United States
Environmental Protection Agency

SURVEY OF COMMUNITY WATER SYSTEMS

OMB No. XXXX-XXXX
Expiration date: MM/DD/YY

Paper version:

Please return this questionnaire in the enclosed pre-paid Federal Express envelope.

or mail to:

EPA Community Water System Survey
c/o The Cadmus Group, Inc.
57 Water Street
Watertown, MA 02472

Participation in the survey is voluntary. However, as a matter of policy, EPA will not disclose the identity of any respondent to this questionnaire, nor the identity of any participating water system. While no respondent has ever claimed that the information asked for in this survey contains confidential business information (CBI), EPA will offer you the opportunity of claiming CBI in the event that we receive a Freedom of Information Act request for any data that would identify you or your system. It should be noted, however, that EPA has never received a Freedom of Information Act request for such information in prior surveys.

The public reporting and record keeping burden for this collection of information is estimated to average 3.58 hours per response or to range from 1 hour to 5 hours per respondent annually. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. 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 OMB control numbers for EPA's regulations are listed in 40 CFR Part 9 and 48 CFR Chapter 15.

If you wish, you may 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, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, Attention: Desk Officer for EPA. Include the EPA ICR number and OMB control number in any correspondence. Do not send the completed survey to this address.

Spreadsheet version:

When you complete the survey, please visit our website at
www.UploadCWSSurvey.gov
Follow instructions to upload your completed questionnaire. Please have your Response ID available

If you prefer, you may return this questionnaire by emailing it as an attachment to:
CWSSurvey@cadmusgroup.com

You also may print a copy of the completed questionnaire and send it to us in the pre-paid Federal Express envelope provided.
(Please call XXX-XXX-XXXX if you need a Federal Express envelope.)

Or you may mail your printed copy of the completed questionnaire to:
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control number in any correspondence. Do not send the completed survey to this address.

Web site version:

(There will be a cover sheet that welcomes the system to the web site, verifying its name and PWSID. It will include instructions for when the system finishes the survey (e.g., click "done" and follow instructions to save a version of the completed questionnaire. it will also include the following text:)

Participation in the survey is voluntary. However, as a matter of policy, EPA will not disclose the identity of any respondent to this questionnaire, nor the identity of any participating water system. While no respondent has ever claimed that the information asked for in this survey contains confidential business information (CBI), EPA will offer you the opportunity of claiming CBI in the event that we receive a Freedom of Information Act request for any data that would identify you or your system. It should be noted, however, that EPA has never received a Freedom of Information Act request for such information in prior surveys.

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Dear Owners and Operators of Community Water Systems:

The United States Environmental Protection Agency (EPA) is conducting a national survey of drinking water systems using the attached questionnaire. About 1,700 water systems have been randomly selected to participate in this survey, and yours was one such system. This survey is conducted approximately every five years, the last one being in 2000. We are sending you this questionnaire because you were identified in your state's database (State Drinking Water Information System) as the most appropriate person to provide information about your water system. Participation in the survey is voluntary. This survey attempts to identify key characteristics of many aspects of a water system to determine a national picture of operations, treatment schemes, and finances. The questions asked in the questionnaire reflect myriad issues and topics including: current technology at the water system, sources of drinking water, treatment techniques and objectives, storage, the distribution system, security questions, and system finance.

Once the questionnaires have been returned, the information collected will be reviewed and statistical inferences about water systems country will be made. With this information, EPA will then determine the best policies and procedures for production of safe drinking water throughout the country.

This will accomplish a number of important objectives. First, it will give us current data that will allow us to better consider the costs and benefits to water systems when we develop new national drinking water regulations. It will also allow us to measure the impact of drinking water regulations that have been put in place since the last survey. This, in turn, will help us determine more affordable approaches to drinking water treatment. Furthermore, the answers you provide in this questionnaire will help us in developing more effective programs to safeguard our nation's drinking water, provide guidance to the states and measure the effectiveness of federal programs already in existence, such as the Drinking Water State Revolving Fund.

As we have done in the past, EPA will only make use of the information you provide when it has been aggregated with the responses of many other water systems in the same size category as yours. We will never disclose your name or the name of your water system in any public documents. Please see the inside cover of the questionnaire if you'd like more details on how your privacy will be protected.

Answers to this questionnaire will help EPA to understand your circumstances better than any other single tool we have. If you have ever wanted to have a larger say in the development of national rules that could directly effect you and your water system, providing answers to this questionnaire is an important contribution. Because only 1,700 of you are being asked to speak for over 50,000 other systems, your voice is that much more important and will carry that much more weight. If you have ever felt that Federal regulators don't understand your situation, then please take this opportunity to tell us, in detail, just what your situation is. It will make a difference.

Sincerely,

Brian C. Rourke
Program Analyst
Standards and Risk Management Division

GENERAL INSTRUCTIONS

This questionnaire asks about your system's operational and financial characteristics.

Questions 1-4 ask for general information about your system.
Questions 5 through 20 ask about your systems **operational characteristics**, including its water sources, treatment practices, storage and distribution system.
Question 20 through 28 ask about your systems **financial characteristics**, including number of connections, revenue, expenses, and capital investment.

