RESTORE CLEAN WATER ACTIONS: Federal Water Quality Two-Year Milestones for 2022-2023
2023 Final Progress

The Executive Order (EO) 13508 Strategy calls upon federal agencies to join the Chesapeake Bay watershed jurisdictions in establishing two-year milestones, many of which are designed to support the jurisdictions in meeting their water quality milestones leading to the 2025 implementation goal of 100 percent practices in-place. This set of federal two-year milestones for water quality applies to calendar years 2022 and 2023. The list below presents milestones for the Environmental Protection Agency (EPA) and nine other federal agencies (USDA, DoD, USACE, USGS, NPS, FWS, NOAA, DOT, and GSA) that support the water quality goals and outcomes in the *Chesapeake Bay Watershed Agreement*. The milestones commitments represent activities with the potential to have significant environmental outcomes, require significant resources, or directly support the jurisdictions in meeting Watershed Implementation Plan (WIP) commitments. These commitments are contingent on receiving adequate funding in the 2022 and 2023 fiscal year budgets.

The federal milestones, along with the jurisdictional milestones, will contribute to the achievement of the Outcomes stated in the *Chespeake Bay Watershed Agreement*. Assuming a steady rate of implementation toward the 2025 goal, the following increments of progress will be achieved for the outcomes by the end of the 2022-2023 milestone period.

Numeric Milestones:

- EPA facilitates the Chesapeake Bay Program Partnership (CBP) to implement the 2025 goal for implementing nitrogen, phosphorus and sediment pollution reduction actions to achieve final Total Maximum Daily Load (TMDL) allocations, as measured through the Phase 6.0 Watershed Model.* As of 2023, Best Management Practices (BMPs) have been implemented to achieve an estimated 61% of the nitrogen reductions, 67% of the phosphorous reductions, and 100% of the sediment reductions needed to attain applicable water quality standards when compared to the 2009 baseline established in the 2010 Chesapeake Bay TMDL.
- EPA's portion of air deposition load reduction to the watershed and to tidal surface waters was reduced by 0.76 million pounds of nitrogen over the 2022-2023 period based on the Phase 6.0 Watershed Model. EPA has achieved 94 percent of the required atmospheric deposition nitrogen load reductions from 2009, surpassing the goal of 90% of needed load reductions by 2023.
- Apply 300,000 acres of conservation practices in conjunction with U.S. Department of Agriculture (USDA) High Priority Performance Goals.
- Timber harvest 500 acres each year with BMPs (1,000 acres total) in Virginia. (USFS) Complete. At least 564 acres were harvested in 2022 and 1260 were harvested in 2023.
- Monitor at least one timber sale/year for water quality BMPs utilizing the USFS National BMP Monitoring protocol for Veg Management (protocol A). The monitoring protocol assesses post-harvest BMP implementation and effectiveness. (If the site is not found to be meeting standards, then follow-up corrective actions are required.) (USFS) Incomplete due to capacity limitations.
- Implement 1 culvert/road/AOP improvement project per year (2 total). FY22-23 ongoing. FY22 funds secured to replace Railroad Hollow culvert for aquatic organism passage (AOP) improvement. Target completion September 30, 2022. FY23 planning Wilson Dam

remediation, funding dependent. (USFS) Complete. Railroad Hollow culvert replaced for AOP improvement in 2023 and Wilson Creek Dam was removed in 2022.

- Implement Road Decommissioning or Road Closure of approximately 4 miles (equivalent to ~6 acres restored). (USFS) Off Schedule. Progress is uncertain as procedures for officially decommissioning a road make this difficult to track.
- Submit 2022-2023 planned BMP implementation in CAST for VA, MD, DC, and PA (Numeric Milestone). The two-year Milestone CAST scenario entitled "SY2022-2023 (credited), 2021 datacall" was shared with the EPA. (DoD). Complete.

***** This outcome used 2009 as the baseline year.

Programmatic Milestones:

Restore Clean Water – TMDL/WIP Support	Final Progress On/Off-Schedule
2022-2023 Programmatic Milestone	
Announce federal 2022-2023 water quality two-year milestones. (EPA, USDA, DoD, USACE, DOT, USGS, FWS, NPS, NOAA, GSA)	Complete. See https://www.epa.gov/chesapeake-bay-tmdl/chesapeake-bay-milestones#2022 NPS/DoD set 2022-2023 Two-Year Milestones and reported annual and Final Milestone Progress to EPA.
Evaluate Pennsylvania's final amended Phase III WIP. (EPA)	Complete. November 2022 https://www.epa.gov/chesapeake-bay-tmdl/epa-evaluation-pennsylvanias-amended-phase-iii-wip
Evaluate jurisdictional and federal 2020-2021 two-year milestone progress. Evaluate jurisdictional, Conowingo, and federal 2022-2023 two-year milestones. (EPA)	Complete. October 2022 https://www.epa.gov/chesapeake-bay-tmdl/epa-evaluation-2020-2021-milestone-progress-and-2022-2023-milestone-commitments
Evaluate how jurisdictions accounted for 2025 climate change conditions in a Phase III WIP addendum or two-year milestones. (EPA)	Complete. October 2022 https://www.epa.gov/chesapeake-bay-tmdl/epa-evaluation-2020-2021-milestone-

