2003 Drinking Water Infrastructure Needs Survey

U.S. Environmental Protection Agency
Washington, DC 20460

OMB No.: 2040-0251
Approval Expires: 12/18/05
Federal PWSID No.:

Please verify or correct the following information:

	Check if Correct as Printed	Corrected Information *(Fill in only if pre-printed information is missing or incorrect)*
Name of System (Community):	☐	
Name of Contact: Street Address: City, State, and Zip:	☐	
Ownership Type:	☐	Check All That Apply: ☐ Public ☐ Investor-owned/Private ☐ Native American ☐ Federal Government
Population Served (if seller, include population of systems sold to):	☐	
Number of Connections:	☐	
Total Design Capacity:	☐	
Source:	☐	Check All That Apply: ☐ Ground ☐ Surface/GWUDI ☐ Purchased Ground ☐ Purchased Surface/GWUDI

Public reporting burden for this collection of information is estimated to average 4 hours per response. This estimate includes time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the information collection. Burden means the total time, effort, or financial resources expended by person 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; adjust the existing ways to comply with any previously applicable instructions; 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.

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, OPPI, Regulatory Information Division, U.S. Environmental Protection Agency (1804A), Ariel Rios Building, 1200 Pennsylvania Ave., NW, Washington, DC 20460; and Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, N.W., Washington, DC 20503.

State Use Only
State Reviewer: **Telephone Number:**

Information provided for this survey can be requested by the public; however, EPA will not release the names and addresses of respondents. Also it is our experience that survey information is rarely requested.

How is Project Information Recorded?

- Please record individual infrastructure projects on the questionnaire using the *"Instructions and Lists of Codes"* (green booklet) included in the questionnaire packet. The booklet provides instructions for each column on the tables and provides the appropriate codes. Projects with multiple parts should be presented in separate entries on the appropriate project tables (e.g., a project with a storage tank and 8-inch and 12-inch distribution mains would have one entry in the *Source, Treatment, Storage, Pumping, and Other Projects* table and two entries in the *Transmission and Distribution Projects* table).
- Supplemental sheets for each table are included in the questionnaire packet. These blank sheets may be copied and included with the appropriate section if additional pages are necessary to list all projects. Each project category has an associated numbering system (indicated in each section of the questionnaire). Please assign sequential numbers to projects if additional pages are used. There is a box at the bottom of each project table that should be marked to indicate supplemental sheets are included with additional projects.

What Types of Projects Should Be Included?

- Infrastructure projects should be included that are needed now as well as projects needed through calendar year 2022 to provide adequate water quality and quantity to current users. "List 1 - Type of Need" in the accompanying booklet, *"Instructions and Lists of Codes,"* lists codes for typical projects. Scanning this list may help clarify the types of projects to be included.
- Examples of typical projects are provided as an introduction to each table in the questionnaire. Brief project descriptions are also provided as examples of adequate documentation/descriptions of project need.
- Projects may be for new construction or to upgrade/rehabilitate existing infrastructure. However, projects are recorded only once during the 20-year survey period, even if they will occur more than once within that time frame (such as for a tank rehabilitation that may occur every 10-15 years).
- Projects must not have begun construction prior to January 1, 2003. If construction has begun by January 1, 2003 phases of the project should be included if their construction begins at a later date.

What Types of Projects Should Not Be Included?

- Do not include the following types of projects:
  - Projects solely for fire flow, fire protection, or ISA ratings
  - Projects solely to meet demand of expected future growth
  - Projects to encourage future expansion or development that do not also serve existing customers
  - Projects for land acquisition not associated with siting of an infrastructure component (e.g., land purchase to locate a tank would be eligible)
  - Projects that do not construct infrastructure (e.g., studies, watershed control programs, staff, operations and maintenance costs, monitoring costs)
  - Projects for dams or raw water reservoirs
- If existing documentation implies projects are for one of the above reasons, additional or replacement documentation or project descriptions may be used to clarify that the project would address a water quality, water quantity, or physical integrity deficiency.

An electronic version of this questionnaire package and other materials that may be useful for completing the questionnaire are available for downloading at www.2003needs.com.

Also, if you have questions, please call your State's Needs Survey contact or the toll-free Needs Survey Helpline. All contact information is provided on the last page of the questionnaire

Transmission and Distribution Projects

Transmission and distribution projects are the piping needs of a water system. **Projects for valves, hydrants, and meters** that are not part of a transmission or distribution project listed in this table should be recorded in the table on page 11.

