

Appendix B – Collection Instrument and List of Codes

The following pages present the state data collection instrument.

Eighth Drinking Water Infrastructure Needs Survey And Assessment

U.S. Environmental Protection Agency
Washington, DC 20460

OMB Control No.: 2040-NEW
Approval Expires: MM/DD/YYYY
Federal PWSID No.: XX1234567
Version: DRAFT

Please verify or correct the following information:

	Check if Correct as Printed	Corrected Information <i>(Fill in only if preprinted information is missing or incorrect)</i>
Name of System (Community):	☐	
Name of Contact:	☐	
Street Address:	☐	
Street Address, line 2:	☐	
City:	☐	
State:	☐	
Zip Code:	☐	
Population Served (if wholesaler, include consecutive population as appropriate):	☐	
Number of Connections (not including consecutive systems):	☐	
Total System Design Capacity (in MGD):	☐	
Total Length of Pipe in System (in Feet):	☐	
Source Water Type (Ground, Surface/GWUDI, etc.):	Check All That Apply:	☐ Ground ☐ Purchased Ground ☐ Surface/GWUDI ☐ Purchased Surface/GWUDI
Ownership Type:	Check All That Apply:	☐ Public ☐ Federal Government ☐ Investor-Owned or Private Non-Profit
This collection of information is approved by OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. (OMB Control No. 2040-NEW). Responses to this collection of information are voluntary (Sections 1452(h) and 1452(j)(4) of the Safe Drinking Water Act SDWA, as amended by America's Water Infrastructure Act of 2018). An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The public reporting and recordkeeping burden for this collection of information is estimated to average 5.67 hours per response.		
Send comments on the Agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden including through the use of automated collection techniques to the Director, Regulatory Support Division, U.S. Environmental Protection Agency (2621T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.		

State Use Only	
State Reviewer: _____	Telephone Number: _____
This information was collected primarily (select one):	☐ From the system ☐ Via a state contractor in coordination with the system ☐ Via a state contractor without coordination with the system ☐ Via the state in coordination with the system ☐ Via the state without coordination with the system
I reviewed and accepted this submission. I confirm that it conforms with DWINSA guidelines and meets the standards for documentation. This submission reflects information that is true and correct to the best of my knowledge.	☐ Yes
I made edits to the survey response (select the best option):	☐ Yes ☐ No ☐ Not Applicable (state completed the survey submission with or without coordination with the system)
If you did make edits, please indicate the information edited (choose all that apply):	☐ Front page (system information) ☐ Project coding ☐ Project documentation ☐ Added project(s) ☐ Other (please briefly describe): _____
Information provided for this survey can be requested by the public.	

Project Table

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[illegible]

Transmission, Distribution and Storage Inventory

EPA used construction material information for specific infrastructure in the 7th DWINSA to estimate the 20-year demand for iron and steel represented by Needs Survey projects. This tab is optional for the 8th DWINSA and is pre-populated with 7th DWINSA data.

Pipe Inventory Table

<u>Material Type for Existing Pipe</u>	<u>Length of Existing Pipe (feet)</u>	<u>Material Likely Used For Replacement of Existing Pipe</u>					
<u>Plastic</u> (such as HDPE, PVC, PE)		Plastic ☐	DI ☐	CI ☐	AC ☐	Unknown ☐	Other (please specify): ☐
<u>Ductile Iron (DI)</u>		Plastic ☐	DI ☐	CI ☐	AC ☐	Unknown ☐	Other (please specify): ☐
<u>Cast Iron (CI)</u>		Plastic ☐	DI ☐	CI ☐	AC ☐	Unknown ☐	Other (please specify): ☐
<u>Asbestos Cement (AC)</u>		Plastic ☐	DI ☐	CI ☐	AC ☐	Unknown ☐	Other (please specify): ☐
<u>Unknown</u>		Plastic ☐	DI ☐	CI ☐	AC ☐	Unknown ☐	Other (please specify): ☐
<u>Other (please specify below):</u>		Plastic ☐	DI ☐	CI ☐	AC ☐	Unknown ☐	Other (please specify): ☐

<u>New Pipe Project Materials</u>	<u>Material Likely Used for New Pipe Projects (extensions and looping)</u>						
What is the most common material used by this system for new pipe installation (extensions or looping?)	Plastic ☐	DI ☐	CI ☐	AC ☐	Unknown ☐	Other (please specify): ☐	Multiple: ☐
If you selected "Multiple", please indicate the two most common materials used for new pipe projects.	Plastic ☐	DI ☐	CI ☐	AC ☐	Unknown ☐	Other (please specify): ☐	
Please use the box to the right to describe any policy the system has regarding new pipe materials (e.g. HDPE used for mains <6" in diameter; DI used for all other mains).							

In the Storage Inventory tables below, please identify the number of elevated and ground level storage tanks in your system, the material of the storage tanks, and the type of material likely to be used for replacements and new tanks.