	progress-and-2022-2023-milestone-commitments
Assess progress made to implement the 2020-2021 two-year milestones to ensure jurisdictions remain on pace to achieve 100% practices in place by 2025 to achieve the CBP partnership's water quality goal. (EPA)	Complete. October 2022 https://www.epa.gov/chesapeake-bay-tmdl/epa-evaluation-2020-2021-milestone-progress-and-2022-2023-milestone-commitments
Federal agencies to report BMP implementation progress to the Bay jurisdictions annually with copy to EPA. (Multiple Federal Agencies/EPA)	Complete. NPS reported Stormwater BMPs to jurisdictions 2022-2023.
Complete technical review of the CBP analysis of future climate risk to the living resource-based Chesapeake water quality standards. Work on 2035 climate impacts. (EPA)	On schedule. The assessment of future climate risk to water quality standards, as well as key living resources such as striped bass and submerged aquatic vegetation, is on schedule with complete, fully operational assessments of 2035 climate change expected to be available to the CBP partners for a year-long review in 2026.
Complete technical work on understanding climate resilient BMPs given future climate change risk to the living resource-based Chesapeake Bay water quality standards. Starting with the 2022-2023 milestones, determine how climate change will impact the BMPs included in the WIPs and address these vulnerabilities in the two-year milestones. (EPA)	Ongoing. Design criteria for climate adapted stormwater management BMPs are available for all 304 counties of the Chesapeake watershed. A contract was awarded in 2023 for development of tools to support resilient stormwater management and for the assessment of agriculture, silviculture, and other non-stormwater BMP efficiencies under future climate hydrologies, which will have results by 2026.
Determine methods for improving the reporting and crediting of BMPs on federal land (EPA)	Ongoing. Completed a report (Brown and Caldwell) on gaps in the federal reporting and accountability system. Federal Facilities workgroup will continue to

	address the gaps in completeness of federal reporting and crediting BMPs.
Continue to provide funding to support a consortium of land grant universities to provide technical expertise to the partnership. (EPA)	Ongoing
Provide trainings on CAST to federal, state and local partners in the Bay watershed. (EPA)	Ongoing. Training webinars are provided monthly and user assistance and training is provided upon request. Recorded webinars can be found via the CAST website: https://cast.chesapeakebay.net/Documentation/Webinars
Develop BMP planning, prioritization, tracking and reporting tools in coordination with jurisdictions and their local partners to provide access to data that can help with BMP siting and streamline tracking and reporting, especially from local partners. (EPA working with Chesapeake Conservancy)	Ongoing.
Communicate findings of trends updates in the watershed and tidal waters to support WIP implementation. Provide key results updates for watershed trends (nutrients and sediment) and tidal trends (DO, clarity and nutrients) to WQ GIT and associated work groups. Work with jurisdictions to understand water-quality response in selected areas to practices being implemented to reduce nutrients and sediment. See agriculture, storm water and science support sections for more details. (USGS, academic partners, working with EPA)	Ongoing
Continue to work with Chesapeake Conservancy and partners to update the watershed-wide high-resolution land cover and land use, and to develop methods for improved mapping of hydrologic features, particularly streams, throughout the watershed. (EPA, USGS)	Ongoing

Federal agencies will work with jurisdictions to correct any errors identified in the federal land GIS files for landholdings within the Chesapeake watershed. (USGS coordinating; DoD, GSA, NPS, USFWS, USDA-USFS, USDA-other, Smithsonian) *Pending decision on whether to postpone this activity to closer to Phase 7 model development.*	Ongoing NPS worked with jurisdictions to identify and correct discrepancies in boundaries and land ownership maps in GIS. NPS also worked with D.C., states, and jurisdictions in 2022-23 to identify and correct Stormwater BMP record discrepancies. USGS. The 2022 update for tracking Protected Lands has been completed, including the "errors" associated with Federal lands. The "errors" that were addressed primarily relate to changes in the treatment of Federal lands in PAD-US. It is not yet clear what the impacts of this will be on Phase 7 model development, if any.
Continue to work with Chesapeake Commons, Chesapeake Conservancy, and jurisdictions to develop BMP siting, tracking and reporting tools, such as Field Doc, that incorporate available high-resolution data for use in WIP implementation. (EPA, USGS)	Ongoing. Collaborating with state partners to capture data on projects implemented with IIJA funds.
Take appropriate action on proposed state water quality criteria updates developed to be consistent with the *Ambient Water Quality Criteria for Dissolved Oxygen, Water Clarity and Chlorophyll-a for the Chesapeake Bay and Its Tidal Tributaries- 2017 Technical Addendum*. (EPA)	Ongoing
By 1 October, report BMP implementation progress to EPA and the Bay jurisdictions annually. (Multiple federal agencies)	NPS/DoD reported Stormwater BMPs to jurisdictions in 2022-2023. DoD FY22 BMP data was submitted in full and on time. FY23 BMP data was submitted in full and on time.
Conduct DoD CB TMDL Progress Evaluations in VA, MD, DC, and PA. (DoD)	Ongoing. A FY21 Progress Evaluation was completed with recommendations and action items for use in internal program

