



National Water Reuse Action Plan

Collaborative Implementation (Version 1)

NATIONAL WATER REUSE ACTION PLAN QUARTERLY UPDATE #1

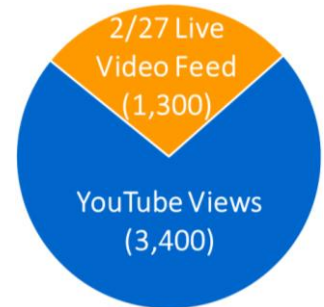
February 27, 2020–June 2020

A Message from EPA Assistant Administrator for Water David Ross

The National Water Reuse Action Plan: Collaborative Implementation (Version 1) was released on February 27, containing 37 actions and more than 200 implementation milestones to advance the consideration of water reuse. The momentum created by this event has been sustained by 28 unique action leaders and over 80 collaborating partners dedicated to action implementation and through the establishment of a water reuse team at EPA. In the months since the Action Plan’s release, more than 80 milestones have been completed as action teams have held kickoff convenings, explored cross-action collaborative opportunities, and thought critically about how to integrate water reuse into new and existing programs, overcoming logistical challenges posed by COVID-19 and adapting to virtual formats. To further demonstrate how the Action Plan continues to strengthen the security, sustainability, and resilience of our nation’s water resources, EPA plans to highlight implementation progress through these quarterly updates. For real-time status on the actions, I encourage you to visit the [WRAP Online Platform](#), which is updated weekly.

Release of Action Plan (Version 1)—February 27, 2020

This February, DOI Secretary David Bernhardt; USDA Secretary Sonny Purdue; CEQ Chairman Mary Neumayr; and federal, state, tribal, and water sector partners joined EPA Administrator Andrew Wheeler at EPA Headquarters in Washington, D.C. to announce the release of the [National Water Reuse Action Plan: Collaborative Implementation \(Version 1\)](#) and complementary [WRAP Online Platform](#). Over 100 representatives from across the water user community attended [the event](#), and more than 1,300 joined remotely through EPA’s live online [video feed](#).



Clockwise from top left: CEQ Chairman Neumayr; USDA Secretary Purdue; DOI Secretary Bernhardt; and EPA Administrator Wheeler; EPA Assistant Administrator David Ross; event attendees.

Action Leader Webinars

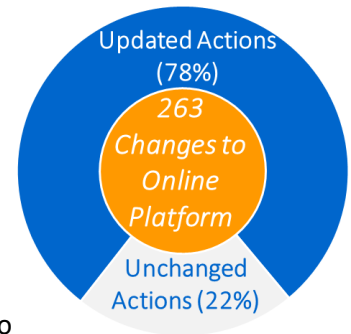
On April 27, the EPA water reuse team held an interactive kickoff webinar where action leaders discussed early progress and Action Plan implementation. Thirty-five leaders from 20 different organizations, representing 33 of the 37 actions, were in attendance and engaged in active dialogue, illustrating the energy driving this collective effort. Momentum carried through the second webinar on June 15, with representation from 30 of the actions. The third webinar in this series will occur in July.

State Engagement

EPA is working with states, state associations, and the WaterReuse Association to **compile existing fit-for-purpose specifications** (Action 2.3.1) and to **enhance state collaboration on water reuse** (Action 2.2.2). This includes joint planning by ACWA, ASDWA, ASTHO, ECOS, and GWPC for a state summit on water reuse at the Annual WaterReuse Symposium in September 2020 and identification of water reuse contacts in relevant state programs.

WRAP Online Platform Updates

The [WRAP Online Platform](#) is the public-facing and virtual location of the WRAP. It identifies the actions, leaders, and partners and the more than 200 implementation milestones. EPA updates the platform weekly, and as of the end of June, leaders had provided input for nearly 300 updates across 29 actions.



