

NATIONAL WATER REUSE ACTION PLAN

COMPLETED ACTION



Action 2.16 Support Local and Regional Reuse Projects by Identifying Challenges, Opportunities, and Models for Interagency Collaboration

Background

Action 2.16 was initiated to support the development of multi-agency water reuse programs by identifying challenges, opportunities and models for interagency collaboration. The final report, *Multi-Agency Water Reuse Programs: Lessons for Successful Collaboration*, includes a literature review and case studies that form the foundation of a framework for understanding the dynamics of interagency collaboration. The report also includes a summary of key principles for effective cooperation and exercises to help utilities, regulators, and other stakeholders work together more productively to increase their capacity to advance water reuse.

Authors reported that successful water reuse programs are achieved when wastewater agencies, stormwater programs, wholesale and retail water agencies, municipal governments, regulators, and private sector water users all work together when creating a new, sustainable water supply. While these entities may only be responsible for one aspect of water management, they must collaborate effectively together to reclaim both wastewater and stormwater. However, it was found their cooperation can be hindered by the challenge of finding common ground, assigning roles, and allocating responsibilities and costs among different organizations.

This report confirms the need for agencies and communities to better work across programs and jurisdictions to successfully develop water reuse projects. Within the document, examples of the tailored legal mechanisms are provided, which illustrate how communities and agencies can work across these program and jurisdictional boundaries. As the action team notes, water reuse projects can only proceed “at the speed of trust,” and legal agreements do not create trust: they only codify it.

Accomplishments/Impact

The action team’s [report](#), *Multi-Agency Water Reuse Programs: Lessons for Successful Collaboration*, published in March 2022, is designed to help agency managers respond to the pressures of population growth, resource depletion, and climate change by working together to develop water reuse programs. Drawing upon an extensive literature review and detailed case studies, the report identifies common legal, financial, regulatory, and organizational challenges and provides examples of how utilities can work together to build successful reuse programs. The case studies also highlight the role of agency leaders in cultivating support for regional programs and the importance of informal communication in maintaining effective partnerships.

Additionally, the action team members have presented their findings at a number of professional conferences, including webinars and panel discussions at UNESCO (2020 and 2021); the WateReuse Symposium (2021, 2022); a poster presentation at Singapore International Water Week (2021); and a workshop on “Collaborative Art: Working Beyond Borders to Solve Systems-Based Problems” conducted at the IWA World Water Congress (2022).

Action Team

Action Leaders

- **Eric Rosenblum**
(eric@envirospectives.com)
- **WateReuse Association (WateReuse)**
 - Greg Fogel (gfogel@watereuse.org)
- **U.S. Environmental Protection Agency (EPA)**
 - Dave Smith
(davesmithwater@gmail.com)

Action Partners

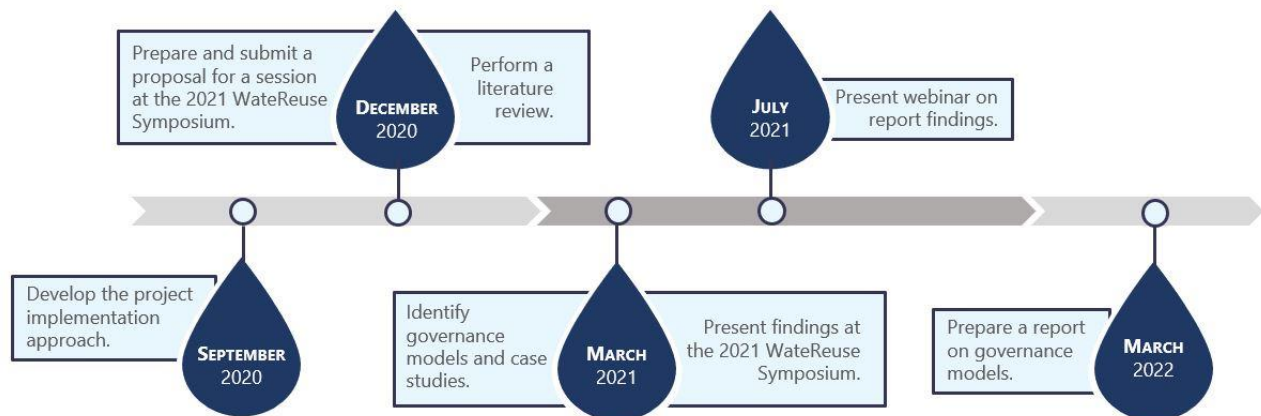
- **Robert Raucher**
(Braucher@Raucher.LLC)
- **Felicia Marcus**
(feliciaamarcus@gmail.com)
- **Shannon Spurlock**
(shannon@shannonspurlock.com)
- **Regional and State Sections of WateReuse**

