

## 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.

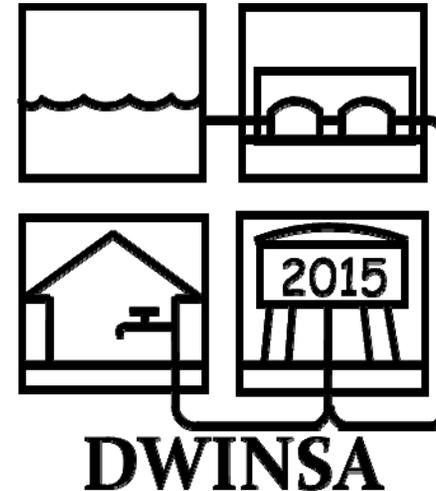
### **Code** *Survey-generated Documentation of Need Only*

- 10 **Written by State.** Brief description and statement of need written by the state.
- 11 **Written by System.** Brief description and statement of need written by the system.

### **Code** *Documentation Submitted for Previous DWINSA*

- 20 **~~Project Relied on 2007 DWINSA Documentation.~~** *Code not applicable to the 2015 DWINSA. Resubmit documentation if it is needed.*
- 21 **Project Relies on 2011 DWINSA Documentation.** Submit project-specific validation statement. Other documentation codes also apply if additional documentation is submitted for the 2015 DWINSA.

## Lists of Codes



Use these instructions and lists of codes when you fill out the Drinking Water Infrastructure Needs Survey and Assessment (DWINSA) questionnaire. In your documentation, please be sure to include project descriptions. Also include copies of the breakdown of cost estimates, if available.

## Instructions for Each Column on the 2015 Drinking Water Infrastructure Needs Survey and Assessment Questionnaire

Column Title	Instructions
<b>Project Number</b>	Number the projects in each category in sequence, using the following range of numbers for each category of need: - 1000's Source, treatment, storage, and pumping projects - 2000's Transmission and distribution projects - 3000's Meters, service lines, backflow prevention, valves, etc.
<b>Project Name</b>	Provide a name that briefly describes and identifies the project.
<b>Type of Need</b>	Refer to List 1 in the Lists of Codes and enter the code(s) that best identifies the project. More than one code may apply to a project if a cost is provided. Use only one code if no cost is available. Codes not applicable to the 2015 DWINSA but that may appear in 2011 DWINSA data are shown in List 1 in italics and with strike-through to indicate they should not be used.
<b>Reason for Need</b>	Refer to List 2 in the Lists of Codes and enter the code(s) that best justifies the project. More than one code may apply to a project.
<b>New, Replace, Expand/Upgrade, or ReHabilitate</b>	Identify whether the project is for: - <b>New</b> infrastructure installation where none exists, enter ' <b>N</b> ' Resulting infrastructure is entirely new. - <b>Replacement</b> of existing infrastructure, enter ' <b>R</b> ' Existing infrastructure is replaced with similar infrastructure. - <b>Expansion/Upgrade</b> of a complete treatment plant, enter ' <b>E</b> ' Major improvements to an existing complete plant that adds or changes unit processes or results in an increase in capacity. Only use for complete treatment plants. - <b>Rehabilitation</b> of existing infrastructure, enter ' <b>H</b> ' Restore existing infrastructure to near-new condition.
<b>Current or Future</b>	Identify whether the project is: - Needed now, enter ' <b>C</b> ' (even if you cannot start construction now) - Not needed now, enter ' <b>F</b> ' (but will be necessary before 12/31/2034)
<b>Regulation or Secondary Purpose</b>	If the project is needed to maintain or obtain compliance with a regulation, secondary MCL, or state requirement, refer to List 3 in the Lists of Codes and enter the appropriate code. Enter '4A' if no code applies.
<b>Design Capacity</b>	Enter the design capacity when applicable: - million gallons per day (MGD) for source, treatment, and pumping; - million gallons (MG) for storage; - kilowatts (kW) for emergency power. For this survey, "design capacity" is the total volume or the flow that can be produced when all components of the project are operating (e.g., for disinfection, record the volume of water treated in MGD).