Please complete the questionnaire.

Paper version
Please make a copy of your completed questionnaire. Return the completed questionnaire, along with any supporting documentation, in the pre-paid FedEx envelop provided.

Your are encouraged to enclose schematics, diagrams, financial reports, or other information that will help provide a complete picture of your water system. If you have a map of your service area, please send it with your questionnaire. If schematics, diagrams, financial or other reports contain the information requested by a question, you may enclose and refer to the documentation rather than fill out the question. If you are responding electronically, you may upload any of these files at www.CWSSQuestionnaire.com.

Spreadsheet version:
You may send the completed questionnaire to us electronically via e-mail, or you may upload it to our website. You also may print a copy and send it to us by FedEx or US mail.

Your are encouraged to enclose schematics, diagrams, financial reports, or other information that will help provide a complete picture of your water system. If you have a map of your service area, please send it with your questionnaire. If schematics, diagrams, financial or other reports contain the information requested by a question, you may enclose and refer to the documentation rather than fill out the question. If have electronic copies of the documents, you may upload any of these files at www.CWSSQuestionnaire.com. Please have your Responder ID available to upload files. You also may request a pre-paid FedEx envelope at our web site, by e-mailing us at CWSSurvey@cadmusgroup.com, or by calling toll-free XXX-XXX-XXXX

Web-version
As with the paper and spreadsheet version of the questionnaire, you do not need to complete the questionnaire in one session. Your data will be saved as you enter it. When you are finished, click on the "Done" button. Follow the instructions to save a copy of the completed questionnaire on your computer.

Your are encouraged to enclose schematics, diagrams, financial reports, or other information that will help provide a complete picture of your water system. If you have a map of your service area, please send it with your questionnaire. If schematics, diagrams, financial or other reports contain the information requested by a question, you may enclose and refer to the documentation rather than fill out the question. If have electronic copies of the documents, you may upload any of these files at www.CWSSQuestionnaire.com. Please have your Responder ID available to upload files. You also may request a pre-paid FedEx envelope at our web site, by e-mailing us at CWSSurvey@cadmusgroup.com, or by calling toll-free XX

If you require more space to answer an question than is provided, please record the information on a copy of the question or use a blank sheet of your own.

If you have any questions, please call us toll-free at XXX-XXX-XXXX

1 Please provide the name, title, and telephone number of the **most knowledgeable person** to contact for information. Also, please provide the name of the responder if it does not match the label:

	A. Part I – Operating Characteristics	B. Part II – Financial Characteristics *(Write "SAME" if same as A)*
Name:	_____	_____
Title:	_____	_____
Tel. No.	_____	_____
Fax No.	_____	_____
E-mail:	_____	_____

2 This survey will ask you to provide operating and financial information for your public water system for the most recent 12-month period for which data are available. Please specify below the **end dates** for which data are provided.

A Operating information **(end date)**: _____ mm / _____ dd / _____ yy

B Financial information **(end date)**: _____ mm / _____ dd / _____ yy

3 Please classify your water system using the following criteria. *(Please check one only)*

- Owned and operated by a government or public agency (not including government-owned systems that hire a private company to operate the system) ☐
- Owned by a government or public agency and operated by a private contractor ☐
- Owned privately and operated for profit primarily as a water business (e.g., American Water Company) ☐
- Owned privately and not operated for profit (e.g., a homeowners association or a non-profit cooperative) ☐
- Owned privately and operated as a necessary part of another business (e.g., a mobile home park) ☐

4 A Do you have regular access to a computer for sending and receiving information?

☐ Yes

☐ No *(Skip to question 5)*

B Do any of your computers have the following features? *(Please check all that apply)*

- Microsoft Excel ☐
- Microsoft Access ☐
- CD drive ☐
- DVD player ☐

C What access do you have to the internet? *(Please check one only)*

- High speed internet access (e.g., cable, DSL, wireless, or T1) ☐
- Dial-up modem access ☐
- No access ☐

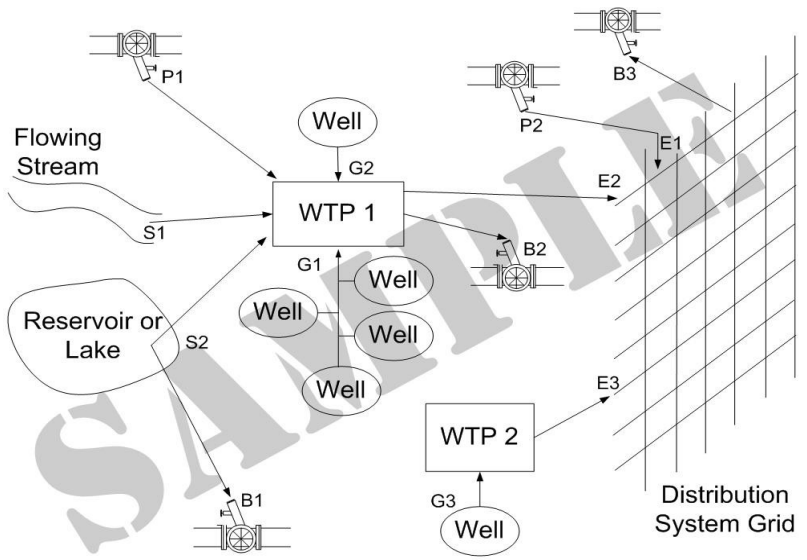
The following definitions of the components of a water system are used in this survey. Figure 1 is an example of a schematic of a water system showing water sources, treatment plants, transmission lines, and the distribution system.

