

Office of
Wastewater
Management



2020 Annual Report



Message from the Director



At the start of each year, we make plans for what we'd like to accomplish. For OWM, like every year, we set ambitious goals. When the COVID-19 pandemic took hold, I wondered how it would affect our work and productivity. I can say, with immense pride, that OWM accomplished all that we set out to achieve and more.

OWM quickly adapted to full-time telework, maintaining or increasing its productivity. Many in OWM took on additional responsibilities to support the agency's response to the pandemic, such as our important work with water utilities and wastewater-based epidemiology. All the while, many of you saw major changes to their workload at home.

I am humbled by all that we have achieved in FY 2020. I commend the flexibility and perseverance of the OWM team. In the face of a global pandemic and persistent uncertainty, we kept going. We continued to serve our country and do our part to help protect human health and the environment.

I extend my gratitude to each and every member of the OWM team. And I look forward to a time when we see each other again. Until then, keep up the good work.

A handwritten signature in black ink, appearing to read "A. Sanyal". The signature is fluid and cursive, written on a white background.

WHO WE ARE

The Office of Wastewater Management (OWM) is part of the U.S. EPA's Office of Water. OWM partners with federal, state, and local governments; industries; and tribes to provide innovative solutions for our nation's water quality and quantity challenges.

WHAT WE DO

We envision a nation where all communities have access to clean water. By working with stakeholders, we develop approaches to manage water as a critical resource and prevent water pollution. Our programs and initiatives protect public health and the environment as we support a growing economy.

TABLE OF CONTENTS

03

FUNDING

Providing affordable financing to build water quality projects in communities. OWM identifies new and innovative approaches to financing water infrastructure that help existing dollars work smarter and harder.

09

TOOLS

Promoting best practices, technical assistance, guidance, and training to help states, industries, and communities make informed decisions about managing water resources.

13

PERMITS

Protecting water quality under the Clean Water Act through permits, rules, and oversight to control water pollution. OWM regulations are developed with extensive input from stakeholders, industry, and the public.

14

PARTNERSHIPS

Collaborating with stakeholders to encourage innovation and supplement regulatory programs with voluntary initiatives to protect water quality and quantity.



Funding

Water Infrastructure and Innovation Act Program

WIFIA Loan Closings

In FY 2020, the Water Infrastructure Finance and Innovation Act (WIFIA) program closed 22 transactions totaling over \$3.2 billion in loans to help finance over \$6.6 billion for water infrastructure projects across the country. FY 2020 WIFIA borrowers represent 10 states including Virginia, Utah, Wisconsin, Kansas, New York, and Tennessee. In total, these borrowers will save more than \$1.2 billion (compared to typical market financing) and create approximately 15,000 jobs.

WIFIA Notice of Funding Availability

In July 2020, EPA announced the availability of financing for \$5 billion in WIFIA loans in its fourth selection round and \$1 billion in State infrastructure financing authority WIFIA (SWIFIA) loans for the first time. This new program, which was authorized by Congress as part of the America’s Water Infrastructure Act (AWIA) of 2018, offers low-interest loans to State infrastructure financing authorities (e.g., the State Revolving Funds) that then help finance needed water infrastructure projects in local communities. The WIFIA program solicited letters of interest from utilities, governmental entities, State Revolving Fund (SRF) programs, partnerships, and private corporations to finance water infrastructure projects expected to cost at least \$20 million or \$5



million for small communities (serving 25,000 or less people). It also named four priorities for the FY 2020 selection round: (1) readiness to proceed; (2) provide for clean and safe drinking water, including reducing exposure to lead and addressing emerging contaminants; (3) repair, rehabilitate, and replace aging infrastructure and conveyance systems; and (4) water reuse and recycling. In fall 2020, the WIFIA program received 70 letters of interest that requested \$9.9 billion in loans from prospective borrowers for water infrastructure projects in 25 states.

WIFIA Webinars

From May 2020 to September 2020, the WIFIA program hosted a series of webinars to provide program updates, explain the benefits of financing with WIFIA loans, and prepare prospective borrowers to submit letters of interest. The WIFIA program had almost 900 participants for the 5 webinars given during this time.

New Initiatives

EPA is quickly adapting to new situations, like the pandemic and associated economic impact. For example, during the early months of 2020, EPA began allowing WIFIA borrowers—who had closed on loans but not yet requested for first draw—to reduce their interest rates through loan re-executions. The first borrower that received an interest rate reduction, San Francisco Public Utilities Commission, saved an additional \$432 million.

In addition, the WIFIA program introduced the master agreement, an umbrella contract between EPA and a borrower, providing an up-front commitment of loan proceeds and a common set

of legal and financial terms under which a borrower can close multiple WIFIA loans over time. The master agreement facilitates financing multiple projects over an extended time period and ensures access to timely low-cost capital. Hampton Road Sanitation District and the City of Atlanta executed master agreements in FY 2020.

Clean Water State Revolving Fund Program

CWSRF Program Success

In 2020, Clean Water State Revolving Fund (CWSRF) programs offered over 1,600 assistance agreements, providing over \$7.5 billion for projects that improved wastewater infrastructure, addressed stormwater, promoted energy and water efficiency, and mitigated nonpoint source pollution. In the last three years alone, average annual CWSRF funding has exceeded \$6.8 billion.

CWSRF programs continue to provide tremendous cost savings to borrowers. The national average SRF interest rate in 2020 was 1.2 percent. During the same year, over \$380 million in additional subsidy was provided to help communities that could not otherwise afford critically important projects needed to address high priority environmental challenges. Since 1988, it is estimated that CWSRF low-cost loans have saved municipal, nonprofit, and individual borrowers more than \$44 billion in interest costs.



CWSRF Marketing and Outreach

In FY 2020 the CWSRF program continued to assist interested state programs with surveys and focus groups to gain feedback on potential assistance recipients' perceptions of the CWSRF program. This year two surveys and one focus group were conducted. Fourteen states have participated in this effort to date. The feedback from these surveys and focus groups helps to guide states in streamlining

and marketing their programs so that they can increase assistance provided. In FY 2020, the CWSRF program also provided technical assistance to the Arizona CWSRF to develop a marketing plan for its program.

PISCES Recognition Program

OWM's CWSRF Performance and Innovation in the SRF Creating Environmental Success (PISCES) Recognition Program highlighted 33 projects for their distinguished accomplishments in promoting human health and improving water quality. In December five of these projects will be announced as an Exceptional Project for one of the following categories: Innovative Financing; System Partnerships; Community Engagement; Environmental and Public Health Protection; and Problem Solving.



CWSRF Training and Oversight

The CWSRF program continues to support training for state and regional staff on the financial and programmatic aspects of CWSRF programs. In FY 2020, the program shifted to a virtual format and held training sessions for approximately 60 state staff from Region 3 and 10. The training sessions included discussions on fund management, program marketing, and federal requirements. A virtual annual review training session was held for regional staff to ensure consistency among regions while providing federal oversight of the program.

American Iron and Steel

In 2020, EPA continued its implementation of the American Iron and Steel (AIS) requirements. The AIS program completed 27 in-person and virtual site visits to active CWSRF construction projects across four states. The site visits provide an opportunity for outreach with those involved with CWSRF projects. EPA conducted 14 trainings for states and other stakeholders, explaining how the AIS requirements apply to SRF projects and outline the responsibilities of each. This effort included new Lunch and Learn

trainings with six short presentations focusing on specific aspects of the AIS requirement.