Ground Storage Inventory Table

<u>Material Type for Existing Tanks</u>	<u>Number of Existing Ground Storage Tanks</u>	<u>Material Likely Used For Future Replacement Tanks</u>					
<u>Welded or Bolted Steel (WS)</u>		WS ☐	GFS ☐	FG ☐	Concrete ☐	Unknown ☐	Other (please specify): ☐
<u>Glass Fused to Steel (GFS)</u>		WS ☐	GFS ☐	FG ☐	Concrete ☐	Unknown ☐	Other (please specify): ☐
<u>Fiberglass (FG)</u>		WS ☐	GFS ☐	FG ☐	Concrete ☐	Unknown ☐	Other (please specify): ☐
<u>Concrete</u>		WS ☐	GFS ☐	FG ☐	Concrete ☐	Unknown ☐	Other (please specify): ☐
<u>Unknown</u>		WS ☐	GFS ☐	FG ☐	Concrete ☐	Unknown ☐	Other (please specify): ☐
<u>Other (please specify):</u>		WS ☐	GFS ☐	FG ☐	Concrete ☐	Unknown ☐	Other (please specify): ☐

Elevated Storage Inventory Table

<u>Material Type</u>	<u>Number of Elevated Storage Tanks</u>	<u>Material Likely Used For Future Replacement</u>			
<u>Welded or Bolted Steel (WS)</u>		WS ☐	Composite ☐	Unknown ☐	Other (please specify): ☐
<u>Composite (e.g. steel tank w/concrete pedestal)</u>		WS ☐	Composite ☐	Unknown ☐	Other (please specify): ☐
<u>Unknown</u>		WS ☐	Composite ☐	Unknown ☐	Other (please specify): ☐
<u>Other (please specify):</u>		WS ☐	Composite ☐	Unknown ☐	Other (please specify): ☐

Potential Funding Barrier Supplemental Questions

1 *If your system has user rates, when is the last time your system increased rates to reflect changing operations and maintenance costs? (e.g., filter media replacement, purchase of chemicals, operator salaries)*

- a. ☐ Within the last year
- b. ☐ 2-5 years
- c. ☐ 5-10 years
- d. ☐ Over 10 years ago
- e. ☐ My water system's operations and maintenance costs have not significantly changed
- f. ☐ Not applicable
- g. ☐ Unsure

2 *How much do long-term operation and maintenance costs (for example, filter media replacement, increased power or chemical costs, needing a certified operator or differing operator certifications) factor into decision making when selecting a capital improvement project option that addresses a new need (as opposed to a one-for-one replacement of existing infrastructure that has reached the end of its useful life)?*

- a. ☐ Significant consideration
- b. ☐ Moderate consideration
- c. ☐ Not considered
- d. ☐ Unsure

3 *Does your water system depend on Drinking Water State Revolving Fund (DWSRF) assistance (loans or grants) to fund capital improvement projects?*

- a. ☐ No, my water system does not pursue DWSRF assistance
- b. ☐ My water system applies for only partial funding for projects as needed
- c. ☐ My water system applies for only my largest capital improvement project(s)
- d. ☐ My water system applies for all or most planned capital improvement projects
- e. ☐ My water system typically only applies for DWSRF funding to refinance already funded projects
- f. ☐ Unsure

4 *How many years does your system's primary planning document cover? (for example, Capital Improvement Plan (CIP), water system plan, master plan, integrated master plan)*

- a. ☐ My water system does not have one
- b. ☐ Up to 5 years
- c. ☐ Up to 10 years
- d. ☐ Up to 20 years
- e. ☐ More than 20 years

- 5 ***Managerial capacity is the ability of a water system to conduct its affairs enabling the system to achieve and maintain compliance with Safe Drinking Water Act (SDWA) requirements. Which of the following aspects of managerial capacity are the most concerning for your water system in the next ten years? *Select your top two****

- a. ☐ Having a sufficient number of staff
- b. ☐ Having appropriately certified and qualified operators
- c. ☐ Having effective succession planning and retention strategies
- d. ☐ Understanding regulatory requirements
- e. ☐ Communicating with customers and/or regulators
- f. ☐ Establishing and implementing Standard Operational Procedures and policies
- g. ☐ Developing and managing information systems

Optional: Provide additional details here regarding your response.

- 6 ***Financial capacity is the ability of a system to acquire and manage sufficient financial resources to allow the system(s) to achieve and maintain compliance with Safe Drinking Water Act (SDWA) requirements. Which of the following aspects of financial capacity are the most concerning for your system in the next ten years? *Select your top two****

- a. ☐ Having appropriate accounting practices and recordkeeping
- b. ☐ Developing and maintaining an investment strategy
- c. ☐ Establishing and maintaining a cash reserve
- d. ☐ Having revenue to cover expenses (e.g., having an adequate rate structure)
- e. ☐ Having an awareness of your non-revenue water
- f. ☐ Collecting bill payments in a timely fashion
- g. ☐ Having credible financial status (e.g., positive credit ratings, bonds and assurances, low debt/equity ratio)
- h. ☐ Other (please specify below)

Optional: Provide additional details here regarding your response.

Technical capacity is the physical and operational ability of a water system to meet SDWA requirements.
7 Which of the following aspects of technical capacity are the most concerning for your water system in the next ten years? *Select your top two*

- a. ☐ Evaluating and recording asset conditions and/or life expectancy
- b. ☐ Developing a Capital Improvement Plan (CIP)
- c. ☐ Developing and validating water audits
- d. ☐ Effectively treating water to meet SDWA compliance requirements
- e. ☐ Understanding the system's technical and operational characteristics
- f. ☐ Developing and implementing source water protection plans
- g. ☐ Having the ability to meet current and future demands

Optional: Provide additional details here regarding your response.