	evaluation and improvement. A FY22 Progress Evaluation was completed with recommendations and action items for use in internal program evaluation and improvement.
Submit 2022-2023 planned BMP implementation in CAST for VA, MD, DC, and PA. (DoD)	Complete. The two-year Milestone CAST scenario entitled "SY2022-2023 (credited), 2021 datacall" was shared with the EPA.
Participate in the Federal Facilities Workgroup to enhance collaborative efforts within the Chesapeake Bay Program Partnership. (multiple federal agencies)	NPS Shawn Norton served as FFWG lead '22-'23, with additional NPS staff attendance. NPS demonstrated its BMP GIS database model to FFWG. DoD participation in the FFWG is ongoing. In addition, the DoD CBP took on the role of co-chairing the Partnership's Federal Office Directors working group.
Work with USGS to produce updated shapefile of forest boundaries and land use (e.g., in FY20 the GWJ NF acquired Grace Furnace (4,664.5 acres) and The Knob (91.23 acres). (FS)	Complete.
The NPS will select and fund at least two prioritized projects from the Wetland Restoration Action Plan for Catoctin, Monocacy, Harper's Ferry, and Chesapeake and Ohio Canal. See the 2022/2023 Key BMP Milestones document provided to the FFWG for detail on planned implementation of BMPs	Ongoing. On schedule via Park BMP Opportunity Assessment NPS secured funding for multiple projects in Chesapeake & Ohio NHP & Monocacy Battlefield Park to restore wetland functions (native plantings, invasive species removal).
NPS will continue to update and refine the BMP database for tracking and reporting of stormwater BMPs.	Complete. NPS Stormwater BMP GIS database updated annually.
The NPS will evaluate opportunities to integrate stormwater management with NPS climate resilience goals in the Chesapeake Bay, such as creating a Climate Action Projects Database.	Ongoing. NPS-NCR Climate Change Workgroup advanced several projects providing co-benefits for the Chesapeake Bay and Climate Resilience.

The NPS will evaluate opportunities to support partnership projects in the MD, PA, VA, and WV similar to the tennis court retrofits and stream restoration projects in Rock Creek Park in the District of Columbia.	Ongoing. NPS partnered with D.C. and other jurisdictions on stream/river restoration and BMP projects in Potomac/Anacostia watersheds. EA's nearly complete for Fort Dupont and Pine Hurst stream restoration projects and moving into implementation phase. NPS identified federal/state landowners adjacent to national parks to inform future BMP and restoration project opportunities.
The NPS will evaluate development of a bundled Chesapeake Bay design and construction contract as a resource for park staff to implement pollutant reduction and climate resilience projects.	Ongoing. NPS secured IRA (Inflation Act Reduction) funding to implement several Grasslands and Meadow restoration projects, Cropland conversion, and reforestation projects in NCR and NER parks. NPS is conducting Historic Building Floodplain Lidar Mapping in Potomac and Anacostia Rivers.
NPS completed evaluations of voluntary BMP opportunities in six parks in 2021. NPS will continue to evaluate opportunities at additional parks in 2022-2023.	Ongoing. NPS reviewed data and identified priority parks to reduce TDML loads for Park BMP Opportunity Assessment Phase 2 Study.
USACE will finalize Facilities TMDL Action Plan-- assess impervious surfaces and develop recommendations for stormwater BMP implementation	Complete. Sent to each jurisdiction.
Continue to meet with EPA and the District of Columbia Department of Energy and Environment (DC DOEE) to reconcile BMP datasets, improve BMP crediting in CAST, and address any remaining equity issues. (DoD)	The DoD Chesapeake Bay Program (CBP) has been working with Joint Base Anacostia Bolling, other installations and DC DOEE to rectify databases. According to the DoD CBP's unique Crediting Reports, the number of DoD BMPs credited improved 4% from FY20 to FY21. During its 2022 Chesapeake Bay Commanders' Conference the DoD CBP hosted a breakout session with the expressed purpose of identifying

	additional areas of cooperation and data quality improvement. Specific outcomes included: 1. After years of collaboration conducting a joint BMP inventory, comparing BMP records and field verification, Joint Base Anacostia Bolling (JBAB) has shifted their data reconciliation focus to the identification and removal of duplicate records with different JBAB, DOEE, and DoD identifiers. JBAB (Jenn McDonnell) reached out to DOEE (Sherry Schwechten) for assistance in using locational coordinates to identify duplicates and in developing a path forward for a unified and agreed upon data set. DoD's Jenn McDonnell will contact DOEE's Sherry Schwechten, Matt Johnson, and Alicia Ritzenthaler to discuss next steps on JBAB BMP data reconciliation. 2. DOEE provided a summary of DoD BMPs not credited in CAST; 150 did not receive credit in the 2021 Progress scenario, largely due to issues with inspection data. Jenn McDonnell indicated JBAB is responsible for a significant portion of the BMPs with inspection issues. 3. Additional coordination is needed on identifying State Unique IDs of

	DoD BMPs in DOEE's Surface and Groundwater System (SGS) database. DOEE's Alicia Ritzenthaler and Sherry Schwechten continue to work on this. 4. DoD's Evan Miles is responsible for the data associated with BMPs at the Washington Navy Yard and Naval Observatory, but they report not having many problems with BMPs not receiving credit. 5. Alicia Ritzenthaler agreed to provide DOEE's inventory of voluntary and required BMPs to DoD (Evan Miles, Jenn McDonnell, Kambeth Powell, Jessica Rodriguez) highlighting those that did not receive credit. Evan Miles will try to match the DOEE database with NAVFAC Washington's inventory. 6. DoD's Bob Williams indicated that the record of required BMPs included some older structures and asked how to determine if they were required or voluntary. DOEE's Matt Gallagher offered to follow up with more detail. 7. DoD's Bob Williams and DOEE's Matt Gallagher agreed to coordinate to discuss the potential for DOEE Stormwater Retention Credits (SRCs) for formerly failed, but restored, DoD BMPs.

