



July 1, 2022

The Honorable Michael S. Regan
Administrator of the Environmental Protection Agency
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

Priority Open Recommendations: Environmental Protection Agency

Dear Administrator Regan:

The purpose of this letter is to provide an update on the overall status of the Environmental Protection Agency's (EPA) implementation of GAO's recommendations and to call attention to areas where open recommendations should be given high priority.¹ In November 2021, we reported that on a government-wide basis, 76 percent of our recommendations made 4 years ago were implemented.² EPA's implementation rate for these recommendations was 94 percent. As of April 2022, EPA had 86 open recommendations. Fully implementing these open recommendations could significantly improve agency operations.

Since our June 2021 letter on the status of priority recommendations, EPA has implemented 10 of our 22 open priority recommendations by taking the following actions:

- In September 2021, the Office of Pollution Prevention and Toxics' workforce planning process resulted in a skills gap analysis and a workforce assessment. These analyses will enable EPA to better understand and communicate its human resource needs for implementing the Toxic Substances Control Act. The agency's actions satisfied our March 2013 recommendation regarding the TSCA workforce.³
- In March 2022, the Center for Public Health and Environmental Assessment identified several actions that will help EPA ensure a consistent approach for addressing program offices and regions' needs for toxicity assessments and help fill gaps in chemical data. These actions satisfy our May 2013 recommendation on Integrated Risk Information System toxicity assessments.⁴

¹Priority recommendations are those that GAO believes warrant priority attention from heads of key departments or agencies. They are highlighted because, upon implementation, they may significantly improve government operations, for example, by realizing large dollar savings; eliminating mismanagement, fraud, and abuse; or making progress toward addressing a high-risk or duplication issue.

²GAO, *Performance and Accountability Report: Fiscal Year 2021*, [GAO-22-4SP](#) (Washington, D.C.: Nov. 15, 2021).

³GAO, *Toxic Substances: EPA Has Increased Efforts to Assess and Control Chemicals but Could Strengthen Its Approach*, [GAO-13-249](#) (Washington, D.C.: Mar. 22, 2013).

⁴GAO, *Chemical Assessments: An Agencywide Strategy May Help EPA Address Unmet Needs for Integrated Risk Information System Assessments*, [GAO-13-369](#) (Washington, D.C.: May 10, 2013).

- EPA's final regulation revising the Lead and Copper Rule went into effect in December 2021 and implemented two of our September 2017 priority recommendations by requiring states to (1) report quarterly to EPA on the number of lead service lines in each public water system in the state and (2) report on all 90th percentile lead levels for all size public water systems. These actions will enable EPA and congressional decision makers to have information at the national level about lead infrastructure, facilitating the agency's oversight role.⁵
- In June 2021, EPA officials shared with Integrated Risk Information System (IRIS) users six acceptance considerations (criteria) the IRIS Program uses to determine which nominations to add to the IRIS workflow, as we recommended in December 2020. These criteria will help EPA program and regional offices better understand how the Office of Research and Development (ORD) prioritizes chemical nominations.⁶
- In April 2021, EPA posted several new agency-wide guidance documents, including (1) an updated research-based definition of risk communication; (2) a new risk communication framework that focuses on strategy, action, learning, and tools; and (3) new risk communication videos and case studies. These actions will help EPA ensure its staff have access to current guidance about how to effectively communicate risk as recommended in December 2020.⁷
- EPA took actions that satisfy our February 2018 priority recommendation to determine whether the water and wastewater systems sector has adopted the National Institute of Standards and Technology cybersecurity framework.⁸ By October 2021, EPA had conducted voluntary technical assessments of water and wastewater utilities and obtained metrics on the utilities' implementation of security controls. Having done so, EPA will obtain a more comprehensive grasp of the use of the cybersecurity framework by this critical infrastructure sector.
- In June 2021, the Director of the Office of Superfund Remediation and Technology Innovation issued a memorandum to relevant EPA staff that provides direction on integrating information about the potential impacts of climate change effects into risk assessments and risk response decisions at nonfederal Superfund sites. Consistent with our two October 2019 recommendations, by providing this direction, EPA will better ensure remedies at these sites protect human health and the environment in the long term.⁹

⁵GAO, *Drinking Water: Additional Data and Statistical Analysis May Enhance EPA's Oversight of the Lead and Copper Rule*, [GAO-17-424](#) (Washington, D.C.: Sept. 1, 2017).