8 The 7th DWNSA identified that the top three challenges for operator hiring difficulty were the lack of interest, lack of knowledge, and lack of candidates. What aspects of these challenges does your water system see most often? *Select up to three of the most applicable *

- a. ☐ There is a shortage of interested candidates
 - b. ☐ There is a shortage of qualified candidates
 - c. ☐ Potentially interested candidates do not know about the career field
 - d. ☐ Potentially interested candidates do not know where to search for operator jobs
 - e. ☐ Developmental programs do not exist to bring in entry-level operators (for example, onboarding apprentice-level staff)
 - f. ☐ Potential applicants perceive that obtaining and/or maintaining a license is difficult
 - g. ☐ Unable to offer competitive wages/compensation
 - h. ☐ Other (please specify)
-

9 Does your water system currently have difficulty in retaining licensed operators?

- a. ☐ Yes
- b. ☐ No
- c. ☐ Unsure

10 Which of the following are effective retention and/or recruiting strategies for licensed operators that are currently used by your water system? *Select up to three of the most applicable*

- a. ☐ Providing retention and/or signing bonuses
 - b. ☐ Hosting a booth at job fairs
 - c. ☐ Advertising jobs through professional organizations
 - d. ☐ Providing onboarding and/or mentoring developmental programs for employees
 - e. ☐ Contracting out to fill/supplement employee shortfall to offset large amounts of overtime hours of existing employees
 - f. ☐ Providing support for continuing education requirements
 - g. ☐ Supporting professional organization involvement (e.g., providing opportunities to attend conferences and/or compete in local or regional water-related competitions)
 - h. ☐ Other (please specify)
-

- 11** *What was your system's annual drinking water infrastructure capital expenditure for the past four years? If an annual figure is unavailable, please provide an average or estimate.*

2022: _____

2023: _____

2024: _____

2025: _____

Or the average/estimate across all years on a per year basis:

- 12** *How much pipe do you anticipate replacing within the next 20 years?*

- a. ☐ I do not anticipate performing this type of project.
- b. ☐ Up to 5% of my system's length of distribution and transmission pipe.
- c. ☐ Up to 10% of my system's length of distribution and transmission pipe.
- d. ☐ Up to 15% of my system's length of distribution and transmission pipe.
- e. ☐ Up to 20% of my system's length of distribution and transmission pipe.
- f. ☐ Up to 25% of my system's length of distribution and transmission pipe.
- g. ☐ Up to 50% of my system's length of distribution and transmission pipe.
- h. ☐ Over 50% of my system's length of distribution and transmission pipe.
- i. ☐ Prefer not to answer

- 13** *What is the approximate average age of your water distribution mains?*

- a. ☐ Less than 10 years
- b. ☐ 10-20 years
- c. ☐ 21-40 years
- d. ☐ 41-60 years
- e. ☐ More than 60 years
- f. ☐ Not sure

- 14** *What is the approximate average age of your well(s)?*

- a. ☐ Less than 10 years
- b. ☐ 10-20 years
- c. ☐ 21-40 years
- d. ☐ 41-60 years
- e. ☐ More than 60 years
- f. ☐ Not sure
- g. ☐ Not applicable. My system does not have any wells

- 15** *What is the approximate average age of your storage tank(s)?*

- a. ☐ Less than 10 years
- b. ☐ 10-20 years
- c. ☐ 21-40 years
- d. ☐ 41-60 years
- e. ☐ More than 60 years
- f. ☐ Not sure
- g. ☐ Not applicable. My system does not have any tanks

Source, Treatment, and Pumping Inventory

To ensure all potential source, treatment, and pumping projects are considered, it may be helpful to complete some or all of this inventory table. However, completion of this table is not required.

- **Source Projects** are all projects related to collecting and pumping raw water. This includes wells, surface water intakes, springs, off-stream raw water storage, well pumps and raw water pumps.
- **Treatment Projects** are all projects related to disinfection, filtration, or other treatment processes for ground or surface water sources, or for treatment applied in the distribution system.
- **Pumping Projects** are related to distribution system booster pump stations, finished water pumps, and water-haul vehicles.

Source Water						
Inventory		Needing Replacement		Needing Rehabilitation		New Infrastructure Needs
Total Number and Capacity of Existing Wells or Springs:		Wells (pumps included) or Springs:		Wells (pumps included) or Springs:		Does your system have additional source water capacity needs to meet the needs of current users? ☐ Yes ☐ No
Total Number and Capacity of Existing Surface Water Sources:		Existing Surface Water Intakes (excluding pumps):		Existing Surface Water Intakes (excluding pumps):		
Total Number and Capacity of Existing Pumps (excluding booster pump stations):		Existing Groundwater Pumps (if wells not listed):		Existing Groundwater Pumps (if wells not listed):		If yes, how many additional sources are necessary?
		Existing Raw Surface Water Pumps:		Existing Raw Surface Water Pumps:		
Treatment						
Inventory		Needing Replacement		Needing Expansion/Upgrading or Rehabilitation		New Infrastructure Needs
For the sources identified above, enter the number of locations where the following treatment is applied:						Does your system have additional treatment needs for provision of additional public health protection or for aesthetic concerns? ☐ Yes ☐ No
Disinfection (including booster disinfection):		Disinfection:		Disinfection:		
Filtration:		Filtration:		Filtration:		If yes, how much additional treatment is necessary?
Chemical removal or addition:		Chemical treatment:		Chemical treatment:		

Pump Stations and Water-Hauling Trucks						
Inventory		Needing Replacement		Needing Rehabilitation		New Infrastructure Needs
Total Number and Capacity of Existing Booster Pump Stations:		Number of Existing Booster Pump Stations:		Number of Existing Booster Pump Stations:		Does your system have additional booster pumping needs to meet the needs of current users?
						☐ Yes ☐ No
						If yes, how much additional booster pumping capacity is necessary?
Total Number of Utility-Owned Water-Haul Vehicles:		Number of Existing Water-Haul Vehicles needing replacement:		(Rehabilitation of water-haul vehicles is considered to be O&M and is not included in the Needs Survey.)		Does your system need additional water-haul vehicles?
						☐ Yes ☐ No
						If yes, how many are needed? (Independently documented water-haul vehicles may be included as an "Other" type of need using code W10)

Meters, Service Lines, Backflow Prevention Devices/Assemblies, Valves, etc.