To ensure all potential projects are considered, it may be helpful to complete this simple inventory for your system's existing piping needs (a rough estimate is acceptable):

Inventory	Needing Replacement	Needing Upgrading or Rehabilitation	Needing New Pipe
Total Length of Existing **Transmission Mains:**_____ Feet ☐ Miles ☐ *Transmission mains are any mains that transport raw water to the treatment plant, or treated water from the plant to the distribution system grid.*	Percentage or Length of Existing Transmission Mains: _____ (e.g., installation of pipe in new area or replacement of existing pipe)	Percentage or Length of Existing Transmission Mains: _____ (e.g., pigging or lining)	Does your system have needs for additional transmission mains to meet the needs of current customers (e.g., provide a second main to an isolated area)? (check one) Yes _____ No _____ If yes, what additional lengths and sizes are needed?___ _____
Total Length of Existing **Distribution Mains:** _____ Feet ☐ Miles ☐ *Distribution mains are any mains that transport water through a piping grid serving customers.*	Percentage or Length of Existing Distribution Mains: _____ (e.g., installation of pipe in new area or replacement of existing pipe)	Percentage or Length of Existing Distribution Mains: _____ (e.g., pigging or lining)	Does your system have needs for additional distribution mains to meet the needs of current customers (e.g., to eliminate dead-end mains)?(check one) Yes _____ No _____ If yes, what additional lengths and sizes are needed?_____

Examples of Projects for the Transmission and Distribution Project Table:

- Example 1 is for 18,000 feet of old and deteriorated 12-inch diameter distribution mains which need to be rehabilitated now. No cost is available. A brief description of the need and extent of the project, such as the first sentence of this example, is submitted by the system.
- Example 2 is for 20,000 feet of old 8-inch diameter pipe which needs to be replaced now to continue to provide water to the users. Cost is from the CIP.
- Examples 3 and 4 are for installation of 15,200 feet of new 12-inch diameter transmission pipe and 2,000 feet of 8-inch transmission pipe to connect existing nearby homes without a supply of safe drinking water. Although this is considered one project by the utility, it is recorded as two entries on the project table.

Project Number	*Project Name*	*Type of Need (List 1)*	*Reason for Need (List 2)*	*New or Upgrade*	*Current or Future*	*Regulation (List 3)*	*Diameter of Pipe (Inches)*	*Length of Pipe (Feet)*	*Cost Estimate (if available)*	*Date of Cost Estimate (Month/Year)*	*Documen-tation (List 4)*
Example 1	*Pigging Mains*	*M1*	*A1*	*U*	*C*	*4A*	*12*	*18,000*	*N/A*	*N/A*	*10*
Example 2	*Replace Galvanized Pipe*	*M1*	*A1*	*N*	*C*	*4A*	*8*	*20,000*	*$1,200,000*	*06/00*	*1*
Example 3	*Connect existing homes-8"*	*X2*	*A11*	*N*	*C*	*4A*	*8*	*2,000*	*N/A*	*N/A*	*10*
Example 4	*Connect existing homes-12"*	*X2*	*A11*	*N*	*C*	*4A*	*12*	*15,200*	*N/A*	*N/A*	*10*

Transmission and Distribution Project Table

Using the completed simple inventory, capital improvement plans, or other existing planning documents and resources, please identify and document projects on the table below.

Project Number	*Project Name*	*Type of Need (List 1)*	*Reason for Need (List 2)*	*New or Upgrade*	*Current or Future*	*Regulation (List 3)*	*Diameter of Pipe (Inches)*	*Length of Pipe (Feet)*	*Cost Estimate (if available)*	*Date of Cost Estimate (Month/Year)*	*Documen-tation (List 4)*
1000											
1001											
1002											
1003											
1004											
1005											
1006											
1007											
1008											
1009											

If you have more transmission or distribution projects check this box ☐ and continue on a supplemental sheet. Project numbers for these projects are 1000-1999, and should be numbered in sequence.

EPA needs documentation of all data 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.

Source, Treatment, Storage, Pumping, and Other Projects

Source projects are all projects related to collecting and pumping raw water. This includes wells, surface water intakes, springs, off-stream raw water storage, pumps, and well houses.

