



We work with others to protect the health of the people of
Washington State by ensuring safe and reliable drinking water.



HERE COMES THE 2020 NEEDS ASSESSMENT

Washington State Department of Health
Office of Drinking Water

DWINSA—What Is It?

- **Drinking Water Infrastructure Needs Survey and Assessment (DWINSA)**
 - aka the "Needs Assessment" or "Needs Survey"
- Twenty-year forecast of drinking infrastructure needs
 - January 1, 2020, through December 31, 2039
- Completed every four years (usually)
- Includes all 50 States, U.S. territories, Alaska Native Villages, and American Indian Communities
- Does not include needs for population growth (not DWSRF eligible)

DWINSA—Why Is It Important?

- Sets DWSRF allotments to states, territories, and American Native/Indian communities for next **four to five** years
- DWSRF is used to provide
 - Technical assistance for water systems
 - Source water protection activities
 - Capital funding for water system infrastructure

DWINSA Year	WA Est. 20-year Need (2015 Dollars, Inflation adjusted)
2007	\$12.3 Billion
2011	\$10.6 Billion
2015	\$11.7 Billion

DWSRF Construction Loans

- All projects scored and ranked based on health risk being addressed.
- Five risk categories.
 - Risk Category 1 the highest ranking category- addresses documented microbial risk
 - Risk Category 2 second highest ranking category- addresses exceedance of primary inorganic contaminants and PFOS/PFOA
- Based on project score and ranking, the highest scoring projects are funded until all funds have been exhausted.

Construction Loans

- See Appendix A of the DWSRF Construction Loan Guidelines for scoring information
 - Guidelines available online at doh.wa.gov/DWSRF.



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DWSRF Construction Loans: Risk Category 1

- Projects to address microbial risk
 - Coliform, surface water, reservoir replacement, disinfection
- Cyanotoxins (blue-green algae)—Exceedance of EPA HRLs
 - 0.3 micrograms per liter for microcystins
 - 0.7 micrograms per liter for cylindrospermopsin



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DWSRF Construction Loans: Risk Category 2

- Projects for nitrate, arsenic, and other primary MCL source contaminants.
- Corrosion control projects for lead and copper
 - Funded packed tower aeration plant for Olympia to raise pH
- PFOS, PFOA, PFHxS, PFNA, and PFHpA combined above 70 ppt
 - Funded new reservoir for Spokane to serve Airway Heights due to presence of PFAS in Airway Heights' wells



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DWSRF Construction Loans: Risk Category 3

- Removal and replacement of lead service lines and goosenecks
 - Provide documentation through historic records, age of house
 - All work eligible for reimbursement if done within 500 feet of lead service line or gooseneck replacement
 - Includes water mains, replacement of service line from main to meter, hydrants, valve
 - Funded project with City of Auburn to replace goosenecks

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DWSRF Construction Loans: Risk Categories 4 and 5

- Category 4
 - Exceedance of secondary MCL
 - Improve resiliency (seismic, flood preparedness)
 - Sanitary survey significant findings
 - Nitrate or arsenic if source 80 percent of MCL
 - Restructuring/consolidation
- Category 5—Projects for system reliability, security measures, other distribution system improvements (**not** for fire flow)

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DWSRF Construction Loans

- Applications accepted October 1–November 30, 2019
- DWSRF has an informational table in the Exhibitor's Hall
- Checkout the website
 - doh.wa.gov/DWSRF or search for DOH DWSRF
- Email: dwsrf@doh.wa.gov



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DWSRF Contacts

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DWINSAs 2020—Preliminary Schedule

- "Validation of Statistical Frame" (August–September 2019)
 - Review potential water systems for 2020 DWINSAs
 - DOH (Nancy Feagin) and EPA staff/contractor
- EPA frame verification and training for states (October 2019–February 2020)
- DWINSAs mail out to states (anticipated March 2020)
- States and water systems work (March 2020–December 2020)
- EPA data analysis, report writing, and presentation to congress (2021 and beyond)

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DWINSA—Who Is Included?

