

Appendix B – Data Collection Instrument and Lists of Codes

The following pages present the data collection instrument
for the non-tribal public water systems

2020 Drinking Water Infrastructure Needs Survey And Assessment

U.S. Environmental Protection Agency
Washington, DC 20460

Federal PWSID No.:

OMB No.:
Approval Expires:

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:			
City, State, and Zip:			
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
<p>This collection of information is approved by OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. (OMB Control No. 2616.01). Responses to this collection of information are voluntary (Sections 1452(h) and 1452(i)(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 5.36 hours per response.</p> <p>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.</p>			
State Use Only			
State Reviewer: _____	Telephone Number: _____		

Information provided for this survey can be requested by the public. It is our experience that this information is rarely requested.

Transmission, Distribution and Storage Inventory

EPA will use construction material information for specific infrastructure to estimate the 20-year demand for iron and steel represented by Needs Survey projects. In the Pipe Inventory table below, please provide an estimate of the existing total length of pipe, in feet, by pipe material. Please also indicate the pipe material likely to be used for replacement of existing pipe. Additionally, please provide information regarding the pipe material typically used by the system for new pipe projects.

Please also respond to the tank material inventory questions located below the pipe questions.

Pipe Inventory Table

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

New Pipe Project Materials	Material Likely Used for New Pipe Projects (extensions and looping)						
What is the most common material used by this system for new pipe installation (extensions or looping?)	Plastic <input type="checkbox"/>	DI <input type="checkbox"/>	CI <input type="checkbox"/>	AC <input type="checkbox"/>	Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/>	Multiple <input type="checkbox"/>
If you selected "Multiple", please indicate the two most common materials used for new pipe projects.	Plastic <input type="checkbox"/>	DI <input type="checkbox"/>	CI <input type="checkbox"/>	AC <input type="checkbox"/>	Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/>	
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

Material Type for Existing Tanks	Number of Existing Ground Storage Tanks	Material Likely Used For Future Replacement Tanks					
		WS <input type="checkbox"/>	GFS <input type="checkbox"/>	FG <input type="checkbox"/>	Concrete <input type="checkbox"/>	Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/> _____
Welded or Bolted Steel (WS)		WS <input type="checkbox"/>	GFS <input type="checkbox"/>	FG <input type="checkbox"/>	Concrete <input type="checkbox"/>	Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/> _____
Glass Fused to Steel (GFS)		WS <input type="checkbox"/>	GFS <input type="checkbox"/>	FG <input type="checkbox"/>	Concrete <input type="checkbox"/>	Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/> _____
Fiberglass (FG)		WS <input type="checkbox"/>	GFS <input type="checkbox"/>	FG <input type="checkbox"/>	Concrete <input type="checkbox"/>	Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/> _____
Concrete		WS <input type="checkbox"/>	GFS <input type="checkbox"/>	FG <input type="checkbox"/>	Concrete <input type="checkbox"/>	Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/> _____
Unknown		WS <input type="checkbox"/>	GFS <input type="checkbox"/>	FG <input type="checkbox"/>	Concrete <input type="checkbox"/>	Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/> _____
Other (please specify)		WS <input type="checkbox"/>	GFS <input type="checkbox"/>	FG <input type="checkbox"/>	Concrete <input type="checkbox"/>	Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/> _____

Elevated Storage Inventory Table

Material Type	Number of Elevated Storage Tanks	Material Likely Used For Future Replacement			
		WS <input type="checkbox"/>	Composite <input type="checkbox"/>	Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/> _____
Welded or Bolted Steel (WS)		WS <input type="checkbox"/>	Composite <input type="checkbox"/>	Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/> _____
Composite (e.g. steel tank w/concrete pedestal)		WS <input type="checkbox"/>	Composite <input type="checkbox"/>	Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/> _____
Unknown		WS <input type="checkbox"/>	Composite <input type="checkbox"/>	Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/> _____
Other (please specify)		WS <input type="checkbox"/>	Composite <input type="checkbox"/>	Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/> _____

Questions for New Storage Tank Projects	Proposed Material of Construction					
What is the most common material used by this system for new ground storage tanks	WS <input type="checkbox"/>	GFS <input type="checkbox"/>	FG <input type="checkbox"/>	Concrete <input type="checkbox"/>	Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/> _____
What is the most common material used by this system for new elevated storage tanks?	WS <input type="checkbox"/>	Composite <input type="checkbox"/>		Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/> _____	

Source, Treatment, and Pumping Inventory

To ensure all potential source, treatment, and storage 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, and 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 raw and finished water pumps and pump stations.

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? If yes, how many additional sources are necessary?
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):	
	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 provisions of additional public health protection or for aesthetic concerns? If yes, how much additional treatment is necessary?
Disinfection (including booster disinfection):	Disinfection:	Disinfection:	
Filtration:	Filtration:	Filtration:	
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 storage capacity and/or booster pumping needs to meet the needs of current users? 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? 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: Please complete supplemental LSL questions to capture lead service line inventory.		