Please refer to these definitions and the schematic for an explanation of the terms used in questions 6 through 11. Please submit diagrams or schematics, using figure 1 as a guide.

Please note that the identifier numbers used in the questions do not refer to specific items in figure 1. For example, use 'S1' to refer to your first surface water source, regardless of whether it is a flowing stream, as depicted in the schematic, or another surface water source.

Term	Example Code	Definition
Surface water intake	S1, S2	A surface water intake refers to the structure at the surface water source (flowing stream, lake, reservoir, or ground water under the direct influence of surface water) that permits the withdrawal of the water from that source.
Ground water source	G1, G2, G3	A ground water source refers to the connection of untreated water from one or more wells to a water treatment plant or directly into the distribution system. Where the water from multiple wells flows through a common pipe prior to entry into the treatment plant or distribution system, the combined flow is considered one ground water source.
Purchased water connection	P1, P2	A purchased water connection refers to the transmission of water from the seller's water system to a water treatment plant or directly into the distribution system of the purchaser's water system.
Water treatment plant	WTP 1, WTP 2	A water treatment plant is any facility where water is filtered, disinfected, and/or otherwise treated prior to its transmission into the distribution system (or its conveyance to another purchasing water system). For the purposes of this survey, simple disinfection only or pH adjustment prior to entry into the distribution system are considered to be a water treatment plant. Other examples include large scale filtration plants and chemical feed on wells for disinfection. It does not include facilities within the distribution system that boost disinfection.
Buyer	B1, B2, B3	A buyer refers to any system to whom water is sold.
Entry point	E1, E2, E3	An entry point is where treated or untreated potable water enters into the water system's distribution system.

Figure 1: Sample diagram of intakes, treatment plants, and entry points



5 Please draw your schematic here or submit a schematic on a separate sheet of paper. Figure 1 is an example of the type of schematic requested.

6 Provide the following information for the ground water sources, surface water intakes, or purchased water connections for this water system.
MG is millions of gallons of water.
MGD is millions of gallons per day.
If the source is used on a seasonal or emergency basis, the average daily amount is for the days the source is used.

A Ground water sources grouped by entry point to the distribution system.
Please list each well or group of wells feeding into a single ground water entry point separately by line.

Ground water sources grouped by entry point to the distribution system	How many individual wells supply this ground water entry point?	Is this a seasonal source? *(Yes or No)*	Is this an emergency source? *(Yes or No)*	If this is a seasonal or emergency source, how many months was it used in the 12-month period reported in question 2A?	Is the water from this source treated by your system?[1] *(Yes or No)*	What is the total amount of water drawn from this source in the 12-month period reported in question 2A? (MG)	On average, how much water is drawn from this source on a typical day that they were used during the reporting period in question 2A? (MGD)
G1							
G2							
G3							
G4							
G5							
G6							
G7							
G8							
G9							
G10							

1. Treatment includes any process that alone or in combination with other processes has an objective of producing or maintaining potable water.
2. If there is no limit on the amount of water that can be withdrawn, enter "no limit" here.
Limits on the availability of water include source capacity, water quality requirements, state and local water resource plans, local economic developmen projections, contractual obligations, permits, water rights, and legal constraints. Limits also include current equipment constraints imposed by system cc pumps, and water treatment plant capacity.

Estimate the maximum daily amount of water that can be drawn from this source that supplies each ground water entry point.[2] (MGD)

ıt and growth
ɔmponents,

B Surface water intake identifiers.

Please list each surface water intake separately by line.

Surface water intake identifiers	What is the source for this surface water intake? *(Please select one)* 1) Flowing stream, 2) Reservoir or lake, 3) GWUDI[1]	Is this a seasonal source? *(Yes or No)*	Is this an emergency source? *(Yes or No)*	If this is a seasonal or emergency source, how many months was it used in the 12-month period reported in question 2A?	Is the water from this intake treated by your system?[2] *(Yes or No)*	What is the total amount of water drawn from this source in the 12-month period reported in question 2A? (MG)	On average, how much water is drawn from this source on a typical day that it was used during the reporting period in question 2A? (MGD)	Estimate the maximum daily amount of water that can be drawn from each surface water intake.[3]
S1								
S2								
S3								
S4								
S5								
S6								
S7								
S8								
S9								
S10								

1. GWUDI is ground water under the direct influence of surface water.
2. Treatment includes any process that alone or in combination with other processes has an objective of producing or maintaining potable water.
3. If there is no limit on the amount of water that can be withdrawn, enter "no limit" here.
   Limits on the availability of water include source capacity, water quality requirements, state and local water resource plans, local economic development and growth projections, contractual obligations, permits, water rights, and legal constraints. Limits also include current equipment constraints imposed by system components, pumps, and water treatment plant capacity.

