Water Reuse Objectives

Water security: The capacity of a population to safeguard sustainable access to adequate quantities of acceptable quality water for sustaining livelihoods, human well-being, and socioeconomic development.

Water sustainability: Ensuring an adequate, reliable, and continual supply of clean water for human uses and ecosystems.

Water resilience: The ability of a water supply (e.g., a community water system or an asset of a community water system) to adapt to or withstand the effects of rapid hydrologic change or a natural disaster.



Federal Policy Statement on Water Reuse

Water is critical to our nation's health, strength, security, and resilience, but the solutions available to manage water and its availability are often complex. When incorporated into an integrated water management plan, water reuse can be a valuable tool to enhance the availability and effective use of water resources. The federal government recognizes, acknowledges, and respects the primacy of states in the management of water resources within their borders.

The federal government supports the consideration of water reuse to increase water security, sustainability, and resilience, especially when considered through integrated and collaborative water resource planning approaches, typically at the watershed or basin-scale.

This policy statement is intended to guide federal agencies to:

- Encourage consideration of water reuse and integrated watershed-scale planning approaches;
- Communicate the value and benefits of water reuse; and
- Leverage existing programmatic, funding, and technical resources.

waterreuse@epa.gov

⁶⁶ Diversifying our nation's water portfolio must be a nationwide priority, and water reuse has the potential to ensure the viability of our water economy for generations to come.

-David Ross, Assistant Administrator for Water, U.S. EPA



National Water Reuse Action Plan



By the Numbers

Strategic Themes 27 Developed Actions 28 Unique Action Le 0+ Collaborating |

200+ Implementation Milestones

WRAP Online Platform

- Provides a repository for all actions (developed and undeveloped)
- Identifies action leaders, implementation milestones, and target completion dates for current and newly developed actions.
- Provides routine updates on progress for each of the actions.
- Creates accountability for action progress.
- Illustrates and communicates ongoing activity.
- Provides a forum to highlight collaboration and partnership.
- Celebrates successes.
- Develops connections among diverse groups of stakeholders.

We thank all the action leaders, partners, and collaborators and encourage others to join the effort... Together, we can make considerable progress as we move into a new era of collaborative action and accountability and ensure the security, sustainability, and resilience of our nation's water resources.

Improving the Security, Sustainability, and Resilience of Our Nation's Water Resources

	National Water Reuse Action Plan: Online Platform									
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artners										
	Through communication with action lee WMAP Online Platform will be updated in maintain a relatively current reflection (Thear rough action specific updated action actions, and links to relevant action out instructions: Cick on an action in the t information about each, including desc leaders, partners, implementation mile dates. Strategic Theme Area:		Enhance Sta	te Collaboration on Water Reuse						
			Enhance State Collaboration on Water Reuse (Action 2.2.7)							
						Show all		Action Leaders and Key Contact:		
						Show 10 ¢ entries		U.S. Environmental Protection Agency (EPA)		
						Strategic Theme Area	Action	Jeft Lape n lape.jeff@epa.gov		
		Integrated Watershed Action	Develop Conside	Association of Clean Water Ad Jake Adler	Enhance State Collaboration on Water Deuse					
	d).		Context	jadler@acwa-us.org	Liniance State Conaboration on Water Reuse					
		Integrated Watershed Action	Within : Framev	Association of State Drinking Wendi Wilkes wwilkes@asdwa.org	Enhance State Collaboration on Water Reuse (Action 2.2.2)					
t	Integrated Watershed Action	Incorpc Plannir	Description: Provide forums approaches for the managem	Action Attributes Action Team Implementation Milestones Outputs and References						
	integrated Watershed Action	Leverag Reuse i the Wat	Background: Some states, p beginning to explore reuse ap	Implementation Milestones	Expand All 🖯					
	Policy Coordination	Compil	challenges when developing provide opportunities to lean	1. Convene the 1st state summit on water reuse at the 34th Annual WateReuse Symposium in San Diego, CA.	~					
			The Annual WateReuse Pacifi been occurring for over a dec	2. Secure meeting facilitation and notetaking support for the 2nd state summit on water reuse.	~					
			model and example of the be nationally coordinated state-	3. Conduct water reuse-focused discussions at a session at the ASDWA Member Meeting.	~					
			In September 2019, ACWA an Symposium with EPA particip The meeting demonstrated to	4. Conduct water reuse-focused discussions at a session at the ACWA Midyear Meeting.	~					
			engagement of additional sta	5. Initiate planning for next annual state summit on water reuse.	~					
			 Increase state collaborat 	6. Compile a list of state water reuse contacts and roles and post in an accessible location online.	~					
				7. Convene the 2nd state summit on water reuse at the 35th WateReuse Symposium in Denver, CO.	Ý					
				8. Prepare state summit on water reuse meeting summary for state representatives.	~					
				9. Additional milestones to be determined.	~					
				Use the arrows to navigate between actions. ← Previous Action Next Action →						