⁶GAO, *Drinking Water: EPA Could Use Available Data to Better Identify Neighborhoods at Risk of Lead Exposure*, [GAO-21-78](#) (Washington, D.C.: Dec. 18, 2020).

⁷[GAO-21-78](#).

⁸GAO, *Critical Infrastructure Protection: Additional Actions Are Essential for Assessing Cybersecurity Framework Adoption*, [GAO-18-211](#) (Washington, D.C.: Feb. 15, 2018).

⁹GAO, *Superfund: EPA Should Take Additional Actions to Manage Risks from Climate Change*, [GAO-20-73](#) (Washington, D.C.: Oct. 18, 2019).

- In March 2022, EPA published its strategic plan for fiscal years 2022 through 2026. The plan satisfies our October 2019 recommendation that EPA clarify how the agency's actions to manage risks to human health and the environment from the potential impacts of climate change effects at Superfund sites align with the agency's current goals and objectives. By clarifying this alignment, EPA will better ensure senior officials take an active role in strategic planning and accountability for managing these risks.¹⁰

We ask for your attention to the 12 open priority recommendations remaining from those we identified in the 2021 letter. We are not adding any new priority recommendations this year. (See the enclosure for the list of priority recommendations and actions needed to implement them.)

The 12 priority recommendations fall into the following six areas:

Assessing and Controlling Toxic Chemicals. EPA's ability to effectively help protect public health and the environment depends on credible and timely assessments of risks posed by toxic chemicals, including per- and polyfluoroalkyl substances (commonly referred to as PFAS). By implementing four priority recommendations in this area, such as by establishing an ongoing process to assess resources required to successfully complete IRIS assessments and provide additional public information about assessment status, EPA would improve its ability to prepare and issue IRIS chemical assessments.

Reducing Pollution in the Nation's Waters. Over the past 50 years, the nation's water quality and drinking water have improved, but threats to water quality and safety remain. Implementing our priority recommendation by taking stronger action on the problem of nonpoint source pollution, such as issuing regulations, would improve EPA's ability to protect the quality of our nation's water resources.

Ensuring Cybersecurity at EPA. Federal agencies face a growing number of cyber threats to their systems and data. To protect against these threats, federal law and policies emphasize that agencies take a risk-based approach to cybersecurity by effectively identifying, prioritizing, and managing their cyber risks. Implementing the priority recommendation to establish a process to conduct an organization-wide cybersecurity risk assessment would help EPA better manage its cybersecurity risks.

Addressing Data and Risk Communication Issues for Drinking Water and Wastewater Infrastructure. The nation's drinking water is among the safest in the world, but contamination has occurred, causing illnesses and even deaths. By implementing two data-related recommendations and one recommendation regarding risk communication, EPA could improve its ability to address water infrastructure issues.

Managing Climate Change Risks. Since February 2013, we have included [Limiting the Federal Government's Fiscal Exposure by Better Managing Climate Change Risks](#) on our list of federal program high-risk areas. Extreme weather related to climate change potentially threatens utilities that produce drinking water and treat wastewater.¹¹ By implementing our one

¹⁰GAO-20-73.

¹¹GAO, *Water Infrastructure: Technical Assistance and Climate Resilience Planning Could Help Utilities Prepare for Potential Climate Change Impacts*, [GAO-20-24](#) (Washington, D.C.: Jan. 16, 2019).

priority recommendation to integrate technical assistance providers in a network to help utilities incorporate climate resilience into infrastructure projects and planning, EPA would better manage climate change risks at water utilities.