C Purchased water connections.

If your system purchases water from one source but has multiple connections or turnouts, please list each connection or turnout separately by line.

Purchased water con-nections	Provide the PWSIDs or name of the sellers for each connection. A seller can appear more than once.	Is this a seasonal source? *(Yes or No)*	Is this an emergency source? *(Yes or No)*	If this is a seasonal or emergency source, how many months was it used in the 12-month period reported in question 2A?	When you purchase this water, is it one of the following? *(Please select one)* 1) Finished, 2) Partially treated[1], 3) Untreated, 4) Unknown	What is the source of the purchased water? *(Please select one)* 1) Ground, 2) Surface, 3) GWUDI,[2] 4) Unknown	Do you boost disinfection of water from this source after it enters the distribution system? *(Yes or No)*	Do you provide any other treatment[1] to this water? (*Yes or No*)	What is the total amount of water drawn from this source in the 12-month period reported in question 2A? (MG)	On average, how much water is drawn from this connection on a typical day that it was used during the reporting period in question 2A? (MGD)	Estimate the maximum daily amount of water that can be drawn from each purchased water connection.[3]
P1											
P2											
P3											
P4											
P5											
P6											
P7											
P8											
P9											
P10											

1. Treatment includes any process that alone or in combination with other processes has an objective of producing or maintaining potable water.
2. GWUDI is ground water under the direct influence of surface water.
3. If there is no limit on the amount of water that can be withdrawn, enter "no limit" here.
   Limits on the availability of water include source capacity, water quality issues, state and local water resource plans, local economic development and growth projections, contractual obligations, permits, water rights, and legal constraints. Limits also include constraints imposed by system components, pipeline carrying capacity, and water treatment plant capacity.

7 Provide the following information for each water treatment plant in this water system. A *water treatment plant* is any facility that treats or otherwise improves the quality of the water. It includes large scale filtration plants, chemical feeds on wells for disinfection, and facilities that adjust pH prior to entry to the distribution system. It does **not** include facilities within the distribution system that boost disinfection.

Average daily production is the total amount of water produced by the plant divided by the number of days the plant was in use in the 12-month reporting period in question 2A. Mathematically, it is the sum of all the daily flows divided by the number of daily flows. *Design capacity* refers to the maximum amount of water the plant can produce in a single 24-hour period with all treatment trains operating at capacity. *Peak daily production* refers to the maximum amount produced in a single day over the 12-month reporting period in question 2A.

Water treatment plant identifier	List all of the surface, ground, and purchased water sources from question 6 that feed into each water treatment plant.	What was the average daily production of each water treatment plant for the 12-month period reported in question 2A?	What was the design capacity for each water treatment plant?	What was the peak daily production for each water treatment plant for the 12-month period reported in question 2A?
WTP1				
WTP2				
WTP3				
WTP4				
WTP5				
WTP6				
WTP7				
WTP8				
WTP9				
WTP10				

Use the treatment processes in table 1 and the objectives in table 2 to describe the treatment processes used by each plant in question 8.

Table 1: Treatment Processes Codes

Treatment	Code	Treatment	Code
Disinfection		**Filtration (continued)**	
Chlorine	T1	Rapid sand filter	T21
Chlorine dioxide	T2	Deep bed mono-media	T22
Chloramines only	T3	Dual/multi media	T23
Chloramine with a free chlorine	T4		
period (based on need in the		**Membranes**	
distribution system and not		Reverse osmosis	T24
routinely done)		Microfiltration	T25
Chloramine with seasonal	T5	Ultrafiltration	T26
(routine) free chlorine use		Nanofiltration	T27
Ozone	T6		
Ultraviolet light	T7	**Other**	
Mixed oxidant	T8	Aeration	T28
		Potassium permanganate	T29
Filtration Processes		Corrosion control	T30
Coagulant addition/rapid mix	T9	Ion exchange	T31
Polymer addition	T10	Activated alumina	T32
Flocculation	T11	Iron-based adsorptive media	T33
Settling/sedimentation	T12	Sequestration	T34
Lime/soda ash softening	T13	Fluoride addition	T35
Recarbonation	T14	Dissolved air flotation	T36
		Granular activated carbon	T37
Filtration		Centrally managed POU/POE	T38
Micro strainer	T15	Clearwell and/or contact vessel	T39
Slow sand filter	T16	(e.g., basin, pipeline)	
Bag or cartridge	T17	Other (1) see question 8	T40
Diatomaceous earth	T18	Other (2) see question 8	T41
Pressure filtration	T19	Other (3) see question 8	T42
Green sand	T20		

Table 2: Treatment Objectives Codes

Treatment	Code
Algae control	O1
Corrosion control	O2
Primary disinfection	O3
Secondary disinfection	O4
Disinfectant byproduct control	O5
Dechlorination	O6
Oxidation	O7
Iron removal	O8
Manganese removal	O9
Taste/odor control	O10
TOC removal	O11
Particulate/turbidity removal	O12
Softening (hardness removal)	O13
Recarbonation	O14
Organic chemical contaminant removal (e.g., VOCs, pesticides)	O15
Inorganic chemical contaminant removal (e.g., arsenic)	O16
Radionuclides contaminant removal	O17
Security	O18
Mussel control	O19
Disinfection byproduct control	O20
Fluoridation	O21
Other (1) see question 8	O22
Other (2) see question 8	O23
Other (3) see question 8	O24

8 Using the water treatment plant identifiers from question 7, characterize the treatment practices used in each of your system's treatment plants.