While the vast majority of the country's water infrastructure projects use iron and steel made in America, when domestic sources are not available EPA thoroughly evaluates submitted project-specific waiver requests. In 2020, EPA received and processed 29 CWSRF project-specific waiver requests, of which 17 were approved, 6 were withdrawn or not approved, and 6 are currently being processed.

Sewer Overflow and Stormwater Reuse Municipal Grants Program

With its recent reauthorization and first appropriation, the Sewer Overflow and Stormwater Reuse Municipal Grants Program will soon provide funding for municipalities across the 50 states, D.C., Puerto Rico, and the territories to address their infrastructure needs in managing combined sewer overflows (CSOs), sanitary sewer overflows (SSOs), and stormwater. In 2020 OWM reviewed and analyzed various datasets and developed an allocation formula that provided proportional shares of the appropriation for each state and territorial entity based on their infrastructure needs for CSOs, SSOs, and stormwater management.

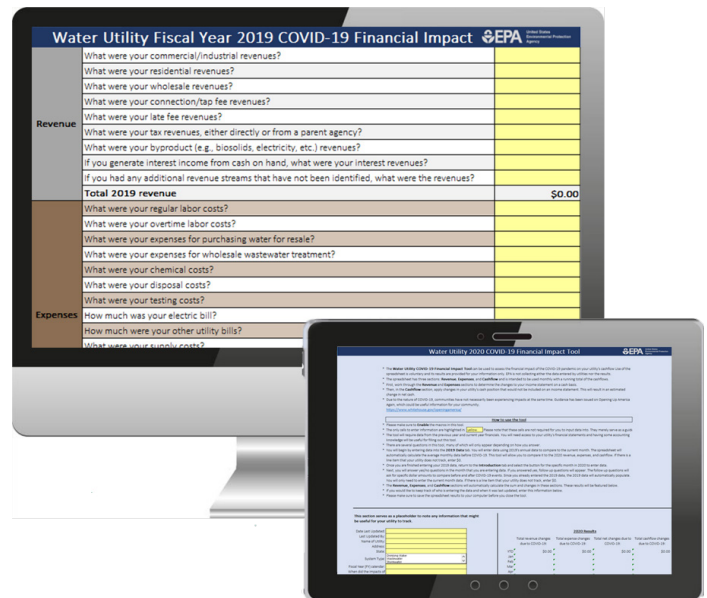
Clean Watersheds Needs Survey

The Clean Watersheds Need Survey (CWNS) estimates the nation's wastewater infrastructure capital needs. In FY 2020, OWM collaborated with state partners to plan and design the next Survey, which has not been conducted since 2012. In addition to the standard need categories (which include secondary and advanced treatment, conveyance, and CSO correction), OWM and state partners identified stormwater, nonpoint source, and decentralized needs as high priority for the survey and are committed to developing tools to help small communities estimate their needs. A new data entry portal that integrates with existing EPA databases is under development and will provide a faster and easier user experience. This effort will bring a renewed focus to nonpoint source categories and will lay the groundwork for more nimble data collection in future surveys.

Water Infrastructure and Resiliency Finance Center

Water Utilities Financial Impact Tool

In July 2020, EPA released a new tool to help water utilities assess the financial impact of COVID-19 on operations. Throughout the COVID-19 national health emergency—and as communities across the country reopened—water utilities reliably provided safe drinking water and critical wastewater services. This tool helps provide important information about the financial and operational health of water utilities which play an integral role in protecting human health and the environment for our nation. The Water Utility COVID-19 Financial Impact Tool leads water utilities through questions that can determine how their revenues, expenses, and cashflow have been affected. This tool helps water utilities understand their financial health as they plan for ongoing operation and maintenance and capital infrastructure needs, including implementing plans to repair, replace, and modernize aging infrastructure.



Proposed 2020 Financial Capability Assessment

On September 18, 2020, EPA issued a Federal Register Notice (FRN) announcing its proposed 2020 Financial Capability Assessment (FCA) for Clean Water Act (CWA) schedule development. The 2020 FCA proposal explores how customers' ability to pay for service impacts the affordability of capital expenditures and operation and maintenance

needed to ensure CWA compliance. This guidance is used to evaluate the financial capability of a community when developing a schedule (i.e., plan) for the water infrastructure improvements. EPA's proposed FCA 2020 guidance includes new metrics to inform a community's implementation schedule, including indicators that more accurately reflect how much low-income communities can afford to pay for water infrastructure upgrades. When finalized, the updated FCA will support negotiations of schedules for implementing CWA requirements for municipalities and local authorities. EPA hosted a webinar on September 22, 2020 to provide an overview of the proposed 2020 FCA. 538 people attended this informational webinar.

EFAB Charter Renewal

The Environmental Financial Advisory Board (EFAB) renewal charter was filed with Congress on April 17, 2020, renewing EFAB for another two years. The EFAB is a discretionary advisory committee that the agency established approximately 30 years ago to provide advice on ways to lower the costs of and increase investments in environmental and public health protection.

EFAB Report EPA Response Letters

EPA provided response letters to EFAB for six EFAB reports in FY 2020:

- Revenue Options for a Waste Backhaul Service Program in Rural Alaska (response letter: January 2020)
- Funding for Pre-Disaster Resiliency (response letter: February 2020)
- A Decision-Maker's Guide to Alternative Service Delivery Options for Public Utility Projects (response letter: February 2020)
- Funding Strategies to Promote System Regionalization (response letter: February 2020)
- Consultation on Financing and Governance Options for the Backhaul Alaska Program (response letter: April 2020)
- Evaluating Stormwater Infrastructure Funding and Financing (response letter: July 2020)

EFAB Advisory Letter

An EFAB advisory letter, Consultation on Financing and Governance Options for the Backhaul Alaska Program, was submitted to the Administrator in April 2020. Backhaul Alaska is a cooperative effort, led by the Solid Waste Alaska Task Force with

financial assistance from the EPA and others federal agencies, to facilitate the backhaul and proper disposal or recycling of hazardous household wastes from remote Alaska communities. EFAB concluded that the challenges posed by the Backhaul Alaska program are indicative of issues that face other small, rural communities who—because of low or declining population levels and/or socio-economic conditions—are unable to pay for critical environmental services. The advisory letter recommends that EPA and the State of Alaska identify additional grant funds to support the start-up of Backhaul Alaska over the first few years of operations until another long-term sustainable funding source is developed.

EFAB Public Meetings and Webinars

EFAB held a public meeting on October 17-18, 2019 in Kansas City, MO. EFAB discussed recommendations from EFAB work products, changes to the EFAB's process of selecting new topics and developing recommendations, and stormwater funding and financing.

On January 30, 2020, a webinar for EFAB members provided a briefing on the Backhaul Alaska program in preparation for a consultation on the program held at the February 2020 public meeting.

EFAB also held a public meeting on February 11-13, 2020 in Washington, D.C. EFAB approved the draft report from the Stormwater Infrastructure Finance Task Force Workgroup. The EFAB also received briefings from EPA program offices on small community resilience considerations and engaged in a consultation with representatives from EPA Region 10 on the Backhaul Alaska program. Regarding future projects, the EFAB agreed to provide advice to EPA on how the agency can engage effectively in Opportunity Zones.

