DWINSA

Needs Survey 102

May 19, 2014

1

Welcome and Introductions

- Introductions
  - EPA and Cadmus
  - State and Regional coordinators

2

Meeting Objectives

- Targeted audience:
  - State and regional coordinators new to the Survey
  - Assume participants attended Needs Survey 101 Webinar
    - Focused on Legislative intent, history and methodology
- Focus on getting participants up to speed on the survey instrument and documentation requirements

3

Topics Covered

- Survey Instrument
  - Lists of Codes
  - Questionnaire
- Project Allowability Criteria
- Documentation Requirements and Examples
- State Strategy

4

Topics to be Covered in Planning Meeting

- Panel approach
- Issues
  - Allotting QA review/TA
  - Updating 2011 submittals
  - 'Insignificant' types of need
  - Projects needed every 20 years
  - Self-certification
  - Options for obtaining additional TA and training
- Validating the frame

5

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Survey Instrument Walk Through

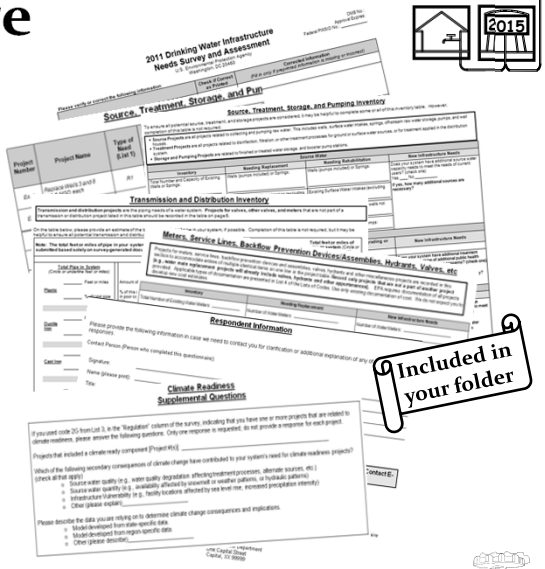
6

What is included in the survey instrument?

7

Questionnaire

- Cover Page
- Back Page
- Project Table
- Inventory Tables



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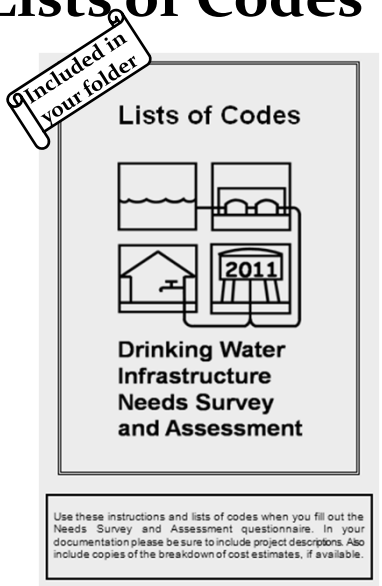
Lists of Codes



- Includes:
  - Instructions
  - List 1 – Type of Need
  - List 2 – Reason for Need
  - List 3 – Regulation or Secondary Purpose
  - List 4 – Documentation

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List 1 – Types of Need

R	Source Codes	**M1**	Distribution Pipe
T1-T9	Disinfection	**M2-M8**	Other Distribution Needs
T10-T24	Complete Treatment Plants	**S**	Storage
T30-T46	Treatment Components	**P**	Pumps
X	Transmission Pipe	**W**	Other

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List 2 – Reason For Need

LIST 2 — REASON FOR NEED

Code	*Reason the Project is Needed*
A1	Project is for existing infrastructure that is or will be old or deteriorated by 12/31/2030.
A2	Project is to correct a deficiency in source water quantity caused by current user demand.
A3	Project is to correct a deficiency in storage capacity caused by current user demand.
A4	Project is to correct existing pressure problems (not related to fire flow).
A5	Project needed as a result of, but not in preparation for, a natural disaster.
A6	Project is to obtain or maintain compliance with an **existing regulation** (enter the regulation code from List 3 in the Lists of Codes in the regulation column of the questionnaire).
A7	Project is to obtain or maintain compliance with a **secondary standard** (e.g., iron, taste and odor, and color) (enter regulation code 2A in the regulation column of the questionnaire).
A8	Project is for consolidation with and/or connection to an existing public water system.
A9	Project is for extending service to existing homes without adequate water quantity or quality.
A10	Project is to prevent, detect, or respond to a security event (e.g., fence, locks, protective structures, gates, on-line sensors, motion sensors, alarm systems, generators, communications equipment, analytical equipment)
A11	Use this code if codes A1-A10 do not apply.

