United States
Environmental Protection Agency

FISCAL YEAR 2022

Justification of Appropriation Estimates for the Committee on Appropriations

Tab 04: Environmental Programs and Management

EPA-190-R-21-002

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Environmental Protection Agency
FY 2022 Annual Performance Plan and Congressional Justification

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APPROPRIATION: Environmental Programs & Management
Resource Summary Table

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management				
Budget Authority	$2,713,792.7	$2,761,550.0	$3,427,494.0	$665,944.0
Total Workyears	8,473.5	8,883.4	9,683.2	799.8

Bill Language: Environmental Programs & Management

For environmental programs and management, including necessary expenses not otherwise provided for, for personnel and related costs and travel expenses; hire and purchase of passenger motor vehicles; hire, maintenance, and operation of aircraft; purchase of reprints; library memberships in societies or associations which issue publications to members only or at a price to members lower than to subscribers who are not members; administrative costs of the brownfields program under the Small Business Liability Relief and Brownfields Revitalization Act of 2002; implementation of a coal combustion residual permit program under section 2301 of the Water and Waste Act of 2016; and not to exceed $9,000 for official reception and representation expenses, $3,427,494,000, to remain available until September 30, 2023: Provided, That of the funds included under this heading, $578,336,000 shall be for Geographic Programs specified in the explanatory statement.: Provided further, That of the funds included under this heading, the Chemical Risk Review and Reduction program project shall be allocated for this fiscal year, excluding the amount of any fees appropriated, not less than the amount of appropriations for that program project for fiscal year 2014: Provided further, That of the funds included under this heading, $140,000,000, to remain available until expended, shall be for environmental justice implementation grants, of which $50,000,000 shall be for competitive grants to reduce the disproportionate health impacts of environmental pollution in the environmental justice community; $25,000,000 shall be for an Environmental Justice Community Grant Program for grants to nonprofits to reduce the disproportionate health impacts of environmental pollution in the environmental justice community; $25,000,000 shall be for an Environmental Justice State Grant Program for grants to states to create or support state environmental justice pro- grams; $25,000,000 shall be for a Tribal Environmental Justice Grant Program for grants to tribes or intertribal consortia to support tribal work to eliminate dis- proportionately adverse human health or environmental effects on environmental justice communities in Tribal and indigenous communities; and $15,000,000 shall be for a competitive Community-based Participatory Research Grant Program for grants to institutions of higher education to develop partnerships with community- based organizations to improve the health outcomes of residents and workers in environmental justice communities: Provided further, That of the funds included under this heading, $10,000,000, to remain available until expended, shall be for an Environmental Justice Training Program for grants to nonprofits for multi- media or single media activities to increase the capacity of residents of underserved communities to identify and address disproportionately

adverse human health or environmental effects of pollution: Provided further, That the Administrator, jointly with the Secretary of Energy, and in consultation with the Administrator of the General Services Agency and the Administrator of the Office of Federal Procurement Policy, shall design and implement a "Buy Clean" procurement pilot that places preference on the purchase or acquisition of goods, products, or materials that are in a manner that results in, or otherwise promotes, the reduction of greenhouse gas emissions.

Program Projects in EPM
(Dollars in Thousands)

Program Project	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Clean Air and Climate				
Clean Air Allowance Trading Programs	$15,503.2	$13,153.0	$18,138.0	$4,985.0
Climate Protection	$103,054.5	$97,000.0	$103,689.0	$6,689.0
Federal Stationary Source Regulations	$21,244.6	$20,733.0	$26,618.0	$5,885.0
Federal Support for Air Quality Management	$131,855.1	$138,020.0	$257,808.0	$119,788.0
Stratospheric Ozone: Domestic Programs	$4,872.4	$4,633.0	$10,901.0	$6,268.0
Stratospheric Ozone: Multilateral Fund	$8,347.0	$8,711.0	$18,000.0	$9,289.0
Subtotal, Clean Air and Climate	$284,876.8	$282,250.0	$435,154.0	$152,904.0
Indoor Air and Radiation				
Indoor Air: Radon Program	$2,680.4	$3,136.0	$3,167.0	$31.0
Radiation: Protection	$8,912.4	$7,661.0	$10,342.0	$2,681.0
Radiation: Response Preparedness	$2,616.2	$2,404.0	$2,908.0	$504.0
Reduce Risks from Indoor Air	$10,934.8	$11,750.0	$13,837.0	$2,087.0
Subtotal, Indoor Air and Radiation	$25,143.8	$24,951.0	$30,254.0	$5,303.0
Brownfields				
Brownfields	$23,332.9	$24,000.0	$24,197.0	$197.0
Compliance				
Compliance Monitoring	$98,418.4	$102,500.0	$132,350.0	$29,850.0
Enforcement				
Civil Enforcement	$162,505.0	$168,341.0	$194,623.0	$26,282.0
Criminal Enforcement	$50,326.2	$51,275.0	$59,121.0	$7,846.0
Environmental Justice	$9,482.5	$11,838.0	$293,862.0	$282,024.0
NEPA Implementation	$15,337.8	$16,943.0	$18,966.0	$2,023.0
Subtotal, Enforcement	$237,651.5	$248,397.0	$566,572.0	$318,175.0
Geographic Programs				
Geographic Program: Chesapeake Bay	$87,690.4	$87,500.0	$90,500.0	$3,000.0
Geographic Program: Gulf of Mexico	$13,833.9	$20,000.0	$22,447.0	$2,447.0

Program Project	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Geographic Program: Lake Champlain	$13,387.0	$15,000.0	$20,000.0	$5,000.0
Geographic Program: Long Island Sound	$20,642.6	$30,400.0	$40,000.0	$9,600.0
Geographic Program: Other				
Lake Pontchartrain	$947.0	$1,442.0	$1,737.0	$295.0
S.New England Estuary (SNEE)	$5,244.8	$5,400.0	$6,252.0	$852.0
Geographic Program: Other (other activities)	$3,672.1	$3,558.0	$3,245.0	-$313.0
Subtotal, Geographic Program: Other	$9,863.9	$10,400.0	$11,234.0	$834.0
Great Lakes Restoration	$346,143.7	$330,000.0	$340,000.0	$10,000.0
Geographic Program: South Florida	$2,739.6	$6,000.0	$7,155.0	$1,155.0
Geographic Program: San Francisco Bay	$5,907.2	$8,922.0	$12,000.0	$3,078.0
Geographic Program: Puget Sound	$32,861.0	$33,750.0	$35,000.0	$1,250.0
Subtotal, Geographic Programs	$533,069.3	$541,972.0	$578,336.0	$36,364.0
Homeland Security				
Homeland Security: Communication and Information	$4,935.3	$4,145.0	$4,557.0	$412.0
Homeland Security: Critical Infrastructure Protection	$990.3	$909.0	$1,008.0	$99.0
Homeland Security: Protection of EPA Personnel and Infrastructure	$4,175.9	$4,959.0	$5,139.0	$180.0
Subtotal, Homeland Security	$10,101.5	$10,013.0	$10,704.0	$691.0
Information Exchange / Outreach				
State and Local Prevention and Preparedness	$13,660.5	$13,736.0	$14,003.0	$267.0
TRI / Right to Know	$12,225.3	$13,206.0	$13,450.0	$244.0
Tribal - Capacity Building	$13,639.3	$12,902.0	$15,971.0	$3,069.0
Executive Management and Operations	$50,346.8	$46,836.0	$54,792.0	$7,956.0
Environmental Education	$6,388.7	$8,580.0	$8,615.0	$35.0
Exchange Network	$14,906.1	$14,084.0	$14,226.0	$142.0
Small Minority Business Assistance	$1,363.2	$1,680.0	$1,884.0	$204.0
Small Business Ombudsman	$2,145.2	$1,778.0	$1,929.0	$151.0
Children and Other Sensitive Populations: Agency Coordination	$6,209.9	$6,173.0	$6,247.0	$74.0
Subtotal, Information Exchange / Outreach	$120,885.0	$118,975.0	$131,117.0	$12,142.0
International Programs				
US Mexico Border	$2,955.4	$2,837.0	$3,192.0	$355.0
International Sources of Pollution	$6,240.6	$6,746.0	$8,006.0	$1,260.0
Trade and Governance	$5,608.4	$5,292.0	$6,080.0	$788.0
Subtotal, International Programs	$14,804.4	$14,875.0	$17,278.0	$2,403.0

Program Project	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
IT / Data Management / Security				
Information Security	$6,190.4	$8,285.0	$14,116.0	$5,831.0
IT / Data Management	$86,699.8	$82,715.0	$86,744.0	$4,029.0
Subtotal, IT / Data Management / Security	$92,890.2	$91,000.0	$100,860.0	$9,860.0
Legal / Science / Regulatory / Economic Review				
Integrated Environmental Strategies	$11,398.1	$9,475.0	$17,719.0	$8,244.0
Administrative Law	$4,524.5	$4,975.0	$5,704.0	$729.0
Alternative Dispute Resolution	$800.2	$864.0	$1,141.0	$277.0
Civil Rights Program	$9,468.4	$9,205.0	$13,946.0	$4,741.0
Legal Advice: Environmental Program	$49,878.3	$49,595.0	$71,895.0	$22,300.0
Legal Advice: Support Program	$14,475.0	$15,865.0	$18,315.0	$2,450.0
Regional Science and Technology	$1,060.5	$638.0	$1,174.0	$536.0
Science Advisory Board	$3,903.2	$3,205.0	$3,475.0	$270.0
Regulatory/Economic-Management and Analysis	$12,643.4	$12,421.0	$13,463.0	$1,042.0
Subtotal, Legal / Science / Regulatory / Economic Review	$108,151.6	$106,243.0	$146,832.0	$40,589.0
Operations and Administration				
Central Planning, Budgeting, and Finance	$70,751.8	$76,718.0	$81,563.0	$4,845.0
Facilities Infrastructure and Operations	$285,437.3	$285,441.0	$297,748.0	$12,307.0
Acquisition Management	$27,433.0	$32,247.0	$34,121.0	$1,874.0
Human Resources Management	$47,042.8	$46,229.0	$53,254.0	$7,025.0
Financial Assistance Grants / IAG Management	$26,319.8	$25,430.0	$28,730.0	$3,300.0
Subtotal, Operations and Administration	$456,984.7	$466,065.0	$495,416.0	$29,351.0
Pesticides Licensing				
Science Policy and Biotechnology	$1,887.3	$1,546.0	$1,546.0	$0.0
Pesticides: Protect Human Health from Pesticide Risk	$60,580.8	$60,181.0	$60,929.0	$748.0
Pesticides: Protect the Environment from Pesticide Risk	$37,650.6	$39,543.0	$39,952.0	$409.0
Pesticides: Realize the Value of Pesticide Availability	$6,173.0	$7,730.0	$7,792.0	$62.0
Subtotal, Pesticides Licensing	$106,291.7	$109,000.0	$110,219.0	$1,219.0
Research: Chemical Safety for Sustainability				
Research: Chemical Safety for Sustainability	$143.0	$0.0	$0.0	$0.0
Resource Conservation and Recovery Act (RCRA)				
RCRA: Corrective Action	$35,671.5	$38,453.0	$38,836.0	$383.0
RCRA: Waste Management	$64,884.9	$70,465.0	$71,082.0	$617.0

Program Project	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
RCRA: Waste Minimization & Recycling	$9,051.3	$9,982.0	$10,202.0	$220.0
Subtotal, Resource Conservation and Recovery Act (RCRA)	$109,607.7	$118,900.0	$120,120.0	$1,220.0
Toxics Risk Review and Prevention				
Endocrine Disruptors	$11,030.3	$7,533.0	$7,565.0	$32.0
Pollution Prevention Program	$11,475.6	$12,558.0	$12,588.0	$30.0
Toxic Substances: Chemical Risk Management	$0.0	$0.0	$0.0	$0.0
Toxic Substances: Chemical Risk Review and Reduction	$67,369.7	$60,280.0	$75,519.0	$15,239.0
Toxic Substances: Lead Risk Reduction Program	$11,859.6	$13,129.0	$13,385.0	$256.0
Subtotal, Toxics Risk Review and Prevention	$101,735.2	$93,500.0	$109,057.0	$15,557.0
Underground Storage Tanks (LUST / UST)				
LUST / UST	$10,841.7	$11,250.0	$11,443.0	$193.0
Water: Ecosystems				
National Estuary Program / Coastal Waterways	$30,863.9	$31,822.0	$31,963.0	$141.0
Wetlands	$20,212.0	$19,300.0	$24,899.0	$5,599.0
Subtotal, Water: Ecosystems	$51,075.9	$51,122.0	$56,862.0	$5,740.0
Water: Human Health Protection				
Beach / Fish Programs	$1,337.2	$1,584.0	$1,804.0	$220.0
Drinking Water Programs	$101,007.3	$106,903.0	$118,265.0	$11,362.0
Subtotal, Water: Human Health Protection	$102,344.5	$108,487.0	$120,069.0	$11,582.0
Water Quality Protection				
Marine Pollution	$9,153.2	$9,468.0	$12,072.0	$2,604.0
Surface Water Protection	$201,289.7	$206,882.0	$218,582.0	$11,700.0
Subtotal, Water Quality Protection	$210,442.9	$216,350.0	$230,654.0	$14,304.0
Congressional Priorities				
Water Quality Research and Support Grants	$15,000.0	$21,700.0	$0.0	-$21,700.0
TOTAL EPM	**$2,713,792.7**	**$2,761,550.0**	**$3,427,494.0**	**$665,944.0**

Clean Air

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$15,503.2***	***$13,153.0***	***$18,138.0***	***$4,985.0***
Science & Technology	$7,537.7	$6,793.0	$8,800.0	$2,007.0
Total Budget Authority	$23,040.9	$19,946.0	$26,938.0	$6,992.0
Total Workyears	63.9	63.7	78.7	15.0

Program Project Description:

The Clean Air Allowance Trading Programs are nationwide and multi-state programs that address air pollutants that are transported across state, regional, and international boundaries. The programs, designed to control sulfur dioxide (SO_2) and nitrogen oxides (NO_X), key precursors of both fine particulate matter ($PM_{2.5}$) and ozone (O_3), include Title IV (the Acid Rain Program) of the Clean Air Act, the Cross-State Air Pollution Rule (CSAPR), the CSAPR Update, and the revised CSAPR Update. The infrastructure for the Clean Air Allowance Trading Programs also supports implementation of other state and federal programs to control SO_2, hazardous air pollutants, and greenhouse gases.

The Clean Air Allowance Trading Programs establish a total emission limit across affected emission sources, which must hold allowances as authorizations to emit one ton of the regulated pollutant(s) in a specific emission control period. The owners and operators of affected emission sources may select among different methods of compliance—installing pollution control equipment, switching fuel types, shifting generation to lower-emitting units, purchasing allowances, or other strategies. By offering the flexibility to determine how the sources comply, the programs lower the overall cost, making it feasible to pursue greater emission reductions. These programs are managed through a centralized database system operated by EPA.[1] Data collected under these programs are made available to the public through EPA's Clean Air Markets Data Resources website[2], which provides access to both current and historical data collected as part of the Clean Air Allowance Trading Programs through charts, reports, and downloadable datasets. To implement the Clean Air Allowance Trading Programs, EPA operates an emission measurement and reporting program, market operations program, environmental monitoring programs, and a communication and stakeholder engagement program.

For emissions measurement and reporting, Part 75 requires almost 4,300 affected units to monitor and report emission and operation data.[3] The Part 75 program requires high degrees of accuracy and reliability from continuous emission monitoring systems or approved alternative methods at the affected sources. EPA provides the affected emission sources with technical assistance to facilitate compliance with the monitoring requirements, and software, the Emissions Collection

[1] Clean Air Act § 403(d).
[2] For additional information, please refer to https://www.epa.gov/airmarkets/data-resources.
[3] Clean Air Act § 412; Clean Air Act Amendments of 1990. P.L. 101-549 § 821.

and Monitoring Plan System (ECMPS), to process, quality assure, and report data to EPA. To assess the quality of the data, the Agency conducts electronic audits, desk reviews, and field audits of the emission data and monitoring systems. In addition to the Clean Air Allowance Trading Programs, the emission measurement program and ECMPS software support several state and federal emission control and reporting programs, including the Texas SO_2 Trading Program, Regional Greenhouse Gas Initiative (RGGI), and Mercury and Air Toxics Standards (MATS). It also interfaces with the Greenhouse Gas Reporting Program (GHGRP), ensuring the Part 75 data is seamlessly transferred to that program's infrastructure (Electronic Greenhouse Gas Reporting Tool (eGGRT)).

EPA's centralized market operation system (the allowance tracking system) manages accounts and records allowance allocations and transfers.[4] At the end of each compliance period, allowances are reconciled against reported emissions to determine compliance for every facility with affected emission sources. For over 20 years, the affected facilities have maintained near-perfect compliance under the trading programs.[5] In 2020, total annual SO_2 emissions from Acid Rain Program-affected emission sources were 788,000 tons, or over 90 percent below the statutory nationwide emissions cap, a level not seen since early in the 20th Century. Total annual 2020 NO_X emissions were 759,000 tons, an almost 9 million ton reduction from projected levels, exceeding the program's goal of a 2 million ton reduction from projected levels.[6] The allowance tracking system also supports several state and federal emission control and reporting programs, including the Texas SO_2 Trading Program, RGGI, and MATS.

The Clean Air Act's Good Neighbor provision[7] requires states or, in some circumstances, the Agency to reduce interstate pollution that significantly contributes to nonattainment or interferes with maintenance of the National Ambient Air Quality Standards. Under this authority, EPA issued CSAPR, which requires 27 states in the eastern U.S. to limit their state-wide emissions of SO_2 and/or NO_X to reduce or eliminate the states' contributions to $PM_{2.5}$ and/or ground-level ozone non-attainment of the NAAQS in downwind states. The emission limitations are defined in terms of maximum statewide "budgets" for emissions of annual SO_2, annual NO_X, and/or ozone-season NO_X emissions from certain large stationary sources in each state. In 2016, EPA issued the CSAPR Update to address interstate transport of ozone for the 2008 ozone NAAQS in the eastern United States. EPA revised the CSAPR Update on March 15, 2021, to address a ruling of the U.S. Court of Appeals for the D.C. Circuit. In addition, EPA is supporting state efforts to address regional haze including best available retrofit technology and reasonable progress, as well as interstate air pollution transport contributing to downwind nonattainment of NAAQS as those obligations relate to emissions from electricity generating units.[8] EPA is conducting environmental justice analyses of the distribution of these emissions and associated public health impacts on overburdened communities.

EPA manages the Clean Air Status and Trends Network (CASTNET), which monitors ambient ozone, sulfate, and nitrate concentrations, dry sulfur and nitrogen deposition, and other air quality indicators. In addition, EPA participates in the National Atmospheric Deposition Program, which

[4] Clean Air Act § 403(d).
[5] For more information, please refer to: http://www3.epa.gov/airmarkets/progress/reports/index.html.
[6] For more information, please refer to: https://www.epa.gov/airmarkets/power-plant-emission-trends.
[7] Clean Air Act § 110(a)(2)(D); also refer to Clean Air Act § 110(c).
[8] Clean Air Act § 110 and § 169A; refer to 40 CFR 52.2312.

monitors wet deposition of sulfur, nitrogen, and mercury, as well as ambient concentrations of mercury and ammonia. EPA also manages the Long-Term Monitoring (LTM) program to assess how lakes, streams, and aquatic ecosystems are responding to reductions in sulfur and nitrogen emissions. Data from these air quality and environmental monitoring programs, in conjunction with SO_2, NO_X, mercury, and CO_2 emissions data from the Part 75 monitoring program and mercury emissions data from the MATS reporting program, have allowed EPA to develop a comprehensive accountability framework to track the results of its air quality programs. EPA applies this framework to the programs it implements and issues annual progress reports on compliance and environmental results achieved by the Acid Rain Program, CSAPR, and the CSAPR Update, and pollution controls installed and emissions reductions achieved by MATS.[9] Required by Congress in the FY 2019 and FY 2020 appropriations reports, these annual progress reports highlight reductions in SO_2 and NO_X emissions, and impacts of these reductions on air quality (e.g., ozone and $PM_{2.5}$ levels), acid deposition, surface water acidity, forest health, and other environmental indicators.

EPA produces several tools to inform the public and key stakeholders about power sector emissions, operations, and environmental data. The Emissions & Generation Resource Integrated Database (eGRID)[10] is a comprehensive source of data on the environmental characteristics of almost all electric power generated in the U.S. eGRID data are used by other EPA programs, state energy and air agencies, and researchers. Between 2015 and 2020, eGRID was cited by more than 1,300 academic papers. Power Profiler[11] is a web application where electricity consumers can see the fuel mix and air emissions rates of their region's electricity and determine the air emissions associated with their electricity use. In keeping with the Agency's renewed commitment to energy equity and environmental justice, EPA is developing analytical and mapping tools to better understand and communicate the impact of electricity generation on low-income communities and communities of color. EPA also operates several initiatives to engage key stakeholders, including working closely with tribal governments to build tribal air monitoring capacity through partnerships with the CASTNET program. The EmPOWER Air Data Challenge[12] encourages academic researchers to propose how to integrate the EPA emissions and/or environmental data in their research. The Ask CAMD webinars provide an opportunity for stakeholders to ask EPA's Clean Air Markets Division staff about the Clean Air Allowance Trading Programs, Part 75 emission reporting program, and the emission and environmental data.

EPA also develops multiple models and tools to project future emissions from the power sector to inform EPA's air quality modeling and air, water, and land regulations affecting power plants. The Integrated Planning Model (IPM) is a state-of-the-art, peer-reviewed, dynamic linear programming model that EPA develops to project power sector behavior under future business-as-usual conditions and to examine prospective air pollution control policies throughout the contiguous United States for the entire electric power system. EPA uses IPM, along with the National Energy Modeling System (NEMS) and the Regional Energy Deployment System (ReEDS), to project likely future electricity market conditions and associated pollutant emissions with and without legislative and regulatory policies under consideration by Congress and the

[9] To view the progress reports, please refer to: http://www3.epa.gov/airmarkets/progress/reports/index.html.
[10] To view eGRID, please refer to https://www.epa.gov/egrid.
[11] To view Power Profiler, please refer to https://www.epa.gov/egrid/power-profiler.
[12] For more information about the challenge, refer to https://www.epa.gov/airmarkets/empower-air-data-challenge.

Administration. The National Electric Energy Data System (NEEDS) includes geographic, operating, air emissions, and other data on existing and planned grid-connected electric generating units across the contiguous United States. EPA updates and publishes NEEDS on a quarterly basis to inform emission modeling projections and to provide timely information to air quality planners and policy-makers developing regulations to address power sector pollution. EPA is augmenting these power sector models and tools to include important information pertinent to environmental justice analyses and community-level impacts.

FY 2022 Activities and Performance Plan:

Work in this program directly supports the President's priorities to tackle the climate crisis, advance environmental justice, and expand the capacity of EPA.

In FY 2022, EPA will continue to operate the Clean Air Allowance Trading Programs and the systems to assess compliance with the programs' regulatory requirements and the programs' progress toward the environmental goals required by the Clean Air Act. EPA will work to meet requirements and requests for modeling in support of the power sector and for legal defense of regulatory actions. The Program will continue to support emission reporting for other state and federal programs, including MATS and GHGRP.[13]

Allowance tracking and compliance assessment
EPA will allocate SO_2 and NO_X allowances to affected emission sources and other account holders as established in the Clean Air Act[14] and state and federal CSAPR implementation plans. These allowance holdings and subsequent allowance transfers will be maintained in an allowance tracking system (i.e., central database).[15] At the end of each compliance period, EPA will reconcile each facility's allowance holdings against its emissions to ensure compliance for all affected sources.[16]

Emission measurement and data collection and review
EPA will operate the Part 75 emission measurement program to collect, verify, and track emissions of air pollutants and air toxics from approximately 4,300 fossil-fuel-fired electric generating units.[17]

Program assessment and communication
EPA will continue to monitor ambient air, deposition, and other environmental indicators through the CASTNET and LTM programs, serve as a part of the National Atmospheric Deposition Program, publish the power sector progress reports required by Congress, and produce other information to communicate the extent of the progress made by the Clean Air Allowance Trading

[13] Refer to, 40 C.F.R. Part 63, Subpart UUUUU (*National Emission Standards for Hazardous Air Pollutants: Coal and Oil Fired Electric Utility Steam Generating Units*) and 40 C.F.R. Part 98, Subpart D (*Mandatory Greenhouse Gas Reporting: Electricity Generation*).
[14] Clean Air Act §§ 110 and 403.
[15] Clean Air Act §§ 110 and 403.
[16] Clean Air Act §§ 110 and 404-405, and state CSAPR implementation plans.
[17] Clean Air Act § 412; Clean Air Act Amendments of 1990. P.L. 101-549 § 821; and 40 C.F.R. Part 63, Subpart UUUUU.

Programs.[18] EPA will publish emissions and environmental data on our Air Markets and eGRID websites.

Redesign system applications
EPA will continue the redesign of its Air Markets Program Data website and Emission Collection Monitoring Plan System software. These mission critical systems support the trading programs, as well as other emissions reporting programs operated by the states (e.g., RGGI) and EPA (e.g., MATS, GHGRP). Reengineering these decade-old systems will enable EPA to enhance the user experience, comply with EPA security and technology requirements, consolidate software systems, and reduce long-term operation and maintenance costs.

Assistance to states
EPA will work with states to develop emission reduction programs to comply with the Clean Air Act Good Neighbor Provision and Regional Haze program requirements.[19]

Stakeholder engagement
EPA will continue to engage our stakeholder communities through efforts to maintain and strengthen current tribal air monitoring partnerships and build new ones to the extent possible. In addition, EPA has new efforts underway to identify how power plant pollution impacts historically marginalized and overburdened disadvantaged communities, and how EPA air rules can mitigate those impacts. EPA also seeks to communicate information about power plant emissions and the contributions to low-income communities and communities of color, and encourage the use of the Clean Air Allowance Trading Programs' data for scientific analysis and communication through various programs and tools such as CAMD(ej), EmPOWER Air Data Challenge, and Ask CAMD webinars.

Policy and regulatory development
EPA will contribute multipollutant and multi-media (air, water, land) power sector analyses informing EPA's policy agenda to tackle the climate crisis and protect public health and the environment, including environmental justice analyses to consider the distributional impacts of emissions on overburdened communities. Analytic and policy topics addressing climate change and air pollution that could be analyzed include a wide range of power sector actions under the CAA, as well as analysis of interactions between alternative vehicle electrification futures and associated changes in electric power generation.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

For more information on program performance, please visit:
http://www.epa.gov/airmarket/progress/progress-reports.html.

[18] Government Performance and Results Act § 1115.
[19] Clean Air Act § 110(a)(2)(D).

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$303.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$4,682.0 / +15.0 FTE) This program change increases support to emissions trading programs that protect human health and the environment by delivering substantial emissions reductions in the power sector of SO_2, NO_x, and hazardous air pollutants, along with significant improvements in air quality and the environment. This proposal expands EPA's ability to perform advanced power sector analyses to tackle the climate crisis, including developing environmental justice tools to consider the distributional impacts of emissions on overburdened communities. This investment includes $2,520.0 thousand in payroll costs.

Statutory Authority:

Clean Air Act.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$103,054.5***	***$97,000.0***	***$103,689.0***	***$6,689.0***
Science & Technology	$7,326.8	$7,895.0	$9,997.0	$2,102.0
Total Budget Authority	$110,381.3	$104,895.0	$113,686.0	$8,791.0
Total Workyears	205.1	214.1	227.9	13.8

Program Project Description:

EPA's Climate Protection Program is working to tackle the climate crisis at home and abroad through an integrated approach of regulations, partnerships, and technical assistance. This Program takes strong action to limit carbon dioxide (CO_2) and methane emissions as well as working to reduce high-global warming potential climate pollutants, like hydrofluorocarbons (HFCs), that will help the U.S. realize near-term climate benefits. Through partnerships, tools, verification, and publication of greenhouse gas (GHG) emissions data, advancing our understanding of climate science and impacts, and economic modeling and policy analysis, EPA provides flexibility and lower costs for federal, state and local government agencies and key GHG-emitting sectors, and works to ensure environmental and public health benefits for all Americans. EPA also extends this expertise internationally and plays critical roles in shaping and advancing international agreements and solutions. This international collaboration helps to both improve public health and air quality in the United States and level the playing field for American businesses by retaining and creating union jobs.

Greenhouse Gas Reporting Program:
EPA implements the U.S. Greenhouse Gas Reporting Program under the CAA. In 2007, Congress directed EPA to "require mandatory reporting of greenhouse gas emissions above appropriate thresholds in all sectors of the economy of the U.S." EPA annually collects data from over 8,100 facilities from 41 large industrial source categories in the U.S. and uses this data to: improve estimates included in the *Inventory of U.S. Greenhouse Gas Emissions and Sinks*; support federal and state-level policy development; support regulatory development; and to share GHG emissions and supply data with state and local governments, tribes, community groups, industry stakeholders, academia, the research community, and the general public.

Inventory of U.S. Greenhouse Gas Emissions and Sinks:
To fulfill U.S. Treaty obligations, under Article 4 of the 1992 Framework Convention on Climate Change, which was ratified by the U.S. Senate, EPA prepares the annual *Inventory of U.S. Greenhouse Gas Emissions and Sinks.* The *Inventory* provides information on total annual U.S. emissions and removals by source, economic sector, and GHG. The Inventory is used to inform U.S. policy and for tracking progress towards the U.S. Nationally Determined Contribution under the Paris Agreement. EPA leads the interagency process of preparing the *Inventory*, working with technical experts from numerous federal agencies, including the Department of Energy's Energy

Information Agency, Department of Agriculture, Department of Defense, U.S. Geological Survey, and academic and research institutions.

Managing the Transition from Ozone-Depleting Substances:
EPA implements efforts directed by Section 612 of the CAA to ensure a smooth transition away from ozone-depleting substances (ODS) to safer alternatives. Applying a comparative risk assessment, the Significant New Alternatives Policy (SNAP) Program evaluates the health and environmental effects of alternatives in the sectors and subsectors where ODS and high-global warming potential HFCs are used, providing additional options for use in key sectors such as refrigeration and air conditioning.

Phasing Down HFCs:
EPA implements the American Innovation and Manufacturing (AIM) Act, enacted to address the climate impact of HFCs by phasing down HFC production and consumption, maximizing reclamation and minimizing releases of HFCs and their substitutes from equipment, and facilitating the transition to next-generation technologies through sector-based restrictions. This phasedown will decrease the production and import of HFCs in the United States by 85 percent over the next 15 years resulting in significant climate benefits.

ENERGY STAR:
ENERGY STAR provides information that consumers and businesses rely on to make informed decisions to reduce energy use, save money, and reduce harmful air pollutants. By reducing energy use, ENERGY STAR lowers costs for states and local governments as they design and implement plans to meet their air quality and climate goals. ENERGY STAR is the national symbol for energy efficiency, recognized by more than 90 percent of American households, and is a critical tool to fight the climate crisis and deliver on environmental justice.

ENERGY STAR achieves significant and growing GHG reductions by promoting the adoption of cost-effective, energy-efficient technologies and practices in the residential, commercial, and industrial sectors. The Program yields significant environmental and economic results through its network of thousands of partners. In 2019 alone, ENERGY STAR and its partners helped American families and businesses save nearly 500 billion kilowatt-hours of electricity and avoid $39 billion in energy costs. These savings resulted in emission reductions of nearly 390 million metric tons of GHGs (roughly equivalent to 5 percent of U.S. total GHG emissions) and more than 470 thousand tons of criteria air pollutants (SO_2, NO_X, $PM_{2.5}$), resulting in an estimated $7 to $17 billion in estimated public health benefits. [20] These investments in turn drive job creation across the economy. More than 800,000 Americans are employed in manufacturing or installing ENERGY STAR certified equipment alone – nearly 35 percent of all energy efficiency jobs in 2019, with energy efficiency accounting for 40 percent of all energy sector jobs overall.[21]

EPA manages the ENERGY STAR program with clearly defined support from the U.S. Department of Energy. Specifically, EPA manages and implements the following activities: the

[20] For more information on ENERGY STAR's environmental, human health, and economic impacts, please see here: https://www.energystar.gov/about/origins_mission/impacts. For more information on ENERGY STAR calculation methods, see the Technical Notes, available here: https://cmadmin.energystar.gov/sites/default/files/asset/document/Technical%20Notes.pdf
[21] NASEO and Energy Futures Initiative. (2020). U.S. Energy and Employment Report. https://www.usenergyjobs.org/ (link is external). The survey does not account for retail employment.

specification development process for more than 75 product categories and the ENERGY STAR Most Efficient recognition program; the ENERGY STAR Residential New Construction Program for single-family homes, manufactured homes, and multifamily buildings; and the ENERGY STAR commercial and industrial programs. This work includes activities such as certification monitoring and verification, setting performance levels for building types, and managing and maintaining the ENERGY STAR Portfolio Manager tool to measure and track energy use in buildings, and managing the integrity of the ENERGY STAR brand.

ENERGY STAR also supports equitable energy solutions that can deliver significant cost savings for low-income families and other disadvantaged populations. The Program prioritizes outreach to low-income populations on products that have the greatest opportunity to save energy and dollars. The ENERGY STAR Program also looks for affordable alternatives to products that may be cost-prohibitive, such as replacement windows, (e.g., storm windows). In addition, roughly 20 percent of ENERGY STAR home builder partners work in the affordable housing space, including 550 Habitat for Humanity affiliates (18,000 ENERGY STAR certified homes constructed), 80 manufactured housing plants (more than 66,500 ENERGY STAR certified manufactured homes built), and the multifamily sector (more than 75 percent of ENERGY STAR multifamily high-rise projects are identified as affordable housing).[22]

Renewable Energy Programs*:*
EPA works with industry and other key groups to encourage efficient, clean technologies. The EPA Green Power Partnership drives voluntary participation in the green power market. The program provides information, technical assistance, and recognition to companies that use green power. Current partners' green power use represents nearly 43 percent of the U.S. voluntary green power market (that goes beyond required purchases under state renewable portfolio standards). Since 2001, the program has helped prevent nearly 280 million metric tons of GHG emissions. [23] The Combined Heat and Power Partnership offers tools and services to facilitate and promote cost-effective, highly efficient CHP projects.

State, Local and Tribal Climate and Energy Programs:
EPA works with state, local and tribal governments to identify and implement cost-effective programs that reduce GHG emissions, save energy, and improve air quality. EPA provides tools, data, and technical expertise to help state, local, and tribal governments implement clean energy policies and programs that reduce emissions, maximize co-benefits, and prioritize low-income and environmental justice (EJ) communities. The Program helps governments develop emissions inventories, discover best practices for emissions reductions and heat island mitigation, and analyze the emissions and health benefits of clean energy strategies. The Program also highlights the best examples across the country on how to deliver inclusive climate programs and provides resources to help governments deliver energy efficiency and renewable energy to low-income communities.

[22] For more information on ENERGY STAR's environmental, human health, and economic impacts, please see here: https://www.energystar.gov/about/origins_mission/impacts. For more information on ENERGY STAR calculation methods, see the Technical Notes, available here: https://cmadmin.energystar.gov/sites/default/files/asset/document/Technical%20Notes.pdf
[23] For more information on the EPA Green Power Partnership's environmental, human health, and economic impacts, please see here: https://www.epa.gov/greenpower/green-power-partnership-program-success-metrics.

SmartWay Transport:
Launched in 2004, SmartWay is the only voluntary program working across the entire freight system to comprehensively address economic and environmental goals related to sustainability. Over 3,700 businesses that receive, ship, or carry freight rely upon SmartWay supply chain accounting tools and methods to assess, track, and reduce transportation-related carbon, energy use, and air emissions. By accelerating deployment of cleaner, more efficient technologies and operational strategies across supply chains, SmartWay partners have avoided significant amounts of pollution, pollutants, helping to address the climate crisis, and contributing to healthier air for disadvantaged communities living close to freight hubs and routes. Improving supply chain efficiency also helps grow the economy and protect and generate jobs while contributing to energy security.

EPA is the SmartWay brand manager and is responsible for the specification process for hundreds of product and vehicle categories, including both family (passenger) vehicles and commercial (heavy duty freight truck and trailer) vehicles, and the SmartWay Partnership and SmartWay Affiliate recognition programs. EPA's technology verification program enables manufacturers to voluntarily demonstrate fuel saving and emission reduction performance using standard testing protocols. SmartWay partner fleets as well as others in the trucking industry use EPA's verified technology lists to identify products that have been demonstrated to save fuel and reduce emissions.

Partnerships to Reduce Methane Emissions:
EPA operates several partnership programs that promote cost-effective reductions of methane by working collaboratively with industry. Methane programs offer excellent opportunities for reducing the concentration of GHGs in the atmosphere and providing a clean energy resource in the process. Methane is a significant source of GHG emissions and has a relatively short atmospheric lifetime of about 9 to 15 years, which means that reductions made today will yield positive results in the near term. Unlike other GHGs, methane is an important energy resource that allows for cost-effective mitigation. There are many opportunities to recover and re-use or sell methane from the agriculture (manure management), coal mining, oil and gas, and landfill sectors. The AgSTAR Program, which is a collaboration between EPA and the Department of Agriculture, focuses on methane emission reductions from livestock waste management operations through biogas recovery systems. The Coalbed Methane Outreach Program promotes opportunities to profitably recover and use methane emitted from coal mining activities. The Landfill Methane Outreach Program promotes abatement and energy recovery of methane emitted from landfills. The Natural Gas STAR and Methane Challenge Programs spur the adoption of cost-effective technologies and practices that reduce methane emissions from the oil and natural gas sector through collaborative partnerships with companies.

EPA also manages the implementation of the Global Methane Initiative (GMI), a U.S. led, international public-private partnership that brings together over 40 partner governments and over 1,000 public and private sector organizations to advance methane recovery and use methane as a clean energy source. GMI builds on the success of EPA's domestic methane programs and focuses on advancing methane reductions from agriculture, coal mines, landfills, oil and gas systems, and municipal wastewater. With assistance from several agencies—particularly EPA and U.S. State Department—the U.S. Government has supported identification and implementation of more than 1,100 methane mitigation projects since 2005. These projects have reduced methane emissions by

more than 409 million tons of carbon dioxide equivalent (MMTCO2e), including 39.4 MMTCO2e in 2018. Since 2005, U.S. efforts under the auspices of GMI also have identified additional possible mitigation projects with an estimated cumulative potential to reduce another 576 MMTCO$_2$e.[24]

Partnerships to Reduce Fluorinated Greenhouse Gas Emissions:
EPA operates partnership programs that promote cost-effective reductions of fluorinated greenhouse gases (FGHG) by working collaboratively with industry. EPA's FGHG partnership programs continue to make significant reductions in potent GHG emissions, such as perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), nitrogen trifluoride (NF3), and hexafluoride (SF6). Through its partnership programs, EPA works closely with participating industries to identify cost-effective emissions reduction opportunities, recognize industry accomplishments, and facilitate the transition toward environmentally friendlier technologies and chemicals and best environmental practices. Although FGHGs account for a small portion of total U.S. GHG emissions, they have very high global warming potentials.

Science, Economic, and Technical Analyses:
EPA conducts a range of economic, scientific, and technical analyses for CAA regulatory actions and to support the Administration's efforts to address climate change. These efforts include the communication of the science of climate change to the public by providing information on the indicators of climate change, climate risks, and actions that can be taken to mitigate the impacts. These efforts also include the development of multiple models and tools to project future multipollutant emissions (including GHGs) from the power sector to inform EPA's air quality modeling and air, water, and land regulations affecting power plants. EPA applies our modeling tools and expertise across a wide range of high priority work areas including supporting U.S. participation in the Paris Agreement, responding to requests for the U.S. Special Presidential Envoy for Climate for analysis and technical expertise, and conducting legislative analyses as requested by Congressional staff. Furthermore, EPA provides critical, world renowned non-CO_2, agriculture and forestry analyses and participates in the interagency process to improve and apply the models and analyses as needed. Finally, EPA is expanding its ability to conduct equity and environmental justice analyses to identify policy implications and improve collaboration with underserved and front-line communities.

FY 2022 Activities and Performance Plan:

Work in this program directly supports the President's priorities to tackle the climate crisis, advance environmental justice, and expand the capacity of EPA.

In FY 2022, EPA will continue to implement the Greenhouse Gas Reporting Program covering a total of 41 sectors, with approximately 8,100 reporters. Focus areas for the Program will include:

- Developing and implementing regulatory revisions across multiple sectors, including oil and gas to streamline reporting where appropriate;
- Aligning the electronic GHG reporting tool with those regulatory amendments;

[24]For more information on the Global Methane Initiative's environmental, human health, and economic impacts, please see here: https://www.epa.gov/gmi/us-government-global-methane-initiative-accomplishments.

- Ensuring that the electronic reporting system continues to meet all Agency security requirements;
- Coding changes to the GHGRP's electronic GHG reporting tool to accommodate HFC supply data submitted by industry to meet the reporting requirements of the American Innovation and Manufacturing (AIM) Act regulations;
- Conducting a QA/QC and verification process through a combination of electronic checks, staff reviews, and follow-up with facilities when necessary;
- Publishing reported data while enhancing the Facility Level Information on GHG Tool (FLIGHT) mapping feature to visually display the distribution of GHG emissions and sources of GHG supply in areas of the country of environmental justice and equity concern;
- Continued review and approval of the increased number of Carbon Capture and Storage Monitoring Reporting and Verification (MRV) plans that are submitted to the GHG Reporting Program due to changes in the IRS tax code.

In addition, EPA will work to complete the annual *Inventory of U.S. Greenhouse Emissions and Sinks.* Focus areas will include:

- Continued improvements to inventory methodologies in areas such as oil and gas, land-use, and waste, consistent with Intergovernmental Panel on Climate Change (IPCC) guidelines, and to meet upcoming Paris reporting requirements;
- Disaggregating the national *Inventory of U.S. Greenhouse Gas Emissions and Sinks* to the state level and publishing the results annually through the online Data Explorer tool;
- Developing the capacity to publish an annual gridded methane inventory, which is essential for use by atmospheric researchers and as input to other studies;
- Creating a new GHG emission calculator, linked to Portfolio Manager, to develop building GHG inventories that fully comply with accounting protocols and local mandates; and
- Enhancing GHG inventory tools and technical assistance to states, local governments, and tribes.

In FY 2022, EPA will continue to implement the ENERGY STAR Program, partnering with more than 840 utilities ($8.4 billion investment), state and local governments, and nonprofits that leverage ENERGY STAR in their efficiency programs to achieve GHG reductions in major economic sectors, consistent with national commitments.

ENERGY STAR will work in the Residential Sector to enable and accelerate the adoption of energy efficiency. In FY 2022, the Program will:

- Update up to 25 product specifications for ENERGY STAR-labeled products to ensure top efficiency performance;
- Further amend up to 14 ENERGY STAR specifications in response to changes in Department of Energy (DOE) minimum efficiency standards and test procedures;
- Maintain third-party certification to ensure consumer confidence in more than 75 categories for ENERGY STAR labeled products, which includes overseeing 500 recognized laboratories worldwide and 20 certification bodies;
- Further drive long-term climate goals by advancing the cutting edge of the current and future market through the ENERGY STAR Emerging Technology Awards and the

- ENERGY STAR Most Efficient recognition program, which certifies 3,600 product models from over 280 manufacturers;
- Target energy-saving resources to underserved and energy burdened households with expanded efforts to leverage the ENERGY STAR market power to advance utility-scale uptake of equitable financing approaches for home energy upgrades, a key opportunity to support environmental justice goals; and
- Implement critical program requirement updates for EPA's ENERGY STAR Residential New Construction Programs, including implementing a multi-step specification development process that will be at least 10 percent more efficient than the 2021 International Energy Conservation Code.

In addition, ENERGY STAR will continue to partner with businesses and public-sector organizations to advance energy efficiency in the commercial sector. In FY 2022, the program will:

- Continue to operate and maintain ENERGY STAR Portfolio Manager, as well as deliver critical enhancements to accommodate the more than 300 commercial software vendors and utilities, and add reporting and tracking functionality and enhanced data quality checks to increase support to corporate and federal, state and local government users;
- Update and expand ENERGY STAR building scores, used to understand how a building's energy consumption compares with similar buildings nationwide;
- Verify an estimated more than 6,000 buildings with EPA's ENERGY STAR label, including conducting approximately 250 spot audits;
- Provide technical assistance to the nearly 40 local governments and states that have adopted mandatory or voluntary energy benchmarking and disclosure policies and/or building performance standards that require use of EPA's ENERGY STAR Portfolio Manager; and
- Produce a public dataset and data visualization tools from Portfolio Manager to understand the range of energy use and intensity across multiple building types and geographic locations.

ENERGY STAR will continue to work with partners in the industrial sector to improve efficiency and reduce costs while protecting the environment. In FY 2022, the Program will:

- Continue to support ENERGY STAR industrial partners across 33 diverse industrial sectors through webinars, focus industry meetings, and company-to-company mentoring;
- Update and develop new Energy Performance Indicators (EPIs) to incorporate key factors that impact energy use in the plant and converts electricity inputs to source energy; and
- Work with, review, and audit an expected 200 industrial plants applications registered to achieve the ENERGY STAR Challenge for Industry in which industrial sites commit to reducing their energy intensity by 10 percent within five years.

In FY 2022, EPA will implement the Green Power Partnership and accelerate the transition to a carbon-pollution free electricity sector. In FY 2022, the Program will:

- Update and develop new credible resources, educational tools, and recognition of actions and leadership to incentivize all sectors of Green Power Partners;

- Drive market leadership by recognizing the actions of partnering organizations that significantly advance the development of green power markets and renewable energy development; and
- Partner with over 100 Green Power Communities to encourage local efforts to increase their use of and investment in renewable electricity, including disadvantaged communities that have traditionally lacked adequate access to green power.

In FY 2022, EPA will implement other partnerships to achieve GHG reductions in major economic sectors, consistent with national climate commitments. Focus areas of the programs will include:

- Operating the Combined Heat and Power (CHP) Partnership, promoting efficient and environmentally beneficial CHP;
- Implementing the Center for Corporate Climate Leadership program, promoting cost-effective corporate GHG management practices; and
- Developing and enhancing guidance and tools to assist public companies with GHG emission reductions and climate disclosure of GHG emissions in their operations and supply chains.

In FY 2022, EPA will implement the State, Local, and Tribal Climate and Energy Program to support state and local activity that is essential to tackling the climate crisis. Focus areas of the Program will include:

- Providing technical support to dozens of state, local, and tribal governments as they implement climate and clean energy policies;
- Updating major analytical tools to enable state, local and tribal governments to develop and analyze GHG inventories and pollutant emissions impacts on public health;
- Developing the Energy Savings and Impacts Scenario Tool (ESIST) to help users assess a set of long-term impacts from utility energy efficiency programs;
- Updating EPA's State Guide to Action on Clean Energy, including adding best practices for addressing equity in program design and implementation; and
- Helping local governments implement heat island reduction initiatives that are a priority of environmental justice communities.

In FY 2022, EPA will continue to achieve significant reductions in climate and other harmful emissions from freight transportation by expanding SmartWay efforts to:

- Develop and refine GHG accounting protocols for freight carriers and their customers;
- Continue to provide expertise and serve as a technical test bed in support of the Agency's efforts to reduce GHG emissions;
- Transition SmartWay partner tools to an online platform making it easier to benchmark and track performance and expanding access to SmartWay for smaller businesses;
- Encourage adoption of SmartWay approaches globally under international frameworks and agreements, including co-administering SmartWay with Canada and establishing a SmartWay pilot in Mexico;
- Contribute to development of an ISO standard to calculate GHG from transportation operations; and,

- Update GHG requirements for federal purchases of passenger vehicles under the Energy Independence and Security Act as needed.

In FY 2022, EPA will continue to mitigate domestic methane and fluorinated greenhouse gases emissions by implementing partnership outreach programs focused on providing technical information on best practices and cost-effective technologies in the petroleum and natural gas systems, municipal solid waste landfills, livestock manure anaerobic digestion and biogas systems, coal mining, and electric power transmission sectors.

EPA also will continue implementing and promoting global methane mitigation opportunities across multiple sectors (oil and gas, coal mining, municipal solid waste, wastewater, agriculture/manure management) in support of the Global Methane Initiative (GMI) by:

- Running the secretariat of the GMI, coordinating and organizing overall activities;
- Providing technical leadership across multiple sectors; and
- Coordinating with key methane-focused initiatives such as United Nations Economic Commission for Europe, Climate & Clean Air Coalition, and the International Energy Agency.

In FY 2022, EPA will maintain and expand the EPA climate change website that was relaunched in 2021 in the ongoing effort to restore the capacity of EPA by developing web products that reach the American public and effectively communicate the causes and effects of climate change and Administration priorities.

EPA also will support the State Department as the technical lead in developing projections and compiling information on GHG mitigation policies and measures as part of the upcoming U.S. Biennial Report and National Communication as required by the U.N. Framework Convention on Climate Change.

EPA will continue UNFCCC engagement by serving as negotiators on U.S. delegations, for example, for transparency and working to assess mitigation potential and information from other countries. EPA also will review national inventory and related reports submitted by other countries, including other major economies such as Brazil, Germany, and China.

EPA will continue to improve work on climate change impacts modeling including how risks and economic impacts can be reduced under mitigation and adaptation scenarios by:

- Advancing the scientific literature on climate impacts through the Climate Impacts and Risk Analysis (CIRA) project by publishing sectoral impact methodologies and reduced form approaches to improve analytical and communication capacity;
- Quantifying and monetizing the risk of climate change on socially vulnerable populations; and
- Making the Climate Change Indicators more accessible through enhanced visualization tools.

EPA also will analyze program data on GHG emissions from petroleum and natural gas facilities and support Agency regulatory development by:

- Developing more detailed oil and gas projections to support the nationally determined contributions (NDCs) under the Paris Agreement and
- Performing technical analyses, regulatory development, regulatory impact analyses, and litigation support.

In FY 2022, through significant contributions to the Interagency Work Group, EPA will complete work to finalize the Social Cost of Greenhouse Gases (SC-GHG) and recommend a process for reviewing and updating SC-GHG as required under Executive Order 13990: *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*. The final values will be key to understanding the benefits of actions across the federal government and beyond to address climate change.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program. Measures are under development to address climate and environmental justice priorities.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$648.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$6,041.0 / +11.5 FTE) This program change increases support for programs that help reduce greenhouse gas emissions while also addressing environmental justice through an integrated approach of regulations, partnerships, and technical assistance. The increase enables EPA to take strong action on CO_2 and methane as well as high global warming potential climate pollutants such as hydrofluorocarbons (HFCs); restores the capacity of EPA's climate partnership programs to provide essential contributions to our nation's climate, economic, and justice goals; and strengthens EPA's capacity to apply its modeling tools and expertise across a wide range of high priority work areas including supporting U.S. participation in the Paris Agreement. This change also will support EPA's work to finalize the Social Cost of Greenhouse Gases (SC-GHG) and recommend a process for reviewing and updating SC-GHG as required under Executive Order 13990. This investment includes $2,006.0 thousand in payroll costs.

Statutory Authority:

Clean Air Act; Global Change Research Act of 1990; Global Climate Protections Act; Energy Policy Act of 2005 § 756; Pollution Prevention Act §§ 6602-6605; National Environmental Policy Act (NEPA) § 102; Clean Water Act § 104; Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) § 8001; American Innovation and Manufacturing (AIM) Act.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$21,244.6***	***$20,733.0***	***$26,618.0***	***$5,885.0***
Total Budget Authority	$21,244.6	$20,733.0	$26,618.0	$5,885.0
Total Workyears	108.2	108.5	128.5	20.0

Program Project Description:

The Clean Air Act (CAA) requires EPA to take action to improve and protect air quality and limit emissions of harmful air pollutants from a variety of sources. The CAA directs EPA to set National Ambient Air Quality Standards (NAAQS) for six "criteria" pollutants considered harmful to public health and the environment. The NAAQS pollutants are particulate matter (PM), ozone (O_3), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), carbon monoxide (CO), and lead (Pb). The CAA requires EPA to review the science upon which the NAAQS are based and the standards themselves every five years. These national standards form the foundation for air quality management and establish goals that protect public health and the environment. Section 109 of the CAA Amendments of 1990 established two types of NAAQS. Primary standards are set at a level requisite to protect public health with an adequate margin of safety. Secondary standards are set at a level requisite to protect public welfare from any known or anticipated adverse effects.

Sections 111, 112, and 129 of the CAA direct EPA to take actions targeted at controlling air emissions of toxic, criteria, and other pollutants from stationary sources. Specifically, to address air toxics, the CAA S.112 Program provides for the development of National Emission Standards for Hazardous Air Pollutants (NESHAP) for major sources and area sources; the assessment and, as necessary, regulation of risks remaining after implementation of NESHAP that are based on Maximum Available Control Technology (MACT); the periodic review and revision of the NESHAP to reflect developments in practices, processes, and control technologies; and associated national guidance and outreach. In addition, EPA must periodically review, and, where appropriate, revise both the list of air toxics subject to regulation and the list of source categories for which standards must be developed. The CAA Section 111 Program requires issuing, reviewing, and periodically revising, as necessary, New Source Performance Standards (NSPS) for criteria and a subset of listed pollutants from certain new, modified, or reconstructed sources of air emissions; issuing emissions guidelines for states to apply to certain existing sources; and providing guidance on Reasonably Available Control Technology through issuance and periodic review and revision of control technique guidelines. The CAA Section 129 Program further requires EPA to develop and periodically review standards of performance and emissions guidelines covering air emissions from waste combustion sources.

Sections 169A and 169B of the CAA require protection of air quality related values (AQRV) for 156 congressionally mandated national parks and wilderness areas, known as Class I areas. Visibility is one such AQRV, and Congress established a national goal of returning visibility in the

Class I areas to natural conditions, i.e., the visibility conditions which existed without manmade air pollution. The Regional Haze Rule sets forth the requirements that state plans must satisfy to make reasonable progress towards meeting this national goal.

FY 2022 Activities and Performance Plan:

NAAQS

The President directed the EPA to review the 2020 PM NAAQS in accordance with Executive Order 13990: *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*, and EPA has requested additional resources in FY 2022 to better incorporate science and input from the reestablished Clean Air Scientific Advisory Committee in support of this review. In FY 2022, EPA will continue reviewing the NAAQS and make revisions, as appropriate. Each review involves a comprehensive reexamination, synthesis, and evaluation of scientific information, the design and conduct of complex air quality and risk and exposure analyses, and the development of a comprehensive policy assessment providing analysis of the scientific basis for alternative policy options.

EPA will work to achieve and maintain compliance with existing standards. These include the ozone standards established in 2015, 2008, 1997, and 1979; the 1987 PM_{10} standards; the 2012, 2006, and 1997 $PM_{2.5}$ standards; the 2008 and 1978 lead standards;[25] the 2010 NO_2 standard;[26] the 1971 CO standard; and the 2010 SO_2 standard[27]. EPA, in close collaboration with states and tribes, will work to reduce the number of areas not in attainment with the NAAQS, including assisting states and tribes in developing CAA-compliant pollution reduction plans.

EPA also will, in close collaboration with states and tribes, work to reduce the number of areas not in attainment with the NAAQS, including assisting states and tribes in developing CAA-compliant pollution reduction plans.

Air Toxics

Section 112(d)(6) of the CAA requires EPA to review and revise, as necessary, all NESHAP (for both major and area sources) every eight years. These reviews include compiling information and data already available to the Agency; collecting new information and emissions data from industry; reviewing emission control technologies; and conducting economic analyses for the affected industries needed for developing regulations. Similarly, Section 112(f) of the CAA requires EPA to review the risk that remains after the implementation of MACT standards within eight years of promulgation. In addition, Section 112 requires EPA to periodically review, and, where appropriate, revise both the list of air toxics subject to regulation and the list of source categories for which standards must be developed.

[25] In September 2016, EPA completed the review of the 2008 Lead NAAQS and retained the standards without revision.
[26] In April 2018, EPA completed the review of the 2010 NO_2 NAAQS and retained the standards without revision.
[27] In February 2019, EPA completed the review of the 2010 SO_2 NAAQS and retained the standards without revision.

In FY 2022, EPA will undertake these required reviews and associated rulemakings. The air toxics program will prioritize conducting reviews of NESHAP for 41 source categories, many of which are subject to court-ordered or court-entered dates or are actions otherwise required by courts. EPA also will be undertaking three actions related to reviewing and revising the list of hazardous air pollutants, as Section 112 requires. EPA expects to promulgate 15 final rules in FY 2022. EPA further expects to take action under Section 112 in FY 2022 to carry out the directive in Executive Order 13990, that EPA review the "National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units—Reconsideration of Supplemental Finding and Residual Risk and Technology Review". EPA will enhance risk assessment capabilities to better identify and determine impacts of exposures to air toxics on communities. The Program will prioritize its work, as resources allow, with an emphasis on meeting court-ordered deadlines, and also incorporate environmental justice considerations as part of the decision-making process.

Finally, as called for in the Administrator's April 27, 2021, *Memorandum Regarding Per- and Polyfluoroalkyl Substances,* EPA will take actions to address PFAS pollution. The Agency's new EPA Council on PFAS will collaborate on cross-cutting strategies; advance new science; develop coordinated policies, regulations, and communications; and engage with affected states, tribes, communities, and stakeholders. This includes consideration of appropriate actions using existing CAA authorities.

NSPS

Section 111 of the CAA requires EPA to set NSPS for new, modified, or reconstructed stationary sources of air emissions in categories that have been determined to cause, or significantly contribute to, air pollution that may endanger public health or welfare. Section 111 also requires EPA, at least every eight years, to review and, if appropriate, revise NSPS for each source category for which such standards have been established. Under CAA Section 111, EPA must establish emission guidelines for existing sources for which air quality criteria have not been issued, are not included in the list published under Section 108(a), or are emitted from a source category that is regulated under Section 112, but to which a standard of performance would apply if such an existing source were a new source.

EPA further expects to take action under Section 111 in FY 2022 to carry out the directive in Executive Order 13990, which requires that EPA consider "proposing new regulations to establish comprehensive standards of performance and emission guidelines for methane and volatile organic compound emissions from existing operations in the oil and gas sector, including the exploration and production, transmission, processing, and storage segments, by September 2021."

In FY 2022, EPA will work to fulfill the CAA's NSPS requirements for seven source categories in 12 rulemaking actions, all of which are subject to court or executive orders or are in litigation. In addition, under Section 129 of the CAA, EPA plans to address the statutorily mandated reviews and court-ordered regulatory revisions for rules involving solid waste incineration units, such as the Other Solid Waste Incinerators rule, and to review developments regarding incineration and control technologies to support these rulemaking efforts. EPA expects to promulgate one final rule under Section 129 in FY 2022.

EPA also will undertake other projects, such as those required by statute or executive order, such as overdue NSPS and area source technology reviews related to source categories in addition to those described above. EPA will continue work on case-by-case regional and national NESHAP and NSPS applicability determinations.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$924.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$4,961.0 / +20.0 FTE) This program change increases support for the regulation of stationary sources of air pollution through developing and implementing emissions standards, regulations, and guidelines in accordance with Executive Order 13990: *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*. This includes support for program activities to address the climate crisis, including the development of analytical methods and approaches to support climate protection, specifically regulations to control greenhouse gas emissions from stationary sources. It also includes support for enhancing risk assessment capabilities to better characterize the effects of air toxics on communities, including incorporating environmental justice considerations as part of the decision-making process. This investment includes $3,467.0 thousand in payroll costs.

Statutory Authority:

Clean Air Act.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$131,855.1***	***$138,020.0***	***$257,808.0***	***$119,788.0***
Science & Technology	$8,974.6	$7,154.0	$10,222.0	$3,068.0
Total Budget Authority	$140,829.7	$145,174.0	$268,030.0	$122,856.0
Total Workyears	824.6	843.0	923.0	80.0

Program Project Description:

The Federal Support for Air Quality Management Program assists states, tribes, and local air pollution control agencies in the development, implementation, and evaluation of programs for the National Ambient Air Quality Standards (NAAQS); establishes standards for reducing air toxics; and sustains visibility protection. EPA develops federal measures and regional strategies that help to reduce emissions from stationary and mobile sources; whereas delegated states have the primary responsibility (and tribes may choose to take responsibility) for developing clean air measures necessary to meet the NAAQS and protect visibility. At the core of this program is the use of scientific and technical air emissions data. EPA, working with states, tribes, and local air agencies, develops methods for estimating and measuring air emissions and concentrations, collects these data, and maintains databases (*e.g.,* Emissions Inventory System, Air Quality System, etc.). EPA also supports training for state, tribal, and local air pollution professionals.

NAAQS Development

The Clean Air Act (CAA) requires EPA to set the NAAQS for six "criteria" pollutants considered harmful to public health and the environment. The NAAQS pollutants are particulate matter (PM), ozone (O_3), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), carbon monoxide (CO), and lead (Pb). Section 109 of the CAA Amendments of 1990 established two types of NAAQS - primary and secondary standards. Primary standards are set at a level requisite to protect public health with an adequate margin of safety, including the health of at-risk populations. Secondary standards are set at a level requisite to protect public welfare from any known or anticipated adverse effects, such as decreased visibility and damage to animals, crops, vegetation, and buildings. The CAA requires EPA to review the science upon which the NAAQS are based and the standards themselves every five years. These national standards form the foundation for air quality management and establish goals that protect public health and the environment.

Air Pollution Information Tracking

For each of the six criteria pollutants, under Section 110 of the CAA, EPA tracks two kinds of air pollution information: air pollutant concentrations based on actual measurements in the ambient (outside) air at monitoring sites throughout the country; and pollutant emissions based on engineering estimates or measurements of the total tons of pollutants released into the air each year.

Air Quality Management Planning

Under CAA Section 110, EPA develops regulations and guidance to clarify requirements for state and local air agencies for developing State Implementation Plans (SIPs) for implementing the NAAQS. EPA works with state and local governments to ensure the technical integrity of emission source controls in SIPs and with tribes on Tribal Implementation Plans (TIPs). EPA also reviews SIPs to ensure they are consistent with applicable requirements of the CAA and takes regulatory action on SIP submissions consistent with CAA responsibilities.

New Source Review (NSR) Preconstruction Permit Program

The NSR preconstruction permit program in Title I of the CAA is a part of state plans to attain and maintain the NAAQS. The two primary aspects of this program are the Prevention of Significant Deterioration Program, described in Section 165 of the CAA; and the Nonattainment NSR Program, described in various parts of the CAA, including Sections 173 and 182.

Protection of Class I Areas

Sections 169A and 169B of the CAA require protection of visibility for 156 congressionally mandated national parks and wilderness areas, known as Class I areas. The Congress established a national goal of returning visibility in the Class I areas to natural conditions (*i.e.*, the visibility conditions which existed without manmade air pollution). The Regional Haze Rule sets forth the requirements that state plans must satisfy to make reasonable progress towards meeting this national goal.

Control of Air Toxics

Toxic air pollutants are known to cause or are suspected of causing increased risk of cancer and other serious health effects, such as neurological damage and reproductive harm. The Federal Support Program assists state, tribal, and local air pollution control agencies in characterizing the nature and scope of their air toxics issues through modeling, emission inventories, monitoring, and assessments. For example, this program maintains updated air toxic emission and exposure data, incorporating current toxicity data to provide recent information on air toxics risks from a national perspective. EPA also supports programs that reduce inhalation risk and multi-pathway risk posed by deposition of air toxics to water bodies and ecosystems, facilitates international cooperation to reduce transboundary and intercontinental air toxics pollution, develops risk assessment methodologies for toxic air pollutants, and provides training for air pollution professionals.

The provisions of the CAA that address the control of air toxics are located primarily in Section 112. This section requires issuing National Emission Standards for Hazardous Air Pollutants (NESHAP) for major sources and area sources; the assessment and, as necessary, regulation of risks remaining after implementation of NESHAP that are based on Maximum Available Control Technology (MACT); the periodic review and revision of all NESHAP to reflect developments in practices, processes, and control technologies; and associated national guidance and outreach. In addition, EPA must periodically review, and, where appropriate, revise both the list of air toxics subject to regulation and the list of source categories for which standards must be developed. EPA has promulgated approximately 180 rules to control air toxics under Section 112 and is continually engaged in their periodic review and revision. Section 129 of the CAA requires a similar approach to review regulations applicable to solid waste incinerators. EPA has promulgated approximately

six rules to control air toxics under Section 129 and is continually engaged in their periodic review and revision. In addition to this regulatory work, EPA also provides determinations to states and industry seeking information about source-specific applicability of these regulations. EPA is making improvements to the database that tracks applicability determinations.

Climate Change

The President has prioritized action to tackle climate change with a focus on an equitable transition to clean energy. These plans call for cuts in greenhouse gas (GHG) pollution to reduce the contribution of human activities to climate change and its impacts on public health, while investing in communities who are the front line of impacts. The Federal Support Program assists states, tribes, and local air pollution control agencies in the development, implementation, and evaluation of programs to reduce GHG pollution. The Program also supports the Agency's work with international partners to combat short-lived climate pollutants.

FY 2022 Activities and Performance Plan:

Addressing Climate Change

EPA expects to take action under Section 111 in FY 2022 to carry out the directive in Executive Order 13990, that EPA consider "proposing new regulations to establish comprehensive standards of performance and emission guidelines for methane and volatile organic compound emissions from existing operations in the oil and gas sector, including the exploration and production, transmission, processing, and storage segments, by September 2021." This request includes resources to fulfill the President's commitment to engage meaningfully with environmental justice communities during the entire rulemaking process, from pre-proposal through final promulgation and implementation.

EPA will continue to work with other countries to take action to address climate change. EPA will consider the results of a range of international assessments to address the climate impacts of short-lived climate pollutants. These air pollutants, including black carbon (a component of PM), and tropospheric ozone, are contributing to and accelerating the impacts of climate change. Reducing emissions of these pollutants can create near-term climate and public health benefits. EPA will continue to identify the most significant domestic and international sources of black carbon and ozone precursor emissions by working with the multilateral Climate and Clean Air Coalition (CCAC), the Arctic Council, the Convention on Long-range Transboundary Air Pollution (LRTAP), and other related international efforts. Based on these findings and enhanced analytical capabilities, EPA will pursue effective steps for reducing these emissions. For instance, EPA is scaling up efforts in low-and middle-income countries to implement best practices for addressing air pollution in ways that achieve climate co-benefits.

Finally, in FY 2022, the Agency will provide on-the-ground resources to assist overburdened and vulnerable communities as they work to engage on EPA's regulatory efforts and address the impacts of climate change. These community resource coordinators will work with external partners such as community stakeholder organizations, other federal agencies, state, local and regional governments, private sector entities, academic institutions, and foundations to assist communities as they begin to plan for climate change and implement actions to increase resilience to climate impacts.

Improving Air Quality

In FY 2022, resources are increased to support efforts to maintain and rebuild programmatic capabilities that focus on protecting clean air. Air quality has improved significantly for communities across the country since passage of the CAA in 1970 (with amendments in 1977 and 1990). Between 1990 and 2019, for example, national average levels have decreased by 25 percent for ozone, 46 percent for particulate matter, 90 percent for sulfur dioxide, and 98 percent for lead.[28] In FY 2022, EPA will continue to prioritize key activities in support of attainment of the NAAQS and implementation of stationary source regulations by state, tribal, and local air agencies.

NAAQS Review

In FY 2022, EPA will continue its CAA-mandated responsibilities to review the science upon which the NAAQS are based and the standards themselves. Periodic review of the NAAQS requires significant resources and analysis of scientific and technical information to ensure for each NAAQS that public health is protected with an adequate margin of safety, considering at-risk populations. The President directed the EPA to review the 2020 PM NAAQS in accordance with Executive Order 13990: *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*. EPA's request includes additional resources to better incorporate science and input from the reestablished Clean Air Scientific Advisory Committee.

EPA will continue to administer the NAAQS by reviewing state plans and decisions consistent with statutory obligations; taking federal oversight actions, such as action on SIP and TIP submittals; and developing regulations and policies to ensure continued health and welfare protection during the transition between existing and new standards. EPA will work with air agencies to determine the need for additional federal rulemakings and guidance documents to support state and tribal efforts to implement CAA SIP requirements, in alignment with capacity and priorities. EPA will provide technical and policy assistance to states and tribes developing or revising SIPs/TIPs.

NAAQS Nonattainment Areas

EPA, in close collaboration with states and tribes, will work to improve air quality and reduce the number of areas not in attainment with the NAAQS. The Agency will continue to implement process changes to improve the efficiency and effectiveness of the SIP process, including its own review process, with a goal of maximizing timely processing of state-requested SIP actions and reducing the backlog. The Agency will act on designation or re-designation of nonattainment areas to attainment in a timely manner. EPA will maximize use of its comprehensive, online State Planning Electronic Collaboration System (SPeCS) to promote efficiencies for states to submit SIP revisions to EPA, and for EPA to track and process state submittals. Since it launched in January 2018, more than 1,250 SIP submittals (about 90 percent official submissions and 10 percent draft submittals) have come through SPeCS, and more than 400 users have registered from all 50 states and eight air districts. EPA also will further develop SPeCS functionality to provide additional transparency to the public about NAAQS nonattainment areas, state SIP requirements, and related EPA actions.

[28] For additional information on air quality trends, please see Air Quality -National Summary at: https://www.epa.gov/air-trends/air-quality-national-summary and at *Our Nation's Air: Status and Trends Through 2019*, found at: https://gispub.epa.gov/air/trendsreport/2020/#home.

SIPs for Regional Haze

In FY 2021, states are due to submit regional haze SIP revisions for the second planning period. In FY 2022, EPA will begin reviewing those SIPs and continue providing technical assistance to ensure that states are making reasonable progress towards their visibility improvement goals, consistent with statutory obligations. Under the Regional Haze Rule, states are required to submit updates to their plans to demonstrate how they have and will continue to make progress towards achieving their visibility improvement goals.

Fulfilling Legal Obligations

One of EPA's priorities is to fulfill its statutory and court-ordered obligations. Section 112 of the CAA sets deadlines for EPA to review and update, as necessary, all NESHAP every eight years, accounting for developments in practices, processes, and technologies related to those standards. Section 112 also requires that EPA conduct risk assessments within eight years of promulgation of each MACT-based NESHAP to determine if it appropriately protects public health and to revise it as needed. EPA also will be undertaking three actions related to reviewing and revising the list of hazardous air pollutants, as Section 112 requires. In FY 2022, EPA will undertake these required reviews and associated rulemakings. EPA will enhance risk assessment capabilities to better identify and determine impacts on communities. The Program will prioritize conducting reviews of NESHAP for 41 source categories, many of which are subject to court-ordered or court-entered dates or are actions otherwise required by courts, and also incorporate environmental justice considerations as part of the decision-making process. From this work, EPA expects to promulgate 15 final rules in FY 2022. EPA further expects to take action under Section 112 in FY 2022 that results from EPA's adherence to Executive Order 13990, which directs EPA to review the "National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units—Reconsideration of Supplemental Finding and Residual Risk and Technology Review".

In FY 2022, EPA also will review regulations applicable to solid waste incinerators, as CAA Section 129 requires, for one source category and expects to promulgate one final rule under Section 129.

Technical Assistance to External Government Partners

EPA will assist other federal agencies and state and local governments in implementing the conformity regulations promulgated pursuant to Section 176 of the CAA. These regulations require federal agencies, taking actions in nonattainment and maintenance areas, to ensure that the emissions caused by their actions will conform to the SIP.

In FY 2022, EPA will provide technical assistance to state, local, and tribal air agencies for both NSR and Title V (operating) permits. This support will occur at appropriate times and as requested, consistent with applicable requirements, before and during the permitting process. EPA expects to implement such support in an efficient manner and consistent with established timeframes for applicable oversight of state, tribal, and local air agencies during the permitting process. EPA's Electronic Permitting System will improve EPA interaction with state, local, and tribal air agencies and improve data availability and transparency.

EPA will assist state, tribal, and local air agencies with various technical activities. EPA develops and provides a broad suite of analytical tools, such as source characterization analyses, emission factors and inventories, statistical analyses, source apportionment techniques, quality assurance protocols and audits, improved source testing and monitoring techniques, source-specific dispersion and regional-scale photochemical air quality models, and augmented cost/benefit tools, to assess control strategies.[29] The Agency will maintain the core function of these tools (e.g., integrated multiple pollutant emissions inventory, air quality modeling platforms, etc.) to provide the technical underpinnings for scientifically sound, efficient and comprehensive air quality management by state, local, and tribal agencies.