EFAB Membership

On August 5, 2020, EPA announced selection of 33 members to the EFAB. EPA welcomed 19 new and 13 returning members along with the incumbent Chair. Following the agency's request for nominations in November 2019, EPA selected members for two- or three-year terms from a pool of more than 60 highly qualified candidates. The Chair and members are drawn from all EPA regions and hail from 18 states.

EFAB Stormwater Task Force Workgroup Meeting and Teleconferences

The EFAB Stormwater Task Force Workgroup held a meeting on October 16, 2019 in Kansas City, MO in advance of the EFAB Meeting. Task Force members discussed draft sections of the report, brainstormed potential recommendations and laid out a process to restructure the report. On December 4 and 18, 2019, the Workgroup held conference calls to continue development of its report on the availability of public and private sources of funding for the construction, rehabilitation, and operation and maintenance of stormwater infrastructure.

EFAB Report: Evaluating Stormwater Infrastructure Funding and Financing

On March 30, 2020, EFAB transmitted its report, Evaluating Stormwater Infrastructure Funding and Financing. The report was developed by the EFAB Stormwater Task Force Workgroup in response to Section 4101 of the 2018 America's Water Infrastructure Act (AWIA). The workgroup concluded current stormwater funding mechanisms and public education initiatives are not sufficient to confront the significant needs across the nation. Federal investment is required to address the lack of state and local funding and to improve multi-jurisdictional stormwater management. Programs and investments similar to those supporting the drinking water and wastewater sectors are needed for the stormwater sector to close the funding gap. The workgroup provided recommendations in two categories: (1) allocating new federal funding for stormwater infrastructure and management; and (2) funding to support education and technical assistance to elected officials and the public on the importance of creating sustainable, local sources of funding for stormwater management.

Stormwater Financing Stakeholder Listening Sessions

In FY 2020, the Water Infrastructure Finance Center (WIRFC) continued a series of stormwater finance workshops throughout the country. This includes events in Alexandria, VA (October 1; with 61 attendees), Atlanta, GA (October 3; with 33 attendees), and Seattle, WA (October 10, with 56 attendees).

Water Finance Clearinghouse

EPA continues work on the Water Finance Clearinghouse to ensure the database best meets users' needs and remains a reliable resource for information. In FY 2020, 107 funds and 61 resources entries were added. The administration team reviewed and approved 1,151 suggestions to add new entries and update existing data. The Clearinghouse has 282 general users and 135 contributors—a gain of 9 contributors and 23 general users in FY 2020. In June 2020, the Clearinghouse also underwent a data gap analysis, ensuring that each state has at least 12 individual data entries. The Clearinghouse received 17,716 visits for FY 2020.

Environmental Finance Center Grants

In FY 2020, EPA provided \$60,000 in funding to each of the 10 Environmental Finance Centers (EFCs). This core funding will be used to support regional-based projects. Since 2000, these grants have been awarded annually. The grants support basic EFC operations and project work topics including small system asset management, utility financial sustainability and rates management, water and wastewater training and employment needs, tribal technical assistance, stormwater financing, environmental finance education and outreach, source water protection, watershed management, and green infrastructure.

Water Pollution Control Program Grants

Section 106 Program

Section 106 of the CWA authorizes EPA to provide federal assistance to states, territories, the District of Columbia; interstate agencies; and eligible tribes to establish and implement water pollution control programs. This funding supports ambient water quality monitoring, water quality standard and total maximum daily load development, National Pollutant Discharge Elimination System (NPDES) permitting and enforcement, training, and public information. EPA provided approximately \$223 million in Section 106 funding to prevent and control water pollution in FY 2020.

State and Interstate Water Pollution Control Grants

In FY 2020, EPA provided \$180 million in Section 106 grant funding to state and interstate agencies to protect and restore water bodies. Increasingly, EPA and states are working together to develop basin-wide approaches to water quality management. The grant program encourages states to take a watershed protection approach which looks at state water quality problems holistically and targets finances to the most important problems.

Tribal Water Pollution Control Grants

Section 106 grants are a crucial, dedicated source of funding for developing, maintaining, and expanding tribal programs designed to prevent, control, and eliminate water pollution. In FY 2020, OWM formed a workgroup to develop recommendations for the revision of the 2007 Final Guidance on Awards of Grants to Indian Tribes under Section 106 of the CWA. Of the 565 federally recognized tribes, approximately 330 meet the criteria to receive Section 106 funding, and 276 of these tribes were eligible to receive grants totaling approximately \$25.6 million in FY 2020.

State and Tribal Water Monitoring Initiative

Using approximately \$17 million, OWM and the Office of Wetlands, Oceans and Watersheds (OWOW) continue to work with states and tribes to enhance their water quality monitoring programs and implement a multi-year, statistically valid survey of the nation's waters. In FY 2020, states and tribes conducted sampling and reported water quality monitoring data for the National Wetlands Condition Assessment. The monitoring initiative allows EPA, states, and tribes to enhance their water quality monitoring programs and implement a multi-year, statistically valid survey to report on the condition of the nation's waters and make progress toward assessing trends in water condition in a scientifically defensible manner.

Grants & Underserved Communities' Infrastructure

Technical Assistance Grants for Small, Rural and Tribal Wastewater Systems

In FY 2020, Congress provided funding for the first time for EPA to award \$12 million for training and technical assistance for wastewater treatment works. These funds will be used to support small, rural, and tribal wastewater communities. OWM expects to distribute the funds using between one and four awards. The grant project period is 18 months.

Small and Rural Community Technical Assistance Grants

In FY 2020, EPA awarded a grant of \$1 million of FY 2019 funds to the Rural Community Assistance Partnership (RCAP). RCAP will provide technical assistance to small and rural communities for managing their wastewater and decentralized treatment systems. The grant project period is 18 months.

RCAP is also managing a \$2.2 million grant from prior years' funding to provide technical assistance to small wastewater treatment and decentralized treatment systems. RCAP has completed work in 47 states, Puerto Rico, and the U.S. Virgin Islands. In addition, RCAP conducted three webinars that targeted a national audience and were well attended. RCAP has worked on a total of 99 projects, 87 being publicly owned treatment works (POTWs) and 12 onsite/decentralized systems. RCAP has held 76 trainings, 67 for POTW systems, and 9 for onsite/decentralized systems.

Clean Water Act Title II Grants to District of Columbia and the U.S. Territories

The District of Columbia and the U.S. Territories, namely, Virgin Islands, American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands received an exemption from establishing a CWSRF, as these jurisdictions have government agencies that also manage wastewater treatment systems. These jurisdictions receive CWSRF appropriated funds as grants. In FY 2020, EPA received \$31.471 million for the CWA Title II Construction Grants Program, which was allocated to these jurisdictions. This funding

does not include CWA 604(b) funds of \$100,000 to each of the jurisdictions. The grants are being awarded to municipalities for the construction of wastewater treatment systems.