Important Notes:

A description of each project or a copy of the documentation must also be clearly identified by project number and submitted with the completed questionnaire.

Projects **primarily** for meeting expected future population growth or for fire flow are unallowable.

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List 3 – Regulation or Secondary Purpose

LIST 3 — REGULATION OR SECONDARY PURPOSE

Code	*Regulation or Secondary Purpose*
EXISTING SDWA REGULATIONS	
1A	Surface Water Treatment Regulations (Surface Water Treatment Rule, Interim Enhanced Surface Water Treatment Rule, Filter Backwash Recycling Rule, Long Term 1 Enhanced Surface Water Treatment Rule, or Long Term 2 Enhanced Surface Water Treatment Rule)
1B	Total Coliform Rule (published June 1989)
1C	Nitrate or Nitrite Standard
1D	Lead and Copper Rule
1E	Arsenic Rule (10 µg/L Arsenic Standard)
1F	Stage 1 Disinfectants/Disinfection Byproducts Rule (for compliance with the 80 µg/L for TTHMs and 60 µg/L for HAA5s as a running annual average)
1G	Other Regulated VOCs, SOCs, IOCs, or Radionuclides (excludes Radon)
1H	Groundwater Rule
OTHER REQUIREMENTS OR SECONDARY PURPOSES	
2A	Secondary Contaminants (e.g., iron, taste and odor, and color)
2B	State Requirements
2C	Green – Green Infrastructure (e.g., porous pavement, green roofs, etc.)
2D	Green – Water Efficiency (e.g., meters, pressure reducing valves, etc.)
2E	Green – Energy Efficiency (e.g., pump rehab, VFDs, SCADA, etc.)
2F	Green – Environmentally Innovative (e.g., LEED buildings, etc.)
2G	Climate Readiness (e.g., source quality degradation, source quantity availability, or infrastructure vulnerability)

PROPOSED AND RECENTLY PROMULGATED SDWA REGULATIONS

Needs associated **solely** with the following proposed or recently promulgated regulations are not allowable and should not be included. The costs for these needs, estimated for each rule's Economic Analysis, will be added to the total national need. These regulations include:

- Stage 2 Disinfectants/Disinfection Byproducts Rule (for compliance with the 80 µg/L for TTHMs and 60 µg/L for HAA5s as a locational running annual average)
- Proposed Revisions to the 1989 Total Coliform Rule
- Proposed Radon Rule

If None of the Above Codes Applies

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

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List 4 – Documentation

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*
10	**Written by State, EPA Region, or Navajo Nation:** Brief description and statement of need written by the state, EPA Region, or Navajo Nation.
11	**Written by System:** Brief description and statement of need written by the system.
Code	*Documentation Submitted for 2007 Assessment*
20	**Project Relies on 2007 Assessment Documentation:** Other documentation codes also apply if additional documentation is submitted for 2011 Assessment.

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2011 Drinking Water Infrastructure Needs Survey and Assessment

U.S. Environmental Protection Agency
Washington, DC 20460

OMB No.:
Approval Expires:
Federal PWSID No.: _____

Please verify or correct the following information:

	Check if Correct as Printed	Corrected Information *(Fill in only if preprinted information is missing or incorrect)*
Name of System (Community):	☐	
Name of Contact for Water System: (Record name of person completing survey on page 8; may be same person) Street Address: City, State, and Zip:	☐	
Population Served (if wholesale seller, include population of systems sold to):	☐	
Number of Connections (not including those in consecutive systems):	☐	
Total System Design Capacity: _____ MGD		
Source Water Type (Ground, Surface/GWUDI, etc.):	Check All That Apply: ☐ Ground ☐ Purchased Ground ☐ Surface/GWUDI ☐ Purchased Surface/GWUDI	
Ownership Type:	Check All That Apply: ☐ Public ☐ Native American ☐ Federal Government ☐ Investor-Owned or Private Non-Profit	

Public reporting burden for this collection of information is estimated to average 8.2 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 collected. Burden means the total time, effort, or financial resources expended by person(s) 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.