In FY 2022, EPA will continue to provide information and assistance to states and communities through documents, websites, webinars and training sessions on tools to help them provide input into environmental justice assessments that can inform risk reduction strategies for air toxics. The Agency will continue to communicate effectively to, and collaborate with, environmental justice communities to address air toxics concerns.

In FY 2022, state and local air agencies will have the lead in implementing the National Air Toxics Trends Sites (NATTS). The NATTS is designed to capture the impacts of widespread air toxics and is comprised of long-term monitoring sites throughout the Nation.[30] EPA will consult on priority data gaps to better assess population exposure to toxic air pollution.

Maintaining Analytical Capabilities and Continuing Data Management

EPA will maintain baseline analytical capabilities required to develop effective regulations including: analyzing the economic impacts and health benefits of regulations and policies; developing and refining source sampling measurement techniques to determine emissions from stationary sources; updating dispersion models for use in source permitting; and conducting air quality modeling that characterizes the atmospheric processes that disperse a pollutant emitted by a source. Resources from the Science and Technology appropriation component of this program support the scientific development of these capabilities.

In FY 2022, EPA will initiate a nationwide effort to ensure and enhance the resiliency, capacity, and capability of air monitoring systems for National Ambient Air Quality Standards (NAAQS) and local-scale monitoring implemented by state, local, and tribal organizations (SLTs) through: 1) system modernization (e.g., infrastructure improvements, enhanced network automation, greater system reliability, and data integration for assessments); 2) expanded functionality (e.g., increased use of continuous monitoring equipment); and 3) local-scale monitoring to, for example, characterize air toxics and better address air quality burdens in environmental justice communities. Key to the success of this effort will be close, meaningful collaboration with our state, local and tribal air partners. The COVID-19 pandemic exposed the vulnerabilities of our aging monitoring infrastructure and the need for modernization in the Nation's ambient air monitoring network, and the recommendations of a 2020 GAO report echoed the need for the Agency to develop an air quality monitoring modernization plan to better meet the additional information needs of air quality managers, researchers, and the public.

[29] For additional information, please see: https://www.epa.gov/technical-air-pollution-resources.
[30] For additional information, please see: http://www.epa.gov/ttn/amtic/airtoxpg.html.

The President's FY 2022 budget request includes $100 million for a new community air quality monitoring and notification program to support efforts to deliver environmental justice for overburdened and marginalized communities. This community air quality monitoring and notification program will be able to provide real-time data to the public in areas with greatest exposure to harmful levels of pollution, as described in Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad*. The Agency will work closely with states, Tribes and local air quality agencies to develop the most effective approach to meet community concerns. Funds will support a number of efforts, including state, local, and tribal grants that supplement the national ambient air quality monitoring network by enhancing air quality characterization in communities, a competitive grant program promoting air monitoring partnerships with communities, and systems to manage and deliver real-time air quality data to the public.

In FY 2022, EPA will operate and maintain the Air Quality System (AQS), one of the Agency's mission-essential functions, which houses the Nation's air quality data. EPA will provide the core support needed for the AQS Data Mart, which provides access to the scientific community and others to obtain air quality data via the internet. The Agency's national real-time ambient air quality data system (AirNow) will maintain baseline operations. Data show the public is increasingly relying on AirNow for air quality information during wildfires. AirNow received over 109 million web page views during the 2020 fire season. This includes a single day during the 2020 fire season when AirNow had more than 6 million website hits. In FY 2022, EPA will collaborate with the Forest Service to assist with air quality information during wildfire events, including continued work on a pilot project to add data from low-cost sensors to the innovative Fire and Smoke map.

EPA will continue to operate and maintain the Emissions Inventory System (EIS), a system used to quality assure and store current and historical emissions inventory data, and to support development of the National Emissions Inventory (NEI). The NEI is used by EPA, states, and others to support state and local air agency SIP development, to serve as a vital input to air quality modeling, to help to analyze the public health risks from air toxics and develop strategies to manage those risks, as well as support multi-pollutant analysis covering air emissions. EPA will continue to implement previously identified Lean strategies to streamline NEI development and reduce the burden for industry to meet their emissions data reporting requirements through the Combined Air Emissions Reporting (CAER) e-Enterprise effort. The CAER project, when fully developed and deployed, will streamline multiple emissions reporting processes and is expected to reduce the cost to industry and government for providing and managing environmental data and to improve decision-making capacity through more timely availability of data.

Performance Measure Targets:

(PM NA1) Number of Nonattainment Areas.	**FY 2021 Target**	**FY 2022 Target**
	121	101

EPA is currently evaluating its suite of measures and indicators related to Environmental Justice, including available data and programs where improved data sets are needed to develop useful

performance measures for Environmental Justice Programs. Measures are under development in this program to address environmental justice.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$5,096.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$100,000.0) This program change supports efforts to develop and implement a community air quality monitoring and notification program to provide real-time data to the public in areas with greatest exposure to harmful levels of pollution, as described in Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad*. This increase supports work to reduce GHG emissions to tackle the climate crisis and ensure equitable environmental outcomes to advance environmental justice.

- (+$14,692.0 /+69.0 FTE) This program change increases support for critical work to implement climate and clean air regulations, including anticipated emission guidelines for existing oil and gas facilities. These resources also will be used to continue the development of a standard reporting system for states to use for submitting plans and tracking their compliance data, and to ensure that communities have access to that data. In addition, these resources will support an increase in support for NAAQS review work and implementation activities; the timely issuance of guidance; ongoing outreach to states and other entities; development of NAAQS implementation tools; and efforts to reduce the SIP backlog as well as ensure timeliness of review of incoming SIPs, permitting needs (both NAAQS and GHG-related), and air quality monitoring and analysis needs. This investment includes $11,817.0 thousand in payroll costs.

Statutory Authority:

Clean Air Act.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$4,872.4***	***$4,633.0***	***$10,901.0***	***$6,268.0***
Total Budget Authority	$4,872.4	$4,633.0	$10,901.0	$6,268.0
Total Workyears	20.5	18.9	32.9	14.0

Program Project Description:

The stratospheric ozone layer protects life by shielding the Earth's surface from harmful ultraviolet (UV) radiation from the sun. Scientific evidence demonstrates that ozone-depleting substances (ODS) used around the world destroy the stratospheric ozone layer,[31] which raises the incidence of skin cancer, cataracts, and other illnesses through overexposure to increased levels of UV radiation.[32]

The *Montreal Protocol on Substances that Deplete the Ozone Layer* (Montreal Protocol) is the international treaty designed to protect the ozone layer by facilitating a global phaseout of ODS and since 2016, phasing down climate-damaging hydrofluorocarbons (HFCs) under the Kigali Amendment. The United States implements its treaty obligations primarily through Title VI of the Clean Air Act and, in the event that the U.S. Senate ratifies the Kigali Amendment and the United States joins the Kigali Amendment to the Montreal Protocol, through the American Innovation and Manufacturing (AIM) Act of 2020. The AIM Act addresses the climate impact of HFCs by phasing down their production and consumption, maximizing reclamation and minimizing releases of HFCs and their substitutes from equipment, and facilitating the transition to next-generation technologies through sector-based restrictions. As a result of global action to phase out ODS, the ozone layer is expected to recover to its pre-1980 levels by mid-century. A global phase down of HFCs is expected to prevent up to 0.5° C of global warming by 2100.

EPA uses a combination of regulatory and partnership programs to implement Title VI of the CAA and the AIM Act. Title VI provides for a phaseout of production and consumption of ODS and requires controls on their use, including banning certain emissive uses, requiring labeling to inform consumer choice, and requiring sound servicing practices for the use of refrigerants in air conditioning and refrigeration appliances. Title VI also prohibits venting ODS and their substitutes and requires listing of alternatives that reduce overall risks to human health and the environment, ensuring that businesses and consumers have alternatives that are safer for the ozone layer than the chemicals they replace. Based on recent updates to EPA's peer-reviewed Atmospheric and Health

[31] World Meteorological Organization (WMO). Scientific Assessment of Ozone Depletion: 2014. Global Ozone Research and Monitoring Project–Report No. 56, Geneva, Switzerland. 2014.
[32] Fahey, D.W., and M.I. Hegglin (Coordinating Lead Authors), Twenty questions and answers about the ozone layer: 2014 Update, In Scientific Assessment of Ozone Depletion: 2014, Global Ozone Research and Monitoring Project–Report No. 56, World Meteorological Organization, Geneva, Switzerland, 2014.
Available on the internet at: https://www.esrl.noaa.gov/csd/assessments/ozone/2014/twentyquestions2014update.pdf.

Effects Framework model, the Montreal Protocol is expected to prevent approximately 443 million cases of skin cancer, 2.3 million skin cancer deaths, and 63 million cases of cataracts for people in the United States born in the years 1890–2100.[33] EPA developed this model to better understand the benefits to public health of stratospheric protection.

As a signatory to the Montreal Protocol, the U.S. is committed to ensuring that our domestic program is at least as stringent as international obligations, and to regulating and enforcing the terms of the Montreal Protocol respective of domestic authority. In 2007, with U.S. leadership, the Parties to the Montreal Protocol agreed to a more aggressive phaseout for ozone-depleting hydrochlorofluorocarbons (HCFCs) equaling a 47 percent reduction in overall emissions during the period 2010 – 2040. The adjustment in 2007 also calls on Parties to the Montreal Protocol to promote the selection of alternatives to HCFCs that minimize environmental impacts, in particular impacts on climate.[34] The Parties to the Montreal Protocol agreed to the Kigali Amendment in 2016,[35] which seeks to globally phase down the production and consumption of HFCs. In the event that the U.S. Senate ratifies the Kigali Amendment and the United States decides to join the Kigali Amendment, the AIM Act provides authority to implement the domestic phase down of HFCs consistent with the Kigali Amendment. Furthermore, the CAA and AIM Act provide the necessary authority to ensure EPA can collect and validate data as well as report data on production and consumption of controlled substances to the Montreal Protocol on behalf of the United States.

Partnership programs are calibrated to increase benefits by focusing on specific areas where the Agency has identified significant opportunities. The Responsible Appliance Disposal (RAD) Program[36] is a partnership that protects the ozone layer and reduces emissions of greenhouse gases through the recovery of ODS and HFCs from old refrigerators, freezers, air conditioners, and dehumidifiers prior to disposal. RAD has more than 40 partners, including manufacturers, retailers, utilities, and state governments. The GreenChill Partnership[37] helps supermarkets transition to environmentally friendlier refrigerants, reduce harmful refrigerant emissions, and move to advanced refrigeration technologies, strategies, and practices that lower the industry's impact on the ozone layer and climate. The Program includes stores in all 50 states and represents over 30 percent of the United States' supermarkets. GreenChill partners are reducing refrigerant leak rates to half the estimated national average and developing annual plans for further improvements.

FY 2022 Activities and Performance Plan:

Work in this program directly supports the President's priorities to tackle the climate crisis, advance environmental justice, and restore the capacity of EPA. In carrying out the requirements of the CAA and the Montreal Protocol in FY 2022, EPA will continue to meet its ODS import caps and work toward the required gradual reduction in production and consumption of ODS. In

[33] U.S. Environmental Protection Agency (EPA). Updating the Atmospheric and Health Effects Framework Model: Stratospheric Ozone Protection and Human Health Benefits. EPA: Washington, DC. May 2020. Available on the internet at: https://www.epa.gov/sites/production/files/2020-04/documents/2020_ahef_report.pdf.

[34] *Montreal Protocol Decision XIX/6: Adjustments to the Montreal Protocol with regard to Annex C, Group I, substances (hydrochlorofluorocarbons).*

[35] Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, Kigali 15 October 2016, found at: https://treaties.un.org/doc/Publication/CN/2016/CN.872.2016-Eng.pdf.

[36] For more information, see: http://www/epa.gov/rad.

[37] For more information, see: http://www.epa.gov/greenchill.

FY 2022, EPA is considering developing notice and comment rulemakings on process agents and feedstock uses of ODS. To meet targets for FY 2022 and beyond, EPA will: issue allocations for HCFC production and import in accordance with the requirements established under CAA Sections 605 and 606; review petitions to import used ODS under sections 604 and 605; manage information that industry identifies as confidential under CAA Section 603; and implement regulations concerning the production, import, and export of ODS and maintenance of the tracking system used to collect the information. EPA plans to also finalize a rule regulating HFC-23 emissions associated with HCFC production, as well as initiate rulemakings to align ODS import and production requirements with relevant rules implemented the AIM Act. EPA also will prepare and submit an annual report under Article 7 of the Montreal Protocol on U.S. consumption and production of ODS to ensure U.S. compliance with that treaty.[38]

CAA Section 612 requires continuous review of alternatives for ODS through EPA's Significant New Alternatives Policy (SNAP) Program[39] to both find those that pose less overall risk to human health and the environment and ensure a smooth transition to safer alternatives. Through these evaluations, SNAP generates lists of acceptable and unacceptable substitutes for approximately 50 end-uses across eight industrial sectors. In Mexichem Fluor v. EPA, the DC Circuit Court partially vacated a 2015 rule "to the extent it requires manufacturers to replace HFCs with a substitute substance" and remanded the rule to EPA for further proceedings. A second court decision applies similarly to a 2016 rule. EPA expects to propose a notice-and-comment rulemaking in FY 2022 that would address the court decisions, including potentially making changes to the SNAP Program's scope and applicability. In addition, EPA will consider a number of submissions and petitions that would expand the list of acceptable lower-GWP alternatives, particularly for end-uses where there is an urgent need for more options which also will support implementation of the AIM Act. EPA also will continue to work towards ensuring the uptake of safer alternatives and technologies, while supporting innovation, and ensuring adoption of alternatives through support for changes to industry codes and standards.

EPA will continue to support the CAA Section 609 motor vehicle air conditioning (MVAC) servicing program to reduce emissions of refrigerants from MVAC systems. Where industry consensus standards are available that EPA considers to be sufficient for protection of human health and the environment, EPA may adopt the standards into its regulations through incorporation by reference. EPA is aware of such standards developed by the Society of Automotive Engineers (SAE) for recovery equipment for new alternatives. EPA finalized a rule in FY 2021 that incorporated by reference industry, consensus-based standards for MVAC systems and will implement it in FY 2022.

As required by the AIM Act, in FY 2022 EPA will start developing a rule to update the refrigerant management program regulatory requirements as well as continuing efforts under CAA Section 608 to reduce emissions of refrigerants during the service, maintenance, repair and disposal of air conditioning and refrigeration equipment. EPA will educate stakeholders about the rules concerning servicing, maintenance, repair and disposal of air conditioning and refrigeration

[38] The Article 7 report prepared by EPA on behalf of the United States contains chemical-specific production, import and export data that is not available publicly. To protect potential confidential information the report is not available on the internet; however, the data included in the report is aggregated and available at: https://ozone.unep.org/countries/profile/usa.
[39] For more information, please see: http://www.epa.gov/ozone/snap/index.html.

appliances. EPA will monitor industry standards and may adopt the standards into its regulations through incorporation by reference, as appropriate.

In FY 2022, the Agency also will continue to implement the AIM Act HFC phasedown through an allowance allocation and trading program established in FY 2021. As part of that implementation EPA will propose separate regulations to address maximizing reclamation and minimizing releases of HFCs and their substitutes. Lastly, under AIM, the Agency will propose regulations on transition to next-generation technologies. Activities include granting and/or denying petitions for sector-based restrictions on HFCs and, if granted, ensuing development of regulations including the potential use of negotiated rulemaking under subsection (i) of the AIM Act; establishing requirements for the management of HFCs and their substitutes to increase reclamation and reduce emissions; and providing allowances for the next period of the phasedown.

As part of AIM, the Agency will implement an HFC tracking system to better ensure compliance with the phasedown regulations, and work with other agencies to prevent illegal imports. EPA also will work to support federal sector management and transition from HFCs through continued cooperation with organizations such as Department of Defense and the General Services Administration.

In FY 2022, EPA will continue to support implementation of the Montreal Protocol domestically by ensuring U.S. interests are represented at Montreal Protocol meetings by providing technical expertise. The Agency will provide technical expertise for the Montreal Protocol's Technology and Economic Assessment Panel and its Technical Options Committees.

With the decline in allowable ODS production, a significant stock of equipment that continues to use ODS will need access to recovered and recycled/reclaimed ODS to allow for proper servicing. EPA reviews available market and reported data to monitor availability of recycled and reclaimed ODS, where production and import of new material is phased out. EPA also will implement other provisions of the Montreal Protocol, including exemption programs to allow for a continued smooth phaseout of ODS, in particular HCFCs and halons.

Additionally, EPA will continue to work with federal and international agencies to stem illegal imports of ODS to support a level playing field for companies that have transitioned to non-ODS alternatives. This is particularly important in light of recent atmospheric measurements showing unexpected increased emissions of CFC-11, an ODS phased out of production globally.[40,41] EPA will continue data exchange with U.S. Customs and Border Protection and Homeland Security Investigations on ODS importers and exporters to determine admissibility and target illegal ODS shipments entering the United States, as well as reviewing and approving ODS imports flagged in the Automated Customs Environment.

[40] See, Montzka *et al*. An unexpected and persistent increase in global emissions of ozone-depleting CFC-11, Nature, volume 557, pages 413–417, 2018. Available on the internet at: https://www.nature.com/articles/s41586-018-0106-2.
[41] See, Rigby *et al*. Increase in CFC-11 emissions from eastern China based on atmospheric observations, Nature, volume 569, pages 546-550, 2019. Available on the internet at: https://www.nature.com/articles/s41586-019-1193-4.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$131.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$6,137.0 / +14.0 FTE) This program change provides increased support to implement provisions in the American Innovation and Manufacturing Act to phase down the use of HFCs, to facilitate U.S. entry to the Kigali amendment to the Montreal Protocol, and to build back staff capacity around efforts to tackle the climate crisis. This investment includes $2,375.0 in payroll costs.

Statutory Authority:

Title VI of the Clean Air Act and the American Innovation and Manufacturing Act.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$8,347.0***	***$8,711.0***	***$18,000.0***	***$9,289.0***
Total Budget Authority	$8,347.0	$8,711.0	$18,000.0	$9,289.0

Program Project Description:

The *Montreal Protocol on Substances that Deplete the Ozone Layer* (Montreal Protocol) is the international treaty designed to protect the ozone layer by facilitating a global phaseout of ozone-depleting substances (ODS) and since 2016, phasing down climate-damaging hydrofluorocarbons (HFCs) under the Kigali Amendment. The United States implements its treaty obligations primarily through Title VI of the Clean Air Act and in the event that the U.S. Senate ratifies the Kigali Amendment and the United States joins the Kigali Amendment to the Montreal Protocol, through the American Innovation and Manufacturing (AIM) Act of 2020. As a result of global action to phase out ODS, the ozone layer is expected to recover to its pre-1980 levels by mid-century. A global phase down of HFCs is expected to prevent up to 0.5° C of global warming by 2100.

The *Multilateral Fund for the Implementation of the Montreal Protocol* (Multilateral Fund) was created by the Parties to the Montreal Protocol to provide funds to enable developing countries to comply with their Montreal Protocol obligations to phase out ODS and phase down HFCs following agreed schedules. The United States and other developed countries contribute to the Multilateral Fund. The U.S. contribution to the Multilateral Fund is split between EPA and the Department of State. In addition, the United States holds a permanent seat on the Multilateral Fund's governing body (the Executive Committee) and can help focus efforts on cost-effective assistance and encourage climate-friendly transitions.

FY 2022 Activities and Performance Plan:

Work in this program directly supports the President's priority to tackle the climate crisis. EPA's contributions to the Multilateral Fund in FY 2022 will help continue support for cost-effective projects designed to build capacity and eliminate ODS production and consumption in over 140 developing countries and begin to lay the groundwork for the global phasedown of HFCs. Through 2019, the Multilateral Fund supported over 7,600 activities in 146 countries that, when fully implemented, will phase out more than 490,000 ozone-depletion potential tons. Additional projects will be submitted, considered, and approved in accordance with Multilateral Fund guidelines.

In FY 2022, the United States will continue to promote developing country transitions away from ODS directly into lower-global warming potential alternatives. The United States also will support activities such as establishing HFC baselines, phasedown starting points, and other preparatory activities to ensure that the global HFC phasedown will leverage the expertise and experience

gained during the 30-year history with phasing out ODS. Taken together, this work will support developing country compliance with Protocol obligations.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$9,289.0) This program change is an increase to help fund additional activities associated with the adoption of the Kigali Amendment and developing country phase down of HFCs while continuing to support ODS phaseout activities.

Statutory Authority:

Title VI of the Clean Air Act.

Brownfields

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$23,332.9***	***$24,000.0***	***$24,197.0***	***$197.0***
Total Budget Authority	$23,332.9	$24,000.0	$24,197.0	$197.0
Total Workyears	116.2	127.5	127.5	0.0

Program Project Description:

Brownfields sites are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Brownfields can be found in the heart of America's main streets and former economic centers. The Brownfields Program supports efforts to revitalize these sites by awarding grants and providing technical assistance to states, tribes, local communities, and other stakeholders to work together to plan, inventory, assess, safely cleanup, and reuse brownfields. Approximately 143 million people (roughly 44 percent of the U.S. population) live within three miles of a brownfields site that receives EPA funding.[42] As of April 2021, grants awarded by the Program have led to over 130,000 acres of idle land made ready for productive use and over 176,800 jobs and $34.5 billion leveraged.[43]

The Brownfields Program directly support President Biden's Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad* (January 27, 2021).[44] This program supports the operating expenses for the Brownfields Program. Operating activities include: 1) conducting the annual, high volume cooperative agreement competitions; 2) awarding new cooperative agreements; 3) managing the ongoing cooperative agreement workload; 4) providing technical assistance and ongoing support to grantees; 5) providing contractor supported technical assistance to non-grantee communities with Brownfields; 6) collaborating with other agency programs; 7) operating the Assessment Cleanup and Redevelopment Exchange System (ACRES) online grantee reporting tool; 8) assisting communities to explore land reuse opportunities under the Land Revitalization Program; and 9) developing guidance and tools that clarify potential environmental cleanup liabilities.

FY 2022 Activities and Performance Plan:

In FY 2022, the Brownfields Program will continue to manage approximately 1,000 assessment, cleanup, Revolving Loan Fund (RLF), multi-purpose, and Environmental Workforce Development and Job Training (EWDJT) cooperative agreements, as well as state and tribal

[42] U.S. EPA, Office of Land and Emergency Management 2020. Data collected includes: (1) Superfund, Brownfield, and RCRA Corrective Action site information as of the end of FY 2019; (2) UST/LUST information as of late-2018 to mid-2019 depending on the state; and (3) 2015-2018 American Community Survey (ACS) Census data.
[43] EPA's ACRES database.
[44] For additional information, please refer to: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.

assistance agreements; training, research, and technical assistance agreements; Targeted Brownfields Assessments; and land revitalization projects. The Brownfields Program also will continue to foster federal, state, tribal, and public-private partnerships to return properties to productive economic use, including in historically disadvantaged and environmental justice communities.

In FY 2022, the Brownfields Program will support the following activities:

- **Compete and Award New Cooperative Agreements**: Review, select, and award an estimated 345 new cooperative agreements, as well as providing over 40 existing RLF recipients with $45 million in supplemental funds, which will lead to approximately $2.4 billion and 12,360 jobs leveraged in future years.

- **Oversight and Management of Existing Cooperative Agreements:** Continue federal fiduciary responsibility to manage approximately 1,000 existing brownfields cooperative agreements in a reduced capacity, while ensuring the terms and conditions of the agreements are met and provide limited technical assistance. The Program also will provide targeted environmental oversight support to grantees (*e.g.*, site eligibility determinations, review of environmental site assessment and cleanup reports).

- **Technical Assistance:** Provide technical assistance to states, tribes, and local communities in the form of research, training, analysis, and support for community led planning workshops. This can lead to cost effective implementation of brownfields redevelopment projects by providing communities with the knowledge necessary to understand market conditions, economic development and other community revitalization strategies, and how cleanup and reuse can be catalyzed by small businesses.

- **Collaboration:** The Program will work collaboratively with our partners at the state, tribal, and local level on innovative approaches to help achieve land reuse. It also will continue to develop guidance and tools that clarify potential environmental cleanup liabilities, thereby providing greater certainty for parties seeking to reuse these properties. The Program also can provide direct support to facilitate transactions for parties seeking to reuse contaminated properties.

- **Accomplishment Tracking**: Support the maintenance of the ACRES online grantee reporting tool. This enables grantees to track accomplishments and report on the number of sites assessed and cleaned up, and the amount of dollars and jobs leveraged with brownfields grants.

- **Land Revitalization Program Support:** Provide support for approximately two communities as part of EPA's Land Revitalization Program. The Land Revitalization Program supports communities in their efforts to restore contaminated lands into sustainable community assets.

Performance Measure Targets:

Work under this program supports performance results in the Brownfields Projects Program under the STAG appropriation.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$462.0) This change to fixed and other costs is an increase due to the recalculation of base payroll costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (-$265.0) This program change will reduce contract supported technical assistance to non-grantee communities.

Statutory Authority:

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), §§ 101(39), 104(k), 128(a); Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, § 8001.

Compliance

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$98,418.4***	***$102,500.0***	***$132,350.0***	***$29,850.0***
Inland Oil Spill Programs	$181.4	$139.0	$2,142.0	$2,003.0
Hazardous Substance Superfund	$1,054.3	$1,000.0	$1,006.0	$6.0
Total Budget Authority	$99,654.1	$103,639.0	$135,498.0	$31,859.0
Total Workyears	433.6	453.9	459.9	6.0

Program Project Description:

The Compliance Monitoring Program is a key component of EPA's Enforcement and Compliance Assurance Program that supports both compliance with federal environmental laws as well as efforts to identify noncompliance. Compliance monitoring activities, such as inspections, investigations, and review of self-reported compliance monitoring information are conducted by EPA and our coregulators (states, federally-recognized Indian tribes, and territories) to determine if regulated entities are complying with environmental statutes as well as applicable regulations and permit conditions. These activities also can be utilized to identify conditions that may present imminent and substantial endangerment to human health and the environment and thereby warrant immediate regulatory attention. Given the large number of regulated entities, effective targeting of compliance monitoring plays a critical role in achieving the goals EPA has set forth for protecting health and the environment.

Tools in the Compliance Monitoring Program include:

- **Compliance Program Data Management and Electronic Reporting with Compliance Assistance:** EPA has a national enforcement and compliance data system, the Integrated Compliance Information System (ICIS), which supports both the compliance monitoring and civil enforcement programs. As EPA's largest mission-focused data system, ICIS is a critical infrastructure used by the Agency, state, tribal, local and territorial governments, as well as the regulated community, to track compliance with and enforcement of all EPA statutes, which facilitates greater compliance and thus protection of human health and the environment. States are a major user of this resource. For instance, twenty-one state governments depend on ICIS to directly manage their clean water permitting and compliance activities. EPA utilizes ICIS enforcement and compliance data and other information technology tools to: (1) identify potential violations of the federal environmental laws; (2) facilitate efficient enforcement; and (3) promote compliance with these requirements. EPA also makes ICIS data available to the public via the internet-accessible Enforcement and Compliance History Online (ECHO) system. Using ICIS and ECHO to electronically track its civil enforcement work allows EPA to better ensure that its enforcement resources are used to facilitate transparency and address the most significant noncompliance problems, including noncompliance affecting disadvantaged communities and noncompliance that leads to climate impacts. EPA

collaborates with state, local, federal, tribal, and industry partners, through the E-Enterprise initiative, to leverage technologies such as promoting electronic reporting and permitting, to reduce promote efficiencies across all programs including compliance and enforcement. For example, EPA and states are implementing the National Pollution Discharge Elimination System (NPDES) Electronic Reporting Rule through ICIS, one key tool for improving the availability of clean water compliance data to EPA, states, and the public.[45]

- **National Pollutant Discharge Elimination System (NPDES):** The Agency will continue to implement Phase 2 of the NPDES Electronic Reporting Rule which covers electronic permitting and compliance monitoring reporting and data sharing requirements for EPA and states. EPA will continue to work with states to evaluate and prioritize the development of additional electronic reporting tools that support states.

- **Compliance Monitoring Inspector Credential Policies and Training for EPA, and State Tribal and Local Governments:** To ensure the quality of compliance monitoring activities, EPA develops national policies, updates inspection manuals, establishes training requirements for inspectors, and issues inspector credentials. EPA delivers critical in-person and online training courses to new and experienced federal, state, tribal and local inspectors to ensure the integrity of the national Compliance Monitoring Program, as well as other training for federal and state personnel on critical and emerging compliance issues. EPA hosts several in-person inspector training programs, such as the annual Clean Water Act NPDES Technical Inspector Workshop and the Federal Insecticide, Fungicide, and Rodenticide Act Pesticide Inspector Residential Training Program.

- **Compliance Assistance:** Compliance assistance is a valuable tool to assist regulated facilities in understanding their compliance obligations. EPA provides compliance assistance work with third-party organizations and federal agencies to support seventeen web-based, sector-specific centers and other web-based assistance resources. In addition, the Enforcement and Compliance Assurance Program develops technical assistance webinars, Compliance Advisories, and other assistance materials to help the regulated community understand their compliance expectations.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will develop and implement a comprehensive action plan for integrating environmental justice (EJ) and climate change considerations throughout all aspects of the Program. This effort answers the President's call to "strengthen enforcement of environmental violations with disproportionate impact on underserved communities through the Office of Enforcement and Compliance Assurance" (EO 14008, sec. 222(b)(i)), and to "combat the climate crisis with bold, progressive action" (EO 14008, sec. 201).[46] Additional resources will enhance EPA's ability to incorporate EJ considerations into all phases of work without displacing other important enforcement and compliance assurance efforts. This work includes, but is not limited to,

[45] For more information, please see: https://www.epa.gov/compliance/npdes-ereporting.
[46] For additional information on the Executive Order on *Tackling the Climate Crisis at Home and Abroad*, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.

multi-state/multi-regional matters, issues of national significance, and emergency situations. In addition, EPA also will provide some targeted oversight and support to state, local, and tribal programs. To accomplish this objective, the Agency will prioritize work with states to develop methods that successfully leverage advances in both monitoring and information technology. The Agency also will maintain accessibility to ICIS for EPA, states, and tribes.

EPA will continue the data system modernization effort to better support states/tribes/local governments and the public's need for information with modernized technology and implement EPA's enterprise-wide Digital Strategy with shared IT services. Modernization also will facilitate EPA's efforts to better target noncompliance that impacts disadvantaged communities and will increase the availability of information about environmental conditions in those communities and elsewhere.

In FY 2022, EPA requests an additional 6 FTE and $29.85 million to accelerate its efforts to modernize ICIS and support better integration with the public ECHO database. As a result of this data integration, EPA will be in a better position to focus compliance monitoring resources on areas of highest risk and to increase transparency to the public. It also will provide a more complete set of information for this program and improve data quality. Resources will be used to complete scoping on the business requirements and possible technological approaches and to continue development of new software. EPA will make adjustments to ICIS and ECHO that will facilitate better access of compliance data and community information (e.g., from EPA's EJSCREEN tool) to EPA and states and to the public. This modernization will enhance EPA's efforts to address compliance concerns in disadvantaged communities.

FY 2022 funding also will allow EPA to expand software solutions for field inspectors to improve the effectiveness and efficiency of compliance inspections conducted by EPA and authorized states. Beginning in FY 2020 and continuing through FY 2021, EPA is rolling out its Smart Tools for inspectors in the Resource Conservation and Recovery Act (RCRA) Hazardous Waste Program and the NPDES Program. Smart Tools software makes the process of documenting field inspections and preparing reports on the results of the inspections more efficient. This tool allows EPA to use its compliance monitoring resources more efficiently, including monitoring for noncompliance, which affect disadvantaged communities, or which may have climate impacts. It also allows EPA to make inspection reports more readily and timely available to the regulated entity and to the general public in affected communities. Work on design and development of software for additional inspection programs is scheduled to begin during the second half of FY 2021 and continue through FY 2022.

Additional funding will further allow EPA to increase its implementation of the Evidence Act.[47] Safe drinking water is critical to the health of communities and each year, thousands of community water systems violate one or more health-based drinking water standards. In FY 2021-2023, EPA will collect new information and conduct studies to develop statistically valid data to identify effective policy instruments. In FY 2022 and beyond, EPA will work with states, tribes, and academic experts to improve the effectiveness of enforcement and compliance programs by: prioritizing the most pressing programmatic questions; planning evidence-based studies to address these questions; and identifying effective and innovative approaches for improving compliance.

[47] *Foundations for Evidence-Based Policymaking Act* (Public Law 115–435).

FY 2022 funding also will allow EPA to expand the Agency's Circuit Rider Program, which reduces noncompliance at small public water systems (PWSs) and small wastewater treatment facilities (WWTFs) by providing hands-on technical assistance. To date, Circuit Riders have provided support to approximately 100 small PWSs and 50 WWTFs in under-resourced communities nationwide (across all Regions – covering 10 states, Puerto Rico and four tribes). There are hundreds more small systems and facilities across environmental justice areas through the nation that need technical support to help them stay in compliance and provide clean and safe water to the communities they serve. All the systems currently supported by the Circuit Rider Program are small communities (less than 10,000 population) and approximately 94 percent are in areas with environmental justice concerns. Even with limited travel in 2020, Circuit Riders helped a tribal PWS correct more than 30 significant deficiencies and developed more than 15 recommendations reports for individual systems and standard operating procedure documents to facilitate sustained operational compliance. Also, this program includes multi-media assistance in Indian Country where systems and facilities are disproportionately small and isolated. In addition to supporting drinking water and wastewater needs, tribes will be offered additional multimedia assistance with respect to underground injection wells, underground storage tanks, and other programs as appropriate. There is significant demand for circuit rider assistance that can be targeted where existing technical support efforts cannot meet the needs of the community. The Circuit Rider Program supplements other efforts across the Agency.

Performance Measure Targets:

(PM 409) Number of federal on-site compliance monitoring inspections and evaluations and off-site compliance monitoring activities.	**FY 2021 Target**	**FY 2022 Target**
	10,000	10,000

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$1,154.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$22,827.0 / +5.0 FTE) This program increase will allow EPA to accelerate the modernization of the Integrated Compliance Information System and enhance its integration with the Enforcement and Compliance History Online family of internet-based services. The increased resources will fund adjustments to ICIS and ECHO that will facilitate better access of compliance data and community information (e.g., from EPA's EJSCREEN tool) to EPA and states and to the public. This modernization will enhance EPA's efforts to address compliance concerns in disadvantaged communities. This investment includes $827.0 thousand in payroll.

- (+$2,000.0) This program increase will allow EPA to advance work on the Smart Tools for Field Inspectors to develop the tool for some of the smaller programs that have more of a direct impact for EJ communities such as the TSCA lead-based paint programs.

- (+$3,249.0) This program increase will build capacity for the inspection program and provide increased training to staff to conduct inspections and perform other compliance monitoring activities. This funding will enhance EPA's compliance monitoring programmatic capabilities to enhance efforts to address pollution in overburdened and marginalized communities.

- (+$620.0 / +1.0 FTE) This program increase will allow EPA to support evidence-gathering activities in support of the Evidence Act. This investment includes $165.0 thousand in payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Act to Prevent Pollution from Ships (MARPOL Annex VI); Clean Air Act; Clean Water Act; Emergency Planning and Community Right-to-Know Act; Federal Insecticide, Fungicide, and Rodenticide Act; Marine Protection, Research, and Sanctuaries Act; Oil Pollution Act; Resource Conservation and Recovery Act; Rivers and Harbors Act; Safe Drinking Water Act; Toxic Substances Control Act.

Enforcement

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$162,505.0***	***$168,341.0***	***$194,623.0***	***$26,282.0***
Leaking Underground Storage Tanks	$657.3	$620.0	$634.0	$14.0
Inland Oil Spill Programs	$2,237.2	$2,413.0	$2,462.0	$49.0
Total Budget Authority	$165,399.5	$171,374.0	$197,719.0	$26,345.0
Total Workyears	899.6	916.2	965.2	49.0

Program Project Description:

The overall goal of EPA's Civil Enforcement Program is to protect human health and the environment by ensuring compliance with the Nation's environmental laws and regulations and to deter noncompliance. The Civil Enforcement Program works in partnership with its state, local and tribal partners to compel regulated entities to correct violations and to assess appropriate penalties for violations, including removing any economic benefit that a violator gained from noncompliance.

The Civil Enforcement Program works closely with the U.S. Department of Justice, state and local governments, tribal governments, territories, and other federal agencies to ensure consistent and fair enforcement of all major environmental statutes and numerous regulations implementing each of those statutes. Millions of regulated federal and private entities are subject to one or more of these statutory requirements. The Civil Enforcement Program develops, litigates, and settles administrative and civil judicial cases against serious violators of environmental laws. In FY 2020, because of EPA civil enforcement actions, approximately 426 million pounds of air, water, and toxic pollutants were reduced, treated, or eliminated, and over 1.6 billion pounds of hazardous and non-hazardous waste were treated, minimized, or properly disposed.[48]

EPA is responsible for direct implementation of programs that are not delegable or where a state or tribe has not sought or obtained the authority to implement a program (or program component). Examples of programs that are not delegable include the Clean Air Act (CAA) mobile source and Ozone Depleting Substances programs; pesticide labeling and registration under the Federal Insecticide, Fungicide, and Rodenticide Act; the new and existing chemicals program under the Toxic Substances Control Act (TSCA); and enforcement in Indian Country (except where the Tribe has been delegated). Many statutes have programs or regulations that states have not obtained authority to implement, including portions of the Resource Conservation and Recovery Act (RCRA), the Clean Water Act, the Safe Drinking Water Act, TSCA (lead-based paint program), and the CAA (chemical accident prevention).

[48] For additional information on EPA's FY 2020 enforcement and compliance assurance program results, please see: https://www.epa.gov/enforcement/enforcement-annual-results-fiscal-year-2020.

EPA works with authorized states and tribes to ensure a level playing field and assists states and tribes in their implementation of delegated programs when needed, such as in cases where the Agency maintains a unique expertise or capability. The Agency also carries out its statutory oversight responsibilities to ensure states and tribes are meeting national compliance monitoring standards and taking timely and appropriate actions to return facilities to compliance. Our work to protect communities with environmental justice (EJ) concerns is a shared goal and responsibility of EPA and our partner agencies.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will continue to focus efforts toward areas where EPA's enforcement actions can address the most substantial impacts to human health and the environment. EPA will continue to focus its resources on: the six current national initiatives to improve air quality, provide for clean and safe water, ensure chemical safety;[49] the enforcement of rules to prevent exposure to lead; and attention to emerging contaminants, like per- and poly-fluoroalkyl substances (PFAS). In addition, the Agency hopes to expand efforts to address environmental justice, climate concerns, and coal combustion wastes.

In FY 2022, EPA is requesting an increase of 49 FTE and $26.2 million. These additional resources are largely to develop and implement a comprehensive action plan for integrating environmental justice, climate, PFAS, and coal combustion residuals (CCR) rule considerations throughout all aspects of EPA's Civil Enforcement Program (e.g., private parties and federal facilities) in headquarters and across EPA's 10 regional offices. These resources are necessary to answer the President's call to "strengthen enforcement of environmental violations with disproportionate impact on underserved communities through the Office of Enforcement and Compliance Assurance" (EO 14008, sec. 222(b)(i)), and to "combat the climate crisis with bold, progressive action" (EO 14008, sec. 201).[50]

Additional resources will enhance EPA's ability to incorporate EJ and climate considerations into all phases of case development without displacing other important enforcement and compliance assurance work, including by increasing climate and EJ-focused inspections and community outreach, prioritizing climate and EJ considerations in case-selection (e.g., to emphasize areas where greenhouse gas emission can be reduced while providing co-benefits in underserved communities), and expanding inclusion of mitigation and resilience remedies in case resolutions. In addition, resources are needed to ensure that the increasing number of climate and EJ rules, policies, and permit-related provisions are enforceable and implementable, to expand databases to track climate and EJ enforcement activities, to enhance or create networks of staff focused on advancing the Administration's climate and EJ goals, and to develop and provide comprehensive and ongoing training on climate and EJ issues to equip staff for the long term.

In addition, EPA may use some of the increased resources to actively investigate and pursue enforcement to address releases and cleanup of PFAS under multiple environmental statutes.

[49] For additional information, please see: https://www.epa.gov/enforcement/national-compliance-initiatives.
[50] For additional information on the Executive Order on *Tackling the Climate Crisis at Home and Abroad*, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.

Enforcement for PFAS contamination is hampered by the lack of standards for PFAS. There are no Maximum Contaminant Levels, Clean Water Act effluent limits or pretreatment standards. Currently, PFAS is not a listed hazardous waste under RCRA or hazardous substance under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) either individually or as a class. Because of the lack of standards, the Agency must rely on its imminent and substantial endangerment authorities to address PFAS contamination and compel cleanup by private parties and federal agencies, where a federal facility is not on CERCLA's National Priorities List.

In FY 2022, new statutory and regulatory requirements will mean an increased need to evaluate and address noncompliance with the rules. Therefore, the Agency may use some of the new funding to cover enforcement of the CCR Rule. EPA's review of publicly posted CCR Rule compliance information already suggests widespread noncompliance with CCR regulations. The additional funding will allow EPA to enforce the CCR Rule, thereby making coal ash units more resilient to extreme weather events, reducing contamination in communities near CCR units, and supporting the transition to cleaner power generation by placing the cost of CCR contamination on the companies that generate the CCR waste.

EPA expects that the six current national initiatives can have a significant impact on addressing potential climate change concerns and protecting the health of communities with potential EJ concerns.

- Creating Cleaner Air for Communities – focuses on noncompliance that results in excess emissions of either volatile organic compounds or hazardous air pollutants, especially where emissions may adversely affect an area's attainment of National Ambient Air Quality Standards or may adversely affect vulnerable populations.
- Stopping Aftermarket Defeat Devices for Vehicles and Engines – focuses on stopping the manufacture, sale, and installation of defeat devices on vehicles and engines, which contribute excess pollution, harming public health and air quality.
- Reducing Hazardous Air Emissions from Hazardous Waste Facilities – focuses on improving compliance with regulations that require the control of organic air emissions from certain hazardous waste management units and activities.
- Reducing Risks of Accidental Releases at Industrial and Chemical Facilities – focuses on decreasing the likelihood of chemical accidents and reducing risk to communities.
- Reducing Significant Non-Compliance with National Pollutant Discharge Elimination System (NPDES) Permits – focuses on improving compliance rates with NPDES permits and ensuring the worst violations are timely and appropriately addressed.
- Reducing Non-Compliance with Drinking Water Standards at Community Water Systems – focuses on ensuring safe and clean drinking water from the 50,000 regulated community drinking water systems.

Performance Measure Targets:

(PM 434) Millions of pounds of pollutants and waste reduced, treated, or eliminated through concluded enforcement actions.	**FY 2021 Target**	**FY 2022 Target**
	325	325

(PM 436) Number of all referred no complaint filed (RNCF) civil judicial cases that are more than 2.5 years old.	FY 2021 Target	FY 2022 Target
	99	99

(PM 444) Percentage of EPA inspection reports timely completed and sent within 70 days of inspection.	FY 2021 Target	FY 2022 Target
	75	75

(PM 446) Quarterly percentage of Clean Water Act National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance with their permit limits.	FY 2021 Target	FY 2022 Target
	12.7	10.1

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$2,715.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$23,567.0 / +49.0 FTE) This program change will support increased focus on environmental justice, climate change, PFAS, and CCR considerations by developing and implementing a comprehensive action plan for integrating climate and EJ considerations throughout all aspects of EPA's Civil Enforcement Program (e.g., private parties and federal facilities) in headquarters and across EPA's 10 regional offices. This investment includes $8,479.0 thousand in payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Act to Prevent Pollution from Ships (MARPOL Annex VI); Clean Air Act; Clean Water Act; Emergency Planning and Community Right-to-Know Act; Federal Insecticide, Fungicide, and Rodenticide Act; Marine Protection, Research, and Sanctuaries Act; Oil Pollution Act; Resource Conservation and Recovery Act; Safe Drinking Water Act; and Toxic Substances Control Act.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$50,326.2***	***$51,275.0***	***$59,121.0***	***$7,846.0***
Hazardous Substance Superfund	$7,292.3	$7,647.0	$7,786.0	$139.0
Total Budget Authority	$57,618.5	$58,922.0	$66,907.0	$7,985.0
Total Workyears	239.8	257.7	289.7	32.0

Program Project Description:

EPA's Criminal Enforcement Program enforces the Nation's environmental laws through targeted investigation of criminal conduct, committed by individual and corporate defendants, that threatens public health and the environment. EPA's criminal enforcement agents (Special Agents) investigate violations of environmental statutes and associated violations of Title 18 of the United States Code such as fraud, conspiracy, false statements, and obstruction of justice.

The Criminal Enforcement Program collaborates with other EPA offices, the environmental justice (EJ) Program, and the U.S. Department of Justice (DOJ) to ensure our enforcement and compliance assurance work is informed and targeted to address the disproportionate impacts of environmental pollution faced by overburdened communities and to expand outreach opportunities through those offices.

Criminal Enforcement Special Agents are assisted in the Criminal Enforcement Program by forensic scientists, attorneys, technicians, engineers, and other experts. EPA's criminal enforcement attorneys provide legal and policy support for all the Program's responsibilities, including forensics and expert witness preparation, to ensure that program activities are carried out in accordance with legal requirements and the policies of the Agency. These efforts support environmental crime prosecutions primarily by the U.S. Attorneys and the DOJ's Environmental Crimes Section. In FY 2020, the conviction rate for criminal defendants charged as a result of EPA criminal enforcement investigations was 95.29 percent.

FY 2022 Activities and Performance Plan:

Work in this program directly supports the administration's priorities, with a focus on the most egregious cases (e.g., significant human health, environmental, and deterrent impacts), while balancing its overall case load across all environmental statutes. In FY 2022, EPA is requesting an additional 32 FTE and $7.85 million to expand EPA's capacity for criminal enforcement and work to support the criminal program, with an emphasis in several priority areas.

The funding will support the development of a specialized Criminal Enforcement task force within the Enforcement and Compliance Assurance Program to address EJ issues and casework, in partnership with the DOJ. This task force will include Special Agents and criminal justice analysts,

as well as witness coordinators to identify and provide services to victims of environmental crimes in EJ communities. These additional resources will allow the Agency to devote resources toward, and more effectively target, those areas and communities that are disproportionally affected by pollution and environmental crime.

The requested staffing increase also will allow the Criminal Enforcement Program to work more effectively and collaboratively with the DOJ's Environment and Natural Resource Division to address the plight of affected communities and populations across the United States, including developing an Environmental Justice enforcement strategy. In FY 2022, EPA's Environmental Crime Victim Assistance Program will more closely align its implementation of the Criminal Victims' Rights Act and the Victims' Rights and Restitution Act with EPA's EJ work. Activities will include data mining and mapping to identify where EJ communities, crime victims, and public health impacts overlap. This strategy will aid the Program in identifying sources of pollution impacting these communities and to focus criminal enforcement resources on the Nation's most vulnerable populations and, where appropriate, use of crime victim program resources and emergency funds to assist individuals in EJ communities.

In addition, in FY 2022 the Criminal Enforcement Program will work with Interpol to combat climate change at the international law enforcement level. Hiring additional data analysts will lead to formalized information sharing related to preventing illegal importation of prohibited products that contribute to global climate instability and will support travel and capacity building with other countries.

In FY 2022 the Criminal Enforcement Program also will increase its collaboration and coordination with the Civil Enforcement Program to ensure that EPA's Enforcement Program identifies the most egregious cases and responds to them as effectively as possible. The Agency will perform targeted investigations of violations of environmental statutes and associated violations of Title 18 of the United States Code to protect public health and the environment.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$1,388.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$6,458.0 / +32.0 FTE) This net program change supports expanding EPA's capacity for criminal enforcement, the expansion of the enforcement in communities with environmental justice concerns, enforcement of climate-related regulations, and increased polluter accountability. This investment includes $6,685.0 thousand for payroll.

Statutory Authority:

Title 18 of the U.S.C.; 18 U.S.C. § 3063; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Resource Conservation and Recovery Act; Clean Water Act; Safe Drinking Water Act; Clean Air Act; Toxic Substances Control Act; Emergency Planning and Community Right-To-Know Act; Federal Insecticide, Fungicide, and Rodenticide Act; Ocean Dumping Act; Rivers and Harbors Act; Pollution Prosecution Act of 1990.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$9,482.5***	***$11,838.0***	***$293,862.0***	***$282,024.0***
Hazardous Substance Superfund	$566.3	$826.0	$5,841.0	$5,015.0
Total Budget Authority	$10,048.8	$12,664.0	$299,703.0	$287,039.0
Total Workyears	30.2	39.9	211.9	172.0

Program Project Description:

EPA's Environmental Justice Program coordinates the Agency's efforts to address the needs of overburdened and vulnerable communities by decreasing environmental burdens, increasing environmental benefits, and working collaboratively with all stakeholders to build healthy, sustainable communities based on residents' needs and desires. EPA's Environmental Justice (EJ) Program works constructively and collaboratively by providing financial and technical assistance to communities to address environmental justice issues. The Program also works with local, state, tribal, and federal governments; community organizations and their stakeholders; business and industry; and academia to establish partnerships seeking to achieve protection from environmental and public health hazards for people of color, low-income, and indigenous communities.

Work in this program directly supports EPA Administrator Michael Regan's message "Our Commitment to Environmental Justice" issued on April 7, 2021,[51] in addition to supporting implementation of Executive Order (EO) 13985,[52] *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*, and EO 14008, *Tackling the Climate Crisis at Home and Abroad*.[53] In accordance with the 2018 American Water Infrastructure Act, every EPA regional office employs a dedicated EJ coordinator and the Agency maintains a list of these persons on the EPA's website.[54]

FY 2022 Activities and Performance Plan:

In FY 2020 and FY 2021, EPA continued its series of training webinars focused on integrating EJ at all levels of government, with additional focus on tribal governments and indigenous populations. The three State EJ Training Webinars conducted in FY 2020 – FY 2021 had 5,449 registrants and were part of a series now totaling seven that involved representatives of government

[51] For more information, please see: https://www.epa.gov/newsreleases/epa-administrator-regan-announces-new-initiatives-support-environmental-justice-and.
[52] For more information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.
[53] For more information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.
[54] For more information on EPA's regional office contacts, please see: https://www.epa.gov/environmentaljustice/forms/contact-us-about-environmental-justice.

agencies in all fifty states, Guam, Puerto Rico, and the District of Columbia.[55] As of March 2021, EJ Program members conducted over 300 EJ engagements and training activities for their EPA colleagues and engaged and partnered with over 300 stakeholder groups and reached approximately 6,000 community members in various outreach and educational activities. For the tribal series in FY 2021, seven webinars have been held with over 2,400 registrants, representing tribes, indigenous organizations, Pacific Islanders, state and local governments, universities, medical professionals, business/industry, environmental organizations, federal agencies and international organizations. The topics covered included: EPA EJ tribal/indigenous policy, EJ financial assistance programs, applying for and managing a grant, EPA Tribal partnership groups, wildfires and air quality, and advancing equity and EJ in Indian country and indigenous communities.[56] EPA's FY 2020 and FY 2021 EJ grants program saw an increase in the scope and level of funding available. EPA also relaunched the State Environmental Justice Cooperative Agreement (SEJCA) Program due to additional congressional resource allocation. The SEJCA Program was made available to proposals from states, tribes, local governments, and territorial governments and had a special emphasis on projects focused on engaging and supporting community efforts in response to the COVID-19 pandemic. In FY 2021, the EJ Program will accept applications for both its EJ Small Grants and its EJ Collaborative Problem-Solving cooperative agreements and anticipates awarding an unprecedented number of awards during that cycle.

In FY 2022, EPA requests an additional $282 million and 170 FTE for the Environmental Justice Program in the EPM appropriation. This investment will allow the Agency to develop, manage, and award new competitive grants to reduce the historically disproportionate health impacts of pollution in EJ communities as well as increasing support for existing grant projects. This investment also will support climate initiatives in EJ communities, and in support of EJ training, education, and outreach programs. This investment will provide paramount support to community-based organizations, indigenous organizations, states, tribes, local governments, and territorial governments in pursuit of identifying and addressing EJ issues.

In FY 2022, EPA will continue to support the successful completion of grant projects funded in previous fiscal years while significantly increasing the number of grant opportunities through new programs, including: 1) a $25 million Environmental Justice Community Grants Program, to competitively award a comprehensive suite of grants to non-profit, community-based organizations to reduce the disproportionate health impacts of environmental pollution in the EJ community; 2) a $25 million Environmental Justice State Grant Program that would establish or support state EJ programs; 3) a $25 million Tribal Environmental Justice Grant Program, to support work to eliminate disproportionately adverse human health or environmental effects on EJ communities in Tribal and Indigenous communities; and 4) a $15 million competitive, community-based Participatory Research Grant Program to award competitive grants to higher education institutions that aim to develop partnerships with community entities to improve the health outcomes of residents and workers in EJ communities.

In FY 2022, EPA will continue to support the efforts of the National Environmental Justice Advisory Council in addition to supporting the efforts of the White House Environmental Justice

[55] For more information, please see: https://www.epa.gov/environmentaljustice/state-and-local-government.
[56] For more information, please see: https://www.epa.gov/environmentaljustice/tribes.

Advisory Council established by EO 14008. EPA also will support the Council on Environmental Quality as they lead the Interagency Council on Environmental Justice. In FY 2022, EPA requests an increase of $10 million and 3 FTE to develop education, training, and outreach programs associated with EJ. These resources will be deployed to establish: 1) an EJ Training Program to increase the capacity of EJ community residents to identify and address negative impacts; 2) outreach centers in the EPA regional offices to work directly with EJ communities; and 3) an EJ Clearinghouse to serve as online resources for EJ information.

In FY 2022, EPA will continue to support and improve our national EJ screening tool, EJSCREEN. Efforts will focus on continuing to identify and add valuable new data sources to the tool with a focus on climate-relevant data, in addition to enhancing user interface elements. This investment is intended to further inform equitable decision making across the federal government and within EPA and more robust and diverse data is needed to effectively prioritize communities in need. The budget request includes an increase of $5.9 million for EJSCREEN to bolster Agency use of nationally consistent data that combines environmental and demographic indicators in mapping and targeting communities with environmental justice concerns. Efforts will focus on continuing to identify and add valuable new data sources to the tool with a focus on climate-relevant data, in addition to enhancing user interface elements. These enhancements will enable EPA to further focus federal resources and program design to benefit environmental justice communities and those most at risk of climate change. In addition, resources are included to update EPA's IT systems to support the development of a geospatial Climate and Economic Justice Screening tool, as outlined in EO 14008.

The FY 2022 Budget identifies environmental justice priority areas that aim to expand EPA's work to ensure environmental justice in underserved communities. It includes proposed authorization language to carry out new environmental justice grants aimed at reducing the disproportionate health impacts of environmental pollution and to establish an Environmental Justice Training Program charged with increasing the capacity of residents of underserved communities to identify and address disproportionately adverse human health or environmental effects.

Performance Measure Targets:

EPA is currently evaluating its suite of measures and indicators related to environmental justice, including available data and programs where improved data sets are needed to develop useful performance measures for the Environmental Justice Program. Measures are under development in this program to address environmental justice.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$1,622.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$88,596.0 / + 61.5 FTE) This net program change supports EJ work across the Agency, including substantial increases for FTE support. This investment supports the significantly

expanded base activity and agencywide coordination required across the EJ Program. This increase includes $9,615.0 thousand in payroll.

- (+$9,906.0 / +63.5 FTE) This program change supports EJ work in the regions. This investment supports the significantly expanded base activity and agency-wide coordination required in the regional offices. This increase includes $9,906.0 thousand in payroll.

- (+$50,000.0 / +5.0 FTE) This program change increases competitive grants aiming to broadly reduce the disproportionate health impacts of environmental pollution in the EJ community. The establishment of this grant program will require authorization from Congress, and appropriations language has been provided in the proposed EPM Bill Language. This investment includes $780.0 thousand in payroll.

- (+$25,000.0 / +2.0 FTE) This program change is an increase to establish an Environmental Justice Community Grant Program. Eligible recipients would be nonprofit, community-based organizations that conduct activities to reduce the disproportionate health impacts of environmental pollution in the EJ community. The establishment of this grant program will require authorization from Congress, and appropriations language has been provided in the proposed EPM Bill Language. This investment includes $312.0 thousand in payroll.

- (+$25,000.0 / +2.0 FTE) This program change is an increase to establish an Environmental Justice State Grant Program that would establish or support state EJ programs. The establishment of this grant program will require authorization from Congress, and appropriations language has been provided in the proposed EPM Bill Language. This investment includes $312.0 thousand in payroll.

- (+$25,000.0 / +2.0 FTE) This program change is an increase to establish a Tribal Environmental Justice Grant Program. This program would support tribal work to eliminate disproportionately adverse human health or environmental effects on environmental justice communities in Tribal and Indigenous communities. The establishment of this grant program will require authorization from Congress, and appropriations language has been provided in the proposed EPM Bill Language. This investment includes $312.0 thousand in payroll.

- (+$15,000.0 / +1.0 FTE) This program change is an increase to establish a competitive, community-based Participatory Research Grant Program. Eligible recipients would be higher education institutions that aim to develop partnerships with community entities to improve the health outcomes of residents and workers in EJ communities. The establishment of this grant program will require authorization from Congress, and appropriations language has been provided in the proposed EPM Bill Language. This investment includes $156.0 thousand in payroll.

- (+$4,000.0 / +5.0 FTE) This program change is an increase to support the Climate National Environmental Justice Advisory Council and other federal advisory council activities. The EJ Program will provide funding and support for the White House Environmental Justice Advisory Council to advise the Interagency Council and Chair of the Council on

Environmental Quality (CEQ) in addition to ongoing support for the National Environmental Justice Advisory Council to advice the EPA Administrator. This investment includes $780.0 thousand in payroll.

- (+$10,000.0 / +3.0 FTE) This program change is an increase to establish an Environmental Justice Training Program to increase the capacity of residents of underserved communities to identify and address disproportionately adverse human health or environmental effects. The establishment of this grant program will require authorization from Congress, and appropriations language has been provided in the proposed EPM Bill Language. This investment includes $468.0 thousand in payroll.

- (+$10,000.0 / +12.0 FTE) This program change is an increase to establish EPA outreach centers housed in EPA regional offices to connect directly with communities, hold hearings, and support local EJ efforts. This investment includes $1,872.0 thousand in payroll.

- (+$4,000.0 / +3.0 FTE) This program change increases legal support with a focus on EJ issues. This investment includes $468.0 thousand in payroll.

- (+$3,000.0 / +3.0 FTE) This program change increases external EJ coordination with other federal agencies. This includes developing and expanding federal best practices around EJ and supporting other federal efforts to expand EJ programs. This investment includes $468.0 thousand in payroll.

- (+$5,000.0 / +3.0 FTE) This program change is an increase to establish an Environmental Justice Clearinghouse, which would serve as an online resource for information on EJ, including training materials and a directory of experts and organizations with the capability to provide advice or technical assistance to underserved communities. This investment includes $468.0 thousand in payroll.

- (+$5,900.0 / +4.0 FTE) This program change is an increase for EJSCREEN to improve how the Agency utilizes nationally consistent data that combines environmental and demographic indicators in mapping and identifying communities with environmental justice concerns. In addition, resources are included to update EPA's IT systems to support the development of a geospatial Climate and Economic Justice Screening tool. This investment includes $624.0 thousand in payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$15,337.8***	***$16,943.0***	***$18,966.0***	***$2,023.0***
Total Budget Authority	$15,337.8	$16,943.0	$18,966.0	$2,023.0
Total Workyears	89.5	89.9	90.9	1.0

Program Project Description:

Pursuant to the National Environmental Policy Act (NEPA) and §309 of the Clean Air Act (CAA), EPA's NEPA Implementation Program coordinates and comments on the environmental review of major federal actions and ensures the §309 draft and final environmental impact statement (EIS) comment letters are made publicly available. The Program guides EPA's compliance with NEPA, and other related statutes and executive orders. The Program manages the official EIS filing system for all federal EISs, in accordance with a Memorandum of Understanding (MOU) with the Council on Environmental Quality (CEQ).[57] EPA uses e-NEPA, a web-based system, as the official EIS filing system for federal agencies and EIS clearinghouse to meet the CEQ MOU commitments. All §309 comment letters are publicly available on e-NEPA. The NEPA Implementation Program also operates, uses, and promotes NEPAssist, a publicly available geographic information system to help users (EPA, other federal agencies, and the public) with environmental reviews under NEPA. The Program also is responsible for managing the review of EISs of non-governmental activities in Antarctica, in accordance with the Antarctic Science, Tourism, and Conservation Act.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will focus its reviews on areas where the Agency has statutory authority and subject matter expertise. EPA will continue to work with the Office of Management and Budget, CEQ, and other federal agencies to evaluate ways to coordinate, streamline, and improve the NEPA process. Under the CAA §309 Program, EPA reviews over 280 EISs each year from other federally agencies. Under the Antarctica Program, EPA reviews on average 25 initial environmental evaluations each year. In FY 2020, EPA engaged early with the lead federal agency on 78 percent of projects where a draft EIS was published.

Executive Order (EO) 13990: *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*[58] directs CEQ to review and update "Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas (GHG) Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews,'' 81 FR 51866

[57] Memorandum of Agreement No. 1 Between the Council on Environmental Quality and the Environmental Protection Agency, October 1977.
[58] For additional information, please refer to: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/.

(August 5, 2016). EO 14008: *Tackling the Climate Crisis at Home and Abroad,*[59]directs CEQ to create a climate and environmental justice (EJ) screening tool. Consistent with EO 13990, CEQ is reviewing the 2020 CEQ NEPA regulations final rule for potential update. In addition, CEQ has stated there is a high likelihood that there will be a need to pursue a notice of proposed rulemaking to update to the 2020 CEQ NEPA regulations. EPA's CAA §309 role in FY 2022 will be to review agencies' EISs and provide recommendations and technical assistance to agencies to improve environmental outcomes, including associated updates to NEPA regulations, addressing guidance on GHG emissions and climate resiliency and adaptation, and addressing guidance when working with communities with EJ concerns, identifying, avoiding and minimize impacts. In FY 2022, the NEPA Implementation Program will develop updated guidance, tools and resources for federal agencies and CAA §309 reviewers to assist in the transparent, consistent and high quality identification and disclosure of opportunities to avoid, minimize and mitigate impacts to communities with EJ concerns; reduce impacts of GHG emissions in all major sectors; and identify and develop climate-resilient alternatives. This will include identifying opportunities to improve and enhance the NEPAssist to incorporate tools and/or additional layers/information as needed, updating the platform to improve functionality for users; enhancing existing interface between NEPAssist and EJSCREEN, and identifying other tools and support as CEQ updates, GHG guidance and provides direction with respect to the climate and EJ screening tools.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$320.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$1,703.0 / +1.0 FTE) This program change is an increase to support the incorporation of EJ data into the NEPAssist geospatial planning tool to ensure EJ impact is considered when using the tool**.** This includes $171.0 in payroll.

Statutory Authority:

NEPA; CAA § 309; Antarctic Science, Tourism, and Conservation Act; Clean Water Act § 511(c); Endangered Species Act; National Historic Preservation Act; Archaeological and Historic Preservation Act; Fishery Conservation and Management Act; Fish and Wildlife Coordination Act; and Title 41 of the Fixing America's Surface Transportation Act.

[59]For additional information, please refer to: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.

Geographic Programs

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$87,690.4***	***$87,500.0***	***$90,500.0***	***$3,000.0***
Total Budget Authority	$87,690.4	$87,500.0	$90,500.0	$3,000.0
Total Workyears	36.5	38.2	38.2	0.0

Program Project Description:

The Chesapeake Bay is the largest estuary in the United States with a drainage area that covers six separate states in the mid-Atlantic. The Bay is not only treasured for recreational purposes but also serves as a vital resource for ecological and economic activities in the region and beyond. The Chesapeake Bay Program is a voluntary partnership initiated in 1983 that now includes the Chesapeake Bay watershed states (Delaware, Maryland, New York, Virginia, Pennsylvania, and West Virginia), the District of Columbia, the Chesapeake Bay Commission, and the federal government. EPA represents the federal government on the partnership's Chesapeake Executive Council and, under the authority of Section 117 of the Clean Water Act, works with the Executive Council to coordinate activities of the partnership. On June 16, 2014, the Chesapeake Bay Program partners signed the most recent Chesapeake Bay Watershed Agreement,[60] which provides for the first time the Bay's headwater states (Delaware, New York, and West Virginia) with full partnership in the Bay Program. The Agreement establishes 10 goals and 31 outcomes for sustainable fisheries, water quality, vital habitats, climate change, toxic contaminants, and other areas, with Management Strategies and two-year Logic & Action Plans covering all 31 outcomes.

EPA, the watershed jurisdictions, and other key federal agencies set two-year water quality milestones that measure progress made in achieving the Bay Total Maximum Daily Load (TMDL) and the jurisdictions' Watershed Implementation Plans.[61] The TMDL satisfies a requirement of the Clean Water Act and EPA commitments under Court-approved consent decrees for Virginia and the District of Columbia dating to the late 1990s.[62] The TMDL is designed to ensure all nitrogen, phosphorus, and sediment pollution control efforts needed to restore the Bay and its tidal rivers are in place by 2025.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will focus on supporting implementation of the two-year Logic & Action Plans for the 25 Management Strategies developed under the Agreement, with particular focus on accelerating implementation of outcomes where progress is lagging. The program is increasing

[60] The Chesapeake Bay Watershed Agreement (2014) available at: http://www.chesapeakebay.net/documents/FINAL_Ches_Bay_Watershed_Agreement.withsignatures-HIres.pdf.
[61] The federal milestones related to water quality in the Chesapeake Bay watershed are available at http://executiveorder.chesapeakebay.net/EO_13508_Water_Quality_Milestones-2012-01-06.pdf. The jurisdictional milestones are available at: https://www.epa.gov/chesapeake-bay-tmdl/chesapeake-bay-milestones.
[62] The Chesapeake Bay TMDL, available at: http://www.epa.gov/chesapeakebaytmdl/.

focus on environmental justice ensuring the benefits of the Chesapeake Bay Program are distributed equitably. In addition, the Program is increasing efforts in the climate change space by focusing initiatives on the resiliency of the watershed. Specific emphases include:

- Implementation of the water quality outcomes that describe the commitment of the Agreement signatories for having all practices in place by 2025 to achieve the necessary pollutant reductions;
- Accelerating implementation of outcomes that help keep the watershed resilient in the face of climate change (including forest and wetland protection and restoration);
- Maintaining the historically strong submerged aquatic vegetation, and tidal and non-tidal water quality monitoring programs implemented through state grants and federal interagency agreements;
- Ensuring the most up-to-date science is used throughout the Chesapeake Bay Program to support decision-making, implementation, and future condition assessment. For example, improving computer models to help predict the impact of climate change on the Chesapeake Bay Program's ability to meet water quality standards in the tidal waters of the Chesapeake Bay; and
- Implementing an action plan to improve diversity, equity, inclusion, and justice in Chesapeake Bay Program restoration efforts.

Environmental results, measured through data collected by the states and shared with the federal government, show the importance of the investment that federal, state, and local governments have made in providing clean and safe water. Every year, the Chesapeake Bay Program uses available monitoring information from the 92 segments of the Chesapeake Bay to estimate whether each segment is attaining criteria for one or more of its designated uses. EPA, along with other federal, state, and academic partners, are using this information to demonstrate progress toward meeting water quality standards and the Bay TMDL.

States have reported that, as of 2019, best management practices to reduce pollution are in place to achieve 39 percent of the nitrogen reductions, 49 percent of the phosphorus reductions, and 100 percent of the sediment reductions needed to attain applicable water quality standards when compared to the 2009 baseline established in the Chesapeake Bay Total Maximum Daily Load.[63]

EPA will continue to provide the Chesapeake Bay Program partnership with funding and technical assistance, track and report progress, and coordinate and facilitate partnership efforts to reach our mutual goals of a healthy Bay and watershed. While continuing progress toward restoring the Bay watershed, EPA and other Executive Council members signed and released the historic *Statement in Support of Diversity, Equity, Inclusion and Justice.*[64] This statement reaffirmed our commitment to recruit and retain staff and volunteers that reflect the diversity of the watershed, foster a culture of inclusion and respect across all partner organizations, and ensure the benefits of our science, restoration, and partnership programs are distributed equitably without disproportionate impacts on vulnerable populations.

Additionally, EPA is working to integrate climate change in Bay restoration efforts. EPA is

[63] For more information, please see https://www.chesapeakeprogress.com/clean-water/watershed-implementation-plans.
[64] For more information, please see https://www.chesapeakebay.net/channel_files/40996/deij_statement_final_all_signatures.pdf.

addressing climate change in three ways: 1) in 2025, predicting the impact of 2035 climate changes on water quality and adjusting pollution targets; 2) understanding adaptations needed in the watershed and coastal regions; and 3) maintaining or improving the watershed's resiliency to climate change. Work is underway to develop state-of-the-science models of the Chesapeake airshed, watershed, and tidal waters to refine the 2035 climate risk in the 2025 Chesapeake Bay Assessment. Also, EPA and the Bay Program partnership are actively investigating Best Management Practices to better protect the watershed and tidal Bay against the observed increased precipitation volumes and intensity brought about by climate change in urban/developed and agricultural regions.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$76.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$2,924.0) This program change increases support for projects to accelerate the restoration of the Chesapeake Bay focusing on a number of outcomes, including improving water quality and promoting climate resiliency.

Statutory Authority:

Clean Water Act, Section 117; Estuary Restoration Act of 2000; Chesapeake Bay Accountability and Recovery Act of 2014; Clean Air Act; Consolidated Appropriations Act, 2021, Pub. L. 116-260.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$13,833.9***	***$20,000.0***	***$22,447.0***	***$2,447.0***
Total Budget Authority	$13,833.9	$20,000.0	$22,447.0	$2,447.0
Total Workyears	14.2	14.7	14.7	0.0

Program Project Description:

The Gulf of Mexico is the ninth largest body of water in the world. The Mississippi River is the main river system which drains to the Gulf. The Mississippi River watershed captures drainage from 41 percent of the land area of the contiguous United States (parts of 31 states). This area equates to approximately 1,467,182 square miles. Through coordinated public collaboration, EPA works in partnership to restore the Gulf, and ultimately improve the health of the coastal area benefiting approximately 20 million Americans.

The mission of the EPA's Gulf of Mexico Division (GMD) is to facilitate collaborative actions which protect, maintain, and restore the health and productivity of the Gulf of Mexico in ways consistent with the economic well-being of the region. The GMD competitively funds projects and works through interagency agreements and strategic partnerships to accomplish its mission. All GMD projects and partnership work are linked to one or more performance measures: improve and/or restore water quality; protect, enhance, or restore coastal and upland habitats; promote and support environmental education and outreach to inhabitants of the Gulf watershed; and support the implementation of programs, projects, and tools which strengthen community resilience. The GMD provides significant leadership and coordination among state and local governments, the private sector, tribes, scientists, and citizens to align efforts that address the challenges facing the communities and ecosystems of the Gulf Coast.

The GMD is committed to voluntary, non-regulatory actions and solutions based on scientific data and technical information as informed by work efforts conducted with partners and the public.

FY 2022 Activities and Performance Plan:

In FY 2022, the Gulf of Mexico Division will continue to support specific actions and solutions designed to improve the environmental and economic health of the Gulf of Mexico region through cooperative efforts and partnerships. Specifically, the Gulf of Mexico Division will address nutrient reduction on agricultural lands with a targeted focus on minority farmers and ranchers. Additionally, GMD will center its focus on sustainable agriculture and resilience in the farming community. EPA will continue to expand Science, Technology, Engineering, and Mathematics (STEM) experiential and workforce development to communities beleaguered by environmental injustices. Through green infrastructure practices akin to artificial reefs, riparian buffers, prairies, and living shorelines, GMD will continue to aid climate change practices. The GMD projects are

competitively funded and coordinated with and complement ongoing Resource and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies (RESTORE) and Natural Resource Damages Assessment (NRDA) activities related to the Deepwater Horizon oil spill. The GMD continues to seek broad participation and input from the diverse stakeholders who live, work, and recreate in the Gulf Coast region. There is a strong sense of partnership due to the coordination with our partners who work together to improve decision-making based on the best available science.