Projects for meters, service lines, backflow prevention devices and assemblies, valves, and other miscellaneous projects are recorded in this section to accommodate entries of multiple identical items on one line in the project table.

Record only projects that are not a part of another project (e.g., water main replacement projects will already include valves and other appurtenances).

EPA requires documentation of all projects provided. Applicable types of documentation are presented in List 4 of the Lists of Codes.

Use only existing documentation of cost. We do not expect you to develop new cost estimates.

To ensure all potential projects are considered, it may be helpful to complete some or all of this inventory table. However, completion of this table is not required.

Inventory		Needing Replacement		New Infrastructure Needs	
Total Number of Existing Water Meters:		Number of Water Meters:		Number of Water Meters:	
Total Number of Existing Backflow Prevention Devices/Assemblies:		Number of Backflow Prevention Devices/Assemblies:		Number of Backflow Prevention Devices/Assemblies:	
Total Number of Valves:		Number of Valves:		Number of Valves:	
Total Number of Service Lines:					

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[illegible]

Respondent Information

Please provide the following information in case we need to contact you for clarification or additional explanation of any of your responses.

Contact Person (Person who completed this questionnaire):

Sign or Initial:	_____	Telephone Number:	_____
First Name:	_____	E-mail Address:	_____
Middle Initial:	_____	Best Time to Reach You:	_____
Last Name:	_____		
Title:	_____		
Mailing Address:	_____		
Mailing Address (line 2):	_____		
City:	_____		
State:	_____		
Zip Code:	_____		

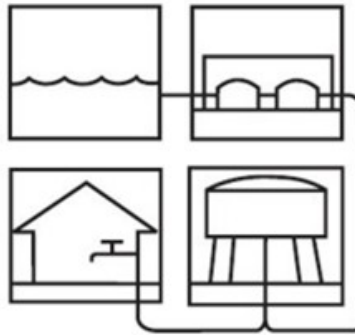
If you have any questions, contact your state coordinator.

CLOSING: Thank you for your help. Did you remember to?

Identify, by project number, available documentation for all needs and costs reported?

Email the questionnaire and email or mail the documentation to your state?

Lists of Codes



8th Drinking Water Infrastructure Needs Survey and Assessment

Use these instructions and lists of codes when you fill out the 8th Drinking Water Infrastructure Needs Survey and Assessment (DWINSA) form. In your documentation, please be sure to include project descriptions. Also include copies of the breakdown of cost estimates, if available.

Instructions for Each Column on the 8th Drinking Water Infrastructure Needs Survey and Assessment Form

<i>Column Title</i>	<i>Instructions</i>
Project Number	Number the projects in each category in sequence, using the following range of numbers for each category of need: - 1000's Source, treatment, storage, and pumping projects - 2000's Transmission and distribution projects - 3000's Meters, service lines, backflow prevention, valves, etc.
Project Name	Provide a name that briefly describes and identifies the project.
Type of Need	Refer to List 1 in the Lists of Codes and enter the code(s) that best identifies the project. More than one code may apply to a project if a cost is provided. Use only one code if no cost is available.
Reason for Need	Refer to List 2 in the Lists of Codes and enter the code(s) that best justifies the project. More than one code may apply to a project.
<u>New</u>, <u>Replace</u>, <u>Expand/Upgrade</u>, <u>or</u> <u>ReHabilitate</u>	Identify whether the project is for: - New infrastructure installation where none exists, enter 'N' Resulting infrastructure is entirely new. - Replacement of existing infrastructure, enter 'R' Existing infrastructure is replaced with similar infrastructure. - Expansion/Upgrade of a complete treatment plant, enter 'E' Major improvements to an existing complete plant that adds or changes unit processes or results in an increase in capacity. Only use for complete treatment plants. - Rehabilitation of existing infrastructure, enter 'H' Restore existing infrastructure to near-new condition.
<u>Current</u> or <u>Future</u>	Identify whether the project is: - Needed now, enter 'C' (even if you cannot start construction now) - Not needed now, enter 'F' (but will be necessary before 12/31/2045)
Regulation or Secondary Purpose	If the project is needed to maintain or obtain compliance with a regulation, secondary MCL, or state requirement, refer to List 3 in the Lists of Codes and enter the appropriate code. Enter '4A' if no code applies.
Design Capacity	Enter the design capacity when applicable: - million gallons per day (MGD) for source, treatment, and pumping; - million gallons (MG) for storage; - kilowatts (kW) for emergency power; - acre feet for water rights. For this survey, "design capacity" is the total volume or the flow that can be produced when all components of the project are operating (e.g., for disinfection, record the volume of water treated in MGD).

Column Title	Instructions
Diameter	Enter the diameter (in inches, using decimals) if the project is for pipe, valves, backflow prevention, or meters. Use a separate project number and line for different sizes of infrastructure if a documented cost is not available. Diameter is not needed for service lines.
Length	Enter the length of pipe (in feet) that must be rehabilitated, replaced, or installed as new. Use a separate project number and line for different sizes of pipe if a documented cost is not available. Length is not needed for service lines.
Number Needed	If you have multiple identical projects at the same capacity or multiple identical items, indicate the total number needed (e.g., rehabilitate 10 wells each with a 0.5 MGD capacity, or replace 1,000 0.625-inch meters). If you use this column and provide a project cost, the cost should reflect the entire project (i.e., all 10 wells or all 1,000 meters, not the cost of an individual well or meter).
Cost Estimate	If an existing cost estimate is available, enter the documented cost estimate for this project. Do not use cost estimates that were prepared prior to January 1, 2016. If no cost estimate is provided and modeling parameters are recorded, EPA will use models to estimate the cost. Do not develop a cost estimate for this survey.
Cost Date	If a documented cost estimate is provided, enter the month and year (MM/YYYY) of the cost estimate. EPA will adjust costs to current-year dollars.
Documentation	Refer to List 4 in the Lists of Codes and enter the code(s) that applies to the type of documentation provided that explains why the project is needed. If a cost estimate is provided, also enter the code that applies to the type of cost documentation. More than one code may apply to a project.
Remove, Modify, or Validate	This column appears for systems that participated in the 7 th DWINSA. An asterisk (*) indicates the project must be removed, modified, or have a project-specific validation for the 8 th DWINSA.