	DOEE is creating a new crediting report and BMP template that will be used to report and reconcile existing BMPs and/or those with a DOEE plan number. A number of records have already been reconciled and we expect our shared data to become more accurate with time.
Given available funding, continue to develop BMP Crediting Reports in VA, MD, DC, and PA. Provide the reports to DoD installations and jurisdictions to identify opportunities to maximize TMDL credit in CAST. (DoD)	Credit Reports for FY 2021 and FY 2022 were completed for VA, MD, DC and PA and were provided to both the jurisdictions and EPA.

Restore Clean Water - Agriculture	**Final Progress On/Off-Schedule**
Programmatic Milestone	
Identify watersheds in which to coordinate/enhance monitoring to demonstrate the impact of agricultural conservation practices on water quality of local streams and rivers. (USGS, NRCS, EPA)	Ongoing. Sites are being selected and instrumented (USGS) Complete. Agreements established between USGS and NRCS for small Agwatershed monitoring (NRCS)
EPA and USDA will work together to fund climate-smart agricultural conservation practices that benefit both climate resiliency (sequester carbon, reduce greenhouse gas emissions) and local/Chesapeake Bay water quality.	Ongoing. USDA/NRCS is providing priority funding through climate smart agriculture and forestry. EPA announced its Climate Pollution Reduction Grant program – funded through the Inflation Reduction Act. https://www.epa.gov/inflation-reduction-act/climate-pollution-reduction-grants

	Complete. USDA/NRCS is providing priority funding through climate smart agriculture, forestry and IRA. (NRCS)
EPA and NRCS will assess opportunities to prioritize support historically under-served farmers and ranchers through outreach, ranking, match adjustment options, and the selection process associated with agricultural conservation practice grants in the Chesapeake Bay watershed.	Ongoing, Consistent with Executive Orer 14008, EPA committed 40% of FY22 and FY23 IIJA funding for the Most Effective Basins (MEB) program for projects in disadvantaged communities. Complete (NRCS)
● Provide Delaware with technical assistance and oversight to develop, issue, and grant permit coverages under the DNREC NPDES General Permit for CAFOs for Non-Poultry and Diversified AFOs with land and no-land application of manure (GP03). (EPA) ● Provide Delaware with technical assistance and oversight to develop, reissue, and grant permit coverages under the DNREC NPDES General Permit for CAFOs for Poultry AFOs with no-land application of manure (GP01). (EPA) ● Provide Delaware with technical assistance and oversight to continue grant permit coverages under the DNREC NPDES General Permit for CAFOs for Poultry AFOs with land application of manure (GP02). (EPA) ● Provide Maryland with technical assistance and oversight to continue grant permit coverages under the MDE NPDES General Permit for CAFOs (MDG01). (EPA) ● Provide Pennsylvania with technical assistance and oversight to develop, reissue, and grant permit coverages under the PADEP NPDES General Permit for CAFOs (PAG12). (EPA)	**Annual Report: Completed** On April 20, 2022, EPA requested updates from DNREC, MDE, PADEP, VADEQ, WVDEP on each of their respective Annual NPDES CAFO Implementation Status reports. Each state responded and EPA was able to update their reports. **DEGP01: Completed** Permit is effective, September 1, 2023 and is set to expire, August 31, 2028. **DEGP02: Completed** Permit is effective, May 1, 2019 and is set to expire, April 30, 2024. **DEGP03: Completed** Permit is effective, September 1, 2023 and is set to expire, August 31, 2028. **MDG01: Completed** Permit is effective, July 8, 2020, and is set to expire, July 7, 2025.

	PAG12: Completed Permit is effective, January 1, 2024, and is set to expire, December 31, 2028.
USDA, USGS, and EPA will continue to support State agencies in BMP reporting within the Chesapeake Bay watershed through the annual provision of aggregated USDA conservation data to the States. (EPA, USDA, USGS)	Ongoing. Provided FY 2022 data to jurisdictions. EPA continues to fund USGS to carry out the MOUs with USDA. Completed. Provided FY 2022/2023 data to jurisdications. (NRCS)
EPA, USDA, and USGS present the findings of the pilot project in PA to develop a data management methodology to more comprehensively account for agricultural conservation practices implemented through state, federal and voluntary efforts.	USGS worked with EPA, USDA, and State agencies to finalize the pilot project and share findings to the CBP and USDA-EPA Federal Crediting Task Force. EPA funded the pilot project. Complete provided FY2022/2023 (NRCS)
EPA will facilitate meetings, as requested, with State agencies, local partners, and the agricultural community to explore how the Clean Water State Revolving Fund can be used to reduce nutrient and sediment loads from agriculture and rural communities. (EPA)	Ongoing. Complete in 2023/Ongoing for 2024. Annual SRF meeting held April 2023. Formal program reviews of the state's CWSRF programs were: MD: 10/2022 WV: 11/2022 PA: 12/2022 VA: 2/2023 DE: 3/2023 Several discussions with MDE in 2023 regarding a proposed new financing method for agricultural BMPs.
Continue to support the implementation of agricultural certainty and recognition programs in the Bay watershed states. (EPA, USDA)	Ongoing Complete (NRCS)

