WATER REUSE ACTION IMPLEMENTATION PLAN

ACTION 2.2.16

OBJECTIVE

"Support local and regional reuse projects by identifying challenges, opportunities and models for interagency collaboration."

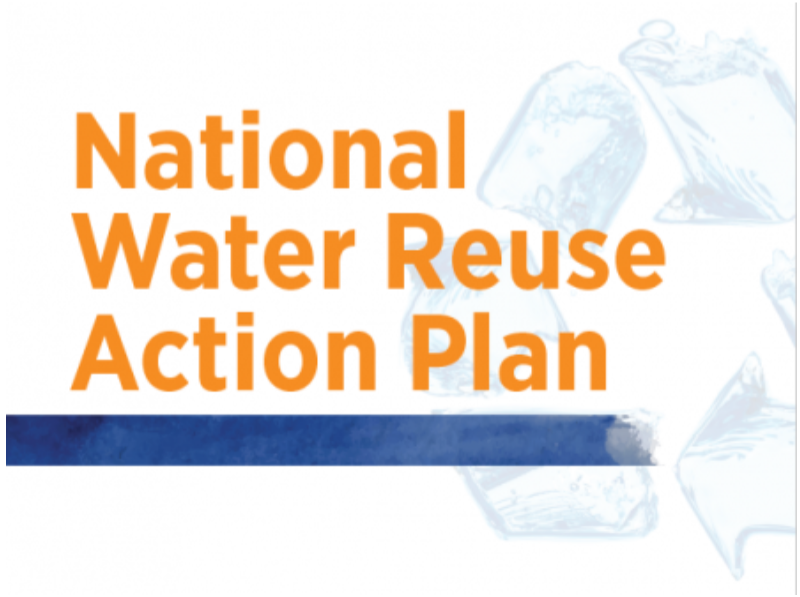
National Water Reuse Action Plan: Online Platform

The **National Water Reuse Action Plan: Collaborative Implementation (Version 1)** includes this online platform. The platform houses the full spectrum of actions and communicates the progress towards implementation of those actions that enhance water reuse consideration within the scope of the WRAP. It also aims to help interested parties identify opportunities to join in collective action and contribute their expertise to the effort. EPA invites the contributions of both new and current partners in order to continue to expand the content and ambitions contained within this Action Plan.

Water Reuse Related Links

- National Water Reuse Action Plan
- Water Reuse Home

Through communication with action leaders, the information in the WRAP Online Platform will be updated routinely (e.g., quarterly) to maintain a relatively current reflection of each action's implementation. These routine action-specific updates will convey progress, including progress on implementation milestones, new entities collaborating on actions, and links to relevant action outputs.



Instructions: Click on an action in the table to display detailed information about each, including descriptions, background information, leaders, partners, implementation milestones, and target completion dates.

Strategic Theme Area:

Policy Coordination

Strategic Theme Area:

Show all

Show 10 entries

Search:

Strategic Theme Area	Action Title	Action No.	Status	View
Integrated Watershed Action	Develop a Federal Policy Statement to Support and Encourage Consideration of Water Reuse in a Watershed-Scale Planning Context	2.1.1	Developed	
Integrated Watershed Action	Prepare Case Studies of Successful Water Reuse Applications Within an Integrated Water Resources Management (IWRM) Framework	2.1.2	Developed	
Integrated Watershed Action	Incorporate Water Reuse and Capture Concepts into Integrated Planning Efforts at the Local Level	2.1.3	Undeveloped	
Integrated Watershed Action	Leverage EPA's Water Partnership Programs to Consider Water Reuse in the Context of Integrated Water Resources Management at the Watershed Scale	2.1.4	Developed	
Policy Coordination	Compile Existing State Policies and Approaches to Water Reuse	2.2.1	Developed	
Policy Coordination	Enhance State Collaboration on Water Reuse	2.2.2	Developed	
Policy Coordination	Complete the EPA Study of Oil and Gas Extraction Wastewater Management	2.2.3	Developed	
Policy Coordination	Enhance Wastewater Source Control through Local Pretreatment Programs to Support Water Reuse Opportunities for Municipal Wastewater	2.2.4	Developed	

Policy Coordination	Forums for Coordinated Federal Engagement on Water Reuse	2.2.7	Developed	
Policy Coordination	Advance Alternative Water Use in Federal Operations through the Federal Energy Management Program	2.2.8	Undeveloped	
Policy Coordination	Align Policies and Communication Tools to Promote Best Management of Unused and Expired Pharmaceuticals to Support Water Reuse and Recycling	2.2.9	Developed	
Policy Coordination	Incorporate Water Reuse Considerations in the Development of Civil Works Projects through the U.S. Army Corps of Engineers Civil Works Program	2.2.10	Undeveloped	
Policy Coordination	Incorporate Stormwater Capture Considerations in Assessment of Stormwater Finance Needs and Opportunities	2.2.11	Undeveloped	
Policy Coordination	Leverage Existing U.S. Department of Agriculture Programs to Encourage Consideration and Integration of Agricultural Water Reuse	2.2.12	Developed	
Policy Coordination	Enhance Combined Sewer Overflow/Sanitary Sewer Overflow Abatement Strategies	2.2.13	Undeveloped	
Policy Coordination	Promote Water Reuse through the Federal Emergency Management Agency's Hazard Mitigation Programs	2.2.14	Undeveloped	
Policy Coordination	Conduct Outreach and Training with Tribes to Build Water Reuse Capacity	2.2.15	Developed	
Policy Coordination	Support Local and Regional Reuse Projects by Identifying Challenges, Opportunities, and Models for Interagency Collaboration	2.2.16	Developed	