Important Notes:

- **What is a “need”?** Installation or rehabilitation of capital infrastructure needed over the next 20 years to obtain or maintain service to existing customers or to serve existing homes with inadequate or unsafe water that are not currently connected. Projects substantially for meeting anticipated future population growth or for fire flow are not allowed for the DWINSA.
- **What is “independent documentation”?** Documents generated through a process independent of the DWINSA (e.g., CIP, master plan, sanitary survey report).
- **What is “survey-generated documentation”?** Documents generated specifically for the survey that are written by the system or the state.

Please use the **Documentation Summary** tab of the survey form to provide survey-generated documentation of need and/or provide information on the independent documentation for the project. A description of each project or a copy of the documentation must be provided and be clearly identified by project number.

LIST 1 - TYPE OF NEED	
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Code	Type of Need
------	--------------

RAW/UNTREATED WATER SOURCE

- R1 Well (including pump and appurtenances)
- R2 Well Pump (pump and electrical controls)
- R6 Aquifer Storage and Recovery Well (including pump and appurtenances for injection and recovery)
- R7 Surface Water Intake (does not include raw water pumps)
- R8 Raw Water Pump (pump and electrical controls)
- R9 Off-Stream Raw Water Storage ¹
- R10 Spring Collector (spring box and appurtenances, does not include pumps)
- R12 Dams¹
- R13 Reservoirs¹

TREATMENT: Disinfection

- T1 Chlorination
- T2 Chloramination
- T3 Chlorine Dioxide
- T4 Ozonation
- T5 Mixed Oxidant Type Equipment
- T6 Ultraviolet Light Disinfection
- T7 Contact Basin for CT
- T8 Dechlorination of Treated Water
- T9 Chlorine Gas Scrubber

TREATMENT: Complete Plants (N/R/E require independent documentation)

- T10 Conventional Filter Plant (includes Contact Adsorption Clarifier technologies; complete plant)
- T11 Direct or In-line Filter Plant (complete plant)
- T12 Slow Sand Filter Plant (complete plant)
- T13 Diatomaceous Earth Filter Plant (complete plant)
- T14 Membrane Technology for Particulate Removal (complete plant)
- T15 Cartridge or Bag Filtration Plant (complete plant)
- T16 Lime Softening (complete plant)
- T17 Reverse Osmosis (complete plant)
- T18 Electrodialysis (complete plant)
- T19 Activated Alumina (complete plant)
- T20 Manganese Green Sand (or other oxidation/filtration technology; complete plant)
- T21 Ion Exchange (complete plant)
- T22 Groundwater or Distribution Chemical-feed (includes disinfection and up to 3 other chemical feeds; does not include well pumps; complete plant)
- T23 Iron Adsorption (complete plant)
- T24 Aeration (complete plant)

TREATMENT: Other Components / Equipment / Processes

- T30 Zebra Mussel Control
- T31 Corrosion Control (chemical addition)
- T32 Powdered Activated Carbon
- T33 Aeration (component)

¹ Documented cost must be provided; cost of this infrastructure cannot be modeled.

Codes R99, S99, T99, and M99 may be added by EPA to assign a category of need. They are in some 7th DWINSA projects but do not affect cost or allowability of the project.

LIST 1 - TYPE OF NEED (cont.)

Code Type of Need

TREATMENT: *Other Components / Equipment / Processes*

- T34 Sequestering for Iron and/or Manganese
- T35 Chemical Feed
- T36 Chemical Storage Tank
- T37 Fluoride Addition
- T38 Presedimentation Basin
- T39 Sedimentation/Flocculation
- T40 Granular Activated Carbon
- T41 Membrane Filtration (not complete plant)
- T42 Media Filters
- T43 Waste Handling/Treatment: Mechanical (not included in another project)
- T44 Waste Handling/Treatment: Nonmechanical or Connection to a Sanitary Sewer
(not included in another project)
- T45 Type of Treatment Unknown
- T46 *Other (Please include an explanation) ¹*
- T54 Point-of-Use or Point-of-Entry Water Treatment Devices

TRANSMISSION MAINS: *(Any mains that transport raw water to the treatment plant, or treated water from the plant to the distribution system grid.)*

- X1 Raw Water Transmission (includes control valves and air release valves)
- X2 Finished Water Transmission (includes control valves and air release valves)

DISTRIBUTION

- M1 Distribution Mains (any mains that transport water through a piping grid serving customers; includes control valves; see "transmission" above)
- M2 Lead (Pb) Service Line Replacement (use only to report a project cost)
- M3 Service Lines (other than lead service lines)
- M5 Valves (gate, butterfly, etc. that are not included in a pipe project)
- M6 Control Valves (PRVs, altitude, etc.)
- M7 Backflow Prevention Devices/Assemblies (testable device or assembly)
- M8 Water Meters