NRCS will continue to support voluntary actions by farmers and landowners to improve water quality and other resources by providing technical assistance through its Conservation Technical Assistance (CTA) program; and technical and financial assistance from the Environmental Quality Incentives Program (EQIP), Regional Conservation Partnership Program (RCPP), Agricultural Management Assistance (AMA) Program, Agricultural Conservation Easement Program (ACEP), Conservation Stewardship Program (CSP). (USDA-NRCS)	Complete (NRCS)
USDA will continue to provide financial and technical support for voluntary temporary retirement of cropland and marginal pasture and establishment of conservation cover for water quality and wildlife habitat improvement, through the Conservation Reserve Program (CRP) and Conservation Reserve Enhancement Program (CREP). (USDA-FSA, USDA-NRCS)	Complete (NRCS)
Incorporate changes in Farm Bill Conservation Programs resulting from any new Farm Bill or conservation funding bill into ongoing efforts to improve water quality in the Chesapeake Bay. Work with partners to inform Chesapeake Bay Program partners and the general public about farm bill conservation program opportunities. (USDA-NRCS)	Ongoing. Incorporating Bipartisan Infrastructure Law (BIL) and Inflation Reduction Act (IRA) funding for partners and conservation in the Chesapeake Bay.
Work with partners to develop and implement strong projects to improve water quality, working with agricultural producers through the Regional Conservation Partnership Program (RCPP). (USDA-NRCS)	Ongoing. Coordinating with partners on FY2023 RCPP projects. Held listening sessions to gather feedback for potential RCPP improvements.
Provide opportunities for non-USDA conservation professionals to participate in NRCS technical training activities such as for conservation planning and practice design and implementation. (USDA-NRCS)	Ongoing. NRCS provides technical and engineering training to conservation professionals and partners.
Promote adoption of practices and systems by agricultural producers that improve soil health and mitigate climate change. (USDA-NRCS)	Ongoing. Soil health is a priority for NRCS and they continue to promote adoption of those systems and practices.
Annual review of grazing permits and restore grazing allotments along the SF Shenandoah River. Restoration plans for allotments along SF Shen River floodplain were submitted, as part of the Dupont Settlement case. Only partial funding secured for implementation. (USFS)	Ongoing- partial funding secured for implementation and USFS is establishing contracts for NNIS treatments and tree planting for this year (2024)

Restore Clean Water – Atmospheric Deposition	**Final Progress On/Off-Schedule**

Programmatic Milestone	
Significantly reduce nitrogen deposition to the Bay and watershed by 2023 through implementation of national rules under the Clean Air Act. (EPA) ● Apply and track new Community multi-scale Air Quality Model (CMAQ) air deposition modeling for future climate risk in the CB watershed incorporating estimated increased wet deposition loads. (EPA) ● Continue implementation of Tier 3 vehicle emission standards. (EPA) ● Oversee state implementation of Clean Air Act 129 rules, including those for Commercial and Industrial Solid Waste Incineration Units (CISWI); Sewage Sludge Incineration Units (SSI); and Hospital, Medical, Infectious Waste Incinerators (HMIWI). Once fully implemented, these rules will reduce emissions of NO_x as well as air toxic pollutants. (EPA)	Ongoing
● Work with states and review SIPs that address reasonably available control technology (RACT) standards for the 2008 ozone National Ambient Air Quality Standards (NAAQS). RACT requirements limit the NO_x emissions at certain sources. (EPA) ● Work with states to develop State Implementation Plan (SIP) revisions to reduce NO_x emissions. (EPA) ● Work with states and review SIPs that address infrastructure requirements, including interstate transport, for the 2015 ozone NAAQS. (EPA) ● Work with states to develop rules to implement the 2015 ozone NAAQS. (EPA) ● Assist states with their development of state implementation plan submissions to address reasonably available control technology (RACT) for the 2015 ozone NAAQS. (EPA) ● Assist states with their development of regional haze state implementation plan submissions for the second planning period. These plans may include federally enforceable rules that reduce air emissions of visibility impairing pollutants, including NO_x. (EPA)	• Ongoing • Ongoing (RACT, Regional Haze SIPs, and attainment plans for ozone bump ups are all currently in progress). • Ongoing • Ongoing • Ongoing (WV, DE, and MD have submitted SIPs) Working with PA and VA. DC's SIP has been approved.
Review state permits which may include rules that limit emissions of NO_x. (EPA)	Ongoing

RESTORE CLEAN WATER - Stormwater	Final Progress On/Off-Schedule
Programmatic Milestone	
Conduct oversight review and comment, per federal regulations and NPDES Memoranda of Agreement with the states, on draft state Municipal, Construction, and Industrial Stormwater permits: to ensure consistency with the Bay TMDL allocations and the level of pollutant reduction called for in state WIPs; and to ensure permits contain enforceable performance measures. (EPA)	The following stormwater (SW) permits were reviewed: WV: WV Construction General Permit WV MS4 Phase II GP (informal/pre-draft) WV DOH GP PA: PAG-03 (PA Industrial SW GP). Allentown Phase I MS4 permit (pre-draft) MD: MD Aquaculture Permit (AquaCon Maryland LLC) MD Seafood Processing GP MD Mineral Mines, Quarries, Concrete and Asphalt Plants GP MD SHA Phase I MS4 permit VA: Pre drafts of MS4 Phase I permits (Chesterfield, Pr. William, Henrico, Fairfax, VA Beach, Hampton, Norfolk, Portsmouth, Newport News) DE: Revised Phase II MS4 Tier I and Tier II GPs
Review certain MS4 TMDL Plans for compliance with permit requirements. (EPA)	Ongoing. Working w PADEP to review plans for 4 munis in PA. Revised plans received in late 2023 .
Conduct MS4 permittee and state inspector trainings in coordination with jurisdictions. (EPA)	Ongoing. None requested during CY2022 or CY2023.