Action Attributes | Action Team | Implementation Milestones | Outputs and References

Action Attributes

Strategic Theme Area: Policy Coordination

Status: Developed

Action Leaders and Key Contact:

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Description: Identify institutional challenges to water reuse, assess opportunities for interagency collaboration, and publicize agreements and other legal models that support implementation of water reuse and other integrated water management projects among "water cycle" utilities.

Background: The production and distribution of recycled water requires the participation and collaboration of numerous public and private parties. By definition, wastewater reclamation and stormwater capture for reuse bring together communities, wastewater agencies, municipal stormwater programs, and/or drinking water agencies that often have single-purpose mandates and limited ability to pursue integrated water management strategies. Similarly, many reuse/capture project opportunities involve multiple jurisdictions within regions and watersheds.

Enabling agencies and communities to work across programs and jurisdictions is critical to designing successful projects to reclaim wastewater for reuse and capture stormwater for use. To be successful in designing and implementing water reuse and capture projects, communities and agencies invested in the water cycle need tailored legal mechanisms that enable them to work with each other across traditional program and jurisdictional boundaries. There are currently no readily available resources that identify a menu of options for creating interagency agreements to enable this type of cross program and interjurisdictional collaboration. Identifying these legal mechanisms to enable interjurisdictional and interagency collaboration in reuse/capture project planning will be critical to overcoming the barriers caused by fragmentation in water governance.

Opportunities:

- Identify the motivations, opportunities, impediments, and tools related to interagency collaboration for water reuse/capture.
- Investigate the fragmentation of benefits and costs accruing to the various water cycle stakeholders and assess its impact on project implementation.
- Examine how administration of water and wastewater regulations can affect interagency cooperation and suggest strategies to facilitate reuse.
- Explore the limits of legislative mandates and incentives for interagency cooperation in integrated water resource management, of which water reuse and stormwater capture are key components.
- Evaluate the ways that agreements can allow agencies to work together as “virtual utilities” to plan, develop, implement, and operate recycled water projects.
- Demonstrate how utility managers and other stakeholders can resolve challenges and select appropriate legal models to lead successful, interjurisdictional water reuse programs.

Action Attributes | Action Team | Implementation Milestones | Outputs and References

Implementation Milestones

Expand All

1. Develop the project implementation approach.
2. Perform a literature review.
3. Prepare and submit a proposal for a session at the 2021 WateReuse Symposium.
4. Identify governance models and case studies
5. Prepare report on governance models
6. Present webinar on report findings
7. Present findings at the 2021 WateReuse Symposium.
8. Identify local or regional settings where governance is a challenge
9. Conduct workshops at candidate sites

PROJECT APPROACH AND SCOPE

- Literature Review: National Water Reuse Database, Previous WateReuse award winners
- Governance models and case studies: WateReuse state sections, Agency partners
- Investigate:
  - Drivers
  - Regulations
  - Economic factors and rates
  - Infrastructure and project construction
  - Political and public support
- Identify **legal models** that support interjurisdictional water reuse programs
- Demonstrate how agreements allow agencies to work as **"virtual utilities"**

BACWA ENGAGEMENT

Participate in agency interviews, case studies

- **Program Level Budget: $50k** (Eastern Research Group www.erg.com/)
  - Provide examples of interagency challenges, opportunities
  - Provide examples of strategies for collaboration
  - Confirm importance of specific issues (e.g. brine disposal, water exchanges)
- **Project Level Budget: >$200k** (WateReuse Association www.watereuse.org)
  - Develop case studies of individual projects, agency interactions
  - Develop templates for specific solutions, agreements
  - Provide agency-specific recommendations

BACWA ENGAGEMENT

- Validate national themes and strategies
- Establish local interest for selection of workshop sites
- Candidate agencies:

• BACWA (CA)	• CASA (CA)
• Denver Water (CO)	• King County (WA)
• Pima County (AZ)	• St. Johns River WMD (FL)

- Suggested agency or association share: ~$50k)

PROJECT TEAM

- **Dave Smith** (EPA Region 9 Liaison to National Water Reuse Action Plan)
- **Greg Fogel** (WateReuse Association)
- **Technical Team**
  - Eric Rosenblum (Project Manager, Engineering Issues and Utility Agreements)
  - Bahman Sheikh (Recycled Water Health & Safety, Interagency Collaboration)
  - Felicia Marcus (Regulatory Issues, Water Resource Management)
  - Bob Raucher (Reuse Economics, Water Pricing and Valuation)