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Washington, DC 20548

Comptroller General
of the United States

Accessible Version

May 9, 2023

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 your continued personal attention to areas where open recommendations should be given high priority.¹ In November 2022, we reported that on a government-wide basis, 77 percent of our recommendations made 4 years ago were implemented.² EPA's recommendation implementation rate was 85 percent. As of April 2023, EPA had 85 open recommendations. Fully implementing these open recommendations could significantly improve agency operations.

Since our July 2022 letter, EPA has implemented one of our 12 priority recommendations. Specifically, in October 2022, EPA updated the website for the agency's Integrated Risk Information System (IRIS) to clarify the status of chemical assessments in the development process, as we recommended in December 2020. In February 2023, EPA communicated information to EPA program offices about changes in assessment milestones. These actions will make it easier for EPA program offices and the public to track the status of EPA's chemical assessments.

We ask for your continued attention to the remaining 11 priority recommendations. We are also adding four new recommendations related to managing harmful algal blooms and hypoxia. This brings the total number of our priority recommendations to 15. (See enclosure for the list of recommendations.)

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 2022*, [GAO-23-900398](#) (Washington, D.C.: Nov. 15, 2022).

The 15 priority recommendations fall into the following six areas:

Assessing and controlling toxic chemicals.

EPA's ability to effectively protect public health and the environment depends on credible and timely assessments of the risks posed by toxic chemicals, including per- and polyfluoroalkyl substances (PFAS). Implementing our three priority recommendations in this area, such as by establishing an ongoing process to assess the resources required to successfully complete IRIS chemical assessments, would improve EPA's ability to prepare and issue the assessments.

Improving the nation's water quality.

Over the past 50 years, the quality of our nation's waters and drinking water has improved. However, threats to water quality and safety remain. Implementing our five priority recommendations would improve EPA's ability to protect the quality of our nation's water resources by managing risks from harmful algal blooms and hypoxia and taking stronger action to address the problem of nonpoint source pollution. For example, we recommended that EPA, working with the National Oceanic and Atmospheric Administration and other agencies, develop a national goal for the working group focused on efforts to prevent harmful algal blooms and hypoxia. EPA should also update new regulations to support the attainment of water quality standards.

Ensuring cybersecurity at EPA.

Federal agencies face a growing number of threats to their information technology systems and data. To protect against these threats, federal law and policies state that agencies should adopt a risk-based approach to cybersecurity by effectively identifying, prioritizing, and managing their cyber risks. Implementing our priority recommendation to establish a process for conducting an agency-wide cybersecurity risk assessment would help EPA better manage its cybersecurity risks.

Addressing data and risk communication issues related to drinking water and wastewater infrastructure.

The nation's drinking water is among the safest in the world, but contamination does occur, causing illnesses and even deaths. Implementing one priority recommendation related to risk communication and two priority recommendations related to data would improve EPA's ability to address drinking water infrastructure issues. This includes that EPA resume data verification audits to evaluate the quality of selected drinking water data. As a sector risk management agency for water and wastewater treatment, we also urge you to implement these priority recommendations related to protecting critical infrastructure.

Managing climate risks.

Since February 2013, we have included [Limiting the Federal Government's Fiscal Exposure by Better Managing Climate Change Risks](#) on our High-Risk List of government operations with greater vulnerabilities to fraud, waste, abuse, and mismanagement, or in need of transformation. Extreme weather related to climate change can threaten utilities that produce

drinking water and treat wastewater.³ By implementing our 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 risks that water utilities face.

Protecting the nation's air quality.

EPA reported that approximately 100 million people live in counties where one or more air quality standards—usually for ozone or particulate matter—were exceeded in 2021. EPA sets these standards at levels intended to protect public health, including the health of susceptible and vulnerable populations such as people with asthma, children, and elderly people. 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 April 2023, we issued our biennial update to our [High-Risk List](#). This list identifies government operations with greater vulnerabilities to fraud, waste, abuse, and mismanagement. It also identifies the need for transformation to address economy, efficiency, or effectiveness challenges.⁴ One of our high-risk areas—[transforming EPA's process for assessing and controlling toxic chemicals](#)—centers directly on EPA, and three 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, as noted.