Clean Water Indian Set Aside and Alaskan Native Villages Grant Programs

In FY 2020, Congress provided \$32,777,000 to the Clean Water Indian Set Aside (CWISA) program to provide grants to tribes for the planning, design and construction of wastewater infrastructure for tribal communities. OWM works closely with the Indian Health Service (IHS) to manage and distribute these funds, and in FY 2020 \$2 million will be used for training and technical assistance activities. The FY 2020 CWISA funds are scheduled to be used for 41 projects that will aim to improve sanitation services to over 11,800 tribal homes. In FY 2020, Congress provided \$29,186,000 to the Rural Alaskan and Native Villages (ANV) grant program for grants for drinking water and sanitation services in rural Alaska. Approximately 3,200 homes in 20 different communities are scheduled to benefit from these funds.

U.S.-Mexico Border Infrastructure Program

In FY 2020, Congress allocated \$25,000,000 in the Agency's State and Tribal Assistance Grants (STAG) account to the United States-Mexico Border Water Infrastructure Program (BWIP) to address drinking and wastewater infrastructure needs along the border that are negatively impacting U.S.-Mexico Border communities. OWM grant these funds to Regions 6 and 9 who ultimately award and administer these funds in close collaboration with the North American Development Bank (NADB). In FY 2020, around \$8 million were disbursed for the successful completion of 4 projects positively impacting/benefiting close to 20,000 people in underserved communities.



Tools

Water Workforce

Water Workforce Initiative

OWM, along with the Office of Ground Water and Drinking Water, completed America's Water Sector Workforce Initiative, the first of its kind. The Initiative reflects a commitment by EPA and our federal, local, and state partners to work with other stakeholders across the water sector to ensure that our workforce is strong, diverse, and resilient and attracts talented individuals from many different backgrounds. The Initiative also emphasizes the need to recognize our water workforce for the vital service they provide to our communities every day. It convenes the resources across the government and industry by bringing discrete efforts together under one umbrella to more effectively bolster water sector careers and reach the next generation of water protection specialists.

Water Workforce Grant Program

OWM led the effort to develop the Request for Applications (RFA) for new workforce grant program authorized under AWIA to support increased collaboration on water workforce among government and other organizations. The new grant program will help assist in the development and utilization of innovative activities related to workforce and expand public awareness about utilities. This new grant will help fund activities such as targeted internship, apprenticeship, and pre-apprenticeship programs; education programs for elementary, secondary, and higher education students; regional industry and workforce development collaborations; integrated learning laboratories in secondary educational institutions; leadership development;

occupational training; mentoring; and cross-training. In FY 2020, Congress authorized \$1 million in funding.

Water Workforce Case Study Compendium

As part of our commitment to work with many partners to make water truly a career of choice, OWM developed a compendium of case studies describing the many ways in which water workers across the country are making a difference in their communities every day. These case studies document how utility leaders are stepping forward to ensure their current workers have the skills to meet both current and future challenges as they continue to provide reliable and affordable water services. These case studies also highlight the policies and programs utilities are designing to ensure greater equity, diversity, and inclusion at their utility and for their community. Many utilities are engaging in innovative work to build community connections to attract and prepare new, talented people to the water sector. These community partnerships amplify and support both utility workforce and public engagement efforts.

Water Workforce Webinar Series

Recruiting and retaining a talented and diverse workforce are some of the most important challenges facing today's water and wastewater utilities. It is important that information to help utilities develop their own workforce programs is an essential part of OWM's mission. In 2020 OWM conducted 4 national [webinars](#), attracting over 2,000 registrants, to highlight ways in which various organizations are implementing programs that can help utilities ensure a trained, motivated and diverse workforce.

Decentralized Wastewater Workforce Activities

Building off a national meeting focused on identifying solutions to increase workforce training and competency and advance decentralized wastewater education in community colleges and universities in FY 2019, the Decentralized Wastewater Workforce Steering Group put together a prioritized list of actions that could be implemented over time to help grow the decentralized workforce. Of those actions, the first two focused on information gathering and landscape evaluation.

Training

NPDES Training to Regions and States

OWM offers a range of [training courses](#) and workshops to support implementation of the NPDES Program. These efforts are critical to build and maintain program integrity in the 48 authorized state/ territory programs and 10 EPA Regions. In response to the COVID-19 pandemic, OWM trainers developed virtual, interactive courses as a substitute for many courses typically offered in person.

Key NPDES courses in 2020 included the Guided Learning Permit Writers' Course, several targeted and advanced trainings to build permit writers' technical skills, as well as whole effluent toxicity, stormwater, and nutrients trainings. EPA hosted approximately 15 NPDES-focused trainings and workshop in 2020, reaching over 3,000 participants. OWM envisions many of the virtual courses developed and deployed during 2020 will continue to play a key role in expanding much needed training capacity in the future.

Pretreatment Program Training

The [Pretreatment Program](#) is a key component of the NPDES Program which addresses the control of industrial discharges to POTWs. Approximately 1,500 POTWs implement Pretreatment Programs through which industrial users are permitted. At other POTWs, states and EPA Regions oversee the industrial users. In late 2019, OWM restructured its training programs to provide annual introductory in-person trainings at three locations for new state and municipal staff. In addition, OWM developed an advanced course on how spreadsheets can assist localities in calculating allowable loadings to POTWs. As the pandemic curtailed in-person training, OWM transitioned to

an interactive virtual format that also expanded to all Regions. For 2020, in-person courses were held in Baltimore, Maryland, and Richmond, Virginia, for approximately 200 people, and virtually for Region 10 for approximately 250. OWM also supported EPA's Office of Compliance by providing two webinars for small POTW operators on identifying, assessing, and controlling sources of wastewater whose discharges may interfere with POTW operations.

Green Infrastructure Webcasts

EPA's [green infrastructure webcast series](#) features leading academics and professionals from around the country sharing expertise on a range of topics related to green infrastructure. In FY 2020, topics covered included practices and technologies for stormwater management; integrating water quality and natural hazard mitigation planning; resilient design assistance in the Mid-Atlantic; integrated planning; and the EPA 9th Campus RainWorks Challenge. Nearly 3,000 attendees tuned in to hear from industry experts and learn about the environmental, economic, and social benefits of green infrastructure practices.

State & Foundation Water Finance Partnerships Webinar

On June 23, 2020, EPA held a webinar about ways coordination between funding agencies is occurring in states across the country. The webinar also discussed opportunities for state-level agencies to partner with foundations on water infrastructure investments. Communities across the country range in abilities to successfully navigate financial options for drinking water, wastewater, and stormwater infrastructure. These water sector investments can be crucial to supporting local jobs and protecting public health in the community. With public and private funds working together, critical funding gaps in the water sector can be addressed. 561 people registered for the webinar and there were 316 unique views while the webinar was broadcast.

Sustainable Financial Management Planning for Water Utilities Webinar

On June 15, 2020, EPA held a webinar on key themes and case studies from utilities around the country that are developing and implementing sustainable financing practices. This webinar provided examples and lessons other utilities can use as they begin

or continue their own journeys toward fiscal sustainability. Water sector utilities across the nation face increasing financial challenges due to aging infrastructure, population changes, cost increases, and environmental challenges. To find solutions, utilities are looking for innovative approaches to ensure they build a sustainable foundation to prepare for the future. 655 people registered for the webinar and 378 unique views while the webinar was broadcast. The webinar recording and presentation are available online.

