



# OFFICE OF INSPECTOR GENERAL U.S. ENVIRONMENTAL PROTECTION AGENCY

CUSTOMER SERVICE ★ INTEGRITY ★ ACCOUNTABILITY

*Operating efficiently and effectively*

## Compendium of Open and Unresolved Recommendations Related to Infrastructure Investment and Jobs Act-Funded Programs

March 23, 2023



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**Abbreviations:**

ARRA	American Recovery and Reinvestment Act of 2009
C.F.R.	Code of Federal Regulations
EPA	U.S. Environmental Protection Agency
IIJA	Infrastructure Investment and Jobs Act
OIG	Office of Inspector General
Pub. L.	Public Law
U.S.C.	United States Code

**Key Definitions:**

Open	The term used to describe a recommendation with which the EPA agrees—that is, it is considered resolved—but for which the Agency has not yet completed agreed-upon corrective actions.
Unresolved	The term used to describe a recommendation with which the EPA disagrees; to which the EPA has not provided a formal, complete, written response; or for which the EPA has proposed corrective actions that the OIG does not consider responsive to the recommendation.
Internal Control	A process that an entity’s oversight body, management, and other personnel implement to provide reasonable assurance that the entity’s objectives will be achieved.

**Cover Image:** An electric school bus on display in Washington, D.C. (EPA image)

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# Office of Inspector General U.S. Environmental Protection Agency

## At a Glance

March 23, 2023

### Why We Published This Compendium

The Infrastructure Investment and Jobs Act, Pub. L. 117-58 (2021), more than doubles the U.S. Environmental Protection Agency's annual budget each year over the next five years to fund water infrastructure, environmental cleanups, and electric school buses, largely through existing programs. Effective internal controls ensure that funds are reasonably protected from fraud, waste, abuse, or mismanagement.

The purpose of this compendium is to analyze open and unresolved recommendations concerning programs that received funding under the Act.

**Open recommendations** are those with which the EPA agrees but for which it has not yet completed corrective actions.

**Unresolved recommendations** are those that the EPA disagrees with; has not provided a formal, complete, written response to; or has proposed corrective actions that have not been agreed upon.

#### This project supports an EPA mission-related effort:

- *Operating efficiently and effectively.*

#### This project addresses a top EPA [management challenge](#):

- *Managing increased investment in infrastructure.*

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[List of OIG reports.](#)

## ***Compendium of Open and Unresolved Recommendations Related to Infrastructure Investment and Jobs Act-Funded Programs***

### What We Found

This compendium focuses on 25 recommendations (19 open and six unresolved as of December 1, 2022). Most of these recommendations were identified prior to the passage of the Infrastructure Investment and Jobs Act, or IIJA, which President Joseph R. Biden Jr. signed into law on November 15, 2021. Although these recommendations are not IIJA-specific, they pertain to programs receiving IIJA appropriations and could highlight areas in which the Agency has an opportunity to prevent potential fraud, waste, abuse, or mismanagement. These recommendations represent more than \$73 million in potential monetary benefits.

The IIJA appropriates over \$60 billion to the EPA for fiscal years 2022 through 2026. According to Congressional Budget Office data as of December 16, 2022, less than 1 percent of the \$60 billion in IIJA funds had been obligated and expended. Existing open and unresolved recommendations regarding programs that receive IIJA appropriations represent areas in which the Agency already lacks internal controls appropriate to administer these programs economically and efficiently at their much lower historic funding levels.

The likelihood of fraud, waste, abuse, or mismanagement rises with significant increases in appropriations over short periods of time. If our existing recommendations are not timely addressed, the related programs may face greater risks as they expand under the IIJA's significant increases in funding and requirements.

The potential for heightened risks also increases the importance of robust oversight. Under the IIJA, the OIG received funding to conduct oversight, including audits, evaluations, and investigations, of EPA programs and funding recipients receiving IIJA funds. In April 2022, the OIG released our inaugural IIJA oversight plan. We will refine our IIJA oversight plan as the EPA refines its plans to execute the Act.

In this compendium, we provide a summary of open and unresolved recommendations in programs that received IIJA funding and a synopsis of our reporting on "lessons learned" from our analyses of past reports and recommendations, which have highlighted potential pitfalls for the EPA to avoid as it implements its responsibilities under the IIJA.

**Potential monetary benefits to the EPA from implementing corrective actions for unimplemented recommendations exceed \$73 million.**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

THE INSPECTOR GENERAL

March 23, 2023

**MEMORANDUM**

**SUBJECT:** Compendium of Open and Unresolved Recommendations Related to Infrastructure Investment and Jobs Act-Funded Programs

**FROM:** Sean W. O'Donnell 

**TO:** Michael S. Regan, Administrator

Janet McCabe, Deputy Administrator

The U.S. Environmental Protection Agency Office of Inspector General presents the *Compendium of Open and Unresolved Related to Infrastructure Investment and Jobs Act-Funded Programs*, which details the statuses of 19 open and six unresolved recommendations that the OIG had issued to the EPA as of December 1, 2022.

The EPA has stated that the Infrastructure Investment and Jobs Act, or IIJA, Pub. L. 117-58, which President Joseph R. Biden Jr. signed into law on November 15, 2021, more than doubles the Agency's annual budget each year over the next five years to fund, largely through existing programs, water infrastructure, environmental cleanups, and electric school buses. Therefore, effective internal controls over these programs are necessary to ensure that the IIJA funds will be reasonably protected from fraud, waste, abuse, or mismanagement. This compendium tracks open and unresolved recommendations that we have made to the EPA for improving internal controls over the programs expected to receive future IIJA funding.

Section 1 of this report focuses on open and unresolved recommendations by program and regional office. Section 2 reports on unresolved recommendations. Section 3 discusses the open and unresolved recommendations by internal control type. Section 4 lists open recommendations that are at least one year old, as well as those recommendations with proposed corrective actions not scheduled to be completed within one year of the issuance of the associated report. Section 5 details our IIJA "lessons learned" reports, which did not contain recommendations but highlighted historical pitfalls for the Agency to keep in mind as it implements its IIJA responsibilities.

We will post this report to our website at [www.epa.gov/oig](http://www.epa.gov/oig).

cc: Assistant Administrators  
General Counsel  
Chief Financial Officer  
Associate Administrators  
Regional Administrators

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# Introduction

## Purpose

This compendium analyzes certain open and unresolved recommendations that the U.S. Environmental Protection Agency Office of Inspector General has made to the EPA. The recommendations analyzed relate to programs receiving appropriations under the Infrastructure Investment and Jobs Act, or IIJA, Pub. L. 117-58 (2021).

The OIG is publishing this report to keep Agency management and Congress informed about the open or unresolved status of relevant OIG recommendations to the EPA and the Agency's progress in completing corrective actions that will help improve its programs and operations. These corrective actions will improve the internal controls associated with the Agency's programs by offering increased protection against fraud, waste, abuse, or mismanagement for those programs and operations that are receiving IIJA appropriations. The U.S. Government Accountability Office's [GAO-14-704G](#), *Standards for Internal Control in the Federal Government*, issued September 2014, also known as the "Green Book," provides the overall framework for establishing and maintaining an effective internal control system.

### Top Management Challenge Addressed

This report addresses the following top management challenge for the Agency, as identified in the OIG's *U.S. Environmental Protection Agency Fiscal Year 2023 Top Management Challenge report*, issued October 28, 2022:

- Managing increased investment in infrastructure.