Several other government-wide, high-risk areas also have direct implications for EPA and its operations. These include (1) [improving the management of IT acquisitions and operations](#), (2) [improving strategic human capital management](#), (3) [managing federal real property](#), (4) [ensuring the cybersecurity of the nation](#),⁵ and (5) [managing the government-wide personnel security clearance process](#).

We urge your continued attention to the EPA and other 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 within EPA. In March 2022, we issued a report on key practices to

³Water and Wastewater Sector Strategic Roadmap Work Group, *Roadmap to a Secure and Resilient Water and Wastewater Sector* (May 2017); and U.S. Global Change Research Program, *Climate Science Special Report, Fourth National Climate Assessment, Volume I* (Washington, D.C.: 2017).

⁴GAO, *High-Risk Series: Efforts Made to Achieve Progress Need to be Maintained and Expanded to Fully Address All Areas*, [GAO-23-106203](#) (Washington, D.C.: Apr. 20, 2023).

⁵With 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).

successfully address high-risk areas, which can be a helpful resource as your agency continues to make progress to address high-risk issues.⁶

In addition to your continued attention on these issues, Congress plays a key role in providing oversight and maintaining focus on our recommendations to ensure they are implemented and produce their desired results. Legislation enacted in December 2022 includes a provision for GAO to identify any additional congressional oversight actions that can help agencies implement priority recommendations and address any underlying issues relating to such implementation.⁷

There are various strategies Congress can use in addressing our recommendations, such as incorporating them into legislation. Congress can also use its budget, appropriations, and oversight processes to incentivize executive branch agencies to act on our recommendations and monitor their progress. For example, Congress can hold hearings focused on EPA's progress in implementing GAO's priority recommendations, withhold funds when appropriate, or take other actions to provide incentives for agencies to act. Moreover, Congress could follow up during the appropriations process and request periodic updates. Congress also plays a key role in addressing any underlying issues related to the implementation of these recommendations. For example, Congress could pass legislation providing an agency explicit authority to implement a recommendation or requiring an agency to take certain actions to implement a recommendation.

Copies of this report are being sent to the Director of the Office of Management and Budget and the appropriate congressional committees. In addition, the report will be available on the GAO website at <http://www.gao.gov>.

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 85 open recommendations, including the recommendations in the high-risk areas for which EPA has a leading role. Thank you for your attention to these matters.

Sincerely yours,

⁶GAO, *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).

⁷James M. Inhofe National Defense Authorization Act for Fiscal Year 2023, Pub. L. No. 117-263, § 7211(a)(2), 136 Stat. 2395, 3668 (2022); H.R. Rep. No. 117-389 (2022) (accompanying Legislative Branch Appropriations Act, H.R. 8237, 117th Cong. (2022)).



Gene L. Dodaro

Comptroller General

of the United States

Enclosure

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

Enclosure Priority Open Recommendations to the Environmental Protection Agency (EPA)

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.

Year Recommendation Made: 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 reevaluate 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 February 2023, officials from ORD's Chemical and Pollutant Assessment Division (CPAD) had conducted an analysis of the resources needed to produce chemical assessments, including IRIS assessments and Provisional Peer-Reviewed Toxicity Values. The analysis examined current budget and human capital resources allocated to CPAD for producing human health assessments, including the skills and competencies needed to produce different types of chemical assessments, and the current staffing levels under each skill set. CPAD's analysis also examined the role of contractors and how they could assist EPA staff in producing chemical assessments. The analysis concluded by noting that CPAD is under-resourced and expects to experience a continued increase in its workload in coming years, thereby worsening the gap between what EPA offices need and what CPAD is able to produce.