Technical Support & Assistance

Integrated Planning

Integrated planning allows communities to synchronize clean water infrastructure investments with broader community development goals and creates opportunities for affordable, multi-benefit investments that protect public health, and enhance resiliency. As congressionally mandated in the Water Infrastructure and Improvement Act (WIIA), EPA's integrated planning framework offers a voluntary opportunity for a municipality to develop an integrated plan to meet multiple CWA requirements. In FY 2020, OWM laid groundwork for broad expansion of the planning process for communities across the country with an [updated website](#) with example plans and webinars. Through research for a Report to Congress, OWM found that over 100 communities are considering or currently developing an integrated plan, 28 municipalities have completed an integrated plan, and thirteen of those have incorporated an integrated plan in a permit, consent decree or administrative order. The full Report to Congress is expected to be released in 2021.

Small MS4 PQR Checklist

In March 2020, OWM updated the Permit Quality Review (PQR) Standard Checklist for Small Municipal Separate Storm Sewer System (MS4) Permits. The revised checklist is a tool for reviewing permits to determine their consistency with the Phase II Stormwater rule modified by the MS4 General Permit Remand Rule that went into effect in January 2017. The new checklist is intended for use by EPA permitting staff tasked with reviewing draft small MS4 permits (general or individual) or completing

PQRs. State permitting programs may also find it helpful as they develop their small MS4 permits to understand in greater detail EPA's interpretation of Remand Rule requirements.

Combined Sewer Overflows Policy Initiative

In early FY 2020, OWM continued to engage stakeholders in discussions about EPA's CSO Policy. Senior managers and staff along with EPA's Office of Science and Technology (OST), OWM, Office of Enforcement and Compliance Assurance (OECA), Office of General Counsel (OGC), and four regional offices met with representatives from the Association of Clean Water Administrators (ACWA), National Association of Clean Water Agencies (NACWA), and Water Environment Federation (WEF). The discussion identified strategic actions EPA can take to support states and CSO communities who are nearing completion of the construction phase of their long-term control plans in meeting water quality standards.

Combined Sewer Overflows Technical Support

In FY 2020, OWM continued its technical support for CSO communities through a series of webinars and began developing several technical support tools for CSO permit writers and permittees:

- Long Term Control Plan (LTCP) Review Checklist: an interactive spreadsheet for CSO permittees and NPDES authorities to review LTCP(s) for effectiveness and areas of possible improvement.
- CSO Model for Small Communities: a spreadsheet-based simple planning tool for small communities, with limited resources for advanced monitoring and modelling, to estimate any untreated CSO volume over a 24-hour period.
- CSO Success Story Report: highlights the progress of the CSO program since the CSO Control Policy was published in 1994 (59 FR 18688). Using available CSO data, the report will characterize the current and future annual CSO volume discharged and number of events and highlights other improvements made by CSO permittees.
- Utilizing Smart Data Tools and Technology to Support Effective Capacity Management Operation and Maintenance (CMOM) Document: helps permittees operate their collection systems and related infrastructures effectively by using

the real-time, or near real-time, advanced control technologies.

Technical Assistance for State Decentralized Programs

In early FY 2020, EPA began to offer technical assistance to states on how to use the CWSRF for both nonpoint source projects and decentralized projects. This is a joint effort between OWM and OWOW. There was significant interest amongst the states. In FY 2020, technical assistance for decentralized support was awarded to the Alaska Department of Environmental Conservation and North Carolina Department of Health and Human Services, where both organizations are looking into funding mechanisms for decentralized projects and potential organizations to partner with in their state.

COMMUNITY TECHNICAL ASSISTANCE PROFILE

City of Gordon, GA Constructed Wetlands Water Treatment Plant

Disclaimer: This compendium has been prepared by the Water Finance Center to address the utility request for assistance. It does not guarantee financial assistance or services on behalf of EPA or any entity listed. This list represents potential sources for which the community may or may not qualify and should only be treated as a reference resource.

REQUEST

The City anticipates major work to upgrade its drinking water and wastewater systems. The City estimates \$3–3.5 million in drinking water needs and \$2 million in wastewater needs. The City has also identified water loss as an issue and may need technical assistance and support.

POINT OF CONTACT

Kenneth L. Turner, Mayor
City of Gordon
478-628-2222
cgordon@windstream.net

EPA TECHNICAL RESOURCES

Water Finance Center

The Water Finance Center is an information and assistance center, helping communities make informed decisions for drinking water, wastewater, and stormwater infrastructure to protect human health and the environment.

Water Finance Clearinghouse

EPA's Water Finance Clearinghouse helps local leaders make informed decisions for their drinking water, wastewater, and stormwater infrastructure needs. The Clearinghouse contains information on available water funding sources (federal, state, non-governmental) and water financing resources (reports, case studies, training, and other tools) that can be used to access capital to meet water infrastructure needs.



UTILITY INFO

NAME: City of Gordon Constructed Wetlands Water Treatment Plant
GOVERNING BODY: City of Gordon City Council
LOCATION: Gordon, GA
EPA REGION: 4
SECTOR: Wastewater, drinking water
MAJOR ASSETS: 13 pumping stations



COMMUNITY INFO

POPULATION: 6,576
MHI: \$37,583 (for Wilkinson County; in 2018 dollars)
POVERTY LEVEL: 23.3% (for Wilkinson County; 14.3% in state)



ADDITIONAL INFO

FEDERAL LOANS IN LAST 3 YEARS: active CDBG grant for drinking water system
CONSENT DECREES/OTHER ENFORCEMENT ACTIONS: Notice of Noncompliance issued 6/1/2020 to Gordon WPCP: Total Coliform Rule violation identified through 12/31/2019

1

Community Assistance Compendiums

The Water Finance Center continues to provide a suite of information and assistance to local decision makers, water utilities, and homeowners on funding and financing for their water needs. As part of the evolving nature of this assistance, the Center has

recently created tailored assistance compendiums to the Cities of Elyria, OH, Thief River Falls, MN, Gordon, GA, and Nezperce, ID upon the request of these cities.

Wastewater Treatment Technology and Research

In 2020, OWM continued to provide technical support to EPA regions and Office of Water program offices on wastewater technology performance areas and actively collaborated with internal and external stakeholders on wastewater studies and research projects. Areas of technical support included mainstream and sidestream nutrient removal, low energy treatment, Mexico Border wastewater infrastructure, wastewater-based epidemiology, PFAS management, and water reuse. OWM's research coordination efforts included collaborating with the National Water Program research coordination team and EPA's Office of Research and Development and their Safe and Sustainable Water Resources research plan.

Virtual Environmental Finance Center Day

On June 4 and 11, 2020 WIRFC hosted virtual EFC Days for the agency. During the webinars, the EFCs presented on COVID-19 resources, GIS analysis, environmental finance modeling, regional collaboration, affordability during the pandemic, and developing and protecting the workforce.

EPA-State SNC National Compliance Initiative Symposium

On January 23, 2020, WIRFC presented at the EPA-State SNC National Compliance Initiative Symposium in Dallas, Texas, on funding and financing options as well as technical assistance available to small and rural wastewater utilities. The symposium focuses on sharing information and best practices related to improving the rate of significant noncompliance (SNC) across authorized states and EPA direct implementation areas with particular focuses on the challenges associated with reducing SNC at small POTWs and other small systems, approaches for improving data quality and addressing completeness issues, and the roles of compliance assistance and enforcement in this initiative.