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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: (Street Address)	_____	Best Time to Reach You:	_____
	_____		
	_____		

If you have any questions, contact {State Contact} at {State Contact Phone Number} or e-mail to {State Contact E-Mail} or call the U.S. EPA toll-free Needs Survey Helpline at 1-888-766-3337.

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

- ☐ Attach all additional project tables to the questionnaire?
- ☐ 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.)

Jane Q. Official
Division of Water
State Environmental Department
One Capital Street
Capital, XX 99999

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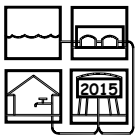
Project Table



- Table to record projects
  - Source, Treatment, Storage, and Pumping Projects
    - 1000's series
  - Transmission and Distribution Projects
    - 2000's series
  - Meters, Service Lines, Backflow Prevention Devices/Assemblies, Hydrants, Valves, etc.
    - 3000's series

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Inventory Tables

- Help system consider entire inventory
- Not required to be completed except when any pipe project relies on survey-generated documentation – then total pipe and design parameters for every pipe project are required

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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, 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 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? (check one) Yes ___ No _____ **If yes, how many additional sources are necessary?**
Total Number and Capacity of Existing Surface Water Sources: _____	Existing Surface Water Intakes (excluding pumps): _____	Existing Surface Water Intakes (excluding pumps): _____	
Total Number and Capacity of Existing Pumps (excluding booster pump stations): _____	Existing Groundwater Pumps (if wells not listed): _____	Existing Groundwater Pumps (if wells not listed): _____	
	Existing Raw Surface Water Pumps: _____	Existing Raw Surface Water Pumps: _____	

Treatment			
Inventory	**Needing Replacement**	**Needing Expansion/Upgrading or Rehabilitation**	**New Infrastructure Needs**
For the sources identified above, enter the number of locations where the following treatment is applied:			
Disinfection (including booster 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 ___ **If yes, what additional treatment is necessary?**
Filtration: _____	Filtration: _____	Filtration: _____	
Chemical removal or addition: _____	Chemical treatment: _____	Chemical treatment: _____	

Storage and Pump Stations			
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? (check one)** Yes ___ No ___ **If yes, how much additional finished water storage or booster pumping capacity is necessary?**
Total Number and Capacity of Existing Booster Pump Stations: _____	Number of Existing Booster Pump Stations: _____	Number of Existing Booster Pump Stations: _____	

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Transmission and Distribution Inventory

Transmission and distribution projects are the piping needs of a water system. **Projects for valves, other valves, and meters** that are not part of a transmission or distribution project listed in this table should be recorded in the table on page 6.

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

Note: The total feet or miles of pipe in your system is required information if any pipe projects are submitted based solely on survey-generated documentation (documentation codes 10 or 11).

_____ **Total feet or miles of pipe in system** *(Circle or underline feet or miles)*

Total Pipe in System *(Circle or underline feet or miles)*			<=6 inch	8-12 inch	15-42 inch	>42 inch
Plastic	_____ Feet or miles	Amount of PVC by pipe size	_____ feet or miles	_____ feet or miles	_____ feet or miles	_____ feet or miles
	_____ % of total pipe	% of this category/size pipe currently in poor condition or beyond useful life	_____ %	_____ %	_____ %	_____ %
Ductile Iron	_____ Feet or miles	Amount of ductile iron by pipe size	_____ feet or miles	_____ feet or miles	_____ feet or miles	_____ feet or miles
	_____ % of total pipe	% of this category/size pipe currently in poor condition or beyond useful life	_____ %	_____ %	_____ %	_____ %
Cast Iron	_____ Feet or miles	Amount of cast iron by pipe size	_____ feet or miles	_____ feet or miles	_____ feet or miles	_____ feet or miles
	_____ % of total pipe	% of this category/size pipe currently in poor condition or beyond useful life	_____ %	_____ %	_____ %	_____ %
Asbestos Cement	_____ Feet or miles	Amount of asbestos cement by pipe size	_____ feet or miles	_____ feet or miles	_____ feet or miles	_____ feet or miles
	_____ % of total pipe	% of this category/size pipe currently in poor condition or beyond useful life	_____ %	_____ %	_____ %	_____ %
Other	_____ Feet or miles	Amount of other by pipe size	_____ feet or miles	_____ feet or miles	_____ feet or miles	_____ feet or miles
	_____ % of total pipe	% of other currently in poor condition or beyond useful life	_____ %	_____ %	_____ %	_____ %

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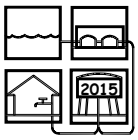

Meters, Service Lines, Backflow Prevention Devices/Assemblies, Hydrants, Valves, etc

Projects for meters, service lines, backflow prevention devices and assemblies, valves, hydrants 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, hydrants 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.