Lessons Learned

A few of the many “lessons learned” shared by agencies around the country include:

- Water agencies created to solve last century’s problems must redefine their missions to address today’s challenges. Knowing their histories can help prospective partners understand each other’s point of view.
- Regulations limiting discharge of contaminants can motivate agencies to recycle water. Survey the regulatory landscape to design projects that can meet multiple objectives, with less transaction cost later.
- Clearly articulate the co-benefits of reuse to communities, businesses, and the environment. Credit the avoided cost of alternate projects, the value of reliability, and the ecological benefits of in-stream flows.
- Multi-agency pilot projects provide utility operators the opportunity to develop new skills, reinforce staff relationships, and set the stage for more extensive future cooperation.
- Managers who can identify future challenges and understand how to persuade other agencies to look outside of their silos by showing how reuse supports their multiple missions are imperative to a successful project.

Action Implementation Process



Potential Future Activity

Future Action 2.16 activities can expand the application of its findings to other types of water reuse, as well as to different regions of the country. As noted in the report (p. 102) “A review of successful multi-agency stormwater capture and reuse projects will provide insight into how this important resource can be developed further in the future.” On a regional level, the factors influencing collaboration can be related to the individual desires of utility managers and other stakeholders in a specific region to increase reuse, their understanding of the value of water recycling, and their capacity to develop and implement recycled water projects. Nationally, the insights gleaned from the case-studies can be developed into a “roadmap for collaboration” that can be used by water, wastewater, and stormwater agency managers throughout the U.S.

Action Deliverables

- [Multi-Agency Water Reuse Programs: Lessons for Successful Collaboration \(Report and Annotated Bibliography\)](#)
- [Multi-Agency Water Reuse Programs: Insights into Interagency Collaboration \(2021 WaterReuse Webinar\)](#)
- [Lions, Gazelles, and Hippos: Lessons in Cooperation from the Waterhole](#) (2021 WaterReuse Symposium Presentation)
- [Multi-agency Reuse Programs: Lessons for Successful Collaboration](#) (2022 WaterReuse Symposium Presentation)
- [Increasing Water Resiliency through Regional Collaborations in North Central Texas](#) (2022 WaterReuse Symposium Presentation)

Additional Resources

- GAO, 2005. Results Oriented Government: **Practices That Can Help Enhance and Sustain Collaboration among Federal Agencies**, Washington DC: GAO. <https://www.gao.gov/products/gao-06-15>
- CUWA, 2016. **Potable Reuse Operator Certification White Paper**, Walnut Creek: California Urban Water Agencies.
- National Research Council. 2012. **Water Reuse: Potential for Expanding the Nation's Water Supply Through Reuse of Municipal Wastewater**. Washington, DC: The National Academies Press. <https://doi.org/10.17226/13303>. Chapter 10 Social, Legal, and Regulatory Issues and Opportunities, pp. 165-192. (National Research Council, 2012).
- Raucher, R., K. Darr, J. Henderson, J. Rice, and B. Sheikh. 2006. **An Economic Framework for Evaluating the Benefits and Costs of Water Reuse**. Denver, CO: WaterReuse Research Foundation, Project 03-06.
- Thakhathi, Andani, "Champions of Change and Organizational Development: A Return to Schön and Typology for Future Research and Practice" In **Research in Organizational Change and Development**. Published online: 30 Jul 2018; 265-306. <https://doi.org/10.1108/S0897-301620180000026007>
- Ulibarri, N., Cain, B. E. & Ajami, N., 2017. **A Framework for Building Efficient Environmental Permitting Processes**. *Sustainability*, 9(180). <https://www.mdpi.com/2071-1050/9/2/180>