-Andrew R. Wheeler, Administrator, U.S. Environmental Protection Agency

Integrated Watershed Action

Develop a Federal Policy Statement to Support and Encourage Consideration of Water Reuse in a Watershed-Scale Planning Context (Action 2.1.1) *Action Leader: EPA*

Prepare Case Studies of Successful Water Reuse Applications Within an Integrated Water Resources Management (IWRM) Framework (Action 2.1.2) *Action Leader: WateReuse*

Leverage EPA's Water Partnership Programs to Consider Water Reuse in the Context of Integrated Water Resources Management at the Watershed Scale (New Action 2.1.4) *Action Leader: EPA*

Policy Coordination

Compile Existing State Policies and Approaches to Water Reuse (Action 2.2.1) Action Leaders: EPA, WateReuse, ACWA, ASDWA

Enhance State Collaboration on Water Reuse (Action 2.2.2)

Action Leaders: EPA, ACWA, ASDWA

Complete the EPA Study of Oil and Gas Extraction Wastewater Management (Action 2.2.3) *Action Leader: EPA*

Enhance Wastewater Source Control through Local Pretreatment Programs to Support Water Reuse Opportunities for Municipal Wastewater (Action 2.2.4) *Action Leaders: NACWA, WEF*

Develop Informational Materials to Address How CWA NPDES Permits Can Facilitate Water Reuse/Capture (Action 2.2.6)

Action Leaders: EPA, ACWA

Utilize Existing Multi-Agency Federal Working Groups to Serve as Forums for Coordinated Federal Engagement on Water Reuse (Action 2.2.7) *Action Leader: EPA* Align Policies and Communication Tools to Promote Best Management of Unused and Expired Pharmaceuticals to Support Water Reuse and Recycling (Action 2.2.9) *Action Leader: LACSD*

Leverage Existing U.S. Department of Agriculture Programs to Encourage Consideration and Integration of Agricultural Water Reuse (Action 2.2.12) *Action Leader: USDA*

Conduct Outreach and Training with Tribes to Build Water Reuse Capacity (Action 2.2.15) *Action Leader: EPA*

Support Local and Regional Reuse Projects by Identifying Challenges, Opportunities, and Models for Interagency Collaboration (New Action 2.2.16) *Action Leaders: Eric Rosenblum, WateReuse, EPA*

Propose U.S. Army Corps of Engineers Nationwide Permit Addressing Reuse (New Action 2.2.17) *Action Leader: USACE*

Science and Specifications

Compile Existing Fit-for-Purpose Specifications (Action 2.3.1)

Action Leader: EPA

Convene Experts to Address Opportunities and Challenges Related to Urban Stormwater Capture and Use (Action 2.3.3)

Action Leaders: EPA, JFW, NMSA, ReNUWIt, WateReuse, WEF

Develop Research and Tools to Support the Implementation of Onsite Non-Potable Water Reuse Systems (ONWS) (Action 2.3.4, previously 2.6.5) *Action Leaders: NBRC for ONWS*

Assess Specifications for Potential Reuse of Wastewater in Food Animal Protein Processing Facilities (New Action 2.3.5) *Action Leader: EPA*

⁶⁶ The WRAP presents a unique opportunity for the water sector, policy-makers, and the broader public to collaborate on a set of specific activities that collectively can result in significant progress toward advancing the adoption of water recycling practices across the [United States].