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

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Climate Readiness Supplemental Question

- Projects identified in questionnaire related to climate readiness trigger response
  - Projects coded 2G from List 3 of LOC
- Response is for system in general
  - Not for individual project but for 20-year need
  - Not a reason for need

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Climate Readiness Supplemental Question

Climate Readiness
Supplemental Questions

If you used code 2G from List 3, in the "Regulation" column of the survey, indicating that you have one or more projects that are related to climate readiness, please answer the following questions. Only one response is requested; do not provide a response for each project.

Projects that included a climate ready component [Project #(s)]: _____

Which of the following secondary consequences of climate change have contributed to your system's need for climate readiness projects? (check all that apply)

- o Source water quality (e.g., water quality degradation affecting treatment processes, alternate sources, etc.)
- o Source water quantity (e.g., availability affected by snowmelt or weather patterns, or hydraulic patterns)
- o Infrastructure Vulnerability (e.g., facility locations affected by sea level rise, increased precipitation intensity)
- o Other (please explain)_____

Please describe the data you are relying on to determine climate change consequences and implications.

- o Model developed from state-specific data.
- o Model developed from region-specific data.
- o Other (please describe)_____

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Project Table – Project Number

Source, Treatment, Storage, and Pur

Project Number	Project Name	Type of Need (List 1)	Reason for Need (List 2)	New, Replace, ReHab, Expand/ upgrade	Current or Future	Reg or Secondary Purpose (List 3)
Ex. 1	*Replace Wells 3 and 8 at 0.5 MGD each*	*R1*	*A1*	*R*	*C*	*4A*
Ex. 2	*Rehab Treatment Plant and Booster Station*	*T10, P2*	*A1,A6*	*H*	*F*	*1A*
1000						
1001						

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Project Table – Project Name

Source, Treatment, Storage, and Pur

Project Number	Project Name	Type of Need (List 1)	Reason for Need (List 2)	New, Replace, ReHab, Expand/ upgrade	Current or Future	Reg or Secondary Purpose (List 3)
Ex. 1	*Replace Wells 3 and 8 at 0.5 MGD each*	*R1*	*A1*	*R*	*C*	*4A*
Ex. 2	*Rehab Treatment Plant and Booster Station*	*T10, P2*	*A1,A6*	*H*	*F*	*1A*
1000						
1001						

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Project Table – Type of Need

Source, Treatment, Storage, and Pu

Project Number	Project Name	Type of Need (List 1)	Reason for Need (List 2)	New, Replace, ReHab, Expand/ upgrade	Current or Future	Reg or Secondary Purpose (List 3)
Ex. 1	*Replace Wells 3 and 8 at 0.5 MGD each*	*R1*	*A1*	*R*	*C*	*4A*
Ex. 2	*Rehab Treatment Plant and Booster Station*	*T10, P2*	*A1,A6*	*H*	*F*	*1A*
1000						
1001						

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Project Table – Reason for Need

Source, Treatment, Storage, and Pu

Project Number	Project Name	Type of Need (List 1)	Reason for Need (List 2)	New, Replace, ReHab, Expand/ upgrade	Current or Future	Reg or Secondary Purpose (List 3)
Ex. 1	*Replace Wells 3 and 8 at 0.5 MGD each*	*R1*	*A1*	*R*	*C*	*4A*
Ex. 2	*Rehab Treatment Plant and Booster Station*	*T10, P2*	*A1,A6*	*H*	*F*	*1A*
1000						
1001						

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Project Table – Description N/R/H/E

Source, Treatment, Storage, and Pur

Project Number	Project Name	Type of Need (List 1)	Reason for Need (List 2)	New, Replace, ReHab, Expand/ upgrade	Current or Future	Reg or Secondary Purpose (List 3)
Ex. 1	*Replace Wells 3 and 8 at 0.5 MGD each*	*R1*	*A1*	*R*	*C*	*4A*
Ex. 2	*Rehab Treatment Plant and Booster Station*	*T10, P2*	*A1,A6*	*H*	*F*	*1A*
1000						
1001						

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Project Table – Current vs. Future