EPA Memo—Improving the Security, Sustainability, and Resilience of the Nation’s Water Resources

Regional Water Reuse Liaisons

EPA Region	Person	Email
1	Mel Cote	Cote.Mel@epa.gov
2	Janice Whitney	Whitney.Janice@epa.gov
3	Kate McManus	Mcmanus.Catharine@epa.gov
4	Pamala Myers	Myers.Pamala@epa.gov
5	LouAnn Unger	Unger.Louann@epa.gov
6	Suzanna Perea	Perea.Suzanna@epa.gov
7	Michael Tate	Tate.Michael@epa.gov
8	Judy Bloom	Bloom.Judy@epa.gov
	Stephanie DeJong	DeJong.Stephanie@epa.gov
9	Dave Smith	Smith.DavidW@epa.gov
10	Maria Lopez	Lopez.Maria@epa.gov

On May 6, EPA issued a [memo](#) to the Regional Administrators, emphasizing the importance of water reuse and advocating for sustained engagement with the Action Plan. Regional engagement is critical as EPA looks to institutionalize water reuse into its core programs, starting with building capacity and expertise, supporting consideration of reuse, and embracing the Action Plan’s guiding principles. EPA has established [water reuse contacts](#) for every EPA Region, listed to the left.

Action Leader Showcase

Action 2.11.2—Raise Global Water Reuse Awareness and Preparedness: On March 19, in observance of World Water Day, the State Department’s Bureau of Oceans and International Environmental and Scientific Affairs and the Bureau of Global Public Affairs co-hosted an interactive global water reuse live webchat. The recorded webinar, titled [Water Reuse: An Essential Tool in Addressing Global Water Scarcity](#), was moderated by Jeff Lape, EPA’s National Program Leader for Water Reuse, and featured Lynn Spivey from Plant City, Florida and Ted Henifin from Hampton Roads Sanitation District in Virginia describing their communities’ efforts with water reuse. Webinar watch parties were hosted at embassies, consulates, and American spaces in 11 different countries (over 250 individual viewers) with a concentration in South and Central Asia.



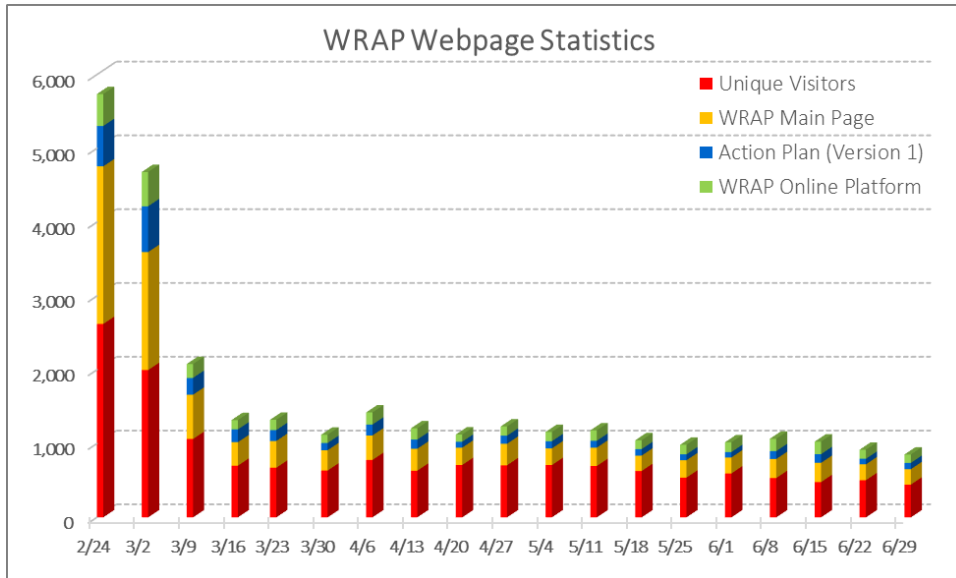
Clockwise from top left: Ted Henifin, Lynn Spivey, and State Department webinar team.

Action 2.5.1—Foster USDA Watershed-Scale Pilot Projects to Share Water Information: On April 28, USDA [announced](#) \$15 million in funding to support the adoption of innovative conservation approaches on agricultural lands. Under USDA’s Natural Resources Conservation Service (NRCS), the Conservation Innovation Grant (CIG) inspires creative problem-solving solutions that boost production on farms, ranches, and private forests and improve natural resources. This year will be the first time NRCS will be offering water reuse as a priority, and Chief Matthew Lohr expressed excitement to see how these projects will play a role in the Agency’s broader strategy for reuse on agricultural land. NRCS accepted proposals through June 29, 2020; complete funding announcement information is available at the [CIG webpage](#).