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, pumping, and other projects are related to finished or treated water storage, booster pump stations, and miscellaneous items such as emergency generators and SCADA or telemetry projects.

To ensure all potential projects are considered, it may be helpful to complete this simple inventory for your system's sources, treatment, storage, and pumping facilities:

Source Water			
Inventory	**Needing Replacement**	**Needing Upgrading or Rehabilitation**	**Needing New Source Water Capacity**
Total Number of Existing Wells or Springs:_____	Wells (including pumps):_____	Wells or Springs (including pumps): _____	Does your system have additional source water capacity needs to meet the needs of current users? (check one) Yes _____ No _____
Total Number of Existing Surface Water Intakes:_____	Existing Surface Water Intakes (excluding pumps):_____	Existing Surface Water Intakes (excluding pumps):_____	If yes, how many additional sources are necessary?
	Existing Pumps (but not wells):_____	Existing Pumps (but not wells):_____	
	Existing Raw Water Pumps:_____	Existing Raw Water Pumps:_____	

Treatment			
Inventory	**Needing Replacement**	**Needing Upgrading or Rehabilitation**	**Needing New Treatment Capacity**
For the sources identified above, enter the number of locations where the following treatment is applied:			
Disinfection _____	Disinfection _____	Disinfection _____	Does your system have additional treatment needs for provision of additional public health protection or for aesthetic concerns? (check one) Yes _____ No _____
Filtration _____	Filtration _____	Filtration _____	If yes, what additional treatment is necessary?
Chemical removal _____	Chemical removal _____	Chemical removal _____	

Storage and Pump Stations			
Inventory	**Needing Replacement**	**Needing Upgrading or Rehabilitation**	**Needing New Storage and/or Pumping Capacity**
Total Number of Existing Elevated or Ground-Level 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? (check one) Yes _____ No _____
Total Number 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?

Examples of Source Projects:

- Example 1 is for a 0.5 MGD well (and pump) that must be rehabilitated now to continue to provide safe water. No cost is available so EPA would model a cost for this need. (Note that if the system has more than one well, a separate project line is required for each well even if the project information is identical. A brief description of the need and extent of the project, such as the first sentence of this example, is submitted by the system).
- Example 2 is for a new 0.5 MGD well needed to meet current user demands. Cost documentation developed in 1999 is provided.
- Example 3 is for upgrading/rehabilitating the existing deteriorated 2 MGD surface water intake. This project is not needed for several years and a cost is not available. The need was identified in the sanitary survey, a copy of which is submitted by the system.

Examples of Treatment Projects:

- Example 4 is for upgrade and rehabilitation of a 5.0 MG conventional water treatment plant. The upgrade is needed now to maintain compliance with the Surface Water Treatment Rule. The cost is provided from a preliminary engineering report.
- Example 5 is for a new chlorinator for a 0.5 MGD well. The existing chlorinator is expected to last another 5 years before the replacement is needed. A cost is not provided so the capacity of the well to be treated is entered as the design capacity for the chlorination system. Disinfection of the well is not required, but it is applied by the system voluntarily so a regulation code does not apply.

Examples of Finished or Treated Water Storage, Pumping and Other Projects:

- Example 6 is for a new 0.25 MG elevated storage tank that is needed now to correct low pressure problems in part of the service area. No cost is available.
- Example 7 is for rehabilitation of an existing 1 MG standpipe storage tank that needs sand blasting and repainting in about 5 years. No cost is available.
- Example 8 is for replacement of an old 0.25 MGD Booster Pump Station. No cost is available.

Project Number	Project Name	Type of Need (List 1)	Reason for Need (List 2)	New or Upgrade	Current or Future	Regulation (List 3)	Design Capacity (MG, MGD, kW)	Cost Estimate (if available)	Date of Cost Estimate (Month/Year)	Documen-tation (List 4)
Example 1	Rehab Well 1	R1	A1	U	C	4A	0.5	N/A	N/A	10
Example 2	New Well #2	R1	A2	N	C	4A	0.5	43,000	11/99	1
Example 3	Rehab WTP Intake	R6	A1	U	F	1A	2.0	N/A	N/A	8
Example 4	Rehab Treatment Plant	T10	A1,A7	U	C	1A	5.0	$6,027,000	12/01	2
Example 5	Well 2 Chlorinator	T1	A1	N	F	4A	0.5	N/A	N/A	10
Example 6	New Tank	S1	A4	N	C	4A	0.25	N/A	N/A	10
Example 7	Rehab. Main St. Tank	S2	A1	U	F	4A	1.0	N/A	N/A	10
Example 8	Replace Pump Station	P2	A1	N	C	4A	0.25	N/A	N/A	10

Source, Treatment, Storage, Pumping and Other Project Table

Using the completed simple inventory, capital improvement plans, or other existing planning documents and resources, please identify and document projects on the following table.

