Stage	Unit Process
Gray infrastructure	Gray stormwater conveyance
	Manufactured devices
	Underground storage
	Real-time controls for CSO management
Green infrastructure	Wet pond
	Dry pond
	Bioretention
	Constructed wetlands
	Permeable pavement
	Green roof
	Cistern
	Infiltration trench
	Rain barrel
	Vegetated swale
	Buffer strip
Urban riparian restoration	

Table L-3. List of Decentralized Unit Processes

Treatment Stage	Unit Process
Decentralized	Aeration
	Evapotranspiration bed
	Filter
	Grinder pump—low-pressure sewer
	Holding tank

Treatment Stage	Unit Process
	Lagoon
	Leach field
	Mound system
	Other non-centralized treatment
	Septic tank
	Trickling filter (unspecified media)
	Wetland

Appendix M. State Correction Requested Findings

Findings—Standard State Correction Requested Text
Minor typographical errors have been found or corrected. See additional information in the message field if applicable.
Documentation is older than six years, please complete the older documentation certification process.
Costs are included in the DEP, but no project description is included in the documentation.
Costs have not been annotated/entered for an annotated project description. Please annotate costs.
Wastewater and decentralized treatment needs for facilities located on tribal lands are included in the IHS STARS SDS survey. Please remove these ineligible needs.
Project(s) appear to be ineligible for CWSRF funding. Please clarify CWSRF funding eligibility. See additional comments for more information if applicable.
Facility type described in documentation does not appear to match facility selected. Please revise to correct facility type.
Change type(s) described in documentation do not appear to match change types selected. Please revise to correct change types.
Project description and/or costs are not associated with a CWNS ID. Please provide more annotation or clarifying information.
It appears that the project is outside of the CWNS 20 year planning horizon. Please clarify if the construction date is within the survey's 20 year plan horizon or remove associated costs.
The document date is incorrect. Please review and correct this error.
The CWNS ID has projects associated with more than one base date within the same document. Please upload a second document and indicate the second base date in the DEP.
Document is unreviewable. Please upload the correct document for review.
Other
There is an incomplete sewershed (i.e., the CWNS ID is missing or not connected to a treatment plant or collection system). Please review the sewershed for this CWNS ID and add missing facilities.
The facility's combination of discharge type and effluent type are not consistent. Please review and confirm or correct these inconsistencies.
Costs entered for a specific project are incorrect or do not match the annotated costs. Please review your entered costs and annotated costs.
Effluent type does not match documented Category/Infrastructure type. Please confirm or correct the Effluent Type so that it matches the documented Category/Infrastructure type.
Honey bucket lagoon has been selected in an urban area. Please confirm that this facility type was not selected in error.
The location point selected is in the wrong state. Please correct the location marker.
Costs for more than one alternative have been entered into the DEP. Please enter the costs for only the selected alternative.
Project costs appear to have been placed in incorrect CWNS category or it is not possible to determine category based on project description. Please change to the correct category.
Ineligible costs have been included in the DEP. Please remove all operation and maintenance costs.
Payroll or fringe costs have been included in the DEP. Please remove all payroll or fringe costs.
Costs for land not specifically required for construction or staging of equipment is included in the DEP. Please remove these land costs.

Findings—Standard State Correction Requested Text
Costs appear to account for inflation. Please update costs to the base date.
Costs appear to include demolition that is not associated with new construction. Please remove any stand-alone demolition costs as these are ineligible.
Documentation indicates that the project or a portion of the project may have already been funded or started. Please remove all costs for projects or portions of projects that have already been funded or provide a statement clarifying why they should be included.
Cost estimation tool inputs are not present in the document. Please clarify input location within the document or submit additional documentation for cost estimation tool inputs.
Based on project description the incorrect cost estimation tool was selected. Please revise cost estimation tool selection and resubmit inputs.
Based on project description, the incorrect construction type was selected for the stormwater cost estimation tool. Please revise the construction type for the stormwater cost estimation tool and resubmit inputs.
Entered costs appear to have been double counted. Please remove duplicate costs.
Cost data appears inconsistent with other technical data. Please review and confirm or correct these inconsistencies.
EPA calculates different category totals but cannot identify the source of the discrepancy. Please review your costs by category and confirm or correct these inconsistencies.
The document does not meet document type 5 requirements found at section 3.6 of the State Coordinator Manual. Please revise and resubmit for preapproval.
The approach or survey form used to estimate or collect needs has not been prior approved. Please revise and resubmit for preapproval.
No annotation was found for the uploaded document. Please annotate within the PDF, in the portal, or an attached spreadsheet.
Handwritten annotation is illegible. Please complete all required annotations in a legible manner or annotate in the DEP.
Document title is not easily identifiable. Please annotate document title.
Document date is not easily identifiable. Please annotate document date.
Document author is not easily identifiable. Please annotate document author.
Base Month/Year of cost information date does not appear to match document. Please revise to correct date.
Document annotation does not appear to include categories/subcategories for all costs for this CWNS ID. Please annotate all categories/subcategories of costs.
Costs are included in the DEP, but no project description is included in the documentation. Please annotate project description.
The uploaded document includes more than one designated document type (e.g. IUP and Engineer's Study). Please upload each document type separately.
Costs for alternatives were not averaged when entered into the DEP. Please enter the costs for only the selected alternative.
EPA calculates different category totals and identified the discrepancy. Please review your costs by category and confirm or correct these inconsistencies.