Source, Treatment, Storage, and Pur

Project Number	Project Name	Type of Need (List 1)	Reason for Need (List 2)	New, Replace, ReHab, Expand/ upgrade	Current or Future	Reg or Secondary Purpose (List 3)
Ex. 1	*Replace Wells 3 and 8 at 0.5 MGD each*	*R1*	*A1*	*R*	*C*	*4A*
Ex. 2	*Rehab Treatment Plant and Booster Station*	*T10, P2*	*A1,A6*	*H*	*F*	*1A*
1000						
1001						

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Project Table – Regulation or Secondary Purpose

Source, Treatment, Storage, and Pur

Project Number	Project Name	Type of Need (List 1)	Reason for Need (List 2)	New, Replace, ReHab, Expand/ upgrade	Current or Future	Reg or Secondary Purpose (List 3)
Ex. 1	*Replace Wells 3 and 8 at 0.5 MGD each*	*R1*	*A1*	*R*	*C*	*4A*
Ex. 2	*Rehab Treatment Plant and Booster Station*	*T10, P2*	*A1,A6*	*H*	*F*	*1A*
1000						
1001						

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Design Parameters

- Specific to the type of project
  - See Type of Need Dictionary
- Required information if no cost is provided
- Requested if cost is provided
  - Used to build cost models
- Length required for all pipe projects if any pipe projects have survey-generated documentation
  - Lengths may be estimated from 2007 cost models

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Project Table – Design Parameters

Current or Future (Enter one: C or F)	Reg or Secondary Purpose (Enter code(s) from List 3 if applicable)	Design Capacity (Enter capacity in MG, MGD, or kW, if applicable)	Diameter or Size (Enter diameter in inches, if applicable)	Length of Pipe (Enter length of pipe in feet, if applicable)	Number Needed (Enter number needed if applicable)	Cost Estimate (Provide cost estimate if available)	Date of Cost Estimate (In mm/yyyy format)	Documen-tation (Enter code(s) from List 4)
C		0.5			2			10
F			8	11,000				10
C			0.625		7,889			10

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Project Table – Cost Estimate and Date

orage, and Pumping Projects

Current or Future	Reg or Secondary Purpose (List 3)	Design Capacity (MG, MGD, kW)	Number Needed (if applicable)	Cost Estimate (if available)	Date of Cost Estimate (Month/ Year)	Documen-tation (List 4)
C	4A	0.5	2	-	-	6, 10
F	1A	5.0	1	$6,027,000	12/2009	4

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Project Table – Documentation

orage, and Pumping Projects

Current or Future	Reg or Secondary Purpose (List 3)	Design Capacity (MG, MGD, kW)	Number Needed (if applicable)	Cost Estimate (if available)	Date of Cost Estimate (Month/ Year)	Documen-tation (List 4)
C	4A	0.5	2	-	-	6, 10
F	1A	5.0	1	$6,027,000	12/2009	4

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All projects must meet allowability criteria and must be adequately documented.

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Allowability Criteria

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Allowable Projects

- Must be:
  - Capital improvement needs
  - Eligible for SRF funding
  - In furtherance of public health goals of the SDWA
  - Most cost-efficient investment strategy
  - Within the Assessment timeframe

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Unallowable Projects

- Not considered to be capital needs:
  - Operation and maintenance costs
  - Acquisition of most vehicles and tools
  - Projects solely for conducting studies
  - Water rights or fee payments
  - Sample collection or analysis fees
  - Employee wages and salaries
  - Other administrative costs

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Unallowable Projects

- Not eligible for SRF funding:
  - Substantial portion accommodates future growth
  - Substantial portion for fire protection
  - For source water protection
    - Funded through set-asides
  - Raw water reservoir or dam-related need

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Allowable vs. Eligible

- Allowable:
  - Projects that can be included in the Assessment and contribute to individual state needs
- Eligible
  - Projects that can be funded through the DWSRF

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Allowable vs Eligible

	DWINSA Allowable	DWSRF Eligible
Dams	No	No
Acquisition of Systems	No	Yes
Refinancing Loans	No	Yes
Source Water Protection Needs	No	Set-aside only
Non-PWSs	No	Yes
Growth	No	No
Studies	No	Yes

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Unallowable Projects

- Not in furtherance of the public health goals of the SDWA:
  - Solely for improving appearance
  - Infrastructure demolition
  - Land acquisition not required for a project
  - Non-essential buildings and parking
  - Connecting existing homes that already have an adequate drinking water supply