FINISHED/TREATED WATER STORAGE

- S1 Elevated Finished/Treated Water Storage
- S2 Ground-level Finished/Treated Water Storage
- S3 Hydropneumatic Storage
- S5 Cover for Existing Finished/Treated Water Storage

PUMP STATION AND FINISHED WATER PUMP

- P1 Finished Water Pump
- P2 Pump Station (booster or raw water pump station-may include clearwell, pumps, housing)

OTHER INFRASTRUCTURE NEEDS

- W2 Computer and Automation Costs (SCADA) (control systems, not software)
- W4 Emergency Power (enter design capacity as kilowatts)
- W10 *Other (Please include an explanation) ¹*
- W11 Water Rights¹
- W12 Non-emergency Power (solar, hydro, wind; enter design capacity in kilowatts)¹

¹ ***Documented cost must be provided; cost of this infrastructure cannot be modeled.***

Codes R99, S99, T99, and M99 may be added by EPA to assign a category of need. They are in some 7th DWINSA projects but do not affect cost or allowability of the project.

LIST 2 - REASON FOR NEED

<i>Code</i>	<i>Reason the Project is Needed</i>
A1	Project is for existing infrastructure that is or will be old or deteriorated by 12/31/2045.
A2	Project is to correct a deficiency in source water quantity caused by current user demand.
A3	Project is to correct a deficiency in storage capacity caused by current user demand.
A4	Project is to correct existing pressure problems (not related to fire flow).
A5	Project needed as a result of , but not in preparation for, a natural disaster.
A6	Project is to obtain or maintain compliance with an existing regulation (enter the regulation code from List 3 in the Lists of Codes in the regulation column of the survey form).
A7	Project is to obtain or maintain compliance with a secondary standard (e.g., iron, taste and odor, and color) (enter regulation code 2A in the regulation column of the survey form).
A8	Project is for consolidation with and/or connection to an existing public water system.
A9	Project is for extending service to existing homes without adequate water quantity or quality.
A11	Use this code if codes A1-A9 or A12 do not apply.
A12	Project is for sustainability in water infrastructure.

LIST 3 - REGULATION OR SECONDARY PURPOSE
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<i>Code Regulation or Secondary Purpose</i>

EXISTING SDWA REGULATIONS

- 1A Surface Water Treatment Regulations (Surface Water Treatment Rule, Interim Enhanced Surface Water Treatment Rule, Filter Backwash Recycling Rule, Long Term 1 Enhanced Surface Water Treatment Rule, or Long Term 2 Enhanced Surface Water Treatment Rule)
- 1B Total Coliform Rule or Revised Total Coliform Rule
- 1C Nitrate or Nitrite Standard
- 1D Lead and Copper Rule
- 1E Arsenic Rule
- 1F Stage 1 or Stage 2 Disinfectants/Disinfection Byproducts Rules
- 1G Other Regulated VOCs, SOCs, IOCs, or Radionuclides (excludes Radon)
- 1H Ground Water Rule
- 1J PFAS Rule

OTHER

- 2A Secondary Contaminants (e.g., iron, taste and odor, or color)
- 2B State Requirements other than Perchlorate
- 2C ~~PFAS (State Requirement)~~ (this code is replaced by "1J PFAS Rule for the 8th DWNSA)
- 2D Perchlorate (State Requirement)

IF NONE OF THE ABOVE CODES APPLY

- 4A Use this code if none of the codes above apply

LIST 4 - DOCUMENTATION

Code Independent Documentation of Need and/or Cost

- 1 **Capital Improvement Plan or Master Plan.** The plan must address why the project is needed and/or provide a cost.
- 2 **Facilities Plan or Preliminary Engineering Report.** Excerpts justifying need and/or cost from the plan or report are acceptable if project-specific.
- 3 **Grant or Loan Application Form.** An application form is acceptable if it specifically describes a problem requiring capital expenditures.
- 4 **Engineer's Estimate or Bid Tabulation.** These must be project specific and independently generated. They must also be accompanied by an explanation of why the project is needed.

Code Independent Documentation of Need Only

- 5 **Intended Use Plan/State Priority List.** The excerpts must include a description of why the project is needed. Costs from IUPs will not be used - modeling parameters or other cost documentation must be provided.
- 6 **Comprehensive Performance Evaluation (CPE) or Sanitary Survey Results.** The results or recommendations may be used to justify need if the state concurs.
- 7 **Monitoring Results.** Monitoring results indicating an MCL exceedance or a trending toward an exceedance can demonstrate a need for a project if accompanied by a written statement explaining how the results demonstrate the need.
- 8 **Other Independent Document.** Use this code if documentation is independent but none of the codes listed above apply. Examples include state enforcement order/notice of violation, engineering studies, watermain break report, repair reports, and distribution system studies.

Code Independent Documentation of Cost Only

- 9 **Cost of Previous Comparable Construction.** This may be used to justify costs if the costs are project-specific and for the same system. It must include documentation of how the costs were derived.

Code Survey-generated Documentation of Need Only

- 10 **Written by State/EPA Region/Navajo Nation.** Brief description and statement of need not written by the system.
- 11 **Written by System.** Brief description and statement of need written by the system.

Code Independent Documentation of need or cost submitted for a Previous DWINSA must be resubmitted for the 8th DWINSA

- | | |
|----|--|
| 22 | Project Relies on 6th (2016) DWINSA Documentation. Code not applicable to the 8 th DWINSA. Resubmit documentation if it is needed. |
|----|--|

The following pages present the tribal data collection instrument.