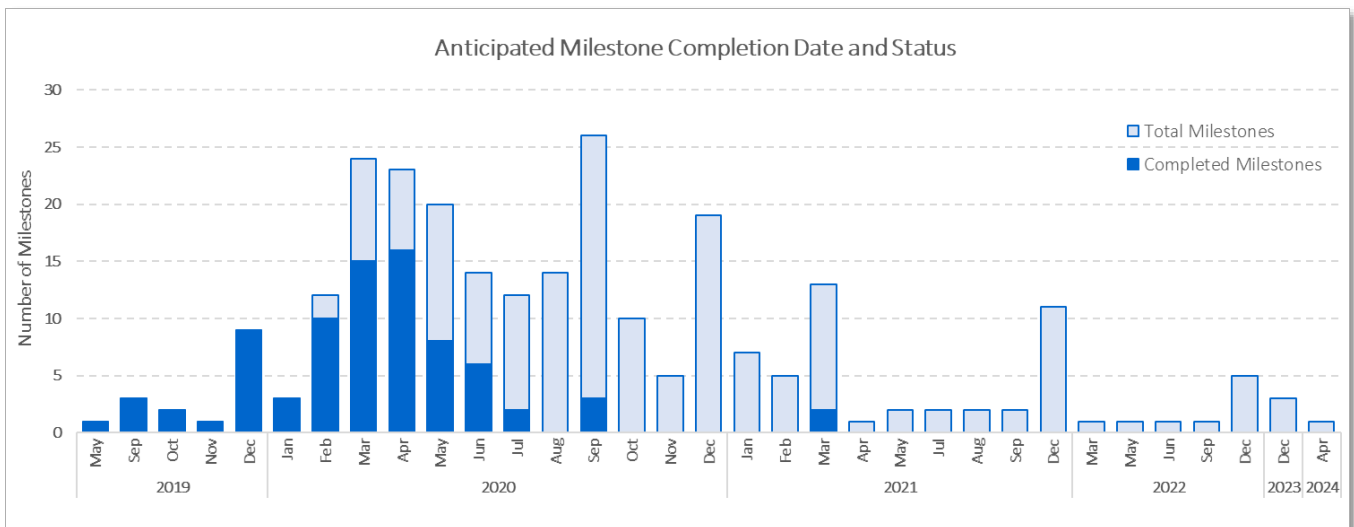
Action 2.2.3—Complete the EPA Study of Oil and Gas Extraction Wastewater Management: On May 11, EPA published its [Summary of Input on Oil and Gas Extraction Wastewater Management Practices Under the Clean Water Act](#). The report reflects stakeholder input on how the Agency, states, tribes, and stakeholders regulate and manage wastewater from the oil and gas industry and will inform EPA’s consideration of potential regulatory and nonregulatory approaches for management of produced water under the CWA, including the potential for greater reuse opportunities. Additional background on the effort can be accessed through [EPA’s website](#).

Online WRAP Resources

- EPA water reuse website: <https://www.epa.gov/waterreuse>
- WRAP launch press release: <https://www.epa.gov/newsreleases/epa-and-partners-announce-collaborative-implementation-national-water-reuse-action-plan>
- Launch event video (90 minutes): <https://www.youtube.com/watch?v=cae-RV8Mu84>
- WRAP print version: <https://www.epa.gov/waterreuse/national-water-reuse-action-plan-collaborative-implementation-version-1>
- WRAP Online Platform: <https://www.epa.gov/waterreuse/national-water-reuse-action-plan-online-platform>











Weekly traffic to EPA’s water reuse site <https://www.epa.gov/waterreuse>, including the WRAP page, Action Plan, and Online Platform.



















81 out of 256 action implementation milestones have been completed as of June 30, 2020.








Status Update on WRAP Actions







*For the implementation progress charts in the table below, the blue area indicates the completed milestones, while the white area reflects pending milestones. A brief narrative update is also provided to help characterize recent activities.

