# Appendix B – Data Collection Instrument and Lists of Codes



# 2020 Drinking Water Infrastructure Needs Survey And Assessment

OMB No.: Approval Expires:

U.S. Environmental Protection Agency Washington, DC 20460

Federal PWSID No.:

Please verify or correct the following information:

	as Printed		Information nation is missing or incorrect)
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	Check All That Ap	ply: Ground	Surface/GWUDI
(Ground, Surface/GWUDI, etc.):		Purchased Ground	Purchased Surface/GWUDI
Ownership Type:	Check All That Ap	ply: Public	Investor-Owned or
Omicisiip Type.		Federal Government	Private Non-Profit
This collection of information is approved by OMB under the Paperwork Reduction Act, 44 U.S 1452(h) and 1452(i)(4) of the Safe Drinking Water Act SDWA, as amended by America's Water to, a collection of information unless it displays a currently valid OMB control number. The pub response.	er Infrastructure Act of 2	018). An agency may not conduct or sponsor	r, and a person is not required to respond
Send comments on the Agency's need for this information, the accuracy of the provided burde automated collection techniques to the Director, Regulatory Support Division, U.S. Environment control number in any correspondence. Do not send the completed form to this address.			
State Use Only			
State Reviewer:		Telephone Number:	
Information provided for this survey can be requested by the public. It is our experie	nce that this informati	on is rarely requested.	

EPA Form 6100-01 July 2020

Project Number	Project Name	Type of Need	Reason for Need	N,E,R,H (New Expand Replace Re H ab)	<u>C</u> or <u>F</u> ( <u>C</u> urren t <u>F</u> uture)	Regula-	Design Capacity (MG, MGD, or kW)	Diameter (inches)	Length (feet)	Number Needed	Cost Estimate	Cost Date (mm/yyyy)	Documen- tation	Remove Modify or Validate
Ex. 1	Replace well 5	R1	A1	R	С	4A	0.5			1			6, 10	
Ex 2	Replace Deteriorated Transmission Main	X2	A1	R	С	4A		24	20,000		\$4,200,000	06/2015	1	

Comment Codes

### 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	<u>Length of</u> Existing Pipe feet)		Material Likely Used For Replacement of Existing Pipe								
Plastic (such as HDPE, PVC, PE)		Plastic 🗖	DI 🗖	cı 🗆	AC 🗆	Unknown 🗆	Other (please specify)				
Ductile Iron (DI)		Plastic 🗆	DI 🗆	cı 🗆	AC 🗆	Unknown 🗆	Other (please specify)				
Cast Iron (CI)		Plastic 🗆	DI 🗆	cı 🗆	AC 🗆	Unknown 🗆	Other (please specify)				
Asbestos Cement (AC)		Plastic 🗆	DI 🗖	cı 🗆	AC 🗆	Unknown 🗆	Other (please specify)				
<u>Unknown</u>		Plastic 🗆	DI 🗆	cı 🗆	AC 🗆	Unknown 🗆	Other (please specify)				
Other (please specify)		Plastic 🗌	DI 🗆	cı 🗖	AC 🗆	Unknown	Other (please specify)				
New Pipe Project Mar	terials	Material Likely Used for New Pipe Projects (extensions and looping)									
What is the most common material u for new pipe installation (extensions of	Plastic □	DI 🗖	cı 🗆	AC 🗆	Unknown 🗖	Other (please specify)	Multiple 🗖				
If you selected "Multiple", please indic common materials used for new pipe	Plastic 🗖	DI 🗖	cı 🗆	AC 🗖	Unknown 🗖	Other (please specify)					
Please use the box to the right to des the system has regarding new pipe n HDPE used for mains <6" in diamete 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			Mat	erial Likely Used	I For Future Replacement Tank	rs.	
Welded or Bolted Steel (WS)		ws 🗆	GFS □	FG □	Concrete	Unknown 🗆	Other (please specify)	
Glass Fused to Steel (GFS)		ws 🗆	GFS □	FG □	Concrete 🗆	Unknown 🗆	Other (please specify)	
Fiberglass (FG)		ws 🗆	GFS □	FG 🗆	Concrete 🗆	Unknown 🗆	Other (please specify)	
Concrete		ws 🗆	GFS 🗆	FG □	Concrete 🗆	Unknown 🗆	Other (please specify)	0
Unknown		ws 🗆	GFS □	FG □	Concrete 🗆	Unknown 🗆	Other (please specify)	
Other (please specify)		ws 🗖	GFS □	FG □	Concrete	Unknown 🗆	Other (please specify)	
			EI	evated Stor	rage Inventory	Table		
Material Type	Number of Elevated Storage Tanks				sed For Future I			
Welded or Bolted Steel (WS)		ws 🗆	Composite		Unknown 🗆	Other (please specify)		
Composite (e.g. steel tank w/concrete pedestal)		ws 🗆	Composite	0	Unknown 🗆	Other (please specify)		
Unknown		ws 🗆	Composite		Unknown 🗖	Other (please specify)		
Other (please specify)		ws 🗆	Composite		Unknown 🗆	Other (please specify)		

