

7th Drinking Water Infrastructure Needs Survey and Assessment April 2023

Our water infrastructure is aging and in need of repair to withstand the challenges of the 21st century. We must maintain and modernize water infrastructure to deliver clean drinking water and safely transport and treat wastewater. EPA's Drinking Water Infrastructure Needs Survey and Assessment (DWINSA) is used to determine the financial needs of the nation's drinking water infrastructure over the next twenty years. It also guides EPA's distribution of annual funding to states through the Drinking Water State Revolving Fund (DWSRF).

What is the projected water infrastructure need for the United States?

The 20-year national infrastructure need for states estimated by the 7th DWINSA is \$625 billion. This is a 32% increase over the 6th DWINSA (\$472.6 billion).

Who participated in the DWINSA?

The 7th DWINSA is the largest and broadest scope effort since its inception in 1995 and includes data on lead service lines (LSLs), operator workforce concerns, and pipe and storage tank construction materials related to Safe Drinking Water Act's American Iron and Steel (AIS) provisions. The survey included 3,629 public water systems from all 50 states, Puerto Rico, the District of Columbia, and U.S. territories. The survey included Tribal systems for the first time since 2011. Out of the 3,629 public water systems surveyed, 3,526 responded, which is a 97% response rate.

How is the DWINSA used to distribute infrastructure funding?

The 7th DWINSA represents the DWSRF-eligible infrastructure projects that are necessary over the next 20 years for water systems to continue to provide safe drinking water to the public. These projects include infrastructure needs that are eligible for, but not necessarily financed by, the DWSRF, including the installation of new drinking water infrastructure and the rehabilitation, expansion, or replacement of existing infrastructure.

The unprecedented investments in drinking water infrastructure under the Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL), are distributed according to a formula that is updated every four years to reflect the needs identified in the DWINSA. This formula will be used for the DWSRF Base Appropriation, BIL General Supplemental, and BIL Emerging Contaminants funds. The BIL Lead Service Line Replacement Fund will be distributed based on a different formula derived from service line data in the 7th DWINSA.

How did EPA use the DWINSA to determine the allotments for the BIL Lead Service Line Replacement Fund?

For the first time, in accordance with Section 1452(h) of SDWA, the 7th Drinking Water Infrastructure Needs Survey and Assessment (DWINSA) included questions that focused on service line material. Based on the results, the agency is projecting a national total of 9.2 million lead service lines across the country. The 7th DWINSA delivers the best available national and state-level projections of service line counts and advances a unique opportunity to employ a separate lead service line allotment formula for the BIL DWSRF Lead Service Line

Replacement appropriation.

EPA developed the allotment formula based on the number of projected LSLs in each state. As required under section 1452(a)(1)(D) of the Safe Drinking Water Act, each state is provided a minimum allotment of 1% of the total amount available to states. This new LSL-specific formula will allow states to receive financial assistance commensurate with their need as soon as possible, furthering public health protection nationwide. The new BIL LSLR fund formula will reduce the need for reallocations and the administrative burden on states and EPA that is created when funding allocated outweighs the need of water systems in that state or vice versa.

When will EPA conduct the next survey?

Section 1452(h) of the Safe Drinking Water Act mandates that EPA conduct an assessment of the nation's public water systems' infrastructure needs every four years and use the findings to distribute DWSRF capitalization grants to states. EPA does not intend to conduct an off-cycle survey.

Why isn't EPA using other studies or waiting for LSL inventories to determine the allocations?

Section 1452(a)(1)(D) of the Safe Drinking Water Act mandates that EPA use the most recent needs survey to develop a formula for distributing the annual DWSRF capitalization grants to states.

How can EPA project the number of lead service lines when most systems are still in the process of developing their inventory?

EPA's 7th DWINSA provides the best available national and state-level projections of materials and service line counts. EPA anticipates that as systems complete their service line inventories, future DWINSA service line data will be even better. All public water systems participating in the 7th DWINSA were asked to provide information on the number of service lines in their system (whether owned by the system, the customer, or jointly owned by both the system and the customer) and what they knew about the construction materials of the service lines and service line connectors. The service line questionnaire was optional; however, 75% of water systems responded.

To develop estimated counts of service lines, system level data was extrapolated at the state and national level using similar methodology as for the primary DWINSA. Responses from the DWINSA service line questionnaire were used to estimate the numbers of service lines of each material type. Because water systems have not yet completed inventories, we do not know how many of the reported services lines of unknown material are actually lead. Therefore, for each state, EPA applied the ratio of the number of known LSLs to the total service lines of all known material types to project how many service lines of unknown material might be lead. This same projection was done for the standalone galvanized service lines. A state specific ratio was developed to derive the total projected count of LSLs in each state. These state numbers were then totaled to calculate the total national LSL number. If a state reported all unknown materials or did not respond to the survey for large and medium systems, a national ratio derived from the states for which EPA had data was applied. For small water systems, a national ratio was applied to the number of connections reported in small systems in each state.

Did EPA change the methodology for calculating the DWSRF allotment based on the survey?

The methodology for the standard DWSRF allotment has not changed. The survey results minimally affected the

drinking water allocations for the DWSRF Base, DWSRF BIL General Supplemental, and DWSRF BIL Emerging Contaminants. The service line data collected during the 7th DWINSA provided information for EPA to develop and use a separate lead service line allotment formula for the BIL DWSRF Lead Service Line Replacement Fund.

Where can I find additional information on the DWINSA?

Section 1452(h) of the Safe Drinking Water Act requires EPA to provide a report to Congress with the results of the DWINSA. When the report is complete and transmitted to Congress, EPA will post the report on its website. Previous DWINSA reports can be found at: <https://www.epa.gov/dwsrf>. A fact sheet on the 7th DWINSA is available on EPA's website.