Protecting the Nation’s Air Quality. EPA reports that almost 100 million people live in counties where one or more air quality standards—usually for ozone or particulate matter—was exceeded in 2020. Under the Clean Air Act, EPA seeks to protect and enhance the quality of the nation's air and protect Americans from the harmful effects of air pollution. By implementing our two priority recommendations, which involve implementing an asset management framework and modernization plan, EPA will better position the national ambient air quality monitoring system to provide critical information to manage air quality and protect public health.

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In March 2021, we issued our biennial update to our [High-Risk List](#), which identifies government operations with greater vulnerabilities to fraud, waste, abuse, and mismanagement, or in need of transformation to address economy, efficiency, or effectiveness challenges.¹² One of our high-risk areas—[transforming EPA’s processes for assessing and controlling toxic chemicals](#)—centers directly on EPA, and four of our priority recommendations are related to this area. An additional high-risk area—[limiting the federal government’s fiscal exposure by better managing climate change risks](#)—is shared among multiple agencies, including EPA.

Several other government-wide high-risk areas also have direct implications for EPA and its operations. These include (1) [ensuring cybersecurity of the nation](#),¹³ (2) [improving management of IT acquisitions and operations](#), (3) [strategic human capital management](#), (4) [managing federal real property](#), and (5) [the government-wide security clearance process](#). We urge your continued attention to the EPA, shared, and government-wide high-risk issues as they relate to EPA. Progress on high-risk issues has been possible through the concerted actions and efforts of Congress, the Office of Management and Budget, and the leadership and staff in agencies, including EPA. In March 2022 we issued a report on key practices to successfully address high-risk areas, which can be a helpful resource as your agency continues to make progress to address high-risk issues.¹⁴

Copies of this letter and its enclosure are being sent to the Director of the Office of Management and Budget and appropriate congressional committees including the Committees on Appropriations, Budget, Homeland Security and Governmental Affairs, and Environment and Public Works, United States Senate; and the Committees on Appropriations, Budget, Oversight Reform, and Energy and Commerce, House of Representatives. In addition, the letter and its enclosure will be available on the GAO website at <http://www.gao.gov>.

¹²GAO, *High-Risk Series: Dedicated Leadership Needed to Address Limited Progress in Most High-Risk Areas*, [GAO-21-119SP](#) (Washington, D.C.: Mar. 2, 2021).

¹³With regard to cybersecurity, we also urge you to use foundational information and communications technology supply chain risk management practices set forth in our December 2020 report: *GAO, Information Technology: Federal Agencies Need to Take Urgent Action to Manage Supply Chain Risks*, [GAO-21-171](#) (Washington, D.C.: Dec. 15, 2020).

¹⁴GAO, *High-Risk Series: Key Practices to Successfully Address High-Risk Areas and Remove Them from the List*, [GAO-22-105184](#) (Washington, D.C.: Mar. 3, 2022).

I appreciate EPA's continued commitment to these important issues. If you have any questions or would like to discuss any of the issues outlined in this letter, please do not hesitate to contact me or Mark Gaffigan, Managing Director, Natural Resources and Environment, at gaffiganm@gao.gov or 202-512-3841. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Our teams will continue to coordinate with your staff on all of the 86 open recommendations, including those recommendations in the high-risk areas for which EPA has a leading role. Thank you for your attention to these matters.

Sincerely yours,

A handwritten signature in black ink that reads "Gene L. Dodaro". The signature is written in a cursive style with a large, prominent "D" and a long horizontal stroke extending to the right.

Gene L. Dodaro
Comptroller General
of the United States

Enclosure(s) – 1

cc: The Honorable Radhika Fox, Assistant Administrator, Office of Water
The Honorable Joseph Goffman, Principal Deputy Assistant Administrator Performing Delegated Duties of Assistant Administrator, Office of Air and Radiation, EPA
The Honorable Maureen Gwinn, Acting Assistant Administrator, ORD, EPA
The Honorable Tonya J. Manning, Director, Office of Information Security and Privacy
The Honorable Shalanda Young, Director, Office of Management and Budget
The Honorable Lawrence Starfield, Acting Assistant Administrator, Office of Enforcement and Compliance Assurance

Enclosure: I

Priority Open Recommendations to the Environmental Protection Agency

Assessing and Controlling Toxic Chemicals

Chemical Assessments: Low Productivity and New Interagency Review Process Limit the Usefulness and Credibility of EPA's Integrated Risk Information System. [GAO-08-440](#). Washington, D.C.: March 7, 2008.

