# Update on Federal Water Reuse Interagency Working Group

# November 2024

The Water Reuse Interagency Working Group (IWG) is coordinating across the federal government to drive progress on water reuse. Collectively, federal leadership strives to ensure that all communities have access to information and resources that support the safe implementation of reuse as part of a resilient water management strategy.

Each federal agency has unique missions and expertise related to water reuse. As a member of the IWG, agencies may work independently or collaboratively to make progress towards these shared goals:

- Support state regulatory and policy clarity.
- Help improve public perception.
- Fund or provide science and technological research.
- Invest in communities by providing infrastructure financing.
- Provide technical assistance.

The 2024 Report to Congress details the first

two years of IWG-led activities. Many of the efforts represented are part of the <u>National Water Reuse Action Plan</u> (WRAP), a collaborative with 150+ partner organizations. Recent accomplishments with federal engagement are summarized below with links to learn more about each effort and collaborator involvement.































# **IWG Strategies to Advance Water Reuse**

#### 1. IWG Members Strive to Improve Regulatory and Policy Clarity to Enable Reuse

Inconsistent or unclear regulations represent a major barrier to implementing water reuse projects. For potable reuse, while all drinking water must meet Safe Drinking Water Act (SDWA) regulations, many states develop their own regulations to provide additional public health protections. In addition, there is often confusion about the level of quality needed for alternative sources and uses of water, from industrial cooling towers to agricultural supplies. The IWG aims to clarify quality standards for all types of reuse within their purview and to support states in developing policies and regulations. These actions provide clarity on water reuse permitting, codes and state or federal policies and regulations to inform best practices and facilitate broader implementation of reuse projects.

- Enhancing state collaboration on water reuse by hosting multiple regulatory summits with state partners. (Action 2.2, led by EPA)
- ✓ Supporting the permitting of innovative water reuse projects under the National Pollutant Discharge Elimination System (NPDES) program, including through an experts workshop and the development of a white paper. (Action 2.6, output led by EPA; Action 2.19, led by EPA)
- ✓ Updating federal facility design <u>standards</u> to require water reuse. (Action 2.18, led by EPA and GSA)
- ✓ Compiling state regulations in the <u>REUSExplorer tool</u> to advance water reuse. (Action 3.1, led by EPA)



Federal panel at 2024 State Summit on Water Reuse in Denver, Colorado.

#### **SPOTLIGHT: Onsite Water Reuse Summit**

This summit included more than 40 presenters and 200 attendees from across the sector who shared experiences, research, goals and success stories in implementing onsite water reuse systems. Leadership from the EPA and DOE provided remarks on the importance of collaboration to advance water reuse. GSA joined a panel on aligning plumbing codes and standards.



#### 2. IWG Efforts Bolster Public Perception of Water Reuse to Accelerate Adoption

Early and frequent public engagement is a best practice for advancing a proposed water reuse project. Effective communication should be tailored and disseminated to different stakeholder groups to clearly explain the need for the project as well as the level of public health protections for water reuse. Improved communication with the public helps to increase support for and acceptance of water reuse projects.

- ✓ Developing educational materials such as the <u>Flush3P.org</u> website and <u>fact sheets</u> to help reduce concentrations of pharmaceuticals in wastewater for downstream end uses. (<u>Action 2.9</u>, outputs led by EPA and FDA)
- ✓ Illustrating integration of stormwater capture and use in urban settings at the <u>building</u> and <u>community</u> scales. (<u>Action 3.3</u>, led by EPA)
- ✓ Providing <u>information</u> to the public and to medical and public health professionals about the safety of recycled water. (Action 8.6, led by CDC and EPA)
- Communicating with the medical community on the need for recycled water and available treatments for removing pathogens, chemicals and constituents of emerging concern. (Action 8.8, led by EPA)

#### 3. The IWG is Helping to Advance Scientific and Technological Research on Reuse

As the need for alternative water supplies increases, it is important to understand the potential impacts of water reuse on the environment, public health and energy consumption. These actions support the development of sound science and research initiatives that can lower the costs, energy needs and material use of water treatment technologies employed for reuse.