As of December 1, 2022, there were 19 open recommendations that, since as far back as 2008, the OIG issued to the EPA concerning programs to which the IIJA appropriates funding. An additional six recommendations remained unresolved.

## Background

On November 15, 2021, President Joseph R. Biden Jr. signed the IIJA into law, which appropriates about \$60 billion to the EPA for fiscal years 2022 through 2026, representing the largest appropriation that the Agency has ever received. The EPA has described the influx of funding as a "moment for the Agency to expand from its historic role as a regulatory and scientific agency to be a large-scale funder of critical infrastructure."<sup>1</sup>

## Historic EPA funding

The IIJA appropriations more than double the Agency's annual budget for each year of the five-year period and requires significant investment in drinking water, wastewater, and stormwater infrastructure projects; environmental cleanups; clean school buses; and

### Open or Unresolved Recommendations

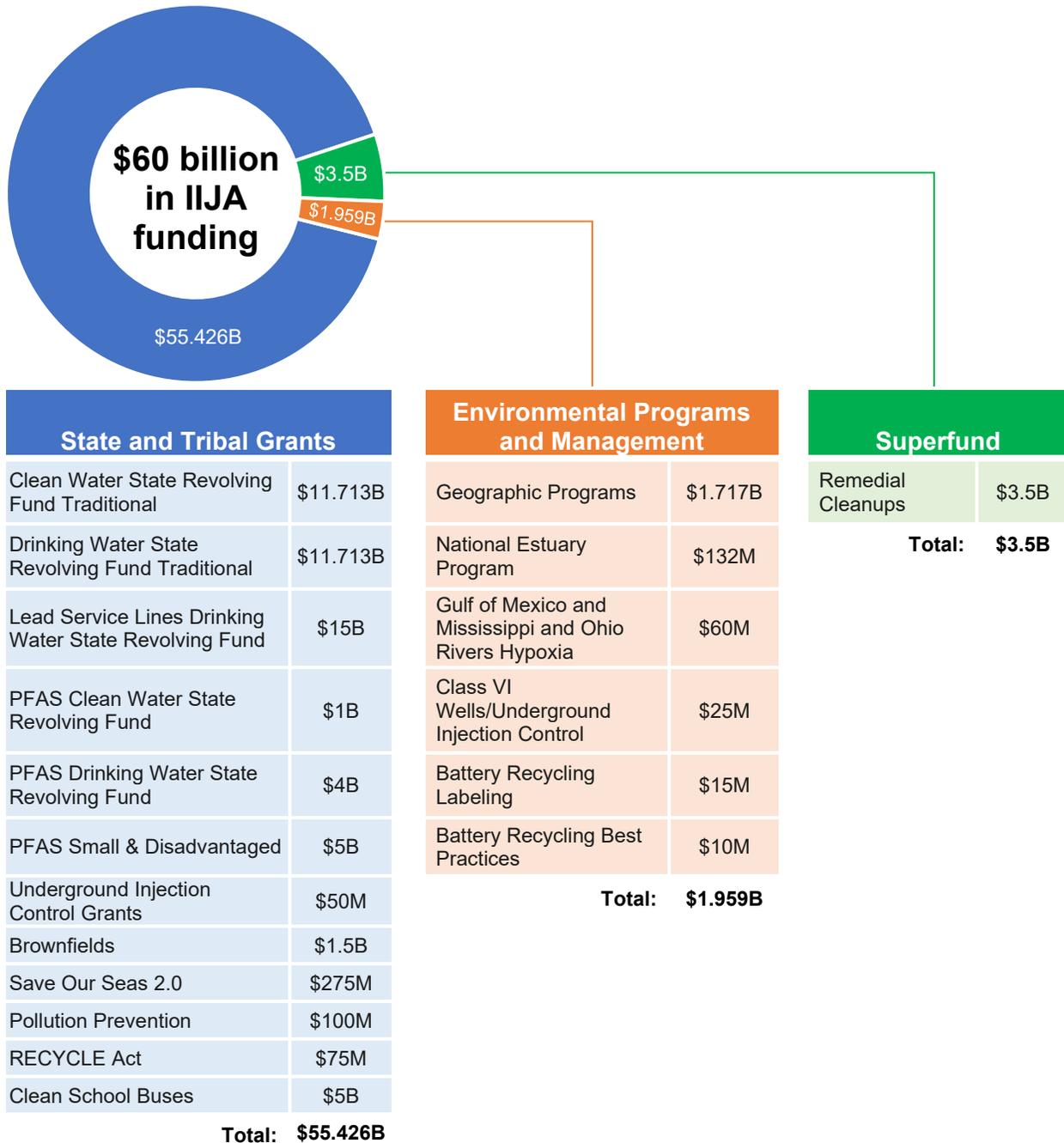
**Open recommendations** are those with which the EPA agrees—that is, they are considered resolved—but the Agency has not yet completed agreed upon corrective actions.

**Unresolved recommendations** are those with which the EPA disagrees; to which the EPA has not provided a formal, complete, written response; or for which the EPA has proposed corrective actions that the OIG does not consider responsive to the recommendation.

<sup>1</sup> U.S. ENVIRONMENTAL PROTECTION AGENCY, 190R22005, YEAR ONE ANNIVERSARY REPORT: BIPARTISAN INFRASTRUCTURE LAW (November 2022), [https://www.epa.gov/system/files/documents/2022-11/BIL\\_Anniversary\\_Report\\_11142022.pdf](https://www.epa.gov/system/files/documents/2022-11/BIL_Anniversary_Report_11142022.pdf).

increases in the EPA workforce.<sup>2</sup> The Agency will implement most of that funding through existing programs, including the Office of Water’s state revolving funds and the Office of Land and Emergency Management’s Superfund program. For most programs, these funds are available until expended. Figure 1 shows the EPA’s expected IJA appropriations by program.

**Figure 1: IJA funding by program**



Note: B = billion; M = million; PFAS=per and polyfluoroalkyl substances.

Source: EPA, [FACT SHEET: EPA & The Bipartisan Infrastructure Law](#), November 6, 2021. (EPA OIG figure)

<sup>2</sup> *Id.* at 1.

The IIJA's environmental project funds give the EPA an opportunity to advance its goal of protecting human health and the environment. As with previous supplemental spending legislation—such as the American Recovery and Reinvestment Act and the Coronavirus Aid, Relief, and Economic Security Act—there is a risk that the influx of infrastructure funds may be mismanaged, that funding requirements will not be complied with, or programmatic goals will not be met. History shows that such significant increases in program funding within a short period of time can create corresponding rises in the likelihood of fraud, waste, abuse, or mismanagement—thus raising the importance of robust oversight of Agency programs and operations.<sup>3</sup>

**Fraud in the American Recovery and Reinvestment Act of 2009.** In February 2009, the American Recovery and Reinvestment Act of 2009, or ARRA, was signed into law. The Act authorized \$787 billion in funding in the form of tax cuts, contracts, grants, and loans, among other things.<sup>4</sup> According to a media article from 2014, in the first five years after ARRA was enacted, investigators had proven 1,268 cases of fraud, resulting in \$57 million in recovered funds.<sup>5</sup>

**Fraud in the Coronavirus Aid, Relief, and Economic Security Act.** In March 2020, the Coronavirus Aid, Relief, and Economic Security Act was signed into law. This Act ultimately authorized over \$800 billion for the Paycheck Protection Program.<sup>6</sup> As of May 2022, over \$4.6 billion in potentially fraudulent Paycheck Protection Program loans had been identified in what the Small Business Administration OIG called “unprecedented fraud levels.”<sup>7</sup>

As discussed in Section 5 of this compendium, we recently reviewed over two dozen American Recovery and Reinvestment Act of 2009 reports and found examples from the EPA's administration of ARRA funds highlighting three areas in which the EPA could mitigate risks and reduce the likelihood of fraud, waste, abuse, or mismanagement under the IIJA.