-WateReuse Association, National Association of Clean Water Agencies, American Water Works Association, Water Environment Federation, Association of Metropolitan Water Agencies, Water Research Foundation



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Technology Development and Validation

Implement New Mexico Produced Water Research Consortium to Identify and Fill Science and Technology Gaps for Off-Field Use of Treated Produced Water (Action 2.4.2)

Action Leader: NMED

Support Water Reuse Through the U.S. Department of Energy's Water Security Grand Challenge (Action 2.4.3) *Action Leader: DOE*

Promote Air-Cooling Condensate Water Reuse Standards, Methods, Tools, and Technologies for Implementing Systems in Large Buildings (New Action 2.4.5)

Action Leaders: ASHRAE, IAPMO, EPA, WW, WTA

Water Information Availability

Foster U.S. Department of Agriculture Watershed-Scale Pilot Projects to Share Water Information to Support Water Reuse Actions (Action 2.5.1) *Action Leader: USDA*

Develop National Integrated Water Availability Assessments (New Action 2.5.4) *Action Leader: USGS*

Finance Support



Clarify and Communicate the Eligibility of Water Reuse Under the Clean Water and Drinking Water State Revolving Fund (SRF) Programs (Action 2.6.2A)

Action Leader: EPA

Continue to Actively Support and Communicate the Eligibility of Water Infrastructure and Financing Innovation Act (WIFIA) Funding for Water Reuse (Action 2.6.2B)

Action Leader: EPA

Compile and Promote Existing U.S. Department of Agriculture Funding and Resources for Rural Communities (Action 2.6.4) *Action Leader: USDA*



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Integrated Research

Develop a Coordinated National Research Strategy on Water Reuse (Action 2.7.2) *Action Leader: WRF*

Increase Understanding of Current Aquifer Storage and Recovery Practices (Action 2.7.4) *Action Leaders: GWPC, EPA*

Coordinate and Promote Water Reuse Technology in Federal Small Business Innovation Research Programs (New Action 2.7.5) *Action Leader: EPA*

Develop U.S. Bureau of Reclamation Advanced Water Treatment Research Roadmap (New Action 2.7.6) *Action Leader: Reclamation*



Outreach and Communications

Compile and Develop Water Reuse Program Outreach and Communication Materials (Action 2.8.1) *Action Leader: WateReuse*

Establish a Water Reuse Champion Award Program for Private Sector Companies (New Action 2.8.4) *Action Leaders: GreenBiz, WateReuse*



Workforce Development

Support and Promote Opportunities for Creating a Skilled Workforce for Water Reuse Applications (Action 2.9.2)

Action Leaders: EPA, WateReuse, AWWA, WEF



Metrics for Success

Facilitate Implementation of the National Water Reuse Action Plan (Action 2.10.3) *Action Leader: EPA*



International Collaboration

Facilitate U.S.-Israel Collaboration on Technology, Science, and Policy of Water Reuse (New Action 2.11.1) *Action Leaders: EPA, MoEP*

Raise Global Awareness and Preparedness for Water Reuse and the Water Reuse Action Plan (New Action 2.11.2) *Action Leader: DOS*

Continuing Implementation: 2020 and Beyond

WRAP Online Platform (<u>www.epa.gov/waterreuse</u>)

- Searchable access to all actions (developed and undeveloped)
- Contact information for action owners and partners to facilitate collaboration
- Complete listing of action implementation milestones
- Regular updates to reflect progress on existing milestones and to add new milestones, collaborators, and actions

Imagining Development of the Action Plan (Version 2)... Ongoing stakeholder engagement and communication

Issue Federal Register notice for public input (September 2020)

 Report on implementation progress and initiate Version 2 at the 35th Annual WateReuse Symposium (Denver, CO; September 2020)

Release Version 2 during Water Week (April 2021)