Action Number and Shortened Title	Action Leader(s)	Brief Update	# of Updates to Online Platform	Implementation Progress*
Strategic Theme Area: Integrated Watershed Action				
Action 2.1.1: Develop Federal Policy Statement to Support Consideration of Water Reuse	Roger Gorke (EPA)	The partnering federal agencies issued a statement of policy supporting the consideration of water reuse within the National Water Reuse Action Plan: Collaborative Implementation (Version 1) .	1	
Action 2.1.2: Prepare Case Studies of Successful Water Reuse Applications	Greg Fogel (WaterReuse)	The WaterReuse Association initiated action planning conversations with partners NGWA, ACWA, AWWA, and NYC DEP to identify roles, responsibilities, funding sources, and an approach for hosting case study information.	5	
Action 2.1.4: Leverage EPA's Water Partnership Programs	Bob Benson (EPA)	EPA has identified and contacted primary partners for the implementation of the action.	14	
Strategic Theme Area: Policy Coordination				
Action 2.2.1: Compile Existing State Policies and Approaches to Water Reuse	Jeff Lape (EPA), Greg Fogel (WaterReuse), Jake Adler (ACWA), Wendi Wilkes (ASDWA)	EPA is securing contractor support to initiate state reuse policy scoping and design conversations with action leaders WaterReuse Association, ACWA, and ASDWA and partners ASTHO, ECOS, WSWC, and GWPC.	1	
Action 2.2.2: Enhance State Collaboration on Water Reuse	Jeff Lape (EPA), Jake Adler (ACWA), Wendi Wilkes (ASDWA)	EPA, ACWA, and ASDWA convened their second meeting with action partners ASTHO, ECOS, and GWPC to plan for the state summit in September and to begin to inform Actions 2.2.1 and 2.3.1.	9	
Action 2.2.3: Complete the EPA Study of Oil and Gas Extraction Wastewater Management	Jesse Pritts (EPA)	EPA finalized the Summary of Input on Oil and Gas Extraction Wastewater Management Practices Under the Clean Water Act on May 11, 2020, and published the final report on the EPA Effluent Guidelines web page.	6	
Action 2.2.4: Enhance Wastewater Source Control through Local Pretreatment Programs	Cynthia Finley (NACWA), Claudio Ternieden (WEF)	NACWA hosted a national pretreatment virtual event on May 12–13, 2020, which had over 1,000 attendees and included a session on pretreatment and water reuse.	—	
Action 2.2.6: Develop Materials on How CWA NPDES Permits Can Facilitate Water Reuse	David Smith (EPA), Kevin Weiss (EPA), Sean Rolland (ACWA)	The action team hosted its first workgroup call for EPA, state, permittee, and other stakeholder volunteers to discuss the project approach and a draft list of permitting questions.	21	

Action Number and Shortened Title	Action Leader(s)	Brief Update	# of Updates to Online Platform	Implementation Progress*
Action 2.2.7: Utilize Existing Working Groups to Coordinate Federal Engagement	Jeff Lape (EPA)	The Inter-Sustainability Working Group and Interagency Water Working Group continue to convene with their partners. The WRAP Federal Partners Workgroup met in early June, and the internal team is planning the next quarterly meeting.	7	
Action 2.2.9: Align Tools to Promote Best Management of Unused/Expired Pharmaceuticals	Sharon Green (LACSD)	Partners continue to convene monthly to identify next steps, compiling research on pharmaceutical disposal (e.g., sources, messaging) and brainstorming how this action can intersect with other actions in the WRAP.	1	
Action 2.2.12: Leverage Existing USDA Programs for Consideration of Agricultural Water Reuse	Alan Gillespie (USDA)	USDA NRCS announced the Regional Conservation Partnership Program where priority resource concerns may include water quality degradation, excess, or insufficient water, all of which support water reuse. USDA also announced the Conservation Stewardship Program , which helps agricultural producers to maintain and improve their existing conservation systems and adopt additional conservation activities to address priority resource concerns with federal assistance.	13	
Action 2.2.15: Conduct Outreach and Training with Tribes to Build Water Reuse Capacity	David Smith (EPA)	EPA established a working group of tribal representatives to assess tribal interests and needs and is preparing water reuse summary documents and a training webinar to conduct outreach to NTWC, NTC, Regional Indian Coordinators, and RTOCs.	19	
Action 2.2.16: Support Local and Regional Reuse Projects	Eric Rosenblum, Greg Fogel (WaterReuse), David Smith (EPA)	The action team has developed a survey to identify agency elements that make water reuse applications successful and allow for interagency collaboration at the local and regional scales.	1	
Action 2.2.17: Propose Nationwide Permit Addressing Reuse	Jennifer Moyer (USACE)	USACE is currently revising language to address water reuse into the nationwide permit.	—	
Strategic Theme Area: Science and Specifications				
Action 2.3.1: Compile Existing Fit-for-Purpose Specifications	Sharon Nappier (EPA)	EPA and contractors convene weekly and continue to have ongoing meetings with action partners to gather data on state specifications and to brainstorm the development of an online database.	5	
Action 2.3.3: Convene Experts on Urban Stormwater Capture and Use	David Smith (EPA), Chris Kloss (EPA), Danielle Johnson (JFW), Seth Brown (NMSA), Richard Luthy (ReNUWIt), Greg Fogel (WaterReuse), Claudio Ternieden (WEF)	The action team finished framing the meeting concept and approach on May 15, 2020, and is considering alternatives to an in-person convening later this year.	28	