## IIJA Oversight Funding

Under the IIJA, the OIG is receiving supplemental appropriations to conduct independent and objective oversight. Most of these funds are available until expended, supporting audits, evaluations, and investigations of EPA programs and funding recipients receiving or affected by IIJA funds. The OIG expects that the need for effective oversight of IIJA funds will extend beyond FY 2026. In April 2022, the OIG released the inaugural edition of our *Infrastructure Investment and Jobs Act Oversight Plan* describing the OIG's planned and ongoing projects related to IIJA oversight. As the EPA refines its plans to execute the IIJA, we will refine our IIJA oversight plan.

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<sup>3</sup> SMALL BUSINESS ADMINISTRATION OFFICE OF INSPECTOR GENERAL, 22-13, SBA'S HANDLING OF POTENTIALLY FRAUDULENT PAYCHECK PROTECTION PROGRAM LOANS, (May 2022), <https://www.oversight.gov/sites/default/files/oig-reports/SBA/SBA-OIG-Report-22-13.pdf>.

<sup>4</sup> U.S. ENVIRONMENTAL PROTECTION AGENCY OFFICE OF INSPECTOR GENERAL, 23-N-0004, AMERICAN RECOVERY AND REINVESTMENT ACT FINDINGS FOR CONSIDERATION IN THE IMPLEMENTATION OF THE INFRASTRUCTURE AND INVESTMENT AND JOBS ACT, (December 2022), <https://www.epa.gov/office-inspector-general/report-american-recovery-and-reinvestment-act-findings-consideration-1>.

<sup>5</sup> Gregory Korte, *Five years since stimulus: Many fraud cases, few losses*, USA Today, February 16, 2014, <https://www.usatoday.com/story/news/politics/2014/02/16/recovery-act-stimulus-fraud-convictions/5400705/>.

<sup>6</sup> SMALL BUSINESS ADMINISTRATION OFFICE OF INSPECTOR GENERAL, *supra* note 3.

<sup>7</sup> *Id.* at 6.

The OIG is issuing this compendium to highlight open and unresolved recommendations related to programs that are receiving IIJA appropriations. In Section 3 of this compendium, we discuss the three main categories of objectives—operations, reporting, and compliance—for the internal controls associated with the EPA’s open and unresolved recommendations.<sup>8</sup> If the Agency does not timely address these outstanding recommendations, the related programs could be more susceptible to fraud, waste, abuse, or mismanagement as they expand under the IIJA’s significant increases in funding and requirements.

### **Recommendation Resolution Process**

As discussed above, this report concerns open recommendations for which the EPA has not yet completed agreed-upon corrective actions and unresolved recommendations that do not yet have agreed-upon corrective actions. Office of Management and Budget Circular [A-50](#), *Audit Followup*, dated September 29, 1982, provides guidance to executive agencies regarding inspector general and Government Accountability Office audits and the recommendation resolution process. Specifically, the circular:

- Affirms that management’s corrective actions on resolved findings and recommendations are essential for improving the effectiveness and efficiency of government operations.
- States that audit follow-up is a shared responsibility of agency management officials and auditors.
- Requires each agency to ensure that systems are in place for the prompt and proper resolution and implementation of audit recommendations.

Further, Office of Management and Budget Circular A-50 requires that agencies provide a means to resolve major disagreements between the OIG and agency management within six months.

### **Report Structure**

Open and unresolved recommendations affecting program or regional offices that received IIJA funding are detailed in Section 1 of this compendium, and unresolved recommendations that affect those offices are detailed in Section 2. Open and unresolved recommendations are analyzed in Section 3 according to the objective category of the internal controls affected. In Section 4, we examine open recommendations that are at least one year old, as well as those recommendations with proposed corrective actions not scheduled to be completed within one year of the issuance of the associated report. Finally, Section 5 discusses recent OIG “lessons learned” reports that analyzed trends or patterns in past oversight reports to identify potential areas for EPA improvement to address potential weaknesses that could affect IIJA programming.

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<sup>8</sup> An **internal control** is a process that an entity’s oversight body, management, and other personnel implements to provide reasonable assurance that the entity’s objectives will be achieved. See U.S. GOVERNMENT ACCOUNTABILITY OFFICE, GAO-14-704G, STANDARDS FOR INTERNAL CONTROL IN THE FEDERAL GOVERNMENT, (September 2014), <https://www.gao.gov/greenbook>.

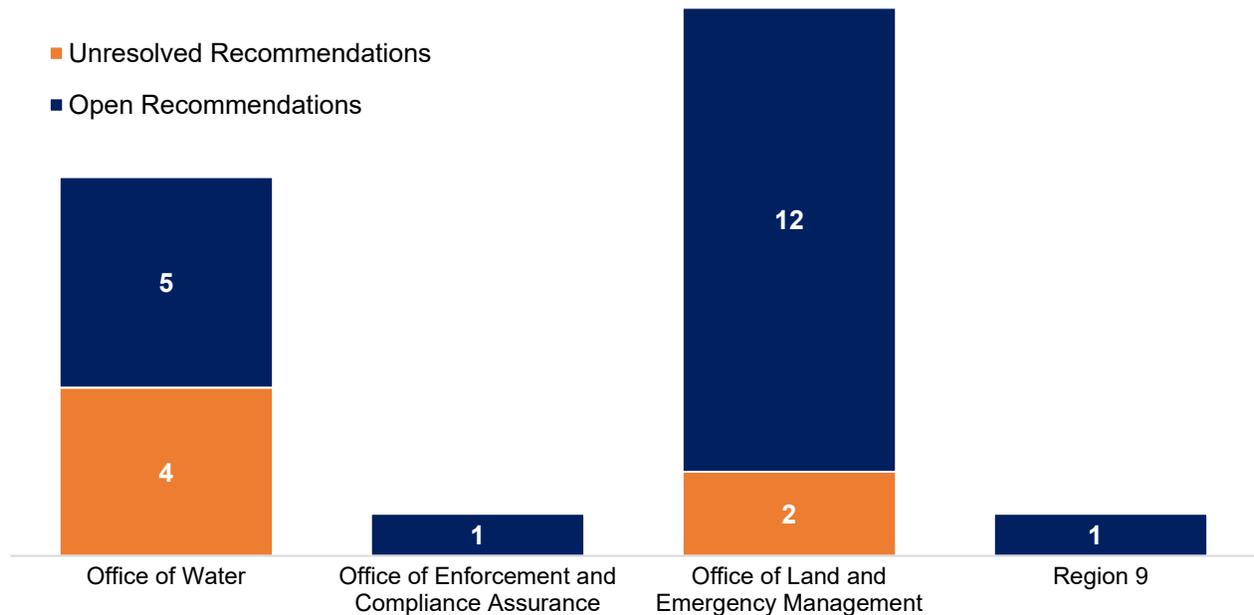
## Compendium Data Sources

Many of the recommendations collated in this report, but not all, are identified in OIG Report No. [EPA-350-R-22-002](#), *Semiannual Report to Congress: April 1, 2022–September 30, 2022*, issued November 2022. Four of the open recommendations in this report were identified among the 15 for which the OIG previously certified completion of corrective actions, despite not having completed the agreed-upon corrective actions, as detailed in OIG Report No. [22-N-0061](#), *The EPA Failed to Complete Corrective Actions as Certified to Address OIG Recommendations*, issued September 30, 2022. The six unresolved recommendations in this report are identified in OIG Report No. [23-P-0003](#), *The EPA Met 2018 Water Security Requirements but Needs to Improve Oversight to Support Water System Compliance*, issued November 21, 2022, and in OIG Report No. [22-E-0049](#), *The Coronavirus Pandemic Caused Schedule Delays, Human Health Impacts, and Limited Oversight at Superfund National Priorities List Sites*, issued June 23, 2022. We have also included information from four OIG “lessons learned” reports related to the IJJA that were issued from August through November 2022.