- ✓ Addressing water reuse research priorities like viral pathogens and antimicrobial resistance with \$42.2 million in funding between October 2020 and January 2024 under the Science to Achieve Results (STAR) and National Priorities Grant Programs. (Actions 3.6, 7.7, 7.8 and 7.9, led by EPA)
- Helping small businesses develop innovative reuse technologies for monitoring, modular systems, nature-based solutions and others through the EPA's <u>Small Business Innovation Research</u> (SBIR) program funding. (Action 7.5, led by EPA)
- ✓ Funding for the new <u>Water Reuse Consortium</u> to advance reuse research. (<u>Action 7.10</u>, led by USACE)

#### **SPOTLIGHT: NAWI 2.0**

In 2024, the National Alliance for Water Innovation (NAWI) <u>announced</u> \$75 million in funding for its second five-year phase for early-stage applied R&D to support research needed to lower the cost and energy of desalination and water reuse technologies. To date, DOE has provided \$70.5 million across 75 reuse research projects. (Action 4.6, led by DOE)









### 4. IWG Member Agencies Are Providing and Highlighting Infrastructure Funding

Funding is one of the largest barriers to water reuse projects. Multiple federal funding programs are available to support community and state efforts that meet cross-cutting policy goals, including reuse. These actions create or highlight federal funding tools that incentivize communities of all sizes to pursue reuse.

- ✓ Funding resilient water infrastructure through the Water and Waste Disposal Loan and Grant Program and the Conservation Innovation Grants program, which have awarded over \$100 million to reuse projects since 2020. (Actions 2.12, 5.1 and 6.4, led by USDA)
- ✓ Supporting safe and sustainable water resources through \$28.7 million in funding for competitive research topics between 2020 and March 2023. (Action 2.12, led by USDA)

## SPOTLIGHT: Webinar on Federal Funding Programs Available for Water Reuse

In a June 2024 <u>webinar</u>, IWG representatives from FEMA, Reclamation, USDA and the EPA discussed their funding programs, application requirements and examples of previous water reuse projects funded under those programs.

- ✓ Promoting reuse eligibility for \$3 billion in disaster recovery financial assistance under the <u>Building Resilient</u>
  <a href="mailto:lnfrastructure">Infrastructure and Communities</a> and <u>Hazard Mitigation Assistance Grants</u> programs. (Action 2.14, led by FEMA and EPA)
- ✓ Studying the public benefit of a potential federal investment tax credit to support private investment in water reuse and recycling systems. (Action 6.6, led by EPA)
- ✓ Investing more than \$2.2 billion in resilient and drought-proof water infrastructure projects from 2020 to 2024 under the Water Infrastructure Finance and Innovation Act (WIFIA) program. (Action 6.2B, led by EPA)
- ✓ Tracking Drinking Water and Clean Water State Revolving Fund (SRF) water reuse investments by state through a new interactive tool. (Action 6.2A, led by EPA)
- ✓ Funding the planning, design and construction of water reuse projects across the Western United States, including over \$179.7 million under the Large-Scale Water Recycling Program and more than \$442.4 million through the Title XVI Water Reclamation and Reuse Program since 2022. (Action 6.5, led by Reclamation)



## 5. IWG Member Agencies Provide Technical Support and Information on Water Reuse

The success of a reuse project depends on engaging stakeholders across different communities to identify their interests and priorities, provide targeted training support and promote collaboration within programs to support local priorities. These actions help communities better understand how to implement reuse projects that best fit their needs.

- ✓ Sharing key takeaways from U.S.-Israel exchanges on agricultural water reuse through a public <u>webinar</u>, <u>summary report</u> and collaborative <u>review article</u>. (Actions <u>11.1</u> and <u>1.6</u>, led by EPA in collaboration with USDA and FDA)
- ✓ Demonstrating community implementation of water reuse through <u>case study examples</u>. (Action 11.3, led by EPA)
- ✓ Promoting USDA water reuse resources for rural communities, including though their <u>Water and Waste Disposal Technical</u>
  <u>Assistance and Training Grants</u> program. (Action 6.4, led by USDA)
- ✓ Leveraging water partnerships to highlight the intersection of water reuse and equity through pilot projects such as the Urban Waters WRAP River System Project. (Action 1.4, led by EPA)
- ✓ Facilitating community connections with <u>technical assistance providers</u> that specifically support water reuse projects and capturing <u>lessons learned</u> in underserved communities. (Actions 4.9 and 8.5, led by EPA)

#### **Key Resources**

- Federal Water Reuse Interagency Working Group website: <a href="https://www.epa.gov/waterreuse/water-reuse-interagency-working-group">https://www.epa.gov/waterreuse/water-reuse-interagency-working-group</a>
- WRAP Online Platform with action information: https://www.epa.gov/waterreuse/wraponline
- Federal Water Reuse Interagency Working Group Report to Congress: <a href="https://www.epa.gov/system/files/documents/2024-09/water-reuse-interagency-working-group">https://www.epa.gov/system/files/documents/2024-09/water-reuse-interagency-working-group</a> rtc 08.21.2024 508.pdf