The GMD directly supports the following activities:

Environmental Education and Outreach

Innovative measures are essential to improving water quality, restoring habits, and enhancing community resilience. In FY 2022, the GMD will continue to promote the use of best available science and healthy environmental practices by developing programs, establishing partnerships, and competitively funding projects that increase environmental literacy. The GMD will enhance experiential learning opportunities for Gulf residents and visitors alike. The GMD will ensure that practitioners of environmental education initiatives are validated by science and Gulf residents can share a commonality of interest to preserve the Gulf of Mexico.

To ensure that environmental education and outreach efforts extend to vulnerable populations, GMD will work with various sectors of government, community leaders, and academia on projects that improve conditions in communities beset by environmental injustices. Education and outreach are vital components and essential to accomplishing the Agency's mission to protect human health and the environment, to serve communities impacted by environmental injustices, and to meet the GMD specific goals of promoting healthy and resilient coastal communities. All Gulf residents deserve the best information as it directly relates to their health, the economic vitality of their communities, and their overall quality of life.

Strengthen Resilience

Coastal and inland communities continuously face various natural and man-made challenges of living along the Gulf of Mexico coastline. These challenges include storm risk, land and habitat loss, depletion of natural resources, compromised water quality, and economic fluctuations. In FY 2022, the GMD will continue the robust partnerships and extensive community interactions to strengthen coastal and near-shore community preparedness. Through actions, activities, partnerships, and projects, communities Gulf-wide will be more resilient, and thus better prepared for natural disasters or other situational emergencies.

Improve Water Quality

The Clean Water Act provides authority and resources critical to protecting and improving the water quality in the Gulf of Mexico and all waters of the United States. The GMD implements projects and works with its partners, such as the Hypoxia Task Force, to improve water and habitat quality throughout the Gulf of Mexico watershed. The GMD funds projects which improve water quality on a watershed basis.

Enhance, Protect, or Restore Coastal Habitats

Managing critical ecosystems is widely recognized as a fundamental environmental challenge throughout the Gulf Coast region. The priority issues include, but are not limited to, sediment management, marsh/habitat loss due to subsidence, the continued reduction of freshwater in-flow, and climate change. For decades, the Gulf Coast has endured extensive natural and man-made damage to key habitats such as coastal wetlands, estuaries, barrier islands, upland habitats, seagrass vegetation, oyster reefs, coral reefs, and offshore habitats. In FY 2022, the GMD will continue working in close partnership to enhance coastal ecosystems, improve sediment movement/management, restore acreage where feasible and cost-effective, and reverse the effects of long-term habitat degradation.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$28.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$2,419.0) This program change increases resources to support projects that will accelerate the restoration of the Gulf of Mexico.

Statutory Authority:

Clean Water Act, Consolidated Appropriations Act, 2021, Pub. L. 116-220.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$13,387.0***	***$15,000.0***	***$20,000.0***	***$5,000.0***
Total Budget Authority	$13,387.0	$15,000.0	$20,000.0	$5,000.0

Program Project Description:

Lake Champlain is a resource of national significance and supports the diverse interests of a basin that spans New York and Vermont. The Lake Champlain Basin comprises 8,234 square miles, 56 percent of which is in Vermont, 37 percent in New York, and seven percent in the Province of Quebec. The Basin is home to more than 600 thousand people, about 35 percent of whom depend on the lake for drinking water and draws millions of visitors annually. The Lake Champlain Basin Program works to support a comprehensive pollution prevention, control, and restoration plan for protecting the future of the Lake Champlain Basin. Through the Lake Champlain Program, EPA is addressing various threats to Lake Champlain's water quality, including phosphorus loadings, invasive species, and toxic substances.[65]

The Program aims to achieve clean waters that will sustain diverse ecosystems, support vibrant communities and working landscapes, and provide safe recreational opportunities. These ecosystems should provide clean water for drinking and recreation and support a habitat that is resilient to extreme events and free of aquatic invasive species. In addition, the Program supports thriving communities, strong local economies, and an informed and involved public.

FY 2022 Activities and Performance Plan:

EPA and its partners will address high levels of phosphorus by implementing priority actions identified in the Opportunities for Action management plan to reduce phosphorus loads. The 2016 Vermont Total Maximum Daily Load (TMDL) for Phosphorus for Lake Champlain is central to the planning and implementation work within the Lake Champlain Basin to reduce phosphorus loads and meet the wasteload and load allocations specified in the TMDL. Phosphorus reductions from the New York portion of the Basin continue to be subject to the original TMDL approved in 2002. Although both New York and Vermont continue to make progress reducing phosphorus inputs to Lake Champlain, there is more work to be done to meet water quality standards. Vermont, which is responsible for 68 percent of the total phosphorus load to the lake, must reduce its current phosphorus load by 213 metric tons per year from the 2015 baseline load of 631 metric tons (or 34 percent). While Vermont's January 2021 annual Clean Water Initiative Performance Report estimates that it has reduced its phosphorus load by 27.7 metric tons per year (or 13 percent of the required total phosphorus reduction), further reductions will require continued efforts. There will

[65] For additional information see: https://www.epa.gov/tmdl/lake-champlain-phosphorus-tmdl-commitment-clean-water, http://www.lcbp.org, beta.SAM.gov.

also be an increased effort to better understand how to address harmful algal blooms (HABs) and monitor and act to prevent invasive species. In FY 2022, EPA will focus on the following:

- Ninety-three percent of the total phosphorus load to the lake is from stormwater or nonpoint source runoff, and seven percent is from wastewater treatment plant sources in Vermont, New York, and Quebec. EPA and its partners will continue to reduce phosphorous pollution from wastewater treatment facilities, stormwater runoff, and nonpoint sources to meet reductions specified in the Vermont and New York Total Maximum Daily Loads (TMDLs). Specifically:
    - Ensuring that facilities' permits remain consistent with the Clean Water Act, necessary upgrades to treatment facilities are completed, and the treatment optimization efforts continue throughout the Basin.
    - Implementing stormwater planning, design, and construction of green stormwater infrastructure at Vermont public schools and state universities, and implementation of best management practices on rural roads in both Vermont and New York.
    - Addressing agricultural nonpoint sources including continued research to determine the efficiency of agricultural best management practices; evaluation of farm practices to identify where practices are needed; and decommissioning former agricultural lands better suited for habitat and floodplain restoration efforts. Results from this work will help direct resources to the most effective practices that reduce runoff and associated nutrient and sediment losses.
- The Lake Champlain Special Designation Act calls for the review and revision, as necessary, of the program management plan at least once every five years. The Lake Champlain Basin Program will work with the Steering Committee to update the plan in FY 2022.
- Increased funds in FY 2022 will support work on aquatic invasive species that are non-native species that harm the environment, economy, or human health, and include aquatic plants, animals, and pathogens. EPA will continue to work with partners to understand the impact of any potential spread and continue to monitor water chestnuts and reduce their density and distribution. Additionally, EPA and its partners will continue to implement the activities identified in the Great Lakes and Lake Champlain Invasive Species Program Report submitted to Congress under requirements of the Vessel Incidental Discharge Act.
- Increased funds in FY 2022 will continue to support the development of new ways to understand the high seasonal concentrations of Harmful Algal Blooms, report on their potential health impacts, and provide necessary information to the health departments of New York and Vermont to close beaches, protect drinking water intakes, or take other actions. In addition, the Lake Champlain Program will look into developing new approaches for urban and agricultural stormwater control.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$5,000.0) This increase of resources supports projects to accelerate the restoration of Lake Champlain through addressing various threats to Lake Champlain's water quality, including phosphorus loadings, invasive species, and toxic substances.

Statutory Authority:

Boundary Waters Treaty of 1909; Clean Water Act; Consolidated Appropriations Act, 2021, Pub. L. 116-260.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$20,642.6***	***$30,400.0***	***$40,000.0***	***$9,600.0***
Total Budget Authority	$20,642.6	$30,400.0	$40,000.0	$9,600.0
Total Workyears	0.3	2.0	2.0	0.0

Program Project Description:

The Long Island Sound Program protects one of the most densely populated areas of the United States, with nearly nine million people living in the watershed. In total, the Long Island Sound watershed comprises of more than 16,000 square miles, including virtually the entire state of Connecticut, and portions of New York, Rhode Island, Massachusetts, Vermont, and New Hampshire. Millions flock yearly to the Long Island Sound for recreation, and the Long Island Sound provides a critical transportation corridor for goods and people. The Long Island Sound continues to provide feeding, breeding, nesting, and nursery areas for diverse animal and plant life. The ability of the Long Island Sound to support these uses is dependent on the quality of its waters, habitats, and living resources. The Long Island Sound watershed's natural capital provides between $17 and $37 billion in ecosystem goods and services every year.

Improving water quality and reducing nitrogen pollution are priorities of the Long Island Sound Program. By investing more than $2.5 billion to improve wastewater treatment, the total nitrogen load to Long Island Sound in 2020 was 47 million pounds less than the 1990 annual baseline discharge, a 60 percent reduction, and is now attaining the wasteload allocation set in 2000.

The Program also is focused on habitat protection and restoration. The Program restored 350 acres of coastal habitat between 2015-2019 and by the end of 2020 achieved 45.6 percent of the long-term goal to restore one thousand acres of habitat by 2035.

FY 2022 Activities and Performance Plan:

EPA will continue to oversee implementation of the Long Island Sound Study (LISS) Comprehensive Conservation and Management Plan (CCMP) by coordinating the cleanup and restoration actions of the LISS Management Conference. The LISS CCMP is organized around four major themes: 1) Clean Waters and Healthy Watersheds; 2) Thriving Habitats and Abundant Wildlife; 3) Sustainable and Resilient Communities; and 4) Sound Science and Inclusive Management. Throughout the four themes, the CCMP incorporates key challenges and environmental priorities including resiliency to climate change, long-term sustainability, and environmental justice. The plan also set 20 quantitative ecosystem recovery targets to drive progress. In 2020, the LISS updated the CCMP with 136 implementation actions covering the period 2020-2024. In FY 2022, EPA will focus on the following:

- Continue to reduce nitrogen pollution through implementing the Nitrogen Reduction Strategy. EPA will work cooperatively with Connecticut and New York to expand modeling and monitoring to develop numeric nitrogen targets that are protective of designated uses and set local nitrogen reduction targets where necessary to meet them;
- Coordinate priority watershed protection programs such as increasing streamside buffer zones as natural filters of pollution;
- Support community sustainability and resiliency through the new LISS Sustainable and Resilient Communities Work Group to help communities plan for climate change impacts while strengthening ecological health and protecting local economies;
- Increase environmental justice considerations through the new LISS Environmental Justice Work Group;
- Expand tracking and reporting of implementation efforts;
- Continue coordinated water quality monitoring;
- Coordinate the protection and restoration of critical coastal habitats to improve the productivity of tidal wetlands, inter-tidal zones, and other key habitats that have been adversely affected by unplanned development, overuse, land use-related pollution effects, and climate change: e.g., sea level rise, warming temperatures, changes in salinity and other ecological effects;
- Provide technical and financial assistance through the Long Island Sound Futures Fund and
- Conduct focused scientific research into the causes and effects of pollution on the Sound's living marine resources, ecosystems, water quality, and human uses to assist managers and public decision-makers in developing policies and strategies to address environmental, social, and human health impacts.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$3.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$9,597.0) This program change increases resources to support projects to accelerate the restoration of Long Island Sound through coordinating cleanup and restoration actions.

Statutory Authority:

Clean Water Act § 119.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$9,863.9***	***$10,400.0***	***$11,234.0***	***$834.0***
Total Budget Authority	$9,863.9	$10,400.0	$11,234.0	$834.0
Total Workyears	4.7	5.7	5.7	0.0

Program Project Description:

EPA targets efforts to protect and restore many of the unique communities and ecosystems across the United States through the geographic programs. In order to protect these diverse and treasured resources impacted by environmental problems, the Agency develops and implements approaches to mitigate sources of pollution and cumulative risk in order to protect ecosystems' water quality and the residents that rely on these water resources. While substantial progress has been made in all of these programs, more work is required to further reduce toxins, lower nutrient loads into watersheds and water bodies, increase ecologically and economically important species, restore habitats, and protect human health.

The Northwest Forest Program

The Northwest Forest Program addresses water quality impairments in forested watersheds and works to improve the quality and quantity of surface water so that beneficial uses and drinking water/source water protection goals are met. Climate change is increasing the demands on the program due to the increase of catastrophic wildfires and resulting impacts to water quality and municipal drinking water.

The Northwest Forest Program supports monitoring of watershed conditions across 72 million acres of forest and rangelands in the Northwest. Funding allows EPA to provide critical support to the Aquatic Riparian Effectiveness Monitoring Program and the Pacfish/Infish Biological Opinion Effectiveness Monitoring Program. These regional scale watershed monitoring Programs are essential to determining the effectiveness of riparian management in meeting aquatic/riparian habitat, ecosystem function, and water quality standards. The data also informs management of drinking water source areas in Oregon and Washington where 40 to 90 percent of the land area of individual national forests supply municipal drinking water to communities west of the Cascade Range crest.

The Northwest Forest Program also helps EPA respond to Tribal trust and treaty responsibilities. EPA staff are key to protection and restoration of watersheds and water quality important to tribes. EPA has tribal trust responsibilities in the Northwest related to tribes reliant on salmon and shellfish.

The Lake Pontchartrain Basin Restoration Program

The Pontchartrain Basin, including headwaters of Lake Pontchartrain, is known for its slow-flowing rivers and bayous, tranquil swamps, and lush hardwood forests, and provides essential habitat for countless species of fish, birds, mammals, reptiles, and plants. The famous wetlands and marshes surrounding the Basin's waters provide a beautiful setting for wildlife and are the heart of the region's commercial and recreational fisheries. The Pontchartrain Basin also is the center of southeastern Louisiana's unique cultural heritage. With over two million[66] residents, including rural farming communities, metropolitan New Orleans, and the fishing, shrimping, crabbing, and oyster industries, the area is brimming with a diversity of people bound by a common interest: the desire for clean and healthy waters in the Pontchartrain Basin. The Basin comprises over 10 thousand square miles of land in 16 Louisiana parishes and four Mississippi counties. According to the Louisiana Agricultural Center Research and Extension, the combined total value in these parishes in 2018 for production of agriculture, forestry, fisheries, and wildlife is $895,904,957.[67] Much of this production requires adequate quantity and quality of water. All of these lands drain into rivers and bayous, which empty into Lake Pontchartrain and its connecting sister lakes, Maurepas and Borgne.

The Lake Pontchartrain Basin Restoration Program, through a collaborative and voluntary effort, strives to restore ecological health by developing and funding restoration projects within the 16 parishes in the Basin. The Program continues to support the efforts of the Lake Pontchartrain Basin Foundation to restore and preserve the water quality, coast, and habitats of the entire Lake Pontchartrain Basin. The Lake Pontchartrain Basin Foundation (LPBF) conducts sampling of the lake and tributary water quality to support related scientific and public education projects.

Southeast New England Program (SNEP)

Southeast New England (from Westerly, Rhode Island, to Pleasant Bay, Massachusetts) faces environmental challenges that are both unique and highly representative of critical national problems, especially in coastal areas. Typical problems include rivers hydrologically disconnected by dams and restrictions, lost wetland functions, urbanization, and centuries-old infrastructure – all compounded by the increasing impacts of excess nutrients from wastewater, stormwater runoff, and atmospheric deposition. Excess nutrients have contributed to severe water quality problems including algal blooms, low dissolved oxygen conditions, fish kills, impaired benthic communities, and habitat loss (sea grass and salt marsh) in estuaries and near-coastal waters of this region and worldwide. The impacts of climate change, especially the likelihood of extreme weather events and increased precipitation, will further stress these systems in coming years, not only environmentally but also socially and economically. The challenge is to link environmental quality to economic opportunity and jobs by delivering local solutions in a regional and watershed context. Taking up and successfully addressing these issues will enable the Program to serve as a model for other areas.

[66] 2010 U.S. Census Bureau. https://www.census.gov/topics/population.html.
[67] For more information, please see: Louisiana Ag Center Research and Extension. https://www.lsuagcenter.com/~/media/system/7/9/6/7/796773af58d4c3e610063c7a8f7985f1/pub2382%20ag%20summary%202020_fullpdf.pdf.

SNEP serves as a hub to enable protection and restoration of the coastal watersheds of Southeast New England, including the ecosystem services that will sustain the region's communities and environmental assets into the future. SNEP draws upon networks of stakeholders and experts to seek out and support innovations in practices, technology, and policies that will enable better and more effective watershed protection and restoration. The goal is to create a sustainable path for change and to lead the next generation of environmental management by:

- Developing and investing in innovative, cost-effective restoration and protection practices, as well as new regulatory, economic, and technology approaches;
- Providing technical assistance to municipalities, tribes, and local organizations;
- Supporting local restoration efforts;
- Integrating delivery of programs to the public by our fellow agencies and partners;
- Focusing on ecosystem services; and
- Improving technology transfer and delivery of restoration programs across the region.

Columbia River Program

The Columbia River Basin (Basin) is one of North America's largest watersheds, covering approximately 260 thousand square miles, originating in British Columbia, Canada, with seven states including significant portions of Idaho, Montana, Oregon, and Washington. The Basin provides environmental, economic, cultural, and social benefits and is vital to many entities and industries in the Pacific Northwest, including tribal, recreational, and commercial fisheries; agriculture; forestry; recreation; and electric power generation.

Human activities have contributed to impaired water quality that impacts human health, and fish and wildlife species survival. Tribal fish consumers, other high fish consumers and subsistence fishers, are exposed to known toxic contaminants and increased human health risks. There are a number of endangered fish and wildlife species throughout the Basin with a major salmon restoration effort underway that has expended millions of dollars to restore salmon throughout the Basin. Beginning in 2004, EPA has made a priority commitment to reducing toxics in the Basin reflecting a responsibility to environmental justice for tribal people to protect human health and help restore and protect fish and wildlife populations.

Furthermore, the Clean Water Act (CWA) Section 123, the Columbia River Basin Restoration Act, directs EPA to lead a Basin-wide collaboration and competitive grant program to assess and reduce toxics in the Basin. The Columbia River Basin Restoration Act is a stand-alone legislation that amended the CWA in December 2016 to include Section 123, which directs EPA to: establish a Columbia River Basin Restoration Program (CRBRP) to assess trends in water quality; collect and assess data to identify possible causes of environmental problems; provide grants for projects for specific purposes; and, establish a voluntary Columbia River Basin Restoration Working Group.

FY 2022 Activities and Performance Plan:

In FY 2022, an $834.0 thousand dollar increase will be allocated to accelerate the restoration of the geographic programs referenced and will emphasize initiatives such as environmental justice and climate change.

Northwest Forest Program

In FY 2022, the Agency's request will support the following activities:

- Wildfires impact monitoring and assessment of water quality in watersheds impacted by the catastrophic 2020 Labor Day fires in Oregon. Participation on the Governor's Wildfire, Natural, Cultural, and Recreation Task Force and Post-Wildfire Research and Monitoring Team to develop a wildfire recovery strategy encompassing impacts to wildlife, natural and cultural resources, and recreation;
- Aquatic and Riparian Effectiveness Monitoring (AREMP) of the Northwest Forest Plan and Bureau of Land Management (BLM) Western Oregon Resource Management Plan in maintaining and restoring watershed condition across 24 million acres of federal lands in western Washington and Oregon, and northern California;
- PacFish/InFish Biological Opinion Effectiveness Monitoring (PIBO) to determine whether land management practices are maintaining or improving riparian and aquatic conditions at both the landscape and watershed scales on federal lands throughout the Upper Columbia River and Missouri River Basins, which encompass approximately 80 million acres of BLM and Forest Service lands;
- Water quality data from AREMP and PIBO will be uploaded to the Water Quality Data Exchange (WQX). These programs maintain over 500 year-round temperature monitoring stations to support state water quality and aquatic habitat reporting, including CWA Section 303(d) listings;
- The Drinking Water Providers Partnership – an annual public-private funding opportunity for water providers and watershed restoration practitioners in Oregon and Washington to implement riparian or in-stream restoration actions to restore and protect the health of watersheds and drinking water;
- Support Region 10 states' implementation of forestry non-point source programs and development of Total Maximum Daily Loads (TMDLs) and Best Management Practices for forestry;
- Continue developing Spatial Statistical Network models to evaluate impacts of forest practices and climate change on stream temperatures across entire watersheds. Further supporting watershed management and development and implementation of TMDLs;
- Engage with Idaho Department of Environmental Quality and Idaho Department of Lands during the rulemaking for forest practices on state and private lands. Ensure science-based management practices are being considered to improve water quality and meet water quality standards;
- Engage with Washington Department of Ecology and Washington Department of Natural Resources during the rulemaking for forest practices on state and private lands. Ensure science-based management practices are being considered to improve water quality and meet water quality standards;
- Continue to roll out the Geomorphic Roads Inventory and Assessment Package (GRAIP)-Light, a GIS-based tool to identify and prioritize sources of sediment within watersheds;
- Continue collaboration with partners and local water providers to address sediment and temperature impairments in forested watersheds and engage in collaborative efforts including the Oregon Watershed Enhancement Board. These collaborative efforts are at the forefront of efforts to conserve and restore water quality using alternatives to traditional regulatory and enforcement-related approaches;

- Work with land management agencies to inform management in key source water areas with the objective of ensuring production and delivery of clean and sustainable water while achieving economic efficiencies. Effective management of forest cover in source water areas can decrease drinking water treatment and chemical costs by twenty percent;[3] and
- Engage in an interagency forum at the executive and management levels for Washington, Oregon, and California and a similar forum for the interior Columbia Basin.[4] These two broad-scale collaborative efforts address policy, management, and technical natural resource issues that are key to water quality and drinking water protection.

Lake Pontchartrain

In FY 2022, the Agency's request will help restore the ecological health of the Lake Pontchartrain Basin by:

- Continuing the implementation of the Lake Pontchartrain Basin Program Comprehensive Management Plan[68] and Comprehensive Habitat Management Plan;
- Planning and design of consolidated wastewater treatment systems to support sustainable infrastructure;
- Conducting water quality monitoring outreach and public education projects; and
- Protecting and restoring critical habitats and encouraging sustainable growth by providing information and guidance on habitat protection and green development techniques.

Southeast New England Program (SNEP)

In FY 2022, the Program request will support technical assistance, grants, interagency agreements, and contracts to spur investment in regionally significant and/or landscape-scale restoration opportunities, more fully integrate restoration actions, build local capacity, promote policy and technology innovation, encourage ecosystem (water quality and habitat) approaches, and enact the Southeast New England Program's new Five-Year Strategic Plan.[69] Specific activities include:

- Investing in on-the-ground environmental restoration/protection projects through the SNEP Watershed Implementation Grants (SWIG) Program;
- Building capacity of municipalities and other organizations to actively participate in implementing restoration projects and effectively managing their environmental programs through the SNEP Network;
- Promoting the development of next-generation watershed management tools;
- Communicating with the public through webinars and workshops on priority issues, bi-monthly newsletters, and a biennial tech transfer symposium;
- Collaborating among the Narragansett Bay and Buzzards Bay National Estuary Programs, the states of Rhode Island and Massachusetts, the Cape Cod Commission and other Cape organizations, municipalities, and key stakeholders to identify, test, promote, and implement approaches that can be replicated across Southeastern New England, with a focus on the nexus between habitat, nutrients, and stormwater and ecosystem and community resilience;

[68] For more information please see: https://scienceforourcoast.org/about-us/about-pc/management-plan/.
[69] For more information visit: https://www.epa.gov/snep/snep-strategic-plan.

- Funding pilot projects and research to introduce innovations and practices that accelerate and guide ecosystem restoration and avoid or reduce nutrient impacts through interagency agreements with other federal agencies, including the U.S. Geological Survey and Department of Energy;
- Launching the SNEP Pilot Watershed Initiative which seeks to concentrate and quantitatively evaluate the effectiveness of coordinated environmental restoration projects at a sub-watershed scale. Leveraging for efficiency and effectiveness by coordinating operations, resources, and funding principles among restoration partners, including federal and state agencies;
- Finalizing a framework for a regional monitoring strategy that would ultimately provide data to inform a periodic report on the state of the SNEP region; and
- Incorporating assessment and adaptive management feedback and mechanisms to improve the next generation of projects.

Columbia River Program

The EPA CRBRP's vision is to be a catalyst for broad toxics reduction work efforts and basin-wide collaboration to achieve a healthy ecosystem with significantly reduced toxic levels in fish, wildlife, and water to enable communities to access unimpaired watersheds with healthy fish and wildlife habitat.

Key FY 2022 plans for EPA's CRBRP include:

- Continuing to manage the 14 FY 2019 and FY 2020 grants awarded to monitor and reduce toxics in the Basin;
- Competing the second round of CRBRP funding assistance utilizing FY 2021 and FY 2022 appropriations;
- Providing technical assistance and communication products for the Columbia River Basin Restoration Working Group and the general public including the creation of a CRBRP Story Map; and
- Continuing to update the EPA Columbia River Basin website which serves as a source of technical references and other information on understanding and reducing toxics in the Basin.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$11.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$823.0) This increase of resources supports projects to accelerate the restoration of the geographic programs listed under this program project and will emphasize initiatives such as environmental justice and climate change.

Statutory Authority:

Clean Water Act.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$2,739.6***	***$6,000.0***	***$7,155.0***	***$1,155.0***
Total Budget Authority	$2,739.6	$6,000.0	$7,155.0	$1,155.0
Total Workyears	1.2	1.3	1.3	0.0

Program Project Description:

Rapidly growing South Florida and its nearly 10 million residents represent a multibillion-dollar economy fueled by outdoor recreational tourism (beaches, fishing, boating, and diving); commercial fishing; waterfront real estate development; and agriculture that depend on clean oceans, estuaries, rivers, lakes, and drinking water. EPA is committed to protecting and restoring the Everglades, Florida Keys National Marine Sanctuary (FKNMS), Biscayne Bay, Florida Bay, Caloosahatchee Estuary, Indian River Lagoon, and the other extraordinary natural ecosystems in South Florida.

EPA's South Florida Program coordinates restoration activities in South Florida, including ongoing restoration efforts in the Everglades and the Florida Keys where water quality and habitat are directly affected by land-based sources of pollution. EPA implements, coordinates, and facilitates activities through a variety of programs including: the Clean Water Act (CWA) Section 404 Wetlands Program; the Everglades Water Quality Restoration Strategies Program; the Everglades Regional Environmental Monitoring and Assessment Program; the Florida Keys National Marine Sanctuary Water Quality Protection Program; the Florida Keys National Marine Sanctuary Water Quality Monitoring Program; the Coral Reef Environmental Monitoring Program; the Benthic Habitat Monitoring Program; the Southeast Florida Coral Reef Initiative, as directed by the U.S. Coral Reef Task Force; the Brownfields Program; and other programs.[70,2] The South Florida Program furthers Administration priorities of environmental justice as well as builds resiliency against climate events in the region.

FY 2022 Activities and Performance Plan:

The South Florida Program supports efforts to protect and restore various communities and ecosystems impacted by environmental problems. In FY 2022, EPA will focus on the Florida Keys Water Quality Protection Program, Florida Coral Reef Tract, Florida Keys Coral Reef Restoration, Everglades Restoration, harmful algal blooms, trash free waters, and CWA 404 implementation.

- The Florida Keys National Marine Sanctuary Protection Program conducts long-term monitoring projects of water quality and ecosystems. Data generated from these programs have

[70] For more information please see: http://www.epa.gov/aboutepa/about-epa-region-4-southeast.
[2] For more information please see: https://www.epa.gov/everglades.

documented periodic oceanographic events such as algal blooms, seagrass die-offs, and coral diseases, and have provided the foundational data for the development of nutrient numeric criteria. The long-term status and trend collected by the Coral Reef Environmental Monitoring Program is tracking the ongoing Stony Coral Tissue Loss Disease that continues to decimate over 20 reef building corals species of the Florida Reef Tract. To date, the South Florida Program has provided more than $2.5 million to support coral research to hinder or halt the disease destroying corals reefs that are vital to Florida's eco-tourism industry and that serve as a natural mitigation barrier from storms and hurricanes.

- The Everglades Regional Environmental Monitoring and Assessment Program (REMAP) is an extensive assessment of the Everglades' health conducted by EPA Region 4 since 1993. Data are used by federal and state agencies, tribes, agriculture, the public, non-governmental organizations, and the National Academies of Sciences to understand water quality and ecological conditions and to assess restoration progress. The data also help to explain the effectiveness of control programs for phosphorus and mercury.

- Continued implementation of the Florida Keys Wastewater Master Plan to provide Advanced Wastewater Treatment or Best Available Technology services to all homes and businesses in the Florida Keys through the EPA and state co-chaired FKNMS Water Quality Protection Program. The goal is to remove from service all non-functioning septic tanks, cesspits, and non-compliant wastewater facilities. In 2020, greater than 90 percent of Florida Keys homes and business are on advanced wastewater treatment systems and more than 30 thousand septic tanks have been eliminated.

- Support of studies related to phosphorus enrichment and chlorophyll increases resulting in dying seagrass beds and increasing macro algae blooms in North Biscayne Bay. EPA specifically will fund the development of a sediment and water quality model for the Bay; expand the state's ecological and water monitoring network; and provide for a strategic outreach campaign to implement best management practices to address land-based sources of pollution.

- Enhancement of water quality and seagrass monitoring in the Caloosahatchee Estuary that has been heavily impacted by harmful algal blooms in recent years. EPA funding will be leveraged with a $1 million grant from Florida to support the restoration of seagrass habitat in the upper Caloosahatchee River.

- Support of CWA Section 404 implementation, including wetlands conservation, permitting, dredge and fill, and mitigation banking strategies with U.S. Army Corps of Engineers.

- Continuation of work with the State of Florida on Everglades Water Quality Restoration Strategies to address phosphorus pollution. Part of this work will be tracking progress on the National Pollutant Discharge Elimination System permits and consent orders within the Everglades, including discharge limits for phosphorus and corrective actions that are consistent with state and federal law and federal court consent decree requirements

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$1,155.0) This program change increases resources supporting projects to accelerate the restoration of South Florida through focusing on the Florida Keys Water Quality Protection Program, Florida Coral Reef Tract, Florida Keys Coral Reef Restoration, Everglades Restoration, harmful algal blooms, trash free waters, and CWA Section 404 implementation.

Statutory Authority:

Florida Keys National Marine Sanctuary and Protection Act of 1990; National Marine Sanctuaries Program Amendments Act of 1992; Clean Water Act; Water Resources Development Act of 1996; Water Resources Development Act of 2000; National Environmental Policy Act.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$5,907.2***	***$8,922.0***	***$12,000.0***	***$3,078.0***
Total Budget Authority	$5,907.2	$8,922.0	$12,000.0	$3,078.0
Total Workyears	1.6	1.8	1.8	0.0

Program Project Description:

The San Francisco Bay-Delta Estuary has long been recognized as an estuary of national importance by EPA, other federal agencies, state partners, and local stakeholders. The Bay Area, home to over 7 million people, is one of the densest urban areas in the nation. Historically, San Francisco Bay had about 200 thousand acres of mudflats and tidal marshes and has been significantly altered by mining, diking, and urbanization. San Francisco Bay supports 500 species of wildlife, more than a quarter of which are either threatened or endangered. Furthermore, investing in wetland restoration is pivotal in retaining the bay's resiliency to rising sea levels and other hydrologic changes.

Since 2008, EPA has received an annual appropriation for a competitive grant program, the San Francisco Bay Water Quality Improvement Fund (SFBWQIF), to support projects that protect and restore San Francisco Bay and advance Blueprint/Comprehensive Conservation and Management Plan (CCMP) restoration goals. Funding for the SFBWQIF is specifically targeted for the watersheds and shoreline areas of the nine San Francisco Bay Area counties that drain into the Bay. Since 2008, the SFBWQIF has invested over $63.5 million in 54 grant awards to restore over four thousand acres of wetlands around the Bay and minimize polluted runoff from entering the San Francisco Bay. SFBWQIF grants have leveraged $174 million in funding from partners and represents a collaborative investment with local partners guided by the consensus-based Blueprint/CCMP. The FY 2022 request will support increased attention and action to address climate change impacts of the San Francisco Bay, including readiness and building resiliency. The Program will increase focus on environmental justice communities, through several program and planning efforts.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will focus on the following activities:

- Issue a Request for Applications soliciting proposals to restore wetlands, restore water quality, and implement green development practices that use natural hydrologic processes to treat polluted runoff around San Francisco Bay;

- Continue to administer the SF Bay Water Quality Improvement Fund, consistent with the San Francisco Estuary Partnership's (SFEP) Comprehensive Conservation and Management Plan (CCMP);[71]
- Continue to build the resilience of San Francisco Bay ecosystems, shorelines and communities to climate change and sea level rise;
- Seek to leverage other sources of funding such as the Clean Water State Revolving Fund and Federal Emergency Management Agency's pre-hazard mitigation funds in support of priority CCMP projects such as the San Francisco Estuary Partnership's Hayward Shoreline horizontal levee pilot project and the related "next mile" project;
- Continue to increase the reuse of dredged material for wetlands restoration, which is critical in preparing and responding to sea level rise in San Francisco Bay; and
- Continue to partner with the organizations supporting the EPA-funded San Francisco Bay buoy array monitoring low-pH and low-oxygen events due to intrusion of upwelled water from the ocean and assessing its impacts.

The San Francisco Estuary restoration community is working rapidly to protect and restore wetlands that can provide flood protection, recreation, water quality improvement, and habitat for surrounding communities.

Key actions include partnering with state and federal agencies to implement and track fourteen TMDLs,[72] advance the implementation of the Delta Regional Monitoring Program (RMP),[73] and begin melding the monitoring of fish and aquatic life under the Interagency Ecological Program with the monitoring of water quality and habitat conditions under the Bay and Delta RMPs, and the regional Habitat Conservation Plans, respectively.[74]

Performance Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$3,078.0) This program change increases resources to support projects that will accelerate the restoration of the San Francisco Bay such as restoring wetlands around the Bay and minimizing polluted runoff from entering San Francisco Bay.

Statutory Authority:

Clean Water Act, Consolidated Appropriations Act, 2021, Pub. L. 116-260.

[71] Please see the SFEP Comprehensive Conservation and Management Plan (2016) at https://www.sfestuary.org/wp-content/uploads/2017/08/CCMP-v26a-all-pages-web.pdf.
[72] For more information, please see the SF Bay Delta TMDL Progress Assessment at http://www2.epa.gov/sfbay-delta/sf-bay-delta-tmdl-progress-assessment.
[73] For more information, please see the Delta Regional Monitoring Program – San Francisco Estuary Institute and Regional Water Control Board (Central Valley) at https://www.sfei.org/DeltaRMP.
[74] For more information, please see the Interagency Ecological Program at https://iep.ca.gov/.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$32,861.0***	***$33,750.0***	***$35,000.0***	***$1,250.0***
Total Budget Authority	$32,861.0	$33,750.0	$35,000.0	$1,250.0
Total Workyears	5.3	7.0	7.0	0.0

Program Project Description:

Puget Sound is the southern portion of the international Salish Sea and is the largest estuary by water volume in the United States (U.S.). The Sound is an economic and cultural engine for the region's more than 4.7 million people, including nineteen federally recognized tribes. Nearly 71 percent of all jobs and 77 percent of total income in Washington State are found in the Puget Sound Basin. By 2040, the population is projected to grow to seven million, the equivalent of adding approximately four cities the size of Seattle to the watershed.

Puget Sound's beneficial uses are significant. In 2017, the value of Puget Sound commercial fishing (finfish and shellfish) was $114 million and the Gross Domestic Product from Puget Sound-related tourism and recreation activities was $4.7 billion. Puget Sound's shellfish industry is considered the Nation's most valuable and is an important source of family wage jobs in economically challenged rural communities.

Development and land use conversion have adversely impacted the beneficial uses of Puget Sound's waters. For example, pollution and agricultural runoff reduce the safe harvest and consumption of shellfish across 143 thousand acres of shellfish beds, and cause the closure of popular swimming beaches and recreational sites annually. Southern resident killer whales and 59 populations of Chinook salmon, steelhead, and bull trout are listed under the Endangered Species Act. Tribal nations also are unable to sustain their culture and way of life.

A healthy and functioning Puget Sound benefits all who live, visit, or recreate there, or have a connection to the region. A properly functioning ecosystem provides residents with food, water, and raw materials; regulates and moderates harmful elements; and provides cultural, spiritual, and recreational experiences.

Federal support of Puget Sound recovery comes from many programs, most of which are administered by EPA, the National Oceanic and Atmospheric Administration, the U.S. Department of Agriculture, U.S. Department of Interior, and the U.S. Army Corps of Engineers.

Since 2010, Congress has appropriated over $350 million using Clean Water Act Section 320 authority for Puget Sound. Under Section 320, EPA has provided National Estuary Program and Geographic Program funding and support to help communities make on-the-

ground improvements for clean and safe water, protect and restore habitat, allow for thriving species and a vibrant quality of life for all, while supporting local jobs.

EPA's work with the Puget Sound Partnership, state agencies, tribes, and other partners has supported important gains in recovery. Examples include:

- Comprehensive regional plans to restore the Sound;
- More than $1 billion leveraged for recovery;
- Partnerships with 19 federally recognized tribes;
- Transboundary collaboration with Canada;
- Scientific gains on toxic effects of urban stormwater;
- Since 2007, a net increase of harvestable shellfish beds;
- Over 41 thousand acres of habitat protected and/or restored (cumulative from 2006); and
- More than six thousand acres of shellfish harvest bed upgraded (cumulative from 2007).

FY 2022 Activities and Performance Plan:

Key FY 2022 activities for EPA's Puget Sound Program include:

- Fund assistance agreements with the 19 federally recognized tribes in Puget Sound, three Tribal consortia, and the Northwest Indian Fisheries Commission;
- Co-chair the overall federal effort to address Tribal Treaty Rights at Risk.
- Build on 20 years of international cooperation with Canada by finalizing and implementing the Canada-U.S. Cooperation in the Salish Sea: 2021-2024 Action Plan.
- Fulfill National Estuary Program responsibilities, including the approval of a new Comprehensive Conservation and Management Plan (CCMP) for recovering Puget Sound (the Action Agenda);
- Integrate climate adaptation and environmental justice while supporting local jobs;
- Managing and awarding up to $100 million in projects over the next five years consistent with the EPA's 2021 Strategic Initiative Lead Funding Model;
- Continue to fund and coordinate cutting-edge science in the Salish Sea;
- Continue to monitor and reduce unliquidated obligations; and
- Enhance Federal Task Force leadership, including the development of a new action plan for 2022-2026.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$18.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$1,232.0) This increase of resources supports federal, state, tribal, and local efforts to protect and restore the Puget Sound.

Statutory Authority:

Clean Water Act. Consolidated Appropriations Act, 2021, Pub. L. 116-260.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$346,143.7***	***$330,000.0***	***$340,000.0***	***$10,000.0***
Total Budget Authority	$346,143.7	$330,000.0	$340,000.0	$10,000.0
Total Workyears	66.7	68.5	68.5	0.0

Program Project Description:

The Great Lakes are the largest system of surface freshwater on Earth, containing twenty percent of the world's surface freshwater and 95 percent of the United States' surface freshwater. The watershed includes two nations, eight United States (U.S.) states, two Canadian provinces, and 35 tribes.

Through a coordinated interagency process led by EPA, the implementation of the Great Lakes Restoration Initiative (GLRI) is helping to restore the Great Lakes ecosystem. This restoration effort provides environmental and public health benefits to the region's thirty million Americans who rely on the Great Lakes for drinking water, recreation, and fishing. The restoration and protection of the Great Lakes also fuels local and regional economies and community revitalization efforts across the basin.

This interagency collaboration accelerates progress, promotes leveraging, avoids potential duplication of effort, and saves money. In accordance with the Clean Water Act (CWA), EPA and its partners are accomplishing this restoration through the implementation of a five-year GLRI Action Plan. The implementation of the GLRI Action Plan III, covering FY 2020 through FY 2024, began in October 2019.

EPA and its partners have achieved significant results since the GLRI started in 2010[75], including:

- Four Areas of Concerns (AOCs) delisted, including the Lower Menominee River AOC in FY 2020, and ten others that have had the cleanup and restoration actions necessary for delisting have been completed (prior to GLRI, only one Great Lakes AOC was delisted);
- 91 Beneficial Use Impairments (BUIs) at 27 AOCs in the eight Great Lakes states have been removed, more than nine times the total number of BUIs removed in the preceding 22 years;
- Over 4 million cubic yards of contaminated sediment have been remediated;
- Over 200 thousand acres on which invasive species control activities have been implemented;
- Self-sustaining populations of Silver and Bighead carp have been kept out of the Great Lakes;

[75] For more information, please see https://www.epa.gov/greatlakes.

- Over 10 million pounds of Asian Carp have been removed from the Illinois River, reducing the potential for Asian Carp to invade the Great Lakes;
- Loadings of over 2 million pounds of phosphorus were reduced through implementation of conservation practices (phosphorus is a major driver of harmful algal blooms in Great Lakes priority watersheds);
- More than 460 thousand acres of habitat have been protected, restored, or enhanced; and
- Over 575 thousand youths have benefited from Great Lakes based education and stewardship projects.

Under the GLRI, funds are first appropriated to EPA. After annual evaluation and prioritization consistent with the GLRI Action Plan, EPA and its partner agencies collaboratively identify projects and programs that will best advance progress under GLRI. EPA then provides a substantial portion of those funds to its partner federal agencies to implement GLRI projects and programs in partnership with EPA, states, and tribes. EPA and its partner federal agencies will directly implement projects and fund projects performed by other entities such as states, tribes, municipalities, counties, universities, and nongovernmental organizations. GLRI funding can supplement each agency's base funding.

EPA's Great Lakes National Program Office (GLNPO) was assigned oversight of the Great Lakes and Lake Champlain Invasive Species Program at the end of calendar year 2018 by the Vessel Incidental Discharge Act of 2018. To fulfill this statutory mandate, EPA is collaborating with the U.S. Fish and Wildlife Service (USFWS), U.S. Geological Survey (USGS), National Oceanic and Atmospheric Administration (NOAA), and the United States Coast Guard, and will collaborate with other applicable federal, state, local, and tribal agencies.

FY 2022 Activities and Performance Plan:

In FY 2022, the GLRI will continue to support programs and projects which target the most significant environmental problems in the Great Lakes. Emphasis will continue to be placed on: 1) cleaning up and delisting AOCs which has led to community revitalization, which is especially important in environmental justice communities and opportunity zones; 2) reducing phosphorus contributions that contribute to harmful algal blooms and other water quality impairments; and 3) invasive species prevention. GLRI Action Plan III targets GLRI restoration within the focus areas, objectives, and performance goals described below.

Toxic Substances and Areas of Concern Objectives:

- **Remediate, restore, and delist AOCs**. EPA, USFWS, U.S. Army Corps of Engineers (USACE), USGS, NOAA, and other GLRI partners will continue accelerating the pace of U.S. BUI removals. EPA and its federal partners will work with and fund stakeholders to implement management actions necessary to remove the BUIs (indicators of poor environmental health) that will ultimately lead to the delisting of the remaining U.S. AOCs. Agencies target collective efforts under the GLRI to maximize removal of BUIs and delisting of AOCs. Agencies will support BUI removal through sediment remediation under the Great Lakes Legacy Act (part of the GLRI) and other restoration activities. FY 2022 targets are:

- One AOC (19 AOCs cumulative since 1987) where all management actions necessary for delisting have been implemented;
- Eight BUIs (109 BUIs cumulative since 1987) removed in AOCs; and
- Two AOCs (26 AOCs cumulative since 1987 – more than 80 percent of the 31 total AOCs) with complete and approved lists of management actions necessary for delisting.

- **Share information on the risks and benefits of consuming Great Lakes fish, wildlife, and harvested plant resources with the people who consume them.** Federal agencies and their state and tribal partners will continue to help the public make informed decisions about healthy options for safe fish consumption. Expansion of successful pilot programs will increase the availability and accessibility of safe fish consumption guidelines to vulnerable populations that consume Great Lakes fish. Additional emphasis will be placed on the safe consumption of wildlife and harvested plant resources.

- **Increase knowledge about: 1) "Chemicals of Mutual Concern" identified pursuant to the Great Lakes Water Quality Agreement Annex 3; and 2) other priority chemicals that have negatively impacted, or have the potential to negatively impact, the ecological or public health of the Great Lakes.** Federal agencies will coordinate with appropriate state and tribal partners to begin to fill critical monitoring and data gaps for priority chemicals in the Great Lakes. Monitoring data from this process will provide information on the magnitude and extent of these chemicals in the Great Lakes and help in the evaluation of associated ecological, economic, and recreational consequences.

Invasive Species Objectives:

- **Prevent introductions of new invasive species.** Federal agencies and their partners will continue to prevent new invasive species (including invasive carp) from establishing self-sustaining populations in the Great Lakes ecosystem. Federal agencies and their partners will work to increase the effectiveness of existing surveillance programs by increasing detection abilities. Federal agencies will continue to support state and tribal efforts to develop and implement Aquatic Nuisance Species Management Plans which will be used for annual "readiness exercises" and actual responses to new detections of invasive species. GLRI partners will be able to use risk assessments in combination with updated "least wanted" lists to focus prevention activities. Increasing the ability and frequency of Great Lakes states to quickly address new invasions or range expansion of existing invasive species will be a key GLRI strategy. FY 2022 target: Conduct eight rapid responses or exercises.

- **Control established invasive species.** Federal agencies and their partners will bring an enhanced focus to the quality of acreage to be restored as they restore sites degraded by aquatic, wetland, and terrestrial invasive species. Federal agencies will implement control projects in national forests, parks, and wildlife refuges, and will partner with states and neighboring communities to promote larger scale protection and restoration through applicable control programs. GLRI funding will help the Great Lakes Sea Lamprey Control Program to locate and address strategic barriers while also advancing new control technologies. FY 2022 target: Control invasive species on six thousand acres.

- **Develop invasive species control technologies and refine management techniques.** Federal agencies and their partners will continue to develop and enhance technologies to control non-native phragmites, sea lamprey, and red swamp crayfish so that on-the-ground land managers can field test these new approaches. Federal agencies also will develop and enhance invasive species "collaboratives" to support rapid responses and to communicate the latest control and management techniques for non-native species such as Hydrilla, Dreissenidae mussels, hemlock wooly adelgid, and emerald ash borer. Federal agencies and their partners will support a Great Lakes telemetry network to track aquatic invasive species movements (*e.g.*, grass carp) and refine rapid response actions.

Nonpoint Source Pollution Impacts on Nearshore Health Objectives:

- **Reduce nutrient loads from agricultural watersheds**. EPA, federal agencies, and their partners will continue working on farms and in streams to reduce nutrient loads from agricultural watersheds, emphasizing utilization of conservation systems and work in priority watersheds, particularly the Lower Fox River (WI), Saginaw River (MI), Maumee River (OH), and Genesee River (NY). This work will reduce the most significant loadings from nutrient runoff. Federal agencies and their partners will improve the effectiveness of existing programs, encourage the adoption of technologies and performance-based approaches to reduce runoff and soil losses, expand demonstration farm networks to increase adoption of nutrient management practices, promote practices for slowing down and filtering stormwater runoff, and emphasize long-term and sustainable nutrient reductions. EPA and its federal partners will target resources and activities at locations that are the most significant cause of harmful algal blooms. FY 2022 targets:
    - Reduce 300 thousand pounds (2.2 million pounds cumulative since 2010) of phosphorus from conservation practice implementation throughout Great Lakes watersheds; and
    - 145 thousand acres (2.515 million acres cumulative since 2010) receiving technical or financial assistance on nutrient management in priority watersheds.

- **Reduce untreated stormwater runoff.** EPA and its federal partners will continue to accelerate implementation of green infrastructure projects to reduce the impacts of polluted urban runoff on nearshore water quality at beaches and in other coastal areas. These projects will capture or slow the flow of untreated runoff and filter out sediment, nutrients, toxic contaminants, pathogens, and other pollutants prior to entering Great Lakes tributaries and nearshore waters. Federal agencies and their partners will also continue to support watershed management projects that slow and intercept runoff, including installation of tributary buffers, restoration of coastal wetlands, and re-vegetation and re-forestation of areas near Great Lakes coasts and tributaries. FY 2022 targets:
    - Capture or treat 50 million gallons (450 million gallons cumulative since 2015) of untreated stormwater runoff captured or treated; and
    - Restore or protect seven miles (47 miles cumulative since 2015) of Great Lakes shoreline and riparian corridors restored or protected.

- **Improve effectiveness of nonpoint source control and refine management efforts.** EPA and its federal partners will continue to adaptively manage to maximize nonpoint source

control efforts. Strategies will include: conducting edge-of-field monitoring studies in agricultural priority watersheds to test the effectiveness of innovative practices such as bioreactors; application of previously supported tools and lessons learned to optimize project results; and development of new strategies such as nutrient recovery and manure transformation technologies. FY 2022 targets:

- Conduct 30 nutrient monitoring and assessment activities; and
- Develop or evaluate ten nutrient or stormwater runoff reduction practices or tools.

Habitats and Species Objectives:

- **Protect and restore communities of native aquatic and terrestrial species important to the Great Lakes.** EPA and its federal partners will implement protection, restoration, and enhancement projects focused on open water, nearshore, connecting channels, coastal wetland, and other habitats to protect and restore native species. They will build upon and shore-up past investments while advancing protection and restoration in new areas important to targeted species. Projects will be largely based on priorities in regional scale conservation strategies and will include:
  - Protecting, restoring, and enhancing coastal wetlands;
  - Removing dams and replacing culverts to create fish habitat and reconnect migratory species to Great Lakes tributaries;
  - Restoring habitat necessary to sustain populations of migratory native species; and
  - Protecting, restoring, and managing existing wetlands and high quality upland areas to sustain diverse, complex, and interconnected habitats for species reproduction, growth, and seasonal refuge.

  EPA also will continue to implement projects that support community efforts to clean up trash on Great Lakes beaches and in harbors and river mouths. FY 2022 targets:
  - Restore, protect, or enhance 12 thousand acres of coastal wetland, nearshore, and other habitats; and
  - 200 miles (6,100 miles cumulative since 2010) of connectivity between rivers, streams, and lakes providing passage for aquatic species.

- **Increase resiliency of species through comprehensive approaches that complement on-the-ground habitat restoration and protection.** EPA and its federal partners will maintain, restore, and enhance the habitats of native fish and wildlife species to increase the resiliency and overall health of these species. Agencies will maximize habitat improvements (coastal wetlands in particular) for aquatic and terrestrial species through collaborative conservation and monitoring at local and regional scales. Project benefits are expected to include avoiding species extinction, identification of key habitats and of limiting factors to species recovery and increasing or protecting population levels. GLRI agencies and their partners will continue to support protection of native species that have cultural, subsistence, and economic value. FY 2022 target: Complete actions to significantly protect or promote recovery of populations of two species (four species cumulative since 2018).

GLRI Funding Allocations: EPA leads the cooperative process to determine funding allocations for programs and projects of the GLRI agencies. Under the CWA Section 118, EPA provides the

appropriate authorizing and appropriating committees of the Senate and the House of Representatives a yearly detailed description of the progress of the GLRI and amounts transferred to participating federal departments and agencies.

Summary of FY 2015 - 2022 Allocations by Focus Area
(Dollars in Thousands)

Focus Area Allocations								
Focus Area	**FY 2015**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022[a]**
Toxic Substances and AOC	$120,200	$106,600	$107,500	$107,500	$107,500	$115,900	$125,700	$132,913
Invasive Species	$53,600	$56,400	$62,200	$56,900	$56,900	$62,700	$62,600	$64,912
Nonpoint Source Pollution Impacts on Nearshore Health	$51,000	$51,700	$47,900	$51,000	$51,700	$52,600	$52,100	$52,662
Habitat and Species	$49,000	$54,200	$49,500	$50,000	$50,200	$54,200	$56,600	$53,750
Foundations for Future Restoration Actions	$26,200	$31,100	$32,900	$34,600	$33,700	$34,600	$33,000	$35,496
TOTAL	$300,000	$300,000	$300,000	$300,000	$300,000	$320,000	$330,000	$339,733
[a] Subject to approval by Regional Working Group agencies.								

Summary of FY 2015 - 2022 Allocations* by Agency
(Dollars in Thousands)

Agency	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022[a]
DHS-USCG	$2,006	$1,274	$1,580	$500	$1,661	$1,250	$1,320	$1,200
DOC-NOAA	$24,818	$30,740	$12,027	$24,629	$29,405	$28,163	$13,590	$10,990
DOD-USACE	$48,389	$33,369	$55,940	$43,559	$37,387	$35,418	$45,580	$9,445
DOI-BIA	$4,750	$6,203	$10,904	$11,617	$9,842	$15,840	$15,270	$15,000
DOI-NPS	$3,142	$3,799	$4,379	$3,940	$3,822	$3,794	$4,950	$4,729
DOI-USFWS	$41,393	$48,118	$41,794	$52,902	$47,272	$51,901	$50,200	$28,766
DOI-USGS	$23,433	$22,960	$26,817	$25,724	$21,603	$19,780	$17,480	$7,000
DOT-MARAD	$1,291	$2,106	$800	$675	$803	$5,500	$750	$500
HHS-ATSDR/CDC	$1,738	$1,692	$593	$590	$0	$0	$0	$0
USDA-APHIS	$1,246	$1,089	$1,262	$1,176	$1,312	$1,378	$1,460	$1,772
USDA-NRCS	$23,281	$19,062	$22,072	$25,096	$20,697	$22,239	$22,450	$24,933
USDA-USFS	$6,290	$10,822	$11,355	$10,153	$11,646	$9,921	$11,380	$11,224
Multi-agency	$0	$0	$0	$0	$0	$0	$5,000	$87,535
IA Totals:	$181,776	$181,234	$189,522	$200,560	$185,448	$195,185	$189,430	$203,094
EPA and Misc IAs	$118,224	$118,766	$110,478	$99,440	$114,552	$124,815	$140,570	$136,638
Totals:	$300,000	$300,000	$300,000	$300,000	$300,000	$320,000	$330,000	$339,733
[a] Subject to approval by Regional Working Group agencies.								

* Final allocations for FY 2015 – FY 2019. Allocations for FY 2020 are as reported in the April 2021 GLRI Financial Management Updates. Allocations for FY 2021 are based on a budget approved by Regional Working Group agencies in August 2019. Allocations for FY 2022 are subject to approval by Regional Working Group agencies.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$268.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$9,732.0) This increase supports projects to accelerate the restoration of the Great Lakes through cleaning up and delisting AOCs; reducing phosphorus contributions that contribute to harmful algal blooms and other water quality impairments; and invasive species prevention.

Statutory Authority:

Clean Water Act Section 118.

Homeland Security

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$4,935.3***	***$4,145.0***	***$4,557.0***	***$412.0***
Total Budget Authority	$4,935.3	$4,145.0	$4,557.0	$412.0
Total Workyears	12.1	13.3	14.3	1.0

Program Project Description:

There has been an evolution of the term and mission of homeland and national security since 9/11. National security is now widely understood to include non-military dimensions, such as climate and environmental security, economic security, energy security, and cybersecurity. Systematic preparation is essential for the threats that pose the greatest risk to the security of the Nation, including acts of terrorism, climate change, pandemics, catastrophic natural disasters, and cyber-attacks. The Office of Homeland Security (OHS) supports EPA's coordination and communication activities related to national security and homeland security. The White House, Congress, and the Department of Homeland Security (DHS) have defined responsibilities for EPA in several areas, including critical water infrastructure protection and response to chemical, biological, radiological, and nuclear events, through a series of statutes, presidential directives, and national plans. OHS provides technical, policy, and intelligence advice to senior Agency leadership related to national and homeland security.

OHS coordinates the Agency's intelligence activities including EPA's engagement with the White House, National Security Council (NSC), and other federal departments and agencies on the development of new homeland and national security policy and requirements. OHS also ensures that the NSC and other lead federal entities understand the impacts of new homeland security initiatives and policies on existing EPA programs. OHS maintains intelligence operations and analyses capabilities focusing on EPA's equities including the protection of critical infrastructure, specifically the water sector. OHS also focuses on coordination and integration of chemical, biological, and radiological preparedness and response programs as they relate to the protection of air and water quality and the prevention of land contamination through external engagement with federal departments and agencies and internal coordination with EPA program offices with Homeland Security responsibilities. OHS coordinates with regional, state, and local Fusion Centers and Joint Terrorism Task Forces to focus on integrating EPA regional offices with the information sharing environment and DHS intelligence sharing network. OHS also advances implementation of the following programs: EPA Insider Threat, Suspicious Activity Reporting, Operational Security, Counterintelligence, and Committee on Foreign Investment in the United States.

In addition, OHS works closely with EPA's Water Program to coordinate and integrate water security efforts internally and externally with stakeholders regarding physical threats and contamination and cyber threats to operations. EPA serves as the Sector-Specific Agency (SSA)

and the Sector Risk Management Agency (SRMA) for the water sector. Cyber attacks across critical infrastructure sectors are rapidly increasing in volume and sophistication, impacting both information technology (IT) and operational technology (OT) systems in the water sector. In 2020 and 2021, EPA has coordinated with NSC, DHS Cybersecurity and Infrastructure Security Agency (CISA), and the water sector on several occasions regarding cyber attacks on the water sector's IT systems, which has resulted in a renewed emphasis on notification and communication efforts with the utilities. The October 2020 DHS Homeland Threat Assessment indicated that cyber threats from nation states and non-nation states remain an acute growing problem threatening U.S. critical infrastructure.

National and homeland security information technology efforts are closely coordinated with the agencywide information security and infrastructure activities, which are managed in the Information Security and IT/Data Management programs. These IT support programs also enable contact among localities, EPA program and regional offices, and laboratories in emergency situations.

EPA's Security Operations Center provides a centralized, integrated, and coordinated cyber security incident response capability that defends against unauthorized activity within computer networks, by preventing, detecting, monitoring, analyzing, and responding to suspicious or malicious activity. It maintains communications with DHS Liaison Officers to respond to alerts that have potential national security impact.

FY 2022 Activities and Performance Plan:

With the resources requested in the FY 2022 President's Budget, this program will:

- Continue to promote a coordinated approach to EPA's homeland security activities and support the alignment of resources with government-wide national and homeland security priorities and requirements, including climate security and cybersecurity.

- Recruit and hire technical expertise in cybersecurity intelligence to provide a level of support that would enable EPA to better prepare for and respond timely to specific threats, mitigate attacks, assess evolving water sector cyber intelligence requirements, and assist in developing proposals to prevent/mitigate cyber incidents. With a new cybersecurity intelligence analyst position, the Agency will be able to increase research, analysis, and engagement with the water and wastewater sector and partner agencies who deal with cybersecurity (i.e., DHS CISA). This new position will help EPA fulfill the requirements in Section 9002 of the FY 2021 National Defense Authorization Act. All indicators suggest cybersecurity threats and requirements, particularly those associated with the critical infrastructure sector, will only increase in number, complexity, and potential consequences for the foreseeable future.

- Continue to develop new collaborative practices and methods with Intelligence Community agencies to meet the cybersecurity needs of the water and wastewater sector, along with other critical sectors, to address increasingly sophisticated and complex threat actor tactics and techniques.

- Directly engage with the watch floor at the CISA Operations Center. OHS has developed a new partnership with the National Security Agency office providing cybersecurity support to critical infrastructure agencies.

- Provide more comprehensive support to the expanding collaborations with DOE, CISA, and other programs on cyber threat response.

- Promote a coordinated approach to communicating classified and sensitive information to EPA programs, laboratories, and regional offices via secure communications systems to support timely intelligence and information sharing to enable safe and effective operational preparedness and response.

- Support federal, state, tribal, and local efforts to prevent, protect, mitigate, respond to, and recover from the impacts of natural disasters, acts of terrorism, and other emergencies by providing leadership and coordination across EPA's program offices and regions.

- Ensure appropriate Agency representation in various White House and other federal national security and homeland security policy activities. These efforts include serving as EPA's representative for homeland security, national disaster response, and mitigation and recovery policy in monthly meetings of the Homeland Critical Infrastructure Resilience Interagency Policy Committee, chaired by the National Security Council, and in weekly meetings for other national security policy committees. In addition, OHS serves as EPA's representative in monthly meetings of the Recovery Support Function Leaders Group, chaired by the Federal Emergency Management Agency (FEMA), and the Mitigation Framework Leadership Group, also chaired by FEMA, and on other interagency workgroups.

- Focus on filling critical policy, knowledge, and technology gaps that may be essential for an effective EPA response, including working with our interagency partners to define collective capabilities and resources that may contribute to closing common homeland security gaps, including emerging chemical threats and cybersecurity concerns for critical water infrastructure.

- Provide EPA end-users with relevant, accurate, reliable, objective, and timely intelligence bearing on matters of environmental policy and regulation and domestic threats and counterintelligence, where EPA functions to preserve or assist in the restoration of human health and the environment.

- Continue phased implementation of Executive Order 13587[76] to meet the main pillars of classified information protection with a focus on the implementation of an Insider Threat Program to address and mitigate threats to national security.

[76] For more information, please see: https://obamawhitehouse.archives.gov/the-press-office/2011/10/07/executive-order-13587-structural-reforms-improve-security-classified-net.

- Track emerging national and homeland security issues, through close coordination with the U.S. Intelligence Community, to anticipate and avoid crisis situations and target the Agency's efforts proactively against threats to the United States.

EPA's FY 2022 resources support national cybersecurity efforts through monitoring across the Agency's IT infrastructure to detect, remediate, and eradicate malicious activity/software from EPA's computer and data networks. EPA will continue to enhance internal Computer Security Incident Response Capability to ensure rapid identification and reporting of suspicious activity and will increase training and awareness of cybersecurity threats. EPA personnel are active participants in the United States Computer Emergency Readiness Team, a DHS-led group of experts from incident response and security response teams. Indicators and warnings are shared between EPA incident responders and their cleared counterparts in other agencies and with the Intelligence Community.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$35.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$377.0 / +1.0 FTE) This increase in program resources and FTE supports the addition of a cybersecurity intelligence analyst position and provides additional resources to address emerging threats. This also includes $197.0 thousand in payroll costs and essential workforce support costs.

Statutory Authority:

Resource Conservation and Recovery Act §§ 1001, 2001, 3001, 3005; Safe Drinking Water Act; Clean Water Act §§ 101, 102, 103, 104, 105, 107; Clean Air Act §§ 102, 103, 104, 108; Toxic Substances Control Act §§ 201, 301, 401; Federal Insecticide, Fungicide, and Rodenticide Act §§ 136a-136y; Bio Terrorism Act of 2002 §§ 303, 305, 306, 307; Homeland Security Act of 2002; Post-Katrina Emergency Management Reform Act; Defense Against Weapons of Mass Destruction Act; Food Safety Modernization Act § 208.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$990.3***	***$909.0***	***$1,008.0***	***$99.0***
Science & Technology	$12,926.2	$10,380.0	$14,342.0	$3,962.0
Total Budget Authority	$13,916.5	$11,289.0	$15,350.0	$4,061.0
Total Workyears	22.2	26.6	32.6	6.0

Program Project Description:

The Critical Infrastructure Protection Program supports EPA's efforts to coordinate and provide technical expertise to enhance the protection of the Nation's critical water infrastructure from terrorist threats and all-hazard events through effective information sharing and dissemination. This program provides water systems with current information on methods and strategies to build preparedness for natural and man-made threats.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will build the capacity to identify and respond to threats to critical national water infrastructure by:

- Providing timely information on contaminant properties, water treatment effectiveness, detection technologies, analytical protocols, and laboratory capabilities;

- Supporting effective communication conduits to disseminate threat and incident information and to serve as a clearinghouse for sensitive information;

- Promoting information sharing between the water sector and environmental professionals, scientists, emergency services personnel, law enforcement, public health agencies, the intelligence community, and technical assistance providers. Through this exchange, water systems can obtain up-to-date information on current technologies in water security, accurately assess their vulnerabilities to terror acts, and work cooperatively with public health officials, first responders, and law enforcement officials to respond effectively in the event of an emergency;

- Providing water utilities, of all sizes, access to a comprehensive range of important materials, including the most updated information, tools, training, and protocols designed to enhance the security (including cybersecurity), preparedness, and resiliency of the water sector; and

- Ensuring that water utilities receive timely and informative alerts about changes in the homeland security advisory level or about regional and national trends in certain types of water-related incidents. For example, should there be types of specific, water-related threats or incidents that are recurring, EPA, in coordination with the Department of Homeland Security and other appropriate agencies, needs to alert the utilities of the increasing multiple occurrences or trends of these incidents.

Effective information sharing protocols allow the water sector to improve its understanding of the latest water security and resiliency protocols and threats. They also reduce risk by enhancing the water sector's ability to prepare for an emergency.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act implementation and compliance and performance results in the Drinking Water Programs, under the EPM appropriation, to support safe drinking water for the nation.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$4.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$95.0) This program change supports the protection of critical water infrastructure.

Statutory Authority:

Safe Drinking Water Act, §§ 1431-1435; Clean Water Act; Public Health Security and Bioterrorism Emergency and Response Act of 2002; Emergency Planning and Community Right-to-Know Act, §§ 301-305.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$4,175.9***	***$4,959.0***	***$5,139.0***	***$180.0***
Science & Technology	$443.0	$501.0	$501.0	$0.0
Building and Facilities	$14,325.7	$6,676.0	$6,676.0	$0.0
Hazardous Substance Superfund	$994.6	$1,030.0	$1,030.0	$0.0
Total Budget Authority	$19,939.2	$13,166.0	$13,346.0	$180.0
Total Workyears	7.7	9.2	9.2	0.0

Total workyears in FY 2022 include 9.2 FTE to support Homeland Security Working Capital Fund (WCF) services.

Program Project Description:

Environmental Programs and Management resources for the Homeland Security: Protection of EPA Personnel and Infrastructure Program ensure that EPA maintains a robust physical security and preparedness infrastructure, ensuring that its numerous facilities are secured and protected in line with the federally mandated Interagency Security Committee standards.

In order to secure and protect EPA's personnel and physical infrastructure, the Agency operates a USAccess Personal Identity Verification (PIV) program, which adheres to the requirements as set forth in Homeland Security Presidential Directive-12 (HSPD-12).[77] This program ensures the Agency complies with government-wide standards for the issuance of secure and reliable forms of identification to federal employees and contractors who require access to federally controlled facilities and networks. Additionally, EPA's National Security Information (NSI) program manages and safeguards EPA's classified information for its federal workforce and contractors. Through the NSI program, EPA initiates and adjudicates personnel background investigations, processes fingerprint checks, determines individual eligibility to access classified National Security Information, maintains personnel security records for all federal and non-federal employees, and conducts federally mandated training and NSI inspections.

FY 2022 Activities and Performance Plan:

As part of the nationwide protection of buildings and critical infrastructure, EPA performs vulnerability assessments on facilities each year. Through this program, the Agency also recommends security risk mitigations, oversees access control measures, determines physical security measures for new construction and leases, and manages the lifecycle of security equipment.

In FY 2022, EPA will continue to partner with GSA on the Enterprise Physical Access Control System (ePACS). ePACS supports the Agency's modernization of its security infrastructure in

[77] For additional information, please see: https://www.dhs.gov/homeland-security-presidential-directive-12.

compliance with HSPD-12 and ensures that the Agency is undertaking every effort to enhance safety, security, and efficiency by more effectively controlling access into all EPA-controlled physical space and networks. In addition, the Agency will continue to utilize GSA's Managed Service Office program, *USAccess*, for PIV card enrollment and issuance. *USAccess* is a GSA managed, shared services solution that provides EPA the ability to produce and maintain secure and reliable forms of identification, as required per HSPD-12, for all EPA employees and contractors.

EPA is in compliance with 5 CFR 1400, which requires that federal and non-federal positions are designated for both risk and sensitivity and that personnel have appropriate background investigations commensurate with their position's risk and sensitivity designation. EPA will continue to manage the personnel security, suitability, fitness, and NSI programs and conduct background investigations following appropriate federal guidance, ensuring that personnel are properly investigated for the positions they encumber and that classified material and activity is properly handled. As federal guidelines and policies change, or are introduced, the systems supporting background investigations and the NSI program will be updated and enhanced as needed.

Performance Measure Targets:

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$180.0) This program change supports the protection of EPA personnel and infrastructure. These funds will support ePACS and the Agency's modernization of its security infrastructure efforts to control access into all EPA-controlled physical space and networks.

Statutory Authority:

Intelligence Reform and Terrorism Prevention Act of 2004; Privacy Act of 1974; REAL ID Act of 2005; Homeland Security Act of 2002; Americans with Disabilities Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Indoor Air and Radiation

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$2,680.4***	***$3,136.0***	***$3,167.0***	***$31.0***
Science & Technology	$39.9	$157.0	$157.0	$0.0
Total Budget Authority	$2,720.3	$3,293.0	$3,324.0	$31.0
Total Workyears	8.5	9.0	9.0	0.0

Program Project Description:

Title III of the Toxic Substances Control Act (TSCA) authorizes EPA to take a variety of actions to address the public health risk posed by exposure to indoor radon. Under the statute, EPA studies the health effects of radon, assesses exposure levels, sets an action level, provides technical assistance to states, industry, and the public, advises the public of steps they can take to reduce exposure, and promotes the availability of reliable radon services and service providers to the public.

Radon is the second leading cause of lung cancer in the United States – and the leading cause of lung cancer mortality among non-smokers – accounting for about 21,000 deaths per year[78]. The EPA's non-regulatory Indoor Air: Radon Program promotes actions to reduce the public's health risk from indoor radon. EPA and the Surgeon General recommend that people do a simple home radon test and, if levels above the EPA's guidelines are confirmed, reduce elevated levels by home mitigation using inexpensive and proven techniques. EPA also recommends that new homes be built using radon-resistant features in areas where there is elevated radon. Nationally, risks from radon have been reduced in many homes over the years, but many homes are still in need of mitigation. This voluntary program promotes partnerships among national organizations, the private sector, and more than 50 state, local, and tribal governmental programs to reduce radon risk.

FY 2022 Activities and Performance Plan:

EPA will continue to lead the federal government's response to radon and to implement the Agency's own multi-pronged radon program. EPA will drive action at the national level to reduce radon risk in homes and schools through the National Radon Action Plan, partnerships with the private sector and public health groups, technical assistance to states and industry, public outreach, and education activities. The Agency will encourage radon risk reduction as a normal part of doing business in the real estate marketplace, will promote local and state adoption of radon prevention standards in building codes, and will participate in the development of national voluntary

[78] https://www.epa.gov/radon.

standards (e.g., mitigation and construction protocols) for adoption by states and the radon industry. EPA will update the framework that ensures a quality, credentialed radon workforce.

Performance Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$19.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$12.0) This program change increases resources supporting efforts to build back EPA's staff expertise, analysis, and capacity in the indoor air radon program and begin to reverse reductions in the account in recent years, in order to better lead the federal government's response to radon and to implement the Agency's own multi-pronged radon program.

Statutory Authority:

Title III of the Toxic Substances Control Act (TSCA); Title IV of the Superfund Amendments and Reauthorization Act (SARA); Clean Air Act.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$8,912.4***	***$7,661.0***	***$10,342.0***	***$2,681.0***
Science & Technology	$1,795.6	$1,735.0	$2,340.0	$605.0
Hazardous Substance Superfund	$2,323.3	$1,985.0	$2,612.0	$627.0
Total Budget Authority	$13,031.3	$11,381.0	$15,294.0	$3,913.0
Total Workyears	56.4	53.8	66.7	12.9

Program Project Description:

EPA has general and specific duties to protect human health and the environment from harmful and avoidable exposure to radiation under multiple statutes. EPA's Radiation Protection Program carries out these responsibilities through its federal guidance and standard-setting activities, including: regulatory oversight and implementation of radioactive waste disposal standards at the Department of Energy's (DOE) Waste Isolation Pilot Plant (WIPP); the regulation of airborne radioactive emissions; general disposal standards for nuclear waste repositories; and the development and determination of appropriate methods to measure and to model radioactive releases and exposures under Section 112 of the Clean Air Act. The Radiation Protection Program also supports EPA, state, local and tribal authorities by providing radiation protection scientific analyses and recommendations needed to inform risk management policies, and the necessary radiation risk communications expertise to support local community engagement on issues related to legacy contamination and environmental justice needs.