## Section 1. Open and Unresolved Recommendations by Responsible Program Office or Region

We analyzed the 19 open and six unresolved recommendations as of December 1, 2022, by the region and program office responsible for completing the associated corrective actions. We made the recommendations across eight reports to three offices and one region, as illustrated in Figure 2. [Appendix A](#) details the reports and associated open recommendations for each program office or region in descending order. Section 2 discusses the unresolved recommendations, which were issued in one report.

**Figure 2: Open and Unresolved recommendations by responsible program office or region**



Source: OIG analysis of open and unresolved recommendations in OIG Report No. [EPA-350-R-22-002](#), *Semiannual Report to Congress: April 1, 2022–September 30, 2022*. (EPA OIG image)

## Section 2. Unresolved Recommendations

We identified six recommendations affecting an IJA-funded program office that remained unresolved as of December 1, 2022, meaning the Agency disagreed with the OIG; had not provided a formal, complete, written response; or had proposed corrective actions that the OIG did not consider responsive to the recommendation. Because of when they were issued, none of these unresolved recommendations were reported as such in OIG Report No. [EPA-350-R-22-002](#), *Semiannual Report to Congress: April 1, 2022–September 30, 2022*. The status of the two unresolved recommendations issued to the Office of Land and Emergency Management in OIG Report No. [22-E-0049](#), *The Coronavirus Pandemic Caused Schedule Delays, Human Health Impacts, and Limited Oversight at Superfund National Priorities List Sites*, should be included in the next iteration of the semiannual report and are therefore not detailed below. The status of the other four unresolved recommendations, which were issued to the Office of Water, are detailed below.

### **The EPA Met 2018 Water Security Requirements but Needs to Improve Oversight to Support Water System Compliance**

**Report No. [23-P-0003](#), issued November 21, 2022**

**IJA-Funded Program:** Community water and wastewater infrastructure

The EPA did not provide adequate oversight to ensure the compliance of water systems—particularly small water systems—with requirements of the America’s Water Infrastructure Act, a comprehensive revision to the Safe Drinking Water Act. These systems may, therefore, fail to meet the Act’s requirements and may be vulnerable to malevolent acts that could result in loss of service or unsafe drinking water. About 19 percent of water systems, which serve some 40 million people, were not certified as completing, by the statutory deadlines, the required assessment of risks to the water system from malevolent acts and natural hazards. Additionally, in response to an increase in the frequency of cyberattacks, the EPA updated its malevolent acts baseline information in February 2021 after first issuing it in August 2019, which was deadline imposed by the America’s Water Infrastructure Act. However, the statutory deadlines for medium and large water systems to complete their risk and resilience assessments had passed and the systems were not required to update their assessments.

Unresolved recommendations	
1.	In consultation with the assistant administrator for Enforcement and Compliance Assurance, as appropriate, update and implement a plan for supporting community water systems so that all water systems comply with all certification requirements included in section 2013 of the America’s Water Infrastructure Act for past and future deadlines related to risk and resilience assessments and emergency response plans. <b>Responsible office:</b> Office of Water <b>Management challenge:</b> <i>Protecting information technology and systems against cyberthreats and Managing infrastructure funding and business operations.</i>
2.	In consultation with the assistant administrator for Enforcement and Compliance Assurance, as appropriate, update the processes related to the EPA’s implementation of section 2013 of the America’s Water Infrastructure Act, including processes to monitor community water system compliance with section 2013 and record noncompliance and contact information in the EPA’s Safe Drinking Water Information System database. These processes should be documented in the EPA’s <i>Water Supply Guidance Manual</i> . <b>Responsible office:</b> Office of Water <b>Management challenge:</b> <i>Protecting information technology and systems against cyberthreats and Managing infrastructure funding and business operations.</i>
3.	In consultation with the assistant administrator for Enforcement and Compliance Assurance, as appropriate, review a sample of risk and resilience assessments and emergency response plans completed by community water systems under section 2013 of the America’s Water Infrastructure Act to determine

### Unresolved recommendations

improvements, particularly in cybersecurity, that can be made as the water systems complete the Act's ongoing certification requirements.

**Responsible office:** Office of Water

**Management challenge:** *Protecting information technology and systems against cyberthreats and Managing infrastructure funding and business operations.*

4. In consultation with the assistant administrator for Enforcement and Compliance Assurance, as appropriate, develop formal guidance for community water systems that clearly describes the America's Water Infrastructure Act section 2013 requirements, including certification deadlines, enforcement steps, and the improvements identified as a result of Recommendation 3. Incorporate this guidance into the EPA's *Water Supply Guidance Manual*.

**Responsible office:** Office of Water

**Management challenge:** *Protecting information technology and systems against cyberthreats and Managing infrastructure funding and business operations.*

### Resolution progress

The Office of Water provided a response on September 22, 2022, that communicated its disagreement with the findings and recommendations. Actions the Agency outlined in its response meet the intent of Recommendations 1 and 2 and partially meet the intent of our Recommendations 3 and 4. We asked the Agency to review our final report, provide anticipated completion dates for corrective actions related to Recommendations 1 and 2, and develop fully responsive corrective action plans with anticipated completion dates for Recommendations 3 and 4. The Agency did not provide a formal response by January 20, 2023, which was the 60-day deadline for a response in accordance with EPA Manual 2750, *Audit Management Procedures*. In a memo that the OIG received on February 16, 2023, the EPA proposed corrective actions and completion dates for Recommendations 1 and 4 and proposed that its actions were already addressing Recommendations 2 and 3, but those proposals were not yet resolved with the OIG.

### Potential impact

If water systems do not complete risk and resilience assessments or emergency response plans, they are more vulnerable to cyberattacks and other malevolent acts. The 19 percent of water systems that did not certify completion of these assessments and plans serve 40 million people.