Lead Service Line Questions For America's Water Infrastructure Act

Background

America's Water Infrastructure Act of 2018 amended the federal Safe Drinking Water Act to require an assessment of the cost of replacement of all lead service lines of all public water systems in the United States that are eligible to use Drinking Water State Revolving Funds. To meet this mandate, all public water systems participating in the 2020 Drinking Water Infrastructure Needs Survey and Assessment (DWINSA) are asked to provide information on the number of service lines they have and what is known about the construction materials of the service lines and service line connectors. This inventory is a baseline effort to collect information on lead service lines in public water systems, it is not a comprehensive assessment of all potential sources of lead in drinking water. Other potential sources of lead, such as brass or bronze valves or fittings that contain lead, may be included in future data collection efforts.

The ownership of the service lines is requested in general terms as system- or customer-owned or shared ownership. Ownership information is sought because the assessment must include an estimate of the replacement cost of service lines that contain lead pipe that are the responsibility of the water system and the cost that is the responsibility of the customer. Service line replacement costs will be estimated by EPA and required to be provided by public water systems. However, if service line replacement costs are available, please provide the costs and a copy of the cost documentation.

EPA understands that the construction material of all service lines and connectors might not be known. Reporting that some or all of the requested information is unknown is a response option.

Row Descriptions:

Title row: Include the total number of service lines in your system.

Service Lines That Contain Lead Pipe

Row 1 is for service lines that the system has reason to believe or knows contain any lead pipe. This includes situations where system records or studies indicate that a portion of the service line is believed to be lead pipe and the remainder is believed to be different material (such as galvanized pipe or copper pipe); or when records indicate the entire service line is believed to be lead pipe. If the only lead material between the main and the building is in the connector (e.g., gooseneck, pigtail), include that service line in Row 2.

Service Lines That Do Not Contain Any Lead Pipe But Have Lead Connectors

Row 2 is for service lines that do not contain any segments of lead pipe but the system has reason to believe or knows have lead connectors. For example, galvanized iron, copper or plastic service lines that are currently downstream of a lead connector such as a gooseneck or pigtail. If there is lead pipe and the connector is lead, include that service line under Row 1 as opposed to Row 2.

Service Lines That Contain Galvanized Pipe

Row 3a is for service lines that have any galvanized pipe that the system knows or has reason to believe were previously downstream from a segment of the service line that had lead pipe that has been removed. For example, there could be system records that the lead pipe portion of the service line between the main and curb stop was removed, but the galvanized segment of the service line remains in place.

If the galvanized pipe is currently downstream from a lead pipe, report the service line in Row 1.

Row 3b is for service lines that have any galvanized pipe that the system knows or has reason to believe were previously downstream from a lead connector that was removed. If the galvanized pipe is currently downstream from a connector, report the service line in Row 2.

Row 3c is for service lines that have any have any galvanized pipe that the system knows or has reason to believe were previously downstream from an unknown source of lead that was removed.

Row 3d is for service lines that have any galvanized pipe that the system knows or has reason to believe have never been downstream from any lead service line segment or lead connector.

Other Service Lines and Service lines of Unknown Material

Row 4a is for service lines for which the pipe material is known and that do not have lead pipe, lead connectors, or galvanized pipe that is currently or previously downstream from a lead pipe or lead connector.

This row captures the number of service lines and their connectors that are made of other materials, such as copper or plastic pipe.

Row 4b is for service lines for which the material makeup of the service line and of the connector is not known.

Total Number of Service Lines by Column: The total of the numbers in this row should equal the number provided in the title row. In the example that follows, the system has 1,000 service lines.

Column Descriptions:

Number of Service Lines that Are Solely System-Owned: The number of service lines that fit the description of the row and for which the cost of replacement of the entire service line would be the responsibility of the water system.

Number of Service Lines that Are Solely Customer-Owned: The number of service lines that fit the description of the row and for which the cost of replacement of the entire service line would be the responsibility of the customer. This applies even if the water system performs the work for the customer and provides financing assistance such as no-interest loans to the customer to recover the cost.

Number of Service Lines for which the System and Customer Share Ownership: The number of service lines that fit the description of the row and for which the cost of replacement of the service line would be a shared responsibility between the water system and the customer. The responsibility does not need to be equally shared, but both parties are responsible for some of the cost.

LEAD SERVICE LINE TABLE

(Total number of service lines in the system _____)

For each category, include those service lines *for which it is known or there is reason to believe* the service line likely fits the description. Please record the number of service lines that fit the description of each row and column and count each service line only once.