FY 2022 Activities and Performance Plan:

EPA will meet its statutory obligation to implement its regulatory oversight responsibilities for DOE activities at the WIPP facility, as mandated by Congress in the WIPP Land Withdrawal Act of 1992. In FY 2022, EPA anticipates receiving and starting review of a DOE request for expanding the WIPP repository to address needs for more waste disposal area as a result of a 2014 radiological incident and DOE's intended plan for disposal of surplus plutonium. EPA also will review and update regulations or guidance, as necessary, and provide technical and policy analysis supporting scientific goals for space exploration.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$117.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$2,564.0 / +8.3 FTE) This increase in resources supports efforts to build back EPA's staff expertise, analysis, and capacity in the radiation protection program in order to provide radiation protection, scientific analyses, and recommendations needed to inform risk management policies, and the necessary radiation risk communications expertise to support local community engagement on issues related to legacy contamination and environmental justice needs. This investment includes $1,437.0 in payroll costs.

Statutory Authority:

Atomic Energy Act of 1954; Clean Air Act; Energy Policy Act of 1992; Nuclear Waste Policy Act of 1982; Public Health Service Act; Safe Drinking Water Act; Uranium Mill Tailings Radiation Control Act (UMTRCA) of 1978; Waste Isolation Pilot Plant Land Withdrawal Act of 1992; Marine Protection, Research, and Sanctuaries Act; Clean Water Act.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$2,616.2***	***$2,404.0***	***$2,908.0***	***$504.0***
Science & Technology	$3,402.1	$3,096.0	$4,039.0	$943.0
Total Budget Authority	$6,018.3	$5,500.0	$6,947.0	$1,447.0
Total Workyears	34.9	33.3	41.4	8.1

Program Project Description:

EPA generates policy guidance and procedures for the Agency's radiological emergency response under the National Response Framework (NRF) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The Agency maintains its own Radiological Emergency Response Team (RERT) and is a member of the Department of Homeland Security/Federal Emergency Management Agency Federal Radiological Preparedness Coordinating Committee (FRPCC) and the Federal Advisory Team for Environment, Food and Health (the "A-Team"). The A-Team includes radiation protection experts from EPA, the Centers for Disease Control and Prevention, the Food and Drug Administration and the Department of Agriculture, and their function is to advise federal, state, local and tribal authorities during radiological/nuclear emergences on public safety issues including evacuation, sheltering, and contamination concerns for food, drinking water and other resources. EPA continues to respond to radiological emergencies; conducts essential national and regional radiological response planning and training; and develops response plans for radiological incidents or accidents.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will continue to streamline activities and will fill gaps in expertise that is critical for essential preparedness work and will restore critical capacity to carry out EPA's core mission. The RERT will maintain essential readiness to support federal radiological emergency response and recovery operations under the NRF and NCP. EPA will participate in interagency training and exercises to maintain readiness levels needed to fulfill EPA's responsibilities.

Evaluation of Response Plans

In FY 2022, EPA will continue to work with interagency partners, including those under the FRPCC as well as those at the state, local and tribal levels to examine and, as needed, revise radiation emergency response plans, protocols, and standards. Under the NRF, EPA is the coordinating agency for responding to foreign nuclear incidents, such as the Fukushima accident. In FY 2022, EPA will identify and fill key gaps in staffing, which are critical to meeting the needs of the American public during such incidents.

Coordinating Preparedness Efforts

EPA will continue essential planning and will participate in interagency table-top and field exercises, including radiological anti-terrorism activities with the Nuclear Regulatory Commission, the Department of Energy, the Department of Defense, and the Department of Homeland Security. The Agency also will provide technical support on priority issues to federal, state, local and tribal radiation, emergency management, solid waste and health programs responsible for implementing radiological emergency response and preparedness programs. The Agency will continue to train and advise on the Protective Action Guidance[79] and use lessons learned from incidents and exercises to ensure the effective delivery of EPA support in coordination with other federal, state, local and tribal authorities.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (-$41.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$545.0 / +3.1 FTE) This net increase in resources supports efforts to build back EPA's staff expertise, analysis, and capacity in the radiation response program in order to examine and, as needed, revise radiation emergency response plans, protocols, and standards and continue essential planning for preparedness efforts.

Statutory Authority:

Homeland Security Act of 2002; Atomic Energy Act of 1954; Clean Air Act; Post-Katrina Emergency Management Reform Act of 2006 (PKEMRA); Public Health Service Act (PHSA); Robert T. Stafford Disaster Relief and Emergency Assistance Act; Safe Drinking Water Act (SDWA).

[79] For additional information, please see: https://www.epa.gov/sites/production/files/2017-01/documents/epa_pag_manual_final_revisions_01-11-2017_cover_disclaimer_8.pdf.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$10,934.8***	***$11,750.0***	***$13,837.0***	***$2,087.0***
Science & Technology	$235.5	$161.0	$168.0	$7.0
Total Budget Authority	$11,170.3	$11,911.0	$14,005.0	$2,094.0
Total Workyears	35.2	37.2	47.2	10.0

Program Project Description:

Title IV of the Superfund Amendments and Reauthorization Act of 1986 (SARA) authorizes EPA to conduct and coordinate research on indoor air quality, develop and disseminate information, and coordinate risk reduction efforts at the federal, state, and local levels. Poor indoor air quality represents one of the largest risks in EPA's portfolio[80]. EPA utilizes a range of strategies, including partnerships with non-governmental, professional, federal, state and local organizations, to provide information, guidance and technical assistance to reduce health risks from poor indoor air quality in homes, schools, and other buildings. These tools help equip industry, the health care community, the residential, school and commercial building sectors, and the general public to take action. As technical experts working at the intersection of the built environment and health, EPA is focused on policy and guidance to improve building conditions, including for disproportionately impacted communities, to reduce indoor air risk and achieve improvements in environmental and health outcomes.

FY 2022 Activities and Performance Plan:

Work in this program directly supports the President's priorities to tackle the climate crisis, advance environmental justice, and expand the capacity of EPA by advancing improvements in the design, operation, and maintenance of buildings, including homes and schools, to promote healthier indoor air and protect public health. In FY 2022, the Indoor Air Program will include efforts targeted to children, disadvantaged communities and other vulnerable populations, with a particular focus on new demands for improvements in ventilation, filtration and other protective indoor air practices, including those created by the COVID-19 pandemic. EPA will collaborate with public and private sector organizations to provide clear and verifiable protocols and specifications for promoting good indoor air quality and support adoption of these protocols and specifications into existing energy efficiency, green building, and health-related programs and initiatives to promote healthy buildings for a changing climate. In FY 2022, EPA will equip the affordable housing sector with guidance to promote the adoption of these best practices with the aim of creating healthier, more energy efficient homes for low income families, and will equip school leaders to make science-based decisions for healthy school environments. EPA will build

[80] For more information, please see: https://www.epa.gov/indoor-air-quality-iaq.

the capacity of community-based organizations to provide comprehensive asthma care that integrates management of indoor environmental asthma triggers and health care services, with a particular focus on low-income, minority, and Tribal communities. Internationally, EPA will renew support of the household energy sector, providing technical assistance and promoting the adoption of voluntary international stove standards, to accelerate adoption of clean cookstoves and fuels to reduce the climate, health, and equity impacts of rudimentary stove use in developing nations.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$46.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$2,041.0 / +10.0 FTE) This increase in resources supports efforts to build back EPA's staff expertise, analysis, and capacity in the reduce risks from indoor air program. Funds also support new demands for information on ventilation, filtration, and other protective indoor air practices, including those created by the COVID-19 pandemic. This investment includes $1,762.0 in payroll costs.

Statutory Authority:

Title IV of the Superfund Amendments and Reauthorization Act (SARA); Title III Toxic Substances Control Act; Clean Air Act.

Information Exchange

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$6,209.9***	***$6,173.0***	***$6,247.0***	***$74.0***
Total Budget Authority	$6,209.9	$6,173.0	$6,247.0	$74.0
Total Workyears	16.7	18.4	18.4	0.0

Program Project Description:

The Children's Health Program coordinates and advances the protection of children's environmental health across the EPA by assisting with developing regulations, improving risk assessment and science policy, implementing community-level outreach and education programs, and tracking indicators of progress on children's health. The Children's Health Program is directed by the *Policy on Evaluating Health Risks to Children,*[81] Executive Order (EO) 13045 *Protection of Children's Health from Environmental Health Risks and Safety Risks,*[82] statutory authorities addressing children's environmental health, and other existing guidance.[83]

In FY 2020, the Children's Health Program supported Pediatric Environmental Health Specialty Units,[84] updated training for EPA staff on children's environmental health, updated indicators in *America's Children and the Environment,*[85] developed new content and outreach on children's environmental health to reach approximately 400,000 middle school teachers and their students across the United States,[86] and partnered with the Family, Career and Community Leaders of America (FCCLA) to establish a high school leadership program to reach up to 182,000 high school students in 46 states, Puerto Rico and the Virgin Islands with a Students Taking Action with Recognition (STAR) leadership challenge focused on children's environmental health.

The Children's Health Program has a successful track record of collaboration with non-governmental organizations, state, local and tribal governments, and other federal agencies. The Program led the steering committee of the President's Task Force on Environmental Health Risks and Safety Risks to Children to advance development of a new subcommittee to focus on children's environmental health and disasters, and to rejuvenate subcommittees on climate change, lead, and asthma disparities. Within EPA, the Office of Children's Health Protection collaborates closely with EPA's national program managers and regional offices, as well as EPA's Office of Environmental Justice, and the Office of Policy to develop effective tools and messages in support of children in underserved communities who disproportionately suffer from adverse environmental exposures, and to advance information and messaging to address health risks to children from climate change.

[81] For more information, please see: https://www.epa.gov/children/history-childrens-environmental-health-protection-epa.
[82] For more information, please see: https://www.govinfo.gov/content/pkg/FR-1997-04-23/pdf/97-10695.pdf.
[83] For more information, please see: https://www.epa.gov/children/history-childrens-environmental-health-protection-epa.
[84] For more information, please see: https://www.pehsu.net/.
[85] For more information, please see: https://www.epa.gov/americaschildrenenvironment.
[86] For more information, please see: https://www-qa.scholastic.com/waterpollution/index.html.

In FY 2020, the Children's Health Program contributed to the development of approximately 100 regulations, scientific assessments and/or policies, including actions for the first 10 high priority chemicals under the Toxic Substances Control Act (TSCA), and additional actions under the Safe Drinking Water Act, Food Quality Protection Act, Clean Water Act, and the Clean Air Act, among others, awarded two grants to provide technical assistance to improve school and childcare facilities,[87] coordinated two plenary meetings of the Children's Health Protection Advisory Committee,[88] and launched the review of two sets of charge questions to improve the Agency's risk work to protect children's health in childcare and school settings and to establish priorities for action under TSCA. Additionally, in FY 2020, the Program partnered with the Department of Health and Human Services to support the Lead Exposure and Prevention Advisory Committee, reached stakeholders through nearly 135,000 web impressions, and instituted approaches to better coordinate headquarters and regional children's environmental health activities.

FY 2022 Activities and Performance Plan:

Children disproportionately suffer from environmental exposures, and children in underserved communities are particularly vulnerable due to social disparities of health. In FY 2022, the Children's Health Program will focus on reinvigorating EPA and the Nation's work to protect children's environmental health, particularly for children in underserved communities. Recognizing the 25th anniversary of EO 13045, the Program will support the Administrator to convene the President's Task Force on Environmental Health Risks and Safety Risks to Children, launching work to protect children from adverse consequences of climate change and disasters, and renewing attention to reduce childhood lead poisoning to reduce disparities in childhood health effects. The Program will rejuvenate partnerships with key stakeholders with a focus on preventing risks due to climate change, particularly for children in underserved communities. The Program will leverage resources and work for durable, nationally relevant improvements in children's health protection.

The Program will host a variety of activities to mark Children's Health Month in October to educate parents, caregivers, teachers and others on how to better protect children from adverse environmental exposure, hold listening sessions with state, local, and tribal governments and other stakeholders for next steps in effective public engagement, and obtain input from the National Academies of Science, Engineering, and Medicine to identify the highest priorities to advance children's health for the next quarter century. In FY 2022, the Program will coordinate two in-person plenary meetings of the Children's Health Protection Advisory Committee, with delivery of an expert review of EPA's Consideration of Legally Working Children in Pesticide Exposure Assessment.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

[87] For more information, please see: https://www.epa.gov/newsreleases/epa-announces-selection-organizations-receive-funding-healthy-learning-environments.
[88] For more information, please see: https://www.epa.gov/children/childrens-health-protection-advisory-committee-chpac.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$24.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$50.0) This program change is an increase to provide additional support for existing programs and workforce in the Children's Health Program. This includes updating and expanding indicators and trends in *America's Children and the Environment* by gathering evidence to better represent impacts of environmental exposures on children in underserved communities and by making improvements in the accessibility and presentation of the underlying data.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Toxic Substances Control Act (TSCA); Safe Drinking Water Act (SDWA); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); and Food Quality Protection Act (FQPA).

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$6,388.7***	***$8,580.0***	***$8,615.0***	***$35.0***
Total Budget Authority	$6,388.7	$8,580.0	$8,615.0	$35.0
Total Workyears	9.6	9.2	9.2	0.0

Program Project Description:

In 1990, the National Environmental Education Act (NEEA) was established with the objective of improving the public's understanding and knowledge of the natural and built environment, enabling people to effectively solve environmental problems. NEEA states that "there is growing evidence of international environmental problems, such as global warming…that pose serious threats to human health and the environment."[89] The Office of Environmental Education (OEE) has been tasked with implementing environmental education (EE) programming that helps EPA address these issues from the local community to national and international levels.

OEE addresses issues that impact climate change on frontline communities, by empowering these underserved communities through education, a commitment to equity, and stakeholder engagement with grants authorized by the NEEA and through the National Environmental Education Advisory Council (the Council). OEE also supports the Agency's environmental and public health protection goals by expanding access to quality environmental and climate education and engaging stakeholders through the National Environmental Education and Training Program (teacher training program), the Presidential Environmental Youth Award (PEYA) Program and the Presidential Innovation Award for Environmental Educators (PIAEE) Program. These programs promote civic action to reduce the impacts of climate change and promote environmental and climate equity through an educational lens.

In FY 2020, OEE's teacher training program—a cooperative agreement with the North American Association for Environmental Education and partners—provided training and skills development to more than 169,000 formal and nonformal educators. The cooperative agreement trained more than 3,500 educators directly and more than 300,000 educators indirectly through virtual programing. Additionally, the program supported more than 22 webinars on a variety of topics that reached over 6,000 educators and awarded over 26 small grants to more than 23 state environmental education organizations to strengthen EE at the state and local levels.

In FY 2020, OEE's regional grant program awarded 35 grants totaling $3.2 million to support EE programs and activities in local communities. Additionally, OEE recognized seven teacher winners and three honorable mentions from across the country with the PIAEE, and 35 students who either worked as a team or individually on 13 projects received the PEYA.

[89] For more information, please see: https://www.epa.gov/sites/production/files/documents/neea.pdf.

FY 2022 Activities and Performance Plan:

OEE will implement the teacher training program and regional grant program with a focus on fighting climate change and protecting public health through EE and improved engagement with frontline communities that are pollution-burdened and underserved.

In FY 2022, OEE will**:**

- Support career development through education by funding innovative EE grant projects in frontline communities that can lead to inclusive, just, and pollution-free communities and an economy that supports high-quality jobs.

- Create an OEE's grant website tool for the public that provides detailed and valuable information on all OEE regional grants, including information on audience, project format and duration, environmental topic, and the environmental and educational impacts achieved.

- Ensure formal and nonformal educators have the knowledge and teaching skills necessary to help advance environmental and climate literacy in America through the National Environmental Education and Training Program.

- Build strategic partnerships that include underserved and overburdened communities to increase the conversation around using EE as a tool to achieve environmental protection goals while achieving environmental justice (EJ), climate equity, and economic prosperity.

- Task the National Environmental Education Council (NEEAC) with providing national recommendations for how frontline and underserved communities can use EE to prosper and become resilient to the effects of climate change.

- Create public and private partnerships through the National Environmental Education Foundation (NEEF) to develop programs and initiatives that can empower frontline communities to address environmental threats, advance equity, and increase economic prosperity for all.

- Create a full federal government approach to environmental and climate education that promotes environmental stewardship and prioritizes equity, inclusion, EJ and an improved economy. For example, partner with the US Department of Energy to prepare students in frontline communities for clean energy careers and jobs.

- Utilize an information management system that will track outputs and outcomes for each grant to ensure program effectiveness, improve program efficiency and improve OEE's overall customer service. The information tracking system also will be used for the PEYA and PIAEE programs.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$19.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$16.0) This program change is an increase to support building public awareness and knowledge through EE on issues such as climate change and environmental justice.

Statutory Authority:

National Environmental Education Act (NEEA); Clean Air Act (CAA), § 103; Clean Water Act (CWA), § 104; Solid Waste Disposal Act (SWDA), § 8001; Safe Drinking Water Act (SDWA), § 1442; Toxic Substances Control Act (TSCA), § 10; Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), § 20.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$14,906.1***	***$14,084.0***	***$14,226.0***	***$142.0***
Hazardous Substance Superfund	$1,341.2	$1,328.0	$1,328.0	$0.0
Total Budget Authority	$16,247.3	$15,412.0	$15,554.0	$142.0
Total Workyears	30.7	30.2	30.2	0.0

Program Project Description:

EPA's Environmental Information Exchange Network (EN) is a standards-based, secure approach for EPA and its state, tribal, and territorial partners to exchange and share environmental data over the internet. Capitalizing on advanced technology, data standards, open-source software, shared services for EPA's Digital Strategy, and reusable tools and applications, the EN offers its partners tremendous capabilities for managing and analyzing environmental data more effectively and efficiently, leading to improved decision-making.

The Central Data Exchange (CDX)[90] is the largest component of the EN Program and serves as the point of entry on the EN for environmental data transactions with the Agency. CDX provides a set of core shared services that promote a leaner and more cost-effective service framework for the Agency by avoiding the creation of duplicative applications. It enables faster and more efficient transactions for internal and external EPA clients, resulting in reduced burden.

Working in concert with CDX is EPA's System of Registries, which is a system of shared data services designed to enhance efficiency, reduce burden on the regulated community, and improve environmental outcomes including environmental justice. EPA and EN partners routinely reference these shared data registries, from commonly regulated facilities and substances to the current list of federally recognized tribes. They identify the standard or official names for these assets, which, when integrated into EPA and partner applications, foster data consistency and data quality as well as enable data integration.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will continue to support core functions for the EN information technology (IT) systems. The EN Program will continue to be a pivotal component of EPA's Digital Strategy that supports business process change agencywide. Under this strategy, and the 21st Century Act,[91] the Agency is streamlining business processes and systems to reduce reporting burden on states and regulated facilities, and to improve the effectiveness and efficiency of environmental programs for EPA, states, and tribes. EPA also is responsible for managing EN technical governance groups and

[90] For more information on the Central Data Exchange, please see: http://www.epa.gov/cdx/.
[91] For more information on the 21st Century Integrated Digital Experience Act, please refer to: https://www.congress.gov/115/plaws/publ336/PLAW-115publ336.pdf.

administering the pre- and post-award phases of the EN grants to states, tribes, and territories. These efforts support a standards-based, secured approach for EPA and its state, tribal, and territorial partners to more effectively and efficiently exchange and share environmental data electronically. The Agency also administers and implements the Cross-Media Electronic Reporting Regulation (CROMERR) that removes regulatory obstacles for e-reporting to EPA programs under Title 40 of the Code of Federal Regulations (CFR).

EPA aims to reduce burden and avoid costs while improving IT. The Agency has provisioned Virtual Exchange Services (VES) or virtual nodes to facilitate more than 110 large-scale data transactions supporting states and tribal partners, with another 20 anticipated by the end of FY 2022. EPA will continue to carry out the baseline support for the adoption and onboarding of VES and associated services for EPA and its partners. The shared electronic identity proofing and signature services for CROMERR support 31 partner regulatory reporting programs to date and over 15 states, tribes, and EPA partners will be added in FY 2022. EPA estimates that partners adopting shared CROMERR services save $120 thousand in development and at least $30 thousand in operations each year, which results in a cost avoidance of greater than $2.5 million for EN partners.

In FY 2022, EPA will continue to improve the functionality and use of the System of Registries.[92] In addition to streamlining the Registries, EPA will launch a broader effort across the enterprise to engage organizations and facilitate the adoption of these data services. Registries are shared data services in which common data are managed centrally but shared broadly. They improve data quality in EPA systems, enable integration and interoperability of data across program silos, and facilitate discovery of EPA information. An example is the Agency's effort to promote the adoption of tribal identification services (TRIBES) across EPA systems. This progress is tracked by EPA's Chief Information Officer, who has issued a memorandum calling on all applicable systems to incorporate this shared data service. In FY 2020, EPA increased the number of EPA systems using TRIBES services by more than 26 percent, from 19 to 24 systems, with many other systems currently integrating TRIBES.

In FY 2022, EPA will continue implementing a solution related to shared facility identification information. In FY 2020, EPA began to re-baseline the existing centralized facility registry, as managing facility identification centrally reduces the requirement by programs to manage that information locally. Centralized facility management also is fundamental to better environmental management by bringing together EPA data across programmatic silos. Similar to facility data, substance information also is regulated across EPA programs, with many EPA programs relying on the Substance Registry Service (SRS) to improve data quality and reduce burden.

EPA tracks the number of registry webpages users and web service hits as one measure of usage. For example, the SRS website is visited by approximately 50 thousand users per month; many of these users visit SRS to understand regulatory information about chemicals. SRS also receives between 20 thousand and 140 thousand web service hits per month (depending on reporting cycles), mostly by EPA systems that have incorporated the web services into their online reporting forms. Priorities for EPA registries include improving registry technologies by moving them into an open-source platform, so they are cloud-ready.

[92] For more information, please see: https://ofmpub.epa.gov/sor_internet/registry/sysofreg/about/about.jsp.

By 2022, EPA will have moved TRIBES, SRS, and the Registry of EPA Applications, Models and Data Warehouses (READ) into a cloud-based open-source platform. EPA will continue to expand the number of EPA and partner systems that integrate registry services into their online reports and systems, reducing burden and improving data quality. This includes updating EPA's dataset registry to allow EPA scientists, external partners, and others to share information and make information easier to find in the cloud.

Using the information available in the registries, EPA created RegFinder to help industry discover potentially applicable regulations. In FY 2022, EPA will continue to improve the functionality and information in RegFinder and to improve outreach with regulated industry to ensure the tool meets customer needs. RegFinder builds on services from four EPA data catalogs: 1) SRS; 2) EPA Enterprise Vocabulary; 3) a catalog of federal statutes and regulations (Laws and Regulations Services); and 4) North American Industrial Classification System to enable a user to search for laws and regulations by substance, keyword, or industrial processes.

In FY 2022, EPA will continue to work with the Department of Homeland Security's Customs and Border Protection (CBP) to maintain, utilize, and improve systems to 1) facilitate the import and export of legitimate goods; and 2) leverage big data and artificial intelligence tools to identify and prevent or stop illegal goods from entering or leaving the United States. EPA supports over 20 data exchange types within EPA and with CBP to automate and streamline over 8 million annual import and export filings. This automation is essential for managing a significantly increasing number of imports and exports (e.g., due in large part to e-Commerce) and allows coordinators/officers to focus on compliance monitoring and key high-value targeting activities for non-compliant imports and exports, and to better coordinate with CBP.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$135.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$7.0) This program change increases support for environmental data sharing among EPA, state, tribes, and territories.

Statutory Authority:

Federal Information Security Management Act (FISMA); Clean Air Act (CAA); Clean Water Act (CWA); Toxic Substances Control Act (TSCA); Federal Insecticide Fungicide and Rodenticide Act (FIFRA); Resource Conservation and Recovery Act (RCRA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA).

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$50,346.8***	***$46,836.0***	***$54,792.0***	***$7,956.0***
Total Budget Authority	$50,346.8	$46,836.0	$54,792.0	$7,956.0
Total Workyears	285.2	272.1	296.1	24.0

Total workyears in FY 2022 include 6.2 FTE to support Executive Management and Operations working capital fund (WCF) services.

Program Project Description:

The Executive Management and Operations Program supports various offices that provide direct executive and logistical support to EPA's Administrator. In addition to the Administrator's Immediate Office (IO), the Program supports the Office of Congressional and Intergovernmental Relations (OCIR), Office of Administrative and Executive Services (OAES), Office of the Executive Secretariat (OEX), the Office of Public Affairs (OPA), and the Office of Public Engagement and Environmental Education (OPEEE).

The Program also supports EPA's 10 regions. The Program's management, coordination, and policy activities link the Agency's engagement with outside entities, including: Congress, state and local governments, nongovernmental organizations, national and community associations, and the public.

Within the Program, key functions include responding to congressional requests for information; coordinating and providing outreach to state and local governments and rural communities; and supporting press and other communications activities. The Program also supports administrative management services involving correspondence control and records management systems, human resources management, budget formulation and execution, and information technology management services.

FY 2022 Activities and Performance Plan:

In FY 2022, Office of Congressional Affairs (OCA) will continue to prepare EPA officials for hearings, oversee responses to written inquiries and oversight requests from members of Congress, and coordinate and provide technical assistance and briefings on legislative areas of interest to members of Congress and their staff.

OCIR serves as EPA's principal point of contact for Congress, regions, states, and local governments and as the coordination point for interaction with other agency offices and officials. OCIR is comprised of two main components: the Office of Congressional Affairs (OCA) and Office of Intergovernmental Relations (OIR). OCA facilitates all legislative activity and interactions with Congress. OIR manages interactions with state and local governments and serves as the liaison for the agency with national associations for state and local officials.

OIR will continue to inform and consult with state and local governments on regulations and other EPA activities. Additionally, OIR will continue to lead the Agency's efforts to support and build partnerships with the states, local governments, and tribes on environmental priorities through regular engagements with intergovernmental associations and state and local officials as well as through the National Environmental Performance Partnership System and the increased use of Performance Partnership Agreements and Grants with a focus on addressing climate change and ensuring underserved communities are considered throughout the process. OIR also will continue to operate its Local Government Advisory Committee and Small Communities Advisory Subcommittee, which provide critical advice to the Administrator.

In FY 2022, OCIR will: continue to regularly review and evaluate its processes for responding to congressional and intergovernmental correspondence and FOIA requests; prepare for hearings or briefings; provide technical assistance; and coordinate with EPA's program offices, regional offices, states, local officials, and associations. In addition, the Agency requests resources in support of EPA's implementation of the Foundations for Evidence-Based Policymaking Act of 2018. OCIR's activities will include conducting reviews of select agency grant programs to learn if the commitments established and met are achieving the intended environmental results and provide recommendations, as appropriate, to inform future grants management.

OPA facilitates the exchange of information between EPA and the public, media, Congress, and state and local governments; broadly communicates EPA's mission; assists in public awareness of environmental issues; and informs EPA employees of important issues that affect them. Annually, OPA issues nearly 1,500 press releases; responds to approximately 8,000 media inquiries; and oversees more than 150 audio-visual productions, 500 graphic productions, 2,700 event photographs, and 40 portraits. In addition, in terms of digital media, OPA receives over 160 million impressions on the internet, including www.epa.gov and EPA social media accounts, and posts nearly 100 unique EPA homepage internet news banners. Also, to facilitate communications with EPA employees nationwide, OPA annually posts over 200 intranet banners; issues 48 issues of a weekly e-newsletter - *This Week @ EPA* - with a total of 240 articles; and sends more than 100 agencywide employee Mass Mailers from EPA's Administrator and other senior leaders. In FY 2022, OPA will continue to inform the media of agency initiatives and deliver timely, accurate information. The Office will continue to update the Agency's internet site to provide stakeholders with transparent, accurate, and comprehensive information on EPA's activities and policies. OPA will continue using social media, multimedia, and new media tools to provide stakeholders with information. The Office also will work with EPA's programs and regional offices to improve employee communication; external communication on relevant environmental and human health risks; collaboration and engagement with internal and external stakeholders; updates to the Agency's intranet site; and the use of other communication tools.

OPA also is responsible for ensuring that EPA carries out effective risk communication by sharing critical information on how we are addressing human health and environmental risks with the American public, communities, public officials, and other stakeholders in a way that it is tailored to their needs, reaching a wide audience, and provides meaningful actions they can take to reduce risk. This is integral to most of the work done across the Agency's offices and regions and is essential to carrying out EPA's mission of protecting human health and the environment.

Currently, risk communicators at the Agency are not always connected to best practices from the field, high quality training opportunities, or agencywide efforts underway to improve risk communication. Further, EPA regularly faces intractable risk communication issues that often need sustained focus by highly trained staff who can apply evidence-based practices. Addressing these issues and meeting the challenges of the future will require creating sustained culture change, building agency knowledge and a robust community of practice, and developing strong relationships with the academic community and our federal, state, and tribal partners.

In FY 2022, the Agency requests resources to strengthen EPA's ability to carry out effective and consistent risk communication and position the Agency to meet the risk communication challenges of the future by:

(1) Significantly expanding training across the Agency and with its partners, to create a community of practice and increase staff knowledge in a meaningful and sustainable way. This will increase the number of staff at the Agency and among partners who are using the same best practices in their risk communication efforts while at the same time building a network of staff located across all regions and offices who are well-positioned to share their risk communication expertise.

(2) Launching an internal risk communication fellowship program to increase EPA's progress on the most difficult risk communication issues. The fellowship program will be open to EPA employees and will provide 10 weeks of intensive risk communication study and training followed by 10 to 13 weeks of applying the knowledge gained to an intractable risk communication problem facing the home office or region.

(3) Developing academic partnerships to study EPA's risk communication challenges and improve the Agency's reliance on evidence-based practices. This includes increasing research partnerships to develop a research portfolio with the explicit goal of studying EPA-relevant risk communication questions, and then translating findings into usable tools, applications, and best practices for use across the Agency.

As the central administrative management component of the Administrator's Office (AO), the OAES provides advice, tools, and assistance to the AO's programmatic operations. In FY 2022, OAES will continue to conduct the following activities: human resources management, budget and financial management, information technology and security, outsourcing, facilities management, and audit management.

In FY 2022, OEX will continue to provide critical administrative support to the Administrator, Deputy Administrator, senior agency officials, and staff to comply with the statutory and regulatory requirements under the Federal Records Act, FOIA, and related statutes and regulations. OEX will continue to manage the AO's correspondence, records management, Privacy Act implementation, and FOIA activities. Responsibilities include: processing correspondence for the Administrator and Deputy Administrator, reviewing and preparing documents for their signature, and operating the Correspondence Management System, which provides paperless workflow, tracking and records management capabilities to more than 3,000 EPA employees; managing the

Administrator's primary email account; serving as custodian of the Administrator's, Deputy Administrator's, and IO's records and overseeing the records management program for all AO staff offices; and reviewing and issuing ethics determinations for gifts received by the Administrator and Deputy Administrator. The Office also manages the privacy program for the AO and monitors, reviews, and audits AO systems of records. Finally, OEX manages FOIA-related operations for the AO. OEX closed 809 FOIA requests in FY 2020, exceeding its FY 2019 total of 731 closures. OEX began the fiscal year with a backlog of 1,212 open requests and currently has a backlog of 811 requests, a net reduction of 401. The pace of incoming requests remains high, exceeding 500 requests per year with many requests that are complex and seek significant volumes of records.

In FY 2022, OPEEE will continue providing advice to the Administrator and senior staff on activities surrounding different stakeholder groups, including generating and distributing outreach plans for most regulatory actions. Such plans often include: meeting regularly with stakeholder groups to communicate the Administration's agenda at the EPA, providing advance notification communications to relevant stakeholder groups on upcoming regulatory actions, facilitating in-state visits by the Administrator and/or senior staff to collect regulatory feedback, communicating key dates to stakeholders pertaining to opportunities to comment on EPA rulemakings, and organizing conference calls on regulatory topics with impacted stakeholders.

Released in December 2018, the *Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts*[93] plan is a blueprint for reducing lead exposure and associated harms through collaboration among federal agencies with a range of stakeholders, including states, tribes and local communities, along with businesses, property owners, and parents. Since its implementation, EPA has made substantial progress to date; however, there is an opportunity to improve EPA's lead communication and enhance training of healthcare providers in underserved communities by enhancing the environmental education provided to medical professionals to identify causes and impacts of childhood lead exposure. EPA will work with healthcare providers and families to address this problem directly in an effort to prevent and reduce exposure to lead. To further support the Administration's Lead Exposure Reduction Initiative, and in coordination with EPA's program and regional offices, in FY 2022, the Agency requests resources to continue to lead ongoing efforts to: (1) strengthen EPA's communications with the public on the risks of lead exposure by working with external leaders in the field to build upon the way the Agency conducts its outreach; and (2) leverage EPA's existing relationship with Pediatric Environmental Health Specialty Units (PEHSUs)[94] to enhance and support training of healthcare providers in underserved communities to prevent and reduce children's exposure to lead.

There are several unique risk communication challenges regarding lead, but also unique assets for the Agency to deploy to reduce risk to the American public—especially to children. Lead exposure to children can result from multiple sources and can cause irreversible and life-long health effects. There is no level of lead exposure which is safe. This means that anything the Agency can do to reduce exposure and lower children's blood lead levels will lead to significant improvements in

[93] For more information, please see: https://ptfceh.niehs.nih.gov/features/featured-resource/page859413.htm.
[94] Pediatric Environmental Health Specialty Units (https://www.pehsu.net/) provide expert information, training and consultation for health care professionals and the public on evidence-based prevention, diagnosis, management and treatment of children's environmental health conditions. The PEHSU Program increases the ability of the general public to take simple steps to reduce harmful exposures by raising awareness among parents, school officials and community leaders.

public health and brighter, more productive futures for America's children. In FY 2022, lead communication activities will include: assess which risk communication outreach tactics and platforms work best to reduce risk of lead exposure either through individual (parents, caregivers, children) or partner (schools, water systems, local government) behavioral change with a directed effort to include promising new practices; conduct a pilot of an outreach initiative which leverages key partnerships to amplify EPA's messages across these proven platforms and tactics; evaluate the effort and integration of lessons learned into the broader risk communication efforts across the Agency with an eye toward making sure that effective platforms and tactics can be easily adopted for other uses on other contaminants, if relevant.

Activities related to enhancing training of healthcare providers in underserved communities will include: expand ongoing PEHSU activities with an increased focus on enhancing the education provided to medical professionals on how to identify causes and impacts of childhood lead exposure; and work with health care providers and families to address this problem directly in an effort to prevent and reduce exposure to lead.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$1,553.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$5,376.0 / +20.0 FTE) This program change is an increase in resources to support engagement with state and local partners, enhanced training of healthcare providers in underserved communities on the prevention, diagnosis, management, and treatment of children's exposure to lead, and increased funding to implement and strengthen the Agency's ability to carry out effective risk communication. This investment includes $3,486.0 thousand in payroll.

- (+$1,027.0 / +4.0 FTE) This program increase supports evidence building activities in support of the Foundations for Evidence-Based Policymaking Act of 2018. This investment includes $697.0 thousand in payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Environmental Research, Development, and Demonstration Authorization Act (ERDDAA).

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$2,145.2***	***$1,778.0***	***$1,929.0***	***$151.0***
Total Budget Authority	$2,145.2	$1,778.0	$1,929.0	$151.0
Total Workyears	7.0	4.6	4.6	0.0

Program Project Description:

The Small Business Ombudsman Program includes the Asbestos and Small Business Ombudsman (ASBO),[95] housed within the Office of Small and Disadvantaged Business Utilization (OSDBU), as well as the Small Business Advocacy Chair and other small business activities located in the Office of Policy's Office of Regulatory Policy and Management.[96] The Program provides a comprehensive suite of resources, networks, engagement opportunities for training, and advocacy on behalf of small businesses and leads EPA's implementation of the Regulatory Flexibility Act, as amended by the Small Business Regulatory Enforcement Fairness Act. For example, in FY 2021, the ASBO provided monthly newsletters and worked with state partners to coordinate virtual environmental compliance and training.

The ASBO operates in the dual roles of Asbestos Ombudsman and Small Business Ombudsman. The Asbestos Ombudsman role services a toll-free liaison hotline for asbestos-related questions and concerns. The Small Business Ombudsman role provides small business compliance assistance. The role also functions as the small business advocate for early engagement and consideration of small business impacts in the rulemaking process. The ASBO partners with a variety of internal and external stakeholders, including EPA Programs and Regional Offices, State Small Business Environmental Assistance Programs (SBEAPs),[97] the U.S. Small Business Administration's Office of Advocacy, and Office of the National Ombudsman, as well as numerous local and national small business trade associations. These partnerships serve as a conduit of information and offer distinct perspectives to help EPA and ASBO stakeholders achieve their environmental goals.

Overall, the core functions of the Program include: assisting EPA's program offices with analysis and consideration of the impact of their regulatory actions on small businesses; engaging small entity representatives and other federal agencies in evaluating the potential impacts of rules; operating and supporting the asbestos liaison hotline and outreach resources to support internal and external small business activities. The Program helps small businesses learn about new actions and developments within EPA, while also helping the Agency learn more about the concerns and perspectives of small businesses. Based on the Agency's overall small business regulatory and environmental compliance assistance efforts, EPA has earned a grade of "A" in the last 14 Small

[95] For more information, please see: https://www.epa.gov/resources-small-businesses/asbestos-small-business-ombudsman.
[96] For more information, please see: https://www.epa.gov/aboutepa/about-office-policy-op#ORPM.
[97] For more information, please see: https://nationalsbeap.org/.

Business Administration (SBA) Office of the National Ombudsman Annual Reports to Congress.[98]

FY 2022 Activities and Performance Plan:

Consistent with EPA's priorities for community-driven environmental solutions and equity, in FY 2022, the Program will:

- Improve access to environmental compliance assistance and stakeholder collaboration through small business outreach, engagement and activities designed to assist overburdened and marginalized communities and related public interest organizations. The ASBO will continue to strengthen partnerships through the development and dissemination of ASBO communication materials, including brochures, fact sheets, newsletters, and online resources. The ASBO's outreach and communication efforts help improve stakeholder engagement and increase partnerships with underserved communities.

- Foster stronger state partnerships with the EPA regional offices in the area of small business environmental compliance and assistance through a newly created Regional Air Small Business Liaison (RASBL) function. The RASBLs are regional staff who serve as regional points of contacts on air-related/climate change programs to help reduce greenhouse gas emissions and support engagement activities to those that are often underserved in their communities. The ASBO will provide the RASBLs outreach and engagement support in planning and hosting various engagement activities and events for the small and disadvantaged business communities.

- Enhance underserved community engagement through the ASBO's newly expanded cooperative agreement for the National Small Business Environmental Assistance Program, which facilitates state and national collaboration on small businesses environmental assistance services. This ASBO-funded cooperative agreement will support the expansion of the National SBEAP website[99] and other collaboration tools, including a new compliance assistance web-resource, dedicated to non-English speaking small businesses to ensure that environmental assistance resources are available and understood by those traditionally underserved. Additionally, the cooperative agreement will allow for financial support in hosting and managing compliance assistance training events to better collaborate with the states.

- Implement a new ombudsman monitoring and reporting process to comply with both the Asbestos Ombudsman and Small Business Ombudsman's statutory requirements. A new, less burdensome, and more agile data collection mechanism will be deployed to help monitor and periodically report on the effectiveness of the asbestos hotline services and the small business environmental assistance programs under the 1990 Clean Air Act Amendments.

[98] For more information, please see: https://www.sba.gov/sites/default/files/2021-01/SBA_Annual_Report_2019-508.pdf
[99] For more information, please see: www.nationalsbeap.org.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$12.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$139.0) This program change increases support for core program work.

Statutory Authority:

Asbestos Hazard Emergency Response Act (AHERA), 1986 (adding Title II to the Toxic Substances Control Act (TSCA)) (15 U.S.C. §2641-2656), Clean Air Act, Title 5, Section 507, Small Business Stationary Source Technical and Environmental Compliance Assistance Program (42 U.S.C. §7661f), Small Business Regulatory Enforcement Fairness Act of 1996, Pub. L. 104-121, as amended by Pub. L. 110-28; Small Business Paperwork Relief Act, 44 U.S.C. 35; 42 U.S.C. § 7661f; and 15 U.S.C. §§ 2641-2656.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$1,363.2***	***$1,680.0***	***$1,884.0***	***$204.0***
Total Budget Authority	$1,363.2	$1,680.0	$1,884.0	$204.0
Total Workyears	5.6	7.6	7.6	0.0

Program Project Description:

EPA's Office of Small and Disadvantaged Business Utilization (OSDBU) manages the Agency's Small Business Contracting Program mandated under Section 15(k) of the Small Business Act, 15 U.S.C. § 644(k). As prescribed under that section, the Program provides expertise in ensuring small business prime and subcontracting opportunities to expand EPA's competitive supplier base in furthering the Agency's mission. Under the Program, OSDBU provides EPA's contracting community statutorily required counseling and training on all aspects of governing small business requirements throughout the federal acquisition cycle. It also engages in statutorily mandated advocacy on behalf of the various categories of small businesses, including disadvantaged businesses; certified small businesses located in Historically Underutilized Business Zones (HUBZones); service-disabled veteran-owned small businesses (SDVOSBs); and women-owned small businesses. In accordance with Section 15(k), OSDBU further hosts and participates in an average of one small business outreach and training conference each month, providing needed technical assistance to hundreds of small and disadvantaged businesses across the country.

In implementing the statutory responsibilities required under Section 15(k), OSDBU reviews acquisition strategies to maximize small business prime and subcontracting opportunities; provides expertise in conducting market research for EPA acquisitions; performs contract bundling reviews to avoid unnecessary or unjustified limitations on small business utilization; reviews purchase card transactions within the statutory threshold; and evaluates large prime contractor subcontracting plans. In addition, OSDBU reviews unsolicited proposals for agency acquisitions and assists small businesses in resolving payment issues under EPA acquisitions. It further provides a broad range of training, outreach, and technical assistance to new and prospective small business awardees. Historically, data reported in the Federal Procurement Data Systems (FPDS) indicates that EPA awards an average of 40 percent of total acquisition dollars to small businesses annually – far exceeding the government-wide goal of 23 percent. Based on the Agency's record of excellence in affording small business contracting opportunities, EPA has earned an "A" on the last 11 Small Business Procurement Scorecards administered by the U.S. Small Business Administration (SBA).[100]

[100] For more information, please see: https://www.sba.gov/sites/default/files/2020-08/EPA.pdf.

FY 2022 Activities and Performance Plan:

Consistent with EPA priorities for community-driven environmental solutions and equity, in FY 2022, the Program will:

- Strengthen the EPA Regional Small Business Coordinator statutory function to ensure that small and disadvantaged businesses have equal access to EPA contracting opportunities on the prime and subcontracting level. Under Section 15(k)(8) of the Small Business Act, 15 U.S.C. § 644(k)(8), EPA is required to assign a fulltime employee to each of its regional procurement activities to promote and support the utilization of small and disadvantaged businesses in the activity's acquisitions. This function is critical to the efforts of EPA's regional acquisition community to identify small and disadvantaged business solutions to meet each region's mission needs, and to structure acquisitions to maximize small business contracting opportunities. The function also is critical to providing outreach and technical assistance to small and socioeconomically disadvantaged vendors interested in doing business with EPA. Unlike large businesses, small and disadvantaged businesses often lack the dedicate resources to master the myriad of complex federal procurement requirements to capitalize on agency contracting opportunities. These challenges are particularly acute for those small businesses located in the regions and in various marginalized communities. Strengthening the effectiveness of Regional Small Business Coordinator engagement with these businesses will help level the playing field and avail the businesses of resources to enhance their competitiveness to receive EPA contract awards.

- Fully deploy a commercial web-based solution that will provide greater tools to assist in data-driven acquisition planning and inform market research strategies. In FY 2021, OSDBU worked on completing the integration and ensuring the operability of the new web solution. In FY 2022, OSDBU will officially launch the fully deployed solution that will enable small businesses to voluntarily register their business information into the system. OSDBU will use the information as a repository for identifying available small business solutions for the EPA prime contracting opportunities. Large businesses also will have access to the system as a resource for identifying small business sources for their subcontracting opportunities with EPA. The system will further allow OSDBU to disseminate information, obtain feedback, access additional vendor-posted information on other sites, and otherwise interface with registered small businesses electronically. By leveraging this database, EPA would be able to reduce the potential barriers for underserved communities and businesses and provide the opportunity for full and equal participation in agency procurements.

- Expand EPA's electronic mechanism for tracking the Agency's progress in achieving its established small and disadvantaged business procurement goals. In FY 2018, OSDBU launched a Small Business Contracting Dashboard, providing the dollar value and percentage of contract awards to the five statutory categories of small businesses. OSDBU manually obtains the Dashboard data from the EPA Acquisition System (EAS) and the government-wide spending database www.beta.sam.gov, and uploads the information to the Dashboard through an Excel spreadsheet. In FY 2022, OSDBU will deploy an enhanced Small Business Contracting Dashboard that will provide more comprehensive data, greater

automation, and additional data analytics to drive more accurate and complete data-based acquisition decision-making to optimize small and socioeconomic business contracting opportunities.

- Strengthen EPA's Small Business Subcontracting Program to include OSDBU's affirmative verification of small and disadvantaged business participation in EPA's procurements on the subcontracting level. Small business subcontracting is an important mechanism for all categories of small businesses to gain experience, capacity and familiarly in doing business with the federal government. Although Section 8(d) of the Small Business Act, 15 U.S.C. § 637(d), requires that large federal vendors submit small business subcontracting plans for their prime awards above a certain threshold, additional OSDBU monitoring of large business good faith compliance with those requirements will help further the achievement of small business subcontracting opportunities and goals.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$148.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$56.0) This program change increases resources for program work that advances environmental justice through small minority business assistance.

Statutory Authority:

15 U.S.C § 644(k).

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$13,660.5***	***$13,736.0***	***$14,003.0***	***$267.0***
Total Budget Authority	$13,660.5	$13,736.0	$14,003.0	$267.0
Total Workyears	57.3	63.1	63.1	0.0

Program Project Description:

The State and Local Prevention and Preparedness Program establishes a structure composed of federal, state, local, and tribal partners who work together with industry to protect emergency responders, local communities, facility workers, the environment, and property from chemical accident risks through accident prevention and emergency response programs, community and facility engagement, and improved safety systems. This framework provides the foundation for community and facility chemical hazard response planning, and reduction of risk posed from chemical facilities.

Under Section 112(r) of the 1990 Clean Air Act (CAA) Amendments, chemical facilities that store more than a certain amount of listed extremely hazardous substances are required to implement a Risk Management Plan (RMP) program. These facilities, known as RMP facilities, take preventive measures; report data; mitigate and/or respond to chemical releases; and work with communities, response, and planning groups to increase understanding of risks.[101]

The Emergency Planning and Community Right–to-Know Act (EPCRA) of 1986 was created to help communities plan for chemical emergencies and to inform the public about chemicals in their community. Under EPCRA, facilities are required to report about the chemicals they produce, use, and store to state and local governments. States, tribes, and local governments use this information to prepare communities for potential releases from these facilities through the development of local emergency response plans.[102]

FY 2022 Activities and Performance Plan:

In FY 2022, the State and Local Prevention and Preparedness Program will perform the following activities:

- Inspect RMP and EPCRA facilities to ensure compliance with accident prevention and preparedness regulations, and work with chemical facilities to reduce chemical risks and improve safety. There are approximately 12,000 chemical facilities that are subject to the RMP regulations. Of these, approximately 1,800 facilities have been designated as high-risk based upon their accident history, quantity of on-site dangerous chemicals stored, and

[101] For additional information, please refer to: https://www.epa.gov/rmp.
[102] For additional information, please refer to: https://www.epa.gov/epcra.

proximity to large residential populations.[103] EPA prioritizes inspections at high-risk facilities.

- Provide basic and advanced RMP and EPCRA inspector training for federal and state inspectors.

- Maintain the RMP national database, which is the Nation's premier source of information on chemical process risks and contains hazard information on all RMP facilities. Industry electronically submits updated RMPs to this secure database.

- Develop limited updates to the Computer-Aided Management of Emergency Operations (CAMEO) software suite (*i.e.,* the CAMEO Chemicals, CAMEO*fm,* Areal Locations of Hazardous Atmospheres and Mapping Application for Response, Planning, and Local Operational Tasks applications), which provides free and publicly available information for firefighting, first aid, emergency planning, and spill response activities.

- In accordance with the direction in Executive Order 13990, conduct a review of the final RMP Reconsideration rule (84 FR 69834) and, as appropriate, develop a proposed rule to rescind or revise the action to address Administration priorities on environmental justice and climate change.

- Conduct outreach to regulated industry concerning changes or updates to RMP and EPCRA regulations and interpretive guidance.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$165.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$102.0) This program change supports partnerships with state and local entities to prevent and prepare for environmental emergencies and disasters.

Statutory Authority:

The Emergency Planning and Community Right-to-Know Act (EPCRA); the Clean Air Act (CAA) § 112(r).

[103] Located in the EPA RMP database.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$12,225.3***	***$13,206.0***	***$13,450.0***	***$244.0***
Total Budget Authority	$12,225.3	$13,206.0	$13,450.0	$244.0
Total Workyears	31.3	37.0	37.0	0.0

Program Project Description:

EPA's success in carrying out its mission to protect human health and the environment is contingent on collecting timely, accurate, and relevant information. The Toxics Release Inventory (TRI) Program[104] supports EPA's mission by annually collecting and publishing for the public: release, other waste management (e.g., recycling), and pollution prevention data on TRI-listed chemicals and chemical categories, including per- and polyfluoroalkyl substances (PFAS).[105] Approximately 21,000 industrial and federal facilities report to TRI annually. The TRI Program is a premiere source of cross-media toxic chemical release information for communities, non-governmental organizations, industrial facilities, academia, and government agencies at the local, state, tribal, federal, and international levels. Using technological advances, the TRI Program has developed several public analytical tools that enable easy access, mapping, and analysis of information on TRI chemicals released or otherwise managed as waste at facilities in communities across the United States. Some of these tools incorporate demographic indicators such as low income, people of color, education level, linguistically isolated households, and young and elderly populations, as well as risk indicators.

The Program collaborates with other EPA programs on sector analyses to describe relevant trends in toxic chemical releases and waste management and pollution prevention practices, and to support innovative approaches by industry and other partners to reduce pollution. As a robust, community-focused, annual, cross-media data set on toxic chemical information, the TRI lends itself to comparative analyses with other program-specific data managed by the Agency, providing insights that may not be apparent when viewing the data sets independently. Such insights are especially valuable when it comes to identifying opportunities based on TRI-reported, location-specific release trends to reduce toxic chemical releases in communities of concern in accordance with the Administration's environmental justice priorities, and promoting TRI-reported pollution prevention practices that reduce the release of TRI-listed toxic chemicals and also reduce emissions of greenhouse gases (GHGs). The TRI serves as a central component of EPA's strategy to increasing access to environmental pollution information and enabling communities, scientists, policy-makers and other stakeholders to apply the information in their decisions and engagements

[104] For additional information, please visit: http://www.epa.gov/tri/.
[105] Many per- and polyfluoroalkyl substances (PFAS) were added to the TRI chemical list as a component of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) when the Act was signed into law on December 20, 2019. The first year of TRI reporting these PFAS is calendar year 2020.

to address impacts and deter adverse burdens, particularly to low-income and marginalized communities.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will continue to enhance the regulatory foundation of TRI to ensure that communities have access to timely and meaningful data on toxic chemical releases and other waste management and pollution prevention activities at facilities. As part of this effort, the TRI Program will continue to clarify toxic chemical reporting requirements, pursue chemical listings, expand the scope of industry coverage, respond to petitions, improve the reporting experience, explore opportunities to use this valuable information and share and promote pollution prevention approaches with industry, take steps to optimize the quality of TRI data, and identify opportunities to reduce toxic chemical releases in support of the Administration's environmental justice priorities as well as identifying instances where TRI-reported pollution prevention practices reduce releases of both TRI-listed toxic chemicals and GHGs which aligns with the Administration's climate priorities. The TRI Program will play an enhanced role conducting analyses to support EPA's goals for environmental justice (EJ) and EJ communities.

EPA also will continue to provide reporting facilities with an online reporting application, *TRI-MEweb*, to facilitate the electronic preparation and submission of TRI reports through EPA's Central Data Exchange (CDX).[106] CDX manages access and authentication services for TRI; specifically, it provides identity proofing for reporting facilities. In addition, the TRI data collected by EPA are shared with states, tribes, and territories that have an active node on CDX and are partners of the TRI Data Exchange (TDX).[107] EPA will continue to maintain the TDX throughout FY 2022. The Agency also will continue to support the TRI Processing System (TRIPS) database, which is the repository for TRI data. As a key element of its data quality assurance strategy, in FY 2022, the Program will continue to conduct at least 600 data quality checks annually to help optimize the accuracy and completeness of the reported data and thereby improve the Program's analyses of chemical waste released or otherwise managed. In FY 2022, EPA also will continue to improve its systems, processes, and products based on feedback from users (i.e., communities, academia, industry, states, and tribes).

The Program also will continue to publish English and Spanish versions of the annual *TRI National Analysis,*[108] which describes relevant trends in toxic chemical releases and trends in other waste management practices, and highlights innovative approaches by industry to reduce pollution. The Analysis will include industry sector profiles, parent company analyses, and TRI information reported from facilities in specific urban communities, large aquatic ecosystems, Indian Country, and Alaska Native Villages. The TRI Program also will continue to make the data available to the public within weeks after the July 1 reporting deadline. The data will be available as downloadable data files (via the TRI website and Data.gov) and through online analytical tools such as *Envirofacts.*[109] The Program will continue to provide support to EPA's Enforcement and Compliance Assurance programs by supplying facility target lists developed through the

[106] To access the CDX, please visit: https://cdx.epa.gov/.
[107] For additional information, please visit: https://www.epa.gov/toxics-release-inventory-tri-program/tri-data-exchange.
[108] To access the *TRI National Analysis*, please visit: https://www.epa.gov/trinationalanalysis. EPA publishes each National Analysis approximately six months after that year's data are reported.
[109] *EnviroFacts* may be accessed at: https://enviro.epa.gov/.

comparison of TRI reporting with facility reporting to other EPA programs (e.g., air permits required by the Clean Air Act). The TRI Program will continue to foster stakeholder discussions and collaborations in analyzing and using the TRI data with stakeholders such as industry, government, academia, non-governmental organizations, and the public. Engagement will include conducting TRI National Conferences (potentially in virtual format) and the TRI University Challenge.

As part of the Toxic Substances Control Act (TSCA) implementation, EPA is working to evaluate the health and environmental risks of 20 high-priority chemicals designated in December 2019 and other chemicals pursuant to manufacturer requests. TSCA requires that additional chemicals be selected for evaluation in the future, maintaining 20 EPA-initiated evaluations on an on-going basis. In FY 2022, the TRI Program will support those risk evaluations by providing EPA risk assessors with information from the TRI database that can be used to identify conditions of use and evaluate and estimate occupational, general population, and subpopulation exposures for those chemicals undergoing risk evaluation and that are included on the TRI chemical list. The TRI Program also will support work under TSCA to identify candidate chemicals for future risk evaluations. The TRI Program will pursue chemical listings, including TSCA Work Plan and other high-priority substances as well as respond to petitions that address the TRI chemical list.

Further, Section 7321 of the NDAA requires EPA to assess certain PFAS to determine whether they meet Emergency Planning and Community Right-to-Know Act (EPCRA) Section 313 chemical listing criteria. During FY 2022, EPA also will continue to assess these chemicals and develop associated hazard assessments to support any chemical listing activities. Similarly, to support future evaluations of health and environmental risks under TSCA, additional chemicals may be assessed for TRI listing suitability and associated listing actions, and as required by EPCRA, the Agency will respond to EPCRA chemical petitions regarding TRI within 180 days after receipt.[110] Petitions may request the addition or deletion of chemicals. Petitions also may address industry sector coverage. The quantity and complexity of petitions are unknown until submitted to EPA.

Because electronic systems that collect and disseminate TRI data largely have been developed, the focus in FY 2022 will be on operations and maintenance of *TRI-MEweb*, TRIPS, and processes that contribute to quality control in the development of the annual *TRI National Analysis*. By leveraging agency cloud services, the TRI systems will improve system performance, reliability, efficiencies, portability, and administrative services (security, upgrades, patches, etc.). This also will improve integration/consistency with other cloud-based systems and applications and will provide quicker data processing and enhance TRI's analytical capabilities by using applications such as *Qlik.*[111]

In FY 2022, the TRI Program will analyze and identify facilities and sectors releasing TRI reportable substances proximal to EJ communities (using tools from EPA's *EJScreen*). The program also will develop maps and other products to help facilitate an understanding of the EJ impacts of TRI releases to the surrounding communities including those communities that might

[110] Additional information on current petitions may be found at: https://www.epa.gov/toxics-release-inventory-tri-program/toxics-release-inventory-laws-and-regulatory-activities.
[111] For additional information, please visit: https://www.qlik.com/us/.

be more susceptible to climate change impacts (i.e., sea level rise). TRI will initiate this work for at least two EPA regions, and will provide outreach and training in how to use and interpret the information within those locations.

Additionally, TRI reporting includes information on institutional/firm environmental stewardship, pollution prevention (P2), source reduction, and other sustainability practices and activities (e.g., climate protection-oriented work, environmental stewardship, voluntary consensus standard work, etc.) undertaken by facilities during the reporting year. TRI's P2 reporting data include thousands of instances of pollution prevention implementation by facilities, source reduction, and other sustainability activities, which often reflect economic benefits coupled with improved environmental performance. TRI's P2 data tools have a wide range of capabilities to help identify and amplify improved environmental practices. For example, users can identify and compare facilities within an industry sector and/or geographic area to explore the extent of adoption/deployment of P2 practices. TRI will continue to conduct analyses of these P2 practices and develop profiles of these environmental improvements, which can be useful for P2 practitioners including those seeking to advance sustainability and strengthen the resilience of facilities near EJ communities.

Performance Measure Targets:

EPA is currently evaluating its suite of measures and indicators related to Environmental Justice, including available data and programs where improved data sets are needed to develop useful performance measures for Environmental Justice Programs. Measures are under development in this program to address environmental justice.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$217.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$27.0) This program change is an increase in contract resources to support IT analytical tools that allow stakeholders to view and analyze the data reported to TRI in support of environmental justice initiatives and other initiatives.

Statutory Authority:

Emergency Planning and Community Right-to-Know Act (EPCRA) § 313; Pollution Prevention Act of 1990 (PPA) § 6607.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$13,639.3***	***$12,902.0***	***$15,971.0***	***$3,069.0***
Total Budget Authority	$13,639.3	$12,902.0	$15,971.0	$3,069.0
Total Workyears	75.1	75.6	87.9	12.3

Program Project Description:

EPA is responsible for protecting human health and the environment in Indian country under federal environmental statutes. Under the Agency's 1984 Indian Policy,[112] EPA works with federally recognized tribes (tribes) on a government-to-government basis, in recognition of the federal government's trust responsibility to tribes, to implement federal environmental programs. In the 1984 Indian Policy, "EPA recognizes tribes as the primary parties for setting standards, making environmental policy decisions, and managing programs for reservations consistent with agency standards and regulations," and therefore, EPA assists tribes in developing the programs to make such decisions. In the absence of a program delegation to a tribe, the Agency directly implements the program. This program also supports the Categorical Grant: Tribal General Assistance Grants Program.

EPA's American Indian Environmental Office leads the agencywide effort to ensure environmental protection in Indian country. Please see http://www.epa.gov/tribal for more information.

FY 2022 Activities and Performance Plan:

Overall, the Agency has made steady progress towards strengthening human health and environmental protection on tribal lands. EPA will further its priority of strengthening tribal partnerships and continue to work toward its goal of building tribal capacity through a number of mechanisms in FY 2022. In addition, the Agency continues the direct implementation assessment effort to better understand EPA's direct implementation responsibilities and activities on a program-by-program basis in Indian country.

Capacity Building: EPA will continue to provide assistance and to support mechanisms for tribes to pursue developing and implementing federal environmental programs, including the "treatment in a manner similar to a state" (TAS) process and the use of the Direct Implementation Tribal Cooperative Agreement (DITCA) authority. The Agency will continue to provide technical and financial assistance to ensure tribal governments have the opportunity to build the capacity to meaningfully participate and engage in environmental protection activities. To date, EPA has

[112] EPA Policy for the Administration of Environmental Programs on Indian Reservations, available at https://www.epa.gov/tribal/epa-policy-administration-environmental-programs-indian-reservations-1984-indian-policy.

approved 95 TAS regulatory program delegations to tribes, including 20 approvals for compliance and enforcement authority. EPA had 15 DITCAs with tribes in place in FY 2021.

Indian Environmental General Assistance Program Capacity Building Support: General Assistance Program (GAP) grants to tribal governments help build the basic components of a tribal environmental program. The Agency manages GAP grants according to its *Guidance on the Award and Management of General Assistance Agreements for Tribes and Intertribal Consortia*.[113] In FY 2022, EPA will continue to administer GAP financial assistance to build tribal capacity and address environmental issues in Indian country. EPA's work in FY 2022 also will continue to enhance EPA-Tribal partnerships through development and implementation of EPA-Tribal Environmental Plans (ETEPs) with a continued focus on tracking and reporting measurable results of GAP-funded activities. GAP funding also continues to support EPA Performance Partnership Grant (PPG) goals.

GAP Performance Measurement: In FY 2020, EPA completed an evaluation of the program implementation under the 2013 GAP guidance and anticipates developing revised guidance for tribal consultation. EPA will adjust the performance management application to align with the revised guidance, after it is finalized in FY 2022, and begin compiling and analyzing data. The information technology-based performance application will provide a data-driven basis for supporting funding decisions, funding priorities, and contribute to program accountability.

Tribal Consultation: In working with the tribes, EPA follows its *Policy on Consultation and Coordination with Indian Tribes.*[114] The Consultation Policy builds on EPA's 1984 Indian Policy and establishes clear agency standards for a consultation process promoting consistency and coordination. From FY 2011 through FY 2021, EPA is expected to complete over 770 Tribal Consultations, an important agency milestone under the EPA Tribal Consultation Policy. EPA anticipates completing 70 tribal consultations in FY 2021. In FY 2022, EPA will continue to support the Agency's web-based Tribal Consultation Opportunities Tracking System, a publicly accessible database used to communicate upcoming and current EPA consultation opportunities to tribal governments. The system provides a management, oversight, and reporting structure that helps ensure accountability and transparency.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$829.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

[113] Please refer to https://www.epa.gov/tribal/2013-guidance-award-and-management-general-assistance-agreements-tribes-and-intertribal for further information.
[114] Please refer to: https://www.epa.gov/tribal/forms/consultation-and-coordination-tribes.

- (+$2,240.0 / +12.3 FTE) This program change is an increase in resources and FTE to support core work in the capacity building program with an emphasis on addressing environmental justice. This investment includes $2,113.0 thousand in payroll costs.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

International Programs

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$6,240.6***	***$6,746.0***	***$8,006.0***	***$1,260.0***
Total Budget Authority	$6,240.6	$6,746.0	$8,006.0	$1,260.0
Total Workyears	32.9	32.4	39.4	7.0

Program Project Description:

The United States works with international partners to address international sources of pollution, as well as the impacts of pollution from the United States on other countries and the global environment. International sources of pollution impact air, water, land, the oceans, food crops and food chains, and can accumulate in foods such as fish. Healthy environments, ecosystems, and communities provide the foundation for economic development, food security, and sustainable growth.

EPA's work with international partners and organizations is essential to addressing transboundary pollution adversely impacting the United States. Strengthening environmental protection abroad so that it is on par with practices in the U.S. helps build a level playing field for industry and promotes opportunities for technologies and innovation. EPA's international programs also play an important role in fulfilling national security and foreign policy objectives.

An important example of this work is EPA's engagement in the Group of Seven (G7) and the Group of Twenty (G20) through environment ministerial meetings which negotiate outcomes on key EPA issues such as food waste, marine litter, resource efficiency, and air quality. In addition, EPA's engagement with international financial institutions, United Nations (UN) entities, and the Organization for Economic Cooperation (OECD) has helped advance recognition of the critically important role of environmental factors, including air pollution and toxic chemicals, in the global burden of non-communicable diseases (NCDs), and of the role that sound environmental laws can play in reducing these risks. Additionally, EPA's participation to the North American Commission for Environmental Cooperation (CEC) provides regional and international leadership to advance environmental protection, human health, and sustainable economic growth.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will continue to engage both bilaterally and through multilateral institutions to improve international cooperation to prevent and address the transboundary movement of pollution.

Specifically, EPA will engage with key priority countries and UN institutions to address air pollution that contributes significant pollution to the domestic and international environment. For example, a number of Asian countries are implementing national air quality monitoring, planning,

and control strategies with advice and lessons learned from the United States. Environmental policies adopted and implemented overseas will improve competitiveness for U.S. businesses, drive demand for U.S. emissions control technologies, and expand exports of U.S. environmental goods and services which will create green jobs at home and improve air quality conditions in the United States.

EPA will provide technical assistance through the transfer of tools to address climate change with partner countries, thus leveling the playing field, facilitating the equitable treatment of disparate communities, and helping to ensure that all countries make meaningful progress in implementing their nationally determined contributions under the Paris Agreement. This helps fulfill EPA's commitment to the Executive Order on *Tackling the Climate Crisis at Home and Abroad*.

Also, as part of EPA's work to mitigate pollution in the arctic, the Agency continues to work in the Arctic Council to provide in-kind expertise and help to identify external resources to screen sources of black carbon that may impact local health conditions, with the potential of expanding across a wider range of Alaskan Native Villages (ANVs). In addition, EPA will continue to work with the Arctic Council to further develop a joint project proposal on per- and polyfluoroalkyl substances (PFAS). This effort will focus on aqueous film-forming fire-fighting foams (AFFF) in arctic airports through in-kind technical expertise.

Marine Litter

EPA will continue to engage multilaterally and bilaterally to prevent and reduce marine litter, including plastics, an increasingly prominent global issue that can negatively impact domestic water quality, tourism, industry, and public health in the United States. Further, calls for the development of a new binding international arrangement of marine plastic litter are mounting, and EPA, working with other federal departments, will continue to provide leadership and expertise on how to best address land-based sources of marine litter, including plastics. Since 80 percent of plastic marine litter comes from land-based sources of waste,[115] countries with inadequate waste management contribute to the pollution in our shared oceans. EPA will build on groundbreaking efforts in the G7, the G20, and the United Nations Environment Assembly (UNEA) to support and advance comprehensive approaches including technology innovation, sharing of best practices, and promoting the more efficient use of resources to reduce marine litter. EPA will continue to work with partner countries and other federal agencies to advance sound policy approaches for global action on marine litter.

In FY 2022, EPA will share tools and technical assistance related to expanding Trash Free Waters to key contributing countries in Asia and build on past projects in Latin America and the Caribbean. Technical support may include developing national, regional, and local action plans to reduce leakage of trash to the environment; identifying steps to implement relevant and applicable waste collection/management systems; and modest implementation projects where possible. EPA will continue to collaborate with leaders in innovation in the domestic stakeholder community to identify ways to leverage efforts to tackle this pressing global problem. EPA will continue to strengthen actions with a regional focus on major source countries in Southeast Asia and key

[115] J. R. Jambeck, R. Geyer, C. Wilcox, T. R. Siegler, M. Perryman, A. Andrady, R. Narayan, and K. L. Law, "Plastic waste inputs from land into the ocean," Science, 2015, Volume 347, Number 622.

partners in Latin America and the Caribbean, and by partnering with the United Nations Environment Program (UNEP) leaders in implementing and disseminating governance measures, policies, and technology to prevent marine litter.

EPA will continue to examine and contribute to the interagency technical efforts on proposed regulations on plastics and microplastic, such as the European Commission's proposed restrictions on intentionally-added microplastics range of products in accordance with the Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) Regulation, EC No. 1907/2006.

Food Waste

In FY 2022, EPA will continue to build cooperation with the United Nations and the Office of Management and Budget to ensure that methodologies used to track international progress on reducing food waste accurately reflect U.S. progress and to better understand the climate benefits of reducing food waste. Approximately eight to ten percent of global greenhouse gas emissions are from food loss[116] in the agricultural supply chain and consumer food waste. The Agency will continue to advance food waste efforts, which is an increasing portion of landfill waste in rapidly urbanizing cities in developing countries. The problems of food insecurity, in particular for the most vulnerable, have been exacerbated by COVID-19, thus underscoring the need for greater attention to reducing food waste. For example, EPA will bring together experts from the U.S. and partner country governments, non-governmental organizations (NGOs), academia, the private sector, and the UN to promote programs, best practices, and technologies related to food loss and waste.

Chemicals

EPA also will maintain efforts to reduce environmental threats to U.S. citizens from global contaminants impacting air, water, and land. EPA will continue technical and policy assistance for global, regional, and bilateral efforts to address international sources of harmful pollutants, such as mercury. Since 70 percent of the mercury deposited in the U.S. comes from global sources,[117] both domestic efforts and international cooperation are important to address mercury pollution. EPA will continue to work with international partners and key countries to fully implement obligations under the Minamata Convention on Mercury in order to protect the U.S. population from mercury emissions originating in other countries, including from artisanal and small-scale gold mining.

With respect to mercury, EPA's measures show that partner countries are on track to develop National Action Plans (NAPs) that demonstrate how they will reduce or eliminate the use of mercury in the Artisanal and Small-Scale Gold Mining (ASGM) sector. ASGM is the largest source of global mercury releases[118] and the development of NAPs called for by the Minamata

[116] Intergovernmental Panel on Climate Change (IPPC) Special Report on Climate Change and Land, Chapter 5 Food Security, pg 440, https://www.ipcc.ch/site/assets/uploads/sites/4/2021/02/08_Chapter-5_3.pdf.
[117] For more information, please see: https://www.epa.gov/international-cooperation/minamata-convention-mercury and www.mercuryconvention.org.
[118] Global mercury assessment | UNEP - UN Environment Programme.

Convention on Mercury is a critical first step to help major emitters reduce the use and release of mercury into the environment.

EPA will continue to play a leadership role in the Lead Paint Alliance to increase the number of countries that establish effective laws to limit lead in paint, which remains a priority health concern following successful efforts to eliminate lead in gasoline worldwide. EPA consistently meets objectives for reviewing the development of laws in other countries to control their levels of lead in paint, in a manner consistent with U.S. regulations. In doing so, these countries will not only reduce the exposure of their children to lead and prevent the subsequent health effects of this potent developmental neurotoxin, but also will reduce the amount of lead-based paint on products in international commerce that often reach U.S. markets.

Performance Measure Targets:

Work under this program supports performance results in the RCRA: Waste Minimization & Recycling Program under the EPM appropriation.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$77.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$1,183.0 / +7.0 FTE) This net program change is an increase to address international sources of pollution that impact the Nation's air, water, land, oceans, food crops, food chains, and climate change through coordination with international partners.

Statutory Authority:

In conjunction with the National Environmental Policy Act (NEPA) § 102(2)(F): Clean Air Act § 103(a); Clean Water Act § 104(a)(1)-(2); Safe Drinking Water Act (SDWA) § 1442(a)(1); Resource Conservation and Recovery Act (RCRA) § 8001(a)(1); Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) §§ 17(d), 20(a); Toxic Substances Control Act (TSCA) §10(a); Marine Protection, Research, and Sanctuaries Act (MPRSA) § 203(a)(1); E.O. 13547; E.O. 13689; U.S.-Mexico-Canada Agreement (USMCA) Implementation Act, 19 U.S.C. §§ 4501-4372.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$5,608.4***	***$5,292.0***	***$6,080.0***	***$788.0***
Total Budget Authority	$5,608.4	$5,292.0	$6,080.0	$788.0
Total Workyears	13.7	15.3	18.0	2.7

Program Project Description:

Since the 1972 Trade Act mandated the U.S. Trade Representative to engage in interagency consultations, EPA has played a key role in trade policy development. Specifically, EPA is a member of the Trade Policy Staff Committee, the Trade Policy Review Group and relevant subcommittees – interagency mechanisms that provide advice, guidance, and clearance to the Office of the U.S. Trade Representative in the development of U.S. international trade and investment policy. Trade influences the nature and scope of economic activity and therefore the levels of pollutant emissions and natural resource use. EPA's role in trade negotiations is to ensure that agreements have provisions that are consistent with the Administration's environmental protection goals while not putting the United States at an economic disadvantage. EPA offers technical assistance and environmental governance capacity building for trade partners to support implementation of environmental commitments made in Free Trade Agreements. EPA also provides technical expertise on environmental governance and policy for international financial institutions, including environmental policy reviews and project-level environmental guidance.