CPAD's analysis of the resources needed to produce chemical assessments is a good step toward implementing our recommendation. However, the analysis did not identify specific metrics for assessing the effectiveness of EPA's staff recruitment and retention strategies or whether current resource allocations are helping CPAD meet the targets established in various EPA strategic action plans. We will keep this recommendation open until CPAD updates its analysis to include more specific metrics, which will help EPA determine the effectiveness of its recruitment and retention strategies.

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.

Year Recommendation Made: 2012

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. As of March 2023, EPA officials told us they were considering ways to provide additional documentation to help stakeholders better understand the time frames for completing IRIS assessments. Since 2018, EPA has used IRIS Program Outlooks to provide information to users about IRIS assessment development timelines and has begun including information in IRIS Assessment Plans and Systematic Review Protocols to help stakeholders and the public better understand the complexity of specific types of chemical assessments. EPA has begun using a portfolio of products—including IRIS assessments, Provisional Peer-Reviewed Toxicity Values, and technical memos—to meet EPA program office needs for chemical assessments. We encourage EPA to provide its program offices with documentation of how long it takes to complete each of these different types of assessments to reduce uncertainty for stakeholders with significant interests in IRIS assessments.

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.

Year Recommendation Made: 2021

Recommendation: 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.

Actions Needed: As described above, officials from EPA's CPAD—a part of the Office of Research and Development—conducted an analysis of the resources needed to produce chemical assessments. While this analysis is a good step, to fully implement our recommendation, the analysis needs to include specific metrics for assessing the effectiveness of various recruitment and retention strategies. Additionally, the analysis needs to determine whether current resource allocations are helping CPAD meet the targets established in EPA's strategic action plans. It is also unclear to what extent senior management will use the analysis when reevaluating CPAD's resources. We will keep this recommendation open until CPAD updates its analysis to include such specific metrics and more information is available for us to determine the extent to which EPA management has used CPAD's analysis to balance its workload with available resources. This would ensure EPA and CPAD can better identify and meet user needs.

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

Improving the Nation's Water Quality

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.

Year Recommendation Made: 2014

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.

Actions Needed: EPA agreed with the findings that supported our recommendation but did not agree to take the recommended action. In June 2020, EPA officials told us they considered the recommendation to be implemented based on the actions EPA took to carry out a new vision for the TMDL program. We agree that EPA’s actions can help the agency and states improve the TMDL program, but believe those actions are insufficient because 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 the agency’s current authority. The officials also stated that EPA had no plans to develop TMDL regulations to address our recommendation. As of March 2023, EPA officials told us that the agency had not changed its position.

We continue to believe that EPA has the authority to issue the regulations we recommended, so long as it follows all applicable procedural and substantive requirements. We also believe that the problems of nonpoint source pollution, which is a major contributor to pollution in our nation’s waters, require stronger actions such as issuing new regulations. To fully implement our recommendation, EPA needs to develop TMDL regulations that include additional elements such as comprehensive identification of impairment and plans to monitor water bodies to verify that water quality is improving. Doing so will ensure that TMDLs help water bodies attain water quality standards.

Director: Alfredo Gómez, Natural Resources and Environment

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

Water Quality: Agencies Should Take More Actions to Manage Risks from Harmful Algal Blooms and Hypoxia. GAO-22-104449. Washington, D.C.: June 15, 2022.

Year Recommendations Made: 2022

Recommendations:

1. The Administrator of EPA and the Administrator of the National Oceanic and Atmospheric Administration (NOAA), in collaboration with the members of the working group, should document and define what a national harmful algal bloom (HAB) and hypoxia program would entail, including identifying the program's resource needs.
2. The Administrator of EPA and the Administrator of NOAA, in collaboration with the members of the working group, should develop a national goal for the group focused on efforts to prevent HABs and hypoxia.
3. The Administrator of EPA, working with the other members of the working group, should develop an interagency framework, including prioritizing water bodies and identifying resource needs, to expand monitoring of freshwater HABs and hypoxia.
4. The Administrator of EPA, working with the other members of the working group, should develop an interagency framework, including prioritizing water bodies and identifying resource needs, to expand forecasting of freshwater HABs and hypoxia.