- All water systems serving more than 100,000 people
 - Eleven such water systems in Washington
- A representative sample of water systems serving 3,301 to 100,000 people
 - Forty-four such water systems in Washington in 2015
 - About 80 percent of water systems from the 2015 DWINSAs will be resurveyed in 2020.
- In the 2015 DWINSAs, 16 of 55 water systems were in King County
 - Twenty-nine percent of total water systems
 - A large percentage of Washington infrastructure need

Eastern Washington Water Systems (2015)

Water System Name	Primary Contact (2015)	Second Contact (2015)
Chelan, City of	Dwayne Van Epps	Troy Brooks
Cheney, City of	Todd Abelman	Dan Ferguson
Kennewick, City of	Josh Pantzke	
Pasco Water Department	Ahmad Qayoumi	Reuel Klempel
Prosser, City of	L. J. Dacorsi	Brain Cyphers
Quincy, City of	Tim Snead	Dave Reynolds
Selah, City of	Joe Henne	
Spokane, City of	Dan Kegley	
Walla Walla Water Division	Frank Nicholson	
Yak CO – Terrace Heights	Joe Stump	

Note: Water systems serving less than 100,000 people may not be involved in 2020 Need Assessment.

Other Washington Water Systems (2015)

Water System Name	Primary Contact (2015)	Secondary Contact (2015)
Bellevue, City of	Doug Lane	Pam Maloney
Cascade Water Alliance	Chuck Clarke	
Cedar River Water & Sewer District	Ron Sheadel	
Duvall, City of	Steve Leniszewski	Boyd Benson
Highline Water District	Matt Everett	
Issaquah Water System	Bret Heath	
Lakehaven Utility District	John Bowman	
North City Water District	Diane Pottinger	
Northshore Utility District	Fanny Yee	
Sammamish Plateau Water & Sewer	Jay Krauss	Scott Jonas

Infrastructure Inventory—Part 1

Category	Element	Cost Basis
Source	Well pump	Capacity (mgd)
	Raw water pump	Capacity (mgd)
	Spring system	Capacity (mgd)
Treatment	Disinfection	Capacity (mgd)
	Other chemical feed	Capacity (mgd)
	Filtration	Capacity (mgd)
	Other treatment (IX, GAC contactor, etc...)	Capacity (mgd)
Pumping	Finished Water Pump Station	Capacity (mgd)
	Booster Pump Station	Capacity (mgd)
Transmission	Mains	Diameter (inches); Length (feet)

Infrastructure Inventory—Part 2

Category	Element	Cost basis
Distribution	Mains	Diameter (inches); Length (feet)
	Service lines	Material; Diameter (inches)
	Service meters	Diameter (inches)
	Utility owned backflow devices	Diameter (inches)
	Control valves (PRVs, FCVs, in system)	Diameter (inches)
	Reservoirs (elevated; ground level)	Volume (MG)
Other	SCADA	Automatic based upon system size
	Emergency Generator	kW per unit

Note: See draft of the *Water System Planning Guidebook*, Chapter 3; Table 3-2 (released 9/4/19 at 10:02 am).

Capital Improvements

- Need clear documentation
 - Water system plan
 - Capital improvement plan (CIP) summary
- Do **not** include projects primarily for
 - FIRE
 - GROWth
- Planned out through December 31, 2039
- Provide sizing (mgd, diameter/length, volume) and detailed descriptions to help improve future cost estimates

DWINSA 2020 Extras

- Service Lines—Inventory by type (estimated number of lead service lines)
- Operator Workforce—Succession planning; investments in workforce development
- American Iron and Steel (AIS)—Assess demand and DWSRF concerns (that PWSs aren't using DWSRF because of AIS provisions).
- Unregulated Contaminant Projects—PFAS, harmful algae blooms (HABs), strontium, etc....

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What you can do...

1. Inventory—Sources, treatment, pipe, generators, BFP, etc.
2. CIP—Look forward 20 years; include system resiliency improvements, but not GROWth or FIRE
3. Contacts—Update your DOH regional planner if there are any changes to your DWINSAs person(s)

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Questions?