- Please enter the treatment process and objective for each step of the treatment practice. Use the codes from tables 1 and 2 above.
- There are a total of 15 steps available to select these processes and objectives. Each step may have up to three processes and objectives. Copy this page if you have more than 10 plants or use more than 15 steps in a single plant.
- Do not include disinfection booster stations that are within the distribution system.

WTP		Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10	Step 11	Step 12	Step 13	Step 14	Step 15
Example	Process	T9	T1	T8	T12	T22	T40	T3								
	Objective		O3	O6	O12			O4								
WTP 1	Process															
	Objective															
WTP 2	Process															
	Objective															
WTP 3	Process															
	Objective															
WTP 4	Process															
	Objective															
WTP 5	Process															
	Objective															
WTP 6	Process															
	Objective															
WTP 7	Process															
	Objective															
WTP 8	Process															
	Objective															
WTP 9	Process															
	Objective															
WTP 10	Process															
	Objective															

Use treatment codes T41, T42, and T43 for any treatment process you use that is not listed. Please specify what each process is:

T41: Other (1) _____

T42: Other (2) _____

T43: Other (3) _____

Use treatment codes O21, O22, and O23 for any objective that is not listed. Please specify what each objective is:

O21: Other (1) _____

O22: Other (2) _____

O23: Other (3) _____

8 Using the water treatment plant identifiers from question 7, characterize the treatment practices used in each of your system's treatment plants.

- Please enter the treatment process and objective for each step of the treatment practice. Use the codes from tables 1 and 2 above.
- There are a total of 15 steps available to select these processes and objectives. Each step may have up to three processes and six objectives. Copy this page if you have more than 10 plants or use more than 15 steps in a single plant. If you have more than six objectives for a treatment step, please provide the six most important objectives.
- Do not include disinfection booster stations that are within the distribution system.

Two examples are provided. The first is example is conventional filtration. The second is iron/manganese removal.

WTP		Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10	Step 11	Step 12	Step 13	Step 14	Step 15
Ex. 1	Process	T10	T11	T12	T24	T1	T40									
	Objective	O12	O12	O12	O12	O3	O3									
Ex. 2	Process	T8	T22	T1												
	Objective	O6 O8 O7	O7 O8	O3												
WTP 1	Process															
	Objective															
WTP 2	Process															
	Objective															
WTP 3	Process															
	Objective															
WTP 4	Process															
	Objective															
WTP 5	Process															
	Objective															
WTP 6	Process															
	Objective															
WTP 7	Process															
	Objective															
WTP 8	Process															
	Objective															
WTP 9	Process															
	Objective															
WTP 10	Process															
	Objective															

Use treatment codes T40, T41, and T42 for any treatment process you use that is not listed in Table 1 on page 9.
Please specify what each process is:

T40: Other (1) _____
T41: Other (2) _____
T42: Other (3) _____

Use treatment codes O21, O22, and O23 for any objective that is not listed in Table 2 on page 9.
Please specify what each objective is:

O21: Other (1) _____
O22: Other (2) _____
O23: Other (3) _____

9 Using the water treatment plant identifiers from question 7, indicate if the specified residuals management practices are used and provide the requested information regarding potential discharge. *(Yes or No for each category)*

Water treatment plant identifier	Do you use the following residual management process in the following water treatment plants? (Use the water treatment plant numbers from Question 8)															
	Dewatering		Disposal													
						Waste landfill		Waterway		Septic system		Sanitary sewer				
	Mechanical dewatering (e.g., belt presses, centrifuges, pressure filters, and vacuum filters)	Non-mechanical dewatering (e.g., lagoons, drying beds, and freeze assisted drying beds)	Land application (e.g., beneficial use)	On-Site Storage	Deep well injection	Hazardous waste landfill	Non-hazardous waste landfill	Can you discharge to a waterway (surface water)?	If yes, do you discharge to a waterway?	Can you discharge to a septic system?	If yes, do you discharge to a septic system?	Can you discharge to a sanitary sewer?	If yes, do you discharge to a sanitary sewer?	Recycle filter backwash	Other (specify)
WTP 1																
WTP 2																
WTP 3																
WTP 4																
WTP 5																
WTP 6																
WTP 7																
WTP 8																
WTP 9																
WTP 10																

[QUESTION 10 ASKED OF VERY LARGE SYSTEMS ONLY]

10 A Is your system currently treating (directly or indirectly) for any contaminants not regulated by the federal government? (*Directly* means that the treatment in place is due to the presence of the unregulated contaminant. *Indirectly* means that the unregulated contaminant is being addressed because of current treatment practices for a regulated contaminant.)