Conduct Forums/Workshop for regulated MS4s .	Complete. MS4 DOT forum was conducted Oct 10-11, 2023 in PA
Reissue DC MS4 permit (expiration date is 6/22/23) (EPA)	Final permit issued 11/20/23 with effective date of 12/20/23.
Develop Facilities Master Plan - assess impervious surfaces and maintenance/operational changes. (USFS)	Off Schedule. Progress is uncertain due to staff turnover.

RESTORE CLEAN WATER - Wastewater	**Final Progress On/Off-Schedule**
Programmatic Milestone	
Continue to partner with state technical assistance (TA) staff and non-profit TA staff to conduct classroom and on-site training to wastewater professionals on topics ranging from compliance assistance to nutrient removal optimization. (EPA)	Ongoing. Workforce Development: R3 partnered with PADEP to conduct 5 classroom training on Process Control. Technical Assistance: Provided assistance to 5 WWTPs in PA.
Track number of significant NPDES permits reviewed and objections. (EPA)	Ongoing. EPA reviewed 64 significant CB discharger permits in CY2022. No objections issued for those permits. In CY2023 EPA reviewed 66 significant CB discharger permits and 1 objection was issued for those permit reviews.
Review Bay jurisdictions' trading and offset regulations and policies and support Bay jurisdictions as they develop trading and/or offset programs. (EPA).	Ongoing. Worked with PADEP in 2022 to finalize their Manure Treatment Technology Credit Calculation Tool which is now posted on the PADEP website. Hosted two trading and offset webinars in 2022-23 for all 7 Chesapeake Bay jurisdictions where jurisdiction staff gave presentations on their trading and offset programs.
Work with other Federal agencies to build capacity that will support an efficient and robust trading market. (USDA, EPA, DOT, USACOE)	Ongoing.

RESTORE CLEAN WATER - Toxic Contaminants	Final Progress On/Off-Schedule
Programmatic Milestone	
Take appropriate action on proposed PCB TMDLs submitted in the Bay watershed for local waters. (EPA)	Ongoing. James River PCB TMDL will be submitted by VA in spring 2024. DE will submit a final Alternative TMDL for PCBs in C&D canal in summer 2024.
Take appropriate action on proposed state water quality criteria updates developed to be consistent with the 2015 EPA Updated Ambient Water Quality Criteria for the Protection of Human Health. (EPA)	Ongoing. MD, DE, and VA submitted final WQS revisions with updated Human Health Criteria this FY, and EPA approved approved those submittals within its statutory deadlines.
Update a GIS desktop tool to identify potential land sources of contamination in the watershed (PCBs and mercury). The use of EJ SCREEN will be evaluated to identify the location of such sites in areas with diverse populations. (EPA)	Complete. See new milestone below focusing on SAM 3.0
Review NPDES permits to ensure consistency with the requirements and assumptions with the PCB TMDLs. (EPA)	Ongoing. In CY22 EPA reviewed 2 NPDES permits for consistency with PCB TMDLs in the CB watershed. In CY23 EPA reviewed 11 NPDES permits for consistency with PCB TMDLs in the CB watershed.
Conduct inspection(s) and take appropriate enforcement follow-up to ensure compliance with the Toxic Substances Control Act regulations related to PCBs. (EPA)	Ongoing. ECAD conducted 1 PCB inspection in CBWS in FY2022 and one so far in FY2023
Conduct studies of the sources and occurrence of PCBs in the Washington DC region to help support multi-jurisdictional approach for reduction. (USGS working with DC and MD)	Ongoing. Multi-agency team focusing on identifying sources in Lower Beaverdam Creek on the Anacostia

RESTORE CLEAN WATER - Enforcement	Final Progress On/Off-Schedule

Programmatic Milestone	
Track EPA-led enforcement cases for Stormwater, Wastewater, Agriculture, Trading/Offsets, Air that result in nitrogen, phosphorus, sediment, and/or nitrogen oxides reductions. ● Clean Water Act enforcement case conclusions for stormwater, wastewater and agriculture operations (EPA) ● Clean Air Act stationary source enforcement case conclusions with nitrogen oxide reductions (EPA) ● Clean Air Act case enforcement case conclusions for stopping after-market defeat devices (EPA)	ECAD Ongoing. EPA Region 3: For CY2022, for CWA NPDES, EPA R3 finalized 7 administrative orders on consent (AOCs) (2 stormwater and 5 wastewater) and 5 final agreement and penalty orders (FAPOs) (5 wastewater). EPA also entered 1 wastewater judicial consent decree. For CY2023, for CWA NPDES, EPA R3 finalized 11 administrative orders on consent (AOCs) (4 stormwater and 7 wastewater) and 4 final agreement and penalty orders (FAPOs) (1 stormwater and 3 wastewater). For CY23 there were 3 CAA Administrative Settlements supporting the Stopping After-Market Defeat Devices NCI that included Nox reductions. EPA Region 2: R2 did not have any inspections or EAs for "Federal facilities" in FY2022 or FY2023. For CWA NPDES, R2 had 0 actions for SW, WW, Ag. Outside of those sectors, R2 finalized 1 AOC in FY2023 for non-approved pretreatment for a categorical industrial user.