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 🗖	GFS □	FG □	Concrete 🗖	Unknown 🗆	Other (please specify)
What is the most common material used by this system for new elevated storage tanks?	ws 🗆	Composite		Unknown 🗆	Other (please specify)	

### 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 <u>previously</u> 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 <u>previously</u> 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:

<u>Number of Service Lines that Are Solely System-Owned:</u> 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.

<u>Number of Service Lines that Are Solely Customer-Owned:</u> 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.

<u>Number of Service Lines for which the System and Customer Share Ownership:</u> 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								
previously 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								
previously downstream from an unknown source of lead that								
was removed from the service line.								
Row 3d. Service lines that contain galvanized pipe that have								
never been downstream from any lead pipe or lead connector								
in the service line. Other Service Lines and Service Lines of Unknown Materials								
Other Service Lines and Service Lines of Officiowif 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:					

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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.	Control provides for a sixty or a law interest and interest law for which the graduate is a second in factor of the formation
	System provides financing assistance, such as low interest or no interest loans for which the customer is responsible for repayment $ extstyle  ex$
C.	System provides financial aid, such as payment for a portion of the customer's cost
c. d.	
	System provides financial aid, such as payment for a portion of the customer's cost
	System provides financial aid, such as payment for a portion of the customer's cost
d. 7	System provides financial aid, such as payment for a portion of the customer's cost  Other (please describe)  Costs of lead service line replacements since January 1, 2016. (please include documentation of cost, if available)
d.	System provides financial aid, such as payment for a portion of the customer's cost  Other (please describe)  Costs of lead service line replacements since January 1, 2016. (please include documentation of cost, if available)  Cost Per line replaced
d. 7 a.	System provides financial aid, such as payment for a portion of the customer's cost  Other (please describe)  Costs of lead service line replacements since January 1, 2016. (please include documentation of cost, if available)  Cost Per line replaced  Cost per foot
d. 7 a. b.	System provides financial aid, such as payment for a portion of the customer's cost  Other (please describe)  Costs of lead service line replacements since January 1, 2016. (please include documentation of cost, if available)  Cost Per line replaced

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# 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 system 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.	·
d.	
e.	
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 🗆

- - 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
  - unable to offer candidates paid benefits
  - i. long work hours of the job
  - j. other (please explain)

### 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?
Total Number and Capacity of Existing Surface Water Sources:	Existing Surface Water Intakes (excluding pumps):	Existing Surface Water Intakes (excluding pumps):	If yes, how many additional sources are necessary?
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
Disinfection (including booster	number of locations where the following to Disinfection:	eatment is applied: Disinfection:	Does your system have additional treatment needs for provisions of additional public health protection or for aesthetic concerns?
disinfection):			concerns:
Filtration:	Filtration:	Filtration:	
Chemical removal or addition:	Chemical treatment:	Chemical treatment:	If yes, how much additional treatment is necessary?
	Pump Stat	tions 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 Exiting Water-Haul Vehicles needing replacement	(Rehabilitation of water-haul vechicles 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	Number of Backflow Prevention	Number of Backflow Prevention
Prevention Devices/Assemblies:	Devices/Assemblies:	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.		

# **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?						
ldentify, by project number, available documentation for all needs and	costs reported?					
Email the questionnaire and email or mail the documentation to your s	state?					

	Summary of	f Survey-Ge	nerated and Independent Documentation for Each Project	Federal PWSID No.:	0
Project Number	Project Name	Documen- tation Code(s)	State/System Survey-Generated Statement	Independent Document Name	Independent Documentation Page Number(s)

The following pages present the tribal data collection instrument.

### Al & 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 Corrected Information as Printed (Fill in only if preprinted information is missing or incorrect) 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 Total Length of Pipe in System (in Surface/GWUDI Check All That Apply: Ground Source Water Type (Ground, Surface/GWUDI, etc.): Purchased Ground □ Purchased Surface/GWUDI Investor-Owned or Private Check All That Apply: Public Non-Profit Ownership Type: ☐ Federal Government □ Tribal 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. 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. 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.