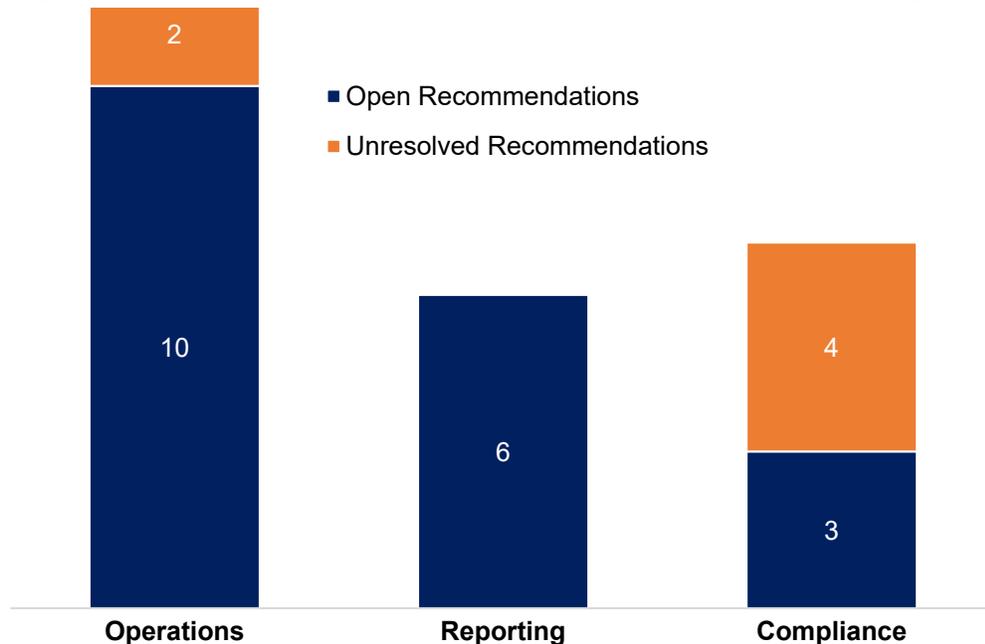
### Section 3. Open and Unresolved Recommendations by Internal Control Category

The Federal Managers’ Financial Integrity Act, 31 U.S.C. § 3512(d), requires agencies to establish internal controls that are consistent with standards issued by the comptroller general. The Government Accountability Office’s Green Book provides the overall framework for establishing and maintaining an effective internal control system. Internal controls cover all aspects of an entity’s objectives. We analyzed the 25 open and unresolved recommendations covered in this report, categorizing them according to which of the following main categories of objectives they addressed:

- **Operations.** These relate to program operations that achieve an entity’s mission and their ability to produce the intended results in a manner that minimizes the waste of resources.
- **Reporting.** These relate to the gathering and communication of information for use by the Agency, its stakeholders, or other external parties.
- **Compliance.** These relate to adherence to laws and regulations that prescribe the Agency’s objectives, structure, methods to achieve objectives, and reporting of performance toward achieving objectives.

We categorized each open and unresolved recommendation by internal control objective category, as detailed in [Appendix B](#), along with the reports in which the recommendations were issued. Figure 3 shows how the 25 open and unresolved recommendations, issued across eight reports, were broken down by objective category.

Figure 3: Open and unresolved recommendations by internal control objective



Source: OIG analysis of open and unresolved recommendations. (EPA OIG image)

## Section 4. Recommendations Taking One Year or More to Implement

Of the 19 open recommendations covered in this report, 14 remained open after one year or corrective actions were not scheduled to be implemented within one year after issuance of the associated report. Corrective actions for at least one recommendation were not expected to be completed until more than 18 years after the associated report was issued, and several were not planned to be implemented until several years into the five-year period during which IIJA funds are to be obligated.

Prompt implementation of corrective actions is necessary to ensure that associated monetary and environmental benefits are realized. Delayed implementation leaves the Agency's programs receiving IIJA funds more vulnerable to fraud, waste, abuse, or mismanagement. The Agency also risks not meeting its goals in the most effective and efficient manner when implementation is delayed.

Office of Management and Budget Circular A-50 requires each executive agency to establish an audit follow-up system. It states that "agencies shall assign a high priority to resolving and implementing corrective actions for audit recommendations." It also states that "corrective actions should proceed as rapidly as possible." It does not, however, establish a time frame. EPA Manual 2750, *Audit Management Procedures*, implements the audit follow-up requirements of Office of Management and Budget Circular A-50, requiring the EPA to resolve OIG findings and recommendations timely, efficiently, and effectively, so as to implement corrective actions with the greatest possible impact and potency.

It is the Agency's responsibility to implement agreed-upon recommendations. EPA Manual 2750 states that recommendations are considered overdue if the Agency has not completed corrective actions agreed upon with the OIG within one year of their estimated completion dates. The OIG prefers that responsible offices complete corrective actions within one year; however, we recognize the Agency's assertion that more complex corrective actions may take longer.

In that vein, funds, including supplemental appropriations, available to the EPA are at a greater risk of fraud, waste, abuse, or mismanagement because corrective actions are not in place, and the Agency estimates some will not be in place for four years or more. For example, we recommended in 2008 that the EPA reclassify or transfer more than \$27 million of the Stringfellow Superfund special accounts to the Superfund Trust Fund, which would make those funds available for use in Region 9 or elsewhere. In FYs 2022 through 2026, the EPA is expected to receive an added \$3.5 billion for Superfund remedial cleanups. But corrective actions responsive to our 2008 recommendation are not expected to be implemented until the end of FY 2026, the final year of IIJA appropriations and 18 years after we made the recommendation.

In another example, in a 2017 report, we recommended that the Office of Land and Emergency Management develop a policy to reduce the balances of available program income of Brownfields Revolving Loan Funds being held by recipients, and that this policy include a time frame for the recipients to reloan or use the funds for additional remediation or to return the money to the Agency for use elsewhere. The EPA will receive \$1.5 billion for Brownfields activities under the IIJA, but the Agency does not plan to have a policy in place to address our 2017 recommendation until 12 months after the final fiscal year of IIJA appropriations—ten years after the recommendation was made.

[Appendix C](#) details the 13 recommendations issued across five reports that remain open after one year or are not scheduled to be implemented within one year after issuance of the associated report.

## Section 5. Lessons Learned Reports

In FY 2022, in keeping with our *Infrastructure Investment and Jobs Act Oversight Plan*, we focused on helping the EPA plan for the significant increase in IIJA funding by issuing three “lessons learned” reports. These reports sought to aid the Agency in avoiding historical pitfalls while it implements its responsibilities under the IIJA. We issued a fourth such report in the first quarter of FY 2023. These four reports are detailed below.

### *Lessons Identified from Prior Oversight of the EPA’s Geographic and National Estuary Programs*

Report No. [22-E-0054](#), issued August 8, 2022

IIJA-Funded Program: Environmental Programs and Management

We identified the following seven programmatic themes across 49 prior oversight reports related to the EPA’s programs designed to protect regional waters: measurement of progress, communication, grant management, strategic planning, leadership, program execution, and resources. We detailed specific lessons under each theme for the EPA to consider as it expands its efforts to protect regional waters using IIJA funding. We did not issue any recommendations in this report.

### *Considerations for the EPA’s Implementation of Grants Awarded Pursuant to the Infrastructure Investment and Jobs Act*

Report No. [22-N-0055](#), issued August 11, 2022

IIJA-Funded Program: State and Tribal Assistance Grants

We identified three broad areas for improvement in the EPA’s administration and oversight of grants: enhancing the grants oversight workforce and strengthening monitoring and reporting; establishing and implementing comprehensive guidance and detailed work plans, as well as improving communications; and requiring adequate documentation to support grant payments. The Agency should consider addressing weaknesses in these areas to mitigate risks and reduce the likelihood of fraud, waste, and abuse as it administers and oversees more than \$55 billion of IIJA funds slated for state and tribal grants. We did not issue any recommendations in this report.

### *Considerations from Single Audit Reports for the EPA’s Administration of Infrastructure Investment and Jobs Act Funds*

Report No. [22-N-0057](#), issued September 14, 2022

IIJA-Funded Programs: Clean Water State Revolving Funds and Drinking Water State Revolving Funds

Our review of single audits conducted from FYs 2019 through 2021 analyzed findings of noncompliance with federal grant award requirements within nine EPA programs that the IIJA appropriates funding to. Instances of noncompliance occurred most frequently in these seven areas: procurement and suspension and debarment, reporting, allowable costs/cost principles, cash management, activities allowable or unallowable, special tests and provisions, and subrecipient monitoring. Most instances of noncompliance were associated with the Clean Water State Revolving Fund program and the Drinking Water State Revolving Fund program. As the EPA prepares to award IIJA funds to its external, nonfederal partners, the Agency should consider how it can address or prevent future instances of noncompliance in light of these findings. We did not issue any recommendations in this report.