Recommendation: To develop timely chemical risk information that EPA needs to effectively conduct its mission, the Administrator of EPA should require the Office of Research and Development (ORD) to re-evaluate its draft proposed changes to the Integrated Risk Information System (IRIS) assessment process in light of the issues raised in the report and ensure that any revised process periodically assesses the level of resources that should be dedicated to this significant program to meet user needs and maintain a viable IRIS database.

Action Needed: EPA agreed to consider our recommendation. As of March 2022, officials from ORD's Center for Public Health and Environmental Assessment (CPHEA) had not developed information assessing the level of resources that EPA should dedicate to IRIS. In January 2022, CPHEA officials told us their role is to consider the needs of EPA as a whole, but that they are minimally involved in the agency's process for determining budgets and resources. EPA needs to develop a strategic plan, or other document, that identifies the resources CPHEA needs to meet EPA user needs for chemical assessments. We will keep this recommendation open until EPA completes, and provides us with, a workforce plan or other documentation that examines agency-wide demand for IRIS assessments and other products, as well as CPHEA's current capacity to produce work, its human resource skill gaps, and how EPA plans to fill those gaps. Until EPA completes these steps, it may not be able to develop timely chemical risk information that EPA needs to effectively conduct its mission.

High-Risk Area: [Transforming EPA's Processes for Assessing and Controlling Toxic Chemicals](#).

Director: Alfredo Gómez, Natural Resources and Environment

Contact information: gomezj@gao.gov, 202-512-3841

Chemical Assessments: Challenges Remain with EPA's Integrated Risk Information System Program. [GAO-12-42](#). Washington, D.C.: December 9, 2011.

Recommendation: To better ensure the credibility of IRIS assessments by enhancing their timeliness and certainty, the Administrator of EPA should require ORD to establish a written policy that clearly describes the applicability of the time frames for each type of IRIS assessment and ensures that the time frames are realistic and provide greater predictability to stakeholders.

Action Needed: EPA agreed with our recommendation and, as of March 2022, EPA officials told us they were considering ways to provide additional documentation to help stakeholders better understand time frames. EPA has used IRIS Program Outlooks since 2018 to provide some information about assessment development timelines and has begun including

information in IRIS Assessment Plans and Systematic Review Protocols to help inform stakeholders and the public about the complexity of individual assessments. While such information can help the IRIS Program estimate time frames, identify appropriate staff, and contract support where needed, stakeholders have limited information to evaluate whether the time frames are realistic. Providing baseline information that elaborates on factors that influence the complexity and time required to complete an assessment would help stakeholders' understanding and better align with our recommendation.

High-Risk Area: [Transforming EPA's Processes for Assessing and Controlling Toxic Chemicals](#).

Director: Alfredo Gómez, Natural Resources and Environment

Contact information: gomezj@gao.gov, 202-512-3841

Chemical Assessments: Annual EPA Survey Inconsistent with Leading Practices in Program Management. [GAO-21-156](#). Washington, D.C.: December 18, 2020.

Recommendations:

- (1) The Administrator should direct the Assistant Administrator of ORD to provide more information publicly about where chemical assessments are in the development process, including internal and external steps in the process, and changes to assessment milestones.
- (2) The Administrator of EPA should include in ORD's strategic plan (or subsidiary strategic plans) identification of EPA's universe of chemical assessment needs; how the IRIS Program is being resourced to meet user needs; and specific implementation steps that indicate how IRIS will achieve the plan's objectives, such as specific metrics to define progress in meeting user needs.