	Number of Service Lines that are Solely System-Owned	Number of Service Lines that are Solely Customer-Owned	Number of Service Lines for which the System and Customer Share Ownership
Service Lines That Contain Lead Pipe			
Row 1. Service lines that contain any lead pipe.			
Service Lines That Contain Lead Connectors			
Row 2. Service lines that do not contain any lead pipe but have lead connectors (such as goosenecks or pigtails).			
Service Lines That Contain Galvanized Pipe			
Row 3a. Service lines that contain galvanized pipe and were <u>previously</u> downstream from a lead pipe that was removed from the service line.			
Row 3b. Service lines that contain galvanized pipe and were <u>previously</u> downstream from a lead connector that was removed from the service line.			
Row 3c. Service lines that contain galvanized pipe and were <u>previously</u> downstream from an unknown source of lead that was removed from the service line.			
Row 3d. Service lines that contain galvanized pipe that have <u>never been</u> downstream from any lead pipe or lead connector in the service line.			
Other Service Lines and Service Lines of Unknown Materials			
Row 4a. Service lines that do not contain any lead pipe or galvanized pipe and that do not have lead connectors.			
Row 4b. Service lines for which the material makeup of the service line and of the connector are not known.			
Total Number of Service Lines by Column	Number:	Number:	Number:

5 Water System's Policy or Requirement for Service Line and Connector Ownership/Replacement Responsibility (check the appropriate option):

- a. Water system is sole responsible from the water main to the building, i.e. full service line length
- b. Customer is solely responsible from the water main to the building
- c. Water system and customer share responsibility for the full-length
- d. Customer is responsible for some but not all of the full length

If checked 5d, indicate the customer responsibility:

- Service line to the building, except the gooseneck or pigtail
- Curb-stop to the building
- Meter to the building (when the meter is not in the building)
- Other (*if "other" estimate customer's share of total length, in percent*)

6 Water system's policy for assisting customer-owned lead service line replacement (check the appropriate option)

- a. System provides replacement assistance but not financial assistance
- b. System provides financing assistance, such as low interest or no interest loans for which the customer is responsible for repayment
- c. System provides financial aid, such as payment for a portion of the customer's cost
- d. Other (please describe)

7 Costs of lead service line replacements since January 1, 2016. (please include documentation of cost, if available)

- a. Cost Per line replaced _____
- b. Cost per foot _____
- c. Other cost estimate _____
- d. Cost documentation included with questionnaire response (Y/N) _____

Water Operator Workforce Questions

- 1 *What is the total number of management, administrative and operations personnel employed or contracted by the water system? (This should include include individuals employed or contracted by the water sytem who are responsible for day-to-day operations at the water system.)*

- 2 *How many operators does the system have for the drinking water treatment and water distribution system?*

- a. *Of the total number of operators reported in Question 2, how many are certified in each of the following categories? Enter the number of operators in each category.*

_____ Drinking water treatment only

_____ Water distribution only

_____ Drinking water treatment and water distribution

- b. *What is the total number of hours per week that all the operators reported in Question 2 spend on-site at the water system? ("On-site" implies time spent physically at the water system for routine operations and for emergencies.)*

_____ Hours per week

- c. *Of the number of operators reported in Question 2, how many are contracted from another entity? Enter zero if none of the operators are contracted.*

_____ Contracted from another entity

If the answer is zero, skip Question 3 and go to Question 4.

3 *If the answer to 2c is more than zero, what type of entity does the water system contract with for operators? Check all that apply.*

- Private company
- One or more water utilities
- Other, please describe

4 *How many positions for contracted or employee drinking water treatment or water distribution system operators are currently vacant? Enter zero if there are no vacancies.*

a. *If there are currently vacant operator positions reported in Question 4, what is the total number of hours per week that need to be filled by those positions?*

For example, enter 40 hours for one full-time position or 20 hours for one half-time position.

_____ Hours per week

5 *Do you anticipate an increase, decrease or no change in the number of operators that the water system will need for the time periods indicated below? Enter the number anticipated or check "Don't know."*

In the next 5 years?

_____ Number of additional operators

_____ Number of fewer operators

- No change
- Don't know

In the next 10 years?

_____ Number of additional operators

_____ Number of fewer operators

- No change
- Don't know

6 *How many of the existing employee or contracted operators do you believe will need to be replaced due to retirement, accepting another position or for other reasons? For the time periods indicated below, enter the number anticipated or check "Don't know."*

a. *In the next 5 years?*

Number of operator staff to be replaced _____

Don't know

b. *In the next 10 years?*

Number of operator staff to be replaced _____

Don't know

7 *Do you currently have difficulty hiring employees or obtaining contracted water operators ?(check one)*

Yes

No

Don't know

8 *Which of the following best describes what you anticipate in the next 5 years for replacing or increasing the number of employee or contracted operators? Check the most applicable option.*