Action Number and Shortened Title	Action Leader(s)	Brief Update	# of Updates to Online Platform	Implementation Progress*
Action 2.3.4: Develop Research and Tools to Support ONWS	Paula Kehoe (NBRC for ONWS)	NBRC published a training manual and sets of modules on how to design and permit onsite non-potable water systems (ONWS).	11	
Action 2.3.5: Assess Specifications of Wastewater in Food Animal Protein Processing Facilities	Jay Garland (EPA)	EPA has established a Cooperative Research and Development Agreement to enable collaboration with action partner Tyson Foods.	2	
Strategic Theme Area: Technology Development and Validation				
Action 2.4.2: Implement New Mexico Produced Water Research Consortium	Rebecca Roose (NMED)	The NM-PWRC Directors established a Government Advisory Board and Technical Steering Committee (TSC), established TSC working groups to select and monitor research and development priorities, and identified Year 1 data analysis and research priorities for each of six working groups.	6	
Action 2.4.3: Support Water Reuse Through DOE's Water Security Grand Challenge	Diana Bauer (DOE)	DOE announced winners for Stage II of the Waves to Water Prize, issued an RFI for the Thermoelectric Power Cooling Prize and launched the American Made Challenge for solar desalination.	21	
Action 2.4.5: Support Air-Cooling Condensate Water Reuse in Large Buildings	Thomas Lawrence (ASHRAE), Bob Boulware (Design Aire), Pete DeMarco (IAPMO), Greg Eades (EPA), John Wammes (WW), Fred Betz (ASHRAE), Jay Garland (EPA), Gaby Schubert (WTA)	WTA convened partners ASHRAE, EPA, WEF, and NBRC in two initial conference calls to discuss collaborative opportunities to implement condensate reuse systems.	7	
Strategic Theme Area: Water Information Availability				
Action 2.5.1: Foster USDA Watershed-Scale Pilot Projects to Share Water Information	Alan Gillespie (USDA)	USDA NRCS released a press announcement identifying water reuse as a priority for its Conservation Innovation Grant.	7	
Action 2.5.4: Develop National Integrated Water Availability Assessments	Mindi Dalton (USGS)	USGS plans to deploy a mapper that incorporates supply and demand in accordance with Milestone 1 by December 2020.	—	
Strategic Theme Area: Finance Support				
Action 2.6.1: Compile Federal Funding Sources and Develop Interagency Decision Tool	Sonia Brubaker (EPA), Stephanie Santell (EPA), David Smith (EPA)	EPA has identified federal funding agency leads and is continuing discussions to support subsequent milestones.	7	