Action Needed: EPA disagreed with the first recommendation at the time of our report, stating that the agency already maintains a high level of transparency. It also said implementing the recommendation would create additional reporting and management burden and would slow the development of assessments. However, we believe more information about the timing of all steps in the assessment process is necessary to help the public and stakeholders track assessments, and that our recommendation is warranted. EPA needs to communicate additional information to the public and stakeholders via public documents such as its IRIS Program Outlooks and website. By providing more information about where assessments are in the development process, including greater clarity on when EPA initiates steps in the process and expects to complete assessments, EPA could achieve greater transparency throughout the chemical assessment process, which would benefit the public and stakeholders of the IRIS Program.

EPA partially disagreed with our other recommendation and as of March 2022 had not identified the resources needed to address user needs for chemical assessments. We continue to believe that ORD should include, in a strategic plan or related document, information about the IRIS Program's resources and capacity. By developing this information, EPA will ensure IRIS is better able to identify and meet user needs within EPA.

High-Risk Area: [Transforming EPA’s Processes for Assessing and Controlling Toxic Chemicals](#).

Director: Alfredo Gómez, Natural Resources and Environment

Contact information: gomezj@gao.gov, 202-512-3841

Reducing Pollution in the Nation’s Waters

Clean Water Act: Changes Needed If Key EPA Program Is to Help Fulfill the Nation’s Water Quality Goals. [GAO-14-80](#). Washington, D.C.: December 5, 2013.

Recommendation: To enhance the likelihood that Total Maximum Daily Loads (TMDLs) support the nation’s waters’ attainment of water quality standards and to strengthen water quality management, the Administrator of EPA should develop and issue new regulations requiring that TMDLs include additional elements—and consider requiring the elements that are now optional—specifically, elements reflecting key features identified by the National Research Council as necessary for attaining water quality standards, such as comprehensive identification of impairment and plans to monitor water bodies to verify that water quality is improving.

Action Needed: EPA agreed with our findings related to this recommendation, but it did not agree to take the recommended action. In June 2020, EPA officials told us they believed the recommendation had been implemented based on steps the agency took to implement a new vision for the TMDL program. We agree that these actions can help the agency and states improve the TMDL program, but they do not carry the force of regulations. In July 2020, EPA officials told us they did not believe the agency could issue the recommended regulations under its current authority and that the agency has no plans to take any action.

We continue to believe that EPA has the authority to issue the regulations, as long as it follows all applicable procedural and substantive requirements. We also believe that the problems of nonpoint source pollution require stronger action, such as regulations, to be resolved because nonpoint sources continue to be a large source of pollution in the nation’s waters.

Director: Alfredo Gómez, Natural Resources and Environment

Contact information: gomezj@gao.gov, 202-512-3841

Ensuring Cybersecurity at EPA

Cybersecurity: Agencies Need to Fully Establish Risk Management Programs and Address Challenges. [GAO-19-384](#). Washington, D.C.: July 25, 2019.

Recommendation: The Administrator of EPA should establish a process for conducting an organization-wide cybersecurity risk assessment.

Action Needed: EPA did not provide comments on our July 2019 report. EPA has updated its cybersecurity risk management strategy, which calls for the agency to develop an organization-wide perspective on cybersecurity risks. As of March 2022, EPA told us it had engaged with a third-party Federally Funded Research Development Corporation to help develop an organization-wide cybersecurity risk assessment. The agency added that this process is expected to begin in the third quarter of fiscal year 2022 and be completed in the third quarter of fiscal year 2023, pending funding. Until EPA develops an agency-wide cybersecurity risk management strategy, it will not have a consistent approach to protecting its systems and information against the increasing number and sophistication of cyber threats.

High-Risk Area: [Ensuring the Cybersecurity of the Nation](#).

Director: Marisol Cruz Cain, Information Technology and Cybersecurity

Contact information: cruzcaim@gao.gov, 202-512-5017

Addressing Data and Risk Communication Issues for Drinking Water and Wastewater Infrastructure

Drinking Water: Unreliable State Data Limit EPA's Ability to Target Enforcement Priorities and Communicate Water Systems' Performance. [GAO-11-381](#). Washington, D.C.: June 17, 2011.