EPA Form 6100-01 July 2020

						Pro	ject Ta	ble			Fede	eral PWSID	(	0	
Project Number	Project Name	Type of Need	Reason for Need	N,E,R,H (New Expand Replace Re H ab)	<u>C</u> or <u>F</u> ( <u>C</u> urren t <u>F</u> uture)	Regula- tion	Design Capacity (MG, MGD, or kW)	Diameter (inches)	Length (feet)	Number Needed	Cost Estimate	Cost Date (mm/yyyy)	Documen- tation	Remove Modify or Validate	Comment Codes
Ex. 1	Replace well 5	R1	A1	R	С	4A	0.5			1			6, 10		
Ex 2	Replace Deteriorated Transmission Main	X2	A1	R	С	4A		24	20,000		\$4,200,000	06/2015	1		

### 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?
		5 5.5 10	☐ Yes ☐ No
Total Number and Capacity of Existing Surface Water Sources:	Existing Surface Water Intakes (excluding pumps):	Existing Surface Water Intakes (excluding pumps):	If yes, how many additional sources are necessary?
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	e number of locations where the following t	reatment is applied:	Does your system have additional treatment needs for
Disinfection (including booster disinfection):	Disinfection:	Disinfection:	provisions of additional public health protection or for aesthetic concerns?
Filtration:	Filtration:	Filtration:	☐ Yes ☐ No
Chemical removal or addition:	Chemical treatment:	Chemical treatment:	If yes, how much additional treatment is necessary?
	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?
			☐ Yes ☐ No
Total Number and Capacity of Existing Booster Pump Stations:	Number of Existing Booster Pump Stations:	Number of Existing Booster Pump Stations:	If yes, how much additional finished water storage or booster pumping capacity is necessary?
Total Number of Utility-Owned Water- Haul Vehicles:	Number of Exiting Water-Haul Vehicles needing replacement:	(Rehabilitation of water-haul vechicles 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.

*ICR for 2020 DWINSA* 24 July 2020

# 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	Number of Water Meters:	Number of Water Meters:
Meters:		
Total Number of Existing Backflow	Number of Backflow Prevention	Number of Backflow Prevention
Prevention Devices/Assemblies:	Devices/Assemblies:	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, including the Drinking Water Infrastructure Grant Tribal Set Aside (DWIG-TSA) 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. Service line replacement costs will be estimated by EPA and do not need to be provided by public water systems.

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.

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### 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 <u>previously</u> 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 <u>previously</u> 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.

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).	se record the number of service lines that fit the description of each row
Row 1. Service lines that contain any lead pipe.  Service Lines That Contain Lead Connectors	Number of Service Lines
Service Lines That Contain Lead Connectors	
Row 2. Service lines that do not contain any lead nine but have lead connectors (such as gooseneeks or nigtails)	
NOW 2. Service lines that do not contain any lead pipe but have lead connectors (such as gooseneeds or pigtains).	
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.	
<b>Row 3c.</b> 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.	
<b>Row 3d.</b> 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:	

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# 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 system 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.

	Г	Private company
	_	One or more water utilities
	Γ	Other, please describe
,		many positions for contracted or employee drinking water treatment or water distribution system ators are currently vacant? Enter zero if there are no vacancies.
a.	weel	ere are currently vacant operator positions reported in Question 4, what is the total number of hours per k 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
	For (	
	Do y	
	Do yo	Hours per week  ou anticipate an increase, decrease or no change in the number of operators that the water system will
	Do yo	Hours per week  ou anticipate an increase, decrease or no change in the number of operators that the water system will for the time periods indicated below? Enter the number anticipated or check "Don't know."
	Do yo	Hours per week  ou anticipate an increase, decrease or no change in the number of operators that the water system will for the time periods indicated below? Enter the number anticipated or check "Don't know."  next 5 years?
	Do yo need In the	Hours per week  ou anticipate an increase, decrease or no change in the number of operators that the water system will for the time periods indicated below? Enter the number anticipated or check "Don't know."  next 5 years?  Number of additional operators
	Do ye need In the	Hours per week  ou anticipate an increase, decrease or no change in the number of operators that the water system will for the time periods indicated below? Enter the number anticipated or check "Don't know."  next 5 years?  Number of additional operators  Number of fewer operators
	Do ye need In the	Hours per week  ou anticipate an increase, decrease or no change in the number of operators that the water system will for the time periods indicated below? Enter the number anticipated or check "Don't know."  next 5 years?  Number of additional operators  Number of fewer operators  No change
	Do you need In the	Hours per week  ou anticipate an increase, decrease or no change in the number of operators that the water system will for the time periods indicated below? Enter the number anticipated or check "Don't know."  next 5 years?  Number of additional operators  Number of fewer operators  No change  Don't know
	Do you need In the	Hours per week  ou anticipate an increase, decrease or no change in the number of operators that the water system will for the time periods indicated below? Enter the number anticipated or check "Don't know."  next 5 years?  Number of additional operators  Number of fewer operators  No change  Don't know  next 10 years?
	Do you need In the	Hours per week  ou anticipate an increase, decrease or no change in the number of operators that the water system will for the time periods indicated below? Enter the number anticipated or check "Don't know."  next 5 years?  Number of additional operators  Number of fewer operators  No change  Don't know  next 10 years?  Number of additional operators