## ***American Recovery and Reinvestment Act Findings for Consideration in the Implementation of the Infrastructure Investment and Jobs Act***

**Report No. [23-N-0004](#), issued December 7, 2022**

**IIJA-Funded Programs:** Clean Water State Revolving Funds and Drinking Water State Revolving Funds

Through our analysis of 28 ARRA reports, we developed three lessons that the EPA should consider. The EPA should aim to avoid similar challenges as it fulfills its responsibilities under the IIJA to help mitigate risks and reduce the likelihood of fraud, waste, and abuse of IIJA funds. The three lessons are to:

- Ensure that federal requirements are met.
- Provide clear and comprehensive guidance.
- Improve project management, monitoring, and data verification.

We did not issue any recommendations in this report.

## Open Recommendations by Responsible Program Office or Region

Responsible office	Reports with open recommendation		Number of open recommendations
	Report No.	Report title	
Office of Land and Emergency Management	<a href="#">22-P-0033</a>	<i>Brownfields Program-Income Monitoring Deficiencies Persist Because the EPA Did Not Complete All Certified Corrective Actions</i>	5
	<a href="#">21-P-0114</a>	<i>EPA Does Not Consistently Monitor Hazardous Waste Units Closed with Waste in Place or Track and Report on Facilities That Fall Under the Two Responsible Programs</i>	3
	<a href="#">17-P-0368</a>	<i>Improved Management of the Brownfields Revolving Loan Fund Program Is Required to Maximize Cleanups</i>	4
<b>Subtotal</b>			<b>12</b>
Office of Water	<a href="#">21-E-0264</a>	<i>EPA Needs an Agencywide Strategic Action Plan to Address Harmful Algal Blooms</i>	3
	<a href="#">21-P-0130</a>	<i>EPA Helps States Reduce Trash, Including Plastic, in U.S. Waterways but Needs to Identify Obstacles and Develop Strategies for Further Progress</i>	2
<b>Subtotal</b>			<b>5</b>
Office of Enforcement and Compliance Assurance	<a href="#">21-P-0114</a>	<i>EPA Does Not Consistently Monitor Hazardous Waste Units Closed with Waste in Place or Track and Report on Facilities That Fall Under the Two Responsible Programs</i>	1
<b>Subtotal</b>			<b>1</b>
Region 9	<a href="#">08-P-0196</a>	<i>Making Better Use of Stringfellow Superfund Special Accounts</i>	1
<b>Subtotal</b>			<b>1</b>
<b>Total</b>			<b>19</b>

Source: OIG Report No. [EPA-350-R-22-002](#), *Semiannual Report to Congress: April 1, 2022–September 30, 2022*. (EPA OIG table)

## ***Open and Unresolved Recommendations by Internal Control Objective Category***

Internal control objective	Report details		Action office	Number of open or unresolved recommendations*	Potential impact
	Report No.	Report title			
Operations: Improving effectiveness and efficiency	<a href="#">08-P-0196</a>	<i>Making Better Use of Stringfellow Superfund Special Accounts</i>	Region 9	1	The EPA stated that when the record of decision is made and the final settlement is signed for the Stringfellow Superfund site near Glen Avon, California, at the time expected in FY 2010, the Agency could reclassify or transfer to the Superfund Trust Fund some \$27.8 million excess funds, plus interest, from the special account. Completion of corrective actions on this open recommendation could make excess Stringfellow funds available for better use in Region 9 or elsewhere.
	<a href="#">17-P-0368</a>	<i>Improved Management of the Brownfields Revolving Loan Fund Program Is Required to Maximize Cleanups</i>	Office of Land and Emergency Management	2	For ten of the 20 closed Brownfields Revolving Loan Fund cooperative agreements reviewed, \$10.9 million available to clean up Brownfields was not being used as intended. Completion of corrective actions for these two recommendations would help ensure that, after cooperative agreement closeout, program income is reloaned, spent, or returned to the EPA.
	<a href="#">21-P-0114</a>	<i>EPA Does Not Consistently Monitor Hazardous Waste Units Closed with Waste in Place or Track and Report on Facilities That Fall Under the Two Responsible Programs</i>	Office of Land and Emergency Management	3	EPA oversight of hazardous waste treatment, storage, or disposal facilities that are referred to the Superfund program then deferred back to the Resource Conservation and Recovery Act program is incomplete, and EPA oversight of facilities managed by both programs was ineffective. This resulted in inaccurate data about accomplishment milestones used to communicate site status to the public and potentially misled or confused communities near these sites. Completion of corrective actions for these three recommendations would help improve oversight of these facilities and the Agency's communication to the public about their status.

Internal control objective	Report details		Action office	Number of open or unresolved recommendations*	Potential impact
	Report No.	Report title			
	<a href="#">21-P-0130</a>	<i>EPA Helps States Reduce Trash, Including Plastic, in U.S. Waterways but Needs to Identify Obstacles and Develop Strategies for Further Progress</i>	Office of Water	1	The EPA and states can reduce the volume of trash, including plastics, in U.S. waterways by evaluating barriers to implementing the Clean Water Act and developing strategies to overcome them. Completion of corrective actions for this recommendation would help ensure states receive strategic guidance for activities such as developing narrative water quality criteria, consistent assessment and measurement methodologies, and total maximum daily loads for trash pollution.
	<a href="#">21-E-0264</a>	<i>EPA Needs an Agencywide Strategic Action Plan to Address Harmful Algal Blooms</i>	Office of Water	3	The EPA does not have an agencywide strategy for addressing harmful algal blooms, despite Congress appointing the EPA administrator as the leader for federal actions focused on reducing, mitigating, and controlling freshwater harmful algal blooms. Completion of corrective actions for these three recommendations would help ensure the Agency develops an agencywide strategic action plan and a plan for developing related water-quality criteria recommendations under the Clean Water Act and determines whether actions are warranted under the Safe Drinking Water Act.
	<a href="#">22-E-0049</a>	<i>The Coronavirus Pandemic Caused Schedule Delays, Human Health Impacts, and Limited Oversight at Superfund National Priorities List Sites</i>	Office of Land and Emergency Management	2 (U)	Restrictions related to the Coronavirus pandemic—that is, the SARS-CoV-2 virus and resultant COVID-19 disease—resulted in work delays and limited on-site oversight of Superfund National Priorities List Sites, disproportionately affecting some communities. Completion of corrective actions for these two recommendations would help ensure the Agency conducts outreach meetings in communities where meetings did not occur during the pandemic and establishes guidance for conducting oversight of Superfund sites when travel or site access is limited.
<b>Subtotal</b>				<b>12</b>	