RESTORE CLEAN WATER – Climate Actions	**Final Progress On/Off-Schedule**
Programmatic Milestone	

Make meaningful progress on all elements of the Climate Change Directive—Workplan July 5th, 2022, Appendix B: Federal Commitment to Implement the Chesapeake Executive Council Directive No. 21-1 Collective Action for Climate Change.	EPA funded Tidal Wetlands Capacity Building project with the Chesapeake Trust for strategic planning, capacity building, landowner engagement, and wetland project design. This work will produce a landscape-wide plan for tidal wetland restoration, marsh migration, and coastal resiliency. EPA awarded a contract in 2023 for development of tools to support resilient stormwater management and for the assessment of agriculture, silviculture, and other non-stormwater BMP efficiencies under future climate hydrologies, which will have results by 2026.
Report on Readiness and Environmental Protection Integration (REPI), REPI Challenge, and Sentinel Landscape Projects that include climate resilience co-benefits. (DoD)	In FY22, 6 installations reported new land conservation projects: Aberdeen Proving Ground (Army) Fort Walker (Formally – Fort A.P. Hill - Army) Fort Indiantown Gap (Army) NAS Patuxent River (Navy) NSA South Potomac – Dahlgren (Navy) NWS Yorktown (Navy) The five highlighted above provided climate resilience co-benefits. We are waiting for updates from the REPI Program to be able to accurately report of the funds spent and acres protected in FY22. By March 2023, we should also be able to report on the funds requested for land protection in FY23.

	Naval Air Station Patuxent River was a recipient of 2022 REPI Challenge funds including $2.7M in REPI funds, $14.8M in military service contributions and $15K in partner contributions to restore crucial shoreline reaches, including living shorelines, to protect strategic Navy testing and training operations and northern diamondback terrapin nesting habitat. In FY23, 7 installations reported new land conservation projects: Aberdeen Proving Ground (Army) Fort Walker (Formally – Fort A.P. Hill - Army) Fort Indiantown Gap (Army) NAS Patuxent River (Navy) NSA South Potomac – Dahlgren (Navy) Marine Corps Base Quantico Joint Base Langley-Eustis (Langley) The three highlighted above provided climate resilience co-benefits. We are waiting for updates from the REPI Program to be able to accurately report of the funds spent and acres protected in FY23. By March 2024, we should also be able to report on the funds requested for land protection in FY24. Marine Corps Base Quantico (MCBQ) received $286K in FY23 REPI Challenge funds for resilience planning

	improvements. Undertaking a proactive approach, the Quantico project will address solutions for the pluvial flooding of Little Creek and shoreline stabilization along Marine Air Corps Facility near Washington D.C. and MCBQ. To address flooding at the base's main entry gate, a watershed survey will evaluate the sources of flooding from the headwaters of Little Creek to Fuller Gate, a primary access point for MCBQ. NSA South Potomac – Dahlgren was awarded $2,968,000 (Navy to cover $1,484,000). The Trust for Public Land brought forth the project and the Navy partnered with Virginia Outdoors Foundation to protect one property (Horner Beach). The DoD CBP worked with the Commonwealth of Virginia to achieve designation of the Virginia Security Corridor Sentinel Landscape, including the Tidewater and Potomac Sentinel Landscapes. The Virginia Security Corridor supports 10 military installations representing every branch of the U.S. Armed Forces. Specifically, the Potomac Sentinel Landscape is anchored by Marine Corps Base Quantico and the Tidewater Sentinel Landscape is anchored by Joint Base Langley Eustis. A decision was made to designate the Sentinel Landscape on July

	10, 2023. A coordinator for each of the Sentinel Landscapes is anticipated to be hied NLT March 2024.
Provide a tally of dollars spent and a list of BMP project types implemented that provide climate resilience co-benefits.(DoD)	In FY22, $144,374 was spent on projects whose primary purpose was to provide for climate resilience. In FY23, $282,407 was spent on projects whose primary purpose was to provide for climate resilience. Based on a Tetra-Tech report and DoD CBP best professional judgement, the following stormwater BMPs, natural and nature-based features (NNBF), and conservation projects were considered to provide flood protection/mitigation or other climate resilience co-benefits: (BMP names vary by jurisdiction) Biofiltration Bioretention - Enhanced Bioretention - Standard Bioswale Bio-Swale Channel Bed Stabilization Channel Stabilization Cisterns & Rain Barrels Constructed Wetland Detention Structure (Dry Pond) Disconnection of Non-Rooftop Runoff Disconnection of Rooftop Runoff

	Dry Detention Ponds Dry Detention Ponds & Hydrodynamic Structures Dry Extended Detention - UDS Dry Extended Detention Ponds Dry Swale Dry Well Dry Wells Enhanced Filters Erosion & Sediment Control Erosion and Sediment Control Level 1 Extended Detention Structure, Dry Extended Detention Structure, Wet Filter Strip Filtering Practices Filtration Floating Treatment Wetland 1 Floodplain Restoration Forest Harvesting Practices Forest Stand Improvement Grass Swale Green Roof - Extensive Green Roofs Impervious Surface Disconnection Impervious Surface Elimination (to Forest) Impervious Surface Elimination (to pervious) Infiltration Basin Infiltration Berms Infiltration Practices Infiltration Trench Landscape Infiltration Mechanical Broom Technology - 1 pass/week