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Unallowable Projects

- Outside of the Assessment's 20-year Timeframe – for the 2015 DWINSA:
  - Construction cannot have started before January 1, 2015
    - Can be funded, but "dirt" cannot be moved
  - Project cannot be needed after December 31, 2034

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Other Unallowable Projects

- Acquisition of existing infrastructure
- Projects driven solely by a non-water related issue
  - Highway relocation
- Projects that are not the responsibility of the water system
  - Service lines
  - Extension paid by developer

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No Duplication of Need

- Multiple projects meeting same need
- Projects with subordinate components
- Recurring need
- More than one system reports the same shared need
- Needs for proposed or recently promulgated regulations

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No Duplication of Need

- Proposed or Recently Promulgated SDWA Regulations
  - EA costs will be added to the total national need
  - Proposed Rules
    - Radon Rule
  - Recently Promulgated Rules – Possibly none for 2015 DWINSA
    - Stage 2 DBPR (may no longer be 'recent' for 2015)
    - Revisions to the Total Coliform Rule (no capital costs)

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Projects: Source to Tap

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Source

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Source Projects

- Allowable projects
  - New sources due to inability to meet current user demand
  - Replacement or rehabilitation of existing sources
    - Reached end of useful life
    - Poor condition creates sanitary risk
- Unallowable projects
  - Raw water reservoirs
  - Source water protection
  - New sources for future growth

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Treatment

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Treatment Projects

- Allowable projects
  - May be for regulatory compliance, but not necessarily
  - Secondary contaminants
- Unallowable projects
  - Double counting (complete plant and any component)
  - Projects for Proposed or Recently Promulgated Regulations

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Storage

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Storage Projects

- Allowable projects
  - New, replacement, rehab of storage tanks
  - Cover for existing finished water storage
- Unallowable projects
  - Additional storage to meet fire suppression needs
  - Across-the-board increase in storage to meet 10 State Standards recommendation

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Pumping

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Pumping Projects

- Allowable projects
  - Finished or raw water pumps
    - When there is not a related complete plant project
  - Booster pump station
- Unallowable projects
  - Increase capacity to meet fire suppression needs
  - Well pump project if same well is being rehabilitated
  - Raw or finished water pumps already included in complete plant project

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Pipe: Transmission and Distribution

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Pipe Projects

- Allowable projects
  - Replacement/rehab of existing pipe
    - Allowable within limits
  - New Pipe
    - Looping to maintain adequate flows and minimize stagnation
    - Connection of existing homes without adequate water
- Unallowable projects
  - Future growth
  - Fire suppression needs
  - To connect homes that currently have an adequate drinking water supply at the time of the Assessment

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Additional Distribution Needs

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Other Distribution System Projects

- Allowable projects
  - Meters, lead services, services owned by the system, control valves, backflow prevention
  - Valves and hydrants not included in pipe projects
- Unallowable projects
  - Hydrants to meet fire suppression needs (allowable if needed for flushing)
  - Valves and hydrants included in pipe projects

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Other Projects

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Other Needs

- Laboratory, controls
  - EPA cannot model
  - Project-specific costs needed (no catalogue costs)
- Generators
  - Can be modeled
  - Rehab considered O&M
- Security
  - No “across the board” statements of need
  - Other than fencing, costs cannot be modeled

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Documentation Requirements

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Three Elements of a DWINSA Project

✓**Necessity** ✓**Feasibility** ✓**Commitment**

- Necessity, feasibility, and commitment are all assumed when survey generated documentation is adequate
- Independent documentation is required for projects when one or more of these are common issues

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Types of Documentation

✓Survey-generated

✓Independent

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Survey-generated Documentation

- Generated specifically for the survey, or in anticipation of the survey
- Prepared by the system, state, contractor, system engineer, etc.