☐ Yes

☐ No *(Skip to question 11)*

B Please provide the following information about unregulated contaminants addressed by your treatment plants.
(If you have more than 10 unregulated contaminants, please make a copy of this table.)

What are the unregulated contaminants that are being addressed by your treatment plants?	If known, please provide the concentration of the unregulated contaminant in the raw and finished water as it leaves the plant. Enter N/A if unknown. Enter ND if the contaminant was not detected. Please provide the units as well (e.g., mg/L).				What water treatment plant treats for the unregulated contaminant (use plant identifiers from questions 8)?	Is the plant treating directly for this contaminant, i.e., is it in place to treat specifically for this contaminant?
	Raw water		Finished Water			
	Concentration	Units	Concentration	Units		

11 A What is the total capacity of storage located past the first residential customer?
(in millions of gallons) _____

B Please indicate the number of each type of storage facility that you have in your utility that are located past the first residential customer.

1 Fully or partially buried _____

2 Ground level _____

3 Elevated _____

4 Hydropneumatic _____

5 a. Standpipes _____

b. How many standpipes are operated as surge tanks? _____

6 Other _____

C Indicate the typical number of years between cleaning an individual storage vessel: _____

D Please provide the following information about the practices you use to maintain water quality in storage vessels.

		1 Do you use any of the following practices to maintain water quality in storage vessels in your system? *(Please check all that apply)*	**2** Check below if you believe you have adequate information on how to use each strategy to address water quality degradation in your storage facilities
a	Modeling or other detention time evaluations	☐	☐
b	Longer fill/draw cycles to increase mixing	☐	☐
c	Inlet/outlet modifications	☐	☐
d	Mechanical mixing	☐	☐
e	Increase or switch disinfectant residual	☐	☐
f	Operational modifications to maintain disinfectant residual	☐	☐
g	Other *(please specify)*	☐	☐

_____

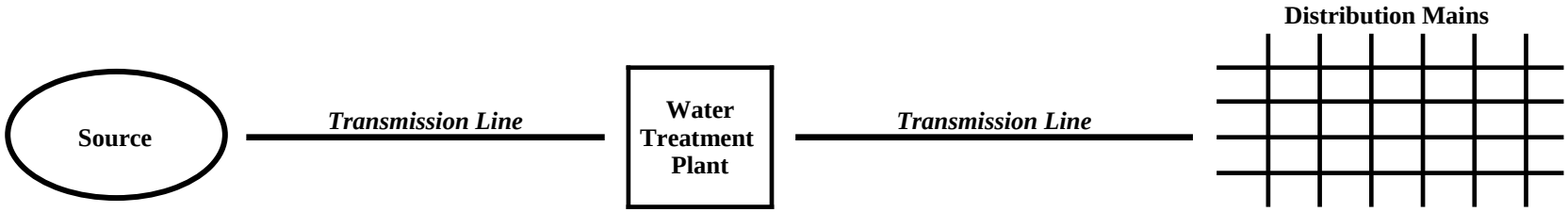
12 Estimate the length of the transmission lines and distribution mains in your system, and length of pipe replaced in the last **five** years.

A transmission line is defined as a pipeline that transports raw or partially treated water to a water treatment plant or finished water to a distribution grid.

A distribution main is defined as part of the pipeline network that distributes water to the consumers.

Replaced pipe is pipe that has either been physically removed from the ground or has been subject to major rehabilitation efforts.

New pipe installed is new transmission lines or distribution mains that do not replace existing pipe.



Pipe Type and Diameter		Existing (or Current) Length of Pipe (In Miles)	Length of Pipe Replaced in the Last 5 Years[1] (In Miles)	Length of New Pipe Installed in the Last 5 Years[1] (In Miles)
Transmission lines				
Mains	Less than 6"			
	6-10"			
	Greater than 10" and Less than 24"			
	24" or greater			

1. Ending on the date shown in your answer to question 2A.

13 A Please provide the following information about each pressure zone in your distribution system.

1 How many pressure zones do you have in your distribution system? _____

2 How many pressure zones have booster disinfection stations? _____

3 How many booster disinfection stations do you have throughout your distribution system? _____

B If your system has experienced a loss of pressure during the past operating year below 20 psi, please tell us the number of pressure losses that occurred for each of the following reasons:

1 Power outage _____

2 Fire _____

3 Main pipeline burst _____

4 Other (such as maintenance, flushing; *please specify*) _____

_____

14 Do you flush your distribution system on a regular basis?

☐ Yes ☐ No *(If No, skip to question 17)*

15 What percentage of the distribution system is flushed each year on a regular basis? _____ %

16 What approach is used when you flush your system on a regular basis?

A (Uni-) Directional (Restricting water flow to one direction using closed valves to maximize velocity, generally from source/plant to the lowest elevation in the system) ☐

B Random or non-directional (Opening hydrants on lines without closing valves or restricting the direction of water flow) ☐

C Dead end (opening a hydrant or flush valve on the dead-end line) ☐

D Other *(Please specify)* _____ ☐

17 A If you do not flush your system on a regular basis, have you ever flushed your system?

☐ Yes ☐ No *(If No, skip to question 18)*

B 1 What was the last year you flushed your system? _____

2 What year did you flush the system before that? *(Enter "NA" if you only flushed the system once.)* _____

18 Please provide the following data on disinfection residuals for one summer month (June, July, August, September) and one winter month (December, January, February).