Effective Utility Management Workshops

As part of OWM's long-standing commitment to help utilities improve all aspects of their operations and become truly sustainable, OWM has continued to sponsor workshops with utilities to help them assess their operations using the Attributes of [Effective Utility Management](#) (EUM) framework, endorsed by EPA and other major water sector organizations. Since 2017, 14 workshops have been held, including 2 more in 2020. In total, over 600 persons from various utilities, mainly smaller and medium sized utilities, have benefitted from this training. In addition, OWM completed a major case study describing how Austin Water Utility in Texas has successfully used EUM to improve many facets of its operations.

PFAS Interim Strategy

In February 2020, EPA formed an interagency workgroup to develop an [interim strategy](#) to provide guidance on how to address potential PFAS discharges for EPA-issued NPDES permits while tools such as EPA-approved analytical methods and treatment techniques, are being developed. EPA issues permits in MA, NH, NM, territories, federal waters, Indian Country, and federal facilities in DE, CO, VT, WA. The overall interim approach is to phase in monitoring requirements based on potential presence of PFAS in the discharge, and continue to share information and best practices, until EPA publishes validated methods and treatment techniques.

Permit Writers' Clearinghouse

OWM worked with EPA Regions and States over the course of 2020 to populate the [NPDES Permit Writers' Clearinghouse database](#). The Clearinghouse, an easily navigable and searchable web-based portal, was developed to help NPDES authorities access and share resources that will enable them to make informed decisions for their permits and is slated to be officially launched to EPA Regions and States in FY 2021. OWM is providing ongoing support to EPA staff and state program managers and permit writers to continue to populate the database with a variety of existing resources and information including final permits, fact sheets, policies, program requirements, training materials, webinars, compendiums, guidance, FAQs, tools, models, databases, and calculators.

Water Quality Trading on a Watershed Scale

In 2019, EPA issued an updated [memorandum on EPA's water quality trading policy](#) to modernize the Agency's approach to market-based programs. The first principle identified in this memorandum is that "states, tribes, and stakeholders should consider implementing water quality trading and other market-based programs on a watershed scale." In November 2020, OWM published a paper titled "[Water Quality Trading on a Watershed Scale](#)," which describes three factors that water quality trading program managers may want to consider when evaluating the appropriate scale for a trading area, which include (1) watershed connectivity, (2) relevant regulatory and policy information, and (3) availability of data and modeling. In this paper, OWM recommended that boundaries for market-based programs, including water quality trading, be based on careful consideration of available and applicable geographic, water quality, hydrologic, and other data, as well as analyses that predict water quality improvements can be achieved within the target watershed.



Permits

Updates to NPDES eRule Data Elements to Reflect MS4 General Permit Remand Rule

In April 2020, EPA finalized the NPDES Electronic Reporting Rule (NPDES eRule) that applies to regulated MS4s. The rule was necessary to reflect changes made to the Phase II stormwater regulations by the MS4 General Permit Remand Rule. Because the MS4-related data elements in appendix A of the NPDES eRule were based on the regulations in place prior to issuance of the MS4 Remand Rule, it was necessary to update the NPDES eRule to reflect these changes. If left unchanged, the eRule data elements would have been inconsistent with the new requirements for small MS4 permits in the Phase II regulations. This action fixes inconsistencies and corrects a small number of typographical errors and other mistakes made in relevant parts of the appendix A data elements. EPA sought input on the language used in this update rule with state permitting authorities as part of a broader EPA-State Stormwater Technical Workgroup.

Reissuance of the Multi-Sector General Permit for Stormwater Discharges from Industrial Activity

Through 2020, OWM proceeded under an extremely tight timeframe to finalize the Multi-Sector General Permit (MSGP). The MSGP protects rivers, lakes, and coastal waters from stormwater pollution when rainfall makes contact with materials handling and storage, equipment maintenance and cleaning, and other activities at industrial facilities that generate stormwater discharges. Staff developed robust background and briefing materials, prepared

detailed comment summaries and technical analyses, presented two national webinars on the proposed permit, and met at various times with both environmental stakeholders and stakeholder groups from the transportation, ship building, oil and gas industries, and other associations to provide updates. Tribal consultation on the permit was completed in March. The [final permit](#) takes effect March 1, 2021.

Reissuance of the Pesticides General Permit

Through 2020, OWM worked on the development of a [proposed reissuance of its Pesticide General Permit](#) (PGP). The PGP helps protect waters of the U.S. by regulating pollutant discharges from the application of biological pesticides and chemical pesticides that leave a residue. The PGP covers the following four pesticide use patterns: (1) Mosquito and Other Flying Insect Pest Control, (2) Weed and Algae Pest Control, (3) Animal Pest Control, and (4) Forest Canopy Pest Control. Continued work on the PGP will help ensure permit issuance prior to the October 2021 expiration of the 2016 PGP. Tribal consultation concluded in June 2020. The proposed permit was signed by all 10 EPA Regions on December 14, 2020. The final permit is expected in 2021.

Reissuance of the Construction General Permit for Stormwater Discharges from Construction Activity

Through 2020, OWM worked on the development of a proposed reissuance of its [Construction General Permit](#) (CGP). The CGP protects rivers, lakes, and coastal waters from stormwater pollution by regulating of stormwater discharges from construction sites that disturb one or more acres of

land. Work on the next permit is necessary so that it can be issued prior to the February 2022 expiration of the 2017 CGP. Staff have conducted a number of discussions with various stakeholders, including state permitting authorities, representatives from the construction industry, and environmental groups to help determine what areas of clarification or improvement are needed for the next issuance of the CGP. Tribal consultation on the proposed permit was also completed. The proposed permit is expected to be published for public comment in 2021.

Information Collection Requests

EPA publishes reporting and record keeping requirements to the public through Information Collection Requests. EPA is in the process of publishing several Information Collection Requests (ICRs), including: Public Notification Requirements for CSO to the Great Lakes Basin; Effluent Limitations Guidelines and Standards for the Dental Office Point Source Category, Final Rule; and the Consolidated NPDES Program (Renewal). In FY 2020, the EPA has published the first FRN for the CSO ICR, and second FRN for the Dental Office Category ICR, for which each respective comment period closes on October 30, 2020, and began the data collection process for the NPDES Program ICR.

Conducting Oversight of NPDES Programs

EPA's FY 2018-2022 Strategic Plan calls for streamlining and modernizing EPA programs, including issuing permits more efficiently. Under the Strategic Plan, by September 30, 2022, EPA must make all permitting-related decisions within six months. Improving the timing for issuance and reissuance of NPDES permits will provide greater certainty for the regulated community and ensure that permits reflect the most up-to-date requirements and scientific information. For the first time, EPA is applying a Lean Management System to the EPA permit backlog. On June 15, 2018, EPA leadership issued a directive that backlogs for new permits in the EPA regions must be eliminated. EPA regions already succeeded in reducing their backlog of new NPDES permits from 106 in March 2018 to 28 in September 2020. Additionally, EPA regions reduced their backlog of existing permits from 547 to 333 in that same timeframe.