Action Needed: EPA agreed with our recommendations. For the first recommendation, EPA officials told us that, as of March 2023, the agency was working with NOAA and other members of the interagency HAB and hypoxia working group to develop a national program, including identifying associated goals, objectives, milestones, and resource needs. EPA officials stated that they expected to complete the development of a national program and a corresponding implementation plan in December 2024. By defining and documenting what a national HAB and hypoxia program would entail, EPA and NOAA, as co-chairs of the working group, would be better positioned to implement the program and enhance federal efforts to manage the risks of HABs and hypoxia.

For the second recommendation, as of March 2023, EPA stated that it was taking actions, in consultation with NOAA and other members of the working group, to develop a national goal focused on efforts to prevent HABs and hypoxia. EPA expects this goal to be developed and incorporated into scientific assessments of HABs and hypoxia mandated by the Harmful Algal Bloom and Hypoxia Research and Control Act of 1998, as amended, which is expected to be completed in 2024. By developing a national goal to focus on preventing HABs and hypoxia, the working group could help increase federal attention on prevention actions to reduce the risks that HABs and hypoxia pose to state, local, and tribal communities.

To address the third and fourth recommendations, EPA stated that it would collaborate with NOAA and other member agencies of the working group to develop frameworks to expand monitoring and forecasting of freshwater HABs and hypoxia. These frameworks will identify resource needs for freshwater monitoring and forecasting as well as prioritize water bodies in which to expand freshwater monitoring and forecasting capabilities. EPA also stated that these frameworks would be completed in June 2024. By developing interagency frameworks for expanding the monitoring and forecasting of freshwater HAB and hypoxia events, EPA and the working group will be better positioned to obtain the information needed to manage the risks from such events.

Director: Alfredo Gómez, Natural Resources and Environment

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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.

Year Recommendation Made: 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. However, 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 2023, EPA stated that it planned to leverage an independent security assessment from the Federal Aviation Administration to augment its current risk assessment process. Until EPA establishes a process for conducting an organization-wide cybersecurity risk assessment, it may be missing opportunities to identify trends in cybersecurity risks, target systemic risks to the agency and its systems, and prioritize investments in risk mitigation activities.

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.

Year Recommendation Made: 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.

Actions Needed: EPA partially agreed with our recommendation. As of March 2023, EPA indicated that it continues to work on modernizing its Safe Drinking Water Information System (SDWIS) and expects to start transitioning states to the system by the end of 2024. In addition, EPA plans to engage with states as it develops data quality goals for monitoring violations and other information. However, our recommendation was that EPA resume data verification audits. In March 2022, EPA told us it was not planning to resume the audits due to budgetary constraints. Instead, EPA said it was taking other actions to improve its 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 with a three-pronged approach that uses electronic reporting through the Compliance Monitoring Data Portal, automated data quality assurance tools, and state file reviews.

EPA estimates that there has been an 80 percent reduction in data flow errors, in which a state or region issues a violation notice to the water system that is reported to the state data system but not correctly transferred to the federal system. However, because this estimate is based on a survey of seven states, EPA does not know the extent to which data flow errors may have been reduced in other states. In addition, questions remain about issues such as compliance determination errors, when a violation occurs but the state does not issue a violation notice to the water system and does not report that violation to the federal system. Overall, it remains unclear to what extent EPA's efforts have resulted in more accurate and complete data on water systems' compliance with SDWA.