FY 2022 Activities and Performance Plan:

Free Trade Agreements and United States-Mexico-Canada Agreement (USMCA)

In FY 2022, EPA will continue its participation in the North American Commission for Environmental Cooperation (CEC), which provides regional and international leadership to advance environmental protection, human health, and sustainable economic growth in North America. EPA also will continue work on implementation of the Environment Chapter of the United States-Mexico-Canada Agreement (USMCA) and other free trade agreements. EPA activities will include monitoring and verifying provisions pertaining to global and national environmental requirements in the agreement and providing subject matter expertise. EPA will continue active participation in the United States Trade Representative (USTR) led Interagency Environment Committee for Monitoring and Environment (IECME) established to promote Mexican and Canadian compliance with their environmental obligations.

In addition, EPA will continue to play an active role in Free Trade Agreements (FTAs) and in the development of new FTAs and in the delivery of technical assistance to support implementation of environmental commitments within them. At present, EPA is working on the development of two new FTAs, with the governments of the United Kingdom and Kenya, through the USTR-led

interagency process. Further, given the emphasis on achieving climate change objectives in a manner that does not disproportionately impact disadvantaged communities, including possibly through trade measures, EPA will provide technical advice and input on the implications of various tools such as carbon border adjustments and environmental goods agreements.

In FY 2022, EPA will continue to work with partners (including the Treasury Department, State Department, U.S. Agency for International Development, and the U.S. International Development Finance Corporation), to improve environmental governance of U.S. funded international development projects. EPA will support the environmental performance of international financial institutions such as the development of environmental safeguards, including climate performance.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$183.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$605.0/ +2.7 FTE) This program change is an increase in resources and FTE to provide support and capacity building for the regional and international Trade and Governance Program addressing climate change. This investment includes $486.0 thousand in payroll costs.

Statutory Authority:

In conjunction with the National Environmental Policy Act (NEPA) § 102(2)(F): Clean Air Act § 103(a); Clean Water Act § 104(a)(1)-(2); Safe Drinking Water Act (SDWA) § 1442(a)(1); Resource Conservation and Recovery Act (RCRA) § 8001(a)(1); Federal Insecticide Fungicide and Rodenticide Act (FIFRA) §§ 17(d), 20(a); Toxic Substances Control Act (TSCA) §10(a); Marine Protection, Research, and Sanctuaries Act (MPRSA) § 203(a)(1); E.O. 12915; E.O. 13141; E.O. 13277; U.S.-Mexico-Canada Agreement (USMCA) Implementation Act, 19 U.S.C. §§ 4501-4372.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$2,955.4***	***$2,837.0***	***$3,192.0***	***$355.0***
Total Budget Authority	$2,955.4	$2,837.0	$3,192.0	$355.0
Total Workyears	12.9	12.4	14.4	2.0

Program Project Description:

The two thousand-mile border between the United States and Mexico is one of the most complex and dynamic regions in the world, where the benefits of international programs are perhaps most apparent. This region accounts for three of the 10 poorest counties in the U.S., with an unemployment rate 250-300 percent higher than the rest of the country.[119] In addition, over 430 thousand of the 14 million people in the region live in 1,200 colonias,[120] which are unincorporated communities characterized by substandard housing and unsafe drinking water or wastewater systems. The adoption of the Border Programs has gone a long way to protect and improve the health and environmental conditions along a border that extends from the Gulf of Mexico to the Pacific Ocean.

The Border 2025 program, like its predecessors, will continue to emphasize local priority-setting, focuses on measurable environmental results, and encourages broad public participation. Specifically, Border 2025 builds on earlier program[121] work, which includes removing more than 13 million scrap tires from the border, establishing drinking water connections for more than 54,000 homes and adequate wastewater connections for over half a million homes; in addition to highlighting regional areas where environmental improvements are most needed, establishing thematic goals supporting the implementation of projects, considering new fundamental strategies, and encouraging the achievements of more ambitious environmental and public health goals.

The Border 2025 program identifies five long-term goals to address the serious environmental and environmentally related public health challenges, including the impact of transboundary transport of pollutants in the border region. These goals include: develop the capacity to prevent waste and improve the collection and recycling of e-waste, plastics, and trash; increase markets to prevent scrap tire piles; develop institutional capacity to clean up border contaminated sites, and implement the consultative mechanism in coordination with border states to disseminate information on treatment, storage, and disposal facilities along the border, specially to underserved communities.

[119] For additional information, please see: http://www.nnirr.org/drupal/sites/default/files/unm_the_us_mexico_border_region_at_a_glance.pdf.
[120] Ibid
[121] For additional information, please see: http://www2.epa.gov/sites/production/files/documents/b2012closeout_eng.pdf.

EPA and the Secretariat of Environment and Natural Resources (SEMARNAT) will continue to closely collaborate with the 10 border states (four U.S./six International), 26 U.S. federally-recognized Indian tribes, and local communities in prioritizing and implementing projects that address their particular needs.

Note: The border water and wastewater infrastructure programs are described in the State and Tribal Assistance Grants (STAG) appropriation, Infrastructure Assistance: Mexico Border Program.

FY 2022 Activities and Performance Plan:

Air Pollution:

In FY 2022, EPA will continue to focus on air pollution reductions in binational airsheds, work on reducing emissions through energy efficiency and alternatives or renewable energy projects to maintaining effective air quality monitoring networks and timely access to air quality data along the border region. This effort to meet health-based air quality standards, especially for particulate matter and/or ozone, is expected to mitigate negative effects on public health, including higher incidence rates for asthma and increased health-related school absences for children and vulnerable populations.

EPA and SEMARNAT will continue to build on the successful air quality efforts conducted thus far in the Border 2020 program, which has resulted in complete greenhouse gas emissions inventories for each Mexico border state; mandatory vehicle-smog checks in Baja, California, and improved public health, especially in underserved communities. In addition, building upon over 20 years of binational air quality success within the New Mexico, Texas, and Chihuahua shared air basin, local coordinated efforts will advance work to address intensive mobile sources at two designated Border cities.

EPA will assist in providing training on, and in the purchase of, emissions testing equipment and help determine whether imported vehicles already meet U.S. emission standards. The benefit in cooperation with Mexican border cities has a high positive impact to Texas' largest populated border city of El Paso in protecting U.S. citizens and vulnerable populations, as Juarez and El Paso make up a metropolitan area that shares and breathes the same air. Along the U.S. border, California, Arizona, and New Mexico have completed Climate Change Action Plans.

Water Management:

In FY 2022, the Agency will continue to address border water management in the Tijuana River Watershed. The United States-Mexico-Canada Trade Agreement (USMCA) authorizes and directs EPA to coordinate with specific federal, state, and local entities to plan and implement high priority infrastructure projects that address transboundary pollution affecting San Diego County. EPA will advance implementation of projects to prevent and reduce the levels of trash and sediment from entering high priority binational watersheds. Other projects that prevent/reduce marine litter should primarily focus on preventing waste at the source through improvements to solid waste management systems, education campaigns, and monitoring as well as reducing trash from

entering the aquatic environment through the capture of litter using river booms in known watershed litter hot spots.

Sustainable Materials Management:

In FY 2022, EPA will continue to collaborate and partner on sustainable materials management demonstration projects to prevent waste and improve the recovery of materials, such as plastic, e-waste, and scrap tires, through public-private partnership programs and infrastructure investments in the border region to mitigate public health and environmental impacts and avoid costly cleanup efforts. Each region of the northern border has different economic, social, and cultural situations, with different capacities to mitigate the generation and management of waste and secondary materials.

Planning:

EPA will continue to work to increase institutional capabilities in planning and technical assistance, enabling the development of programs, projects, or actions, which take into account the life cycle analysis on natural resource economics, manufacturing, transport, and other market factors to more effectively harvest and use materials and avoid them from being lost to landfills.

Additionally, the United States and Mexico will work together to enhance joint preparedness for environmental response and facilitate easier transboundary movement of emergency response equipment and personnel by activities such as: updating Sister City Plans with preparedness and prevention, and providing training to emergency responders on preparedness and prevention related activities. As part of the efforts for binational emergency preparedness and response, work will continue updating of the Mexico-U.S. Joint Contingency Plan in both Spanish and English. In addition, both countries will coordinate efforts in binational border wide.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$57.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$298.0 / +2.0 FTE) This net program change is an increase to support efforts addressing climate change and pollution related activities along the United States-Mexico border. Due to the uniqueness of the needs in the region and in support of the Border 2025 program priorities, this effort also focuses on smaller-scale sustainability and capacity building projects designed to improve the environment and protect the health of the nearly 14 million people living along the border.

Statutory Authority:

In conjunction with the 1983 Agreement between the United States of America and the Mexican United States on Cooperation for the Protection and Improvement of the Environment in the Border Area (La Paz Agreement) and National Environmental Policy Act (NEPA) § 102(2)(F): Clean Air Act § 103(a); Clean Water Act § 104(a)(1)-(2); Safe Drinking Water Act (SDWA) §§ 1442(a)(1); Resource Conservation and Recovery Act (RCRA) § 8001(a)(1); Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) §§ 17(d), 20(a); Toxic Substances Control Act (TSCA) § 10(a); Marine Protection, Research, and Sanctuaries Act (MPRSA) § 203(a)(1); U.S.-Mexico-Canada Agreement (USMCA) Implementation Act, 19 U.S.C. §§ 4501-4372.

IT/ Data Management/ Security

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$6,190.4***	***$8,285.0***	***$14,116.0***	***$5,831.0***
Hazardous Substance Superfund	$927.6	$659.0	$5,659.0	$5,000.0
Total Budget Authority	$7,118.0	$8,944.0	$19,775.0	$10,831.0
Total Workyears	12.1	13.1	13.1	0.0

Program Project Description:

Digital information is a valuable national resource and a strategic asset that enables EPA to fulfill its mission to protect human health and the environment. The Information Security Program's mission is to protect the confidentiality, availability, and integrity of EPA's information assets. The information protection strategy includes, but is not limited to, risk management, oversight, and training; network management and protection; and incident management.

FY 2022 Activities and Performance Plan:

Cybersecurity is a serious challenge to our Nation's security and economic prosperity. Effective information security requires vigilance and the ability to adapt to new challenges every day. To respond, the Agency maintains a robust, dynamic approach to cybersecurity risk management, governance, and oversight. In FY 2022, EPA requests an increase of $5.8 million to strengthen capacity of the Information Security Program in the EPM Appropriation. The Agency will continue improving its security posture, partnering with public and private sector entities to promote the adoption of cybersecurity best practices, and reporting to the White House and Congress on the status of these initiatives.

EPA will continue implementing the Strengthening and Enhancing Cyber-capabilities by Utilizing Risk Exposure Technology Act (SECURE Technology Act) and Section 889 of the FY 2019 National Defense Authorization Act to mitigate supply chain risks in the procurement of information technology (IT). EPA's Senior Procurement Official, in consultation with the Chief Information Security Officer, issued agencywide policy implementing the requirements of Section 889 (a)(1)(B), conducted training for the acquisition community, and made all required actions (amendments, modifications, etc.) on existing contracts to fully implement Section 889. The policy also will guide future contracts to fully comply with the Section 889 requirements.

Risk Management, Oversight, and Training:

In FY 2022, EPA will continue to include cybersecurity and privacy components in ongoing senior leadership program reviews. These reviews enhance Chief Information Officer (CIO) oversight by enabling better risk area determination and targeted improvement direction to system and mission program managers. While EPA programs and regions maintain responsibility for improving their

performance in specific cybersecurity measures, EPA's senior leadership routinely reviews performance results and potential challenges for achieving continuous improvement. In FY 2020, this review process led to an 87 percent agencywide reduction in system level vulnerabilities.

In FY 2022, the Agency will continue to collect Federal Information Security Modernization Act (FISMA)[122] metrics and evaluate related processes, tools, and personnel to identify areas of weakness and opportunities for improvement. EPA's CIO, who also is the Senior Agency Official for Privacy (SAOP), in coordination with the Chief Information Security Officer will continue to monitor and report on these metrics, in line with OMB Memorandum M-20-04 *Fiscal Year 2019-2020 Guidance on Federal Information Security and Privacy Management Requirements.*[123]

Further, EPA also deploys Agency-specific role-based training to ensure personnel in key cybersecurity roles have the skills, knowledge, and capabilities to effectively support EPA's cybersecurity posture.

Network Management and Protection:

In accordance with OMB Memorandum M-19-17 *Enabling Mission Delivery through Improved Identity, Credential, and Access Management*, EPA will continue to review and improve identity management capabilities through authentication infrastructure and system configurations.

In FY 2022, EPA will strengthen cloud security through cloud access security broker and cloud platform management services, which enables remote workers to securely use systems and services in the cloud while also improving application performance and reducing costs associated with Trusted Internet Connections (TIC).[124] The Agency also will implement tools to improve web content filtering capabilities to prevent malicious and unauthorized web content from impacting EPA systems and users. The Agency will continue to build an Insider Threat Program for the unclassified network to monitor Privileged Users and Systems Administrators activity, as recommended by several cybersecurity assessments,[125] and to monitor and report on EPA networks and systems.

The Agency is working to address shortfalls in current Office of Management and Budget risk posture assessments. These investments include Limiting Privilege Users to Trusted Websites, developing an automated mechanism preventing the use of untrusted removable media from workstations and servers, as well as segmenting High Vulnerability Assets across the information environment to improve security and compliance.

[122] Including those found in Federal Information Security Modernization Act of 2014 and Federal Information Security Cybersecurity Act of 2015.
[123] For more information, please see: https://www.whitehouse.gov/wp-content/uploads/2019/11/M-20-04.pdf.
[124] For more information, please see: https://www.whitehouse.gov/wp-content/uploads/2019/09/M-19-26.pdf.
[125] These assessments include Annual Assessments and Classified briefings with the Department of Homeland Security and EPA's Office of Homeland Security, as well as a 2017 OIG Report, available at: https://www.epa.gov/sites/production/files/2017-10/documents/_epaoig_20171030-18-p-0031.pdf.

Incident Management:

Cyber-attacks across critical infrastructure sectors are rapidly increasing in volume and sophistication, impacting both IT and operational technology systems. EPA's Agency IT Security and Privacy (AITSP) Program enables agencywide implementation, management, and oversight of the CIO's Information Security and Privacy Programs through continuous monitoring functions. Continuous monitoring capabilities, which serve to identify and address incidents quickly, are vital to ensure that EPA's information environment remains safe. In FY 2022, this investment will support the on-going implementation of capabilities for data labeling and data loss prevention, and remote computer imaging and forensics, all of which will improve security information and event management by collecting, synthesizing, managing, and reporting cybersecurity events for systems across the Agency.

The Information Security Program supports EPA's Security Operations Center (SOC), which manages the Computer Security Incident Response Capability (CSIRC) processes to support identification, response, alerting, and reporting of suspicious activity. In accordance with OMB Memorandum M-20-04 *Fiscal Year 2019-2020 Guidance on Federal Information Security and Privacy Management Requirements*,[126] in FY 2022, EPA will continue to mature the Microsoft Cloud Access Service, which will provide a monitoring capability to improve incident detection and response capabilities. Through CSIRC, EPA will continue to maintain relationships with other federal agencies and law enforcement entities, as needed, to support the Agency's mission. The incident response capability includes components such as detection and analysis, forensics, and containment and eradication activities.

Additionally, the Agency practices Coordinated Vulnerability Disclosure (CVD). By working with internal stakeholders, private industry, and federal organizations to communicate vulnerabilities discovered or encountered, CVD decreases the harm or time an adversary can use to deny or disrupt services to the networks.

EPA continues to leverage capabilities through the Continuous Diagnostics and Mitigation (CDM) Program, which addresses agencies' cybersecurity protection gaps and allows EPA to efficiently identify and respond to federal-wide cybersecurity threats and incidents. In FY 2022, as part of the work with the Department of Homeland Security to support implementation of current and future Phase CDM requirements, the CDM Program will focus on closing remaining gaps in privileged access to EPA's network and continue to provide critical security controls for the Agency's cloud applications. The CDM Program also will review interior EPA network boundary protection from interconnections to external networks, expand endpoint detection and response capabilities, and integrate mobile device discovery to expand program capabilities. In FY 2022, EPA estimates a $12.6 million budget for the CDM Program across the EPM and Superfund accounts.

Supply Chain Risk Management:

In FY 2022, EPA will work on developing a strategy for how the Agency will implement Supply Chain Risk Management Security Controls to comply with the Government Accountability Office

[126] For more information, please see: https://www.whitehouse.gov/wp-content/uploads/2019/11/M-20-04.pdf.

(GAO) findings[127] and *NIST 800-53 Rev 5 Security and Privacy Controls for Information Systems and Organization*.[128] This initial work will include coordinating across the Agency with professionals from Information Technology, Information Security, and Acquisitions to update the policy and obtain the necessary tools to address these critical security requirements which were a vulnerability in the SOLAR WINDS FY 2021 intrusion.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$29.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$5,802.0) This program change reflects a necessary increase to continue support for the implementation of the critical CDM Program and other IT security requirements. This investment will be used to close existing gaps by improving audit capability, ensuring accountability, and adding protections directly associated with the information.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Cybersecurity Act of 2015; Federal Information Security Modernization Act (FISMA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA).

[127] Government Accountability Office Report on information and communications technology (ICT) Supply Chain: GAO-21-164SU.
[128] For more information, please see: https://csrc.nist.gov/publications/detail/sp/800-53/rev-5/final.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$86,699.8***	***$82,715.0***	***$86,744.0***	***$4,029.0***
Science & Technology	$3,473.7	$3,072.0	$3,121.0	$49.0
Hazardous Substance Superfund	$15,168.6	$13,826.0	$15,202.0	$1,376.0
Total Budget Authority	$105,342.1	$99,613.0	$105,067.0	$5,454.0
Total Workyears	442.3	482.4	486.4	4.0

Total workyears in FY 2022 include 172.0 FTE to IT/Data Management working capital fund (WCF) services.

Program Project Description:

The work performed under the Information Technology/Data Management (IT/DM) Program supports human health and the environment by providing critical IT infrastructure and data management. The Program ensures analytical support for interpreting and understanding environmental information; exchange and storage of data, analysis, and computation; rapid, secure, and efficient communication; and access to scientific, regulatory, policy, and guidance information needed by the Agency, regulated community, and the public.

This program supports the maintenance of EPA's IT and Information Management (IT/IM) services that enable citizens, regulated facilities, states, and other entities to interact with EPA electronically to access, analyze and understand, and share environmental data on-demand. The IT/DM Program also provides support to other IT development projects and essential technology to EPA staff, enabling them to conduct their work effectively and efficiently in the context of federal IT requirements, including the Federal Information Technology Acquisition Reform Act (FITARA); Technology Business Management (TBM); Capital Planning and Investment Control; and the Open, Public, Electronic, and Necessary Government Data Act.

To date, throughout the COVID-19 pandemic, EPA has continued to maintain continuity of operations with most of the Agency in a maximum telework posture. Specifically, the IT/DM Program has doubled the Virtual Private Network infrastructure, provisioned over 1,449 new users with EPA laptops enabling day one productivity from telework locations, and deployed Microsoft Teams and Teams Live Events, allowing EPA offices to conduct virtual video-based meetings for up to 10 thousand participants

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will further strengthen its IT acquisition and portfolio review process as part of the implementation of FITARA. In the most recent FITARA scorecard, released in December 2020, EPA scored an overall B+, the second highest rating among CFO Act agencies.

The Agency requests an increase of 4 FTE and $4.0 million for the IT/DM Program in the EPM Appropriation. EPA will continue implementing OMB/NARA Memoranda M-19-21, which directs agencies to manage all permanent records electronically to the fullest extent possible with appropriate metadata and all temporary records in an electronic format or store them in commercial records storage facilities by December 31, 2022. To accomplish this, EPA will continue to make the Agency aware of this Directive and encourage the transfer of inactive permanent and temporary paper records to the Federal Records Centers before the OMB/NARA's target date. EPA will look to apply artificial intelligence and machine learning for content tagging in the records digitization process to improve the access and quality of EPA's digitized permanent records. Further, in FY 2022, EPA will complete buildout of two digitization centers and continue the development and deployment of Records Management Technologies, including: Content Ingestion Services into the National Computer Center Amazon Web Services environment, deployment of a Paper Asset Tracking Tool, and the buildout of a new, cloud-hosted, Record Management Technology application focused on improving search capabilities.

In FY 2022, EPA will bolster its agencywide support for annual operations and maintenance of IT infrastructure, including eDiscovery (supporting the Agency's FOIA Program), Local Area Network Switches and Regional Laptop Refreshes. These services are crucial for EPA's operations, and consistent resources are necessary for operations and the Agency's ability to carry out its mission. This investment will enable EPA to establish a rolling four-year refresh of laptops without any delays for funding, a critical IT infrastructure requirement as EPA adapts to the future of work in a post-COVID environment.

EPA also will continue to maintain and manage its core IT/ DM services, including Information Collection Requests, the National Library Network, the Agency's Docket Center, and EPA's Section 508 Program, which develops training for different stakeholder communities and assesses documentation for all public-facing EPA systems/applications. EPA's Controlled Unclassified Information Program will standardize, simplify, and improve information management and IT practices to facilitate the sharing of important sensitive data within the Agency, with key stakeholders outside of the Agency, and with the public, meeting federal standards as required by Executive Order 13556 – *Controlled Unclassified Information*.[129]

EPA's Customer Experience (CX) Program will focus on improving the mission support experience of EPA staff to improve their ability to serve the public. The Program focuses on collaborations such as the E-Enterprise Initiative, which facilitates conversations among EPA, states, and tribal leaders about opportunities to improve customer services across the environmental enterprise. In FY 2022, the CX Program will continue to promote IT modernization, accountability, and transparency, and to improve how it supports and manages the lifecycle of information and information products.

Under the leadership of the Agency's Chief Technology Officer and Chief Architect, EPA will continue to enhance enterprise software development and architecture capabilities, including application development, deployment approaches, and technical platform support. EPA also will identify and prioritize the interoperability of data within EPA and across federal agencies that

[129] For more information, please refer to Executive Order: https://www.federalregister.gov/documents/2010/11/09/2010-28360/controlled-unclassified-information.

benefits internal and public-facing services. Finally, EPA will continually monitor and develop staff proficiencies in the understanding and use of data.

The Agency also will continue to support the essential capabilities of GeoPlatform, a shared technology enterprise for geospatial information and analysis. By implementing geospatial data, applications, and services, the Agency can integrate and interpret multiple data sets and information sources to support environmental decisions. EPA will partner with other agencies, states, tribes, and academic institutions to propose innovative ways to use, analyze, and visualize data through EPA's Data Management and Analytics Application.

EPA's One EPA Web will continue to manage content and support internal and external users with information on EPA business, support employees with internal information, and provide a clearinghouse for the Agency to communicate initiatives and successes. EPA also will continue to upgrade its web infrastructure, ensuring that it meets current statutory and evolving security requirements.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$653.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$3,376.0 / +4.0 FTE) This program change is an increase for EPA to continue its progress towards upgrading the Agency's enterprise-wide records management system and enhancing the digitization of paper records. Centralizing, managing, and digitizing the Agency's records will decrease onsite storage costs, improve records management, and position EPA to comply with statutory requirements under the Federal Records Act.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Federal Information Technology Acquisition Reform Act; Federal Information Security Modernization Act (FISMA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA); Rehabilitation Act of 1973 § 508.

Legal/ Science/ Regulatory/ Economic Review

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$4,524.5***	***$4,975.0***	***$5,704.0***	***$729.0***
Total Budget Authority	$4,524.5	$4,975.0	$5,704.0	$729.0
Total Workyears	20.8	23.8	25.8	2.0

Program Project Description:

This program supports EPA's Administrative Law Judges (ALJ) and the Environmental Appeals Board (EAB).

Administrative Law Judges

The ALJ presides in hearings and issue initial decisions in cases initiated by EPA's enforcement program concerning environmental, civil rights, and government program fraud related violations. The Fifth Amendment of the Constitution of the United States of America guarantees the regulated community the right to due process of the law. The ALJ issues orders and decisions under the authority of the Administrative Procedure Act (APA) and the various environmental, civil rights, and anti-fraud statutes that establish administrative enforcement authority and implement the Constitution's guarantee of due process. The right of affected persons to appeal those decisions is conferred by various statutes, regulations, and constitutional due process rights. The ALJ also offers an opportunity for alternative dispute resolution.

Environmental Appeals Board

The Environmental Appeals Board (EAB) is a four-member appellate tribunal established by regulation in 1992 to hear appeals and issue decisions in environmental adjudications (primarily enforcement and permit related) under all major environmental statutes that EPA administers. The EAB promotes the rule of law and furthers the Agency's mission to protect human health and the environment. The EAB furthers the Agency's mission to advance environmental justice and tackle the climate crisis by ensuring the integrity of federal decision-making and fairness in its adjudication of administrative appeals.

Since the 1994 Executive Order on Environmental Justice was issued, the EAB has played a pioneering role in ensuring that the Agency meets its obligation with respect to environmental justice and, for example, in the context of permitting, has remanded several permit cases where the record did not support a finding that the permit authority reasonably considered the contested environmental justice issues in their permit decision making process.

To promote access to justice, parties appearing before the Board are not required to be represented by counsel or pay a filing fee. Additionally, the Board promotes public participation in the appeals

process through remote oral arguments and maintains an extensive website, accessible to the public, containing all final Board decisions and case filings. Among others, parties participating before the Board include local and national community groups, tribal nations, private parties, and state and local governments.

The EAB decides petitions for reimbursement under the Comprehensive Environmental Response, Compensation, and Liability Act Section 106(b); hears appeals of pesticide licensing and cancellation proceedings under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); and serves as the final approving body for proposed settlements of enforcement actions initiated at EPA. The EAB issues decisions in a fair and timely manner consistent with the Administrative Procedure Act (APA) and the applicable environmental statutes, and under the authority delegated by the Administrator and pursuant to regulation, ensuring consistency in the application of legal requirements. In 90 percent of matters decided by the EAB, no further appeal is taken to federal court, providing a final resolution to the dispute. The EAB also offers an opportunity for alternative dispute resolution.

FY 2022 Activities and Performance Plan:

In FY 2022, the ALJ will continue to convene formal hearings in the location of the alleged violator or violation, as required by statute. In FY 2022, the EAB will continue to efficiently and fairly adjudicate permit and enforcement appeals under all statutes, and petitions for reimbursement under CERCLA, expediting appeals such as Clean Air Act New Source Review cases and FIFRA licensing proceedings that are time-sensitive. The EAB and ALJ also anticipate addressing a potential increase in environmental justice and climate related issues and in new work assuring access to justice, including for tribal nations and parties impacted by environmental justice.[130]

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$14.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$715.0 / +2.0 FTE) This program increase advances environmental justice through the Administrative Law Program. This investment includes $417.0 thousand in payroll.

[130] For additional information on the Administration's priority on "Tackling the Climate Crisis at Home and Abroad," please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.

Statutory Authority:

Administrative Procedure Act (APA); Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Clean Water Act (CWA); Clean Air Act (CAA); Toxic Substance Control Act (TSCA); Solid Waste Disposal Act (SWDA); Resource Conservation and Recovery Act (RCRA); Safe Drinking Water Act (SDWA); Emergency Planning and Community Right-to-Know Act (EPCRA); Marine Protection, Research, and Sanctuaries Act (MPRSA); Mercury-Containing and Rechargeable Battery Management Act (MCRBMA); the Act to Prevent Pollution From Ships (APPS).

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$800.2***	***$864.0***	***$1,141.0***	***$277.0***
Hazardous Substance Superfund	$1,014.2	$832.0	$857.0	$25.0
Total Budget Authority	$1,814.4	$1,696.0	$1,998.0	$302.0
Total Workyears	3.5	5.9	6.9	1.0

Program Project Description:

EPA's Alternate Dispute Resolution (ADR) Program offers cost-effective processes for preventing and resolving conflicts on environmental matters and some workplace conflicts prior to engaging in formal litigation. The Program provides legal counsel, facilitation, mediation, public involvement, training, consensus building advice and support, and organizational development support to external stakeholders and to all EPA programs.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will continue to provide conflict prevention and ADR services to all EPA programs and external stakeholders on environmental matters. Specifically, ADR will:

- Continue to administer it's five-year, $53 million Conflict Prevention and Resolution Services contract. The contract supports the ADR Program by providing the above services to more than 100 active projects and is expected to take on an additional 20-30 projects in FY 2022. The Program expects a growth in the areas of environmental justice and Title VI.
- Directly provide the above services through the conflict resolution specialists on staff. The ADR Program expects to directly support agency programs and stakeholders by providing facilitation, mediation, or other consensus building support on 2-4 projects.
- Provide training to EPA staff in conflict resolution concepts and skills. The ADR Program offers this training through its cadre of eight interactively designed courses to all national program offices and regions. Adapting to a virtual environment in FY 2021 has allowed the ADR Program to reach many more programs throughout the Agency and expects that to increase in FY 2022.

The following are examples of FY 2020 accomplishments:

- Successfully transitioned to a five-year, $53 million Conflict Prevention and Resolution Services contract and administered 203 contract actions over 51 active task orders valued at $10.1 million in the first year.
- Supported 91 environmental collaboration and conflict resolution (ECCR) cases nationwide, including several Administrator priority projects; such as, a US-Mexico-Canada trade

agreement project in the Tijuana River; the National Water Reuse Action Plan; the Trash Free Waters Program; and an international symposium on marine litter.
- Trained more than 178 EPA staff in conflict resolution skills through eight classes, including two "train-the-trainer" webinars to EPA ECCR Specialists to increase capacity across the Agency and organized an Introduction to Systemic Racism training for EPA's Office of General Counsel managers.

Performance Measures Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$12.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$265.0.0 / +1.0 FTE) This program change is an increase to support core capacity for the ADR Program and the development of efficient solutions to conflicts.

Statutory Authority:

Administrative Dispute Resolution Act (ADRA) of 1996; Negotiated Rulemaking Act of 1996; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$9,468.4***	***$9,205.0***	***$13,946.0***	***$4,741.0***
Total Budget Authority	$9,468.4	$9,205.0	$13,946.0	$4,741.0
Total Workyears	47.4	54.4	71.9	17.5

Program Project Description:

The Civil Rights Program enforces federal civil rights laws that prohibit discrimination by recipients of federal financial assistance and protect employees and applicants for employment from discrimination. There are two offices within the Agency's Civil Rights Program, the Office of Civil Rights (OCR) and the External Civil Rights Compliance Office (ECRCO). OCR has responsibility for the internal enforcement of several civil rights laws related to equal employment opportunity (EEO) and ECRCO carries out the external enforcement of several civil rights laws that prohibit discrimination in programs or activities that receive federal financial assistance from the EPA.

OCR, within EPA's Office of the Administrator, provides leadership, direction, and guidance in carrying out the Agency's EEO Program. OCR is responsible for advising senior leadership and Agency managers in carrying out their EEO responsibilities. OCR also conducts workforce analysis to identify and eliminate barriers to employment and advancement. Additionally, OCR counsel employees, promotes alternative dispute resolution mechanisms to resolve EEO dispute, investigates EEO complaints, and issues EEO decisions. Further, OCR assists managers in processing reasonable accommodation requests made by persons with disabilities.

ECRCO, within the Office of General Counsel, investigates and resolves external complaints, develops policy guidance, conducts affirmative compliance reviews, and provides technical assistance to recipients of federal funds and outreach to communities. In FY 2021, ECRCO committed to strengthening civil rights enforcement to address health and environmental disparities, eliminate discriminatory barriers to clean air, water, and land, and ensure the protection of human health and the environment for all persons in the United States. This commitment includes the following: initiating proactive civil rights compliance activities, including targeted compliance reviews in pollution-burdened and underserved communities; taking concrete steps to ensure the integration of civil rights obligations in programmatic actions across EPA; integrating environmental justice (EJ) principles into civil rights enforcement and collaboration across the Agency to incorporate analyses of disproportionate and cumulative impacts in decision-making; coordinating, communicating and engaging with pollution-burdened and underserved communities; and leading interagency collaboration across the federal government to enforce federal civil rights laws.

In FY 2021, ECRCO launched strategic planning efforts to update and develop an ECRCO Strategic Plan, in light of Executive Order 13985 *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*. An updated Strategic Plan is expected during the second quarter of FY 2022. ECRCO is initiating a compliance review in the third quarter of FY 2021, to be completed during the first quarter of FY 2022. In addition, ECRCO is issuing Foundational Nondiscrimination Program Guidance for Recipients in the last quarter of FY 2021.

In FY 2021, ECRCO continued to improve its process for and support of complaint docket management through investigations, informal resolution agreements and mediation consistent with EPA's nondiscrimination regulation and its revised Case Resolution Manual, issued in the second quarter of 2021.[131] In FY 2021, ECRCO continued to meet its internal performance measures to ensure the timely resolution of discrimination complaints. Where applicable, ECRCO issued preliminary findings within 180 days of acceptance of the complaint, as required by EPA's regulation. In addition, ECRCO continued to implement internal performance measures to ensure that all complaints resolved through Informal Resolution Agreements receive those resolutions in a timely fashion. ECRCO also continued to implement a contract to provide language assistance services to customers with limited-English proficiency throughout EPA.

FY 2022 Activities and Performance Plan:

Office of Civil Rights

In FY 2022, OCR will implement the first year of its internal 2022-2025 Strategic Plan. The Strategic Plan will guide OCR's work and measure progress towards accomplishing internal goals and regulatory requirements through 2025. OCR's work in FY 2022 will include addressing potential barriers to employment and advancement, enhancing training and service delivery, and assessing organizational EEO efforts during Technical Assistant Visits (TAVs) with the programs and regions. Additionally, OCR supports the Administration's priorities relative to equity and workforce engagement.

Employee Complaints and Resolution (ECR)

In FY 2022, EPA will dedicate a large portion of its financial resources to the processing of discrimination complaints, EEO related training for management and staff, and building the Alternative Dispute Resolution (ADR) Program. ECR expected to engage in the following activities:

- Review and refine processes to meet responsibility for issuing Final Agency Decisions (FADs), which is 60 days. At the end of FY 2020, the OCR averaged 86 days to issue FADs.
- Evaluate the trends of the growing number of formal complaints and develop a targeted strategy for addressing trends to include anti-harassment and advanced EEO training.

[131] For more information, please see: https://www.epa.gov/sites/production/files/2017-01/documents/final_epa_ogc_ecrco_crm_january_11_2017.pdf.

- Develop ADR training (for management and staff), a program manual, and other ADR marketing materials to strengthen participant's knowledge, to increase offers and participation in the ADR process.
- Expand technical assistance visits of Regional and Program Offices, which were two in 2020 and four in 2021, to eight in 2022.

Affirmative Employment, Analysis, and Accountability (AEAA)

In FY 2022, AEAA will continue to focus on identifying and eliminating barriers to employment and advancement at the Agency. This will include implementing new methodologies for workforce analysis and engagement with management, employees, and the Special Emphasis Programs (SEPs). In FY 2022, AEAA expects to engage in the following activities:

- Evaluate the effectiveness of measures implemented from the Increased Use of the Schedule A Hiring Authority barrier analysis.
- Continue the Upward Mobility of Hispanics from GS-13 to the SES barrier analysis.
- Begin additional barrier analysis based on areas identified for priority in FY 2022.
- Continue to address the EPA MD-715[132] priority regarding collecting applicant flow data on Career Development Opportunities.
- Evaluate the significant underrepresentation of demographics groups from the FY 2020 MD-715 report, which were Hispanic men, Hispanic women, Black men, and persons with disabilities.
- Monitor and assist the Administrator's Office, and Regional and Program offices with implementation of EEO Actions Plans completed in March 2021.
- Enhance the effectiveness of the Agency's SEPs to further develop their ability to contribute meaningfully to OCR's programmatic work (EPA filled 95 percent of its SEP Management) positions in FY 2021.
- Implement enhanced analysis methodologies and tools for the development of the MD-715 to ensure more efficient and accurate analysis of data (to include trigger and barrier analysis).
- Conduct assistance visits for a total of eight regional and program offices.
- Provide effective training and tools for managers to carry out their responsibilities under MD-715 and the Diversity and Inclusion Strategic Plan.

Reasonable Accommodations (RA) Program

In FY 2022, the RA Program will work to enhance the effectiveness of services through training, policy development, and improving the support functions of the Local Reasonable Accommodation Coordinators (LORACs). In FY 2022, RA expects to engage in the following activities:

- Evaluate the procedures for providing Personal Assistant Services (PAS) to determine their effectiveness; and, as necessary revise procedures.

[132] For additional information regarding Management Directive 715, please see: https://www.epa.gov/ocr/fy-2020-management-directive-715-md-715-report-submitted-epa-equal-employment-opportunity.

- Coordinate the Agency's efforts to improve accessibility for persons with disabilities through engagement with senior leadership and subject matters experts.
- Deliver more advanced RA training for employees and management, including incorporating aspects of PAS.
- Complete deployment of the Reasonable Accommodations Management System (RAMS) moving to an electronic processing of all RA requests (includes LORAC utilization of RAMS).
- Conduct assistance visits for a total of eight EPA regional and program offices.

External Civil Rights Compliance Office, including Title VI

In FY 2022, EPA will work to overhaul and refocus the office to bring justice to frontline communities that experience the worst impacts of environmental pollution. ECRCO is committed to strengthening its program and vigorously enforcing compliance with federal civil rights laws by recipients of EPA financial assistance through complaint investigations and affirmative compliance reviews, while providing technical assistance to recipients, engaging with communities, developing strategic policy guidance, and prioritizing ECRCO's workforce planning and training. ECRCO will issue investigative guidance to clarify and strengthen legal standards for addressing disparate impact and disparate treatment claims, including those related to permitting and cumulative impacts. In addition, ECRCO and EJ Programs are engaging in strategic action planning designed to achieve lasting and positive change in response to community priorities and concerns, including EJ concerns that have been raised through civil rights complaints and vice versa. In FY 2022, ECRCO is dedicated to deepening the alignment and collaboration between it and EPA's EJ Program, recognizing the need to go beyond the general procedural level relationship that was discussed in the EJ 2020 Action Agenda.

FY 2022 will see ECRCO continue to track internal performance measures to ensure ECRCO timely resolution of discrimination complaints and affirmative compliance reviews, and that Informal Resolution Agreements are fully implemented within the agreed-upon timeframes. Also, in FY 2022, the Program will implement and refine the Case Resolution Manual that was reissued in FY 2021.

In addition, in FY 2022, ECRCO is building upon the Foundational Nondiscrimination Program Guidance for Recipients issued at the end of FY 2021, by releasing a public facing training video, and a revised, more robust review process for the pre-award Form 4700-4. In FY 2022 ECRCO is completing the work started in FY 2021 to provide technical assistance to States in Regions 5 and 7 to strengthen their nondiscrimination programs and provide additional support to states in Region 1 to do the same. In FY 2022 ECRCO is implementing the process for prioritizing compliance reviews through a yearly Affirmative Compliance Review Docket planning process launched at the end of FY 2021. Specifically, the Program will:

- Implement the FY 2022 Affirmative Compliance Review Docket Plan developed in FY 2021 and launch additional affirmative compliance reviews in pollution-burdened and underserved communities:
- Develop an Affirmative Compliance Review Docket Plan for FY 2023;

- Finalize and issue the guidance, started in FY 2021, to clarify expectations with regard to civil rights investigative and legal standards, including permitting and cumulative impacts;
- Begin to develop guidance for recipients regarding their utilization of civil rights compliance data for purposes of decision making in recipient programs and activities.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$772.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$3,969.0 / +17.5 FTE) This program change is an increase for EPA's External Civil Rights Compliance Office to overhaul and refocus the office to bring justice to frontline communities that experience the worst impacts of environmental pollution. This investment includes $3,113.0 thousand for payroll.

Statutory Authority:

Title VI of the Civil Rights Act of 1964; Title IX of the Educational Amendments of 1972; Rehabilitation Act of 1973 § 504; the Age Discrimination Act of 1975, Federal Water Pollution Control Act Amendments of 1972 § 13; Title VII of the Civil Rights Act of 1964; Equal Pay Act of 1963; Rehabilitation Act of 1973 §§ 501, 504, 505, 508; Americans with Disabilities Act of 1990; ADA Amendments Act of 2008; Age Discrimination in Employment Act (ADEA) of 1967; and Genetic Information Nondiscrimination Act (GINA).

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$11,398.1***	***$9,475.0***	***$17,719.0***	***$8,244.0***
Total Budget Authority	$11,398.1	$9,475.0	$17,719.0	$8,244.0
Total Workyears	45.4	48.5	58.5	10.0

Program Project Description:

The Integrated Environmental Strategies (IES) Program advances the Agency's mission of protecting human health and the environment while promoting economic growth from the national level to the community level and advancing environmental justice (EJ). The IES Program provides tools and resources to transform EPA into a more effective organization. Nationally, IES is focused on: 1) streamlining and oversight of environmental permitting; 2) working with industrial sectors to identify and develop sensible approaches to better protect the environment and public health; 3) collaborating with federal, state, municipal partners, communities, businesses, and other stakeholders to implement locally-led, community-driven approaches to environmental protection through technical assistance, policy analysis, and training; and (4) partnering with other federal agencies, states, tribes, local governments, and businesses to increase the resilience of the Nation to the impacts of climate change.

FY 2022 Activities and Performance Plan:

This program demonstrates new approaches to streamline and reduce unnecessary burdens and to help communities meet their environmental and economic needs. In FY 2022, the Program will focus on permitting strategies, sector strategies, climate adaptation, and community-driven environmental protection.

In FY 2022, EPA requests an additional $7.3 million and 10.0 FTE for the Integrated Environmental Strategies (IES) Program. This investment includes:

- $1 million and 2.0 FTE for enhanced efficiencies, oversight, and coordination for anticipated major infrastructure projects through our statutory role conducting NEPA reviews.
- $500 thousand and 2.0 FTE for an augmented and enriched platform for the Agency to collaborate with industry to develop innovative approaches and collaborations to protect the environment and public health through the Sectors program.
- $1.5 million and 2.0 FTE for the expanded deployment of tools and technical assistance to strengthen EPA's efforts in economically distressed communities and communities impacted by the energy economy transition away from fossil fuels, and while delivering training, tools, technical support, data, and information the Agency's partners need to adapt and increase resilience to climate change. This investment also will support

initiatives for community-based organizations, indigenous organizations, states, tribes, local governments, and territorial governments.

- $2 million and 4.0 FTE for the integration of climate adaptation into EPA's programs, regulations, and policies to ensure they are effective in the face of changing climate. This also will support training of management and staff on climate literacy and their ability to mainstream adaptation planning into decision-making processes.

Permitting Strategies

One way that EPA implements its statutory authority is through various permitting programs. The Agency will continue to focus on working across EPA program offices and with state and tribal co-regulators to streamline EPA's permitting processes to accelerate permitting-related decisions to reduce the backlog of new permit applications. In FY 2022, the Agency will focus on supporting permit streamlining and coordination on major infrastructure projects including those for carbon capture/utilization/sequestration and for renewable energy projects. EPA will analyze the issues impeding progress and identify opportunities to address permitting delays and backlogs. EPA will continue to address cross-cutting permitting and policy issues (e.g., Endangered Species Act (ESA), National Historic Preservation Act (NHPA) coordination, permit automation, EJ, and climate adaptation), and in partnership with other federal agencies, state and tribal permitting offices, continue to streamline and gain efficiencies in the review of all permits.

The Program will continue to facilitate and support the sharing and implementation of permitting best practices and approaches of environmental co-regulators to achieve efficient and effective permitting. In support of Executive Order 14008 *Tackling the Climate Crisis at Home and Abroad*,[133] the Program will support and partner with EPA's permitting programs to integrate EJ and climate change analysis into permit development by establishing policy and guidance for consistency and building permit writers' proficiencies in EJ and climate resilience/adaptation/mitigation. This will be achieved through developing an EJ and climate change analysis framework with permitting programs and EJ coordinators; establishing a Community of Practice for each program to share and learn from experiences; developing and delivering a training/workshop series providing a primer on the basics of EJ and climate resilience/adaptation/mitigation for permit writers, and tools to facilitate quantitative EJ and climate analyses in permitting; best practices on conducting enhanced outreach to include discussion of legal authorities; identifying approaches to incorporate data into decision-making and permit conditions; and engaging and supporting states to integrate EJ and climate change analysis into state-developed permits.

In FY 2022, EPA will continue to coordinate with lead agencies on Title 41 of the Fixing America's Surface Transportation Act (FAST-41) and One Federal Decision infrastructure project permit streamlining, and work with the Council on Environmental Quality on additional interagency coordination. In so doing, EPA will work to enhance efficiencies, oversight, and coordination among appropriate permitting authorities. These efforts will help facilitate permits for anticipated major infrastructure projects and will ensure integration of EJ and climate change into federal permits and decision-making.

[133] For additional information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.

Smart Sectors

EPA's Smart Sectors Program (SSP) provides a platform for the Agency to collaborate with industry to develop innovative approaches to protect the environment and public health. SSP serves as a hub for understanding and addressing sector-specific environmental challenges/opportunities, facilitating dialogue with industry stakeholders at the national and regional levels, and managing a network of SSPs in all 10 EPA regions. The Program will continue serving a liaison function to connect, convene and facilitate discussions between agency experts and sector representatives to solve discrete policy, guidance, and implementation issues unique to each sector.

In FY 2022, SSP will focus activities in three areas: broad multi-stakeholder engagement, cross-agency coordination, and policy and program initiatives as they relate to industry sectors. Multi-stakeholder engagements will provide a platform for working with industry sectors and leading companies, as well as other stakeholders on key issues such as climate change and EJ. Other stakeholders that SSP will work with include non-governmental organizations, organized labor, the academic community, state/local governments, and communities with EJ concerns, as appropriate. The Program will coordinate and lead cross-agency activities and projects to address climate change, infrastructure, and other Administrator priorities, as they relate to industry sectors. Finally, SSP will develop and implement policy and program initiatives that draw on its understanding of industry sectors to advance the Agency's regulatory and non-regulatory activities.

Community-Driven Environmental Protection

The IES Program delivers technical assistance, training, and tools to economically distressed communities and coordinates the Agency's work with communities to increase efficiency, effectiveness, and accountability. In FY 2020, the Program delivered direct technical assistance to more than 40 communities. In FY 2021, the Program is developing new technical assistance approaches specifically focused on helping communities disproportionately impacted by the COVID related economic downturn by attracting private investment and supporting communities' efforts to rebuild in a way that also improves environmental and human health outcomes. In FY 2022, EPA will deploy the tools, expertise, and technical assistance piloted and deployed in FY 2021. This investment will continue to strengthen EPA's efforts in economically distressed communities and communities impacted by the energy economy transition away from fossil fuels to leverage public and private sector investments to support improved economic development and environmental outcomes. In FY 2022, additional FTE will serve EPA's regional offices to advance community driven outcomes through technical assistance for revitalization projects in economically distressed communities by: 1) assessing actions EPA can take to prioritize federal investment in these areas; 2) working to minimize regulatory and administrative burdens that discourage investment; 3) helping local applicants identify and apply for EPA and other federal resources; 4) coordinating EPA's regional efforts; and 5) measuring results. The additional FY 2022 resources will allow EPA to increase its capacity to hold community workshops and trainings to assist states in adopting policies and programs that support community revitalization, with an emphasis on strategies that also reduce greenhouse gas (GHG) emissions and make places more resilient and more equitable. EPA efforts will emphasize support of economically distressed

communities, working directly with up to 70 communities to help them leverage a range of public and private sector resources to support revitalization.

In FY 2022, the Program will continue to lead, along with the Office of Environmental Justice, the application of community-driven solutions to local environmental challenges, focusing on the Administration's priorities, such as leveraging private investment and aligning federal investments to maximize benefits to vulnerable and underserved communities. Technical assistance and training are the cornerstone of EPA's cooperative approach to addressing environmental challenges in communities, particularly communities that are economically distressed. In FY 2022, EPA will continue to prioritize technical assistance and training, with the objective of helping tribal, state, and local governments increase their capacity to protect the environment while growing their economies, creating jobs, and using public and private sector investments and other resources more efficiently. Where appropriate, EPA will partner with other agencies to help achieve locally led, community-driven approaches to protecting air, land, and water, while at the same time supporting economic revitalization.

In FY 2022, the Program will continue analyses on emerging trends, innovative practices, and tools that support clean air, land, and water outcomes. EPA will continue to develop tools to help interested communities incorporate innovative approaches to infrastructure and land development policies. This assistance helps deliver on multiple economic, community, and human health goals embedded in EPA's core mission, including managing stormwater, reducing combined sewer overflows, improving local air and water quality, cleaning up and reusing previously developed sites, and supporting revitalization and redevelopment in economically distressed communities.

Climate Adaptation Program

EPA is committed to identifying and responding to the challenges that a changing climate pose to human health and the environment. The goal of the Climate Adaptation Program is to ensure the Agency continues to fulfill its mission of protecting human health and the environment even as the climate changes.

In FY 2022, the Program will focus on integrating climate adaptation into EPA's programs and regions, policies, rules, and operations to ensure they are effective even as the climate changes, while the Agency also works to reduce GHG emissions. Management and staff will be trained to enhance climate literacy and their ability to mainstream adaptation planning into decision-making processes. Decision-support tools and technical assistance will be developed and provided to enable EPA staff to integrate climate adaptation planning into programs and to identify strategies that will yield co-benefits in the form of GHG reductions.

The Program also will focus on building and strengthening the adaptive capacity of states, Tribes, communities, and businesses to increase their resilience to the impacts of climate change, with a strong focus on advancing EJ. The Agency's partners share responsibility for protecting human health and the environment, and partnerships with EPA are at the heart of the nation's environmental-protection system. In FY 2022, the Program will produce and deliver training, tools, technical support, data, and information the Agency's partners need to adapt and increase resilience to climate change. Financial incentives will be provided through Agency grant programs

to support climate-resilient investments in communities across the nation. The Program will place special emphasis on, and work in partnership with, overburdened and vulnerable populations. Certain parts of the population, such as communities of color, low-income communities, children, the elderly, Tribes and indigenous people, and small rural communities can be especially vulnerable to the impacts of climate change. The Program will engage the most overburdened and vulnerable communities to improve their capacity to prepare for, minimize, and recover from climate change impacts. The long-term goal is to empower all 40,000 communities across the nation and all 574 Tribes to adapt to the risks of climate change in ways that are critical to attaining the Agency's mission.

Performance Measure Targets:

(PM PE2) Number of new permit applications in backlog.	FY 2021 Target	FY 2022 Target
	24	

(PM PE3) Number of existing permit applications in backlog.	FY 2021 Target	FY 2022 Target
	256	

EPA is currently evaluating its suite of measures and indicators related to environmental justice and climate change, including available data and programs where improved data sets are needed to develop useful performance measures for the Environmental Justice and Climate Change Programs. Measures are under development in this Program to address environmental justice and climate change.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$933.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$7,311.0 / +10.0 FTE) This program change increases support for core program work to advance climate adaptation, community revitalization, stakeholder collaborations, and streamlining and oversight of environmental permitting. This investment includes $1,758.0 in payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$49,878.3***	***$49,595.0***	***$71,895.0***	***$22,300.0***
Hazardous Substance Superfund	$628.3	$443.0	$450.0	$7.0
Total Budget Authority	$50,506.6	$50,038.0	$72,345.0	$22,307.0
Total Workyears	250.4	263.9	301.5	37.6

Total workyears in FY 2022 include 8.8 FTE funded by TSCA fees and 17.1 FTE to support Legal Advice working capital fund (WCF) services.

Program Project Description:

The Legal Advice: Environmental Program provides legal representational services, legal counseling, and legal support for all the Agency's environmental activities. The legal support provided by this program is essential to the Agency's core mission. The personnel assigned to this program represent essential expertise in these critical fields that the Agency relies on for all decisions and activities in furtherance of its mission: to protect human health and the environment.

The Program provides legal counsel on every major action the Agency takes. It plays a central role in all statutory and regulatory interpretation of new and existing rules and rule and guidance development under EPA's environmental authorities. The Program also provides essential legal advice for every petition response, every judicial response, and every emergency response. When the Agency acts to protect the public from pollutants or health-threatening chemicals in the air we breathe, in the water we drink, or in the food we eat, the Program provides counsel on the Agency's authority to take that action; it then provides the advice and support necessary to finalize and implement that action. When that action is challenged in court, the Program in coordination with the Department of Justice, defends it.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA is requesting an increase of an additional 37.6 FTE and $22.3 million. These additional resources are essential to assist the Agency's environmental programs in tacking the climate crisis, advancing environmental justice, and in protecting human health and the environment. These funds are critically needed to address a significant constriction of funds over the last 5 years. During that time EPA's Office of General Counsel's (OGC) budget has remained flat, while the caseload funded by this program has increased more than 150 percent. The Ethics program within OGC also has significantly expanded as recommended by the Office of Government Ethics. In addition, this investment will allow the Program to address vital new Administration priorities on pending regulatory changes, climate, and environmental justice. The Program provides legal representation in more than 725 defensive judicial cases each year. It is projected that the number of cases in FY 2022 will exceed this number. The Program will continue to provide legal representation in judicial and administrative litigation for core agency environmental programs and for agency priorities. The Program also will provide counseling

outside of the litigation context in the highest priority issues arising under all the environmental statutes administered by EPA.

In FY 2022, the Agency will continue to focus on its core mission to apply the most effective approaches by implementing EPA's environmental programs under the Resource Conservation and Recovery Act (RCRA), Leaking Underground Storage Tanks (LUST), Clean Air Act (CAA), Clean Water Act (CWA), Toxic Substances Control Act (TSCA), Federal Insecticide Fungicide and Rodenticide Act, Food Quality Protection Act, Safe Drinking Water Act, and other authorities. This strategy will help ensure that human health and the environment are protected, including clean air, water, and land, and safe chemicals and pesticides.

Legal counseling resources also continue to be in high demand to support the Agency's response to states seeking assistance developing or implementing environmental programs, industrial facilities seeking permits requiring them to undertake new economic activity, and citizens seeking actions to protect local environmental quality, among other things. The Program will prioritize resources after supporting judicial and administrative litigation to counsel Agency clients on these matters.

The following examples of recent accomplishments and work being completed illustrate this program's role in implementing the Agency's core mission:

- EPA's Water Law Office has played a critical role in advising Agency decisionmakers during the Agency's reconsideration of the 2020 Clean Water Act "Navigable Waters Protection Rule" or "NWPR," a rule the White House expressly called out in its list of regulations to be reviewed under Executive Order 13990. The NWPR redefined the foundational CWA term "waters of the United States" and substantially altered the geographic scope of federal jurisdiction under the Clean Water Act. Our attorneys are not only advising on the legal issues associated with defining 'waters of the U.S.," a complex area of the law involving decades of agency interpretation and judicial decisions, but also have worked successfully with the Department of Justice to seek and obtain stays where necessary in the 21 active district court cases they are defending across the country challenging the Agency's actions in defining "waters of the U.S."
- EPA's Pesticides and Toxic Substances Law Office (PTSLO) is providing the legal advice and support critical to the Agency's Office of Chemical Safety and Pollution Prevention (OCSPP) review of actions taken on the initial TSCA risk evaluations, and advising on the implementation of any changes to EPA programmatic approaches associated with risk evaluation of existing hazardous substances under TSCA. Significantly, these actions are governed by statutory provisions which require an increased number of risk evaluations to be conducted and challenging statutory deadlines under TSCA. Beginning this year, PTSLO also will be advising on the initiation of risk management rulemaking required by TSCA following the determination of unreasonable risk of a chemical substance during a risk evaluation conducted under TSCA. Finally, a number of previous actions taken by EPA implementing the new requirements under the amendments to TSCA are now in litigation and place tremendous demands on PTSLO staff as the subject matter leads working with the Department of Justice staff in the defense of EPA in these matters. PTSLO also provides critical legal advice in support of OCSPP's actions taken or

mandated under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). Most notably for FY 2020 and continuing into the present, PTSLO counsels OCSPP on numerous antimicrobial disinfectant issues that have arisen in response to COVID-19 emergency conditions. Under incredible pressure and in short timeframes, PTSLO attorneys are prominent players in support of OCSPP's efforts to both ensure all Americans have ready access to effective disinfection products to use against the virus and to provide numerous flexibilities to industry and other interested stakeholders in the face of the unique challenges they encounter as a result of the pandemic.

- EPA's Air and Radiation Law Office (ARLO) is providing critical legal assistance on numerous top Administration priorities. Executive Order 13990 specifically directs EPA to revise and address as appropriate actions related to methane emissions from the oil and gas sector, the regulation of greenhouse gases from power plants under section 111 and emissions standards for greenhouse cases from light duty vehicles. ARLO also provided essential legal support for the Agency's recent proposed rule to implement the American Innovation and Manufacturing Act. This Act was passed late last year and requires a phasedown of Hydrofluorocarbons (HFCs), an extremely potent greenhouse gas. In addition to this work on climate change, ARLO is providing counsel on many other Agency priorities, including review of the ozone and particulate matter ambient air quality standards, the regulation of power plants under section 112 and review of the Agency's benefit-cost rule. These are significant undertakings that require considerable resources to develop the necessary supporting legal analysis. As a result, ARLO has seen an increase in its workload.
- EPA's Solid Waste and Emergency Response Law Office (SWERLO) will be providing key legal support to the EPA Council on PFAS, recently created by Administrator Regan and charged with building on the Agency's ongoing work to better understand and ultimately reduce the potential risks caused by PFAS. Part of the Council's work will include a review of all ongoing actions (with an eye towards proposing any necessary modifications), and identification of new strategies and priorities. As the Council develops any recommendations, SWERLO will advise on any strategies to address PFAS through CERCLA or RCRA, informed by an aim of significantly advancing environmental justice for communities across the country impacted by PFAS.
- EPA's Cross-Cutting Issues Law Office (CCILO) is providing critical legal advice in the Agency's response to the President's Executive Orders on Environmental Justice. It is supporting the creation of the White House Environmental Advisory Council, as well as the White House Environmental Justice Interagency Council, called for in E.O. 14008, and has been counseling on the inclusion of Environmental Justice across EPA programs, including in climate mitigation issues and climate change adaptation policy.

Performance Measure Targets[134]:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

[134] The following long-term performance goal is deleted: By September 30, 2022, meet 100% of legal deadlines imposed on EPA.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$10,493.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$11,807.0 / +37.6 FTE) This program change addresses a need for increased defensive litigation work as well as the large increase in pesticides and toxics work and the need to address emerging issues like PFAS. This investment provides additional funding for essential core workforce support costs and includes approximately $8.6 million in payroll. These additional resources also will assist EPA in tackling the climate crisis and securing environmental justice.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$14,475.0***	***$15,865.0***	***$18,315.0***	***$2,450.0***
Total Budget Authority	$14,475.0	$15,865.0	$18,315.0	$2,450.0
Total Workyears	74.6	89.2	89.2	0.0

Total workyears in FY 2022 include 5.6 FTE funded by TSCA fees.

Program Project Description:

The Legal Advice: Support Program provides legal representational services, legal counseling, and legal support for all activities necessary for EPA's operations. The Program provides legal counsel and support on a wide variety of issues and plays an important role in meeting and addressing legal support for work under the Civil Rights Statutes, employment law, and Freedom of Information Act (FOIA) requirements and provides critical counseling on a range of Information Law, Employment and Labor Law, Intellectual Property Law, and National Security Law matters. This program supports EPA's National FOIA Office. With enhanced FOIA implementation, community consultations and other public participation opportunities, the beneficiaries of environmental protection – the American people including environmental justice communities – will be able to more meaningfully engage through their communities, local governments, and state and tribal governments.

For example, if an EPA program office needs guidance on how to respond to a FOIA request, whether it may spend money on a certain activity, or what to do when a tort claim is filed with the Agency, this program provides answers, options, and legal advice. Additionally, the Program provides comprehensive advice on civil rights issues including equal protection. The Program provides counsel and advice for settlement on Equal Employment Opportunity mediations and counsels on a range of sensitive and complex national security law matters. The Program also supports EPA in maintaining high professional standards and in complying with all laws and policies that govern the Agency's operations.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will continue to address and manage information requests, legal support for work under the Civil Rights Statutes, and employment law. There also is an ongoing need for a high level of involvement in questions related to contracts, ethics, grants, finance, appropriations, and employment.

This program increase is critical to maintain basic legal services for EPA. The Legal Advice Support Program has had level funding in this area for the last 5 years and has seen its caseload in this area increase by a factor of five. Defending these lawsuits on matters ranging from FOIA to torts to contracts to employment law is vital to ensure the Agency continues to be responsive to

the public. The Agency's focus on responding to our significant FOIA workload and increasing our responsiveness to requesters has correspondingly increased the work of the FOIA attorneys. Our Federal Tort Claim Act portfolio also has increased with incredibly complex, billion-dollar cases such as Flint and Gold King Mine, which require significant resources. Further, the Civil Rights lawyers have a critical role to play in "Affirmatively advancing equity, civil rights, racial justice, and equal opportunity", pursuant to Executive Order 13985 (January 21, 2021).[135] EPA's External Civil Rights Compliance Office is committed to vigorously enforcing compliance with civil rights laws through complaint investigations and affirmative compliance reviews, as well as through technical assistance and engaging with communities. The civil rights attorneys funded in this program are a vital part of that effort, ensuring that enforcement complies with civil rights laws. At the same time the Program is working closely with our Civil Rights Program to ensure the legality of our efforts to advance equity across EPA and have a robust and engaged Equal Employment Opportunity program.

The following are examples of FY 2020 accomplishments:

- Coordinated with DOJ and provided legal counsel on appropriations and assistance law leading to a settlement agreement resolving the State of Utah's $1.3 billion claim for damages in connection with the Gold King Mine release in exchange for $3 million in grants and about $200 thousand in mine assessment work. EPA continues to work with DOJ on this enormous case with other plaintiffs.

- Provided extensive legal support to the Agency related to managing the impact of COVID-19. The Program assisted in the development of guidance to agency programs in providing administrative relief to financial assistance recipients impacted by COVID-19; assisted the Agency in a process to launch virtual public hearings and meetings in compliance with its obligation to make information accessible to individuals with limited English proficiency and individuals with disabilities; advised on personal liability, supplemental appropriations, paying contractor idle labor under the CARES Act, and ideas for building economic relief into existing programs (such as debt suspension); and counseled on myriad legal issues regarding the impact of COVID-19 on agency procurements. The Program also provided critical employment law advice and assistance in navigating many novel issues associated with the Agency's COVID-19 response.

- Reformed the Agency's Employee Salary Overpayment Waiver Request Process: worked collaboratively with OMS and OCFO to educate and train offices on standards and requirements for granting salary overpayment waivers arising from agency error. This effort, triggered in part by an OIG investigation, resulted in significant updates to streamline agency procedures and marked communication improvements that have translated into clear and measurable efficiency gains.

- Significantly furthered the Agency's duties under the Toxic Substances Control Act by completing almost 1,000 Confidential Business Information (CBI) determinations on claims submitted pursuant to the Toxic Substances Control Act so far in FY 2021.

[135] For additional information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.

- Virtually eliminated the FOIA appeals backlog, with only one appeal remaining at the end of the fiscal year, processed 240 appeals; and reduced median processing time from 107 to 18 days.

Performance Measure Targets:

(PM FO1) Percentage reduction in overdue FOIA requests from the April 2018 baseline.	FY 2021 Target	FY 2022 Target
	75.00	100.00

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$2,025.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$425.0) This program change is an increase to support Legal Advice: Support Program projects, with a priority for work related to defending the increase in litigation, addressing civil rights issues including External Civil Rights and equal protection, advising on FOIA requests, and ensuring the agencies work in contracts, grants, and appropriations is handled in accordance with the law.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Regional Science and Technology

Program Area: Legal / Science / Regulatory / Economic Review

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$1,060.5***	***$638.0***	***$1,174.0***	***$536.0***
Total Budget Authority	$1,060.5	$638.0	$1,174.0	$536.0
Total Workyears	1.9	1.7	1.7	0.0

Program Project Description:

The Regional Science and Technology (RS&T) Program provides direct support to multiple programs for the Agency including implementing the Resource Conservation and Recovery Act; Toxic Substances Control Act; Clean Water Act; Safe Drinking Water Act; Clean Air Act; and Comprehensive Environmental Response, Compensation and Liability Act. The RS&T Program supports the Agency's goals by performing laboratory analysis and sample collection to provide credible scientific data on environmental pollutants and conditions to Agency decision makers. The RS&T Program also assists state environmental agencies by providing specialized technical assistance and helping build Tribal capacity for environmental monitoring and assessment.

The RS&T Program provides essential expertise and scientific data for a wide array of environmental media, including ambient air; surface, drinking and ground water; soil and sediment; solid and hazardous waste; and biological tissue. The Program continuously seeks to realize efficiencies in analysis and data collection. A strategic strength of the Regional Laboratory network is in its ability to respond to events requiring surge capacity. In the event of an emergency or large-scale project, Regional Laboratories work together to leverage the strengths and capacities of individual lab facilities.

The RS&T Program provides expertise in areas such as environmental biology, microbiology, chemistry, field sampling, enforcement, and criminal investigations. The Program's applied science expertise is often used to develop, modify, and improve analytical methods for specialized science, such as emerging chemicals of concern, and to provide scientific consultation to Agency, state, and tribal partners. The Program supports special or non-routine analytical requests that EPA cannot readily obtain from other sources thereby supporting the Agency's need to meet short-term timeframes. Funding for scientific equipment is essential to the Program's operations. New and improved technology strengthens science-based decision-making for regulatory efforts, environmental assessment of contaminants, and development of critical and timely environmental data in response to accidents and natural or man-made disasters. As technology improves, the sensitivity of equipment advances to detect lower levels of contaminants. Newer advanced instrumentation has improved environmental data collection and laboratory analytical capability.

FY 2022 Activities and Performance Plan:

In FY 2022, resources will continue to support regional implementation of the Agency's statutory mandates through laboratory operations for environmental sampling and monitoring. Resources also will provide direct laboratory and monitoring support at the local level and improve timely decision-making in regional program management and implementation. Taking this approach enables the Agency to address environmental issues specific to geographic areas (e.g., energy extraction, mining, wood treating operations, specialty manufacturing), natural disasters (e.g. Winter Storm Uri), or homeland security threats.

Regional laboratories provide increased levels of service and meet the analytical needs of the Agency's programs by coordinating efforts and optimizing network expertise and assistance. In FY 2022, regional laboratories will continue to coordinate within the Regional Laboratory Network (RLN) to provide needed scientific services. The regional laboratories have the capability to analyze a full suite of contaminants using an array of established methods, including regulatory or guidance methods such as the Resource Conservation Recovery Act and Clean Water and Safe Drinking Water Act methods. Laboratories also utilize new and modified methods based on immediate needs or circumstances. For example, some regional laboratories have analytical expertise unique to a regional office and when requested, can quickly modify established methods to address specific or unique needs.

In FY 2022, the RS&T Program also will support the risk identification and assessment associated with pesticides, organic chemicals, and other high-risk chemicals, as well as support the Agency's science priorities. The Agency's mission to protect human health and the environment often requires the availability of scientific data at lower detection levels, which requires specialized equipment. Almost all scientific instrumentation is computer-controlled or interfaced. As computer technology improves, instrument efficiencies and sensitivity also improve – these advances in technology leading to lower detection levels of contaminants are essential. For example, for some compounds, health-based risk levels are decreasing (e.g., hexavalent chromium). When measuring for these compounds, the instrument detection levels need to be as low as technically feasible, requiring laboratories to modify an existing method, modify existing equipment, or purchase newer instrumentation.

Some examples of necessary equipment for both fixed and mobile laboratory functions include sample concentrators; autosamplers; gas and liquid chromatography/mass spectrometry systems; direct mercury analyzers; inductively coupled plasma (metals) analyzers; air toxics sampling equipment; high-resolution equipment; hand-held equipment for screening of high-hazard samples; and various soil and water analyzers.

In FY 2022, resources for the regional laboratories will:

- Enhance agencywide enforcement efforts and enable regional laboratories to perform forensic analysis on a wide variety of samples collected as part of criminal investigations and enforcement actions. These analyses require cutting-edge, high-quality, and defensible laboratory data.

- Support agencywide science priorities by facilitating the abilities of regional laboratories to explore the impacts of emerging contaminants (e.g., pharmaceuticals, PFAS and PFOA, endocrine disrupting chemicals) and support method development and applied science.

- Support agencywide exploration of Next Generation monitoring techniques (e.g., water monitoring remote sensors, remote sensing buoy passive samplers for air monitoring) and technologies to improve environmental data collection and the resultant outcomes. These new techniques will capture real-time results from mobile analytical techniques supporting all programs. The regional laboratories can provide a practical application and perspective, as well as assist with new policies regarding this technology.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$3.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$533.0) This program change increases funding to support the replacement of aging capital equipment by regional laboratories to continue providing analytical support to Program Office priorities. Regional laboratory analyses provide the science-based foundation for short-term decision making across the Agency in support of clean air, water, land, and environmental justice programs.

Statutory Authorities:

Resource Conservation and Recovery Act; Toxic Substances Control Act; Clean Water Act; Safe Drinking Water Act; Clean Air Act; Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); Pollution Prevention Act; Federal Insecticide, Fungicide and Rodenticide Act (FIFRA).

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$12,643.4***	***$12,421.0***	***$13,463.0***	***$1,042.0***
Total Budget Authority	$12,643.4	$12,421.0	$13,463.0	$1,042.0
Total Workyears	60.1	72.5	74.0	1.5

Program Project Description:

The Regulatory/Economic, Management, and Analysis Program is responsible for reviewing the Agency's regulations to ensure that they are developed in accordance with the governing statutes, executive orders, and agency commitments and are based on sound technical, economic, and policy assumptions. Further, the Program ensures consistent and appropriate economic analysis of regulatory actions, conducts analyses of regulatory and non-regulatory approaches, and considers interactions between regulations across different environmental media. The Program provides all technical support to the Interagency Working Group on the Social Cost of Greenhouse Gases (GHGs) to develop final SC-CO_2, SC-N_2O and SC-CH_4 values required under Executive Order (EO) 13990.[136] The Program helps to implement the President's Memorandum on *Modernizing Regulatory Review*[137] and EO 13985 *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*[138] by prioritizing the appropriate analysis and consideration of environmental justice (EJ) concerns in regulatory actions. The Program ensures the Agency's regulations comply with statutory and EO requirements, including the Congressional Review Act[139], the Regulatory Flexibility Act (as amended by the Small Business Regulatory Enforcement Fairness Act)[140], and EOs 12866[141] and 13563[142] regarding the Office of Management and Budget regulatory review. The Program manages the development and deployment of EPA's economy-wide model for analyzing the economic impacts of environmental regulations. The Program also includes the Agency's Chief Statistical Official charged with implementing major elements of the *Foundations for Evidence Based Policy Act*.[143]

[136] For more information on EO 13990, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/.
[137] For more information on the Memorandum Modernizing Regulatory Review, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/modernizing-regulatory-review/.
[138] For more information on EO 13985, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.
[139] For more information on the Congressional Review Act, please see: https://www.govinfo.gov/content/pkg/PLAW-104publ121/pdf/PLAW-104publ121.pdf.
[140] For more information on the Regulatory Flexibility act, please see: https://www.govinfo.gov/content/pkg/STATUTE-94/pdf/STATUTE-94-Pg1164.pdf, and as amended by the Small Business Regulatory Enforcement and Fairness Act, please see: https://www.govinfo.gov/content/pkg/PLAW-104publ121/pdf/PLAW-104publ121.pdf.
[141] For more information on EO 12866 *Regulatory Planning and Review*, please see: https://www.archives.gov/files/federal-register/executive-orders/pdf/12866.pdf.
[142] For more information on EO 13563 *Improving Regulation and Regulatory Review*, please see: https://obamawhitehouse.archives.gov/the-press-office/2011/01/18/executive-order-13563-improving-regulation-and-regulatory-review.
[143] For more information, please see: https://www.congress.gov/115/plaws/publ435/PLAW-115publ435.pdf.