- a. much less difficult than it is now
- b. less difficult than it is now
- c. about the same as it is now
- d. more difficult than it is now
- e. much more difficult than it is now
- f. no opinion

9 *Which of the following best describes what you anticipate in the next 6-10 years for replacing or increasing the number of employee or contracted operators? Check the most applicable option.*

- a. much less difficult than it is now
- b. less difficult than it is now
- c. about the same as it is now
- d. more difficult than it is now
- e. much more difficult than it is now
- f. no opinion

10 *Which of the following best describes what you anticipate in the next 10 years for replacing or increasing the number of employee or contracted operators? Check the 3 most applicable options.*

- a. lack of candidates interested in a water operator profession
- b. lack of knowledge of the water operator profession by potential candidates
- c. lack of candidates with necessary technical skill
- d. difficulties getting operator certification requirements met
- e. retirements are expected to overwhelm normal recruitment
- f. unable to offer candidates competitive wages
- g. unable to offer candidates full-time work
- h. unable to offer candidates paid benefits
- i. long work hours of the job
- j. other (please explain)

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):

Signature:	_____	Telephone Number:	_____
Name (please print):	_____	Fax Number:	_____
Title:	_____	E-mail Address:	_____
Mailing Address:	_____	Best Time to Reach You:	_____
(Street Address)	_____		

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?

The following pages present the data collection instrument
for the tribal community water systems

AI & ANV - 2020 Drinking Water Infrastructure Needs Survey And Assessment

U.S. Environmental Protection Agency
Washington, DC 20460

Federal PWSID No.:

OMB No.: XXXX-XXXX

Approval Expires:

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):	<input type="checkbox"/>	
Name of Contact:		
Street Address:	<input type="checkbox"/>	
City, State, and Zip:		
Population Served (if wholesaler, include consecutive population as appropriate):	<input type="checkbox"/>	
Number of Connections (not including consecutive systems):	<input type="checkbox"/>	
Total System Design Capacity (in MGD):	<input type="checkbox"/>	
Total Length of Pipe in System (in Feet):	<input type="checkbox"/>	
Source Water Type (Ground, Surface/GWUDI, etc.):	Check All That Apply:	<input type="checkbox"/> Ground <input type="checkbox"/> Surface/GWUDI <input type="checkbox"/> Purchased Ground <input type="checkbox"/> Purchased Surface/GWUDI
Ownership Type:	Check All That Apply:	<input type="checkbox"/> Public <input type="checkbox"/> Investor-Owned or Private Non-Profit <input type="checkbox"/> Federal Government <input type="checkbox"/> Tribal
<p>This collection of information is approved by OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. (OMB Control No. 2616.01). Responses to this collection of information are voluntary (Sections 1452(h) and 1452(i)(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 5.36 hours per response.</p> <p>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.</p>		
<p>State Use Only State Reviewer: _____ Telephone Number: _____</p>		

Information provided for this survey can be requested by the public. It is our experience that this information is rarely requested.

Transmission and Distribution Inventory

Transmission and distribution projects are the piping needs of a water system. Projects for **valves, backflow prevention devices and assemblies, and meters** that are not part of a transmission or distribution project listed in this table should be recorded in the table under the tab titled "Inventory Table 3".

On the table below, please provide an estimate of the total feet or miles of pipe in your system, if possible. Completion of this table is not required, but it may be helpful to ensure all potential transmission and distribution pipe projects are considered.

Note: The total feet or miles of pipe in your system is required information if any pipe projects are submitted based solely on survey-generated documentation (documentation codes 10 or 11).		40	feet	Total Pipe in System	
<u>Total Pipe in System</u> (Check feet or miles)		<u><=6 inch</u>	<u>8-12 inch</u>	<u>15-42 inch</u>	<u>>=48 inch</u>
<input type="checkbox"/> feet miles	Amount of _____ by pipe size % of this category/size pipe currently in poor condition or beyond useful life	feet miles	feet miles	feet miles	feet miles
<u>Plastic</u> _____ % of total pipe _____	Amount of PVC by pipe size % of this category/size pipe currently in poor condition or beyond useful life 0 _____%	_____ miles	_____ miles	_____ miles	_____ miles
<u>Ductile Iron</u> _____ % of total pipe _____	Amount of ductile iron by pipe size % of this category/size pipe currently in poor condition or beyond useful life _____%	_____ miles	_____ miles	_____ miles	_____ miles
<u>Cast Iron</u> _____ % of total pipe _____	Amount of cast iron by pipe size % of this category/size pipe currently in poor condition or beyond useful life _____%	_____ miles	_____ miles	_____ miles	_____ miles
<u>Asbestos Cement</u> _____ % of total pipe _____	Amount of asbestos cement by pipe size % of this category/size pipe currently in poor condition or beyond useful life _____%	_____ miles	_____ miles	_____ miles	_____ miles
<u>Other</u> _____ % of total pipe _____	Amount of other by pipe size % of other currently in poor condition or beyond useful life _____%	_____ miles	_____ miles	_____ miles	_____ miles