Recommendation: To improve EPA's ability to oversee the states' implementation of the Safe Drinking Water Act (SDWA) and provide Congress and the public with more complete and accurate information on compliance, the Administrator of EPA should resume data verification audits to routinely evaluate the quality of selected drinking water data on health-based and monitoring violations that the states provide to EPA. These audits should also evaluate the quality of data on the enforcement actions that states and other primacy agencies have taken to correct violations.

Action Needed: EPA partially agreed with our recommendation. As of March 2022, EPA indicated that it was not resuming data verification audits. Instead, EPA said it was taking other actions to improve the agency's ability to oversee the quality of drinking water data that states provide to EPA. For example, the agency told us it was evaluating data quality through a three-pronged approach of electronic reporting through the Compliance Monitoring Data Portal (CMDP), automated data quality assurance tools, and state file reviews. For example, EPA indicated that there was an 80 percent reduction in data flow errors through the CMDP. However, because the results were based on a survey of seven states, EPA does not know by how much data flow errors may have lessened in other states, and questions remain about issues such as compliance determination errors. As a result, it is unclear to what extent EPA's efforts have resulted in more accurate and complete data on water systems' compliance with the SDWA.

EPA needs additional information on the extent to which its Safe Drinking Water Information System (SDWIS) modernization will improve the agency's ability to oversee states' implementation of SDWA and provide Congress and the public with more complete and accurate information on compliance. EPA indicated that the agency would work closely with states and the SDWIS Modernization Board to collect the necessary information and an efficient

mechanism to evaluate whether SDWIS data are current, accurate, and complete. Once the modernization is complete and in use by states, EPA plans to develop goals for the completeness and accuracy of data on monitoring violations. After EPA completes the modernization, we will conduct additional follow-up with agency staff on the status of these efforts.

Director: Alfredo Gómez, Natural Resources and Environment

Contact information: gomezj@gao.gov, 202-512-3841

Drinking Water: Additional Data and Statistical Analysis May Enhance EPA's Oversight of the Lead and Copper Rule. [GAO-17-424](#). Washington, D.C.: September 1, 2017.

Recommendation: The Assistant Administrator for Water of EPA's Office of Water and the Assistant Administrator of EPA's Office of Enforcement and Compliance Assurance should develop a statistical analysis that incorporates multiple factors—including those currently in SDWIS/Fed [database] and others such as the presence of lead pipes and the use of corrosion control—to identify water systems that might pose a higher likelihood for violating the Lead and Copper Rule once complete violations data are obtained, such as through SDWIS Prime.

Action Needed: EPA agreed with our recommendation and, as of June 2022, we are conducting additional follow-up with EPA staff on the status of these efforts. EPA needs to provide us with an update on SDWIS modernization or other data plans for identifying data associated with water systems that might pose a higher likelihood for violating the Lead and Copper Rule. Although EPA indicated that the agency expects the modernized SDWIS database to have an efficient mechanism to evaluate whether data are current, accurate, and complete, we are keeping this recommendation open until EPA provides us information that it has finalized its efforts. By implementing our recommendation, EPA could better target its oversight of water systems.

Director: Alfredo Gómez, Natural Resources and Environment

Contact information: gomezj@gao.gov, 202-512-3841

Drinking Water: EPA Could Use Available Data to Better Identify Neighborhoods at Risk of Lead Exposure. [GAO-21-78](#). Washington, D.C.: December 18, 2020.

Recommendation: EPA's Assistant Administrator for Water should develop a strategic plan that meets the Water Infrastructure Improvements for the Nation (WIIN) Act requirement for providing targeted outreach, education, technical assistance, and risk communication to populations affected by the concentration of lead in public water systems, and that is fully consistent with leading practices for strategic plans.¹⁵

Action Needed: In March 2022, EPA reiterated its disagreement with our recommendation and stated that it believes it has met the WIIN Act requirement. However, we maintain that the recommendation is warranted and that EPA should implement it. EPA's Strategic Plan for Targeted Outreach to Populations Affected by Lead does not discuss all items the WIIN Act

¹⁵Pub. L. No. 114-322, § 2106(a)(6), 130 Stat. 1628, 1724 (2016) (*codified at* 42 U.S.C. § 300g-3(c)(5)(A)).

requires and does not meet leading practices for strategic plans. EPA identified several other examples of its lead reduction efforts for vulnerable populations and disadvantaged communities. However, we do not believe these actions are sufficient to meet the intent of the recommendation. Implementing our recommendation would give the agency greater assurance that it has effectively planned how to communicate to the public the risk of lead in drinking water.