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."
а	. 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.
9 a.	number of employee or contracted operators? Check the most applicable option.
_	number of employee or contracted operators? Check the most applicable option.
a.	number of employee or contracted operators? Check the most applicable option.  much less difficult than it is now  less difficult than it is now
a. b.	number of employee or contracted operators? Check the most applicable option.  much less difficult than it is now  less difficult than it is now
a. b. c.	number of employee or contracted operators? Check the most applicable option.  much less difficult than it is now  less difficult than it is now  about the same as it is now  more difficult than it is now

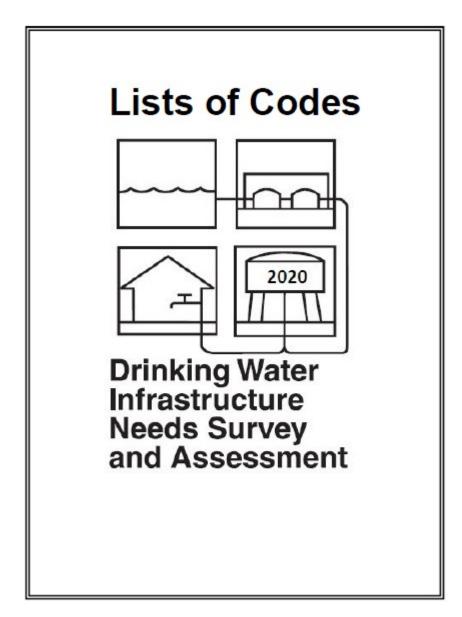
10	Which of the following best describes what you anticipate in the next 10 years for replacing or increasing the number of employee or contracted operators? Check the 3 most applicable options.
a.	lack of candidates interested in a water operator profession
b.	lack of knowledge of the water operator 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)

	Summary of	f Survey-Ge	nerated and Independent Documentation for Each Project	Federal PWSID No.:	0
Project Number	Project Name	Documen- tation Code(s)	State/System Survey-Generated Statement	Independent Document Name	Independent Documentation Page Number(s)

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



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

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.
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, <b>not</b> 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, 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 <u>substantially</u> 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 Well House 1-Eliminate Well Pit 1-Abandon Well 1 R3-5 R6 Aguifer Storage and Recovery Well R7 Surface Water Intake R8 Raw Water Pump Off-Stream Raw Water Storage 2 R9 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
- Electrodialysis T18
- T19 Activated Alumina
- T20 Manganese Green Sand (or other oxidation/filtration technology)
- T21 Ion Exchange
- T22 Groundwater Chemical-feed
- T23 Iron Adsorption
- T24

### TREATMENT: Other Components / Equipment / Processes

- T30 Zebra Mussel Control
- T31 Corrosion Control (chemical addition)
- T32 Powdered Activated Carbon
- T33 Aeration (component)
- Sequestering for Iron and/or Manganese T34
- T35 Chemical Feed
- T36 Chemical Storage Tank

<sup>&</sup>lt;sup>1</sup> These codes are not applicable to the 2020 DWINSA but may appear in 2011 DWINSA data.

<sup>&</sup>lt;sup>2</sup> 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		
T53	Surface Water Monitoring-Equipment (Tribal Only) <sup>1</sup> Chlorine Residual Monitors (Tribal Only) <sup>1</sup>		
TRANS	MISSION MAINS: (Any mains that transport raw water to the treatment plant, or treated		
	rom the plant to the distribution system grid.)		
X1	Raw Water Transmission		
X2	Finished Water Transmission		
DISTRI	BUTION		
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		
FINISH	ED/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 W11	Other (Please include an explanation) <sup>2</sup> Water Rights <sup>2</sup>		
Codes F	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
<b>A</b> 1	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 <b>existing regulation</b> (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 <b>secondary standard</b> (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	[A10 is not applicable to the 2020 DWINSA but may appear in 2011 DWINSA data. A10 referred to security-related needs]
A11	Use this code if codes A1-A9 do not apply.

### LIST 3 - REGULATION OR SECONDARY PURPOSE

### Code Regulation or Secondary Purpose

### EXISTING SDWA REGULATIONS

- 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 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. It must include documentation of how the costs were derived.

### Code Survey-generated Documentation of Need Only

- 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 Tribal or State Small System Survey Only

- 12 Documentation Written by Small System Site Visit Contractor.
- 15 Project is in Indian Health Service SDS

Code	Documentation Submitted for Previous DWINSA		
20	Project Relied on 2007 DWINSA Documentation. Code not applicable to the 2020 DWINSA. Resubmit documentation if it is needed.		
21	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.		