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 <input type="checkbox"/>	GFS <input type="checkbox"/>	FG <input type="checkbox"/>	Concrete <input type="checkbox"/>	Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/> _____
<u>Glass Fused to Steel (GFS)</u>		WS <input type="checkbox"/>	GFS <input type="checkbox"/>	FG <input type="checkbox"/>	Concrete <input type="checkbox"/>	Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/> _____
<u>Fiberglass (FG)</u>		WS <input type="checkbox"/>	GFS <input type="checkbox"/>	FG <input type="checkbox"/>	Concrete <input type="checkbox"/>	Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/> _____
<u>Concrete</u>		WS <input type="checkbox"/>	GFS <input type="checkbox"/>	FG <input type="checkbox"/>	Concrete <input type="checkbox"/>	Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/> _____
<u>Unknown</u>		WS <input type="checkbox"/>	GFS <input type="checkbox"/>	FG <input type="checkbox"/>	Concrete <input type="checkbox"/>	Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/> _____
<u>Other (please specify)</u>		WS <input type="checkbox"/>	GFS <input type="checkbox"/>	FG <input type="checkbox"/>	Concrete <input type="checkbox"/>	Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/> _____

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 <input type="checkbox"/>	Composite <input type="checkbox"/>	Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/> _____
<u>Composite (e.g. steel tank w/concrete pedestal)</u>		WS <input type="checkbox"/>	Composite <input type="checkbox"/>	Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/> _____
<u>Unknown</u>		WS <input type="checkbox"/>	Composite <input type="checkbox"/>	Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/> _____
<u>Other (please specify)</u>		WS <input type="checkbox"/>	Composite <input type="checkbox"/>	Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/> _____

Questions for New Storage Tank Projects	Proposed Material of Construction					
What is the most common material used by this system for new ground storage tanks	WS <input type="checkbox"/>	GFS <input type="checkbox"/>	FG <input type="checkbox"/>	Concrete <input type="checkbox"/>	Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/> _____
What is the most common material used by this system for new elevated storage tanks?	WS <input type="checkbox"/>	Composite <input type="checkbox"/>		Unknown <input type="checkbox"/>	Other (please specify) <input type="checkbox"/> _____	

Source, Treatment, Storage, and Pumping Inventory

To ensure all potential source, treatment, and storage 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, and 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.
- **Storage and Pumping Projects** are related to finished or treated water storage, and booster pump stations.

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? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, how many additional sources are necessary?
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):	
	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 provisions of additional public health protection or for aesthetic concerns? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, how much additional treatment is necessary?
Disinfection (including booster disinfection):	Disinfection:	Disinfection:	
Filtration:	Filtration:	Filtration:	
Chemical removal or addition:	Chemical treatment:	Chemical treatment:	
Storage, Pump Stations and Water-Hauling Trucks			
Inventory	Needing Replacement	Needing Rehabilitation	New Infrastructure Needs
Total Number and Capacity of Existing Storage Tanks:	Number of Existing Elevated or Ground-Level Storage Tanks:	Number of Existing Elevated or Ground-Level Storage Tanks:	Does your system have additional storage capacity and/or booster pumping needs to meet the needs of current users? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, how much additional finished water storage or booster pumping capacity is necessary?
Total Number and Capacity of Existing Booster Pump Stations:	Number of Existing Booster Pump Stations:	Number of Existing Booster Pump Stations:	
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? 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: Please complete supplemental LSL questions to capture lead service line inventory.		

Lead Service Line Questions For America's Water Infrastructure Act

Background

America's Water Infrastructure Act of 2018 amended the federal Safe Drinking Water Act to require an assessment of the cost of replacement of all lead service lines of all public water systems in the United States that are eligible to use Drinking Water State Revolving Funds. To meet this mandate, all public water systems participating in the 2020 Drinking Water Infrastructure Needs Survey and Assessment (DWINSA) are asked to provide information on the number of service lines they have and what is known about the construction materials of the service lines and service line connectors. This inventory is a baseline effort to collect information on lead service lines in public water systems, it is not a comprehensive assessment of all potential sources of lead in drinking water. Other potential sources of lead, such as brass or bronze valves or fittings that contain lead, may be included in future data collection efforts.

The ownership of the service lines is requested in general terms as system- or customer-owned or shared ownership. Ownership information is sought because the assessment must include an estimate of the replacement cost of service lines that contain lead pipe that are the responsibility of the water system and the cost that is the responsibility of the customer. Service line replacement costs will be estimated by EPA and required to be provided by public water systems. However, if service line replacement costs are available, please provide the costs and a copy of the cost documentation.