Project Number	*Project Name*	*Type of Need (List 1)*	*Reason for Need (List 2)*	*New or Upgrade*	*Current or Future*	*Regulation (List 3)*	*Design Capacity (MG, MGD, kW)*	*Cost Estimate (if available)*	*Date of Cost Estimate (Month/Year)*	*Documen-tation (List 4)*
2000										
2001										
2002										
2003										
2004										
2005										
2006										
2007										
2008										
2009										

EPA needs documentation of all data 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.

Source, Treatment, Storage, Pumping and Other Project Table, cont.

Project Number	Project Name	Type of Need (List 1)	Reason for Need (List 2)	New or Upgrade	Current or Future	Regulation (List 3)	Design Capacity (MG, MGD, kW)	Cost Estimate (if available)	Date of Cost Estimate (Month/Year)	Documen-tation (List 4)
2010										
2011										
2012										
2013										
2014										
2015										
2016										
2017										
2018										
2019										

If you have more source, treatment, storage, pumping or other related projects check this box ☐ and continue on a supplemental sheet. Project numbers for these projects are 2000-2999, and should be numbered in sequence.

EPA needs documentation of all data 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.

Backflow Prevention Devices/Assemblies, Flushing Hydrants, Service Lines, Valves, and Water Meter Projects

Although these needs may fit into the other categories of the questionnaire, projects for backflow prevention devices and assemblies, hydrants used to flush water mains, service line replacement, and other items such as valves, hydrants, and meters are recorded in this section to accommodate entries of multiple identical items on one line in the project table.

To ensure all potential projects are considered, it may be helpful to complete this simple inventory for your system's existing needs:

Inventory	Needing Replacement	Needing Upgrading or Rehabilitation
Please do not list any component that is included in a pipe replacement or rehabilitation project listed on the Transmission and Distribution Project Table. If you listed any pipe replacement or rehabilitation project without a cost, EPA will assign a cost using a model that includes all these components.		
Total Number of Existing Valves (gate, butterfly, PRVs, altitude, etc.):_____	Number of Valves:_____	Number of Valves_____
Total Number of Existing Water Meters: _____	Number of Water Meters:_____	Number of Water Meters:_____
Total Number of Existing Flushing Hydrants: _____	Number of Flushing Hydrants:_____	Number of Flushing Hydrants:_____
Total Number of Lead Service Lines: _____	Number of Lead Service Lines:_____	Number of Lead Service Lines:_____
Total Number of Backflow Prevention Devices/Assemblies:_____	Number of Backflow Prevention Devices/Assemblies:_____	Number of Backflow Prevention Devices/Assemblies:_____

Examples of Projects for the Backflow Prevention Devices/Assemblies, Flushing Hydrants, Service Lines, Valves and Water Meter Project Table:

- Example 1 is for 25, 12-inch diameter valves that will need to be replaced due to deterioration before the end of 2022. They are not part of an existing distribution or transmission project. No cost estimate is provided. A description of the need and extent of the project is submitted by the system.
- Example 2 is for replacement of 100 lead service lines. The cost is from the CIP. Because they are lead lines, the Lead and Copper Rule applies. No diameter is needed for service lines.