FY 2022 Activities and Performance Plan:

The Program assists the Administrator and other senior agency leaders in implementing regulatory policy priorities, including those established in EO 13990 (*Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis),*[144] EO 13992 (*Revocation of Certain Executive Orders Concerning Federal Regulation*),[145] and EO 14008 (*Tackling the Climate Crisis at Home and Abroad*).[146]

In FY 2022, EPA will continue its efforts to assess and review the costs and benefits to businesses, jobs, communities, government entities, and the broader economy associated with each economically significant regulatory action to maximize the net benefits of policies protecting human health and the environment. EPA will conduct and integrate analysis of EJ concerns in the rulemaking process to address the Administration's priorities. EPA will collect data and build models to assess regulatory proposals and their impacts on costs, benefits, economic performance, and EJ. Planned key program activities in FY 2022 include:

- Represent EPA on, and prepare information and analyses for, the Interagency Working Group on the Social Cost of GHGs, engage the public, stakeholders and experts to provide recommendations for reviewing, and, as appropriate, updating, the social cost of carbon ($SC\text{-}CO_2$), social cost of nitrous oxide ($SC\text{-}N_2O$), and social cost of methane ($SC\text{-}CH_4$) to ensure that these costs are based on the best available economics and science.

- Represent EPA on recommending improvements to modernize the regulatory review process to promote policies that reflect new developments in scientific and economic understanding, fully accounts for regulatory benefits that are difficult or impossible to quantify, and does not have harmful anti-regulatory or deregulatory effects. Develop proposed procedures that take into account the distributional consequences of regulations, including as part of any quantitative or qualitative analysis of the costs and benefits of regulations, to ensure that regulatory initiatives appropriately benefit and do not inappropriately burden disadvantaged, vulnerable, or marginalized communities.

- Support EPA's Chief Statistical Official, who will provide technical support for projects under EPA's interim learning agenda, evaluation plan, and capacity assessment; design statistically-sound policy analyses and evaluations; assist in the development of the full learning agenda; and promote a culture of evidence-based decision making.

- Develop and offer a series of EJ training sessions for agency rule writers, analysts, and economists who conduct rulemaking analyses, including information on current technical guidance and tools as well as illustrative case studies. Plan and host internal workshops on analytic challenges and opportunities for assessing EJ for rulemakings.

[144] For more information, please see: https://www.federalregister.gov/documents/2021/01/25/2021-01765/protecting-public-health-and-the-environment-and-restoring-science-to-tackle-the-climate-crisis.
[145] For more information on EO 13992, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-revocation-of-certain-executive-orders-concerning-federal-regulation/.
[146] For more information on EO 14008, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.

- Expand analytic capabilities for conducting EJ analyses for rulemaking through development of flexible analytic tools and novel datasets.

- Develop a targeted update of EPA's EJ Technical Guidance, with a new section addressing how the EJ analysis can be used to inform policy options to address EJ implications of rulemaking. In addition, add a section on expanded tools and data as well as discussion of newer techniques and approaches to conducting EJ analyses.

- Release an updated version of EPA's Guidelines for Preparing Economic Analyses, revised to incorporate recommendations from Science Advisory Board's peer review. The updated guidelines will help ensure that EPA's economic analyses provide a complete accounting of the economic benefits, costs and impacts of regulatory actions, including distributional consequences. The guidelines also will help ensure that evidence-based economic analysis will be done consistently across EPA programs and in accordance with the best economic practices and methods.

- Deploy a model of the U.S. economy so that EPA routinely assesses how regulations affect the economy, including distributional impacts, costs, and broader macro-economic performance. EPA will update the model consistent with recommendations from EPA's Science Advisory Board and begin its deployment in regulatory analyses, where appropriate. This model will provide critical evidence-based analyses to inform decision making.

- Conduct training for EPA economists and regulatory analysts on the updated Guidelines for Preparing Economic Analyses, ensuring that EPA analysts have a strong understanding of the Guidelines to improve the consistency, transparency, and quality of EPA's economic analyses.

- Continue to manage EPA's response to recently issued EOs, particularly with an eye toward identifying previous regulatory actions that are not consistent with current policies and working to develop new actions that constructively advance current policy positions.

- Review economic analyses prepared by EPA to ensure compliance with statutory and other related requirements. Provide the Administrator and the public with high-quality analyses of the costs, benefits, and impacts on jobs, businesses, and communities of major regulatory proposals to better inform decision-making and ensure transparency about the consequences of regulation.[147]

- Apply the best modeling tools to assess the economic effects of approaches that reduce climate pollution in every sector of the economy, deliver EJ, and spur well-paying union jobs and economic growth, including methods designed to examine how alternative regulatory options affect employment. Continue development of open source data and

[147] For more information, please see: https://www.epa.gov/environmental-economics/guidelines-preparing-economic-analyses.

economic models, including sector-specific cost models, to support these efforts in a manner that maximizes the transparency of these EPA analyses.

- Continue development of a modeling platform capable of assessing the benefits of national regulations that affect water quality. This effort will provide important evidence-based data and analyses, consistent with economic science best practices, to inform decision making.

- Strengthen available data and methods to estimate the monetized benefits of health outcomes of chemical exposures, water pollution, and air pollution for use in EPA's benefit cost analyses.

- Continue to develop EPA's semiannual unified Regulatory Agenda.

- Manage EPA's internal Action Development Process and expand and upgrade regulatory planning and tracking tools to facilitate timely decisions and coordination across programs.

- Serve as EPA's liaison with the Office of Information and Regulatory Affairs within OMB.

- Serve as EPA's liaison with the Office of the Federal Register by reviewing, editing, and submitting documents for publication so that the public, states, other agencies, and Congress are informed about EPA's regulatory activities in a timely manner.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$414.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$628.0 / +1.5 FTE) This program change supports cross-agency coordination, analysis, and review of regulatory activity across statutory programs. A particular emphasis is to be placed on pending climate regulations. This investment includes $264.0 thousand in payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$3,903.2***	***$3,205.0***	***$3,475.0***	***$270.0***
Total Budget Authority	$3,903.2	$3,205.0	$3,475.0	$270.0
Total Workyears	17.5	18.7	18.7	0.0

Program Project Description:

EPA's Science Advisory Board Staff Office (SABSO) manages two Federal Advisory Committees. Congress established the Agency's Science Advisory Board (SAB) in 1978, under the Environmental Research, Development, and Demonstration Act, to advise the Administrator on a wide range of highly visible and important scientific matters. The Clean Air Scientific Advisory Committee (CASAC) was established under the Clean Air Act Amendments of 1977 to provide independent advice to the EPA Administrator on the technical bases for EPA's National Ambient Air Quality Standards (NAAQS). The SAB and the CASAC, both statutorily mandated chartered Federal Advisory Committees, draw from a balanced range of non-EPA scientists and technical specialists from academia, states, independent research institutions, and industry. The Program provides management and technical support to these advisory committees. The Committees provide EPA's Administrator independent advice and objective scientific peer review on the technical aspects of environmental issues as well as the science used to establish criteria, standards, regulations, and research planning, as requested.[148]

In FY 2020, the SAB produced nine scientific peer reviews and the CASAC produced two scientific peer reviews. The SAB also completed two consultations at the request of the Administrator. The topics reviewed by the SAB include the All Ages Lead Model, the Computable General Equilibrium (or SAGE Model), COVID-19 research, and the Science Transparency Rule. In FY 2020, the SAB also completed consultations on Human Toxicity Standards and the Lead and Copper Rule. The CASAC completed reviews of the Particulate Matter (PM) Integrated Science Assessment (ISA), the PM Policy Assessment, the Ozone Policy Assessment, and the ISAs of Nitrogen Oxides (NOx), Sulfur Oxides (SOx) and PM.

In FY 2020, the Science Advisory Board Staff Office (SABSO) piloted cross-cutting actions which reduced the time to complete a peer review, increase transparency, and enhance public participation. The focus on efficiency was a program management tool that provided a seamless transition during the COVID-19 pandemic transition and working from home. Since SABSO provides an in-house resource for EPA peer reviews, the Program is able to keep costs low for the Agency as compared to external peer review conducted by groups like the National Academy of

[148] For more information, please see: http://www.epa.gov/sab/ and http://www.epa.gov/casac/.

Sciences (NAS). Furthermore, Agency costs have been significantly lower for virtual meetings when compared to face to face meetings.

FY 2022 Activities and Performance Plan:

In FY 2022, the Program will review the CASAC policy assessment and Integrated Science Assessment for PM.[149] The Program will accommodate additional requests as made by EPA's Administrator or program offices.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$125.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$145.0) This program change is an increase to assist in the review of the CASAC policy assessment and Integrated Science Assessment for PM.

Statutory Authority:

Environmental Research, Development, and Demonstration Authorization Act (ERDDAA); Federal Advisory Committee Act (FACA); and Clean Air Act (CAA).

[149] For additional information on PM, please see: https://www.epa.gov/pm-pollution/particulate-matter-pm-basics.

Operations and Administration

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$27,433.0***	***$32,247.0***	***$34,121.0***	***$1,874.0***
Leaking Underground Storage Tanks	$155.9	$132.0	$132.0	$0.0
Hazardous Substance Superfund	$24,356.1	$23,800.0	$30,519.0	$6,719.0
Total Budget Authority	$51,945.0	$56,179.0	$64,772.0	$8,593.0
Total Workyears	266.3	285.7	325.7	40.0

Program Project Description:

Environmental Programs and Management (EPM) resources in the Acquisition Management Program support EPA's contract activities, which cover planning, awarding, and administering contracts for the Agency. Efforts include issuing acquisition policy and interpreting acquisition regulations; administering training for contracting and program acquisition personnel; providing advice and oversight to regional procurement offices; and providing information technology improvements for acquisition.

In response to the COVID-19 pandemic, EPA will continue providing regular guidance and flexibilities to the Agency's acquisition community and contractors, including increasing the micro-purchase threshold and providing an Emergency Acquisition Toolkit of best practices and templates. EPA also implemented Section 3610 of the Coronavirus Aid, Response, and Economic Security (CARES) Act, which authorized federal agencies to reimburse contractors for paid leave.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA requests an increase of 10 FTE and nearly $1.9 million to strengthen the Acquisition Management Program in the EPM Appropriation. These resources will assist the Agency to continue its efforts to process and award contract actions in a timely manner and in accordance with Federal Acquisition Regulation (FAR) and guidance from the Office of Management and Budget (OMB) Office of Federal Procurement Policy (OFPP). Timely procurement processing is crucial to efficient operations. In FY 2020, EPA completed 91 percent of all contract actions within procurement action lead times (PALT), exceeding its target of 90 percent. The Agency is on track to meet the FY 2021 target of 95 percent. In FY 2022, EPA will continue exploring opportunities for improving PALT.

This investment also supports the implementation of supply chain risk requirements of Section 889 of the 2019 National Defense Authorization Act and the "Made in America Laws" referenced in Executive Order 14005, *Ensuring the Future Is Made in All of America by All of America's*

Workers[150] while furthering Category Management implementation requirements. In FY 2022, EPA will focus on establishing a comprehensive architecture for the Agency's supply chain as well as mechanisms to identify and mitigate risk within the supply chain. The Agency will support efforts to ensure there is diversity, and thereby strength, of the supply chain by monitoring and ensuring small business utilization and "Buy American" implementation from a supply chain management and account management lens.

EPA also will work to ensure that its procurement activity aligns with Executive Order 13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*.[151] In FY 2022, EPA will aim to eliminate any barriers to full and equal participation in agency procurement and contracting opportunities and will promote the equitable delivery of government benefits and opportunities by making contracting and procurement opportunities available on an equal basis to all eligible providers of goods and services.

EPA is fully committed to leveraging category management, Spend Under Management (SUM), Best-In-Class (BIC), and strategic sourcing principles in each of its programs and purchasing areas to save taxpayer dollars and improve mission outcomes. In FY 2022, EPA will continue to leverage data provided by the General Service Administration, and implement spend analysis, trend analysis, and data visualization tools to measure progress toward the implementation of Category Management and the adoption of Federal Strategic Sourcing vehicles, and BIC acquisition solutions.

- The OMB Category Management focuses on total acquisition spend transitioned from contract vehicles that are unaligned with category management principles to the SUM Program. EPA revised its Acquisition Guidance section 8.0.100, *Requirements for Mandatory Use of Common Contract Solutions* to mandate the use of enterprise-wide contract vehicles, in addition to BIC contract solutions and other OMB-designated contract solutions. Based on this policy change, EPA anticipates that 58 percent of total addressable spend will have been transitioned into the SUM Program by the end of FY 2022, relative to the FY 2020 result to date of 43.2 percent.

- In FY 2022, EPA will continue to implement SUM principles to leverage pre-vetted agency and government-wide contracts as part of the Agency's effort to utilize more mature, market-proven acquisition vehicles.[152] Through SUM Tier 2 and BIC solutions, EPA will leverage acquisition experts to optimize spending within the government-wide category management framework and increase the transactional data available for agency level analysis of buying behaviors. To modernize the acquisition process and remove barriers to entry for obtaining government contracts, EPA has developed two innovative tools available agencywide: the EPA Solution Finder, which provides solution and ordering information for all EPA enterprise-wide contract solutions; and the BIC Opportunity Tool,

[150] For additional information, please refer to: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/25/executive-order-on-ensuring-the-future-is-made-in-all-of-america-by-all-of-americas-workers/.
[151] For additional information, please refer to: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.
[152] For additional information, please refer to: https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2017/M-17-29.pdf *Best-in-Class Mandatory Solution -Package Delivery Services.*

which recommends BIC solutions to address newly identified agency requirements for commodities and services and those supported on expiring contracts.

- In FY 2022, EPA also will continue to maximize its Strategic Sourcing Program (SSP), thereby enhancing purchase coordination, improving price uniformity and knowledge-sharing, and leveraging small business capabilities to meet acquisition goals. The SSP allows the Agency to research, assess, and award contract vehicles that will maximize time and resource savings. The SSP serves as a foundation for effective financial and resource management because it simplifies the acquisition process and reduces costs. Long-term implementation of the SSP is transforming the Agency's acquisition process into a strategically driven function, ensuring maximum value for every acquisition dollar spent. In FY 2020, EPA realized $5.9 million cost avoidance by using data analysis tools to monitor specific, measurable data related to print services, cellular services, shipping, Microsoft software, voice services, office supplies, lab supplies, PCs, and furniture. Since the beginning of the Strategic Sourcing Program in FY 2013 through the second quarter of FY 2021, EPA has achieved cost avoidance of $26.2 million. In FY 2022, EPA anticipates approximately $4.3 million in additional savings.

In FY 2022, EPA will continue to evaluate options for replacing the EPA Acquisition System (EAS) with an approved government-wide Federal Shared Service Provider (FSSP) for a contract writing system, in line with government-wide mandates to increase the use of shared services.[153,154] The Agency is focusing on a modern acquisition solution that reduces costs while increasing efficiency by standardizing federal procurement planning, contract award, administration, and close-out processes. Transition preparations include data management strategies, business process reviews, and user engagement to develop a business case and ensure data elements conform with Federal Government Procurement standards. As part of this effort, in FY 2022, EPA will implement a new Government-wide Unique Entity Identifier for acquisition awards in line with General Services Administration (GSA) and OMB requirements. EPA also will continue implementing the Financial Information Technology Acquisition Reform Act (FITARA) by competing contracts with multiple vendors or confining the scope of the contract to a limited task, thereby avoiding vendor lock-in, and developing acquisition vehicles that support the Agency in FITARA compliance and implementation.

Performance Measure Targets:

(PM PR1) Percentage of contract actions processed within the Procurement Action Lead Time (PALT) Standards.	**FY 2021 Target**	**FY 2022 Target**
	95	97

[153] OMB-17-22 "Comprehensive Plan for Reforming the Federal Government, for more information, please visit: https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2017/M-17-22.pdf.
[154] OMB-19-16 "Centralized Mission Support Capabilities for the Federal Government, for more information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2019/04/M-19-16.pdf.

Work under this program supports performance results in the Central Planning, Budgeting and Finance Program under the EPM appropriation.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$361.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$1,513.0 / +10.0 FTE) This net program change will strengthen EPA's capacity to process new, increased, and existing award contract actions in a timely manner. It also will support the Agency's efforts to "Buy American". This investment includes $1,670.0 thousand in payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$70,751.8***	***$76,718.0***	***$81,563.0***	***$4,845.0***
Leaking Underground Storage Tanks	$354.8	$416.0	$434.0	$18.0
Hazardous Waste Electronic Manifest System Fund	$114.5	$0.0	$0.0	$0.0
Hazardous Substance Superfund	$24,772.5	$26,561.0	$27,720.0	$1,159.0
Total Budget Authority	$95,993.6	$103,695.0	$109,717.0	$6,022.0
Total Workyears	422.0	462.0	465.0	3.0

Total workyears in FY 2022 include 2.0 FTE funded by TSCA fees and 1.0 FTE funded by e-Manifest fees.
Total workyears in FY 2022 include 39.0 FTE to support Central Planning, Budgeting, and Finance working capital fund (WCF) services.

Program Project Description:

Activities under the Central Planning, Budgeting, and Finance Program support the management of integrated planning, budgeting, financial management, performance and accountability processes, risk assessments and reporting, and financial systems to ensure effective stewardship of resources. This includes managing and supporting the Agency's financial management systems. Functions include financial payment and support services for EPA; general and specialized fiscal and accounting services for many of EPA's programs; strategic planning and accountability for environmental, fiscal, and managerial results; executing an Enterprise Risk Management program to support effective and efficient mission delivery and decision-making; providing policy, systems, training, reports, and oversight essential for EPA's financial operations; managing the agencywide Working Capital Fund (WCF); and managing the Agency's annual budget process. This program supports agency activities to meet requirements of the Government Performance and Results Modernization Act (GPRMA) of 2010;[155] the Digital Accountability and Transparency (DATA) Act of 2014;[156] the Federal Information Technology Acquisition Reform Act (FITARA) of 2015;[157] the Federal Management Financial Integrity Act (FMFIA);[158] the Inspector General Act of 1978, as Amended;[159] and the Foundations for Evidence-Based Policymaking Act of 2018.[160]

FY 2022 Activities and Performance Plan:

EPA will continue to provide resource stewardship to ensure that all agency programs operate with fiscal responsibility and management integrity, financial services are efficiently and consistently delivered nationwide, and programs demonstrate results. EPA will maintain key planning,

[155] For more information, please see: https://www.congress.gov/111/plaws/publ352/PLAW-111publ352.pdf.
[156] For more information, please see: https://www.congress.gov/113/plaws/publ101/PLAW-113publ101.pdf.
[157] FITARA became law as a part of the National Defense Authorization Act for Fiscal Year 2015 (Title VIII, Subtitle D), https://www.congress.gov/113/plaws/publ291/PLAW-113publ291.pdf.
[158] For more information, please see: https://www.govinfo.gov/content/pkg/STATUTE-96/pdf/STATUTE-96-Pg814.pdf.
[159] For more information, please see: https://www.govinfo.gov/content/pkg/STATUTE-92/pdf/STATUTE-92-Pg1101.pdf.
[160] For more information, please see: https://www.congress.gov/115/plaws/publ435/PLAW-115publ435.pdf.

budgeting, performance measurement, and financial management activities. EPA will ensure secure and efficient operations and maintenance of core agency financial management systems: Compass, PeoplePlus (Time and Attendance), Budget Formulation System which includes a Performance Module, and related financial reporting systems. The Agency is modernizing its financial systems to gain greater efficiencies through leveraging the accounting system and eliminating legacy systems, as well as providing accessible tools to manage resources and track performance. For example, the Agency has implemented the credit management module in the financial management system to improve and standardize Water Infrastructure Finance and Innovation Act accounting and is working to improve accounting for e-Manifest through closer integration. Dashboards are now in place to support payroll and FTE management, and to support GPRMA performance planning and systematic tracking of progress.

EPA will standardize and streamline internal business processes, reduce the number of administrative systems, and adopt federal shared services when supported by business case analysis. For example, EPA has implemented Treasury's Invoice Payment Processing System (IPP) for reviewing invoices and paying commercial vendors. As of April 2021, more than 80 percent of contract invoices are being handled through this service. When fully implemented in FY 2022, the full range of payment types will be processed in the system, greatly reducing manual effort, and allowing the elimination of two legacy administrative systems.

Also, during FY 2022, EPA will focus on implementation of G-Invoicing, Treasury's Interagency Agreement system. G-Invoicing will integrate into the Agency's accounting system as part of a government-wide effort to standardize and improve financial management of interagency agreements. The goal of G-Invoicing is to align EPA's business processes to deliver the new, more streamlined approach for the end-to-end delivery of financial transactions for interagency agreements. This will involve implementing a new version of EPA's accounting systems software in FY 2022. Extensive testing and training will be needed.

Over the next several years, other federal shared services that will impact financial transactions are likely to be offered. EPA will further standardize processes to prepare for adoption of a potential new federal contracts writing system and new federal payroll or time and attendance systems. Equally important is the ability to adapt systems to meet increased transparency needs, such as those prescribed in the DATA Act, as well as compliance with government-wide data elements such as the unique entity identifier (UEI). In FY 2020, the Coronavirus Aid, Relief, and Economic Security Act[161] increased DATA Act reporting to monthly, and in FY 2022, submissions will include a monthly certification requirement.

In FY 2022, EPA will continue to advance the goals of the Foundations for Evidence-Based Policymaking Act of 2018, using a distributed model. The Agency's Evaluation Officer in OCFO will collaborate with the Agency's Statistical Official and Chief Data Officer to strengthen EPA's capacity to assess and make strategic investments in data, data quality, evaluation, and other evidence-building activities at an enterprise level, as well as in targeted programs throughout the Agency. Key responsibilities include developing the Agency's learning agenda and evaluation plans that enhance strategic and annual planning. The Evaluation Officer will support agency program evaluations and other evidence-building activities. EPA will systematically identify the

[161] For more information, please see: https://www.congress.gov/116/plaws/publ136/PLAW-116publ136.pdf.

most important evidence the Agency needs to gather and generate to advance its goals and ensure use of high-quality data, evaluation results, and other information to inform EPA's policy and decision-making.

In FY 2022, the Program will continue to focus on core responsibilities in the areas of strategic planning; performance measurement, assessment, and reporting; enterprise risk management; budget preparation; financial reporting; and transaction processing. As the Agency lead in designing and implementing performance measurement and risk management strategies that inform agency decision-making and advance mission results, the Program will focus on driving progress toward the Administrator's priorities by regularly assessing performance results against ambitious targets, monitoring and mitigating risks, and adjusting strategies as needed. This includes convening regular Performance Reviews to assess progress; promoting an increased use of data analytics and evidence-based decision-making practices; working collaboratively with agency programs to assess and analyze performance and risk data; and providing technical assistance on agencywide measures of governance to enhance data quality. EPA also will continue to use the performance data and other evidence to answer fundamental business questions and identify opportunities for service improvements.

During FY 2022, EPA will continue to use Lean and visual management principles, practices, and tools, to promote continuous improvement. Paired with routine monitoring, measurement, and engagement, these practices support EPA employees in identifying and solving problems and sustaining improvement. As of March 2021, EPA has deployed the Lean management system to 11,666 EPA staff and implemented 758 process improvements, well exceeding its target. A process is considered improved when it achieves a 25 percent improvement over the baseline. For example, EPA improved the Superfund Cost Recovery process by decreasing the number of days to complete a cost recovery request from thirty days to five days, an 83 percent improvement.

The Agency expects to achieve 500 additional process improvements in FY 2021 and 540 more in FY 2022. EPA also expects to support interested states and tribes in adopting its Lean management system to improve processes related to authorized or delegated federal programs, such as permits. To date, environmental quality departments in Maryland, Connecticut, New Hampshire, Texas, and Oklahoma have adopted and deployed EPA's Lean management system, and D.C. is in the process of adopting and deploying.

The Program will continue to ensure the Agency accurately implements OMB Circular A-123 guidance, conducts internal control program reviews, and uses the results and recommendations from the Office of Inspector General to provide evidence of the soundness of EPA's financial management program and identify areas for further improvement. The Program will collect key operational statistics for its financial management program to further evaluate its operations and for management decision-making. For example, in FY 2019, EPA observed a trend that agency corrective actions were increasingly being implemented beyond the agreed upon resolution date reaching a peak in FY 2020 of 31 outstanding late corrective actions. Through a process of meeting regularly with offices and establishing timelines to effectively closeout corrective actions, by the middle of FY 2021, EPA was able to cut the number of late corrective actions in half. In addition, EPA is dedicated to reducing fraud, waste, and abuse, and strengthening internal controls over improper payments. Since the implementation of the Improper Payments Information Act of

2002,[162] EPA has continually reviewed, sampled, and monitored its payments to protect against erroneous payments and complied with reporting requirements, with very low rates of erroneous payments (below the 1.5 percent threshold for each payment stream), well below government averages.

The Program will continue to support FITARA requirements in accordance with EPA's Implementation Plan.[163] The Chief Information Officer will continue to be engaged throughout the budget planning process to ensure that information technology (IT) needs are properly planned and resourced in accordance with FITARA. In addition, the Program will support work to implement the OMB-mandated framework under Technology Business Management (TBM) to create transparency under IT resource management and facilitate data-driven decision-making and communication between IT and finance. In addition, the Program is in the early stages of planning a modest reorganization to incorporate updated activities and workflows.

Performance Measure Targets:

(PM CF1) Number of administrative shared services.	FY 2021 Target	FY 2022 Target
	9	10

(PM CF2) Number of Agency administrative subsystems.	FY 2021 Target	FY 2022 Target
	19	17

(PM OP1) Number of operational processes improved.	FY 2021 Target	FY 2022 Target
	500	540

FY 2022 Change from the FY 2021 Enacted Budget (Dollars in Thousands):

- (+$4,336.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$509.0 / +3.0 FTE) This program change supports implementation of the Foundations for Evidence-Based Policymaking Act of 2018 in the regional offices and includes associated payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified as Title 5 App.) (EPA's organic statute).

[162] For more information, please see: https://www.govinfo.gov/content/pkg/PLAW-107publ300/pdf/PLAW-107publ300.pdf.
[163] For more information, please see: http://www.epa.gov/open/fitara-implementation-plan-and-chief-information-officer-assignment-plan.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$285,437.3***	***$285,441.0***	***$297,748.0***	***$12,307.0***
Science & Technology	$68,812.7	$67,500.0	$68,533.0	$1,033.0
Building and Facilities	$32,216.3	$27,076.0	$56,076.0	$29,000.0
Leaking Underground Storage Tanks	$1,066.0	$836.0	$837.0	$1.0
Inland Oil Spill Programs	$640.2	$682.0	$683.0	$1.0
Hazardous Substance Superfund	$82,734.0	$68,727.0	$72,801.0	$4,074.0
Total Budget Authority	$470,906.5	$450,262.0	$496,678.0	$46,416.0
Total Workyears	305.2	315.4	315.4	0.0

Total workyears in FY 2022 include 5.4 FTE to support Facilities Infrastructure and Operations working capital fund (WCF) services.

Program Project Description:

Environmental Programs and Management (EPM) resources in the Facilities Infrastructure and Operations Program fund the Agency's rent, utilities, and security. The Program also supports centralized administrative activities and support services, including health and safety, environmental compliance and management, facilities maintenance and operations, space planning, sustainable facilities and energy conservation planning and support, property management, mail, and transportation services. Funding for such services is allocated among the major appropriations for the Agency.

In response to the COVID-19 pandemic, EPA will continue ensuring the safety of EPA facilities and personnel by following the EPA Workplace Safety Plan in accordance with CDC guidelines. This includes adherence to requirements for mask-wearing, occupancy limits, procuring disinfecting and cleaning supplies, hand sanitizer for use by facility personnel and EPA staff, promoting physical distancing through signage, and procuring safety shields for personnel with increased contact with other people (e.g., security guards, badging office personnel, and administrative staff).

This program also includes the Agency's Protection Services Detail (PSD) that provides physical protection for the Administrator through security for daily activities and events. The PSD coordinates all personnel and logistical requirements including scheduling, local support, travel arrangements, and the management of special equipment.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will continue to invest in the reconfiguration of EPA's workspaces, enabling the Agency to release office space and avoid long-term rent costs, consistent with HR 4465,[164] the *Federal Assets Sale and Transfer Act of 2016*. EPA is implementing a long-term space consolidation plan that will aim to reduce the number of occupied facilities, consolidate and optimize space within remaining facilities, and reduce square footage wherever practical. EPA also will continue to work to enhance its federal infrastructure and operations in a manner that increases efficiency.

EPA's long-term consolidation plan for FY 2018 – FY 2022 has the potential to provide a cumulative annual rent avoidance of approximately $28 million across all appropriations by releasing 850,641 square feet. This will help offset EPA's escalating rent and security costs. In FY 2020, EPA released 116,425 square feet of unused office and warehouse space and is planning to release an additional 26,017 square feet in FY 2021. Planned consolidations and space releases in FY 2022 will allow EPA to release an expected 467,345 square feet of space. For FY 2022, the Agency is requesting $166.94 million for rent, $8.67 million for utilities, and $25.66 million for security in the EPM appropriation. EPA uses a standard methodology to ensure that rent charging appropriately reflects planned and enacted resources at the appropriation level.

In support of Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*,[165] EPA will work to secure physical and operational resiliency for agency facilities. The Agency will continue to take aggressive action to reconfigure EPA's workplaces with the goal of reducing long-term rent costs while increasing EPA facility resiliency and sustainability to combat the effects of climate change and ensuring a space footprint that accommodates a growing workforce. Space reconfiguration enables EPA to reduce its footprint to create a more efficient, collaborative, and technologically sophisticated workplace. However, even if modifications are kept to a minimum, each move requires initial funding to achieve long-term cost avoidance and sustainability goals.

EPA will continue to manage lease agreements with the General Services Administration (GSA) and private landlords, and maintain EPA facilities, fleet, equipment, and fund costs associated with utilities and building security needs. In line with Executive Orders 14008[166] and 13990,[167] EPA will pursue aggressive energy, water, and building infrastructure requirements with emphasis on environmental programs (e.g., Environmental Management Systems, Environmental Compliance Programs, LEED Certification, alternative fuel use, fleet reductions, telematics, sustainability assessments). This investment will support EPA facilities infrastructure (e.g., architectural and design) and mechanical systems (e.g., electrical, water/steam, HVAC), which is necessary to meet federal sustainability goals. Additionally, in FY 2022, EPA will direct $1.4 million to the purchase of electric vehicles, or lease through GSA electric vehicles, and consider electric vehicles in all

[164] For additional information, please refer to: https://www.congress.gov/bill/114th-congress/house-bill/4465, *Federal Assets Sale and Transfer Act of 2016*.
[165] For additional information, please refer to: https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad.
[166] For additional information, please refer to: https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad.
[167] For additional information, please refer to: https://www.federalregister.gov/documents/2021/01/25/2021-01765/protecting-public-health-and-the-environment-and-restoring-science-to-tackle-the-climate-crisis.

future fleet procurements, where economically feasible. This allows EPA to prioritize energy efficiency and climate resilience in the rehabilitation of United States Government fleet vehicles and combat the climate crisis.

EPA also will meet regulatory Occupational Safety and Health Administration (OSHA) obligations and provide health and safety training to field staff (e.g., inspections, monitoring, On-Scene Coordinators), and track capital equipment of $25 thousand or more. In FY 2022, the Agency will continue to partner with GSA to utilize shared services solutions, *USAccess* and Enterprise Physical Access Control System (ePACS) programs. *USAccess* provides standardized HSPD-12 approved Personal Identity Verification (PIV) card enrollment and issuance and ePACS provides centralized access control of EPA space, including restricted and secure areas.

Performance Measure Targets:

(PM FA1) Reduction in EPA Space (sq. ft. owned and leased).	**FY 2021 Target**	**FY 2022 Target**
	26,017	467,345

Work under this program supports performance results in the Central Planning, Budgeting and Finance Program under the EPM appropriation.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$1,247.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$11,307.0) This net change to fixed and other costs is an increase due to the recalculation of rent, utilities, security, and transit subsidy.

- (-$247.0) This net program change is an increase of $6.4 million in support of EPA's growing workforce to ensure an optimal footprint and increase the sustainability and resiliency of EPA facilities. It also reflects an increase of $1.4 million for agency electric vehicle fleet purchases and leases with GSA's fleet and, if necessary, related charging infrastructure to support the Administration's goal of electrifying the federal motor vehicle fleet. These investments are offset by a decrease in resources for moves and space reconfiguration as EPA will have completed funding moves in Philadelphia and Annapolis.

Statutory Authority:

Federal Property and Administration Services Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$26,319.8***	***$25,430.0***	***$28,730.0***	***$3,300.0***
Hazardous Substance Superfund	$3,561.3	$3,210.0	$3,390.0	$180.0
Total Budget Authority	$29,881.1	$28,640.0	$32,120.0	$3,480.0
Total Workyears	135.8	139.5	159.5	20.0

Program Project Description:

Environmental Program and Management (EPM) resources in the Financial Assistance Grants and Interagency Agreement (IA) Management Program support the management of grants and IAs, and suspension and debarment activities. Grants and IAs comprise approximately 60 percent of EPA's annual appropriations. Resources in this program ensure that EPA's management of grants and IAs meet the highest fiduciary standards, produce measurable results for environmental programs and agency priorities, and that EPA's Suspension and Debarment Program effectively protects the government's business interests from fraud and mismanagement.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA requests an increase of 20 FTE and $3.3 million to strengthen and expand capacity for the Financial Assistance Grants and IA Management Program in the EPM Appropriation. EPA will work to ensure that its financial assistance activity supports Executive Order 13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*.[168] In FY 2022, the Agency will continue to implement activities to achieve efficiencies while enhancing quality and accountability to ensure that opportunities for competitive grants are made publicly available, so all eligible applicants have an opportunity to compete for them. EPA also will explore methods to use the grant competition and grant-making processes to promote the objectives of the Executive Order.

EPA also will continue investments in modernizing grant and IA information technology/information management (IT/IM) systems, support the improved capacity for oversight and tracking of new and increased grant investments, and ensure the timely processing of financial assistance agreements. EPA will manage its Next Generation Grants System (NGGS), which the Agency deployed in FY 2021, in conjunction with the retirement of an outdated legacy grants management system. NGGS has the capability to improve capacity and align with the requirements of the Grant Reporting Efficiency and Agreements Transparency (*GREAT*) Act, applicable Office of Management and Budget (OMB) Quality Service Management Offices (QSMO) standards, and the Federal Integrated Business Framework for grants (e.g., required

[168] For more information on the Executive Order, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.

standard data elements for grants reporting). In FY 2022, EPA will deliver a national solution for electronic grants record management that integrates with EPA's enterprise records management system and aligns with applicable QSMO standards, and will implement a new Government-wide Unique Entity Identifier system for grant awards to meet OMB requirements.

Further, EPA will continue to focus on reducing the administrative burden on EPA and grant applicants and recipients, and on improving grants management procedures. The Agency will continue implementation of the FY 2021-2025 Grants Management Plan, focusing on the award and effective management of assistance agreements, enhancing partnerships within the grants management community, and ensuring effective grant oversight and accountability. The Agency also will continue to explore opportunities to improve efficiencies within the grants management processes.

In FY 2022, EPA expects to complete activities to align its IA business processes to ensure compatibility with the government-wide mandate to adopt G-Invoicing, the federal shared service for intragovernmental transactions, by October 1, 2022, in line with Department of the Treasury requirements.

The Agency will continue to make use of discretionary debarments and suspensions as well as statutory disqualifications under the Clean Air Act and Clean Water Act to protect the integrity of federal programs. In FY 2022, EPA will continue to focus suspension and debarment resources on protecting the integrity of federal procurement and assistance programs. Congress and federal courts have long recognized federal agencies' inherent authority and obligation to exclude non-responsible parties from eligibility to receive government contracts and federal assistance awards (e.g., grants, cooperative agreements, loans, and loan guarantees). Several federal statutes, GAO reports, and OMB directives require that federal agencies administer effective suspension and debarment programs to protect the public interest.

Performance Measure Targets:

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$101.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$3,199.0 / +20.0 FTE) This net program change will improve capacity for oversight and tracking of new and increased grant investments and the timely processing of financial assistance agreements. This investment includes $3,312.0 thousand in payroll and also reflects a slight adjustment in non-payroll resources.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Federal Grant and Cooperative Agreement Act; Federal Acquisition Streamlining Act § 2455.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$47,042.8***	***$46,229.0***	***$53,254.0***	***$7,025.0***
Hazardous Substance Superfund	$6,094.4	$6,202.0	$6,842.0	$640.0
Total Budget Authority	$53,137.2	$52,431.0	$60,096.0	$7,665.0
Total Workyears	223.2	229.9	252.4	22.5

Total workyears in FY 2022 include 0.2 FTE to support Human Resources Management working capital fund (WCF) services.

Program Project Description:

Environmental Programs and Management (EPM) resources for the Human Resources (HR) Management Program support human capital management (HCM) activities throughout EPA. To help achieve its mission and maximize employee productivity and job satisfaction, EPA continually works to improve business processes for critical HCM functions including recruitment, hiring, employee development, performance management, leadership development, workforce planning, and labor union engagement. This includes personnel and payroll processing through the Human Resources Line of Business. EPM resources also support overall federal advisory committee management and Chief Human Capital Officer Council activities under applicable statutes and guidance, including the Agency's Human Capital Operating Plan.

In response to the COVID-19 pandemic, EPA has provided workplace flexibilities to employees with dependent care situations, including expanding work hours and schedule requirements. EPA seamlessly implemented a virtual onboarding process during the COVID-19 pandemic, hiring over 1,449 employees since the Agency began remote work status on March 24, 2020.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA requests an additional 21.7 FTE and $7.0 million to strengthen and expand capacity for the HR Management Program in the EPM Appropriation. Effective workforce management is critical to EPA's ability to accomplish its mission. EPA's efforts in HR functions are focused on strengthening the workforce, retaining critical expertise, and capturing institutional knowledge. EPA continues developing mechanisms to ensure employees have the right skills to successfully achieve the Agency's core mission today and in the future.

The Agency is actively involved with OPM's Chief Human Capital Officer Council and the President's Management Council Agenda to address the challenges of the 21st Century federal workforce. In line with Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad,*[169] EPA will identify the most critical need for climate literacy training for its workforce. These efforts will focus on integrating climate adaptation, risk disclosure, and other education

[169] For additional information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/, *Executive Order on Tackling the Climate Crisis at Home and Abroad.*

activities into the management of EPA's procurement, real property, public lands and waters, and financial programs.

In FY 2022, EPA will support evidence-building activities as part of its implementation of the Evidence Act and the activities will be designed to ensure that the workforce strategy is guided by data-driven decisions. This work includes revalidation of EPA's agency-specific Mission Critical Occupations (MCOs), enhancement of EPA's competency assessment tool, skills gap analysis among Agency-specific MCOs, and knowledge transfer strategies to support succession planning.

In FY 2022, EPA will continue to operate and maintain the Talent Enterprise Diagnostic (TED) tool to allow EPA to make data-driven, strategic workforce decisions. TED data will serve a crucial role in EPA's Workforce Planning and Succession Management activities by identifying potential competency gaps across the Agency and by increasing management's understanding of where needed skill sets reside within EPA. Additionally, EPA will continue to maintain and operate dashboards related to Mission Critical Occupations, Workforce Demographics, and Diversity. These dashboards provide data visualizations and easy-to-understand information about the current workforce, assisting EPA with succession planning by identifying workforce gaps due to anticipated retirements and attrition trends. Approximately 25 percent of EPA's workforce is retirement eligible and another 19 percent of the current workforce will become retirement eligible over the next five years.

EPA has increased efforts to improve Diversity and Inclusion, hosting virtual outreach events targeting diverse networks such as veterans, Historically Black Colleges and Universities (HBCUs), and Returned Peace Corps Volunteers. The Agency reviews applicant flow data analysis on diversity every 6 months. To recruit EPA's next generation of employees, EPA will continue outreach to new potential sources for future employees and use all available hiring authorities and recruitment incentives. In FY 2022, EPA will work with STEM-focused institutions to bring on college students to experience working at the Agency, the Society of Hispanic Professional Engineers for promoting a diverse workforce, and participate in the President Management Council's Interagency Rotational Program to create leadership development assignments for GS 13-15 level employees.

In FY 2022, the Agency will continue to build upon its performance, learning, and succession management activities. EPA will maintain and operate FedTalent, a one-stop-shop talent management system provided through the Department of Interior's Interior Business Center. FedTalent serves as a valuable tool to assist with developing, delivering, and tracking high-impact training. Additionally, EPA will maintain and operate USA Performance, provided through the U.S. Office of Personnel Management, enabling the Agency to automate the performance appraisal process throughout the entire performance rating cycle.

EPA also will work to support the efficient recruitment and onboarding of new employees to build the EPA workforce. EPA's Human Resources Shared Service Centers (HRSSC) leverage data analytics to improve performance across the Agency's Human Resources Management Program, reducing EPA's Time-to-Hire average from 95 days in FY 2018 to 83 days in FY 2020. In FY 2022, EPA will coordinate and deliver a comprehensive Human Resources Management Program,

including: outreach/recruitment; employee relations and advisory services; training and employee orientation; and management guidance on workforce planning and personnel policies.

The Agency continues to strengthen and improve its HR Accountability Program through internal assessments with OPM's HRStat framework. With a focus on efficient, effective, and accountable systems, EPA is meeting all regulatory requirements and looks for opportunities for continuous improvement. EPA also will maintain statutorily required services associated with the Employee Counseling Assistance Program, the Federal Worker's Compensation Program, the Drug-free Workplace Program, Unemployment Compensation, and Sign Language Interpreting and Captioning services.

The Agency will continue to implement Executive Order 14003, *Protecting the Federal Workforce*,[170] issued on January 22, 2021. EPA reviewed its unions' agreements to identify and eliminate provisions influenced by four revoked EOs and will increase the focus on pre-decisional involvement and interest-based bargaining (IBB). In FY 2022, EPA will continue working to reset and repair a damaged relationship and involve unions in a collaborative way, promoting the Agency's and the unions' shared goal of the positive and equitable treatment of newly empowered employees.

Finally, EPA's advisory committees, operating as catalysts for public participation in policy development, implementation, and decision making, have proven effective in building consensus among the Agency's diverse external partners and stakeholders. In line with President Biden's *Memorandum on Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking,*[171] EPA remains committed to ensuring that highly qualified external experts serve on agency committees and that those members and future nominees of EPA advisory committees reflect the diversity of America in terms of gender, race, ethnicity, geography, and other characteristics.

Performance Measure Targets:

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

FY 2022 Change from the FY 2021 Enacted Budget (Dollars in Thousands):

- (+$1,022.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (-$3,448.0) This net change to fixed and other costs is a decrease for sign language services and fees for the federal shared human resource systems and services provided by

[170] For additional information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/22/executive-order-protecting-the-federal-workforce/.
[171] For additional information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/memorandum-on-restoring-trust-in-government-through-scientific-integrity-and-evidence-based-policymaking/.

Department of Interior's Interior Business Center and is offset with an increase for workers compensation, childcare subsidy, and core HR management operations.

- (+$8,390.0 / +18.5 FTE) This program change strengthens agencywide capacity to quickly increase staff levels in key offices and programs (i.e., environmental justice, climate, infrastructure programs, etc.). This investment includes $3,082.0 thousand in payroll.

- (+$1,061.0 / +3.2 FTE) This program change is an increase in support of the Foundations for Evidence-Based Policymaking Act of 2018. Resources will be used for Learning Agenda's evidence-gathering activities. This investment includes $533.0 thousand in payroll.

Statutory Authority:

Title 5 of the U.S.C.; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Pesticides Licensing

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$1,887.3***	***$1,546.0***	***$1,546.0***	***$0.0***
Total Budget Authority	$1,887.3	$1,546.0	$1,546.0	$0.0
Total Workyears	7.2	4.6	4.6	0.0

Program Project Description:

The Science Policy and Biotechnology Program provides scientific and policy expertise, coordinates EPA's intra/interagency efforts, and facilitates information-sharing related to core science policy issues concerning pesticides and toxic chemicals. Many offices within EPA regularly address cutting-edge scientific issues including endocrine disruptors and biotechnology products. Coordination among affected EPA programs including Air, Pesticides, Toxic Substances, Water, Research and Development allows for coherent and consistent scientific policy from a broad agency perspective. In addition, the Science Policy and Biotechnology Program provides for independent, external scientific peer review, primarily through two federal advisory committees: the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Scientific Advisory Panel (FIFRA SAP), and the Toxic Substances Control Act (TSCA) Science Advisory Committee on Chemicals (TSCA SACC).

FY 2022 Activities and Performance Plan:

In FY 2022, the Science Policy and Biotechnology Program continues its peer review role, as needed, to evaluate the scientific and technical issues associated with chemical safety and biotechnology, including plant incorporated protectants (PIPs). In addition, other biotechnology issues will be supported by the Program when decisions require expert scientific advice from an independent scientific peer review panel.

FIFRA Scientific Advisory Panel

The FIFRA SAP, operating under the rules and regulations of the Federal Advisory Committee Act, will continue to serve as the primary external independent scientific peer review mechanism for EPA's pesticide programs. As the Nation's primary pesticide regulatory agency, EPA makes decisions that require EPA to review scientific data on pesticide risks to wildlife, farm workers, pesticide applicators, sensitive populations, and the general public. The scientific data involved in these decisions are complex, and a critical component of EPA's use of the best available science to address such issues is seeking technical advice and scientific peer review from the FIFRA SAP.

The FIFRA SAP conducts reviews each year on a variety of scientific topics. In FY 2020, EPA convened two FIFRA SAP scientific reviews. Specific topics to be placed on the SAP agenda are

usually confirmed in advance of each session and include difficult, new, or controversial scientific issues identified in the course of EPA's Pesticide program activities.

TSCA Science Advisory Committee on Chemicals

The TSCA SACC, operating under the rules and regulations of the Federal Advisory Committee Act, will continue to serve as the primary external independent scientific peer review mechanism for EPA's chemical programs. EPA makes decisions that require the Agency to review scientific data on risks that chemicals pose to a variety of populations including women, children, and other potentially exposed or susceptible subpopulations. The scientific data, assessments, methodologies, and measures involved in these decisions are complex. Many of EPA's tools and models for examining exposures to industrial chemicals rely on inputs that are sensitive to climate data. The SACC provides independent, expert scientific advice and recommendations to EPA on the scientific basis for risk assessments, methodologies, and pollution prevention measures and approaches for chemicals regulated under the TSCA and also is a critical component of EPA's best available science.

The TSCA SACC conducts reviews each year on a variety of scientific topics. In FY 2020, OCSPP convened six TSCA SACC scientific reviews. Similar to the FIFRA SAP, specific topics to be placed on the SACC agenda include difficult, new, or controversial scientific issues identified in the course of EPA's industrial chemicals program activities.

Planned Committee Meetings

As noted in the current committee charters,[172] the FIFRA SAP and TSCA SACC anticipate holding a total of nine to 11 meetings in FY 2022. These meetings will focus on the impact of pesticides and industrial chemicals on health and the environment and include the peer review of scientific data, methodologies, models, and assessments, as needed.

Performance Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$106.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (-$106.0) This change reflects the result of savings realized by the program's increased reliance on virtual meetings.

[172] For additional information, please visit: https://www.epa.gov/sap/fifra-scientific-advisory-panel-charter and https://www.epa.gov/tsca-peer-review/science-advisory-committee-chemicals-charter.

Statutory Authority:

Federal Insecticide Fungicide and Rodenticide Act (FIFRA); Federal Food, Drug and Cosmetics Act (FFDCA), §408; Toxic Substances Control Act (TSCA); Federal Advisory Committee Act (FACA).

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$60,580.8***	***$60,181.0***	***$60,929.0***	***$748.0***
Science & Technology	$3,109.5	$2,803.0	$2,840.0	$37.0
Total Budget Authority	$63,690.3	$62,984.0	$63,769.0	$785.0
Total Workyears	393.7	385.6	385.6	0.0

Total program work years in FY 2022 include 82.1 FTE funded by the Reregistration and Expedited Processing Revolving Fund.

Program Project Description:

Under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)[173] and the Federal Food, Drug, and Cosmetic Act (FFDCA), as amended by the Food Quality Protection Act of 1996 (FQPA), and the Pesticide Registration Improvement Extension Act of 2018 (PRIA),[174] EPA is charged with protecting people from the health risks that pesticide use can pose. FIFRA requires EPA to register pesticide products before they are marketed for use in the U.S. Registration is based on the review of scientific data sufficient to demonstrate that the product can perform its intended function without unreasonable adverse effects on people or the environment. This program emphasizes the use of reduced risk methods of pest control, including the use of reduced risk pesticides and helping growers and other pesticide users learn about new, safer products and methods of using pesticides.

Under FFDCA, if a pesticide is to be used in a manner that may result in pesticide residues in food or animal feed, EPA must establish a tolerance, or maximum legal residue level or exemption from the requirement of a tolerance, before it can be registered. To establish a tolerance, EPA must find that the residues are "safe," which, under FFDCA, means that there is a reasonable certainty of no harm to human health from aggregate exposure to the pesticide residue in food and from all other exposure except occupational exposure.[175] EPA must periodically review the registration and tolerances that the Agency issues to ensure that the public health is adequately protected.

[173] For additional information on FIFRA, please visit: https://www.epa.gov/laws-regulations/summary-federal-insecticide-fungicide-and-rodenticide-act.

[174] On Friday, March 8, 2019, Pesticide Registration Improvement Extension Act of 2018 (PRIA 4) was signed into law, which reauthorizes PRIA for 5 years through fiscal year 2023, and updates the fee collection provisions of the Federal Insecticide, Fungicide, and Rodenticide Act.

[175] Additional information related to pesticide registration, the setting of tolerance levels, and the pesticide risk assessment process can be found at the following location: https://www.epa.gov/pesticide-tolerances/setting-tolerances-pesticide-residues-foods.

FY 2022 Activities and Performance Plan:

Pesticide Review and Registration

In FY 2022, EPA will continue to review and register new pesticides, new uses for existing pesticides, and other registration requests in accordance with statutory requirements. In addition, the Agency will be evaluating pesticides that are already in the market against current scientific standards for human health. To further advance EPA's work supporting environmental justice and children's health, EPA also will process these registration requests with special consideration for susceptible populations, especially children. Under the FQPA, EPA is statutorily required to ensure that its regulatory decisions are protective of children's health and other vulnerable subpopulations. EPA also will continue to emphasize the registration of reduced risk pesticides, including biopesticides, to provide farmers and other pesticide users with new, safer alternatives. The Agency, in collaboration with the U.S. Department of Agriculture (USDA), also will work to ensure that minor use registrations receive appropriate support and that needs are met for reduced risk pesticides for minor use crops. EPA also will assist farmers and other pesticide users in learning about new, safer products and methods of using existing products through workshops, demonstrations, small grants, and materials available on the website and in print.

In FY 2022, EPA also will continue to review the registrations of existing pesticides with a focus on assessing and ensuring that pesticides can continue to be used safely, without unreasonable adverse effects to human health and the environment. The goal of the registration review process, as mandated by statute, is to review pesticide registrations every 15 years to determine whether it continues to meet the FIFRA standard for registration.[176] For pesticides registered before October 1, 2007, EPA has a statutory mandate to make registration review decisions by October 1, 2022. The original total of such cases was 725, which EPA has completed opening dockets for all. In March 2020, an additional case was identified bringing the total case count to 726. For each case, the steps in this process include, in this order: opening dockets, developing work plans, completing risk assessments, and making decisions regarding any risk management measures. EPA is focusing its resources on completing risk assessments and making decisions to meet the FY 2022 statutory deadline. A cumulative total of 646 draft risk assessments and 481 final or interim decisions were completed through FY 2020, which results in 80 draft risk assessments and 245 final or interim decisions remaining to be completed to meet the FY 2022 statutory deadline.

EPA fell short of the FY 2020 target of 110 decisions completed through pesticides registration review, completing 98 decisions for the fiscal year. The target was missed in part due to requests from stakeholders to extend the comment period for proposed decisions in previous quarters and because EPA was awaiting data and/or registrant input before finalizing the registration review decision. In addition, there was a year-long lapse in the Information Collection Request (ICR) needed to issue Data Call Ins (DCIs), which further delayed submittal of data necessary to complete draft risk assessments. Further ongoing challenges to meet the October 2022 deadline include registrant submittal of additional data after EPA's draft risk assessments have been completed, coordination across EPA programs on high profile cases (i.e., ethylene oxide, formaldehyde), and resource limitations in prior fiscal years. For example, over 100 staff from

[176] *See*, the EPA Pesticide Registration Internet site, found at: https://www.epa.gov/pesticide-registration.

across the program were diverted to provide varying levels of support to EPA's COVID-19 response efforts.

In FY 2022, EPA will continue enhancements to the Pesticide Registration Information System (PRISM). Expanding the capabilities of PRISM via further inclusion of electronic processes will reduce paperwork burden and maximize efficiency, in accordance with the President's Management Agenda (PMA), by converting paper-based processes into electronic processes and corresponding workflows for the Pesticide Program's regulated entities. In addition, PRISM will create an iterative/inclusive, streamlined electronic workflow to support pesticide product registration, chemical reviews, and assessments, and will be used as a centralized data repository to electronically store associated data as they relate to regulatory decisions and scientific information. Overall, the Agency projects that by expanding PRISM and related projects, over 150 existing business process workflows supporting the implementation of PRIA will be improved.

Reducing Pesticide Risks to People through the Registration of Lower Risk Pesticides

In FY 2022, EPA will continue to promote reduced-risk pesticides by giving registration priority to pesticides that have lower toxicity to humans and non-target organisms such as birds, fish, and plants; low potential for contaminating groundwater; lower use rates; low pest resistance potential; and compatibility with Integrated Pest Management (IPM).[177] Several other countries and international organizations also have instituted programs to facilitate registering reduced-risk pesticides. EPA works with the international scientific community and the Organization for Economic Cooperation and Development (OECD) member countries to register new reduced-risk pesticides and to establish related tolerances (maximum residue limits). Through these efforts in FY 2022, EPA will help reduce risks to Americans from foods imported from other countries.

Protecting Workers from On-the-Job Pesticide Risks

Millions of America's workers are exposed to pesticides in occupations such as agriculture, lawn care, food preparation, and landscape maintenance. Protecting pesticide handlers and agricultural workers from potential effects of pesticides is an important role of the Pesticide Program. Pesticide handlers in a number of sectors may be exposed to pesticides when they prepare pesticides for use, such as by mixing a concentrate with water, or loading and applying the pesticide.

The Agricultural Worker Protection Standard (WPS)[178] and the Certification of Pesticide Applicators (CPA) revised rules (finalized in FY 2015 and FY 2017, respectively) are key elements of EPA's strategy for reducing occupational exposure to pesticides. In FY 2022, EPA will continue to support the implementation of the regulations through education and outreach, guidance development, and grant programs. Efforts to implement the WPS include addressing environmental justice issues in rural communities and especially consider farmworkers and their families. Programs include National Farmworker Pesticide Safety Training and development of pesticide educational resources and training targeted toward agricultural workers and pesticide

[177] *See*, the EPA Overview of Risk Assessment in the Pesticide Program Internet site, found at: https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/overview-risk-assessment-pesticide-program. *See also*, EPA's IPM website, found at: https://www.epa.gov/safepestcontrol/integrated-pest-management-ipm-principles#for_more-information.

[178] For additional information, please visit: https://www.epa.gov/pesticide-worker-safety/agricultural-worker-protection-standard-wps.

handlers. Through this worker protection program, EPA also will continue outreach and training to healthcare providers in the recognition and management of pesticide-related illnesses. Outreach will focus on training health care providers serving the migrant and seasonal farmworker community, further improving the treatment of agricultural workers and rural communities potentially exposed to pesticides.

Implementation of the CPA includes continued support of state Pesticide Safety Education Programs, which play a crucial role in training and certifying pesticide handlers in proper pesticide use, protecting themselves and other workers, as well as the public and the environment. In addition, EPA will support the development of resources, training, and educational forums for applicators, including the development of a virtual pesticide training for certification of private applicators in Indian Country covered under the EPA-administered plan to meet the requirements of using restricted use pesticides in agriculture.

Preventing Disease through Public Health Pesticides: Antimicrobial Testing

Antimicrobial pesticides play an important role in public health and safety by killing germs, bacteria, viruses, fungi, protozoa, algae, and slime. Some of these products are used to sterilize hard surfaces in hospitals. Chemical disinfection of hard, non-porous surfaces, such as floors, bed rails, and tables is one component of the infection control systems in hospitals, food processing operations, and other places where disease-causing microorganisms, such as bacteria and viruses, may be present. In reviewing registrations for antimicrobials, EPA is required to ensure that antimicrobials maintain their effectiveness.[179]

EPA's Antimicrobial Testing Program (ATP) has been testing hospital sterilants, disinfectants, and tuberculocides since 1991 to help ensure that products in the marketplace meet stringent efficacy standards. EPA is currently in the process of developing a new risk-based testing strategy in response to EPA Office of the Inspector General recommendations made in FY 2016.[180] Consistent with OIG recommendations, EPA suspended the ATP in November 2017 and released a draft risk-based strategy, renamed the Antimicrobial Performance Evaluation Program (APEP), in October 2019 for public comment and will continue to seek public input prior to implementation in FY 2022.

COVID Response

In FY 2020, EPA activated its Emerging Viral Pathogens Guidance for Antimicrobial Pesticides. EPA initiated and implemented an expedited process to review and approve registrant submissions for disinfectant products that are effective against the SARS-CoV-2 virus, the cause of COVID-19, including the development, implementation, and ongoing weekly maintenance of EPA's List N: Disinfectants for Use Against SARS-CoV-2. As of May 2021, List N reached 549 EPA-registered disinfectant products that are effective for use against the SARS-CoV-2 virus, a 600 percent increase from 90 products in March 2020. EPA also launched a web-based app to help consumers rapidly identify disinfectant products best suited for use against COVID-19.

[179] *See*, FIFRA section 3(h)(3), 7 U.S.C. 136a(h)(3).
[180] For additional information, please visit: https://www.epa.gov/pesticide-registration/antimicrobial-testing-program.

In response to supply chain disruptions by pesticide registrants who manufacture disinfectant products on List N, EPA developed and issued three separate times, over the course of 6 weeks, limited temporary amendments to Pesticide Registration Notice (PRN) 98-10 which is a PRN describing the type of changes that may be made to existing pesticide registrations by notification, non-notification, and minor formulation amendments. These temporary amendments helped to ensure that disinfectant products remain available as the country responds to the COVID-19 public health emergency. EPA also developed and posted guidance for registrants for expedited review of requests to add electrostatic spray directions to currently registered products and new products that would qualify for EPA's Disinfectant List N for use against SARS-CoV-2.

In FY 2021, EPA released draft guidance for companies seeking to demonstrate that their products have "long lasting" or "residual" effectiveness on surfaces against SARS-CoV-2. EPA released an updated draft testing protocol for evaluating a copper surface's ability to kill bacteria and a draft protocol for evaluating the residual efficacy of antimicrobial surface coatings for public comment. EPA also announced registration of the first product, Group 1 copper alloys, with residual claims against viruses like SARS-CoV-2 for use nationwide.

Noting information from the Centers for Disease Control and Prevention (CDC) that the risk of being infected with COVID-19 by touching contaminated surfaces is considered low, EPA announced in April 2021 that it will no longer prioritize Public Health Emergency requests for new products that address surface transmission of SARS-CoV-2. In light of the hundreds of EPA-registered products available on List N, EPA will no longer expedite new product registrations, emerging viral pathogen claims, SARS-CoV-2 claims, and electrostatic spraying directions for products intended to kill SARS-CoV-2 on surfaces. EPA will continue to review registration requests for new surface disinfectants for SARS-CoV-2 via the standard registration process and associated deadlines required by FIFRA and update List N.

In addition, EPA addressed impacts from the public health emergency to the worker protection and certification programs. In FY 2020, EPA issued guidance to inform agricultural and handler employers of flexibilities available under the Agricultural Worker Protection Standard (WPS) to allow continued protection for employees and agricultural production. EPA issued temporary guidance that outlines approaches to address the limited availability of required respiratory protection and respiratory fit testing for agricultural pesticide handlers, in response to supply chain challenges and service disruptions as a result of the public health emergency. In FY 2021, the need for temporary guidance is being gauged in order to make edits or to extend or terminate the options on an as-needed basis; monitoring the continued need of the temporary guidance will continue through FY 2022. Also, some state, tribal, and federal certifying authorities needed to make temporary changes to their existing pesticide applicator certification programs in response to the COVID-19 public health emergency. As a result, EPA issued temporary guidance to provide flexibilities through FY 2022 that meet both the needs of applicators and the requirements of the Certification of Pesticide Applicators rule.

Outreach and Education

It is essential for people using pesticides to be well informed and to understand the importance of reading and following label directions and proper disposal. They also need to understand how to

protect themselves from pests that can transmit disease. In FY 2022, the Pesticide Program also will continue environmental education and training efforts for growers, pesticide applicators, and workers, as well as the public in general. Giving priority to reduced risk and Integrated Pest Management- (IPM-) friendly pesticides are two steps toward protecting human health. Also, the Pesticide Safety Education Programs support provides education through training and is key component to the implementation of applicator certification programs across the Nation and helps ensure pesticides are used in a manner to protect human health and the environment. In addition, EPA will continue to make information to the public and pesticide users easily accessible, up-to-date safety information on pesticides, support the National Pesticide Information Center that provides a bilingual hotline for pesticide information, and develop outreach materials for the public and incident reporting, including reports on incidents in youth.

Reducing Animal Testing

In FY 2022, the Agency will continue to utilize its guiding principles on data needs[181] to ensure that the Agency has enough information to support strong regulatory decisions to protect human health, while reducing, and eliminating in some cases, unnecessary animal testing. EPA's Hazard and Science Policy Council (HASPOC) plays an important role in the implementation of the vision of the 2007 National Academy of Sciences (NAS) report on toxicity testing in the 21st Century – moving toward smarter testing strategies by waiving human health toxicity studies that do not provide useful information. Since its inception, HASPOC has waived hundreds of studies resulting in the saving of tens of thousands of animals and tens of millions of dollars in the cost of conducting the studies. In addition, the Agency has continued to develop and implement 21st Century toxicology and exposure methods, including additional retrospective analyses of the utility of various toxicity studies and the use of computer-modeling and in vitro testing techniques, to advance more efficient and effective human health risk assessments that support sound, risk-based, regulatory decision-making.

Evidence and Evaluation

EPA will continue to improve the review process for pesticide new active ingredient applications by reducing the timeframes to review these types of applications. In FY 2022, EPA also will gather additional evidence, building on continuous efforts to map the process, use data visualization techniques, engage in enhanced collaboration activities, and identify and address bottlenecks. The Agency expects to reduce decision timeframes for new active ingredient applications, improve on-time percentages, and leverage those improvements for other related processes (e.g., new uses).

In FY 2020, EPA completed reviews of 2,385 PRIA registration actions, with 98.1 percent of those actions being completed on or before PRIA negotiated due dates; registered 16 new pesticide active ingredients; published 100 pesticide draft risk assessments and 98 final/interim decisions for existing pesticides. The average PRIA new active ingredients decision timeframe turnaround for FY 2020 was 876 days, which fell short of the FY 2020 target of 619 days. The average number of days exceeding the PRIA decision timeframes result through June 2020 was 353 days. EPA experienced delays due to an adjustment to science review committee schedules in FY 2019,

[181] Additional information on reducing animal testing may be found at: https://www.epa.gov/pesticides/new-epa-guidance-testing-pesticides-will-reduce-animal-testing.

deficient applications, and the need for additional information to make regulatory determination (mitigation required).

Performance Measure Targets:

Work under this program supports performance results in the Pesticides: Protect the Environment from Pesticide Risk Program under the EPM appropriation.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$611.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$137.0) This program change reflects a rebalancing of resources among the Pesticides programs to increase outreach to EJ communities.

Statutory Authority:

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Federal Food, Drug, and Cosmetic Act (FFDCA) § 408.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$37,650.6***	***$39,543.0***	***$39,952.0***	***$409.0***
Science & Technology	$1,757.7	$2,207.0	$2,230.0	$23.0
Total Budget Authority	$39,408.3	$41,750.0	$42,182.0	$432.0
Total Workyears	297.8	249.6	249.6	0.0

Total program work years in FY 2022 include 53.2 FTE funded by the Reregistration and Expedited Processing Revolving Fund.

Program Project Description:

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) requires EPA to register a pesticide if, among other things, the product "will also not generally cause unreasonable adverse effects on the environment" when used in accordance with labeling and common practices. The goal of this program is to protect the environment from the potential risks posed by pesticide use. EPA must conduct risk assessments before the initial registration of each pesticide for each use, as well as re-evaluate each pesticide at least every 15 years, as required by the Food Quality Protection Act (FQPA). This periodic review is accomplished through EPA's Pesticide Registration Review Program.

In addition to FIFRA responsibilities, the Agency has distinct obligations under the Endangered Species Act (ESA).[182] These obligations include ensuring that pesticide regulatory decisions also will not destroy or adversely modify designated critical habitat or jeopardize the continued existence of species listed as threatened or endangered by the U.S. Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (NMFS) (jointly, "the Services").

FY 2022 Activities and Performance Plan:

Assessing the Risks Pesticides Pose to the Environment

To accomplish the goals set out in the FIFRA and ESA statutes, in FY 2022, EPA will continue to conduct ecological risk assessments[183] to determine what risks are posed by each pesticide to plants, animals, and ecosystems that are not the targets of the pesticide and whether changes are necessary to protect the environment. EPA has extensive statutory authority to require the submission of data to support its scientific decisions and uses the latest scientific methods to conduct these ecological risk assessments. The Agency requires applicants for pesticide registration to conduct and submit a wide range of environmental laboratory and field studies. These studies examine the ecological effects or toxicity of a pesticide and its breakdown products on various terrestrial and aquatic animals and plants, and the chemical fate and transport of the

[182] For additional information, please visit: https://www.epa.gov/endangered-species.
[183] For additional information, please visit: https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/factsheet-ecological-risk-assessment-pesticides.

pesticide (how it behaves and where it enters the soil, air, and water). EPA uses these and other data to prepare an environmental fate assessment and a hazard, or ecological effects, assessment that interprets the relevant toxicity information for the pesticide and its degradation products.[184]

In FY 2022, EPA also will continue to examine all toxicity and environmental fate data submitted with each new pesticide registration application to determine what risks the new active ingredient may pose to the environment. When complex scientific issues arise, the Agency consults the FIFRA Scientific Advisory Panel[185] for independent scientific advice.

Risk Mitigation

To ensure unreasonable risks are avoided, EPA may impose risk mitigation measures such as modifying use rates or application methods, restricting uses, or denying uses. In some regulatory decisions, EPA may determine that uncertainties in the risk determination need to be reduced and may subsequently require monitoring of environmental conditions, such as effects on water sources, or the development and submission of additional laboratory or field study data by the pesticide registrant.

Ensuring Proper Pesticide Use through Labeling

Under FIFRA, it is illegal to use a registered pesticide in a manner inconsistent with the label instructions and precautions. In FY 2022, EPA will continue to use pesticide labels to indicate what uses are appropriate and to ensure that the pesticide is used at the application rates and according to the methods and timing approved. When EPA registers a pesticide product, it requires specific labeling instructions and precautions. When risks are identified during the initial registration or during registration review, the Agency may mitigate those risks by requiring label changes. For example, EPA may require buffer zones around water sources to prevent contamination of water or endangering aquatic plants and wildlife. Other examples are changing the application method, or rate or timing of applications to when pollinators are not present to prevent risks to pollinators such as bees.

Pesticide Registration Review

In FY 2022, EPA's activities will involve increased efforts on comprehensive risk assessments to protect the environment. For pesticides registered before October 1, 2007, EPA has a statutory mandate to make registration review decisions by October 1, 2022. The original total of such cases was 725, which EPA has completed opening dockets for all. In March 2020, an additional case was identified bringing the total case countto 726. For each case, the steps in this process include, in this order: opening dockets, developing work plans, completing risk assessments, and making decisions regarding any risk management measures. EPA is focusing its resources on completing risk assessments and making decisions to meet the FY 2022 statutory deadline. A cumulative total of 646 draft risk assessments and 481 final or interim decisions were completed through FY 2020,

[184] Additional information may be found at: https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/overview-risk-assessment-pesticide-program.
[185] For additional information, please visit: http://www.epa.gov/scipoly/sap.

which results in 80 draft risk assessments and 245 final or interim decisions remaining to be completed to meet the FY 2022 statutory deadline.

EPA fell short of the FY 2020 target of 110 decisions completed through pesticides registration review, completing 98 decisions for the fiscal year. The target was missed in part due to requests from stakeholders to extend the comment period for proposed decisions in previous quarters and because EPA was awaiting data and/or registrant input before finalizing the registration review decision. In addition, there was a year-long lapse in the Information Collection Request (ICR) needed to issue Data Call Ins (DCIs), which further delayed submittal of data necessary to complete draft risk assessments. Further ongoing challenges to meet October 2022 deadline include registrant submittal of additional data after EPA's draft risk assessments have been completed, coordination across EPA programs on high profile cases (i.e., ethylene oxide, formaldehyde), and resource limitations in prior fiscal years. For example, over 100 staff from across the program were diverted to support EPA's COVID-19 response efforts.

Pesticide Registration and Reducing Risk Through the Use of Safer Pesticides and Methods

The review of pesticides currently in the marketplace and implementation of decisions made as a result of these reviews are a necessary element of meeting EPA's goals. However, attaining risk reduction would be significantly hampered without availability of alternative products to these pesticides for consumers.[186] Consequently, the success of the Registration Program in ensuring the availability of reduced risk pesticides plays a significant role in meeting the environmental outcome of improved ecosystem protection. EPA has promoted reduced risk pesticides since 1993 by giving registration priority to pesticides that have lower toxicity to people and non-target organisms such as birds, fish, and plants; low potential for contaminating groundwater; lower use rates; low pest resistance potential; and compatibility with Integrated Pest Management (IPM).[187] Biological pesticides and biotechnology often represent lower risk solutions to pest problems. In FY 2022, EPA also will continue to assist pesticide users in learning about new, safer products as well as safer methods for using existing products. The Agency also will continue encouraging the use of IPM tools.

Reducing Animal Testing

In FY 2022, through stakeholder discussions and participation in intergovernmental working groups, the Agency will work to identify opportunities to reduce the use of animals in ecological hazard testing. EPA also will reach out to non-governmental organizations to collaborate on projects (e.g., to retrospectively analyze the results of ecological hazard testing). Based on the results of those projects, EPA will then develop and disseminate guidance materials for companies to clarify ecotoxicology testing requirements/needs.

In FY 2022, EPA will continue its efforts for using alternative methods to whole animal toxicity testing for characterizing the effects of pesticide active ingredients on terrestrial and aquatic

[186] For additional information on pesticide risk, please visit: https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/overview-risk-assessment-pesticide-program.
[187] For additional information on IPM, please visit: https://www.epa.gov/safepestcontrol/integrated-pest-management-ipm-principles.

vertebrates. EPA also will continue the current partnership with the National Toxicology Program Interagency Center for the Evaluation of Alternative Toxicological Methods (NICEATM). A focus will be the use of Collaborative Acute Toxicity Modeling Suite (CATMoS) estimates of acute oral toxicity to replace mammal testing in ecological risk assessment. EPA also will complete a study of the feasibility for reducing the number of tested species of fish used to characterize acute effects for the taxa. The effort is expected to coincide with EPA's collaboration with other federal agencies to collect, describe, and develop performance-based evaluations for a suite of *in-silico* and *in-vitro* methods for estimating acute lethal endpoints in fish. By addressing both the endpoint needs and the available estimation tools concurrently, EPA expects to increase the efficiency of performance evaluation and narrow the scope of needed estimation methods for consideration, thereby speeding up the acceptance process.