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Independent Documentation

- Generated through a process independent of the Assessment
  - Planning, funding, educating consumers
- Must be system and project specific
- Might not demonstrate the project is allowable
  - Additional information may be necessary

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Documentation of Need - Requirements

- Two-tiered documentation approach
  - All forms of documentation accepted
  - Weight of evidence documentation
    - For certain infrastructure in this category, independent documentation also required
- Requirement dependent on:
  - Type of need
  - New, Expansion/Upgrade, Replace, or Rehabilitation

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Weight of Evidence – Defined

- The adequacy of documentation of need and allowability will be determined based on a high level of system-specific and project-specific detail such as:
  - Age, condition, time since last rehabilitation
  - Specific reason for project need

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Table of Documentation of Need by Type of Need

Acceptable Documentation of Need by Type of Need Code

Code	Need Type	New	Replacement	Rehabilitation
SOURCE				
R1	Well	Weight of evidence – Substantial portion not for growth – Specific deficiency discussed	Weight of evidence – Age, condition, history – Specific deficiency discussed	Weight of evidence – Age, condition, history
R10	Spring Collector			
R2	Well Pump	Weight of evidence – Substantial portion not for growth – Specific deficiency discussed	All forms of documentation accepted	
R8	Raw Water Pump			
R3	Well House	Weight of evidence – Clear indication of need	Weight of evidence – Age, condition, history of well houses for the system	
R4	Eliminate Well Pit	All forms of documentation accepted	N/A	
R5	Abandon Well			
R6	Aquifer Storage and Recovery Well	Weight of evidence – **Independent Documentation Required** – Substantial portion not for growth – Specific deficiency discussed	Weight of evidence – Age, condition, history – Specific deficiency discussed	Weight of evidence – Age, condition, history
R7	Surface Water Intake			
R9	Off-Stream Raw Water Storage	Weight of evidence – **Independent Documentation Required** – Specific deficiency discussed – Not for new/recent regulation – Cost estimate required	All forms of documentation accepted (cost estimate required)	
R11	De-stratification	All forms of documentation accepted (cost estimate required)		
TREATMENT COMPONENTS				
T1 – T9	Disinfection	Weight of evidence – **Independent Documentation Required** – Specific deficiency discussed – Not for new/recent regulation	All forms of documentation accepted	
T30 – T44	Treatment components			
T45	Treatment Unknown		N/A	
T46	Other		All forms of documentation accepted (cost estimate required)	
T50 – T53	Treatment components (AI/AW only)	Weight of evidence – Specific deficiency in process monitoring capabilities discussed – Clear indication not in other project	All forms of documentation accepted	N/A

Code	Need type	New	Expansion or Upgrade	Replacement	Rehabilitation
COMPLETE TREATMENT PLANTS					
T10 – T24	Complete Treatment Plants	Weight of evidence – **Independent Documentation Required** – Substantial portion not for growth – Specific deficiency discussed			All forms of documentation accepted

Code	Need Type	New	Replacement	Rehabilitation
PUMPING				
P1	Finished Water Pump	Weight of evidence – Substantial portion not for growth – Specific deficiency discussed	All forms of documentation accepted	
P2	Pump Station	Weight of evidence – **Independent Documentation Required** – Substantial portion not for growth or fire – Specific deficiency discussed	Weight of evidence – Age, condition, history of pump station or system	All forms of documentation accepted

Included in your folder

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Table of Documentation of Need by Type of Need

Acceptable Documentation of Need by Type of Need Code

Code	Need Type	New	Replacement	Rehabilitation
PIPE				
X1	Raw Water Transmission	Weight of evidence – **Independent Documentation Required** – Substantial portion not for growth – Specific deficiency discussed	All forms of documentation accepted within 10% limit Independent documentation required over 10% limit **If any project relies on survey-generated documentation, the total system-wide rehab and replacement rate may not exceed 10% for the 20-year period.**	
X2	Finished Water Transmission			
M1	Distribution Mains			
M2	Lead Service Lines	N/A	All forms of documentation accepted	N/A
M3	Service Lines	All forms of documentation accepted (statement of system's responsibility required) Weight of evidence if significant amount of new backflow or over 10% of service line replacement		(Rehabilitation not allowed – considered O&M)
M7	Backflow Prevention			
M8	Water Meters	Weight of evidence if more than one meter per connection All forms of documentation accepted if ≤ one meter per connection		
M4	Hydrants	Weight of evidence – Clear indication not included in pipe – Specific deficiency and history of replacement if over 10% of existing or significant amount of new		(Rehabilitation not allowed – considered O&M)
M5	Valves			
M6	Control Valves	All forms of documentation accepted		
FINISHED / TREATED WATER STORAGE				
S1	Elevated Storage	Weight of evidence – **Independent Documentation Required** – Substantial portion not for growth/fire – Specific deficiency discussed	Weight of evidence – Age, condition, history of tank – Specific deficiency discussed	All forms of documentation accepted
S2	Ground-level Storage			
S3	Hydropneumatic Storage	Weight of evidence – Substantial portion not for growth – Specific deficiency discussed	All forms of documentation accepted	
S4	Cisterns (AI/AN/ONLY)	All forms of documentation accepted		
S5	Cover for Existing Finished / Treated Water Storage	All forms of documentation accepted (includes rehab of the tank)		N/A
OTHER				
W1	Laboratory	All forms of documentation accepted (system-specific cost estimate required for laboratory)		(Rehabilitation not allowed – considered O&M)
W2	SCADA			
W3	Pump Controls / Telemetry			
W4	Emergency Power	Weight of evidence – Clear indication of need (necessary to operate critical infrastructure to maintain pressure and provide water)	All forms of documentation accepted	(Rehabilitation not allowed – considered O&M)
W5	Fencing	Weight of evidence – Specific deficiency discussed – Reasonable lengths – Clear indication not included in other projects	Weight of evidence – Specific deficiency discussed – Clear indication not included in other projects	(Rehabilitation not allowed – considered O&M)
W6-W9	Security	Weight of evidence – System-specific cost estimate required – Clear indication security is not included in other projects		(Rehabilitation not allowed – considered O&M)
W10	Other			