EPA understands that the construction material of all service lines and connectors might not be known. Reporting that some or all of the requested information is unknown is a response option.

Row Descriptions:

Title row: Include the total number of service lines in your system.

Service Lines That Contain Lead Pipe

Row 1 is for service lines that the system has reason to believe or knows contain any lead pipe. This includes situations where system records or studies indicate that a portion of the service line is believed to be lead pipe and the remainder is believed to be different material (such as galvanized pipe or copper pipe); or when records indicate the entire service line is believed to be lead pipe. If the only lead material between the main and the building is in the connector (e.g., gooseneck, pigtail), include that service line in Row 2.

Service Lines That Do Not Contain Any Lead Pipe But Have Lead Connectors

Row 2 is for service lines that do not contain any segments of lead pipe but the system has reason to believe or knows have lead connectors. For example, galvanized iron, copper or plastic service lines that are currently downstream of a lead connector such as a gooseneck or pigtail. If there is lead pipe and the connector is lead, include that service line under Row 1 as opposed to Row 2.

Service Lines That Contain Galvanized Pipe

Row 3a is for service lines that have any galvanized pipe that the system knows or has reason to believe were previously downstream from a segment of the service line that had lead pipe that has been removed. For example, there could be system records that the lead pipe portion of the service line between the main and curb stop was removed, but the galvanized segment of the service line remains in place.

If the galvanized pipe is currently downstream from a lead pipe, report the service line in Row 1.

Row 3b is for service lines that have any galvanized pipe that the system knows or has reason to believe were previously downstream from a lead connector that was removed. If the galvanized pipe is currently downstream from a connector, report the service line in Row 2.

Row 3c is for service lines that have any have any galvanized pipe that the system knows or has reason to believe were previously downstream from an unknown source of lead that was removed.

Row 3d is for service lines that have any galvanized pipe that the system knows or has reason to believe have never been downstream from any lead service line segment or lead connector.

Other Service Lines and Service lines of Unknown Material

Row 4a is for service lines for which the pipe material is known and that do not have lead pipe, lead connectors, or galvanized pipe that is currently or previously downstream from a lead pipe or lead connector.

This row captures the number of service lines and their connectors that are made of other materials, such as copper or plastic pipe.

Row 4b is for service lines for which the material makeup of the service line and of the connector is not known.

Total Number of Service Lines by Column: The total of the numbers in this row should equal the number provided in the title row. In the example that follows, the system has 1,000 service lines.

LEAD SERVICE LINE TABLE
 (Total number of service lines in the system _____)

For each category, include those service lines *for which it is known or there is reason to believe* the service line likely fits the description. Please record the number of service lines that fit the description of each row and column and count each service line only once.

	Number of Service Lines
Service Lines That Contain Lead Pipe	
Row 1. Service lines that contain any lead pipe.	
Service Lines That Contain Lead Connectors	
Row 2. Service lines that do not contain any lead pipe but have lead connectors (such as goosenecks or pigtails).	
Service Lines That Contain Galvanized Pipe	
Row 3a. Service lines that contain galvanized pipe and were <u>previously</u> downstream from a lead pipe that was removed from the service line.	
Row 3b. Service lines that contain galvanized pipe and were <u>previously</u> downstream from a lead connector that was removed from the service line.	
Row 3c. Service lines that contain galvanized pipe and were <u>previously</u> downstream from an unknown source of lead that was removed from the service line.	
Row 3d. Service lines that contain galvanized pipe that have <u>never been</u> downstream from any lead pipe or lead connector in the service line.	
Other Service Lines and Service Lines of Unknown Materials	
Row 4a. Service lines that do not contain any lead pipe or galvanized pipe and that do not have lead connectors.	
Row 4b. Service lines for which the material makeup of the service line and of the connector are not known.	
Total Number of Service Lines	Number:

Water Operator Workforce Questions

- 1** *What is the total number of management, administrative and operations personnel employed or contracted by the water system? (This should include include individuals employed or contracted by the water sytem who are responsible for day-to-day operations at the water system.)*

- 2** *How many operators does the system have for the drinking water treatment and water distribution system?*

- a.** *Of the total number of operators reported in Question 2, how many are certified in each of the following categories? Enter the number of operators in each category.*

_____ Drinking water treatment only

_____ Water distribution only

_____ Drinking water treatment and water distribution

- b.** *What is the total number of hours per week that all the operators reported in Question 2 spend on-site at the water system? ("On-site" implies time spent physically at the water system for routine operations and for emergencies.)*

_____ Hours per week

- c.** *Of the number of operators reported in Question 2, how many are contracted from another entity? Enter zero if none of the operators are contracted.*

_____ Contracted from another entity

If the answer is zero, skip Question 3 and go to Question 4.