Director: Alfredo Gómez, Natural Resources and Environment

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Managing Climate Change Risks

Water Infrastructure: Technical Assistance and Climate Resilience Planning Could Help Utilities Prepare for Potential Climate Change Impacts. [GAO-20-24](#). Washington, D.C.: January 16, 2020.

Recommendation: The Director of Water Security of EPA, as Chair of the Water Sector Government Coordinating Council, should work with the council to identify existing technical assistance providers and engage these providers in a network to help drinking water and wastewater utilities incorporate climate resilience into their projects and planning on an ongoing basis.

Action Needed: EPA neither agreed nor disagreed with our recommendation but said its current efforts to work with other federal agencies and the water sector would help it carry out the recommendation. In December 2021, EPA told us it meets regularly with its water sector partners, has emailed newsletters with information on resilience tools to water sector partners, and hosted webinars and trainings that reached 16,500 personnel at water and wastewater systems in fiscal year 2021. These actions are consistent with our recommendation. However, at least 67,000 utilities need assistance. In March 2022, EPA stated that participation of the water sector and of other federal agencies in helping these utilities is voluntary and not something the agency can enforce. However, EPA has not indicated how it will work with agencies and the water sector to organize a network of technical assistance, as we recommended, to reach many more water and wastewater utilities across the U.S.

To fully implement our recommendation, EPA can work with the sector and federal agencies to integrate all technical assistance providers in a network, which would help more utilities incorporate climate resilience into their projects and planning on an ongoing basis.

High-Risk Area: [Limiting the Federal Government's Fiscal Exposure by Better Managing Climate Change Risks.](#)

Director: Alfredo Gómez, Natural Resources and Environment

Contact information: gomezj@gao.gov, 202-512-3841

Protecting the Nation's Air Quality

Air Pollution: Opportunities to Better Sustain and Modernize the National Air Quality Monitoring System. [GAO-21-38](#). Washington, D.C.: November 12, 2020.

Recommendations:

- (1) The Assistant Administrator of EPA's Office of Air and Radiation, in consultation with state and local agencies, should develop, make public, and implement an asset management framework for consistently sustaining the national ambient air quality monitoring system. Such a framework could be designed for success by considering the key characteristics of effective asset management described in our report, such as identifying the resources needed to sustain the monitoring system, using quality data to manage infrastructure risks, and targeting resources toward assets that provide the greatest value.
- (2) The Assistant Administrator of EPA's Office of Air and Radiation, in consultation with state and local agencies and other relevant federal agencies, should develop and make public an air quality monitoring modernization plan to better meet the additional information needs of air quality managers, researchers, and the public. Such a plan could address the ongoing challenges in modernizing the national ambient air quality monitoring system by considering leading practices, including establishing priorities and roles, assessing risks to success, identifying the resources needed to achieve goals, and measuring and evaluating progress.

Action Needed: EPA agreed with our recommendations, stating in its comments that implementing them would add value and help sustain the national air quality monitoring system. EPA also stated that to ensure success, the agency needed to engage stakeholders at state, local, and tribal air monitoring agencies. As of March 2022, EPA had engaged with state, local, and tribal partners to begin establishing an air quality monitoring asset management plan and identifying an approach, goals, and priorities for an air quality monitoring modernization plan. EPA officials said the agency estimates it will complete the asset management plan in 2023. The officials also said EPA is considering our recommendation to modernize air quality monitoring as it plans to distribute American Rescue Plan funding for enhanced air quality monitoring. By taking actions to implement these recommendations, EPA will better ensure it can help sustain the monitoring system and protect public health as future air quality issues emerge.

Director: Alfredo Gómez, Natural Resources and Environment

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