American Indian and Alaska Native Village Eighth Drinking Water Infrastructure Needs Survey And Assessment

U.S. Environmental Protection Agency (EPA)
Washington, DC 20460

OMB Control No.: 2040-NEW
Approval Expires: MM/DD/YYYY
Utility ID: XX1234567
Version: DRAFT

Please verify or correct the following information:

	Check if Correct as Printed	Corrected Information (Fill in only if preprinted information is missing or incorrect)
Name of Utility Organization:	☐	
Name of Contact:	☐	
Street Address:	☐	
Street Address, line 2:	☐	
City:	☐	
State:	☐	
Zip Code:	☐	
Total Population Served by Utility:	☐	
AI Strata - Drinking Water Source	Check All That Apply:	☐ Ground ☐ Purchased Ground ☐ Surface/GWUDI ☐ Purchased Surface/GWUDI
AI Strata - Service(s) Provided	Check All That Apply:	☐ Combined Water & Wastewater ☐ Wastewater Only ☐ Drinking Water Only
ANV Strata - Drinking Water Distribution System	Check All That Apply:	☐ Pressure ☐ Individual Haul -Washeteria ☐ Circulating ☐ Community Haul
ANV Strata - Wastewater Collection System	Check All That Apply:	☐ Gravity ☐ Low Pressure System (LPS) ☐ Community Haul ☐ Vacuum ☐ Honey Bucket -Washeteria
This collection of information is approved by OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. (OMB Control No. 2040-NEW). Responses to this collection of information are voluntary (Sections 1452(h) and 1452(j)(4) of the Safe Drinking Water Act SDWA, as amended by America's Water Infrastructure Act of 2018). An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The public reporting and recordkeeping burden for this collection of information is estimated to average 2.53 hours per response.		
Send comments on the Agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden including through the use of automated collection techniques to the Director, Regulatory Support Division, U.S. Environmental Protection Agency (2821T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.		

EPA Region Use Only	
EPA Region Reviewer: _____	Telephone Number: _____
This information was collected primarily (select one):	☐ From the utility ☐ Via a contractor in coordination with the utility ☐ Via a contractor without coordination with the utility ☐ Via the EPA Region in coordination with the utility ☐ Via the EPA Region without coordination with the utility
I reviewed and accepted this submission. This submission reflects information that is true and correct to the best of my knowledge.	☐ Yes
I made edits to the utility's response (select the best option):	☐ Yes ☐ No ☐ Not Applicable (EPA Region completed the survey submission with or without coordination with the utility)
If you did make edits, please indicate the information edited (choose all that apply):	☐ Front page (utility information) ☐ Question Response ☐ Other (please briefly describe): _____
Information provided for this survey can be requested by the public.	

Capacity Questions

1 *How many utility employees support your public water system(s)?*

_____ (#) Full-time (40+ hours/week)

_____ (#) Part-time (<40 hours/week)

2 *Of all the public water system operators employed by the utility, how many are certified in each of the following three categories to the minimum required level?*

Enter the number of operators in each category:

_____ Drinking water treatment only

_____ Water distribution only

_____ Drinking water treatment and water distribution

_____ Other

Please specify other:

3 *What is the certifying authority for your public water system(s) certified operators? (Indicate all that apply)*

- a. ☐ State
- b. ☐ Tribal Consortia
- c. ☐ Tribe
- d. ☐ EPA (including other entities that implement the certification program for EPA)

Optional: Provide additional details here regarding your response.

4 *What is the current number of vacant operator positions associated with your public water system(s)?*

_____ (#) Full-time

_____ (#) Part-time/Seasonal

5 *If your public water system(s) has trouble recruiting or retaining certified operators, to what do you attribute the difficulty in recruiting or retaining certified operators? (Select all that apply)*

- a. ☐ Higher compensation/opportunities for career advancement at another utility
- b. ☐ Higher compensation/opportunities for career advancement in another career field
- c. ☐ Inability to properly perform functions of a public water system operator due to lack of training or mentorship
- d. ☐ Not Applicable
- e. ☐ Other (please specify below)

6 *How often does your utility access a formal training program for your public water system operators? (check one)*

- a. ☐ Each year
- b. ☐ Every 2-3 years
- c. ☐ 4+ years
- d. ☐ This support is unavailable

Optional: Provide additional details here regarding your response.

7 *If you have utilized training and technical assistance opportunities offered by various federal, Tribal, or other organizations that specifically enhance the Tribe's Operations and Maintenance (O&M) capabilities, select the agencies and organizations you have accessed for these resources: (Select all that apply)*

- a. ☐ EPA
- b. ☐ Indian Health Service (IHS)
- c. ☐ State programs
- d. ☐ Environmental Finance Centers
- e. ☐ Other Non-Profit organizations (such as Rural Community Assistance Partnership (RCAP) affiliates or National Rural Water Association (NRWA))
- f. ☐ Not Applicable
- g. ☐ Other (please specify below)

8 *What planning documents does your utility have for your public water system(s)? (Select all that apply)*

- a. ☐ Primary planning document that helps guide operational and development decisions (e.g., Capital Improvement Plan (CIP), water system plan, master plan, integrated master plan)
- b. ☐ Asset management plan or other formal written strategy addressing your long-term (e.g., 20 years or more) needs for infrastructure rehabilitation and replacement for the public water systems under the utility's direction
- c. ☐ Organizational chart that reflects the chain of command
- d. ☐ None
- e. ☐ Other (please specify below)

9 Does your utility have written operational guidance (administrative policy, technical guidance, safety policy, etc.)? (Select all that apply)

- a. ☐ Administrative policies
- b. ☐ Technical guidance
- c. ☐ Safety policy
- d. ☐ Preventive maintenance program
- e. ☐ Other (please specify below)

10 How does your utility maintain public water system data (e.g., usage, revenues, expenses, repairs, models, maps, as-builts, pump data, PRV settings, tank information, maintenance records)? (Select all that apply)

- a. ☐ Paper files
- b. ☐ Electronic system (not georeferenced)
- c. ☐ Georeferenced electronic system (e.g., Geographic Information System)
- d. ☐ Rely on other federal agencies to provide data
- e. ☐ Utility does not maintain public water system data
- f. ☐ Other (please specify below)

11 How is your utility's organizational leadership structured? (Select all that apply)

- a. ☐ Utility Board
- b. ☐ Administrator
- c. ☐ Department Managers
- d. ☐ No organizational leadership
- e. ☐ Other (please specify below)

12 If your utility has a board, is your utility board linked to the political leadership of the Tribe or local community?