Included in your folder

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Pipe Policy

- Rehab/Replacement of Pipe
  - Project based on independent documentation
    - Accepted if allowable
  - Project based on survey-generated documentation
    - Cannot cause system's total pipe rehab/replacement to exceed a total of 10 percent over 20 years
    - Must have total pipe length in system and pipe length for all projects

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Documentation Examples

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Survey-generated Documentation

Number	Description	Reason for Need
2004	South Street Tank	This tank, built in 1972, has not had any major work since built. It was poorly constructed and is deteriorated past the point of rehab and needs to be replaced.
2005	Highline Tank	This tank is in adequate condition now, but will need rehabilitation within 20 years.
2006	East Tank	This steel tank is 60 years old. It was rehabbed 12 years ago, but is in need of replacement now because it is structurally inadequate.
2007	Weber Booster Station	The booster station is operating poorly. It is 40 years old and has been band-aided together. It currently needs replacement.
2008	Oakvale Treatment Plant	Our plant is operating adequately but will need some rehabilitation within 20 years.

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Independent Documentation

"This project will expand the capacity of the water treatment plant from 60 MGD to 81 MGD. Pre-design studies for this expansion were completed in FY12, and major final design work was completed in FY 14. Construction of these new facilities is expected to start in FY 16. Improvements will include new a parallel treatment train consisting of…"

- Great information but…Why is project needed?

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SG Documentation to Supplement ID

- Add a survey-generated statement

"Project 1000 for the expansion of the treatment plant is needed due to extensive growth in the area over the past decade. The current average day demand is 55 MGD and the current max day demand is 70 MGD. The system routinely operates under water restrictions."

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Documentation Summary

Summary of Survey-Generated and Independent Documentation for Each Project

Project Number	Project Name	Documen-tation Code(s)	State/System Survey-Generated Statement	Independent Document Name	Independent Documentation Page Number(s)
1000	Elm Street Treatment Plant Expansion	1, 10	Project 1000 for the expansion of the treatment plant is needed due to extensive growth in the area over the past decade. The current average day demand is 55 MGD and the current max day demand is 70 MGD. The system routinely operates under water restrictions.	City of Anytown Capital Improvement Plan	42, 43
1001	First Street Tank Rehab	10	The First Street Tank will require rehabilitation within the next 20 years.	N/A	N/A

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Efficient and Effective State Efforts

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Suggested Approach for Completing Surveys

1. Inventory approach
   - List all infrastructure expected to require rehab/replacement in 20 years that can be documented with survey-generated documentation
   - Obtain list of inventory from sanitary surveys, discussion with system, etc.

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Suggested Approach for Completing Surveys

2. Independently documented projects
   - List infrastructure projects for which you have independent documentation and the reason for need is clear and allowable, and which does not duplicate the projects identified in Step 1

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Suggested Approach for Completing Surveys

3. Effort-intensive projects
   - List projects in feasibility study-phase, those with marginal documentation, etc. only after completing Steps 1 and 2 and if you have time to thoroughly investigate allowability and need

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Questions/ Discussion

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