Season	Month	Average Entry Point Disinfectant Residual for the Treatment Plant with the Highest Average Daily Flow (mg/L)				Distribution system		
		Surface water entry point[1] (mg/L as Cl_2)		Ground water entry point (mg/L as Cl_2)		Average distribution disinfectant residual (mg/L as Cl_2)		Percentage of Distribution System Samples <0.2 mg/L, including non-detects
		Total Cl_2	Free Cl_2	Total Cl_2	Free Cl_2	Total Cl_2	Free Cl_2	Total Cl_2
Summer								%
Winter								%

1. Surface water entry points includes ground water under the direct influence of surface water. If the plant treats both surface and ground water, report the results in the surface water entry points columns.

[QUESTIONS 19 ASKED OF SMALL AND MEDIUM SYSTEMS ONLY]

19 Please list the 5-digit ZIP codes included in your service area. This information will be used to identify the unique demographic characteristics of your service area so that EPA can better assess the financial and operating characteristics of the system

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

20 Please answer the following questions about water security.

			Enter Yes or No
A	1	Has your water system attended any EPA-sponsored water security training?	☐
	2	Have you used EPA's web-based water security technology product guides?	☐
	3	Have you heard of EPA's Response Protocol Toolbox?	☐
	4	Have you heard of the 14 features of an "active and effective" water security program?	☐
	5	What, if any, information do you need that would help you protect your system against security threats? *(Please write a brief answer below)*	

_____

_____

B	1	Have you heard of mutual aid and assistance agreements and/or compacts? *(If No, skip to section C)*	☐
	2	Would you be interested in joining such an agreement and/or contract?	☐
	3	If not, please explain why not _____	

_____

C What are the two largest barriers to enhancing security at your system? (*Please select only 2*)

1	Lack of interest at the system, public, or rate board level	☐
2	Competing priorities (regulatory compliance, aging infrastructure, etc.)	☐
3	Lack of funding	☐
4	Lack of knowledge / guidance / training materials	☐
5	Other *(Please specify)*	

_____

D Who do you prefer to get Water Security Information / Products from? (*Please select only one*)

1	Department of Homeland Security	☐
2	EPA	☐
3	Water Associations	☐
4	No preference	☐
5	Other *(Please specify)*	☐

_____

21 A Please complete the table below for the most recently completed fiscal year (the 12-month period indicated in question 2B). Financial information is needed to assess the financial condition of the water system, to assess possible future expenditures, and to see how costs are distributed among customers. No financial information provided will affect any EPA or other Federal financial assistance program.

Column A: What was the amount of water produced and delivered to each of the following customer categories? Report the amount in millions of gallons per year (MGY). Unaccounted for water includes system losses and uncompensated uses (e.g., fire flow).

Columns B and C: How many connections and people did your drinking water system serve year-round? Please indicate the number of connections and number of people served by your water system for all customer types that apply. If you do not know the connections or people served, please provide your best estimate.

Column D: What were your drinking water system's revenues from water sales for each of the following customer categories? (Enter "0" if you do not have revenue from a source.)

	Column A Water Quantity Delivered	**Column B Number of Connections Served**	**Column C Number of People Served**	**Column D Water Sales Revenue**
1 Sold to other water suppliers				
a Finished water	_____ MGY	_____	_____	$ _____
b Partially-treated or untreated water	_____ MGY	_____	_____	$ _____
2 Residential	_____ MGY	_____	_____	$ _____
3 Non-residential (Commercial, Industrial, Agricultural)				
a Finished water	_____ MGY	_____		$ _____
b Partially-treated or untreated water	_____ MGY	_____		$ _____
4 Unaccounted for water and uncompensated usage	_____ MGY			

B Please indicate your water system's revenue during the last year from other water-related revenue sources.

1 Connection and development fees $ _____
2 Revenue from the Government (e.g. General fund of Municipal Government, public systems only) $ _____
3 Other water-related revenue not reported above (e.g., fines, penalties, other fees; *please specify*) $ _____

_____

C Provide the PWSID or name of each public water supplier included in the response to part A1 above.

1 Finished water

_____ _____
_____ _____
_____ _____

2 Partially treated or untreated water

_____ _____
_____ _____
_____ _____

D Please indicate the revenue you receive from non-drinking water related business, not included above, including rental income and the sale of other goods and services: $ _____

E If you did not report any revenue under parts A, B, and D, how did you pay for your system's operations?