## 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 or Revised Total Coliform Rule
- 1C Nitrate or Nitrite Standard
- 1D Lead and Copper Rule
- 1E Arsenic Rule
- 1F Stage 1 or Stage 2 Disinfectants/Disinfection Byproducts Rules
- 1G Other Regulated VOCs, SOCs, IOCs, or Radionuclides (excludes Radon)
- 1H Ground Water Rule

#### OTHER

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

#### IF NONE OF THE ABOVE CODES APPLY

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

#### PROPOSED AND RECENTLY PROMULGATED SDWA REGULATIONS

Needs associated **solely** with the **Proposed Radon Rule** are not allowable and should not be included. The costs for these needs, estimated for the rule's Economic Analysis, will be added to the total national need.

As of January 1, 2015, there were no other proposed rules or recently promulgated rules applicable to the 2015 DWINSA.

**LIST 2 - REASON FOR NEED**

<b>Code</b>	<b>Reason the Project is Needed</b>
A1	Project is for existing infrastructure that is or will be old or deteriorated by 12/31/2034.
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 or in preparation for a natural disaster.
A6	Project is to obtain or maintain compliance with an <b>existing regulation</b> (enter the regulation code from List 3 in the Lists of Codes in the regulation column of the questionnaire).
A7	Project is to obtain or maintain compliance with a <b>secondary standard</b> (e.g., iron, taste and odor, and color) (enter regulation code 2A in the regulation column of the questionnaire).
A8	Project is for consolidation with and/or connection to an existing public water system.
A9	Project is for extending service to existing homes without adequate water quantity or quality.
<del>A10</del>	<i>[A10 is not applicable to the 2015 DWINSA but may appear in 2011 DWINSA data. A10 referred to security-related needs]</i>
A11	Use this code if codes A1-A9 do not apply.

<b>Column Title</b>	<b>Instructions</b>
<b>Diameter</b>	Enter the diameter (in inches, using decimals) if the project is for pipe, valves, backflow prevention, or meters. Use a separate project number and line for different sizes of infrastructure if a documented cost is not available. Diameter is not needed for service lines.
<b>Length</b>	Enter the length of pipe (in feet) that must be rehabilitated, replaced, or installed as new. Use a separate project number and line for different sizes of pipe if a documented cost is not available.
<b>Number Needed</b>	If you have multiple identical projects at the same capacity or multiple identical items, indicate the total number needed (e.g., rehabilitate 10 wells each with a 0.5 MGD capacity, or replace 1,000 0.625-inch meters).  If you use this column and provide a project cost, the cost should reflect the entire project (i.e., <i>all</i> 10 wells or <i>all</i> 1,000 meters, <b>not</b> the cost of an individual well or meter).
<b>Cost Estimate</b>	If an existing cost estimate is available, enter the documented cost estimate for this project. Do not use cost estimates that were prepared prior to January 1, 2005. If no cost estimate is provided and modeling parameters are recorded, EPA will use models to estimate the cost. Do not develop a cost estimate for this survey.
<b>Cost Date</b>	If a documented cost estimate is provided, enter the month and year (MM/YYYY) of the cost estimate. EPA will adjust costs to current-year dollars.
<b>Documentation</b>	Refer to List 4 in the Lists of Codes and enter the code(s) that applies to the type of documentation provided that explains why the project is needed. If a cost estimate is provided, also enter the code that applies to the type of cost documentation. More than one code may apply to a project.
<b>Remove, Modify, or Validate</b>	This column appears for systems that participated in the 2011 DWINSA. An asterisk (*) indicates the project must be removed, modified, or have a project-specific validation for the 2015 DWINSA.

**Important Notes:**

- **What is a “need”?** Installation or rehabilitation of capital infrastructure needed over the next 20 years to obtain or maintain service to existing customers or to existing homes with inadequate or unsafe water that are not currently connected. Projects *substantially* for meeting anticipated future population growth or for fire flow are not allowed for the DWINSA.
- **What is “independent documentation”?** Documents generated through a process independent of the DWINSA (e.g., CIP, master plan, sanitary survey report).
- **What is “survey-generated documentation”?** Documents generated specifically for the survey that are written by the system or the state.

Please use the **Documentation Summary** tab of the Questionnaire to provide survey-generated documentation of need and/or provide information on the independent documentation for the project. A description of each project or a copy of the documentation must be provided and be clearly identified by project number.