3 *If the answer to 2c is more than zero, what type of entity does the water system contract with for operators? Check all that apply.*

- Private company
- One or more water utilities
- Other, please describe

4 *How many positions for contracted or employee drinking water treatment or water distribution system operators are currently vacant? Enter zero if there are no vacancies.*

a. *If there are currently vacant operator positions reported in Question 4, what is the total number of hours per week that need to be filled by those positions?*

For example, enter 40 hours for one full-time position or 20 hours for one half-time position.

_____ Hours per week

5 *Do you anticipate an increase, decrease or no change in the number of operators that the water system will need for the time periods indicated below? Enter the number anticipated or check "Don't know."*

In the next 5 years?

_____ Number of additional operators

_____ Number of fewer operators

- No change
- Don't know

In the next 10 years?

_____ Number of additional operators

_____ Number of fewer operators

- No change
- Don't know

6 *How many of the existing employee or contracted operators do you believe will need to be replaced due to retirement, accepting another position or for other reasons? For the time periods indicated below, enter the number anticipated or check "Don't know."*

a. *In the next 5 years?*

Number of operator staff to be replaced _____

Don't know

b. *In the next 10 years?*

Number of operator staff to be replaced _____

Don't know

7 *Do you currently have difficulty hiring employees or obtaining contracted water operators?(check one)*

Yes

No

Don't know

8 *Which of the following best describes what you anticipate in the next 5 years for replacing or increasing the number of employee or contracted operators? Check the most applicable option.*

a. much less difficult than it is now

b. less difficult than it is now

c. about the same as it is now

d. more difficult than it is now

e. much more difficult than it is now

f. no opinion

9 *Which of the following best describes what you anticipate in the next 6-10 years for replacing or increasing the number of employee or contracted operators? Check the most applicable option.*

a. much less difficult than it is now

b. less difficult than it is now

c. about the same as it is now

d. more difficult than it is now

e. much more difficult than it is now

f. no opinion

10 *Which of the following best describes what you anticipate in the next 10 years for replacing or increasing the number of employee or contracted operators? Check the 3 most applicable options.*

- a. lack of candidates interested in a water operator profession
- b. lack of knowledge of the water operator profession by potential candidates
- c. lack of candidates with necessary technical skill
- d. difficulties getting operator certification requirements met
- e. retirements are expected to overwhelm normal recruitment
- f. unable to offer candidates competitive wages
- g. unable to offer candidates full-time work
- h. unable to offer candidates paid benefits
- i. long work hours of the job
- j. other (please explain)

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):

Signature: _____

Telephone Number: _____

Name (please print): _____

Fax Number: _____

Title: _____

E-mail Address: _____

Mailing Address: _____

Best Time to Reach You: _____

(Street Address) _____

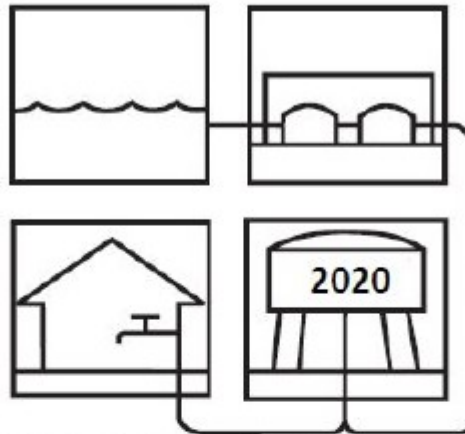
If you have any questions, contact your state coordinator.

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



Drinking Water Infrastructure Needs Survey and Assessment

Use these instructions and lists of codes when you fill out the Drinking Water Infrastructure Needs Survey and Assessment (DWINSA) questionnaire. 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 2020 Drinking Water Infrastructure Needs Survey and Assessment Questionnaire

<i>Column Title</i>	<i>Instructions</i>
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.
Number Needed	<p>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).</p> <p>If you use this column and provide a project cost, the cost should reflect the entire project (i.e., <i>all</i> 10 wells or <i>all</i> 1,000 meters, not the cost of an individual well or meter).</p>
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, 2010. 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 2015 DWINSA. An asterisk (*) indicates the project must be removed, modified, or have a project-specific validation for the 2020 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 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 Questionnaire 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