Project Number	*Project Name*	*Type of Need (List 1)*	*Reason for Need (List 2)*	*New or Upgrade*	*Current or Future*	*Regulation (List 3)*	*Size (Diameter in Inches)*	*Number Needed*	*Cost Estimate (if available)*	*Date of Cost Estimate (Month/Year)*	*Documen-tation (List 4)*
Example 1	*Replace Valves*	*M5*	*A1*	*N*	*F*	*4A*	*12*	*25*	*N/A*	*N/A*	*10*
Example 2	*Replace Lead Service Lines*	*M2*	*A7*	*N*	*C*	*1D*	*N/A*	*100*	*100,000*	*5/01*	*1*

Backflow Prevention Devices/Assemblies, Flushing Hydrants, Service Lines, Valves, and Water Meter Project Table

Using the completed simple inventory, capital improvement plans, or other existing planning documents and resources, please identify and document projects on the table below. ***Please do not list any component that is included in a pipe replacement or rehabilitation project listed on the Transmission and Distribution Project Table. If you listed any pipe replacement or rehabilitation project without a cost, EPA will assign a cost using a model that includes all these components.***

Project Number	Project Name	Type of Need (List 1)	Reason for Need (List 2)	New or Upgrade	Current or Future	Regulation (List 3)	Size (Diameter in Inches)	Number Needed	Cost Estimate (if available)	Date of Cost Estimate (Month/Year)	Documen-tation (List 4)
3000											
3001											
3002											
3003											
3004											
3005											
3006											
3007											
3008											

If you have more of these projects check this box ☐ and continue on a supplemental sheet. Project numbers for these projects are 3000-3999, and should be numbered in sequence.

EPA needs documentation of all data 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.

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 Shelley Love at (317) 232-4396 or e-mail to slove@dem.state.in.us or call the U.S. EPA toll-free Needs Survey Helpline at 1-888-NEEDS-03.

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

- ☐ Attach to the questionnaire all additional project tables?
- ☐ Identify by project number, available documentation for all needs and costs reported above?
- ☐ Put the questionnaire and the documentation in the pre-paid, pre-addressed Federal Express Pak provided and return this questionnaire and the documentation to the address below? (See the pink enclosure for further return instructions.)

Shelley Love
Indiana Department of Environmental Management
Office of Water Quality SRF Section 100 N. Senate Ave.
Indianapolis, IN 46206-6015

Additional Project Table: Transmission and Distribution Projects

Please record numbers in sequence continuing from previous transmission and distribution project table (#'s 1000-1999).

Project Number	*Project Name*	*Type of Need (List 1)*	*Reason for Need (List 2)*	*New or Upgrade*	*Current or Future*	*Regulation (List 3)*	*Diameter of Pipe (Inches)*	*Length of Pipe (Feet)*	*Cost Estimate (if available)*	*Date of Cost Estimate (Month/Year)*	*Documen-tation (List 4)*
1____											
1____											
1____											
1____											
1____											
1____											
1____											
1____											
1____											
1____											
1____											

If you have more transmission and distribution projects check this box ☐ and continue on another supplemental sheet.

Additional Project Table: Source, Treatment, Storage, Pumping, Other Projects

Please record numbers in sequence continuing from previous source, treatment, storage, pumping and other project table (#'s 2000-2999).

Project Number	*Project Name*	*Type of Need (List 1)*	*Reason for Need (List 2)*	*New or Upgrade*	*Current or Future*	*Regulation (List 3)*	*Design Capacity (MG, MGD, kW)*	*Cost Estimate (if available)*	*Date of Cost Estimate (Month/Year)*	*Documen-tation (List 4)*
2____										
2____										
2____										
2____										
2____										
2____										
2____										
2____										
2____										
2____										
2____										

If you have more source, treatment, storage, pumping or other projects check this box ☐ and continue on another supplemental sheet.

Additional Project Table: Backflow Prevention Devices/Assemblies, Flushing Hydrants, Service Lines, Valves, and Water Meter Projects

Please record numbers in sequence continuing from previous backflow prevention devices/assemblies, flushing hydrants, service lines, valves, and water meter project table (#'s 3000-3999). ***Please do not list any component that is included in a pipe replacement or rehabilitation project listed on the Transmission and Distribution Project Table. If you listed any pipe replacement or rehabilitation project without a cost, EPA will assign a cost using a model that includes all these components.***

Project Number	Project Name	Type of Need (List 1)	Reason for Need (List 2)	New or Upgrade	Current or Future	Regulation (List 3)	Size (Diameter in Inches)	Number Needed	Cost Estimate (if available)	Date of Cost Estimate (Month/Year)	Documen-tation (List 4)
3____											
3____											
3____											
3____											
3____											
3____											
3____											
3____											
3____											
3____											

If you have more of these projects check this box ☐ and continue on another supplemental sheet.