Internal control objective	Report details		Action office	Number of open or unresolved recommendations*	Potential impact
	Report No.	Report title			
<b>Reporting: Gathering and communicating useful information</b>	<a href="#">17-P-0368</a>	<i>Improved Management of the Brownfields Revolving Loan Fund Program Is Required to Maximize Cleanups</i>	Office of Land and Emergency Management	2	For ten of the 20 closed Brownfields Revolving Loan Fund cooperative agreements reviewed, \$10.9 million available to clean up Brownfields was not being used as intended. Completion of corrective actions for these two recommendations would help ensure the responsible office has vital information about Brownfields activities by better monitoring closed cooperative agreements and program income, as well as compliance with reporting requirements.
	<a href="#">21-P-0130</a>	<i>EPA Helps States Reduce Trash, Including Plastic, in U.S. Waterways but Needs to Identify Obstacles and Develop Strategies for Further Progress</i>	Office of Water	1	The EPA and states can reduce the volume of trash, including plastics, in U.S. waterways by evaluating barriers to implementing the Clean Water Act and developing strategies to overcome them. Completion of corrective actions for this open recommendation would provide the states and the public with information about these obstacles and contribute to development of strategies to surmount them.
	<a href="#">22-P-0033</a>	<i>Brownfields Program-Income Monitoring Deficiencies Persist Because the EPA Did Not Complete All Certified Corrective Actions</i>	Office of Land and Emergency Management	3	The Office of Brownfields and Land Revitalization did not complete corrective actions for all six recommendations in OIG Report No. 17-P-0368, and thus it lacks current and accurate information needed to determine whether some \$46.6 million in program income under closed Brownfields Revolving Loan Fund cooperative agreements was used timely and for the purposes authorized. Completion of corrective actions for these three recommendations would help ensure the availability of timely and accurate information about program income and activities.
<b>Subtotal</b>				<b>6</b>	
<b>Compliance: Adherence to laws and regulations</b>	<a href="#">21-P-0114</a>	<i>EPA Does Not Consistently Monitor Hazardous Waste Units Closed with Waste in Place or Track and Report on Facilities That Fall Under the Two Responsible Programs</i>	Office of Enforcement and Compliance Assurance	1	Completion of corrective actions for this open recommendation would help ensure inspection frequency meets the applicable statutory requirements or policy for treatment, storage, or disposal facilities with Resource Conservation and Recovery Act-permitted land-disposal units closed with waste in place. This, in turn, would help timely identify potential contamination and contribute to protection of human health and the environment.

Internal control objective	Report details		Action office	Number of open or unresolved recommendations*	Potential impact
	Report No.	Report title			
	<a href="#">22-P-0033</a>	<i>Brownfields Program-Income Monitoring Deficiencies Persist Because the EPA Did Not Complete All Certified Corrective Actions</i>	Office of Land and Emergency Management	2	The Office of Brownfields and Land Revitalization did not complete corrective actions for all six recommendations in OIG Report No. 17-P-0368, and thus, it lacks current and accurate information needed to determine whether some \$46.6 million in program income under closed Brownfields Revolving Loan Fund cooperative agreements was used timely and for the purposes authorized. Completion of corrective actions for these two recommendations would help to ensure program income balances are used or returned to the EPA.
	<a href="#">23-P-0003</a>	<i>The EPA Met 2018 Water Security Requirements but Needs to Improve Oversight to Support Water System Compliance</i>	Office of Water	4 (U)	The EPA did not provide adequate oversight to ensure the compliance of water systems—particularly small water systems—with America’s Water Infrastructure Act requirements. Water systems may, therefore, fail to meet America’s Water Infrastructure Act requirements and may not understand their vulnerability to malevolent acts. Completion of corrective actions for these four unresolved recommendations would help ensure water systems comply with America’s Water Infrastructure Act requirements and would improve risk and resilience assessments and emergency response plans as part of the Act’s ongoing certification process.
<b>Subtotal</b>				<b>7</b>	
<b>Total</b>				<b>25</b>	

Note: “U” denotes an unresolved recommendation.

Source: OIG Report No. [EPA-350-R-22-002](#), *Semiannual Report to Congress: April 1, 2022–September 30, 2022*. (EPA OIG table)

## ***Recommendations Taking One Year or More to Implement***

### ***Making Better Use of Stringfellow Superfund Special Accounts***

Report No. [08-P-0196](#), issued July 9, 2008

IIJA-Funded Program: Superfund

EPA Region 9 anticipated that by FY 2010 it could reclassify or transfer to the Superfund Trust Fund up to \$47.8 million in special account funds for the Stringfellow Superfund site located near Glen Avon, California. In response to our draft report, the region agreed to reclassify \$20 million of that amount by the end of FY 2008 and stated that it would review the remaining \$27.8 million annually and when it achieved a record of decision and settlement for the remaining site work in FY 2010. The Agency does not plan to implement Recommendation 2 until the end of FY 2026.

#### **Recommendations open one year or more after report issuance**

2. Reclassify or transfer to the Trust Fund, as appropriate, \$27.8 million (plus any earned interest less oversight costs) of the Stringfellow special accounts in annual reviews, and at other milestones including the end of Fiscal Year 2010, when the record of decision is signed and the final settlement is achieved.  
Responsible office: Region 9  
Initial planned completion: December 31, 2012, estimated at report issuance  
Revised planned completion dates: September 30, 2023, and September 30, 2026 (more than 18 years after issuance)

#### **Potential impact**

An 18-year delay in reclassifying funds indicates Region 9 has encountered serious issues in managing the Trust Fund, which could indicate additional concerns in managing increased funds under the IIJA.

### ***Improved Management of the Brownfields Revolving Loan Fund Program Is Required to Maximize Cleanups***

Report No. [17-P-0368](#), issued August 23, 2017

IIJA-Funded Program: Brownfields activities

About \$10.9 million available to clean up Brownfields is not being used as intended. Contaminated brownfield properties are not being cleaned up and redeveloped for ten of the 20 closed Brownfields Revolving Loan Fund cooperative agreements reviewed. The recipients of the cooperative agreements have not reloaned or spent program income collected after the closeout agreement was signed. Confusion across EPA regions and Brownfields Revolving Loan Fund recipients resulted in various inconsistencies that could potentially affect the long-term sustainability of the Brownfields Revolving Loan Fund program. The estimated completion dates for Recommendations 1 and 16 will provide no controls until the end of FY 2027.

#### **Recommendations open for one year or more after report issuance**

1. Develop a policy to reduce balances of available program income of Brownfields Revolving Loan Funds being held by recipients. The policy should establish a timeframe for recipients to use or return the funds to the EPA.  
Responsible office: Office of Land and Emergency Management  
Initial planned completion: March 31, 2018, estimated at report issuance  
Revised planned completion date: September 30, 2027

**Recommendations open for one year or more after report issuance**

8. Develop and implement required training for all regional Brownfields Revolving Loan Fund staff. Have the training include all program policy and guidance relating to maintaining a Brownfields Revolving Loan Fund after the cooperative agreement is closed if program income exists.

Responsible office: Office of Land and Emergency Management  
Initial planned completion: September 30, 2018, estimated at report issuance  
Revised planned completion date: March 31, 2023

14. Develop and implement a method for the Office of Brownfields and Land Revitalization to track closed cooperative agreements with pre- and post-program income.

Responsible office: Office of Land and Emergency Management  
Initial planned completion: September 30, 2018, estimated at report issuance  
Revised planned completion date: December 31, 2023

16. Create a method for the Office of Brownfields and Land Revitalization, and EPA regional managers, to track compliance with reporting requirements for closed cooperative agreements.

Responsible office: Office of Land and Emergency Management  
Initial planned completion: June 30, 2018, estimated at report issuance  
Revised planned completion date: September 30, 2027

**Potential impact**

The inability to establish policies and methods, that is, internal controls, over the Brownfields program increases program risk.