- a. ☐ Yes
Optional: Provide additional details here regarding your response.

- b. ☐ No
Optional: Provide additional details here regarding your response.

13 What is the frequency of routine oversight and tracking of the budget? (check one)

- a. ☐ Quarterly
- b. ☐ Annually
- c. ☐ 2-4 years
- d. ☐ 5+ years
- e. ☐ Utility does not have a budget
- f. ☐ Other (please specify below)

Optional: Provide additional details regarding frequency of budget review and who provides routine oversight.

14	<i>What was your utility's total annual expenditure for 2024 (labor, chemicals, power, parts, etc.), excluding any major capital expenditures? This question applies to all work areas under utility responsibility (Enter amount, if applicable).</i>	
a.	☐ Unknown	
b.	☐ _____ (Amount)	☐ Check this box if total annual expenditure was unusual or otherwise atypical in 2024.
15	<i>What was your utility's total annual revenue for 2024? This question applies to all work areas under utility responsibility (Enter amount, if applicable).</i>	
a.	☐ Unknown	
b.	☐ _____ (Amount)	☐ Check this box if total annual revenue was unusual or otherwise atypical in 2024.
16	<i>What are the revenue sources for the utility? This question applies to all work areas under utility responsibility (check one).</i>	
a.	☐ User fees (e.g., metered rates)	
b.	☐ Other utility user fees from non-water businesses (e.g., wastewater, solid waste, electricity, internet/cell service, natural gas)	
c.	☐ General Funds	
d.	☐ Federal assistance	
e.	☐ Unsure	
f.	☐ Other (please specify below)	

	Optional: Provide additional details here regarding your response.	

17	<i>Does your water system(s) depend on federal assistance such as from the IHS, EPA, US Department of Agriculture (USDA) or others to fund capital improvement projects? (Select All that Apply)</i>	
a.	☐ My water system(s) does not pursue federal assistance	
b.	☐ My water system(s) relies upon the Indian Health Service to identify and address capital improvement needs	
c.	☐ My water system(s) relies upon the Tribe or Tribal Consortium to identify and address capital improvement needs	
d.	☐ My water system(s) is partially supplied by other revenue options, such as alternative energy programs or federal energy agreements (for example, Western Area Power Administration)	
e.	☐ My water system(s) applies for federal funding grants to address capital improvement need	
f.	☐ Unsure	
	Optional: Please indicate which federal agency fund sources you utilize.	

18 *Financial capacity is the ability of a utility to acquire and manage sufficient financial resources to allow the system(s) to achieve and maintain compliance with Safe Drinking Water Act (SDWA) requirements. Which of the following aspects of financial capacity are the most concerning for your utility in the next ten years? *Select your top two**

- a. ☐ Having appropriate accounting practices and recordkeeping
- b. ☐ Developing and maintaining an investment strategy
- c. ☐ Establishing and maintaining a cash reserve
- d. ☐ Having revenue to cover expenses (e.g., having an adequate rate structure)
- e. ☐ Having an awareness of my non-revenue water
- f. ☐ Collecting bill payments in a timely fashion
- g. ☐ Having credible financial status (e.g., positive credit ratings, bonds and assurances, low debt/equity ratio)
- h. ☐ Other (please specify below)

Optional: Provide additional details here regarding your response.

19 *If your utility charges users for its services, which of the following pricing structures does your utility use? (check one)*

- a. ☐ Fixed fee or uniform flat rate (all customers pay the same regardless of usage)
- b. ☐ Single block rate (all customers are charged a constant rate per volume used regardless of usage; may be coupled with a base rate)
- c. ☐ Decreasing block rate (customers are charged a rate per volume used that decreases as the amount of usage increases)
- d. ☐ Increasing block rate (customers are charged a rate per volume used that increases as the amount of usage increases)
- e. ☐ Other
- f. ☐ Not applicable

Optional: Provide additional details here regarding your response.

20 *If your utility has user rates, when is the last time your utility increased rates to reflect changing operations and maintenance costs? (e.g., filter media replacement, purchase of chemicals, operator salaries)*

- a. ☐ Within the last year
- b. ☐ 2-5 years
- c. ☐ 5-10 years
- d. ☐ Over 10 years ago
- e. ☐ My utility's user rates have not significantly changed
- f. ☐ Not applicable
- g. ☐ Unsure

21 *Does your utility have a procedure for collecting past due billing?*

- a. ☐ Yes
- b. ☐ No
- c. ☐ Unsure
- d. ☐ Not applicable

Optional: Provide additional details here regarding your response.

This page shows the PWSs served by this utility. Please review the list. If the list is correct, check the box in C5. To remove a PWS, check the box in the PWS's row in column E in Table 1. (The row will not be removed here, it will be marked for removal later by EPA.) To add additional PWS(s), provide the information in Table 2.

[illegible][illegible]