Framework for Best Professional Judgment for Cooling Water Intake Structures at Hydroelectric Facilities

OWM developed a framework to evaluate whether, based on best professional judgment (BPJ), additional measures may be necessary at hydroelectric generating facilities to minimize impingement and entrainment of fish and other aquatic organisms at cooling water intake structures (CWIS). In a memo issued in 2020, the Agency has determined that EPA did not intend that the 2014 rule's substantive provisions would apply to CWIS at hydroelectric facilities and instead, CWIS at hydroelectric facilities are subject to BPJ.

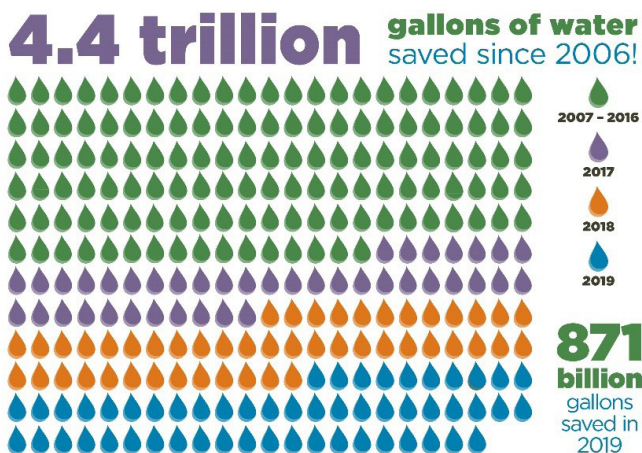


Partnerships

WaterSense

Defeating Water Waste

Since June 2006, the WaterSense program has helped save more than an estimated 4.4 trillion gallons of water—more than the amount used by all U.S. households for 6 months. U.S. households, by looking for and installing WaterSense labeled products, saved 871 billion gallons of water in 2019 alone. WaterSense labeled products are independently certified to use at least 20 percent less water and perform as well or better than standard models. More than 34,000 different models of toilets, bathroom faucets and accessories, showerheads, flushing urinals, flushometer-valve toilets, weather-based irrigation controllers, and spray sprinkler bodies have earned the label. EPA estimates WaterSense labeled products have helped Americans save \$87 billion in energy and water bills. More than 2,000 utility, manufacturer, retail, builder, and other organizational partners helped Americans save water, energy, and money with products, programs, and promotions.



WaterSense Reviews Specifications

The America’s Water Infrastructure Act of 2018 required EPA to review any WaterSense specifications created before 2012, which includes tank-type toilets, flushing urinals, bathroom faucets, showerheads, and irrigation controllers, for potential improvements to product performance and/or water efficiency. The program issued a Notice of Specification Review in December 2018 informing the public of the specifications under review and inviting stakeholders to provide feedback. A series of five public meetings were held via webinar throughout 2019 targeting specific product categories to focus in greater depth on topics and issues related to each. In April 2020, EPA issued an FRN to inform the public that the agency made the decision that it would not make updates or changes to the WaterSense product specifications and also invited public input on how the WaterSense program should consider consumer satisfaction in product specification development.

Monitoring Soil Moisture to Control Irrigation

In November 2019, EPA released the WaterSense Draft Specification for Soil Moisture-Based Irrigation Control Technologies, which had been in development since 2013. Also known as soil moisture sensors (SMSs), these technologies can detect the amount of moisture in the ground beneath the landscape and override scheduled irrigation when plants don’t need water, reducing water waste and promoting plant health.

WaterSense Partners of the Year Awards

On October 3, 2019, the 2019 WaterSense award winners were announced at WaterSmart Innovations Conference and Exposition in Las Vegas, Nevada. WaterSense partners across the country help save water by advancing and promoting WaterSense and water efficiency.

In 2019, nine partners were recognized with Sustained Excellence Awards for their continued high level of support:

- American Standard,
- Athens-Clarke County (Georgia) Public Utilities Dept.,
- City of Charlottesville (Virginia),
- Citrus County (Florida) Utilities,
- Cobb County (Georgia) Water System,
- Delta Faucet Company,
- KB Home,
- Metropolitan North Georgia Water Planning District, and
- Sonoma-Marín (California) Saving Water Partnership.

Three partners were recognized as Partners of the Year:

- City of Plano (Texas),
- The Broward Water Partnership (Florida), and
- The Upper San Gabriel Valley (California) Municipal Water District.

WaterSense also presented thirteen Excellence Awards, which recognize organizations that stood out in one or more evaluation categories:

- City of Allen (Texas),
- City of Durham (North Carolina) Dept. of Water Management,
- City of Sacramento (California) Dept. of Utilities,
- City of Frisco (Texas),
- Irvine Ranch (California) Water District,
- Polk County (Florida) Utilities,
- San Antonio (Texas) Water System,
- Alliance for Water Efficiency,
- Sonoma-Marín (California) Saving Water Partnership,
- The Toro Company,
- Hunter Industries,
- Niagara Conservation, and
- The San Diego County (California) Water Authority.

Decentralized Wastewater Program

Celebrating the 8th Annual SepticSmart Week

EPA's SepticSmart Week campaign informs homeowners about proper septic system care and maintenance, assists local agencies in promoting homeowner education and awareness, and educates local decision makers about infrastructure options to improve and sustain their communities. The 8th Annual SepticSmart Week occurred September 14-18, 2020. Each year, states and organizations submit proclamations of support and commitment to SepticSmart Week, and this year, the program received nine. The Decentralized memorandum of understanding (MOU) Partnership also updated their SepticSmart Week Social Media Guide, which contains social media posts, blogs, press releases, local outreach examples, and much more.



New SepticSmart Program Materials

EPA's Decentralized Wastewater Program created several new SepticSmart Week products for MOU partners, states, and homeowners. The program developed new SepticSmart Quick Tip videos to educate homeowners on how to care for their septic systems. A new SepticSmart Strategic Communications Plan was also created to assist organizations and local agencies communicate consistent decentralized messages. It includes

core messages, audiences to reach, engagement strategies, and metrics for evaluation.



Decentralized Wastewater MOU Partnership Renewal Meeting

EPA's Decentralized Wastewater MOU Partnership Renewal meeting took place virtually on September 23 – 24, 2020. This is the fifth time the MOU has been renewed since the Partnership began in 2005. There are three new organizations joining the Partnership for 2020-2023: DigDeep, Indian Health Service, and US Water Alliance. The virtual meeting featured remarks from all 20 Partners, an overview of Partnership accomplishments from 2017-2020, and discussions on decentralized support for underserved households, workforce and financing decentralized systems.

Winner of the EPA Advanced Septic System Nitrogen Sensor Challenge Webinar

On May 27, 2020, EPA and the Decentralized Wastewater MOU Partnership held a webinar highlighting the winner of EPA Office of Research and Development's Advanced Septic System Nitrogen Sensor Challenge. In 2017, EPA's Office of Research and Development launched this challenge to develop a prototype low-cost sensor to measure nitrogen levels discharged from advanced septic systems. Dr. Qingzhi Zhu, with Stony Brook University and the New York State Center for Clean Water Technology in Stony Brook, New York, earned the Challenge's prize of \$50,000 – along with the opportunity for commercialization support and eligibility for further testing and verification of the sensor technology's performance. 205 people registered for the webinar and there were 134 unique views while the webinar was broadcast. The webinar

recording and presentation are available online.