With the successful completion of methods development for acute mammal and fish toxicity estimation efforts as well as the FY 2020 completion of subacute dietary study waiver guidance, EPA also will be embarking on projects to evaluate the feasibility of reducing the number of avian reproduction study species (currently the routing data requirement is testing for two species) and fish life cycle tests (currently testing for freshwater and estuarine species is a frequent occurrence). The goal would be to reduce the number of tested species, yet still provide for appropriately protective terrestrial and aquatic organism risk assessments.

Minimizing Environmental Impacts through Outreach and Education

Through public outreach, the Agency will continue to encourage the use of IPM and other practices to maximize the benefits pesticides can yield while minimizing the impacts on the environment. The Agency also will develop and disseminate brochures, provide education on potential benefits of IPM, and promote outreach on the success of IPM to encourage its use.[188] To encourage responsible pesticide use that does not endanger the environment, EPA also will reach out to the public through the Internet, and to workers and professional pesticide applicators through worker training programs. The Pesticide Safety Education Programs provides education to professional pesticide applicators through training and is a key component to the implementation of applicator certification programs across the Nation and helps ensure pesticides are used in a manner to protect human health and the environment.

Protection of Endangered Species

EPA is responsible for complying with the Endangered Species Act (ESA). This presents a great challenge given that there are approximately 1,200 active ingredients in more than 17,000 pesticide products – many of which have multiple uses – and over 1,600 listed endangered species in the U.S. with diverse biological attributes, habitat requirements, and geographic ranges.[189] In FY 2022, as part of EPA's determination of whether a pesticide product may be registered for a particular use, the Agency will assess whether listed endangered or threatened species or their designated critical habitat may be affected by use of the product in a manner described in reports

[188] For additional information, please visit: https://www.epa.gov/safepestcontrol/integrated-pest-management-ipm-principles.
[189] For additional information, please visit: https://ecos.fws.gov/ecp0/reports/box-score-report.

to Congress.[190] Where risks are identified in a biological evaluation, EPA also will work with the Services in a consultation[191] process to ensure these new or existing pesticide registrations also will meet the ESA standard.[192]

During registration review, EPA also will support obtaining risk mitigation earlier in the process by encouraging registrants to agree to changes in uses and applications of a pesticide that are beneficial to the protection of endangered species prior to completion of EPA's consultations with the Services. In FY 2022, pesticide registration reviews are expected to contain environmental assessments. Selected assessments also will evaluate potential endangered species impacts. This effort will continue to expand the Program's workload due to the need to review studies that were received as a result of data call-ins and the need to conduct additional environmental assessments for pesticides already in the review pipeline.

Integrating ESA-based decisions into FIFRA registrations is challenging due to the complexities and associated resources involved in performing a spatially explicit evaluation for a large number of species and their designated critical habitats. An ESA evaluation includes consideration of each species' unique biological and habitat characteristics as well as their location relative to potential use sites. In FY 2022, in cooperation with the Services and the U.S. Department of Agriculture (USDA), the Agency will continue to work on implementing the ESA. EPA also will continue to use the new methodologies for ESA assessment developed by five federal agencies and released in March 2020, pursuant to the Agricultural Improvement Act of 2018 (2018 Farm Bill). During FY 2022, EPA also will continue to improve the Biological Evaluations methodology and will apply the revised approaches to selected pesticide risk assessments.

In January 2018, EPA, the U.S. Department of the Interior, and the U.S. Department of Commerce signed a Memorandum of Agreement (MOA) creating a Working Group charged with reviewing statutory requirements, regulations and cases, and making recommendations to improve scientific and policy approaches. The Working Group was formalized in the 2018 Farm Bill and included USDA and the Council for Environmental Quality (CEQ). The Farm Bill also transferred leadership of the Working Group from CEQ to EPA. Regular process reports also are required. The first report released in December 2019 outlines the recommendations and plans for implementation of those recommendations. A second report was released in June 2020 summarizing the progress made on implementing those recommendations.[193]

The Agency will continue to provide technical support for compliance with the requirements of the ESA. In FY 2022, EPA also will continue the advancement and integration of state-of-the-art science models, knowledge bases, and analytic processes to increase productivity and better address the challenge of potential risks of specific pesticides to specific species. Interconnection of the various databases within the Program also will provide improved support to the risk

[190] For additional information, please visit: https://www.epa.gov/endangered-species/reports-congress-improving-consultation-process-under-endangered-species-act.
[191] For additional information, please visit: https://www.epa.gov/endangered-species/assessing-pesticides-under-endangered-species-act.
[192] Additional information on how EPA protects endangered species from pesticides can be found at: https://www.epa.gov/endangered-species.
[193] For additional information, please visit: https://www.epa.gov/endangered-species/reports-congress-improving-consultation-process-under-endangered-species-act.

assessment process during registration review by allowing risk assessors to analyze complex scenarios more easily to endangered species.

Pollinator Protection

Bees and other pollinators play a critical role in ensuring the production of food. USDA is leading the federal government's effort to understand the causes of declining pollinator health and identify actions that will improve pollinator health. EPA is part of this effort and is focusing on the potential role of pesticides. EPA's emphasis is to ensure that the pesticides used represent acceptable risks to pollinators and that products are available for commercial beekeepers to manage pests that impact pollinator health.

EPA continues to carefully evaluate potential effects that pesticides may have on bees through the registration of new active ingredients and registration review, in cooperation with the Government of Canada and the California Department of Pesticide Regulation. EPA is continuing to work with USDA to identify and address factors associated with declines in pollinator health. EPA also has been working with a wide range of stakeholders in the government and private sections, both domestically and internationally, to develop and implement strategies to address factors associated with pollinator declines and to ensure that the best available science serves as a foundation for regulatory decisions. In FY 2020, EPA held pollinator webinars for the public, renewed partnership with pollinator non-governmental organizations, and participated in a USDA hosted pollinator workshop. In FY 2022, EPA also will continue to apply the best available science and risk management methods for sustaining pollinators.[194]

Protection of Water Resources

Reduced concentration of pesticides in water sources is an indication of the effectiveness of EPA's risk assessment, management, mitigation, and communication activities. In FY 2022, the Agency also will continue to work to develop sampling plans and refine program goals. Water quality is a critical endpoint for measuring exposure and risk to the environment and a measure of EPA's ability to reduce exposure from these key pesticides of concern.[195]

Evidence and Evaluation

EPA will continue to improve the review process for pesticide new active ingredient applications by reducing the timeframes to review these types of applications. In FY 2022, EPA also will gather additional evidence, building on continuous efforts to map the process, use data visualization techniques, engage in enhanced collaboration activities, and identify and address bottlenecks. The Agency expects to reduce decision timeframes for new active ingredient applications, improve on-time percentages, and leverage those improvements for other related processes (e.g., new uses).

[194] Additional actions EPA is taking to protect pollinators from pesticides can be found at: https://www.epa.gov/pollinator-protection.
[195] The most sensitive aquatic benchmarks for the chemicals are posted on the website: http://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/aquatic-life-benchmarks-pesticide-registration.

In FY 2020, EPA completed reviews of 2,385 PRIA registration actions, with 98.1 percent of those actions being completed on or before PRIA negotiated due dates. The Agency also registered 16 new pesticide active ingredients and published 100 pesticide draft risk assessments and 98 final/interim decisions for existing pesticides. The average PRIA new active ingredients decision timeframe turnaround for FY 2020 was 876 days, which fell short of the FY 2020 target of 619 days. The average number of days exceeding the PRIA decision timeframes result through June 2020 was 353 days. EPA experienced delays due to an adjustment to science review committee schedules in FY 2019, deficient applications, and the need for additional information to make regulatory determination (mitigation required).

Performance Measure Targets:

(PM FIFRA1) Number of FIFRA decisions completed through pesticides registration review.	**FY 2021 Target**	**FY 2022 Target**
	110	122

(PM FIFRA2) Number of FIFRA registration review draft risk assessments completed.	**FY 2021 Target**	**FY 2022 Target**
	60	20

(PM PRIA1) Average number of days to complete PRIA decisions for new active ingredients.	**FY 2021 Target**	**FY 2022 Target**
	607	595

(PM PRIA2) Average number of days exceeding the PRIA decision timeframes for new active ingredients where the original PRIA due date was not met.	**FY 2021 Target**	**FY 2022 Target**
	263	256

(PM 091) Percentage of decisions (registration actions) completed on time (on or before PRIA or negotiated due dates).	**FY 2021 Target**	**FY 2022 Target**
	99	99

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$576.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (-$167.0) This program change reflects a rebalancing of resources among the Pesticides programs to increase EJ communities' outreach under the Pesticides: Protect Human Health Program.

Statutory Authority:

Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); Endangered Species Act (ESA).

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$6,173.0***	***$7,730.0***	***$7,792.0***	***$62.0***
Science & Technology	$379.9	$876.0	$970.0	$94.0
Total Budget Authority	$6,552.9	$8,606.0	$8,762.0	$156.0
Total Workyears	30.7	35.8	35.8	0.0

Program Project Description:

The primary federal law that governs how EPA oversees pesticide manufacture, distribution, and use in the United States is the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). Originally enacted in 1947, FIFRA has been significantly amended several times, including by the Food Quality Protection Act of 1996 (FQPA) and the Pesticide Registration Improvement Extension Act of 2018 (PRIA). FIFRA requires that EPA register pesticides based on a finding that they will not cause unreasonable adverse effects to people and the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide.

This program seeks to realize the value of pesticides that can be used safely to yield many benefits, such as killing viruses and bacteria in America's hospitals. These benefits also include guarding the Nation's abundant food supply, protecting the public from disease-carrying pests, and protecting the environment from the introduction of invasive species from other parts of the world. In fulfilling its mission, the Program manages the following types of pesticide registrations and regulatory actions under FIFRA:

- Special Local Needs under FIFRA section 24(c);
- Federal registrations at the national level under FIFRA section 3;
- Experimental Use Permit section 5;
- Emergency, Quarantine, and Crisis Exemption section 8; and
- Periodic review of existing chemicals under the Registration Review Program.[196]

FY 2022 Activities and Performance Plan:

Meeting Agriculture's Need for Safe, Effective Pest Control Products

With the passage of FQPA, Congress acknowledged the importance of and need for "reduced-risk pesticides" and supported expedited agency review to help these pesticides reach the market sooner and replace older and potentially riskier chemicals. The law defines a reduced risk pesticide as one that "may reasonably be expected to accomplish one or more of the following: (1) reduces pesticide risks to human health; (2) reduces pesticide risks to non-target organisms; (3) reduces the potential

[196] Additional information may be found here: https://www.epa.gov/pesticide-registration/types-registrations-under-fifra.

for contamination of valued, environmental resources, or (4) broadens adoption of Integrated Pest Management (IPM)[197] or makes it more effective." In FY 2022, EPA will continue to support and develop procedures and guidelines for expedited review of applications for registration or amendments for a reduced risk pesticide.

Registration of Generic Pesticides

FIFRA authorizes EPA to register products that are identical to or substantially similar to already registered products (also known as "me too products"). Applicants for these products may rely on, or cite data already submitted by another registrant. The entry of these new products into the market can cause price reductions resulting from new competition and broader access to products, benefitting farmers and consumers. The Agency will continue to prioritize and review generic registrations consistent with the statutory decision-making schedule. Application submissions for these actions can generally be reviewed in four months. For example, the Agency completed 188 registrations for the primary PRIA category (R-300) that involves "me too" conventional chemical registration requests in FY 2020. The Agency expects to complete a similar volume of registrations in FY 2022.

Outreach and Education

In FY 2022, the Agency will continue to encourage IPM, which emphasizes minimizing the use of broad-spectrum chemicals and maximizing the use of sanitation, biological controls, and selective methods of application. EPA regions are committed to partnering with states, tribes, and territories to carry out IPM projects that inform pesticide users about the pest control options and how to best use them. It is not enough to have pesticide products registered to control pest infestations. Pesticide users need to know which pesticides to use, how to use them, and how to maintain the site so pests do not return. The Pesticide Program is invested in outreach and training efforts for people who use pesticides and the public in general.

Review and Registration

During FY 2022, EPA will continue to review and register new pesticides, new uses for existing pesticides, and act on other registration requests in accordance with FIFRA and Federal Food, Drug, and Cosmetic Act standards, as well as PRIA timeframes. Many of these actions will be for reduced-risk pesticides, which, once registered and used by consumers, will increase societal benefits. Working together with the affected communities, through IPM and related activities, the Agency plans to accelerate the adoption of lower-risk products. EPA also will continue to support implementation of other IPM-related activities. The Agency also will partner in the development of tools and informational brochures to promote IPM efforts and provide guidance to schools, farmers, other partners, and stakeholders.

Similarly, the Agency also will continue work-sharing efforts with international partners. Through these collaborative activities and resulting international registrations, international trade barriers will be reduced. When nations with whom the U.S. trades accept imported crops treated with newer, lower-risk pesticides, domestic users can more readily adopt these newer pesticides into

[197] For additional information, please visit: https://www.epa.gov/safepestcontrol/integrated-pest-management-ipm-principles.

their Crop Protection Programs. Work-sharing efforts also reduce the costs of registration to governments by sharing the expenses.

Emergency, Quarantine, and Crisis Exemptions

In FY 2022, EPA will continue to prioritize emergency exemptions under FIFRA Section 18, which authorizes EPA to allow an unregistered use of a pesticide for a limited time in the event of an emergency, such as a severe pest infestation, public health emergency, or invasive pest species quarantine. The economic benefit of the Section 18 Program to growers is the avoidance of losses incurred in the absence of pesticides exempted under FIFRA's emergency exemption provisions. In addition, exemptions serve as important public health controls to avert pests that may cause significant risk to human health. In FY 2020, the Agency processed just under 70 requests for emergency uses and expects to process a similar level in FY 2022.

Evidence and Evaluation

The Program will continue to improve the review process for pesticide new active ingredient applications by reducing the timeframes to review these applications. In FY 2022, EPA also will gather additional evidence to assist the Agency with: streamlining the process; mapping the process; using data visualization techniques; engaging in enhanced team collaborations; and identifying and addressing bottlenecks. The review process also will be streamlined by incorporating special antimicrobial sections and further monitoring the use of unregistered pesticides under Section 18. By identifying efficiencies in the process, the Agency expects to: reduce decision timeframes for new active ingredient applications; improve on-time percentages; and leverage those improvements for other related processes (e.g., new uses).

In FY 2020, EPA completed reviews of 2,385 PRIA registration actions, with 98.1 percent of those actions being completed on or before PRIA negotiated due dates; registered 16 new pesticide active ingredients; published 100 pesticide draft risk assessments and 98 final/interim decisions for existing pesticides. The average PRIA new active ingredients decision timeframe turnaround for FY 2020 was 876 days, which fell short of the FY 2020 target of 619 days. The average number of days exceeding the PRIA decision timeframes result through June 2020 was 353 days. EPA experienced delays due to an adjustment to science review committee schedules in FY 2019, deficient applications, and the need for additional information to make regulatory determination (mitigation required).

Biotechnology

EPA has a critical role in the successful implementation of the Executive Order (EO) 13874: *Modernizing the Regulatory Framework for Agricultural Biotechnology Products*. EPA has been evaluating the current regulatory framework to determine if there are opportunities for streamlining current approaches to enable these important technologies to get to market efficiently. The Agency is working on exemptions for plant incorporated protectants (PIPs) engineered using biotechnology that are indistinguishable from PIPs made using natural plant breeding. EPA's proposed rule is under review and expected to be issued in Fall 2020. Additionally, in January 2020, EPA, the United States Department of Agriculture, and the Food and Drug Administration

launched a unified website that provides a one-stop-shop for information about the actions the federal government is taking to oversee the development of agricultural biotechnology products.[198]

Performance Measure Targets:

Work under this program supports performance results in the Pesticides: Protect the Environment from Pesticide Risk Program under the EPM appropriation.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$114.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (-$52.0) This program change reflects a rebalancing of resources among the Pesticides programs to increase EJ communities' outreach under the Pesticides: Protect Human Health Program.

Statutory Authority:

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Federal Food, Drug, and Cosmetic Act (FFDCA) § 408.

[198] For additional information, please visit: https://usbiotechnologyregulation.mrp.usda.gov/biotechnologygov/home/.

Resource Conservation and Recovery Act (RCRA)

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$35,671.5***	***$38,453.0***	***$38,836.0***	***$383.0***
Total Budget Authority	$35,671.5	$38,453.0	$38,836.0	$383.0
Total Workyears	164.9	174.4	174.4	0.0

Program Project Description:

To reduce risks from exposure to hazardous wastes, EPA's Resource Conservation and Recovery Act (RCRA) Corrective Action Program ensures that contaminated facilities subject to RCRA requirements are cleaned up by the responsible party, returns contaminated property to productive use, and keeps costs from being transferred to the taxpayer-funded portion of the Superfund Program. Pursuant to EPA promulgated regulations and administrative orders under RCRA, EPA and authorized states will continue to oversee cleanups conducted by facility owner/operators to ensure that the facilities meet their cleanup obligations and to protect taxpayers from having to pay the bill. Approximately 113 million Americans live within three miles of a RCRA corrective action facility (roughly 35 percent of the U.S. population),[199] and the total area covered by these corrective action sites is approximately 18 million acres.[200]

EPA works in close partnership with 44 states and one territory authorized to implement the Corrective Action Program[201] to ensure that cleanups are protective of human health and the environment. The Corrective Action Program allows for the return of properties to beneficial use, which benefits the surrounding communities, reduces liabilities for facilities, and allows facilities to redirect resources to productive activities. The Agency provides program direction, leadership, and support to its state partners. This includes specialized technical and program expertise, policy development for effective program management, national program priority setting, measurement and tracking, training and technical tools, and data collection/management/documentation. In addition, through work-sharing, the Agency serves as lead or support for a significant number of complex and challenging cleanups in both non-authorized and authorized states.

FY 2022 Activities and Performance Plan:

In FY 2022, the Corrective Action Program will focus its resources on continuing cleanup of approximately 3,924 priority contaminated facilities (the Corrective Action Progress Track), which include highly contaminated and technically challenging sites, and on assessing others to determine whether cleanups are necessary. As of the end of FY 2020, only 40 percent of these

[199] U.S. EPA, Office of Land and Emergency Management Estimate 2020. Data collected includes: (1) site information as of the end of FY 2019 from RCRAInfo; and (2) population data from the 2015-2018 American Community Survey.
[200] Compiled RCRAInfo data.
[201] State implementation of the Corrective Action Program is funded through the STAG Categorical Grant: Hazardous Waste Financial Assistance and matching state contributions.

facilities have completed final and permanent cleanups, leaving approximately 2,300 facilities still needing oversight and technical support to reach final site-wide cleanup objectives. In FY 2020, EPA approved 169 RCRA corrective action facilities as ready for anticipated use (RAU), bringing the total number of RCRA RAU facilities to 1,640. In addition, 95 percent of the 2020 Baseline priority corrective action facilities achieved protection of human health while 91 percent achieved control of contaminated groundwater migration.[202] The Program's goals are to control human exposures, control migration of contaminated groundwater, complete final cleanups for the Corrective Action Progress Track facilities, and identify, assess, and clean up additional priority facilities.

In FY 2022, EPA will:

- Continue to make RCRA corrective action sites RAU, ensuring that where possible properties are returned to productive use and human health and the environment are protected into the future.

- Reassess its universe of cleanup facilities, priorities, and measures to ensure that resources are focused on addressing those facilities that present risk to human health and the environment by implementing actions to end or reduce these threats.

- Provide technical assistance to authorized states in the areas of site characterization, sampling, remedy selection, reaching final cleanup goals, and long-term stewardship for cleanups with contamination remaining in place in order to support communities at risk from multiple health stressors and/or climate change impacts.

- Prioritize and focus the Program on completing site investigations to identify the most significant threats, establish interim remedies to reduce or eliminate exposure, and select and construct safe, effective long-term remedies that also maintain the economic viability of the operating facility.

- For high priority facilities, perform cleanup work under work-sharing agreements to assist with facilities that have complex issues[203] or special tasks (e.g. ecological risk assessments).

- Continue to improve cleanup approaches and share best practices and cleanup innovations[204] to speed up and improve cleanups.

- Maintain RCRAInfo, which is the primary data system that many states rely upon to manage their RCRA permitting, corrective action, and hazardous waste generator programs. RCRAInfo receives data from hazardous waste handlers for the National Biennial RCRA Hazardous Waste Report. The last biennial report in 2019 showed there were 26,284 generators of over 33 million tons of hazardous waste. RCRAInfo provides

[202] For more information, please refer to https://www.epa.gov/hw/lists-facilities-resource-conservation-and-recovery-act-rcra-2020-corrective-action-baseline.
[203] For example, vapor intrusion, wetlands contamination, or extensive groundwater issues.
[204] For more information, please visit: https://www.epa.gov/hw/toolbox-corrective-action-resource-conservation-and-recovery-act-facilities-investigation-remedy.

the only national-level RCRA hazardous waste data and statistics to track the environmental progress of approximately 20,000 hazardous waste units at 6,600 facilities.

- Contribute to efforts ensuring the proper management, disposal, and cleanup of PFAS. The PFAS Destruction and Disposal Interim Guidance, required by the National Defense Authorization Act for FY 2020, identifies a number of information gaps in our understanding of how to destroy or dispose of PFAS and its byproducts while protecting human health and the environment. It also identifies a significant amount of ongoing and planned research on PFAS technologies.

Performance Measure Targets:

(PM RSRAU) Number of RCRA corrective action facilities made ready for anticipated use.	FY 2021 Target	FY 2022 Target
	133	140

(PM CA5RC) Number of RCRA corrective action facilities with final remedies constructed.	FY 2021 Target	FY 2022 Target
	73	49

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$355.0) This change to fixed and other costs is an increase due to the recalculation of base payroll costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$28.0) This program change supports RCRA Corrective Action activities including cleanups.

Statutory Authority:

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) §§ 3004, 3005, 8001.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$64,884.9***	***$70,465.0***	***$71,082.0***	***$617.0***
Hazardous Waste Electronic Manifest System Fund	$20,317.5	$0.0	$0.0	$0.0
Total Budget Authority	$85,202.4	$70,465.0	$71,082.0	$617.0
Total Workyears	273.6	296.8	296.8	0.0

Total workyears in FY 2022 include 11.0 FTE funded by e-Manifest fees.

Program Project Description:

The Resource Conservation and Recovery Act (RCRA) established EPA's role as a federal leader in the conservation and recovery of resources. Under RCRA, EPA sets national standards for managing solid and hazardous wastes and provides federal agencies, state, tribal, and local governments, and industries with technical assistance on solid waste management, resource recovery, and resource conservation. Approximately 60,000 facilities generate and safely manage hazardous waste in the United States.[205] Eighty percent of the U.S. population live within three miles of one of these facilities, making national standards and procedures for managing hazardous wastes a necessity.[206]

The Waste Management Program safeguards the American people while facilitating commerce by supporting an effective waste management infrastructure. Cradle-to-grave hazardous waste management regulations help ensure safe management practices through the entire process of generation, transportation, recycling, treatment, storage, and final disposal. The Program increases the capacity for proper hazardous waste management in states by providing grant funding and technical support.

The RCRA permitting programs serve to protect the millions of people in surrounding communities by facilitating clean closure where applicable and managing permits and other controls to protect human health and the environment for 20,000 hazardous waste units at 6,600 facilities.[207] Just as businesses innovate and grow, the waste management challenges they face also evolve; this requires new direction and changes in the federal hazardous waste program through updated regulations, guidance, and other tools.

EPA directly implements the RCRA Program in Iowa and Alaska and provides leadership, work-sharing, and support to the remaining states and territories authorized to implement the permitting program. Additionally, the Toxic Substances Control Act (TSCA) polychlorinated biphenyls

[205] Memorandum, February 18, 2014, from Industrial Economics to EPA, Re: Analysis to Support Assessment of Economic Impacts and Benefits under RCRA Programs: Key Scoping Assessment, Initial Findings and Summary of Available Data (Section 1), pages 5-11.
[206] U.S. EPA, Office of Solid Waste and Emergency Response Estimate. 2014. Data collected includes: (1) site information as of the end of FY 2011 from RCRAInfo; and (2) census data from the 2007-2011 American Community Survey.
[207] As compiled by RCRAInfo.

(PCB) cleanup and disposal program is implemented under the Waste Management Program to reduce PCB exposure from improper disposal, storage, and spills. The Program reviews and approves PCB cleanup, storage, and disposal activities. This federal authority is not delegated to state programs. PCBs were banned in 1979, but legacy use and contamination still exists, and PCBs can still be released into the environment from poorly maintained hazardous waste sites that contain them.

Maintaining updated permits and controls ensures that facilities: 1) have consistent and protective standards to prevent release; 2) have proper standards for waste management to protect human health, prevent land contamination/degradation; and 3) avoid future cleanups and associated substantial costs. In FY 2020, EPA and the states implemented the Generator Improvement Rule which updated and modernized the regulations for hazardous waste generators to bring them into the 21st Century.

There continues to be increased public and congressional attention to issues around post-consumer materials management, including plastics, in the environment and EPA's role in addressing them (*e.g.*, ocean plastics, environmental justice concerns in countries to whom the U.S. exports plastics, and the climate impacts of single-use plastics). Marine litter is an increasingly prominent global issue that can negatively affect domestic water quality, tourism, industry, and public health. Some of this marine debris comes from human activity at sea, and it makes its way into our waterways from land, creating a direct link between waste management practices and ocean pollution.[208] The Save Our Seas 2.0 Act,[209] enacted in December 2020, demonstrates bipartisan congressional interest and provides EPA with authority to further act on post-consumer materials management.

The Program also plays a central role in establishing and updating standards for analytical test methods that are used across the country and the world to provide consistent, reliable determinations as to whether waste is hazardous, as well as the presence and extent of hazardous waste in the environment. This work provides the foundation that underlies waste management approaches and ensures that method standards evolve with technology for conducting these analyses.

In addition to overseeing the management of hazardous waste under RCRA subtitle C, EPA also plays a role in solid waste management under Subtitle D. While much of this area is delegated to the states, EPA is actively working on aspects of coal combustion residuals (CCR) under this area of the law, including the establishment and refinement of appropriate regulations and, as directed by the 2016 Water Infrastructure Improvements for the Nation Act (WIIN Act), developing a new federal permitting program for CCR surface impoundments and landfills.

While the majority of the work is focused on domestic issues, the Program also is responsible for issues related to international movement of wastes. EPA oversees the tracking and management of hazardous waste imports and exports. Most of these movements are for recycling and, thus, are critical to resource conservation. In coordination with other agencies and departments, EPA

[208] U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Ocean Service, "Ten Things you should Know about Marine Debris," https://oceanservice.noaa.gov/news/marinedebris/ten-things.html.
[209] For additional information, please see: https://www.congress.gov/116/plaws/publ224/PLAW-116publ224.pdf.

represents the U.S. Government in numerous international forums concerned with waste issues. This representation is vital to protecting U.S. interests and furthering U.S. policy goals.

FY 2022 Activities and Performance Plan:

In FY 2022, the RCRA Waste Management Program will:

- Provide technical assistance to regions, states, and tribes regarding the development and implementation of solid waste programs (e.g., the RCRA hazardous waste generator, transporter, treatment, storage, and disposal regulations and implementing guidance; the RCRA non-hazardous waste program; the TSCA PCB disposal and cleanup program; and the hazardous waste import/export program).

- Provide technical and implementation assistance, oversight, and support to facilities that generate, treat, store, recycle, and dispose of hazardous waste.

- Review and approve PCB cleanup, storage, and disposal activities to reduce exposures, particularly in sensitive areas like schools and other public spaces. Issuing PCB approvals is a federal responsibility, non-delegable to states.

- Manage and monitor the RCRA permitting program and ensure the issuance of permit efficiently to achieve program goals. This includes progress towards meeting the Agency's goal of reaching all permitting-related decisions in a timely manner for the approximately 20,000 hazardous waste units (e.g., incinerators, landfills, and tanks) located at 6,600 treatment, storage, and disposal facilities.

- Manage the hazardous waste import/export notice and consent process. EPA will continue to implement and modernize the process and data system (the Waste Import Export Tracking System- WEITS) including integrating the system into RCRAInfo in order to make shipping hazardous waste across borders more efficient. Managing hazardous waste imports and exports is a federal responsibility, non-delegable to states.

- Provide technical hazardous waste management assistance to tribes to encourage sustainable practices and reduce exposure to toxins from hazardous waste.

- Directly implement the RCRA Program in unauthorized states, on tribal lands, and other unauthorized portions of state RCRA programs. Issue and update permits, including continuing to improve permitting processes.

- Establish and update standards for analytical test methods that are used across the country and the world to provide consistent, reliable determinations as to whether waste is hazardous, as well as the presence and extent of hazardous waste in the environment.

- Take action as necessary regarding regulations to ensure protective management of CCR. The Agency has promulgated regulations specifying improved management and disposal practices to ensure people and ecosystems are protected. The Agency will continue to work

with our stakeholders as we develop and implement regulations, through technical assistance and guidance.

- Implement applicable provisions of the WIIN Act, which enables states to submit state CCR permit programs for EPA approval. The Agency will continue to work closely with state partners to review and make determinations on state programs. Subject to appropriations, EPA will implement a permit program for CCR disposal facilities on tribal lands as well as participating states.

- As part of an EPA effort to reduce ocean pollution and plastics, the Program will provide technical expertise and funding to support development and implementation of solid waste management systems and infrastructure to help ensure that trash is appropriately collected, recycled, reused, or properly disposed of to prevent litter from entering waterways from land.

Performance Measure Targets:

(PM HW5) Number of permit renewals issued at hazardous waste facilities.	FY 2021 Target	FY 2022 Target
	100	90

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$516.0) This change to fixed and other costs is an increase due to the recalculation of base payroll costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$101.0) This program change increases efforts to ensure proper management of hazardous and non-hazardous solid wastes.

Statutory Authority:

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) §§ 3002, 3004, 3005, 3017; Toxic Substances Control Act (TSCA) § 6.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$9,051.3***	***$9,982.0***	***$10,202.0***	***$220.0***
Total Budget Authority	$9,051.3	$9,982.0	$10,202.0	$220.0
Total Workyears	37.7	43.4	43.4	0.0

Program Project Description:

The RCRA Waste Minimization and Recycling Program supports the sustainable management of resources, including managing materials that sustainably promote economic growth and reduces environmental impacts.

The U.S. recycling industry provides approximately 680,000 jobs and $5.5 billion annually in tax revenues and there is opportunity for greater contribution to the economy and environmental protection, as recent data indicate materials worth as much as $9 billion are thrown away each year.[210] Recycling is an important part of a circular economy, which refers to a system of activities that is restorative to the environment, enables resources to maintain their highest values, and designs out waste. A circular economy approach provides direct, measurable reductions in greenhouse gas emissions, as natural resource extraction and processing make up approximately 50 percent of total global greenhouse gas (GHG) emissions.[211]

Further, living near waste and waste-related facilities can place burdens on communities when waste is not properly managed, which can lead to higher levels of chronic health issues. Communities whose residents are predominantly persons of color, Indigenous, or low-income continue to be disproportionately impacted by high pollution levels, resulting adverse health and environmental impacts. It is critical to implement materials management strategies that are inclusive of communities with environmental justice concerns as well as pursue innovations that offer the benefits of cleaner processing of materials to all. Recycling is not enough to achieve a circular economy, but it is an important part of addressing climate change, creating jobs, and reducing environmental and social impacts.

As directed by Congress, EPA developed a draft National Recycling Strategy in 2020 to begin to address the challenges facing the recycling system to accelerate the move towards a circular economy both domestically and internationally. In FY 2021, the RCRA Waste Minimization and Recycling Program will finalize the National Recycling Strategy. EPA also established a National Recycling Goal to increase the recycling rate from a rate of 32.1 percent in 2018 to 50 percent by 2030.[212] Congressional and public interest continues to grow regarding plastics in the environment

[210] For more information, please refer to: https://www.epa.gov/smm/recycling-economic-information-rei-report.
[211] U.N. Environment International Resource Panel, Global Resources Outlook, 2019, p. 8.
[212] In 2018, in the United States, approximately 292 million tons of municipal solid waste (MSW) were generated. Of the MSW generated, approximately 94 million tons were recycled or composted, equivalent to a 32.1 percent recycling and composting rate. https://www.epa.gov/sites/production/files/2021-01/documents/2018_ff_fact_sheet_dec_2020_fnl_508.pdf.

and EPA's role in addressing them (e.g. ocean plastics, environmental justice concerns in countries to whom the U.S. exports plastics, and the climate impacts of single-use plastics). The Save Our Seas 2.0 Act,[213] enacted in December 2020, demonstrates bipartisan congressional interest and provided EPA with authority to further act on domestic recycling and address plastic waste through new grant programs, studies, and increased federal coordination.

The RCRA Waste Minimization and Recycling Program also promotes the efficient management of food as a resource. Reducing food loss and waste means more food for communities, fewer greenhouse gas emissions and climate impacts, and increased economic growth. EPA works to meet the national goal of reducing food loss and waste by 50 percent by 2030, by providing national estimates of food waste generation and management; convening, educating, and supporting communities seeking to reduce food waste; working collaboratively with the U.S. Department of Agriculture, and U.S. Food and Drug Administration to reduce food waste; and providing funding to demonstrate anaerobic digester applications.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will focus on efforts to strengthen the U.S. recycling system, address the global issue of plastic waste, engage communities, and prevent and reduce food loss and waste. The Program will conduct the following activities:

- Provide national leadership and direction on approaches to reduce environmental impacts and increase the safe and effective reuse/recycling of materials, with a special focus on reducing plastic waste and reducing food waste.

- Expand efforts to gather and provide high-quality scientific information and comprehensive data.

- Continue coordinating with federal agencies to reduce food waste in their facilities, working with industry to reduce food loss and waste in the supply chain, and connecting stakeholders with food waste reduction technologies like anaerobic digestion.

- Finalize a financial needs assessment of the investment required to modernize waste management infrastructure to achieve consistent collection across the Nation to maximize the efficient delivery of materials to the circular economy.

- Develop estimates for the amounts of investment needed to provide all citizens with access to recycling services on par with access to disposal.

- Work with stakeholders (industry, governments, non-profits, communities, and others) to implement actions identified in the National Recycling Strategy and identify additional actions needed to support a circular economy.

[213] For more information, please refer to: https://www.congress.gov/116/plaws/publ224/PLAW-116publ224.pdf.

- Contribute towards global climate change efforts and demonstrate U.S. leadership internationally through participation in resource efficiency dialogues.

- Continue recycling education and outreach efforts and track progress toward the national recycling goal.

- Conduct various studies as required by Save Our Seas 2.0 Act to address post-consumer materials management, including plastic waste.

- Administer a grant program for state and local governments to build or enhance recycling capacity and infrastructure around the country. The grant program will support pilots and infrastructure in communities seeking to enhance their capacity to recover and recycle materials.

- Implement targeted, incentive-based programs to encourage participants to modify business practices to increase recycling and prevent/reduce food waste/loss, enabling industries to efficiently conserve resources, save money, and increase competitiveness.

Performance Measure Targets:

(PM RFW) Number of stakeholder actions taken to increase recycling and reduce food loss and waste.	**FY 2021 Target**	**FY 2022 Target**
	9,750	10,733

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$57.0) This change to fixed and other costs is an increase due to the recalculation of base payroll costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$163.0) This program change increases programmatic activities including the reduction of waste generation at the source.

Statutory Authority:

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA). Save our Seas 2.0 Act, 2020, Pub. L. 116-224.

Toxics Risk Review and Prevention

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$11,030.3***	***$7,533.0***	***$7,565.0***	***$32.0***
Total Budget Authority	$11,030.3	$7,533.0	$7,565.0	$32.0
Total Workyears	8.0	7.6	7.6	0.0

Program Project Description:

The Endocrine Disruptor Screening Program (EDSP) was established in 1996 under authorities contained in the Food Quality Protection Act (FQPA) and the Safe Drinking Water Act (SDWA) amendments. The EDSP is transitioning to the use of high throughput (HT) screening and computational toxicology (*CompTox*)[214] tools to: screen thousands of chemicals for endocrine activity; establish policies and procedures for screening and testing; and evaluate data to ensure chemical safety by protecting public health and the environment from endocrine disrupting chemicals. Implementing EDSP work into the Agency's risk assessment and risk management functions supports EPA's environmental justice (EJ) priorities, both by targeting substances based on effects to sensitive life stages and deploying rapid methods for assessing disparate chemical exposures to vulnerable communities.

With EDSP support, EPA has run thousands of chemicals through additional HT assays. To further support the evaluation and validation of HT approaches, the EDSP has completed some limited targeted *in vivo* Tier 1 & 2 assays and is conducting systematic reviews of relevant *in vivo* data meeting EPA guidelines. EDSP also supports the Toxic Substances Control Act (TSCA) risk evaluation and scoping process for chemicals with EDSP-relevant information, implementation of Alternative Test Methods using EDSP experience, and development of information technology to facilitate identification of EDSP-relevant information.

The Agency continues to engage the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Scientific Advisory Panel (SAP) in the scientific peer review of HT tools including *ToxCast*[215] to evaluate their use in chemical screening as alternatives to Tier 1 assays. Embedded into the EDSP approach is a focus on sensitive life stages during the tiered testing and assessment processes. As this data is fed into conceptual risk assessment models, it can specifically inform decisions on vulnerable subpopulations. Further, as EDSP prioritizes future chemical assessments, HT tools such as *ExpoCast*[216] will assist in the identification of priority chemical targets with vulnerable subpopulations and environmental justice concerns for further investigation.

[214] For additional information, please visit: https://www.epa.gov/endocrine-disruption/use-high-throughput-assays-and-computational-tools-endocrine-disruptor.
[215] For additional information, please visit: https://www.epa.gov/chemical-research/toxicity-forecasting.
[216] For additional information, please visit: https://www.epa.gov/chemical-research/rapid-chemical-exposure-and-dose-research.

FY 2022 Activities and Performance Plan:

As envisaged by the current tiered framework, imposing the EDSP Tier 1 battery for all 10,000+ substances in the EDSP Universe of Chemicals would cost the regulated community more than $10.0 billion in addition to EPA resources for staff to manage the regulatory infrastructure to order and review the tests. Given the current national and international laboratory testing capacity necessary to accomplish this, it would take many years to complete, and involve the sacrifice of many millions of animals. To address these issues, in FY 2022, with the requested funding for the EDSP, the Agency will:

- Continue collaborations with EPA's research programs in order to increase scientific confidence in HT approaches which will support a more refined, integrated endocrine activity exposure-based approach to EDSP chemical screening.
- Develop and begin execution of a multi-year plan for implementation of the EDSP for pesticide active ingredients and inerts; and,
- In collaboration with EPA's research programs, initiate HT screening on pesticide substances that were not part of the *ToxCast* chemical sets.

In FY 2022, these efforts will address several key milestones including: (1) work towards finalizing the EDSP List 1, Tier 1 decisions including potential initiation of Tier 2 assays; and (2) developing a plan for implementation and begin several case study EDSP evaluations of pesticide active ingredients to support pesticide registration and registration review, in line with Administration priorities on The EDSP battery explicitly includes evaluations on vulnerable subpopulations such as differences among lifestages such as pregnancy, infants, and early childhood. Moreover, the EDSP battery considers effects on reproduction, a key indicator for EJ.

To date, the EDSP has not been incorporated into the regulatory programs for which it was intended. Further, no program has systematically incorporated HT and *CompTox* tools and results into their regulatory decision-making. A refined, multi-year estimate beyond the baseline testing and review costs cannot be established until the program has gained more experience with actual decisions.

The EDSP will continue to collaborate with international partners, including through the Organisation for Economic Co-operation and Development (OECD) and the international initiative known as Accelerating the Pace of Chemical Risk Assessment (APCRA),[217] to maximize the efficiency of EPA's resources and promote adoption of internationally-harmonized test methods for evaluating the potential endocrine effects of chemicals. EPA represents the U.S. as either the lead or a participant in OECD and APCRA projects involving the improvement of assay systems, including the development of non-animal screening and testing methods.

Performance Targets:

EPA is currently evaluating its suite of measures and indicators related to Environmental Justice, including available data and programs where improved data sets are needed to develop useful

[217] For additional information, please visit: https://www.epa.gov/chemical-research/accelerating-pace-chemical-risk-assessment-apcra.

performance measures for Environmental Justice Programs. Measures are under development in this program to address environmental justice.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$17.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$15.0) This program change increases contractual support for pesticide evaluations under the EDSP.

Statutory Authority:

Federal Food Drug and Cosmetic Act (FFDCA), § 408(p); Safe Drinking Water Act (SDWA), § 1457.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$11,475.6***	***$12,558.0***	***$12,588.0***	***$30.0***
Total Budget Authority	$11,475.6	$12,558.0	$12,588.0	$30.0
Total Workyears	42.0	49.2	49.2	0.0

Program Project Description:

The Pollution Prevention (P2) Program is one of EPA's primary tools for advancing environmental stewardship and sustainability by federal, state, and tribal governments, businesses, communities, and individuals. The Program also is the primary implementation mechanism for the Pollution Prevention Act (PPA) of 1990. The P2 Program seeks to alleviate environmental problems by leveraging business-relevant approaches to achieve significant reductions in the generation of hazardous releases to air, water, and land; reductions in the use of hazardous materials, which also advances EPA's chemical risk reduction and management goals under the Toxic Substances Control Act (TSCA); reductions in the generation of greenhouse gases; and reductions in the use of water. As a result of these preventative approaches, the P2 Program helps businesses and others reduce costs and access market opportunities. The P2 Program's efforts advance the Agency's priorities to pursue sustainability, take action on climate change, make a visible difference in communities – including environmental justice (EJ) communities, and ensure chemical safety.[218] The P2 Program is augmented by a counterpart P2 Categorical Grants Program in the State and Tribal Assistance Grants (STAG) account. For more information about the EPA's P2 Program, please see http://www.epa.gov/p2/.

FY 2022 Activities and Performance Plan:

Safer Choice Program

EPA certifies and allows use of the Safer Choice label[219] on products containing ingredients that meet stringent health and environmental criteria and undergo annual audits to confirm the products are manufactured to the Safer Choice Standard's rigorous health and environmental requirements. With 400+ partner companies and approximately 2,000 certified products in the marketplace, companies have invested heavily in this EPA partnership, and consumer and industry interest in Safer Choice – and safer chemical products – continues to grow across chemical product value chains. This program gives industry a real incentive to develop and use safer chemicals, and consumers the ability to identify safer chemical products. Further, consumers, retailers, and institutional purchasers are important drivers of demand for products labeled under the Program. In FY 2022, the Program will begin work to update and strengthen its standards. Safer Choice also will conduct coordinated outreach with partners to better communicate the health and

[218] For additional information about the EPA's P2 Program, please visit: http://www.epa.gov/p2/.
[219] For additional information about the Safer Choice Program, please visit: https://www.epa.gov/saferchoice.

environmental benefits of these products to consumers; federal, state, tribal, and local government procurement officials; and institutional and industrial purchasers. The Safer Choice Program will expand into additional product categories and seek to increase consumer and commercial recognition of Safer Choice products. EPA also will continue in FY 2022 its Partner of the Year Awards Program, which awards organizations and companies for their leadership in formulating, and making available to communities, products made with safer ingredients.

New for the remainder of FY 2021 and into FY 2022, Safer Choice outreach and partnership activities will add a specific focus on bringing Safer Choice-certified products to people of color and low-income communities – two common characteristics of EJ communities. This action is aligned with Executive Order (EO) 14008: *Tackling the Climate Crisis at Home and Abroad* at section 219, which directs agencies to develop "…programs, policies, and activities to address the disproportionately high and adverse human health, environmental, climate-related and other cumulative impacts on disadvantaged communities…" Safer Choice will work with retailers and product manufacturers to help them develop even more products containing safer chemical ingredients that are easily identified and purchased. Safer Choice will begin partnerships with organizations that serve communities with EJ concerns to help custodial staff and house cleaning companies fight conditions such as asthma[220] and gain access to Safer Choice-certified products. Safer Choice will, through its Partner of the Year Awards and other activities, encourage companies to fight climate change, reduce use of hazardous materials, and improve water quality as they formulate products with safer ingredients.

To enhance transparency and to facilitate expansion of safer chemical choices and products, EPA has included on the Program's website a list of non-confidential chemicals that meet the Safer Choice Program criteria and that are allowed in the Program's labeled products. In FY 2020, this Safer Chemical Ingredients List contained almost 1,000 safer chemicals, and EPA will continue to update this list in FY 2021 and FY 2022 as the program evaluates additional chemical ingredients and chemical categories and approves products for the use of the Safer Choice label.

P2 Technical Assistance Grants

The P2 Source Reduction Assistance Grant Program[221] assists businesses, particularly small- and medium-sized firms, to identify, evaluate, and adopt environmental stewardship, P2, and sustainability solutions that make good business sense and improve multi-media environmental conditions, including reduction in hazardous materials and pollutants, including greenhouse gases. Through competitive grants to technical assistance centers operated by states, tribes, and non-profit organizations, U.S. businesses are able to access a range of P2 enabling tools and support programs. In FY 2021, EPA has 11 active two-year source reduction assistance grants to states, tribes, and several non-profit organizations. Additionally, EPA invests in analyses, tool development, training, outreach, and partnerships, leveraging the success of EPA grantees and client businesses in a particular sector/location by amplifying/replicating environmental

[220] Please see: https://journals.lww.com/joem/Fulltext/2003/05000/Cleaning_Products_and_Work_Related_Asthma.17.aspx.
[221] For additional information, please visit: https://www.epa.gov/p2/grant-programs-pollution-prevention. These EPM grants serve as laboratories of innovation, and are complementary to the P2 Categorical Grants issued only to states and tribes. In FY 2021, there are 11 active P2 Source Reduction Grants and 42 active P2 Categorical Grants, for a total of 53 grants.

stewardship, P2, and sustainability successes to similar businesses in other locales. Such economies of scale for P2 are central to maximizing the effectiveness of the Program.

One of the approaches EPA takes to pursue program efficiencies and economies of scale is through sector-focused P2 National Emphasis Areas. for P2 grants awarded in FY 2022, grant applicants from states, tribes, and other grantees will continue to be required to focus on one or more industry areas, which were selected based on an analysis of data to identify industry sectors that had high environmental impact, high economic importance, and substantial environmental stewardship, P2, and sustainability opportunity.[222] Documenting best practices and developing case studies and training materials will be foundational assets for amplifying/replicating successes resulting from the grant programs. The collective potential of EPA's P2 grant programs in addressing climate is enormous. From 2011-2018, EPA's P2 grants contributed to the elimination of 15.2 million metric tons of greenhouse gases. In our upcoming grant solicitation for FY 2022 and FY 2023, the P2 Program will further emphasize using P2 approaches to address climate impacts.

To further advance EJ in the remainder of FY 2021 and in FY 2022, EPA will use analyses of toxic chemical releases from facilities and industrial proximal to EJ communities (from Toxics Release Inventory [TRI] reporting and Chemical Data Reporting [CDR], where available), and use sector-specific P2 cases studies and best practices – combined with outreach and training – to facilitate adoption of P2 practices in those industries, and in the EJ communities themselves. Additionally, EPA will advance P2 technical assistance objectives in FY 2022 through customizing, developing, and delivering training to identify and deploy green chemistry and engineering solutions through a range of incentive and related approaches in these same communities.

Environmentally Preferable Purchasing Program (EPP)

The Environmentally Preferable Purchasing Program (EPP)[223] implements the direction provided to EPA in the Pollution Prevention Act, the National Technology Transfer and Advancement Act, Federal Acquisition Regulations, and Executive Orders which mandate sustainable federal procurement, including through the development and use of sustainability standards, specifications, and ecolabels. From FY 2015 through FY 2020, the EPP Program issued and updated EPA Recommendations of Specifications, Standards, and Ecolabels for Federal Procurement, for more than 20 products and services. These recommendations help federal procurement officials determine which private sector standards and ecolabels, among sometimes dozens within a single purchase category, are appropriate and effective in meeting Federal procurement goals and mandates. EPA also coordinates federal procurement programs that integrate environmental performance into procurement, working with agencies such as the General Services Administration, and the Departments of Energy and Defense.

EPA will continue its leadership role in FY 2022 working toward the final implementation of the EPA guidelines intended to provide a transparent, fair, and consistent approach to evaluating the environmental sustainability of product standards and eco-labels for federal purchasing. These

[222] P2 National Emphasis Areas include: automobile manufacturing and maintenance, aerospace manufacturing and maintenance, chemical manufacturing and processing, metal manufacturing and fabrication, and food and beverage manufacturing or processing.
[223] For additional information, please visit: http://www.epa.gov/greenerproducts/buying-green-federal-purchasers.

guidelines will help EPA explore expanding EPA Recommendations in product categories that have high climate impacts in support of EO 14008. This EO directs federal agencies to align management of federal procurement to support climate action by providing an immediate, clear, and stable source of product demand, increased transparency and data, and robust standards for the market.

To further support EPA's goals for equity and EJ, the EPP Program will develop and implement training and outreach for disproportionately affected communities, as well as state, tribal, and local governments, to assist in facilitating product and service procurement choices that are environmentally sound and promote human and environmental health.

Green Chemistry

The Green Chemistry Program[224] fosters the sustainable design of chemical products and processes. The Program also analyzes green chemistry innovations and works with partners and external stakeholders to facilitate market adoption and penetration of new commercially successful chemistries and technologies. Its Green Chemistry Challenge Awards (GCCA) serve a critical role in raising the profile, importance, and credibility of innovative green and sustainable chemistry technologies. During the Program's 25+ years, EPA has received more than 1,800 nominations and presented awards to 123 technologies, demonstrating the interest among stakeholders to be recognized at the national level for developing market-ready and/or market-mature green chemistry solutions. The contribution of greener chemistries to addressing climate change is very clear. Winning technologies are estimated to eliminate 7.8 billion pounds of carbon dioxide equivalents released to air – the equivalent of taking 770,000 cars off the road each year.[225] In FY 2022, EPA will develop training materials to help state, tribal, local, and industry stakeholders acquire information and understanding of the benefits from these innovations.

The Green Chemistry Program also analyzes green chemistry innovations and works with federal partners and external stakeholders to facilitate market adoption and penetration of new commercially successful chemistries and technologies. In FY 2022, the Program also will work with awardees and nominees to pursue the goal of market-oriented environmental and economic progress through increased adoption of these innovations.

Performance Targets:

(PM P2mtc) Reductions in metric tons of carbon dioxide equivalent (MTCO2e) released.	**FY 2021 Target**	**FY 2022 Target**
	No Target Established	TBD

(PM SC1) Number of new products certified by the Safer Choice program.	**FY 2021 Target**	**FY 2022 Target**
	200	200

[224] For additional information, please visit: http://www.epa.gov/greenchemistry/index.html.
[225] For additional information, please visit: https://www.epa.gov/greenchemistry/information-about-green-chemistry-challenge.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$130.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (-$100.0) This program change reflects savings obtained from greater efficiencies due to the Program's use of more virtual meetings with stakeholders.

Statutory Authority:

Pollution Prevention Act of 1990 (PPA); Toxic Substances Control Act (TSCA).

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$67,369.7***	***$60,280.0***	***$75,519.0***	***$15,239.0***
Total Budget Authority	$67,369.7	$60,280.0	$75,519.0	$15,239.0
Total Workyears	274.3	331.7	419.3	87.6

Total program work years in FY 2022 include 51.6 FTE funded by TSCA fees. FY 2020 Actuals include obligations of TSCA Service Fees and the advance on appropriations for those fees. TSCA Service Fees are not included in FY 2021 Enacted or FY 2022 President's Budget levels, but EPA anticipates collecting approximately $33.85 million of such fees in FY 2021 and $6.85 million in FY 2022, subject to potential changes in fee levels in response to statutory requirement for TSCA User Fee Rule to be updated every three years.

Program Project Description:

EPA has significant responsibilities under the Toxic Substances Control Act (TSCA) for ensuring the safety of chemicals in or entering commerce and addressing unreasonable risks to human health or the environment. These responsibilities are executed by the Agency through the Chemical Risk Review and Reduction (CRRR) Program, which works to ensure the safety of:

- Existing chemicals[226] by collecting chemical data, conducting risk evaluations, and developing and implementing risk management actions, where appropriate, to prevent any unreasonable risk posed by their manufacture, use and/or disposal; and
- New chemicals, by reviewing new chemical submissions from manufacturers and processors and taking action, as appropriate, to mitigate potential unreasonable risks to health or the environment before those chemicals can enter the marketplace.

The CRRR Program – particularly the assessment and management of chemical risks to health and the environment, including risks to vulnerable subpopulations – will play an important role in achieving the Biden-Harris Administration's goals to enhance environmental justice and tackle the climate crisis as set forth in Executive Order (EO) 13985: *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government* and EO 14008: *Tackling the Climate Crisis at Home and Abroad*.

TSCA authorizes EPA to collect fees from chemical manufacturers and processors to defray 25 percent of the costs for administering certain sections[227] of TSCA.[228] Fee levels are set by regulation and may be adjusted on a three-year basis for inflation and to ensure that fees defray approximately 25 percent of relevant costs. The TSCA Fee rule became effective on October 1,

[226] "Existing Chemicals" are those already in use when TSCA was first enacted in 1976 and those which have since gone through review by the TSCA New Chemicals Program. These include certain prevalent, high-risk chemicals known generally as "legacy chemicals" (e.g., PCBs, mercury), which were previously covered in a separate Chemical Risk Management (CRM) budget justification. The CRM program area was combined with Chemical Risk Review and Reduction effective FY 2015.
[227] The costs of implementing TSCA Sections 4 - 6 are defrayable up to the statutory caps, as are the costs of collecting, processing, reviewing and providing access to and protecting from disclosure, as appropriate, chemical information under Section 14.
[228] The authority to assess fees is conditioned on appropriations for the CRRR Program, excluding fees, being held at least equal to the amount appropriated for FY 2014.

2018.[229] CRRR Program fees collected or projected to be collected in FY 2019 – FY 2021 under this rule equated to approximately 14 percent of associated expenditures for those three FYs. EPA proposed revisions to the rule in December 2020, but plans to re-propose in light of public comments, as such, now expects to finalize an amended fee rule in FY 2022. EPA expects the amended rule to defray up to 25 percent of relevant costs, as statutorily allowed.[230]

FY 2022 Activities and Performance Plan:

The 2016 amendments to TSCA imposed significantly increased responsibilities for the CRRR Program, including, for example, a requirement to systematically prioritize and comprehensively evaluate at least 20 chemicals at a time (and evaluate additional chemicals at manufacturers' request), and to manage identified unreasonable risks, all under strict statutory deadlines. The Program resources, however, have not increased commensurate to the workload related to these new statutory requirements. In FY 2022, the Agency is requesting an additional 87.6 FTE (35 percent increase from the FY 2021 Enacted Budget level) to continue implementation of TSCA. Emphasis will be placed on integrity of scientific products, adherence to statutory intent and requirements, and timelines applicable to pre-market review of new chemicals, chemical risk evaluation and management, data development and information collection, the review of Confidential Business Information (CBI) claims, and other statutory requirements.

The increased resources are essential for EPA to address the increased workload, including:

- Revising some of the first 10 risk evaluations issued in FY 2020 and FY 2021 to address overlooked and/or inadequately assessed exposure pathways (including those affecting underserved/disproportionately-burdened communities);
- Ensuring the risk evaluations support legally defensible risk management actions;
- Developing risk management actions in response to the unreasonable human health and environmental risks identified in risk evaluations;
- Developing draft risk evaluations for the 20 High-Priority Chemicals initiated by EPA in December 2019;
- Identifying and collecting the robust data needed to support those risk evaluations; and
- Initiating or continuing risk evaluations in response to requests by manufacturers.

At the same time, the Agency also will continue to review Section 5 new chemicals submissions under TSCA's enhanced safety determination requirements, continue to review CBI claims to ensure that the public has access to the maximum amount of chemical safety information allowed by law, and carry out other required TSCA CRRR activities as described below.

[229] The statute authorizes EPA to collect fees from chemical manufacturers (including importers) and, in limited instances, processors who: are required to submit information (Section 4); submit notification of or information related to intent to manufacture a new chemical or significant new use of a chemical (Section 5); manufacture, (including import) a chemical substance that is subject to an EPA-initiated risk evaluation (Section 6); or request that EPA conduct risk evaluation on an existing chemical (Section 6), subject to the Agency's approval of the request.

[230] This rule may not go into effect until FY 2023.

Primary TSCA Implementation Activities Supported in Part by User Fees

Section 4: Testing of Chemical Substances and Mixtures. TSCA Section 4 authorizes EPA to require testing of a chemical substance. The Agency exercised for the first time new statutory authority in its issuance of the first TSCA Test Order in March 2020 for critical data associated with Pigment Violet 29. In January 2021 the Agency issued Test Orders for nine additional chemicals currently undergoing TSCA risk evaluation. In FY 2022, increased resources will enable the Agency to: review test protocols and test data submitted in response the recently-issued Test Orders and previously issued Test Rules and Enforceable Consent Agreements (ECAs); issue additional Test Orders, Test Rules, and/or ECAs to support chemical prioritization and risk evaluation activities.

Section 5: New Chemicals. Under TSCA Section 5, EPA is responsible for reviewing all new chemical submissions to determine whether the chemicals may pose unreasonable risks to human health or the environment. In FY 2022, the Agency expects to: conduct risk assessments for more than 500 new chemical notice and exemption submissions;[231] make affirmative determinations on whether unreasonable risks are posed under their conditions of use; manage identified risks associated with these chemicals through the issuance of Orders, publish Significant New Use Rules (SNURs); and to require the development of additional data where information is insufficient to conduct a reasoned evaluation.[232]

The new chemicals program plays an important gatekeeper role in ensuring the safety of new chemicals before they enter commerce. In previous FYs, however, the Agency's implementation of TSCA Section 5 placed a significant emphasis on concluding reviews within 90 days by, for example, limiting those reviews to only the submitter's intended uses of the chemical. In March 2021, the Agency announced several policy changes for this program to ensure a more fulsome consideration of a chemical's conditions of use and potential exposures to workers. These changes restore the approach taken immediately following enactment of the 2016 amendments and aim to align implementation of the Program more closely with the law's requirements. The requested resources in FY 2022 are essential for EPA to implement the new chemicals program in accordance with statutory mandates and to address the backlog of older submissions. The additional FTE also are critical to ensuring that the Agency can conduct robust risk assessments using best available science and data within the statutory timelines, identified risks to human health or the environment from new chemicals are appropriately mitigated prior to their entry in commerce, and the Program continues to foster chemical innovation and advances in technologies.

Section 6: Existing Chemicals. Under TSCA, as amended, EPA has gained significant responsibility for evaluating the risks of existing chemicals to human health and the environment. Where unreasonable risk is found, the Agency also will commence risk management (regulatory) action under TSCA Section 6 to address those risks. The increased resources requested in FY 2022

[231] e.g., Pre-Manufacture Notices (PMNs), significant new use notifications (SNUNs), microbial commercial activity notices (MCANs), low volume exemptions (LVEs), low releases and low exposures exemptions (LoREX), test marketing exemption (TME), TSCA experimental release application (TERA) and Tier 1 and 2 exemptions.

[232] For PMNs, MCANs and SNUNs, as required by law, the Agency must generally complete these review, determination and associated risk management activities within 90-days of receiving the submission, subject to extensions or suspension under certain circumstances.

are critical for the Agency to continue implementing these additional requirements to address the risks of existing chemicals, including:

- **Prioritization**: Prioritization is the initial step in the process of evaluating existing chemicals under TSCA and is codified in a final Chemical Prioritization Process rule.[233] The purpose of prioritization is to designate a chemical substance as either High-Priority for further risk evaluation, or Low-Priority for which risk evaluation is not warranted at the time. TSCA required that EPA designate by December 2019 at least 20 chemical substances as High-Priority for risk evaluation, and also at least 20 chemical substances as Low-Priority. On December 20, 2019, EPA finalized the designation of 20 chemical substances as High-Priority for upcoming risk evaluations.[234] On February 20, 2020, EPA finalized the designation of 20 chemical substances as Low-Priority.[235] TSCA requires that upon completion of a risk evaluation for a High-Priority chemical, EPA must designate at least one additional High-Priority chemical to take its place, thus ensuring that at least 20 EPA-initiated risk evaluations are underway at all times. In FY 2022, EPA will begin working to identify additional High-Priority chemicals.

- **Risk Evaluation**: EPA initiated risk evaluations for the first 10 chemicals in December 2016. The Agency missed the 3.5-year statutory deadline for completing TSCA risk evaluations for nine of the chemicals. Only one evaluation was completed on time (June 2020). The last were not completed until January 2021. Furthermore, the Agency is now facing the need to reexamine many of the risk evaluations for those chemicals to address overlooked and/or inadequately assessed exposure pathways (including those affecting underserved or disproportionately burdened communities), adding additional performance requirements for FY 2021 and FY 2022.

  EPA initiated risk evaluations for the first set of 20 High-Priority chemicals in December 2019.[236] On September 4, 2020, EPA released final scoping documents for these chemicals[237] with the 20 evaluations required to be completed by December 2022, or June 2023 if statutorily authorized extensions are required to be exercised. However, the Agency will need to revisit many of those scoping documents under its renewed commitment to scientific integrity and to ensure that exposure pathways affecting under-served/disproportionately-burdened communities are properly evaluated in accordance with the law, which will likely expand the focus of those evaluations. Specifically, it is expected that the Agency will include expanded consideration of potentially exposed and susceptible subpopulations, including environmental justice considerations. It is expected EPA also will include the assessment of specific exposure pathways, such as air and water, that were excluded in the 2020 scoping documents due to policy decisions made previously. In addition, the Agency has already experienced delays in obtaining responses from TSCA Section 4 Test Orders and Section 8 data gathering rules

[233] For additional information, please visit: https://www.regulations.gov/document?D=EPA-HQ-OPPT-2016-0636-0074.
[234] For additional information, please visit: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/chemical-substances-undergoing-prioritization-high.
[235] For additional information, please visit: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/low-priority-substances-under-tsca.
[236] For additional information, please visit: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/chemical-substances-undergoing-prioritization-high.
[237] For additional information, please visit: https://www.epa.gov/chemicals-under-tsca/epa-releases-final-scope-documents-and-list-businesses-subject-fees-next-20.

intended to provide information critical to the completion of the evaluations. Increased resources in FY 2022 will support the TSCA Program's efforts to meet statutory mandates and other requirements while maintaining the Agency's commitment to make evidence-based decisions guided by the best available science and data, consistent with the President's January 27 2021 Memo on Scientific Integrity.

Manufacturers may submit requests to EPA to evaluate specific additional chemicals. The first two Manufacturer Requested Risk Evaluations (MRREs) were commenced in FY 2020; a third was commenced in FY 2021 and a fourth request is currently being considered. Those initial MRREs will be underway throughout FY 2022 and are for chemicals that were on the TSCA Work Plan, enabling the Agency to collect user fees amounting to only 50 percent of its associated actual costs. Increased resources in FY 2022 will ensure that all MRREs are completed on time and in accordance with statutory requirements.

- **Risk Management**: When unreasonable risks are identified in the final risk evaluation, EPA must promulgate risk management action rulemakings under TSCA Section 6(a) to address the unreasonable risk within two years, or up to four years if an extension is utilized.[238] EPA commenced development of risk management actions in FYs 2020 and 2021 after determining that each of the first 10 chemicals evaluated under Section 6 presented unreasonable risk of injury to health or the environment under the assessed conditions of use, and sees the potential for expanding/augmenting some of those actions as the risk evaluations for the first ten chemicals are revaluated. EPA will continue development of these rulemaking actions in FY 2022, including issuance of proposed rules for certain chemicals. EPA is in the process of reconsidering the risk evaluations, which may impact risk management actions under development. As a result, proposed rulemakings will not be published for public comment until the review and any update of the risk evaluations are complete. However, EPA will continue to engage stakeholders in dialogue regarding these risk management actions to ensure the Agency has the benefit of input from interested parties.

  TSCA also mandated that EPA promulgate Section 6 risk management rules for certain Persistent, Bioaccumulative, and Toxic (PBT) chemicals on the 2014 TSCA Work Plan without undertaking further risk evaluation.[239] EPA issued five final rules in January 2021. However, in March 2021, EPA announced a 60-day public comment period to collect additional input on these final rules. Additionally, EPA issued a temporary 180-day "No Action Assurance" indicating that the Agency will exercise its enforcement discretion regarding the prohibitions on processing and distribution of one of these PBTs, Phenol, isopropylated phosphate (PIP)[240] It is possible that as a result of this information and comments received during the public comment period, one or more of the five rules will require revision.

Section 14: Confidential Business Information. EPA is required under TSCA Section 14 to review and make determinations on CBI claims contained in TSCA submissions; process requests for and

[238] TSCA, as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act, Section 6(c)(1)(B) and (C)
[239] TSCA, as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act, Section 6(h) (1) and (2)
[240] For additional information, please visit: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/persistent-bioaccumulative-and-toxic-pbt-chemicals-under#:~:text=Contact%20Us-,Persistent%2C%20Bioaccumulative%2C%20and%20Toxic%20(PBT)%20Chemicals,under%20TSCA%20Section%206(h)&text=Lautenberg%20Chemical%20Safety%20for%20the,bioaccumulative%20and%20toxic%20(PBT).

make certain CBI information available to states, tribes, health and medical professionals, first responders, under defined circumstances; and, assign and publish unique identifiers for each chemical substance for which a confidentiality claim for specific chemical identity is approved. EPA is updating policies, regulations, and guidance to implement the amendments. In FY 2022, EPA will assign unique identifiers to chemicals where CBI claims for chemical identity are approved and expects to complete CBI claim reviews for more than 2,000 new cases, and approximately 1,500 chemical identity claims.

Other TSCA Sections, Mandates and Activities

Section 8:

- **Chemical Data Reporting (CDR) Rule.** Section 8(a) of TSCA requires manufacturers (including importers) to provide EPA with information on the production and use of chemicals in commerce.[241] In March 2020, EPA amended the Chemical Data Reporting (CDR) rule to reduce burden for certain CDR reporters, improve data quality and align reporting requirements with amended TSCA. The recent CY 2020 CDR Reporting Cycle, which occurs every four years and covers CY 2016-2019, commenced on June 1, 2020, and concluded on January 29, 2021.[242]
- **Other Section 8 Activities.** In FY 2022, EPA will: publish a proposed section 8(a)(7) rule for Per- and Polyfluoroalkyl Substances (PFAS); issue an 8(d) rule requiring health and safety data reporting for certain chemicals; analyze 300 Substantial Risk (Section 8(e)) Notifications submitted by industry;[243] implement a rule that will establish a plan for reviewing claims to protect confidential chemical identities within one year of compiling the initial Inventory with active and inactive designations;[244,245] and continue issuing other Section 8 data gathering rules to obtain data needed to support Section 6 prioritization and risk evaluations.

Work Addressing Mercury. In FY 2022, EPA will:

- Maintain the Mercury Electronic Reporting Application[246] and conduct outreach to stakeholders on reporting requirements.
- Continue work under the Mercury Export Ban Act, and related Lautenberg amendments related to the prohibition of export of certain mercury compounds, to support compliance with the Minamata Convention on Mercury, to which the United States is a party.
- Collect and prepare information for publication in the CY 2023 update to the national mercury inventory and consider recommending actions to further reduce mercury use.

[241] For additional information on CDR, please visit: https://www.epa.gov/chemical-data-reporting.
[242] For additional information, please visit: https://www.epa.gov/newsreleases/epa-continues-deliver-commitments-under-amended-tsca.
[243] TSCA Section 8(e) Notifications require EPA be notified immediately when a company learns that a substance or mixture presents a substantial risk of injury to health or the environment.
[244] These are chemical identities reported in retrospective commercial activity notices (the review plan rule was finalized in February 2020).
[245] CBI claims made by manufacturers or processors for chemical identities in retrospective activity notices must be reviewed and determinations made no later than five years after the rule is final (compiling the initial Inventory). The current Inventory has approximately 7,750 chemicals on the confidential portion that have been reported as being active in commerce in the last 10 years.
[246] The Mercury Electronic Reporting application is an electronic reporting interface and database within the Central Data Exchange (CDX).

TSCA Citizen Petitions. In FY 2022, EPA will continue to meet the requirements of Section 21 of TSCA which authorizes citizen petitions for the issuance, amendment, or repeal of certain actions (rules and orders) promulgated under specific components of TSCA sections 4, 5, 6, and 8. The Agency must grant or deny a Section 21 petition within 90 days. If EPA grants a petition, the requested action must be initiated in a timely fashion.

Formaldehyde Standards for Composite Wood Products. In FY 2022, EPA will continue implementing regulations under the TSCA Title VI Formaldehyde Standards for Composite Wood Products Act (Public Law 111-199), which established national emission standards for formaldehyde in new composite wood products.[247] This includes updating new revised voluntary consensus standards incorporated by reference in the rule, as required under the National Technology Transfer and Advancement Act (NTTAA).

TSCA User Fees. Section 26 of TSCA authorizes EPA to collect user fees to offset 25 percent of the Agency's full costs for implementing TSCA Sections 4, 5, 6, and 14.[248] EPA promulgated the TSCA User Fee Rule in October 2019[249] and collected $2.7 million in fee revenue in FY 2019 from Section 5 submissions. In FY 2020, $3 million in fee revenue was collected from Section 5 submissions as well as $2.5 million from two Section 6 MRREs for chemicals on the TSCA Work Plan (diisodecyl phthalate [DIDP] and diisononyl phthalate [DINP]). In FY 2021, fee collections are expected to be $30.0 million ($3 million from Section 5, $25.65 million from 19 of the 20 Section 6 EPA-Initiated Risk Evaluations, $1.25 million from one Section 6 MRRE for a TSCA Work Plan chemical (D4), and less than $0.1 million from Section 4 Test Orders). However, nearly $17 million of the collections for the 19 Section 6 Risk Evaluations is not due to be paid until September 2, 2021, rendering the funds un-usable by EPA until early FY 2022. In FY 2022, EPA anticipates collecting similar amounts for Sections 4 and 5 ($3.1 million) and $2.5 million for an assumed two Section 6 MRREs for TSCA Work Plan Chemicals, subject to potential fee level changes (see below). EPA will apportion FY 2021 Section 6 collections over the risk evaluation lifecycle (3-3.5 years). TSCA requires EPA to update the fees every three years.[250] Fees collected/projected to be collected in FY 2019 – FY 2021 equated to approximately 14 percent of associated expenditures for those three FYs, well below the 25 percent target. EPA proposed revisions to the fee rule in December 2020 but plans to re-propose in light of public comments; as such, EPA now expects to finalize an amended fee rule in FY 2022.

Information Technology (IT) in Support of TSCA Implementation

IT systems development and maintenance will continue in FY 2022 with the goal of minimizing reporting burdens on industry and streamlining data management by EPA, including the following activities:

- Continuing enhancement of the TSCA Chemical Information System to reduce manual handling of data and increase internal EPA access to data relevant to chemical assessments and expedite review of chemicals.

[247] For additional information, please visit: http://www2.epa.gov/formaldehyde/formaldehyde-emission-standards-composite-wood-products.
[248] TSCA, as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act, Section 26(b) (1) and (4).
[249] For additional information, please visit: https://www.epa.gov/tsca-fees/fees-administration-toxic-substances-control-act.
[250] For additional information, please visit: https://www.epa.gov/tsca-fees/fees-administration-toxic-substances-control-act.

- Continuing integration of TSCA information management, e-Reporting, and public access systems with the Agency's E-Enterprise business strategy.
- Initiating development of new tools for hazard and exposure identification, assessment, and characterization, while improving existing tools to better assess chemical risks.
- Maintaining the functionality of *ChemView*[251] and plan for expanding the information it makes available to the public to include newly completed chemical assessments, worker protection information, and other new data reported to EPA under TSCA.
- Completing the TSCA CBI LAN assessment in preparation for network modernization.

Continuous Improvement of TSCA Implementation

In FY 2022, the Agency will continue monitor and evaluate its progress on key metrics related to core responsibilities under TSCA, such as completing all EPA-initiated risk evaluations and associated risk management actions for existing chemicals within statutory timelines. In addition, EPA plans to further reduce review times and reduce the number of cases under review for more than 90 days for Section 5 new chemicals (PMNs, MCANs, and SNUNs).