Furthermore, EPA needs additional information to assess the extent to which its efforts to modernize the SDWIS 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. We will continue to monitor EPA's actions and conduct additional follow-up with agency staff regarding the status of the agency's efforts to update its systems and oversee the quality of data reported by states. Updating systems and data reporting would allow EPA to more completely and accurately determine the location and extent of violations which could improve data quality and the effectiveness of the agency's oversight of states.

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.

Year Recommendation Made: 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 the Safe Drinking Water Information System (SDWIS)/Federal [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. In April 2023, the agency proposed revisions to the Consumer Confidence Report Rule that, if finalized, would require states and others with primary enforcement authority to annually report drinking water compliance monitoring data, starting in 2025. We think this proposed rule is a good step forward. Revisions to the rule are scheduled to be finalized by March 2024, after which EPA will need to demonstrate plans for using the improved compliance data. We are keeping this recommendation open until EPA provides us information that it has finalized its efforts. By implementing our recommendation, EPA will be better able to target its oversight of water systems.

Director: Alfredo Gómez, Natural Resources and Environment

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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.

Year Recommendation Made: 2021

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.⁸

Action Needed: In March 2023, EPA reiterated its disagreement with our recommendation and stated that it believes the agency has satisfied WIIN Act requirements. However, we maintain that the recommendation is still warranted because EPA's Strategic Plan for Targeted Outreach to Populations Affected by Lead does not address all of the WIIN Act's requirements and does not meet leading practices for strategic plans. For example, EPA's plan does not address education, technical assistance, or risk communication. Rather, the plan only discusses actions to disseminate information to households after EPA has learned of certain lead action level exceedances.

EPA officials stated that the agency had also developed a proposed National Primary Drinking Water Regulation to implement ways to protect citizens from lead in drinking water. However, the proposed regulation is not a strategic plan and does not include all of the elements required by the WIIN Act for the strategic plan. Implementing our recommendation would give EPA

⁸Pub. L. No. 114-322, § 2106(a)(6), 130 Stat. 1628, 1724 (2016) (*codified at* 42 U.S.C. § 300g-3(c)(5)(A)).

greater assurance that it has effectively planned for how to communicate to the public the risks of lead in drinking water.

Director: Alfredo Gómez, Natural Resources and Environment

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

Managing Climate 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.

Year Recommendation Made: 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 since 2021 has taken actions that are consistent. For example, EPA emailed newsletters to water sector partners with information about resilience tools and hosted webinars and trainings that reached 29,500 personnel at water and wastewater systems. In March 2023, EPA said that it uses programs such as its Creating Resilient Water Utilities initiative to provide water utilities with practical tools, training, and assistance to increase their resilience to climate change and other hazards, and to identify potential long-term adaptation options related to financing infrastructure improvements and implementing resilience measures. EPA also said the agency would consider working with stakeholders and integrating technical assistance providers to assist utilities in incorporating resilience into infrastructure project planning and execution. EPA's actions indicate that it can do more to coordinate assistance to water utilities.

To fully implement our recommendation, EPA should work with the water sector and other federal agencies to develop a network of technical assistance providers that would help more utilities incorporate climate resilience into their planning and projects on an ongoing basis. These actions would help ensure that drinking water and wastewater infrastructure projects that receive federal financial assistance adequately address risks from climate change. We plan to continue following up on EPA's efforts in this area.

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

Director: Alfredo Gómez, Natural Resources and Environment

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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.

Year Recommendations Made: 2021

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 and stated 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 2023, EPA officials said the agency had continued to engage with state, local, and tribal partners to begin establishing an air quality monitoring asset management framework and identifying an approach, goals, and priorities for an air quality monitoring modernization plan. EPA officials said the agency estimated it would implement an asset management process for the monitoring system in 2024. The officials also said EPA was using funding from the American Rescue Plan Act of 2021 and Inflation Reduction Act of 2022 to make investments in air quality monitoring to help address the information needs we identified in our report. By continuing to take actions to fully implement our 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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