_____

_____

_____

22 Please identify your drinking water system's billing structure. *(Please check all that apply)*

		Residential Customers	Non-residential Customers
A	Metered charges		
	1 Uniform rate	☐	☐
	2 Declining block rate	☐	☐
	3 Increasing block rate	☐	☐
	4 Peak period rate (e.g., seasonal)	☐	☐
B	Unmetered charges		
	5 Separate flat fee for water	☐	☐
	6 Annual connection fee	☐	☐
	7 Combined flat fee for water and other services (e.g., rental fees, association fees, pad fees):	☐	☐
C	Other billing methods *(please specify)*: _____	☐	☐

23 A Does your system have a program that lowers the cost of drinking water for low- or fixed-income households? *(Please check only one)*

☐ Yes
☐ No *(Skip to question 24)*

B What are the eligibility requirements for this program?

_____

_____

_____

C How many households qualify for the program? _____

[QUESTIONS 24 ASKED OF SMALL, MEDIUM, SYSTEMS ONLY]

24 A Does your system serve a residential population that changes on a seasonal basis? The seasonal population is considered the population that fluctuates within a system based on the seasons. For example, the population of a water system serving a winter or summer resort area has an influx during certain periods of the year. *(Please check Yes or No)*

☐ Yes
☐ No *(Skip to question 25)*

B Please indicate the average daily flow during peak season: _____

C Please indicate the approximate length in days of the peak season (e.g. 30, 60, or 90 days): _____

25 Please enter the average cumulative number of hours operators, mangers, and administrative staff work in the water system each week. Please include part-time and contract employees that operate the system. For staff employed directly by the system, enter the average hourly wage or salary of each. Enter the cost of fringe benefits provided as a percentage of wages or salaries. (Fringe benefits include pension and other retirement contributions, health insurance contributions, vacation, and sick leave.) For contract employees that operate the system, provide the average hourly cost to the system of the contract employees (including wages, salaries, benefits, and fees).

Staff	Hours per week employees work in the water system	Employees of the system: Average hourly wage/salary	Employees of the system: Benefits as a percentage of salary or wages	Contract employees that operate the system: Average hourly labor cost
A Operators				
1 Treatment Plant		$	%	$
2 Distribution System		$	%	$
B Managers		$	%	$

C	Administrative staff		$	%	$

26 This question is intended to account for all of your drinking water expenses related to the revenues referred to in question 21 A and B. Please provide finanical data for the latest 12 month period for which they are available. Please do not compile new data specifically for the survey if data already exists. The categories below are intended to be mutually exclusive. For example, expenses for purchased water in part B should include the cost of the water only (an operating expense), not the capital required to bring it to the system.

A Please attach available summaries of financial statements, including a balance sheet, income statement, and statement of cash flows. Please attach a depreciation schedule, if one is available (i.e., a program defining your process for depreciating the value of capital improvements).

B Please enter the following routine operating expenses in the last year:

1 Expenses for purchased water: $ _____

2 Security related expenses (spending for security only, e.g., gates, locks, or guards): $ _____

3 Other routine operating expenses (including expenses for labor, chemicals, power, materials and supplies, and contractor services): $ _____

4 Depreciation expenses: $ _____

5 Income taxes (privately owned systems): $ _____

6 Other payments to the general fund, e.g., payment in lieu of taxes (publicly owned systems): $ _____

C Please enter the amount of debt service expenditures in the last year:

7 Interest payments: $ _____

8 Principal payments: $ _____

D Other Expenses

9 Capital improvements: $ _____

27 A If you have paid for major capital improvements, repairs, or expansions in the last five years ending on the date reported in question 2B, please indicate the total amount spent on these capital expenditures.

1 a Land: $ _____

b How much land was purchased (acres): _____

2 Water source: $ _____

3 Transmission and distribution system: $ _____

4 Treatment: $ _____

5 Storage: $ _____

6 Security (include security-related spending not included in other capital expenditures): $ _____

7 All other not included above: $ _____

B What percentage of the total capital expenditures identified in part A were used for the following (must sum to 100 percent)?

1 System expansion, regardless of whether expenditure includes replacement and repair of equipment or compliance with regulations _____ %

2 Replacement and repair of equipment, regardless of whether it includes compliance with regulations but excluding spending for system expansion _____ %

3 Compliance with regulations, excluding expenditures for system expansion and replacement and repair of equipment _____ %

10 Payments to reserve funds: $ _____

C How were the major capital improvements, repairs, and expansions of the past five years from question 27A funded?

	Percentage of capital expenses funded from each source (should sum to 100 percent)	For borrowed funds, please provide the: Average Interest Rate	Average Length of Loan Period (Years)
1 Current revenue (including payments from reserve funds):	%		
2 Equity or other funds from private investors:	%		
3 Department of Homeland Security Grant:	%		
4 Other government grants:	%		
5 Drinking Water State Revolving Fund			
a Principal Repayment Forgiveness:	%		
b Loans:	%	%	
6 Other borrowing from public sector sources (e.g., state or regional authorities):	%	%	
7 Borrowing from private sector sources (e.g., banks or the bond market):	%	%	
8 Other *(please specify)*: _____	%	%	

28 A Do you have an asset management plan or other formal written strategy addressing your long-term (e.g., 20 years or more) needs for infrastructure rehabilitation and replacement?

☐ Yes

☐ No