Action Number and Shortened Title	Action Leader(s)	Brief Update	# of Updates to Online Platform	Implementation Progress*
Action 2.6.2A: Communicate Eligibility of Water Reuse in SRF Programs	Justin Mattingly (EPA), Kiri Anderer (EPA)	EPA has developed a list of water reuse projects funded through CWSRF to be posted to the Online Platform. Action leaders are updating the Clean Water Benefits Reporting System to include a mapping tool with new data fields to make it easier to identify water reuse projects.	14	
Action 2.6.2B: Support and Communicate WIFIA Funding	Arielle Gerstein (EPA)	EPA has developed a list of water reuse projects funded through WIFIA to be posted to the Online Platform.	11	
Action 2.6.4: Compile and Promote Existing USDA Resources for Rural Communities	Edna Primrose (USDA)	USDA provided an overview of the WRAP to state offices and coordinated with the National Rural Water Association and the Rural Water Assistance Partnership (both Action Plan partners) to promote water reuse during technical assistance. USDA is following up with state engineers to identify current and planned water reuse projects funded by the water and waste program.	—	
Strategic Theme Area: Integrated Research				
Action 2.7.2: Develop a Coordinated National Research Strategy	Julie Minton (WRF)	WRF has begun planning for a session at the WaterReuse Symposium to discuss framing of a coordinated national research strategy on water reuse.	—	
Action 2.7.4: Increase Understanding of Current Aquifer Storage and Recovery Practices	Mike Paque (GWPC), Jeff Lape (EPA), Kara Goodwin (EPA)	The Co-Chairs for GWPC's ASR-MAR Workgroup are meeting to define activities for implementation and are seeking to establish a small leadership team to identify and work on aquifer storage and recovery (ASR) and managed aquifer recharge (MAR) issues and topics.	4	
Action 2.7.5: Coordinate and Promote Water Reuse Technology in Federal SBIR Programs	April Richards (EPA)	EPA announced 2020 SBIR Phase I topics, including monitoring and treatment technologies for water reuse, that were developed in collaboration with federal partner SBIR program managers, promoted an SBIR informational webinar, and is preparing to release the EPA SBIR solicitation.	12	
Action 2.7.6: Develop USBR's Advanced Water Treatment Research Roadmap	Yuliana Porras-Mendoza (Reclamation)	USBR is working to finalize its draft roadmap document for internal review.	—	

Action Number and Shortened Title	Action Leader(s)	Brief Update	# of Updates to Online Platform	Implementation Progress*
Strategic Theme Area: Outreach and Communications				
Action 2.8.1: Compile and Develop Outreach and Communication Materials	Pat Sinicropi (WaterReuse), Greg Fogel (WaterReuse)	WaterReuse anticipates commencing action implementation with an assessment of existing communication assets in October 2020 in accordance with milestone 1.	—	
Action 2.8.4: Establish a Water Reuse Champion Award Program	Pete May (GreenBiz), Greg Fogel (WaterReuse)	GreenBiz and WaterReuse anticipate implementation of milestones in 2021 in accordance with VERGE 2021.	3	
Strategic Theme Area: Workforce Development				
Action 2.9.2: Support and Promote Opportunities for Creating a Skilled Workforce	Jim Horne (EPA), Greg Fogel (WaterReuse), Barb Martin (AWWA), Claudio Ternieden (WEF)	EPA is organizing a workforce development session to be held at the 35 th WaterReuse Symposium in September 2020.	—	
Strategic Theme Area: Metrics for Success				
Action 2.10.3: Facilitate Implementation of the National Water Reuse Action Plan	Jeff Lape (EPA)	On May 6, EPA Assistant Administrator for Water David Ross issued a memorandum , titled “Improving the Security, Sustainability, and Resilience of the Nation’s Water Resources— National Water Reuse Action Plan,” to EPA Regional Administrators outlining goals for institutionalizing the consideration of water reuse into EPA’s core programs. The Agency has established water reuse contacts in each Region.	6	
Strategic Theme Area: International Collaboration				
Action 2.11.1: Facilitate U.S.- Israel Collaboration on Water Reuse	Jeff Lape (EPA), Adam Schalimtzek (MoEP)	EPA; MoEP; and partners U.S. Embassy, Embassy of Israel, and IWA are coordinating a U.S. mission to Israel, including developing an itinerary and identifying a spectrum of U.S. municipal, industrial, and agricultural representatives for the delegation.	5	
Action 2.11.2: Raise Global Water Reuse Awareness and Preparedness	Allie Davis (DOS)	DOS co-hosted a global water reuse webcast that was broadcasted in 11 different countries for World Water Day (Water Reuse: An Essential Tool in Addressing Global Water Scarcity) and is planning subsequent global reuse webcasts and organizing a virtual session for World Water Week at Home, highlighting U.S. federal efforts for water reuse.	16	
37 Developed Actions	28 Unique Action Leaders		263 Updates to Online Platform	81 Milestones Completed