Other Collaboration & Synergy

Wastewater Based Epidemiology for COVID-19 Surveillance

As a result of the COVID-19 pandemic, EPA is conducting wastewater-based epidemiology surveillance to track infections with the goal to provide early warnings and estimate infection rates in populations. EPA has been coordinating its efforts with the U.S. Centers for Disease Control and Prevention (CDC) and other federal partners to rapidly deploy and evaluate various approaches and technologies. EPA's Office of Research and Development is currently researching various methods to detect different forms of the virus in sewage.

Representatives from EPA, CDC, U.S. Department of Health and Human Services, and other federal agencies have partnered to serve on the National Sewage Surveillance Interagency Leadership Committee to advance wastewater surveillance implementation. EPA is coordinating with CDC to resolve technical issues and scale this technology and is also collaborating with public and private entities who are working on methods comparison, developing sewage surveillance, and researching the virus in sewage to understand its fate.

AADG Meeting

In October 2020, EPA hosted its Fall Animal Agriculture Discussion Group (AADG) meeting. The AADG consist of animal agriculture stakeholders including representatives from EPA, USDA, and all sectors of the animal feeding industry and their associations, academia, and states whose aim is to develop an understanding of the CWA, as well as identify challenges faced in the field when implementing measures that protect water quality in these particular industries and identify best practices to overcome these challenges. During this meeting, the AADG discussed sector challenges and provided updates on positive water quality initiatives, and introduced a new member, the American Sheep Industry Association, who discussed some of the unique challenges faced by the sheep sector in terms

of environmental and water quality goals.

Transportation and Stormwater Management

During FY 2020 OWM continued collaborating with the Federal Highway Administration (FHWA) on its Eco-Logical approach for environmental stewardship. The approach organizes current methods for addressing natural resource identification, avoidance, minimization, and mitigation into a systematic, step-wise process that starts at the beginning of the transportation planning process and concludes with establishing programmatic approaches to recurring natural resource issues that are implemented at the project level. Federal agencies that signed-on to the approach met in January and August 2020 for biannual meetings and were briefed by OWM staff on the current status of the National Waters Protection Rule (WOTUS) and plans for revising EPA's National Environmental Policy Act (NEPA) regulation to conform to the Council on Environmental Quality's revised NEPA rules.

Outreach and Technical Assistance for Transportation

In order to promote broader adoption of green infrastructure practices for highways, OWM is working with FHWA on outreach activities that are a follow-up to the 2018 report by the National Cooperative Highway Research Program, *Leading Landscape Design Practices for Cost-Effective Roadside Water Management*. OWM also provided EPA input and expertise to FHWA's effort to scale up a GIS-based early coordination system for transportation projects requiring NEPA reviews through ongoing coordination with EPA's NEPA Assist team and OWOW's Watershed Resources Registry team.

Campus RainWorks Student Challenge

EPA's green infrastructure program held the 8th annual [Campus RainWorks Challenge](#), a design competition that engages with the next generation of environmental professionals to showcase the environmental, economic, and social benefits of green infrastructure practices. Student teams designed innovative green infrastructure projects to address stormwater pollution as well as benefit campus communities and the environment. During this round, over 300 students competed on 50 teams

who submitted green infrastructure designs for their respective campuses to compete in one of two categories: master plan or demonstration project. Florida International University and the University of Arizona were the first and second place winners, respectively, in the master plan category. The University of California at Los Angeles and Arizona State University were first and second, respectively, in the demonstration project category.

Voluntary Long-Term Stormwater Planning

In October 2016, EPA released a draft guide, [Community Solutions for Stormwater Management: A Guide for Voluntary Long-Term Planning](#), to promote comprehensive, community-wide planning approaches to manage stormwater. As communities continue to grow and develop their local economies, they look for sustainable and effective approaches to reduce these existing and emerging sources of pollution. Throughout 2020, EPA continued to work with several communities to develop long-term stormwater plans that will serve as national models: Santa Fe, NM; Burlington, IA; Hattiesburg, MS; and Rochester, NH. OWM finalized several documents for Santa Fe, NM: one providing examples of funding opportunities and another offering examples on how green infrastructure could be incorporated into roadway projects. EPA will leverage the lessons learned from these efforts by sharing information related to lowering barriers to long-term stormwater planning, making progress on human health and water quality objectives, and decreasing the costs of stormwater management.

WEFTEC 2019

EPA participated in the 92nd annual Water Environment Federation's Technical & Exhibition Conference (WEFTEC) in Chicago, Illinois, from September 21 – 25, 2019. The 2019 conference attracted 22,500 attendees and featured 992 exhibits. During WEFTEC 2019, EPA announced its Water Workforce Initiative. EPA hosted 14 talks at its booth as part of an ongoing speaker series, three of which WEF highlighted as part of their WEF Chat series. EPA also participated in a variety of events throughout WEFTEC including the Utility Leaders breakfast, Water Policy session, the Global Center, technical and governmental affairs committee meetings, and other workshops and technical sessions.

U.S.-Brazil Finance Cooperation Meeting

On July 23, 2020, EPA's Office of Water and Office of International and Tribal Affairs participated in the U.S./Brazil Water Finance and Technology Webinar, hosted by the U.S. Embassy in Brazil. The webinar was conducted as part of the ongoing collaboration between EPA and the Brazil Ministry of Environment formalized by the MOU entered into between the two entities and signed by the Administrator and Brazil's Environmental Minister in 2019. Participants included Brazil government officials, including senior Ministry of the Environment officials, staff of the Development Bank of Brazil, and public and private sector representatives of the water sector. There were 55 participants on the webinar.

Office of Community Revitalization

Within the EPA's [Sustainable Utility Management Initiative](#), OWM collaborated with the Office of Community Revitalization (OCR) in the Office of Policy on two projects, one exploring water utilities as anchor institutions, and the second on expanding on a planning process developed by EPA in 2015.

Sustainable water infrastructure is vital to every community, and effective infrastructure planning is essential for water and wastewater systems to manage their operations and to ensure the sustainability of the communities they serve. OWM expanded the planning process focused on Augmented Alternatives Analysis, called Making the Right Choices for Your Utility: Using Sustainability Criteria for Water Infrastructure Decision. This planning process augments traditional planning processes by incorporating community priorities and values into the process. In collaboration with OCR, OWM undertook two pilot programs with the Highline Canal Conservancy near Denver, Colorado, and with the Saco, Maine, Water Resource Recovery Department. This effort builds off the original pilot project which took place at the Camden County Municipal Utility Authority in Camden, New Jersey.

Water utilities are on the front lines of safeguarding public health, protecting the environment, and sustaining critical infrastructure investments in our communities. Many utilities operate in communities that are grappling with economic hardships such as poverty, unemployment, and aging infrastructure. While utilities are deeply impacted by these larger

forces, they are also positioned as anchor institutions to help address them and create large-scale positive economic, social, and environmental impacts in and for their community. EPA met with several water utility leaders to develop an emerging framework for "anchor utilities" creating value, which includes five key activity areas: economic health and water services affordability; job creation; convening and collaboration; environment and public health enhancement; and multi-benefit investment.

U.S. Environmental Protection Agency
Office of Water
Office of Wastewater Management
1200 Pennsylvania Ave NW
Washington, D.C. 20460
www.epa.gov/owm
Publication #830R21003