**LIST 1 - TYPE OF NEED**

<i>Code</i>	<i>Type of Need</i>
<b>RAW/UNTREATED WATER SOURCE</b>	
R1	Well (including pump and appurtenances)
R2	Well Pump
<del>R3</del>	<del>Well House <sup>1</sup></del>
<del>R4</del>	<del>Eliminate Well Pit <sup>1</sup></del>
<del>R5</del>	<del>Abandon Well <sup>1</sup></del>
R6	Aquifer Storage and Recovery Well
R7	Surface Water Intake
R8	Raw Water Pump
R9	Off-Stream Raw Water Storage <sup>2</sup>
R10	Spring
<del>R11</del>	<del>Destratification <sup>1</sup></del>
<b>TREATMENT: Disinfection</b>	
T1	Chlorination
T2	Chloramination
T3	Chlorine Dioxide
T4	Ozonation
T5	Mixed Oxidant Type Equipment
T6	Ultraviolet Disinfection
T7	Contact Basin for CT
T8	Dechlorination of Treated Water
T9	Chlorine Gas Scrubber
<b>TREATMENT: Complete Plants (N/R/E require independent documentation)</b>	
T10	Conventional Filter Plant (includes CAC technologies)
T11	Direct or In-line Filter Plant
T12	Slow Sand Filter Plant
T13	Diatomaceous Earth Filter Plant
T14	Membrane Technology for Particulate Removal
T15	Cartridge or Bag Filtration Plant
T16	Lime Softening
T17	Reverse Osmosis
T18	Electrodialysis
T19	Activated Alumina
T20	Manganese Green Sand (or other oxidation/filtration technology)
T21	Ion Exchange
T22	Groundwater Chemical-feed
T23	Iron Adsorption
T24	Aeration
<b>TREATMENT: Other Components / Equipment / Processes</b>	
T30	Zebra Mussel Control
T31	Corrosion Control (chemical addition)
T32	Powdered Activated Carbon
T33	Aeration (component)
T34	Sequestering for Iron and/or Manganese

<sup>1</sup> These codes are not applicable to the 2015 DWINSA but may appear in 2011 DWINSA data.

<sup>2</sup> Cost must be provided; cost of this infrastructure cannot be modeled.

**LIST 1 - TYPE OF NEED (cont.)**

<i>Code</i>	<i>Type of Need</i>
<b>TREATMENT: Other Components / Equipment / Processes</b>	
T35	Chemical Feed
T36	Chemical Storage Tank
T37	Fluoride Addition
T38	Presedimentation Basin
T39	Sedimentation/Flocculation
T40	Granular Activated Carbon
T41	Membrane Filtration (not complete plant)
T42	Media Filters
T43	Waste Handling/Treatment: Mechanical (not included in another project)
T44	Waste Handling/Treatment: Nonmechanical or Connection to a Sanitary Sewer (not included in another project)
T45	Type of Treatment Unknown
T46	Other (Please include an explanation) <sup>2</sup>
<b>TRANSMISSION MAINS: (Any mains that transport raw water to the treatment plant, or treated water from the plant to the distribution system grid.)</b>	
X1	Raw Water Transmission
X2	Finished Water Transmission
<b>DISTRIBUTION</b>	
M1	Distribution Mains (any mains that transport water through a piping grid serving customers; see "transmission" above)
M2	Lead (Pb) Service Line Replacement
M3	Service Lines (other than lead service lines)
<del>M4</del>	<del>Hydrants <sup>1</sup></del>
M5	Valves (gate, butterfly, etc.) (not included in a pipe project)
M6	Control Valves (PRVs, altitude, etc.)
M7	Backflow Prevention Devices/Assemblies
M8	Water Meters
<b>FINISHED/TREATED WATER STORAGE</b>	
S1	Elevated Finished/Treated Water Storage
S2	Ground-level Finished/Treated Water Storage
S3	Hydropneumatic Storage
S5	Cover for Existing Finished/Treated Water Storage
<b>PUMP STATION AND FINISHED WATER PUMP</b>	
P1	Finished Water Pump
P2	Pump Station (booster or raw water pump station-may include clearwell, pumps, housing)
<b>OTHER INFRASTRUCTURE NEEDS</b>	
<del>W1</del>	<del>Laboratory Capital Costs for Labs Owned by the System <sup>1</sup></del>
W2	Computer and Automation Costs (SCADA)
<del>W3</del>	<del>Pump Controls/Telemetry <sup>1</sup></del>
W4	Emergency Power (enter design capacity as kilowatts)
<del>W5</del>	<del>Fencing and Security-related needs <sup>1</sup></del>
<del>W9</del>	<del>Other (Please include an explanation)<sup>2</sup></del>
W10	Other (Please include an explanation) <sup>2</sup>

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