Code	Type of Need
RAW/UNTREATED WATER SOURCE	
R1	Well (including pump and appurtenances)
R2	Well Pump
R3-5	Well House ¹ Eliminate Well Pit ¹ Abandon Well ¹
R6	Aquifer Storage and Recovery Well
R7	Surface Water Intake
R8	Raw Water Pump
R9	Off-Stream Raw Water Storage ²
R10	Spring
R11	Destratification ¹
TREATMENT: Disinfection	
T1	Chlorination
T2	Chloramination
T3	Chlorine Dioxide
T4	Ozonation
T5	Mixed Oxidant Type Equipment
T6	Ultraviolet 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 CAC technologies)
T11	Direct or In-line Filter Plant
T12	Slow Sand Filter Plant
T13	Diatomaceous Earth Filter Plant
T14	Membrane Technology for Particulate Removal
T15	Cartridge or Bag Filtration Plant
T16	Lime Softening
T17	Reverse Osmosis
T18	Electrodialysis
T19	Activated Alumina
T20	Manganese Green Sand (or other oxidation/filtration technology)
T21	Ion Exchange
T22	Groundwater Chemical-feed
T23	Iron Adsorption
T24	Aeration
TREATMENT: Other Components / Equipment / Processes	
T30	Zebra Mussel Control
T31	Corrosion Control (chemical addition)
T32	Powdered Activated Carbon
T33	Aeration (component)
T34	Sequestering for Iron and/or Manganese
T35	Chemical Feed
T36	Chemical Storage Tank

¹ These codes are not applicable to the 2020 DWINSA but may appear in 2011 DWINSA data.

² Cost must be provided; cost of this infrastructure cannot be modeled.

LIST 1 - TYPE OF NEED (cont.)

Code Type of Need

TREATMENT: *Other Components / Equipment / Processes*

- 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)* ²
- ~~T50-52~~ *Surface Water Monitoring Equipment (Tribal-Only)*¹
- ~~T53~~ *Chlorine Residual Monitors (Tribal-Only)*¹

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
- X2 Finished Water Transmission

DISTRIBUTION

- M1 Distribution Mains (any mains that transport water through a piping grid serving customers; see "transmission" above)
- M2 Lead (Pb) Service Line Replacement
- M3 Service Lines (other than lead service lines)
- ~~M4~~ *Hydrants* ¹
- M5 Valves (gate, butterfly, etc.) (not included in a pipe project)
- M6 Control Valves (PRVs, altitude, etc.)
- M7 Backflow Prevention Devices/Assemblies
- M8 Water Meters

FINISHED/TREATED WATER STORAGE

- S1 Elevated Finished/Treated Water Storage
- S2 Ground-level Finished/Treated Water Storage
- S3 Hydropneumatic Storage
- S4 Cisterns (Tribal Only)
- 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

- ~~W1~~ *Laboratory Capital Costs for Labs Owned by the System*¹
- W2 Computer and Automation Costs (SCADA)
- ~~W3~~ *Pump Controls/Telemetry*¹
- W4 Emergency Power (enter design capacity as kilowatts)
- ~~W5-9~~ *Fencing and Security-related needs* ¹
- W10 *Other (Please include an explanation)* ²
- W11 Water Rights²

Codes R99, S99, T99, and M99 may be added by EPA to assign a category of need. They are in some 2011 and 2015 DWINSA projects but do not affect cost or allowability of the project.

LIST 2 - REASON FOR NEED

Code	Reason the Project is Needed
A1	Project is for existing infrastructure that is or will be old or deteriorated by 12/31/2039.
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 questionnaire).
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 questionnaire).
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.
A10	<i>[A10 is not applicable to the 2020 DWINSA but may appear in 2011 DWINSA data. A10 referred to security-related needs]</i>
A11	Use this code if codes A1-A9 do not apply.

LIST 3 - REGULATION OR SECONDARY PURPOSE

<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

OTHER

- 2A Secondary Contaminants (e.g., iron, taste and odor, or color)
- 2B State Requirements

IF NONE OF THE ABOVE CODES APPLY

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

PROPOSED AND RECENTLY PROMULGATED SDWA REGULATIONS

TBD.

LIST 4 - DOCUMENTATION

Code <i>Independent Documentation of Need and/or Cost</i>	
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 <i>Independent Documentation of Need Only</i>	
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 <i>Independent Documentation of Cost Only</i>	
9	Cost of Previous Comparable Construction. This may be used to justify costs if the costs are project-specific. It must include documentation of how the costs were derived.
Code <i>Survey-generated Documentation of Need Only</i>	
10	Written by State/EPA Region/Navajo Nation. Brief description and statement of need <u>not</u> written by the system.
11	Written by System. Brief description and statement of need written by the system.
Code <i>Tribal or State Small System Survey Only</i>	
12	Documentation Written by Small System Site Visit Contractor.
15	Project is in Indian Health Service SDS
Code <i>Documentation Submitted for Previous DWINSA</i>	
20	Project Relied on 2007 DWINSA Documentation. Code not applicable to the 2020 DWINSA. Resubmit documentation if it is needed.
24	Project Relies on 2011 DWINSA Documentation. Code not applicable to the 2020 DWINSA. Resubmit documentation if it is needed.
22	Project Relies on 2015 DWINSA Documentation. Submit project-specific validation statement. Other documentation codes also apply if additional documentation is submitted for the 2020 DWINSA.