***EPA Does Not Consistently Monitor Hazardous Waste Units Closed with Waste in Place or Track and Report on Facilities That Fall Under the Two Responsible Programs***

Report No. [21-P-0114](#), issued March 29, 2021

IJA-Funded Program: Superfund

Almost half (339 of 687, or 49.3 percent) of treatment, storage, or disposal facilities with Resource Conservation and Recovery Act, or RCRA, units closed with waste in place were not inspected at the frequency set by EPA policy. EPA regional oversight of treatment, storage, or disposal facility inspections by authorized states is also inconsistent. EPA oversight of RCRA units referred to the Superfund program and those deferred back to the RCRA program is incomplete, and lacking procedures made it uncertain whether either program is appropriately managing RCRA units. Recommendation 2 controls will not be available in the next 12 months.

**Recommendations open one year or more after report issuance**

2. In collaboration with the Office of Land and Emergency Management, establish mechanisms to ensure that all inspections are completed within the required time frame of two years for operating treatment, storage, or disposal facilities or the policy time frame of three years for nonoperating treatment, storage, or disposal facilities.

Responsible office: Office of Enforcement and Compliance Assurance  
Initial planned completion: Not applicable  
Revised planned completion date: March 29, 2024

4. Develop and implement controls to verify that the Superfund program deferrals to the Resource Conservation and Recovery Act are added to RCRAInfo for further Resource Conservation and Recovery Act attention, as necessary.

Responsible office: Office of Land and Emergency Management  
Initial planned completion date: September 30, 2023, estimated at report issuance  
Revised planned completion date: Not applicable

<b>Recommendations open one year or more after report issuance</b>	
5.	<p>Develop and maintain a crosswalk of Superfund Enterprise Management System and corresponding RCRAInfo identification numbers.</p> <p>Responsible office: Office of Land and Emergency Management            Initial planned completion date: Not applicable            Revised planned completion date: December 31, 2022</p>
6.	<p>Develop and implement controls to identify and eliminate overlap of environmental indicators between Resource Conservation and Recovery Act Corrective Action and Superfund Programs and include this information in public queries, such as Cleanups in My Community.</p> <p>Responsible office: Office of Land and Emergency Management            Initial planned completion date: June 30, 2022            Revised planned completion date: March 31, 2023</p>
<b>Potential impact</b>	
<p>Not completing inspections at treatment, storage, or disposal facilities at a frequency compliant with applicable statutory requirements, as well as other shortcomings with Agency oversight and communication with the public, indicates a lack of adequate internal control to effectively administer Superfund and RCRA programs to meet requirements under historic appropriation levels, suggesting increased funding and added requirements could put Agency programs at further risk.</p>	

***EPA Helps States Reduce Trash, Including Plastic, in U.S. Waterways but Needs to Identify Obstacles and Develop Strategies for Further Progress***

**Report No. [21-P-0130](#), issued May 11, 2021**

**IIJA-Funded Program:** Clean Water State Revolving Funds

The EPA and states have not widely applied all the tools established by the Clean Water Act to reduce the trash, including plastic, in U.S. waterways. Trash pollution in water bodies is challenging to control because it is made up of many substances and is both a point- and nonpoint source pollutant and the EPA has not established consistent methods for measuring it. The EPA can further improve its efforts by evaluating the regulatory and nonregulatory obstacles facing states and municipalities implementing the Clean Water Act and by continuing its support of trash-reduction initiatives.

<b>Recommendations open one year or more after report issuance</b>	
1.	<p>Evaluate the obstacles to implementing the Clean Water Act to control trash in U.S. waterways and provide a public report describing those obstacles.</p> <p>Responsible office: Office of Water            Initial planned completion: December 31, 2021, estimated at report issuance            Revised planned completion date: February 28, 2023</p>
2.	<p>Develop and disseminate strategies to states and municipalities for addressing the obstacles identified in the evaluation from Recommendation 1. These strategies may include guidance regarding how to develop narrative water quality criteria, consistent assessment and measurement methodologies, and total maximum daily loads for trash pollution.</p> <p>Responsible office: Office of Water            Initial planned completion: April 30, 2023, estimated at report issuance            Revised planned completion date: Not applicable</p>
<b>Potential impact</b>	
<p>By not evaluating the obstacles that states and municipalities face and providing them with strategies to overcome those obstacles, the EPA risks progress toward improving implementation of the Clean Water Act being hampered. The IIJA is providing the EPA some \$375 million in added funding for activities related to solid waste management, recycling infrastructure, battery recycling guidance, and other recycling-related outreach to states and municipalities. These activities may also be hampered if the Agency does not similarly identify and address the barriers that state and local governments face.</p>	

## EPA Needs an Agencywide Strategic Action Plan to Address Harmful Algal Blooms

Report No. [21-E-0264](#), issued September 29, 2021

IJA-Funded Program: Drinking Water State Revolving Funds

The EPA does not have an agencywide strategy for addressing harmful algal blooms, despite Congress appointing the EPA administrator as the leader for federal actions focused on reducing, mitigating, and controlling freshwater harmful algal blooms. By creating an agencywide harmful algal bloom strategy, the EPA can reduce harmful algal blooms and their impacts on human health and the environment using the authorities and tools provided by the Clean Water and Safe Drinking Water Acts. Additionally, the EPA has not fulfilled its 2015 commitment to Congress to develop additional drinking water health advisories for cyanotoxins associated with some blooms as information becomes available. The EPA also needs to take further action to develop revised nitrogen and phosphorus numeric water-quality criteria recommendations for states to adopt to better control levels of these nutrients in water bodies.

### Recommendations open one year or more after report issuance

1. Develop an agencywide strategic action plan, including milestones, to direct the EPA's efforts to maintain and enhance a national program to forecast, monitor, and respond to freshwater harmful algal blooms. This plan should incorporate strategies for: (a) identifying knowledge gaps; (b) closing identified knowledge gaps, particularly related to health risks from exposure to cyanotoxins in drinking water and during recreational activities; (c) monitoring and tracking harmful algal blooms; (d) enhancing the EPA's national leadership role in addressing freshwater algal blooms; (e) coordinating EPA activities internally and with states; and (f) assessing the health risks from exposure to cyanotoxins in drinking water and during recreational activities and establishing additional criteria, standards, and advisories, as the scientific information allows.

Responsible office: Office of Water

Initial planned completion: January 31, 2023, estimated at report issuance

Revised planned completion date: Not applicable

3. Mindful that the EPA has substantial work to complete before publishing final numeric water quality criteria recommendations for nitrogen and phosphorus under the Clean Water Act for rivers and streams, establish a plan, including milestones and identification of resource needs, for developing and publishing those criteria recommendations.

Responsible office: Office of Water

Initial planned completion: April 30, 2023, estimated at report issuance

Revised planned completion date: Not applicable

4. Assess and evaluate the available information on human health risks from exposure to cyanotoxins in drinking water and recreational waters to determine whether actions under the Safe Drinking Water Act are warranted.

Responsible office: Office of Water

Initial planned completion: December 31, 2022, estimated at report issuance

Revised planned completion date: Not applicable

### Potential impact

Without a strategic action plan that is useful for aiding resource and policy decisions and ensuring accountability, the Agency's programs to reduce harmful algal blooms and their impacts on human health and the environment may not be operating at maximum effectiveness. A strategic action plan, as well as additional health advisories for cyanotoxins associated with some blooms and further action to develop revised nitrogen and phosphorus numeric water-quality criteria recommendations for states to adopt, could benefit the Agency as it expects to receive at least \$60 million in additional funding related to hypoxia in the Gulf of Mexico and the Mississippi and Ohio Rivers.

## ***Distribution***

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