EPA also will undertake other forms of assessment and evidence gathering in FY 2022. The Agency's ongoing risk evaluation processes for existing chemicals utilize scientific evidence obtained from data gathered pursuant to TSCA authorities and systematic review of literature sources in making the risk determination required under amended TSCA. Based on experience and peer review feedback, EPA is further refining its methods for conducting systematic review and plans to peer review its TSCA Systematic Review Protocol in FY 2022. EPA is working aggressively to gather evidence in support of risk evaluations, accelerating the systemic review work to identify data gaps and filling those data gaps through Section 4 Test Orders and Section 8(a) and (d) data gathering rules. The Agency is collaborating extensively with other agencies in this effort, including with the Interagency Testing Committee (ITC) to add 50 substances to the TSCA section 8(d) "model" Health and Safety Data Reporting rule. These additions to the 8(d) rule will require all manufacturers (including importers) that propose to manufacture, or have manufactured within 10 years preceding the effective date of the listing, to submit copies and lists of unpublished health and safety studies to EPA. EPA also will incorporate information reported in response to the 8(d) rule amendments into the risk evaluations for the 20 High-Priority chemicals, subject to the results of systematic review of obtained information, to enhance the risk evaluations and EPA's ability to determine potential risk. Additional information will be obtained by completing an annual programmatic risk assessment exercise and a statutorily required EPA Office of the Inspector General audit of TSCA user fees to determine whether fee levels are appropriate.

Performance Measure Targets:

(PM TSCA1) Number of final EPA-initiated TSCA risk evaluations completed within statutory timelines.	**FY 2021 Target**	**FY 2022 Target**

[251] For additional information, please visit: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/introduction-chemview.

(PM TSCA2) Number of final existing chemical TSCA risk management actions completed within statutory timelines.	FY 2021 Target	FY 2022 Target
	1	0

(PM TSCA3) Percentage of final TSCA new chemical determinations for Pre-Manufacture Notices, Significant New Use Notices and Microbial Commercial Activity Notices completed within the initial 90-day statutory timeframe.	FY 2021 Target	FY 2022 Target
	80	100

(PM TSCA3b) Percentage of final TSCA new chemical determinations for Pre-Manufacture Notices, Significant New Use Notices and Microbial Commercial Activity Notices completed within the full timeframes allowable by statute.	FY 2021 Target	FY 2022 Target
	100	100

EPA is currently evaluating its suite of measures and indicators related to Environmental Justice, including available data and programs where improved data sets are needed to develop useful performance measures for Environmental Justice Programs. Measures are under development in this program to address environmental justice.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$840.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$14,976.0 / +87.6 FTE) This program change provides increased capacity to reflect the workload associated with chemical risk evaluations and risk management actions. Additional FTE will support the TSCA program's efforts to meet statutory mandates for chemical risk review. This includes $14,976.0 thousand for payroll.

- (-$577.0) This net program change reflects the funding shift of some contractual support for risk evaluation activities to TSCA fees from appropriations.

Statutory Authority:

Toxic Substances Control Act (TSCA).

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$11,859.6***	***$13,129.0***	***$13,385.0***	***$256.0***
Total Budget Authority	$11,859.6	$13,129.0	$13,385.0	$256.0
Total Workyears	56.2	62.9	62.9	0.0

Program Project Description:

EPA's Lead Risk Reduction Program contributes to the goal of reducing lead exposure and works toward addressing historic and persistent disproportional vulnerabilities of certain racial, and low-income communities.[252] This program will thereby play an important role in achieving the Biden-Harris Administration's goals to enhance environmental justice and equity as set forth in Executive Order (EO) 13985: *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government* and EO 14008: *Tackling the Climate Crisis at Home and Abroad* by:

- Establishing standards governing lead hazard identification and abatement practices;
- Establishing and maintaining a national pool of certified firms and individuals who are trained to carry out lead hazard identification and abatement practices and/or renovation, repair, and painting projects while adhering to the lead-safe work practice standards and minimizing lead dust hazards created in such projects; and
- Providing information and outreach to housing occupants and the public so they can make informed decisions and take actions about lead hazards in their homes.

Lead is highly toxic, especially to young children. Exposure to lead is associated with decreased intelligence, impaired neurobehavioral development, decreased stature and growth, and impaired hearing acuity. According to the Centers for Disease Control and Prevention, no safe blood lead level in children has been identified, and effects of lead exposure cannot be corrected.[253,254] Reducing exposure to lead-based paint (LBP) in old housing continues to offer the potential to significantly decrease blood lead levels in the largest number of children. Housing units constructed before 1950 are most likely to contain LBP. The most recent national survey estimated that 37.1 million homes in the U.S. have LBP, and 23.2 million homes have significant LBP hazards.[255] Children living at or below the poverty line who live in older housing are at greatest risk. Additionally, children of some racial and ethnic groups and those living in older housing are

[252] Childhood blood lead levels (BLL) have declined substantially since the 1970s, due largely to the phasing out of lead in gasoline and to the reduction in the number of homes with lead-based paint hazards. The median concentration of lead in the blood of children aged 1 to 5 years dropped from 15 micrograms per deciliter in 1976–1980 to 0.7 micrograms per deciliter in 2013–2014, a decrease of 95%. *See*, *America's Children and the Environment* (EPA, 2019), found at: https://www.epa.gov/americaschildrenenvironment.
[253] Centers for Disease Control and Prevention, Blood Lead Levels in Children, found at: http://www.cdc.gov/nceh/lead/prevention/blood-lead-levels.htm.
[254] *America's Children and the Environment* (EPA, 2019), found at: https://www.epa.gov/americaschildrenenvironment.
[255] *See, American Healthy Homes Survey, Lead and Arsenic Findings* (HUD, 2011), found at: https://www.hud.gov/sites/documents/AHHS_REPORT.PDF.

disproportionately affected by LBP.[256] Because of historic and persistent disproportional vulnerabilities of certain racial, and low-income communities, the Lead Risk Reduction Program has the potential to create significant environmental justice (EJ) gains and provides strategic opportunities to advance EPA's EJ goals in support of the Biden-Harris Administration's goals to enhance environmental justice and equity as set forth in Executive Orders 13985 and 14008.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will conduct technical analyses and rulemaking efforts to address issues related to preventing childhood lead poisoning, including reviewing the definition of LBP, revising the dust-lead hazard standard (DLHS) for lead in soil (SLHS), and addressing any LBP hazards identified in public and commercial buildings, The DLHS, the definition of LBP, and the dust-lead clearance levels (DLCL) regulations have been identified by the Administration as rules to reconsider. FY 2022 funding will enable EPA to address the rulemaking activities necessary to revisit the DLHS, definition of LBP, and DLCL under expeditious timeframes. In addition, EPA must continue work to evaluate whether hazards are created from renovations of public and commercials buildings (P&CBs). Reconsideration and development of these rulemakings will help ensure the most protective approaches are taken to reduce lead exposure in homes and child-occupied facilities, with benefits for communities where disproportionate impacts occur from LBP in support of the Biden-Harris Administration's goals to enhance environmental justice and equity as set forth in Executive Orders 13985 and 14008.

Renovation, Repair and Painting Program

In FY 2022, EPA will continue to implement the Renovation, Repair and Painting (RRP) Rule to address lead hazards created by renovation, repair, and painting activities in homes and child-occupied facilities[257] and to advance EPA's EJ goals in support of the Biden-Harris Administration's goals under Executive Orders 13985 and 14008. Fourteen states and one tribe have been authorized to administer this program and rule. In the remaining non-authorized states, tribes, and territories, EPA will continue to accredit training providers, track training class notifications, and certify renovation firms. EPA also will assist in the development and review of state and tribal applications for authorization to administer training and certification programs, provide information to renovators and homeowners, provide oversight and guidance to all authorized programs, and disseminate model training courses for lead-safe work practices. As of March 2021, there were 317 accredited RRP training providers and more than 57,000 certified renovation firms.

[256] Among children ages 1 to 5 years in families with incomes below poverty level, the 95th percentile blood lead level (BLL) was 3.0 µg/dL, and among those in families at or above the poverty level, it was 2.1 µg/dL, a difference that was statistically significant. The 95th percentile BLL among all children ages 1 to 5 years was 2.5 µg/dL. The 95th percentile BLL in Black non-Hispanic children ages 1 to 5 years was 3.0 µg/dL, compared with 2.4 µg/dL for White non-Hispanic children, 1.8 µg/dL for Mexican-American children, and 2.7 µg/dL for children of "All Other Races/Ethnicities." The differences in 95th percentile BLL between race/ethnicity groups were all statistically significant, after accounting for differences by age, sex, and income. *See*, *America's Children and the Environment* (EPA, 2019), found at: https://www.epa.gov/americaschildrenenvironment.

[257] For additional information, please visit: https://www.epa.gov/lead/lead-renovation-repair-and-painting-program.

DLHS, Definition of LBP, DLCL, and Public and Commercial Buildings (P&CBs)

In FY 2022, EPA will review the DLHS/LBP and DLCL rules and continue analytical work to support the P&CB rule. These regulations, which reduce lead exposure, can aid in addressing historic and persistent disproportional vulnerabilities of certain racial and low-income communities, and can play an important role toward achieving the Biden-Harris Administration's goals to enhance environmental justice and equity as set forth in Executive Orders 13985 and 14008. The DLHS defines hazardous levels of lead in residential paint, dust, and soil, and post abatement clearance levels for lead in interior house dust. On August 10, 2009, EPA received a petition requesting the Agency to lower DLHS and to modify the definition of LBP in its regulations. EPA responded to the petition on October 22, 2009, agreeing to revisit the current DLHS and to work with the U.S. Department of Housing and Urban Development (HUD) to reconsider the definition of LBP.[258] The petition also requested lower DLCL, but EPA's response did not specifically address this issue. A 2009 settlement agreement also established a timeline for action on P&CB renovations unless EPA determined that these activities do not create lead-based paint hazards.

In FY 2019, EPA revised the DLHS[259]. EPA also finalized its 2018 proposal to make no change to the definition of LBP. The FY 2019 DLHS/LBP rule was challenged through litigation and the rule has been identified by the Administration for reconsideration. In the challenge of the update to the DLHS, the lack of revision of soil lead hazard standards (SLHS) also was challenged. This challenge is pending in the Ninth Circuit Court of Appeals.

On January 7, 2021, the final DLCL rule reduced the amount of lead that can remain in dust on floors and windowsills after lead removal activities to better protect children from the harmful effects of lead exposure from 40 to 10 $\mu g/ft^2$ on floors, and 250 to 100 $\mu g/ft^2$ on windowsills. This rule also was challenged, and it also has been identified by the Administration as a rule to reconsider. In FY 2022, EPA will continue to evaluate whether hazards are created from P&CB renovations and to develop any necessary work practice and training requirements.

Lead-Based Paint (LBP) Activities

In FY 2022, EPA will continue to implement the LBP Activities (Abatement, Risk Assessment, and Inspection) Rule by administering the federal program to review and certify firms and individuals and to accredit training providers. Ensuring that those who undertake LBP Activities are properly trained and certified is a critical aspect of federal efforts to reduce lead exposure and work towards addressing the historic and persistent disproportional vulnerabilities of certain racial, and low-income communities in support of the Biden-Harris Administration's goals under Executive Orders 13985 and 14008. Additionally, the Agency will continue to review and process requests by states, territories, and tribes for authorization to administer the lead abatement program in lieu of the federal program. Thirty-nine states, four tribes, the District of Columbia, and Puerto Rico have been authorized to run the lead-based paint abatement program.

[258] The petition and response may be found at: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/tsca-section-21-petition-requesting-epa-lower-lead-dust.

[259] For details on the revised rule, please visit: https://www.federalregister.gov/documents/2021/01/07/2020-28565/review-of-dust-lead-post-abatement-clearance-levels.

Education and Outreach

In FY 2022, the Agency will continue to provide education and outreach to the public on the hazards of LBP, emphasizing compliance assistance and outreach to support implementation of the RRP rule and to increase public awareness about preventing childhood lead poisoning. The program will continue to focus on reducing harm in communities disproportionately affected by lead exposure, including a focus on low income and tribal communities, and providing community leaders a means to educate their own communities about lead hazards and the importance of lead poisoning prevention. Finally, EPA will continue to provide support to the National Lead Information Center (NLIC) to disseminate information to the public.

Performance Measure Targets:

EPA is currently evaluating its suite of measures and indicators related to Environmental Justice, including available data and programs where improved data sets are needed to develop useful performance measures for Environmental Justice Programs. Measures are under development in this program to address environmental justice.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$256.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

Statutory Authority:

Toxic Substances Control Act (TSCA), 15 U.S.C. 2601 *et seq.* – Sections 401-412.

Underground Storage Tanks (LUST/UST)

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$10,841.7***	***$11,250.0***	***$11,443.0***	***$193.0***
Leaking Underground Storage Tanks	$9,942.8	$9,470.0	$9,603.0	$133.0
Total Budget Authority	$20,784.5	$20,720.0	$21,046.0	$326.0
Total Workyears	87.7	91.6	91.6	0.0

Program Project Description:

Environmental Program Management (EPM) resources fund EPA's work in the Leaking Underground Storage Tank (LUST)/UST Program to help prevent releases of petroleum through activities such as inspection and compliance assistance support. The EPM LUST/UST Program provides states[260] and tribes with technical assistance and guidance, and by directly funding projects that assist states and tribes in their program implementation, such as the Tribal Underground Storage Tanks Database (TrUSTD). EPA is the primary implementer of the UST Program in Indian Country. With few exceptions, tribes do not have independent UST program resources.

This program supports the Administration's priority of mitigating the negative environmental impacts to communities that are historically underserved, marginalized, and adversely affected by persistent poverty and inequality. As of September 2020, approximately 53 million people lived within a quarter mile of an active UST facility, representing 16 percent of the total U.S population. These communities tend to be more minority and lower income than the U.S. population as a whole.[261]

In 2005, Congress passed the Energy Policy Act (EPAct) which, along with other release prevention measures, requires states to inspect facilities at least once every three years. EPA has been supporting states in these efforts. Between 2008 and 2020, the number of annual confirmed releases has decreased by 33 percent (from 7,364 to 4,944).[262]

A recent EPA study suggests that increased UST compliance is a result of increasing inspection frequency. EPA's statistical analysis, using the State of Louisiana's and Arkansas's UST data, showed a positive and statistically significant effect of increased inspection frequency on facility

[260] States as referenced here also include the District of Columbia and five territories as described in the definition of state in the Solid Waste Disposal Act.
[261] U.S. EPA, Office of Land and Emergency Management 2020. Data used includes: (1) UST/LUST information as of late-2018 to mid-2019 depending on state from the UST Finder (https://www.epa.gov/ust/ust-finder) and (2) 2015-2018 American Community Survey (ACS) census data.
[262] For more information, please refer to https://www.epa.gov/sites/production/files/2020-06/documents/ca-20-12.pdf.

compliance.[263] This evidence supports the data trends the Agency witnessed: compliance rates rose notably after fully implementing the three-year inspection requirement.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will engage in the following activities:

- Support enhanced inspections and evaluations for UST owners/operators to ensure that UST systems meet current regulations. This will include expanded development and use of a facility specific compliance assistance application for use in Indian Country.

- Develop tools and resources to assist states in adapting to the impacts of climate change and extreme weather events. This includes developing tools and resources to assist states in identifying facilities that are more prone to flooding or wildfires and helping these facilities prepare for these events before they occur.

- Provide oversight for state LUST prevention grants and provide compatibility compliance assistance for tribal facilities.

- Provide technical assistance to states and the regulated community regarding compatibility of UST systems with ethanol 15 percent blends (E15) and conduct inspections in Indian Country to ensure compatibility. Work in this area is important given the national growth in biofuels and other emerging fuels.[264]

- Continue research studies that identify the compatibility of new fuel formulations with current tank systems.

- Continue to coordinate with state UST prevention programs.

- Provide technical assistance, compliance help, and expert consultation to state, tribal, and stakeholders on both policy and technical matters. This support strives to strengthen the network of federal, state, tribal, and local partners (specifically communities and people living and working near UST sites) and assists implementation of the UST regulations.

- Provide guidance, training, and assistance to the regulated community to improve understanding and compliance.

- Continue to work with industry, states, and tribes to identify causes and potential solutions for corrosion in diesel tanks. Work in this area is important given the significant findings regarding the increasing prevalence of corrosion of UST system equipment containing ethanol or diesel fuels.[265]

[263] Sullivan, K. A.; Kafle, A (2020). *The Energy Policy Act of 2005: Increased Inspection Frequency and Compliance at Underground Storage Tank Facilities*. OCPA Working Paper No. 2020-01.
[264] Please see the following EPA website: www.epa.gov/ust/emerging-fuels-and-underground-storage-tanks-usts#tab-2.
[265] Please see the following EPA website: www.epa.gov/ust/emerging-fuels-and-underground-storage-tanks-usts#tab-3.

EPA will continue to collect data regarding both the compliance rate and the number of new releases for UST systems in Indian Country. The compliance rate will help determine progress toward meeting EPA's revised regulations and help identify any areas that need specific attention. In addition, EPA will continue its work to evaluate the effectiveness of its 2015 regulations, which are designed to ensure existing UST equipment continues to function properly.

Performance Measure Targets:

Work under this program supports performance results in the LUST Cooperative Agreements Program under the LUST appropriation.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$52.0) This change to fixed and other costs is an increase due to the recalculation of base payroll costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$141.0) This program change supports enhanced inspections and evaluations to ensure that underground storage tanks meet current regulations.

Statutory Authority:

Resource Conservation and Recovery Act §§ 8001, 9001-9011.

Water Ecosystems

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$30,863.9***	***$31,822.0***	***$31,963.0***	***$141.0***
Total Budget Authority	$30,863.9	$31,822.0	$31,963.0	$141.0
Total Workyears	35.5	36.9	36.9	0.0

Program Project Description:

The National Estuary Program (NEP)/Coastal Waterways Programs works to restore the physical, chemical, and biological integrity of estuaries of national significance and coastal watersheds by protecting and restoring water quality, habitat, and living resources.[266]

The water quality and ecological integrity of estuarine and coastal areas is critical to the economic vitality of the United States (U.S.). While the estuarine regions of the U.S. comprise just 12.6 percent of U.S. land area, they contain 43 percent of the U.S. population and provide 49 percent of all U.S. economic output.[267] The economic value of coastal recreation in the United States – for beach going, angling, bird watching, and snorkeling/diving – has been conservatively estimated by the National Oceanic and Atmospheric Administration to be in the order of $20 billion to $60 billion annually.[268] When natural resources such as fisheries are adversely impacted by upstream and coastal development, so too are the livelihoods of those who live and work in estuarine watersheds.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will provide $19.6 million in Clean Water Act Section 320 grants for 28 National Estuary Programs (NEPs) ($700 thousand per NEP). This funding continues EPA's support for implementation of the NEP Comprehensive Conservation and Management Plans, addresses findings from regular program evaluations of individual NEPs, supports priorities such as nutrient management, habitat protection and restoration, and green infrastructure, as well as performing oversight of the NEPs. Funding also will support the NEPs in developing the skills and capacity to integrate diversity, equity, and inclusion; water equity; and environmental and climate justice into their guiding documents and daily operations.

The FY 2022 request includes resources and FTE to strengthen the capacity of coastal communities to adapt to the impacts of climate change and increase their resilience through locally-driven NEP partnerships and reinvigorating the Climate Ready Estuaries (CRE) program.[269] NEPs assess

[266] For more information, visit https://www.epa.gov/nep.
[267] A 2007 Restore America's Estuaries study, "The Economic and Market Value of Coasts and Estuaries
[268] Pendleton, Lindwood. The Economic and market Value of Coasts and Estuaries: What's at Stake. Available at: https://estuaries.org/resource-library/the-economic-and-market-value-of-coasts-and-estuaries-whats-at-stake/.
[269] For more information, visit https://www.epa.gov/cre.

climate change vulnerabilities, develop and implement adaptation and resiliency strategies, engage and educate stakeholders, and implement collaborative projects with regional, state, and local partners. CRE provides technical support to NEPs and other coastal community leaders and advises on climate resiliency nationally. EPA will continue to work with other federal agencies, states, and tribes to assess ocean and coastal acidification and identify opportunities to implement actions to mitigate the effects of acidification.

EPA continues to work with states, tribes, trust territories, NEPs, and other Federal agencies to implement the National Aquatic Resource Survey (NARS) in coastal/estuarine waters. In FY 2022, the NARS coastal survey will complete processing of samples collected during FY 2021 and provide validated sample results to partners. Analysis and interpretation of the sample results will be used for the next National Coastal Condition Report.

EPA, as the federal chair of the Gulf Hypoxia Task Force, will work with other task force member federal agencies and twelve member states to continue implementation of the 2008 Gulf Hypoxia Action Plan. This activity complements other coordination and implementation resources in the Geographic Program: Gulf of Mexico and Surface Water Protection Program. A key goal of the Gulf Hypoxia Action Plan is to improve water quality in the Mississippi River Basin and reduce the size of the hypoxic zone in the Gulf of Mexico by implementing existing and innovative approaches to reduce nitrogen and phosphorus pollution into the Basin and to the Gulf. Hypoxia Task Force member states are implementing their nutrient reduction strategies, partnering with land grant universities, reporting on measures to track progress, and identifying a need for adaptive management, while the Task Force is developing basin-wide metrics. Excessive nutrients can have both ecological and human health effects – high nitrate levels in drinking water have been linked to serious illness.[270] In addition to the public health risks, the economic costs from impaired drinking water are considerable. State support for effective nutrient reduction in the Gulf will be coordinated with other Hypoxia Task Force federal member agencies, such as the U.S. Department of Agriculture and U.S. Geological Survey, in high-priority watersheds.

Performance Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

[270] For more information, please visit: https://nepis.epa.gov/Exe/ZyNET.exe/P100U1TD.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2006+Thru+2010&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C06thru10%5CTxt%5C00000039%5CP100U1TD.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$75.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$66.0) This program change increases support for the restoration of the water quality and ecological integrity of estuaries of national significance. This reflects EPA's increased national support to assist estuary and coastal communities to prepare for the effects of climate change.

Statutory Authority:

2021 Protect and Restore America's Estuaries Act; 1990 Great Lakes Critical Programs Act of the Clean Water Act; Great Lakes Legacy Reauthorization Act of 2008; Clean Water Act Section 320; Estuaries and Clean Waters Act of 2000; Protection and Restoration Act of 1990; North American Wetlands Conservation Act; Water Resources Development Act; 2012 Great Lakes Water Quality Agreement; 1987 Montreal Protocol on Ozone Depleting Substances; 1909 Boundary Waters Treaty.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$20,212.0***	***$19,300.0***	***$24,899.0***	***$5,599.0***
Total Budget Authority	$20,212.0	$19,300.0	$24,899.0	$5,599.0
Total Workyears	112.1	116.4	138.0	21.6

Program Project Description:

EPA's Wetlands Protection Program has two primary components: 1) the Clean Water Act (CWA) Section 404 regulatory program and 2) the state and tribal development program. Major activities of the Wetlands Protection Program include timely and efficient review of CWA Section 404 permit applications submitted to the U.S. Army Corps of Engineers (USACE) or authorized states; engaging and partnering with USACE, states, and other stakeholders to develop stream and wetland assessment tools, and improving compensatory mitigation effectiveness and availability of credits; assisting in the development of state and tribal wetlands protection programs under CWA; and providing technical assistance to the public on wetland management and legal requirements.

FY 2022 Activities and Performance Plan:

Working with federal, state, tribal, and local partners, EPA will help to ensure an effective, consistent approach to wetlands protection and permitting. This is done through both the Agency's collaborative relationship with USACE in the CWA Section 404 permitting program and continuing work with states and tribes to build their wetlands programs.

CWA Section 404

Section 404 of CWA is an established program to regulate the discharge of dredged or fill material into water of the United States, including wetlands. USACE is responsible for managing the day-to-day permit processes nationwide under CWA Section 404.[271] EPA engages in the CWA 404 permit process to ensure compliance with the CWA Section 404(b)(1) guidelines as the permitting authority formulates their proposed permits. In FY 2022, EPA will support the development of stream and wetland assessment methods, trainings for regulators, and regional crediting protocols to improve the efficiency of federal and state agency review, the transparency and predictability of decision making for the public, and the environmental outcomes of the program. In addition, EPA and USACE will continue to work together improving efficiencies in federal CWA Section 404 permitting that would help reduce potential costs and delays; increase consistency and predictability; improve protection of public health and the environment, including assessing

[271] Currently two states, Michigan and New Jersey have assumed the CWA Section 404 permit program. CWA Section 404(g) gives states and tribes the option of assuming, or taking over, the permitting responsibility and administration of CWA Section 404 permit program for certain waters.

climate impacts and impacts to disadvantaged communities; and ensure permit decisions are legally defensible.

EPA and USACE have initiated a rulemaking to propose amendments to the Mitigation Rule to establish standards and criteria for the use of all types of compensatory mitigation, including on-site and off-site permittee-responsible mitigation, mitigation banks, and in-lieu fee mitigation to offset unavoidable impacts to waters of the United States.

EPA also will continue carrying out its responsibilities as a member of the Gulf Coast Ecosystem Restoration Council authorized under the Resources and Ecosystem Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States (RESTORE) Act, and as a Natural Resource Damage Assessment (NRDA) Trustee for the Deepwater Horizon oil spill under the Oil Pollution Act (OPA). Under CWA Section 404, the RESTORE Act, and OPA, EPA's responsibilities include timely, environmentally sound, and compliant implementation of National Environmental Policy Act (NEPA) review and associated permitting. Under NRDA, EPA is a cooperating or lead federal agency for NEPA on all Trustee Implementation Group restoration plans and ensures the appropriate level of NEPA analysis is integrated into those referenced restoration plans. EPA's RESTORE responsibilities include NEPA analysis for projects that the Council assigns to EPA. As a NRDA Trustee, EPA undertakes mandatory independent third-party financial audits every three years to ensure accountability regarding the use of funds provided under a 2016 consent decree.[272] The first independent third-party financial audit was initiated in FY 2018 and concluded in FY 2019 and the second audit is scheduled to start in FY 2021.

Building State and Tribal Wetlands Programs

EPA will continue to work with states and tribes to target Wetlands Protection Program funds to core statutory requirements while providing states and tribes the flexibility they need to best address their priorities. This includes providing continued assistance to states and tribes interested in assuming administration of the CWA Section 404 program. EPA will propose a rule in FY 2022 to update the existing assumption regulations and provide greater clarity to state and tribes on what waters may be assumed and anticipates taking final action in FY 2023. EPA also will continue to administer Wetlands Program Development Grants in support of state and tribal wetlands programs, with a focus on working more efficiently with states and tribes to achieve specific program development outcomes including protecting and restoring wetlands to address climate impacts and supporting state and tribal assumption of the CWA Section 404 program.[273]

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

[272] For more information, please see: https://www.epa.gov/sites/production/files/2016-02/documents/deepwaterhorizon-cd.pdf.
[273] For more information, please see: https://www.epa.gov/wetlands.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$242.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$5,357.0 / +21.6 FTE) This increase of program resources and FTE supports the implementation of the CWA to protect and restore wetlands. Resources will support EPA's implementation of CWA responsibilities under Section 404, including increasing the quality and quantity of wetlands via timely technical review of Section 404 permits and support for state and tribal efforts to establish and implement effective wetland restoration and protection programs. This investment includes $3,453.0 thousand in payroll costs and essential workforce support costs.

Statutory Authority:

CWA § 404.

Water: Human Health Protection

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$1,337.2***	***$1,584.0***	***$1,804.0***	***$220.0***
Total Budget Authority	$1,337.2	$1,584.0	$1,804.0	$220.0
Total Workyears	1.7	3.2	3.8	0.6

Program Project Description:

The Beach/Fish Program provides up-to-date science, guidance, technical assistance, and nationwide information to state, Tribal, and federal agencies on the human health risks associated with recreational water contact and eating locally caught fish with contaminants at levels of concern.

The Agency implements the following activities under this program:

- Develop and disseminate methodologies and guidance that states and tribes use to sample, analyze, and assess fish tissue in support of waterbody specific or regional consumption advisories.
- Develop and disseminate guidance that states and tribes can use to conduct local fish consumption surveys.
- Develop and disseminate guidance that states and tribes can use to communicate the risks of consuming chemically contaminated fish.
- Gather, analyze, and disseminate information to the public and health professionals that informs decisions on when and where to fish, and how to prepare fish caught for recreation and subsistence.
- Provide best practices on public notification of beach closures and advisories.
- Develop tools such as the sanitary survey app, predictive modeling and improved analytical methods.
- Maintain the E-Beaches IT system to collect data required by the BEACH Act.

These programs are part of EPA's ongoing effort to increase public awareness of the risks to human health associated with the consumption of fish contaminated with mercury and providing technical support to states and tribes on beach monitoring and data reporting. These efforts are directly linked to the Agency's mission to protect human health.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will continue to:

- Update science and public policy to assess and manage the risks and benefits of fish consumption;

- Provide analytical tools and collect data associated with beach monitoring; and
- Provide technical support to states in the operation of their fish advisory and beach monitoring programs.
- Build program capacity, particularly in areas related to environmental justice, water infrastructure support and oversight, climate change resilience, and regulatory reviews.

Performance Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$11.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$209.0 / +0.6 FTE) This increase of resources and FTE builds program capacity, particularly in areas related to environmental justice, water infrastructure support and oversight, climate change resilience, and regulatory reviews. This investment includes $111.0 thousand in payroll costs and essential workforce support costs.

Statutory Authority:

Clean Water Act, § 101, 104, and 303.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$101,007.3***	***$106,903.0***	***$118,265.0***	***$11,362.0***
Science & Technology	$4,265.0	$4,364.0	$6,444.0	$2,080.0
Total Budget Authority	$105,272.3	$111,267.0	$124,709.0	$13,442.0
Total Workyears	472.2	475.2	531.0	55.8

Program Project Description:

Safe drinking water is critical for protecting human health and the economic vitality of the Nation. Approximately 320 million Americans rely on the safety of tap water provided by public water systems that are subject to national drinking water standards.[274] EPA's Drinking Water Program is based on a multiple-barrier and source-to-tap approach to protect public health from contaminants in drinking water.[275] EPA protects public health through:

- Source water assessment and protection;
- Promulgation of new or revised National Primary Drinking Water Regulations (NPDWRs);
- Training, technical assistance, and financial assistance programs to enhance public water system capacity to comply with regulations and provide safe drinking water;
- Underground injection control (UIC) programs;
- Support for implementation of NPDWRs by state and tribal drinking water programs through regulatory, non-regulatory, and voluntary programs and policies; and
- Resources and tools for states and tribes to support the financing of water infrastructure improvements, while addressing climate change challenges and creating more resilient infrastructure, including cybersecurity.[276]

Recent events including the detection of lead and per- and polyfluoroalkyl substances (PFAS) in drinking water highlight the importance of safeguards to public health and local economies, and in particular, the need to prioritize threats and protect drinking water sources. The detection of lead and PFAS, such as perfluorooctanoic acid (PFOA), perfluorooctane sulfonate (PFOS) and Gen-X chemicals, exemplifies the increased demand for risk communication and other tools that can help communities across the country protect public health and address these chemicals.

[274] For more information on the U.S. Environmental Protection Agency Safe Drinking Water Information System (SDWIS/FED), please see: http://water.epa.gov/scitech/datait/databases/drink/sdwisfed/index.cfm.
[275] For more information, please see: https://www.epa.gov/sites/production/files/2015-10/documents/guide_swppocket_2002_updated.pdf.
[276] For more information, please see: https://www.epa.gov/ground-water-and-drinking-water.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA is requesting an increase of over $11.3 million and 51 FTE to support regulatory analysis, development and training, technical assistance for state, tribal, and local communities to address drinking water contaminants (including Lead and PFAS) in their efforts to ensure safe and affordable drinking water. This increase also supports development and implementation of the Lead and Copper Rule Revisions and the Unregulated Contaminant Monitoring Rule.

The Agency will continue to improve the effectiveness and efficiency of regulatory programs for states and tribes, including work to implement the Justice40 initiative and advance racial equity and environmental justice for communities who too often have been left behind, including rural and tribal communities. The Drinking Water Program supports this effort by assisting and training state drinking water programs, tribal drinking water officials, and technical assistance providers on achieving and maintaining compliance at drinking water systems, developing best practices, strengthening state and tribal program capacity, and certifying drinking water operators.

Work in this program also supports evidence-building activities as part of EPA's implementation of the Foundations for Evidence-Based Policymaking Act of 2018 (Evidence Act).

EPA is enhancing its oversight of state drinking water programs by completing the annual public water system supervision program review for each primacy agency as required under the Safe Drinking Water Act (SDWA). Information gained during these reviews includes an analysis of the completion of sanitary surveys by the primacy agency and an evaluation of whether the primacy agency is implementing the state program in accordance with SDWA. The annual program review directly supports the work of the states and the Agency to reduce the number of community water systems still in noncompliance with health-based standards. As of March 2021, approximately 2,756 of the original 3,508 systems with long-term health-based violations on September 30, 2017 have been returned to compliance.

Water Infrastructure

Infrastructure investment is essential as the Nation's aging infrastructure poses a significant challenge for the drinking water and wastewater sectors to protect public health and the environment. In FY 2022, EPA will continue to support funding of the Nation's drinking water infrastructure, including infrastructure needs and assistance for disadvantaged and tribal communities and focusing efforts to leverage and encourage public and private collaborative efforts and investments. EPA will continue to work on the seventh Drinking Water Infrastructure Needs Survey. This survey provides a 20-year capital investment need for public water systems that are eligible to receive funding from state Drinking Water State Revolving Fund (DWSRF) programs and inform the DWSRF allocation formula as required under SDWA.

In FY 2022, EPA will continue to support financing and construction of drinking water infrastructure projects by doing the following, in addition to supporting the DWSRF Program:

- Advise states on maintaining their capacity development and operator certification programs to support compliance by public water systems with SDWA;

- Provide grant funding for lead reduction efforts, cybersecurity, and resiliency to natural hazards, especially for small and disadvantaged communities; and
- Encourage states to continue developing state-centric tools to assist water systems with capacity development and support coordination between Public Water System Supervision (PWSS) programs and states.

The Water Infrastructure Improvements for the Nation Act of 2016 (WIIN) and America's Water Infrastructure Act of 2018 (AWIA) strengthened many existing programs within EPA while creating new programs to tackle significant public health concerns and environmental needs. These programs are vital to protecting public health, continuing to grow the American economy and ensuring that rural and urban communities from coast-to-coast can thrive. Mandates range from the creation of grant programs to promoting water workforce development. WIIN and AWIA requirements will continue to be critical to achieve the Administration's priorities by increasing water infrastructure investment and improving drinking water and water quality across the country.

Funding for infrastructure supports EPA's goal to increase the cumulative amount of non-federal dollars leveraged by water infrastructure finance programs (Clean Water State Revolving Fund, DWSRF, and the Water Infrastructure Finance and Innovation Act Program. As of March 2021, over $17.5 billion has been leveraged in FY 2020 and FY 2021.

Drinking Water Implementation

In FY 2022, the Agency will continue to work with states to implement requirements for all NPDWRs to ensure that systems install, operate, and maintain appropriate levels of treatment and effectively manage their drinking water treatment plants and distribution systems. Activities include:

- Working with states to optimize corrosion control treatment and develop other strategies to minimize exposure to lead;
- Developing guidance, tools, and trainings to support water systems and primacy agencies in implementing the Lead and Copper Rule Revisions;
- Developing regulations to improve the clarity, readability, and accuracy of information in Consumer Confidence Reports; and
- Focusing on the reduction of the number of community water systems with health-based violations, especially small systems, tribal systems, and systems in underserved communities which have additional challenges.

EPA will continue to support state migration to the Compliance Monitoring Data Portal, which enables drinking water utilities and laboratories to report drinking water data electronically. In addition, EPA will continue development of the Safe Drinking Water Information System Modernization Program management and reporting tool, which will focus on what drinking water regulation or technical, managerial, and financial state and public water system capacity-building trainings, in support of drinking water standard compliance, should be emphasized. Both systems support human health protection through efficient data management and decision support.

In FY 2022, EPA will conduct the following activities to facilitate compliance with rules:

- Overseeing the national PWSS Program by administering grants to states and measuring program results based on state reporting of health-based rule violations at public water systems for over 90 drinking water contaminants;
- Offering training and technical assistance to states, tribes, and public water systems with a priority on addressing significant noncompliance with the NPDWRs;
- Directly implementing the Aircraft Drinking Water Rule, designed to protect millions of people who travel on approximately 5,700 aircraft in the U.S. annually; and
- Directly implementing the Drinking Water Program where states and tribes do not have primacy (e.g., Wyoming, the District of Columbia, and tribal lands excluding the Navajo Nation).

In FY 2022, EPA is requesting resources to support evidence-building activities in support of the Evidence Act. EPA will gather existing reports and analyses on data quality of EPA drinking water compliance data; identify what additional data is needed; search for other sources of information; and analyze information to identify and fill data gaps. With this data analysis, EPA will identify system characteristics that support compliance and those that cause compliance challenges. EPA will use these findings to inform and develop policy instruments.

Drinking Water Standards

To assure the American people that their water is safe to drink, EPA's drinking water regulatory program monitors for a broad array of contaminants, evaluates whether contaminants are a public health concern, and regulates contaminants when there is a meaningful opportunity for health risk reduction for persons served by public water systems. In FY 2022, the Agency also will address drinking water risks, by:

- Re-evaluating the Lead and Copper Rule Revisions (LCRR) to take into consideration the input from impacted communities. On March 12, 2021, EPA published two notices: 1) the first is an extension of the effective date for the revised LCRR from March 16, 2021 until June 17, 2021; 2) the second action proposes to extend the effective date until December 16, 2021 and proposes a corresponding extension of the revised LCR's compliance deadline. During the extension time period, EPA will seek further public input, particularly from communities that are most at-risk of exposure to lead in drinking water. Through the LCRR, EPA is seeking ways to advance water infrastructure improvement efforts for public water systems. Public engagement includes two virtual public listening sessions and a set of community- and stakeholder-focused roundtables including local community groups, national stakeholders and environmental justice organizations;
- Conducting human health risk assessments for water contaminants to develop national recommended ambient water quality criteria under the Clean Water Act (CWA) and health effects assessments to support SDWA actions, including the derivation of maximum contaminant level goals, drinking water health advisories, and human health benchmarks. Consideration of those potentially most at risk – especially sensitive subpopulations (e.g.,

subsistence fishers) and critical life stages (e.g., infants and children) – is key in development of health effects assessments for contaminants in water;

- Conducting technical analyses, as needed, following the Agency's FY 2021 final regulatory determinations for contaminants on the fourth contaminant candidate list (CCL 4);
- After a thorough review in accordance with the Administration's executive orders and other directives, EPA reissued the final regulatory determination to regulate PFOA and PFOS in drinking water on February 22, 2021—which was previously announced on January 19, 2021—without substantive change. In FY 2021, EPA began the process to establish enforceable limits for PFOA and PFOS under the Safe Drinking Water Act. PFAS are a set of man-made chemicals that include PFOA and PFOS. PFAS threaten the health and safety of communities across the Nation, disproportionately impacting historically disadvantaged communities. EPA intends to propose NPDWRs for PFOA and PFOS in FY 2023, with a substantial portion of analyses, including conducting health effects assessments/science to support PFOA/PFOS rulemaking, external consultations, peer reviews, and other work being undertaken in FY 2022;
- Continuing to participate in interagency efforts to address PFAS to better understand the health impacts, the extent of occurrence in the environment, and exposures to PFAS;
- Continuing to develop risk communication and other tools to support states, tribes, and localities in managing PFAS and other emerging contaminants in their communities;
- Developing and publishing the final fifth contaminant candidate list (CCL 5) based on the analysis of available health effects and occurrence data on unregulated contaminants;
- Continuing to conduct analyses in support of the fourth six-year review of existing NPDWRs, utilizing state data for regulated contaminants collected between 2012-2019;
- Continuing to support state and tribal efforts to manage cyanotoxins in drinking water, including providing technical assistance;
- Continuing to engage stakeholders through public meetings and consider additional fora to seek expert stakeholder input on potential revisions to the existing Microbial and Disinfection Byproducts Rules. Develop draft technical support documents and other materials to support this work;
- Developing the final rule for the next cycle of the UCMR monitoring (UCMR 5). This includes evaluating and addressing public comments on the UCMR 5 proposed rule published in March 2021. Providing support to drinking water systems and laboratories as they prepare for the collection and analysis of samples during the implementation of UCMR 5; and
- Collecting Community Water System Survey data to capture changes in the conditions of public water systems that have taken place in water systems over the past 14 years.

Source Water Protection

EPA will continue to partner with states, federal counterparts, drinking water utilities, and other stakeholders to identify and address current and potential impacts to sources of drinking water. In FY 2022, the Agency will be:

- Continuing to develop data-layers and decision support tools to assist source water assessment, planning, and emergency preparation efforts including the Drinking Water Mapping Application for Protecting Source Waters and an online GIS program available through EPA's web-based geospatial platform, Geoplatform;[277]
- Working with state, federal, utility, and local stakeholders to leverage resources, support efforts to assist communities in source water protection activities and projects, and promote ongoing efforts to protect drinking water sources;
- Continuing to partner with the U.S. Department of Agriculture (USDA)'s Natural Resources Conservation Service and Forest Service, and state partners to support implementation of the source water protection provisions of the Agriculture Improvement Act of 2018 (2018 Farm Bill). This presents an opportunity to forge stronger connections between EPA and USDA to address agriculture-related impacts to drinking water sources;
- Continuing to provide support for workshops that promote source water protection at the local level and support the integration of source water protection into related programs at the state and federal levels, focusing on reducing nutrient pollution impacts on drinking water sources;
- Working with stakeholders to implement source water protection provisions mandated by AWIA. Support the implementation of the AWIA revisions to the Emergency Planning and Community Right-to-Know Act as it relates to notification of releases of hazardous chemicals that potentially affect source water. In addition, support community water systems having access to hazardous chemical inventory data;
- Continuing to serve as an expert on sources of emerging drinking water contaminants and options for limiting or preventing such contamination through source water protection and integration of SDWA and CWA, particularly national recommended ambient water quality criteria; and
- Supporting the development of outreach and training materials on incorporating source water protection into asset management to further the concept that source water protection is an integral part of the overall planning and management of a utility.

Underground Injection Control (UIC)

To safeguard current and future underground sources of drinking water from contamination, the UIC Program regulates the permitting, construction, operation, and closure of injection wells that place fluids underground for storage, disposal, enhanced recovery of oil and gas, and minerals recovery. In FY 2022, activities in the UIC Program include:

- Working with the Ground Water Protection Council, Interstate Oil and Gas Compact Commission, and the National Rural Water Association to identify best practices in oil and gas development, such as reuse and recycling of produced water, that can help safeguard public health;
- Supporting the Administration's efforts to tackle the climate crisis by working with permit applicants on Class VI permits for secure geologic storage of carbon dioxide and working with state UIC programs to obtain state primacy for the Class VI program;

[277] For more information, please see: https://www.epa.gov/sourcewaterprotection/dwmaps.

- Working with authorized state and tribal agencies in their efforts to effectively manage Class II enhanced oil and gas recovery wells and oil and gas-related disposal wells;
- Supporting states and tribes in applying for primary enforcement responsibility and implementing UIC Program revisions;
- Providing technical assistance, tools, and strategies to states for improving implementation of UIC programs, including development of e-learning material;
- Using national UIC data to assist with promoting nationally consistent approaches to program oversight of state and EPA UIC programs;
- Developing tools to support permitting in direct implementation and state implementation of the Class VI program; and
- Streamlining EPA UIC direct implementation permitting, developing standard work, deploying Lean management principles and reducing the permit application backlog. Through these efforts, the backlog of EPA-issued new UIC permits decreased from 36 to 22.

Water Reuse

To assure a safe and reliable source of water that is resilient to drought, flooding, and population growth, EPA is working to advance the consideration of water reuse nationwide. This work is being done in collaboration with a broad group of stakeholders including non-governmental organizations, states, tribes, and local governments. In FY 2022, EPA will continue to support the National Water Reuse Action Plan and develop and pursue actions that prioritize advancing technical and scientific knowledge on water reuse to ensure its safety across a range of uses and applications. EPA also will pursue actions in the Plan that provide financial tools to stakeholders to ensure the accessibility of water reuse.[278]

Performance Measure Targets[279]:

(PM DW-02) Community water systems still out of compliance with health-based standards since September 30, 2017.	**FY 2021 Target**	**FY 2022 Target**
	875	701

Work under this program supports Safe Drinking Water Act implementation and compliance to support safe drinking water for the nation.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$1,256.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

[278] For more information, please see https://www.epa.gov/waterreuse.
[279] The Agency has made a technical correction to the baseline for the long-term performance goal associated with this program. The adjusted long-term performance goal is "By September 30, 2022, reduce the number of community water systems still in noncompliance with health-based standards since September 30, 2017, to 701."

- (+$10,106.0 / +51.8 FTE) This program change is an increase in resources and FTE to support regulatory analysis, development and training, technical assistance for State, Tribal, and Local communities to address drinking water contaminants (including Lead and PFAS) in their efforts to ensure safe and affordable drinking water. This increase also supports development of the Lead and Copper Rule Revisions and the Unregulated Contaminant Monitoring Rule. This total includes $9.0 thousand in non-pay and 1.0 FTE to support implementation of the Evidence Act. This investment also includes $8,765.0 thousand in payroll costs and essential workforce support costs.

Statutory Authority:

SDWA; CWA.

Water Quality Protection

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$9,153.2***	***$9,468.0***	***$12,072.0***	***$2,604.0***
Total Budget Authority	$9,153.2	$9,468.0	$12,072.0	$2,604.0
Total Workyears	32.8	31.8	38.0	6.2

Program Project Description:

EPA's Marine Pollution Program: 1) aims to reduce marine litter and improve trash capture activities across the country, and supports the Trash Free Waters Program; 2) addresses incidental discharges under the Clean Water Act Section 312; and 3) protects human health and the marine environment from pollution caused by dumping through implementation of the Marine Protection, Research and Sanctuaries Act (MPRSA) and supports the Ocean Dumping Management Program.

FY 2022 Activities and Performance Plan:

Trash Free Waters Program. The FY 2022 request includes resources and FTE to expand trash capture and prevention programs across the U.S. tied to water quality and waste management goals and implement activities under the Save Our Seas 2.0 Act. This program provides support to states and municipalities in coastal regions and on major river systems, with a special focus on lower-income areas with environmental justice concerns. Work will focus on high impact activities such as expanding trash prevention and monitoring programs. Examples include installing trash capture systems in stormwater conveyance systems and in waterways using technologies that are cost-effective and that have high trash-removal efficiencies; providing assistance on integrating trash prevention provisions into municipal stormwater management permits and practices, as well as broader watershed plans; aiding targeted source reduction efforts; promoting appropriate protocols for trash monitoring efforts; researching and addressing microplastics (including microfibers) in waterways; engaging in comprehensive outreach and education efforts for trash reduction; and validating and replicating the most effective tools, projects, metrics, and partnerships across the U.S. for subsequent application both in other locations within the U.S. and in countries with the greatest need.

The Trash Free Waters Program has been able to increase the number of place-based projects year by year through active engagement with partners. In FY 2020, 55 Trash Free Water projects were started. EPA will continue to work with its partners to enhance this initiative in FY 2022.

Vessel Incidental Discharge Act (VIDA). In December 2018, VIDA was signed into law establishing a new framework for the regulation of discharges incidental to the normal operation of vessels. After considering public comments on the proposed rule, EPA plans final action in FY 2022 to set national performance standards for approximately thirty different categories of discharges from commercial vessels greater than 79 feet in length, and for ballast water from

commercial vessels of all sizes. Following finalization of the regulations, EPA will coordinate with the U.S. Coast Guard on their implementing regulations. EPA plans to issue revised no-discharge zone guidance and continue to work with states on designating no-discharge zones within their waters.

Ocean Dumping Management Program. MPRSA regulates the disposition of any material in the ocean unless expressly excluded under MPRSA. In FY2022, EPA will continue to evaluate MPRSA permitting requests for the ocean dumping of all materials except dredged materials and, as appropriate, issue MPRSA emergency, research, general and special permits. This may include addressing climate change-related permitting requests under MPRSA, including proposals for the sub-seabed sequestration of CO_2 in geological formations or marine geoengineering activities (*e.g.*, macroalgae cultivation for carbon sequestration, ocean alkalinity enhancement, addition of reflective materials for solar radiation management). EPA will continue managing 98 EPA-designated ocean disposal sites; conducting oceanographic surveys; and evaluating requests to designate new ocean disposal sites and/or modify (*i.e.*, expand the capacity of) existing EPA-designated sites, and, as appropriate, designating or modifying ocean disposal sites (through rulemaking) under MPRSA. EPA will serve as the Head of the U.S. Delegation for the annual London Convention (LC) and London Protocol (LP) Scientific Groups Meetings and Alternate Head of the U.S. Delegation for the annual Consultative Meeting of the LC and LP Parties.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$38.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$2,566.0/ +6.2 FTE) This program change increases resources and FTE to build program capacity, particularly in areas related to environmental justice, water infrastructure support and oversight, climate change resilience, and regulatory reviews. This investment also includes $1,107.0 thousand in payroll costs and essential workforce support costs.

Statutory Authority:

Clean Water Act; Marine Protection, Research, and Sanctuaries Act (Ocean Dumping Act); Marine Debris Research, Prevention and Reduction Act of 2006; Marine Plastic Pollution Research and Control Act of 1987; Save Our Seas Act 2.0.

Surface Water Protection

Program Area: Water Quality Protection

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$201,289.7***	***$206,882.0***	***$218,582.0***	***$11,700.0***
Total Budget Authority	$201,289.7	$206,882.0	$218,582.0	$11,700.0
Total Workyears	920.7	944.2	990.0	45.8

Program Project Description:

The Surface Water Protection Program, under the Clean Water Act (CWA), directly supports efforts to protect, improve, and restore the quality of our Nation's coasts, rivers, lakes, and streams. EPA works with states and tribes to make continued progress toward clean water goals.

The National Pollutant Discharge Elimination System (NPDES) Program issues on average over 11,000 permits a year to address discharges from among the approximately 15,000 wastewater treatment facilities, more than 60 categories of industries, and almost 300,000 stormwater facilities. CWA established the NPDES permit program to help address water pollution by regulating point sources that discharge pollutants to waters of the United States. EPA authorizes the NPDES permit program to state, tribal, and territorial governments and currently 47 states have authorized programs. EPA is the permitting authority for three states (Massachusetts, New Hampshire, and New Mexico), the District of Columbia, all tribes except in Maine, all territories except the U.S. Virgin Islands, and federally operated facilities in Colorado, Delaware, Vermont, and Washington.

EPA continues to collaborate with the permitting authorities (states) to identify opportunities to enhance the integrity and timely issuance of NPDES permits. EPA is making efforts to modernize permitting and oversight practices by eliminating its permitting backlog and implementing programmatic measures. After program improvements, between March 2018 and March 2021, the backlog of EPA-issued new and existing NPDES permits decreased from 106 to 24 and 547 to 338, respectively.

EPA is responsible for conducting oversight of the permitting authorities to ensure adequate implementation of the CWA requirements and regulations. EPA continues to use the Program and Permit Quality Review process to evaluate permit language, factsheets, permit conditions, and administrative records of a particular permitting authority. Through this review mechanism, EPA promotes national consistency and opportunities to enhance the implantation of the Program. This review also evaluates the pretreatment programs across the country. The pretreatment program is a cooperative effort of federal, state, and local governments that perform permitting, and enforcement tasks for discharges to publicly owned treatment works.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will work with states and tribes to target funds to core requirements while providing states and tribes with flexibility to best address their priorities for surface water protection. The increase in funding will allow EPA to focus on advancement of clean water infrastructure programs, with an emphasis on building climate change resilience, conducting CWA regulatory reviews, and advancing environmental justice through technical assistance and stakeholder engagement.

Program Implementation

Water Quality Criteria and Standards. In FY 2022, EPA will continue to develop and publish new or revised water quality criteria reflecting the latest scientific knowledge as required by CWA Section 304. EPA also will continue to review and take action on both state and tribal water quality standards and state lists of impaired waters as required by CWA Section 303. The Agency will place special emphasis on improving the water quality standards in tribal waters inside and outside reservations to better ensure that tribes' health and natural resources are protected.

Water quality criteria and standards provide the scientific and regulatory foundation for water quality protection programs under the CWA. EPA will continue to support state and tribal programs by providing scientific water quality criteria information as required by CWA Section 304. EPA also will continue to support states and authorized tribes in adopting and implementing water quality standards in accordance with the water quality standards regulation set forth in 40 CFR part 131. In FY 2022, the Agency will place special emphasis on engaging with underserved communities in the review and setting of state water quality standards. Many underserved communities endure the contamination of their local waters. This work will help empower these communities to secure adequate water quality standards for their local waters and to drive attainment of those standards.

Effluent Limitations Guidelines (ELGs). As required under the CWA, EPA will continue to annually review industrial sources of pollution and publish a preliminary ELG plan for public review, followed by a final biennial ELG plan informed by public comment. These plans will identify any industrial categories where ELGs need to be revised or where new ELGs need to be developed. In FY 2022, EPA intends to increase the capability of EPA's Effluent Guidelines program to reduce industrial pollutant discharges through innovative technology nationwide. These discharges often directly and disproportionately affect underserved downstream communities by contaminating their water sources and fish caught for consumption. The Agency will invest in engaging communities that are so often bearing the brunt of the industrial discharges that are the focus of ELGs, through surface water and fish contamination, drinking water contamination, stress on drinking water treatment systems, and impairment of aquatic ecosystems.

Biosolids. EPA will continue to implement the biosolids (sewage sludge) program as required under CWA Section 405, including reviewing the biosolids regulations not less often than every two years for the purpose of identifying additional toxic pollutants and promulgating regulations for such pollutants consistent with the CWA. EPA also will continue to develop tools to conduct risk assessments for chemicals and pathogens found in biosolids. EPA will focus resources on

obtaining and using the latest scientific knowledge to identify resource recovery and reuse alternatives, understanding and managing the biosolids lifecycle, engaging partners—particularly those communities most affected—and conducting research. Investment in the biosolids program is critical to addressing near term risks from PFAS, dioxins and dibenzofurans, PCBs, and other chemicals known to be in domestic sewage sludge that is currently applied to land.

Impaired Waters Listings and Total Maximum Daily Loads (TMDLs). EPA will work with states and other partners on identifying impaired waters, as required by CWA Section 303(d), and on developing waterbody restoration plans, including TMDLs, for listed impaired waterbodies. TMDLs focus on clearly defined environmental goals and establish a pollutant budget, which is then implemented through local, state, and federal watershed plans and programs to restore waters. EPA also will work with states and tribes on their CWA Section 303(d) programs, TMDLs, and other restoration and protection plans to ensure they are effective and can be implemented. EPA will provide support to promote implementation ready TMDLs and the protection of high-quality waters.

Monitoring and National Aquatic Resource Surveys. EPA will continue working with states and tribes to support the National Aquatic Resource Survey's statistically representative monitoring of the condition of the Nation's waters which supports CWA Section 305(b). EPA also will continue working with states and tribes to support base water quality monitoring programs and priority enhancements that serve state and tribal CWA programs in a cost-efficient and effective manner. EPA will continue supporting state and tribal water quality data exchange and tools to maximize the use of data from multiple organizations to support water quality management decisions.

Waters of the United States. EPA and the Department of the Army published the final Navigable Waters Protection Rule in April 2020. In accordance with Executive Order 13990, EPA and the Department of the Army are reconsidering the rule and intend to provide robust engagement with states, tribes, and stakeholders.

Water Quality Certification. In response to Executive Order 13868, issued in April 2019, EPA finalized a rule to update the CWA Section 401 certification regulations in June 2020 and began developing implementation resources and coordinating with other federal agencies as they revise their own regulations. In accordance with Executive Order 13990 *Protecting Public health and the Environment and Restoring Science To Tackle the Climate Crisis,* EPA is reconsidering the rule and intends to provide robust engagement with states, tribes, and stakeholders. Section 401 of the CWA gives states and authorized tribes the authority to assess potential water quality impacts of discharges from federally permitted or licensed infrastructure projects that may affect navigable waters within their borders.

Water Quality Programs. The NPDES Program is a vast and complex program that protects human health, safety, and the environment. In FY 2022, EPA will continue to implement the water quality programs that control point source discharges through permitting and pretreatment programs. The program continues to work with states to structure the permit program, support its implementation and better pursue comprehensive protection of water quality on a watershed basis.

In addition, as required under the CWA and Executive Order 12866, EPA will continue to support cost-benefit analysis for CWA regulatory and deregulatory actions. EPA will work with states, tribes, territories, and local communities to safeguard human health; maintain, restore, and improve water quality; and make America's water systems sustainable and secure, supporting new technology and innovation wherever possible.

Nutrient and Harmful Algal Bloom (HAB) Reductions. The FY 2022 request directs resources and FTE to support efforts to reduce nutrient pollution and HABs, which remain the most significant widespread water quality challenge across the country, despite decades of efforts to achieve reductions.[280] The sources and impacts of nutrient pollution and HABs vary depending on geographic location, and span urban, rural, and coastal landscapes. Still, in many places nonpoint sources are responsible for a significant portion of nutrient loads. Federal regulatory programs do not comprehensively cover these issues, and therefore a more diverse suite of approaches (non-regulatory, incentive-based, partnership, and market approaches), must be used to complement EPA's existing regulatory drivers. Harnessing the wealth of information accrued via federal, state, and local efforts to reduce nutrients, this effective partnership framework engages our state partners at the forefront of environmental protection. EPA has been working with its partners to address these challenges. For example, EPA partners with the Hypoxia Task Force to help implement state plans to reduce excess nutrients in the Mississippi River/Atchafalaya River Basin and co-hosts a webinar series with the Department of Agriculture on innovative financing in the public and private sectors that can be used to help reduce excess nutrients. As of March 2021, more than 16,600 square miles of watersheds identified as impaired by nutrients in October 2019 are now attaining standards. The FY 2022 request also directs resources to reduce and better predict HABs, which can be caused by nutrient pollution. It also will support science research related to HABs, including development of a national policy on hypoxia and HABs in freshwater, and examining how climate impacts the frequency and intensity of HAB events.

Per- and Polyfluoroalkyl Substances (PFAS) The PFAS Action Plan includes the following work: determining whether data are sufficient to develop national recommended ambient water quality criteria; scoping biosolids risk assessments for PFOA and PFOS; development of methods for detecting PFAS in wastewater; collecting information on discharges of PFAS from industrial point sources to determine if revisions to one or more ELGs is warranted; and fish tissue monitoring. In FY 2022 EPA will build on that Plan and continue the collaborative efforts of the EPA Council on PFAS.

Water Reuse. To assure a safe and reliable source of water that is resilient to drought, flooding, and population growth, EPA is working to advance the consideration of water reuse nationwide. This work is being done in collaboration with a broad group of stakeholders including non-governmental organizations, states, tribes, and local governments. In FY 2022, EPA will continue to support the National Water Reuse Action Plan and develop and pursue actions that prioritize advancing technical and scientific knowledge on water reuse to ensure its safety across a range of uses and applications. EPA also will pursue actions in the Plan that provide financial tools to stakeholders to ensure the accessibility of water reuse.[281]

[280] For more information, please see https://www.epa.gov/nutrientpollution.
[281] For more information, please see https://www.epa.gov/waterreuse.

Water Sense. The WaterSense Program is a key component of the Agency's efforts to ensure long-term sustainable water infrastructure, contribute to GHG reductions, and help communities adapt to drought and climate change. WaterSense provides consumers with a simple label to identify and select water-efficient products to help them save water and money and provides resources and tools to help water utilities carry out efforts to manage water demand and wastewater flows. As of April 2021, the Agency has voluntary specifications for three water-efficient service categories (certification programs for irrigation system auditors, designers, and installation and maintenance professionals) and nine product categories (residential toilets, bathroom faucets and accessories, showerheads, flushing urinals, flushometer-valve commercial toilets, weather-based irrigation controllers, soil moisture-based irrigation controllers, and spray sprinkler bodies). The Program also has a specification to label water-efficient single and multifamily homes that are designed to save water indoors as well as outdoors. Product specifications include water efficiency as well as performance criteria to ensure that products not only save water but also work as well as standard products in the marketplace. Products and homes may only bear the WaterSense label after being independently certified to ensure that they meet WaterSense specifications.

WaterSense has become a national symbol for water efficiency among utilities, plumbing manufacturers, and consumers, and awareness of the WaterSense label is increasing. As of April 2021, the program has labeled more than 37,000 models of plumbing and irrigation products and close to 3,000 homes have earned the WaterSense label. Cumulative water savings in the Program attributed to reported products shipped through the end of 2019 (the most recent year for which there is data) exceed 4.4 trillion gallons, enough water to supply all the homes in the United States for 6 months – and $86.9 billion in water, sewer, and energy bill savings. The energy savings associated with reducing the need to move, treat, and heat that water is equivalent to 198 MMTCO2E of greenhouse gas reductions.[282]

WaterSense has more than 2,000 partners, which include manufacturers, retailers, builders, utilities, state/local governments, and community organizations, that help to educate consumers on the benefits of switching to water-efficient products and efficient water use. In FY 2022, the Program will work with its partners to carry out consumer campaigns that encourage consumers to switch to WaterSense-labeled products and practice other water-efficient behaviors in their homes, outdoors, and in the workplace. WaterSense also is working within the federal government to ensure that it leads by example through the use of water-efficient products and practices.

In 2021, the Agency released a final specification for soil moisture-based irrigation controllers and a major update to the homes program. The update to the homes program increases flexibility in meeting WaterSense's technical requirements without compromising on overall water efficiency or performance, improves collaboration with green certification programs, and allows for easier implementation and certification. In FY 2022, the Program will look to promote the new irrigation product within the suite of other outdoor products and support the full transition of the homes program to its new structure. The Program also will research other residential and commercial product and service categories to inform future specifications. The Program plans to update its 2012 guide on best management practices to support commercial and institutional facilities and carry out targeted outreach to promote the EPA Water Score for multifamily properties, which was

[282] WaterSense Accomplishment Reports (updated annually). For more information visit: https://www.epa.gov/watersense/accomplishments-and-history .

developed in partnership with ENERGY STAR. In FY 2022, the WaterSense Program also will continue support to additional sectors by working with the ENERGY STAR Program to achieve multiple benefits of water and energy savings.

Infrastructure

EPA will continue its support of the Nation's infrastructure, focusing on efforts to leverage and encourage public and private collaborative efforts and investments in improving the Nation's water infrastructure. This program supports the policy and fiduciary oversight of the Clean Water State Revolving Fund (CWSRF) Program, which provides low-interest loans and additional subsidization to help finance wastewater treatment facilities and other water quality projects.[283] The Program supports policies and outreach that help ensure the good financial condition of the State Revolving Funds. Federal capitalization to the SRFs is significantly leveraged; since 1988, the CWSRF program has made 42,842 assistance agreements, funding over $145 billion in wastewater infrastructure and other water quality projects. The Program also funds implementation of sections of the America's Water Infrastructure Act of 2018 (AWIA).

The FY 2022 request:

- Supports funding for the Environmental Finance Centers Program which will help communities across the country improve their wastewater and stormwater systems, particularly through innovative financing;
- Helps drive progress, between FY 2020-2021, the Agency will increase by $16 billion the non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA). At the end of March 2021, EPA has leveraged over $17.5 billion in non-federal dollars; Supports decentralized (septic or onsite) systems that provide communities and homeowners with a safe, affordable wastewater treatment option by supporting the 2020 Decentralized Wastewater Management MOU. Decentralized wastewater systems are used throughout the country for both existing and new homes as well as commercial or large residential settings; they are in small, suburban, and rural areas where connecting to centralized treatment is often too expensive or may not be available.;
- Supports the Wastewater Technology Center that will provide accurate and objective resources on innovative and alternative wastewater technologies with a focus on small, mid-sized, and underserved communities. The Center serves to support effective investments in 21st century utilities and will support utilities holistically as they embark on adopting technologies; serve as a forum between the sector and government to identify synergies; share information and springboard new initiatives; support the adoption of innovative and alternative technologies; and increase and facilitate our understanding of the opportunities and impacts of emerging technologies to the National Water Program.
- Supports the AWIA 2018 Wastewater Technology Clearinghouse, a searchable data base that will provide reliable, objective information on proven innovative and alternative technologies for decentralized and centralized alternative wastewater treatment, such as water reuse, small system technologies used by lagoons, resource recovery, and nutrients;

[283] For more information, please see https://www.epa.gov/cwsrf.

- Supports the Sustainable Utility Management programs, implemented in partnership with industry associations and designed to protect and improve infrastructure investments through the Effective Utility Management Program, the Water Workforce Initiative, and tools such as augmented alternatives analysis that help communities leverage investments to achieve water protection goals and other community economic and societal goals; and
- Supports the Water Infrastructure and Resiliency Finance Center in assisting local leaders in identifying financial approaches for their drinking water, wastewater, and stormwater infrastructure needs.
- Work on the Clean Water Needs Survey (CWNS) (reference the FY 2022 requested STAG appropriations language to allow EPA to allocate unused budget authority within the CWSRF American Iron and Steel provision set-aside for work on the CWNS).

Program Oversight/Accountability

The Assessment TMDL Tracking Implementation System (ATTAINS). States and tribes play a critical role in implementing the CWA. For programs where states and tribes have primacy, the Agency will focus on providing oversight and assistance. The Agency will continue to support states in electronically reporting CWA Section 303(d) and Section 305(b) assessment conclusions through ATTAINS to track improvements in impaired waters. This tool reduces burden on states to track and report progress in meeting water quality standards in waters targeted for local action and greatly improves evidence-based tracking of local actions to improve water quality.

EPA will continue to track state progress in completing TMDLs, alternative restoration approaches, or protection plans with the goal of 84 percent of plans in place at state identified priority waters by the end of 2021. As of March 2021, over 70 percent of state priority waters were addressed by a TMDL, alternative restoration plan, or protection approach. EPA has continued to support Lean efforts in the states to improve their water quality monitoring, assessment, and reporting processes. EPA continues to support streamlining efforts to allow states to reduce the time they spend on administrative reporting and contribute to improved reporting of the Agency's metric to reduce the number of square miles of watershed with surface water not meeting standards. Between August 2019 and March 2021, over 42,000 square miles of watershed that contained impaired waters in FY 2019 attained compliance with water quality standards.

Eliminate NPDES Backlog. The FY 2022 request supports work underway to accelerate permitting-related decisions and streamlining efforts focused on establishing clear timelines for permitting processes. EPA plans to continue implementing a national strategy to eliminate the NPDES permit backlog by providing technical assistance and trainings. In addition, EPA will work to publish the final Multi-Sector General Permit, the draft Construction General Permit and the final Pesticide General Permit.

Factors that contribute to delays in the permit issuance process include increased complexity of permitting emerging contaminants, and permit litigation. In FY 2022, EPA will continue to host NPDES-related courses and workshops to build permit writer capacity on a range of topics including permit writing, pretreatment, whole effluent toxicity, stormwater, and nutrients.

In FY 2022, EPA will continue to work with the federal permitting authorities to address PFAS in NPDES permitting. The recently released *Interim Strategy for PFAS in Federally Issued NPDES Permits,* recommends that permit writers include permit requirements for phased-in monitoring and best management practices, as well as a continuing education on permitting practices. In FY 2022, EPA will continue to build upon this strategy by conducting training, collaborating with state permitting authorities, and sharing the latest research and state practices, to prevent this contaminant from reaching surface waters.

In FY 2022, EPA will work on addressing court decisions related to Maui and criminal intent in the permitting program. In *County of Maui v. Hawaii Wildlife Fund*, the Supreme Court held that discharges from point sources through groundwater that eventually reach a water of the United States require an NPDES permit if they are the "functional equivalent" of a direct discharge to a water of the United States. In FY 2021, EPA formed a national workgroup and in FY 2022 will continue to collaborate with stakeholders to better understand the resources and tools needed to implement this decision effectively in permits.

Integrated Planning. Clean water infrastructure investment needs are documented to be several hundred billion dollars, with wet weather improvements (CSOs, SSOs, bypasses, and stormwater discharges) comprising a significant portion of this total. Investment needs of this magnitude affect utility rates, and disproportionately impact disadvantaged communities. Integrated planning utilizing green infrastructure allows communities to synchronize infrastructure investments with broader community development goals. An integrated approach creates opportunities for affordable, multi-benefit investments that protect public health, and enhance resiliency. In FY 2022, EPA will continue to implement integrated planning and green infrastructure practices to address wet weather challenges and increase infrastructure resiliency.

Improving Permit Writer Capacity. EPA continues to work with our stakeholders and industry to identify challenges in implementation and build permit writers' capacity. In FY 2022, EPA will continue to lead the Animal Agriculture Discussion Group (AADG), which consists of animal agriculture representatives from U.S. Department of Agriculture (USDA), the animal feeding industry, and the states. AADG provides a forum for industry to engage with permitting authorities, resulting in a shared understanding of how to enhance agricultural practices that lead to greater water quality protection.

Improving National Aquatic Resource Survey (NARS) Data. Another process improvement effort is focused on streamlining the flow of NARS data from EPA labs to state partners and data analysts. Improvements are being tracked through an internal process. The Agency will continue to implement these process improvements and monitor impact of data delivery on timeliness of analysis and reporting.

Improving timeliness of water quality standards actions. EPA is investing in reducing the backlog of water quality standards (WQS) actions. The Agency will continue to work to decrease the number of state and tribal WQS revision actions that have been submitted to EPA that EPA neither approved nor disapproved within the first 60 days after submittal to EPA, and that have yet to be acted upon. The CWA requires EPA to review state and tribal WQS revisions and either approve within 60 days or disapprove within 90 days.

Performance Measure Targets:

(PM SWP-01) Square miles of watersheds with surface waters not meeting standards (cumulative).	FY 2021 Target	FY 2022 Target
	539,536	531,536

(PM SWP-02) Square miles of watersheds with surface waters not meeting standards because of nutrients.	FY 2021 Target	FY 2022 Target
	183,596	180,596

(PM TMDL-02) Percentage of priority TMDLs, alternative restoration plans, and protection approaches in place.	FY 2021 Target	FY 2022 Target
	84	100

(PM NPDES-03) Number of existing EPA-issued NPDES permits in backlog.	FY 2021 Target	FY 2022 Target
	230	93

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$1,968.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$9,732.0 / +45.8 FTE) This program change is an increase in resources and FTE to support the advancement of clean water infrastructure programs, with an emphasis on building climate change resilience, conducting Clean Water Act regulatory reviews, and advancing environmental justice through technical assistance and stakeholder engagement. This investment also includes $7,849.0 thousand in payroll costs and essential workforce support costs.

Statutory Authority:

CWA; Marine Protection, Research, and Sanctuaries Act; Marine Debris Research, Prevention and Reduction Act of 2006; Marine Plastic Pollution Research and Control Act of 1987.

Congressional Priorities

Water Quality Research and Support Grants

Program Area: Congressional Priorities

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	***$15,000.0***	***$21,700.0***	***$0.0***	***-$21,700.0***
Science & Technology	$4,992.0	$7,500.0	$0.0	-$7,500.0
Total Budget Authority	$19,992.0	$29,200.0	$0.0	-$29,200.0

Project Description:

The purpose of this program is to provide training and technical assistance for small public water systems, to help such systems achieve and maintain compliance with the Safe Drinking Water Act (SDWA), and to provide training and technical assistance for small publicly-owned wastewater systems, communities served by onsite/decentralized wastewater systems, and private well owners improving water quality under the Clean Water Act (CWA).

FY 2022 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2022. States have the ability to develop technical assistance plans for their water systems using Public Water System Supervision Program grant funds and set-asides from the Drinking Water State Revolving Fund.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (-$21,700.0) This program change proposes to eliminate the Water Quality Competitive Grant Program. Resources are available through other existing programs and states are best positioned to develop technical assistance plans for their water systems.

Statutory Authority:

SDWA § 1442(e); Federal Food, Drug and Cosmetic Act; Food Quality Protection Act; Endangered Species Act; CWA § 104(b)(3).