	Mechanical Street Sweeping Microbioretention Micro-Bioretention New Stormwater Treatment Oil Grit Separator Outfall Stabilization Permeable Pavement Permeable Pavement - Standard Permeable Pavements Planting Trees or Forestation on Pervious Urban Pocket Wetland Proprietary Practice - Retrofit Stormwater Treatment Proprietary Stormwater Treatment Device Rain Garden Rain Gardens Rainwater Harvesting Reduction of Impervious Surfaces Regenerative Step Pool Conveyance Regenerative/Vacuum Street Sweeping Reinforced Turf Retention Pond (Wet Pond) Sand Filter Septic Tank Pumpout Shallow Marsh Sheetflow to Conservation Areas Shoreline Management Storm Drain Cleaning Stream Restoration Stream Restoration Urban Street Cleaning Practice 1 Street Cleaning Practice 11 Street Cleaning Practice 2

	Street Cleaning Practice 3 Street Cleaning Practice 4 Street Cleaning Practice 6 Street Cleaning Practice 7 Street Sweeping Submerged Gravel Wetlands Tree Planting Tree Planting - Canopy Underground Filter Underground Infiltration System Urban Filter Strip Runoff Reduction Urban Filter Strip Stormwater Treatment Urban Forest Buffer Urban Forest Planting Urban Grass Buffer Urban Infiltration Practices Urban Nutrient Management Urban Nutrient Management Plan Urban Shoreline Management Urban stream restoration Urban Stream Restoration Urban Tree Canopy Planting Vegetated Open Channels Vegetated Treatment Area Wet Extended Detention Wet Pond Wet Pond - Wetland Wet Ponds & Wetlands Wet Ponds and Wetlands Wet Swale Wetland Enhancement Wetland Rehabilitation In FY22, DoD installations in the watershed

	spent $13,972,042.69 on 82 BMP projects with climate resilience co-benefits. In FY23, DoD installations in the watershed spent $20,557,653 on 169 BMP projects with climate resilience co-benefits DoD installations conducted 22 projects and planted the equivalent of 23.6 acres of trees in FY22. DoD installations conducted 56 projects and planted the equivalent of 69.8 acres of trees in FY23.
Report on the number and percentage of installations who have updated their Integrated Natural Resource Management Plans (INRMP) to address climate change. (DoD)	In FY22, 16 installations reported updating their Integrated Natural Resource Management Plans to address climate change. That represents 57% of the total. Installations reported 46 un-funded INRMP projects that could provide climate resilience co-benefits. In FY23, 27 installations reported updating their Integrated Natural Resource Management Plans to address climate change. That represents 75% of the total. Installations reported 48 un-funded INRMP projects that could provide climate resilience co-benefits.
Report on the incorporation of climate resiliency themes into existing DoD CBP outreach materials (Quarterly Journal articles, factsheets, Annual Progress Report, etc.) to build climate literacy and a climate-informed workforce. (DoD)	The DoD CBP publishes the Chesapeake Bay Program Journal quarterly and it featured the following articles related to climate resilience:

	Winter 2022 Journal: • Commander's Corner: Draft Water Quality & Climate Milestones • Success Story: Stewardship and Resilience Initiatives at Fort Belvoir • Incorporating Climate Resilience in Stormwater Design Spring 2022 Journal: • New REPI Resilience Interactive Website • Successful Community and Resilience Planning: NSA Annapolis and USNA Summer 2022 Journal: • Collectively, Federal Agencies Commit to Implement the Chesapeake Bay Program Partnership's Climate Directive • Urban Heat Island Effect: Mission Impacts and Nature Based Mitigation Methods • Supporting Military Installations by Engineering with Nature (EWN®) Fall 2022 Journal • Commanders' Corner: 2022 Chesapeake Bay Commanders' Conference Recap Spring 2023 Journal • Navy Climate Resilience Funding and Contract Support

	• Commanders' Corner: Resources for Effective CBP Information Transfer to Commanding Officers Natural and Nature-Based Features to Build Resilience Summer 2023 Journal • Commander's Corner: Chesapeake Bay Commanders' Conference After-Action Report • Effects of Rising Water Temperatures in the Chesapeake Bay Watershed • Promoting Awareness and Education at Fort-Gregg Adams and Naval Station Norfolk – Public outreach events to promote environmental stewardship and climate resilience in the DoD community. Fall 2023 Journal • Achieving Water Quality Goals in the Chesapeake Bay: A Comprehensive Evaluation of System Response (CESR) Winter 2024 Journal • The DoD Launches its First Ever Climate Resilience Portal • Assessment of the Chesapeake Bay TMDL: Impacts of Climate Change Journals can be found at:

	https://denix.osd.mil/chesapeake/dod-cbp-quarterly-journals/ The DoD CBP has published or is in the process of publishing factsheets for installations, including: • An update to the *Commanders Guide to the Chesapeake Bay i*ncluding new climate resilience themes *Stormwater BMPs and Real Property Classifications* – aimed at facilitating the maintenance of stormwater BMPs and preventing flooding. GIS Tools to Meet Multiple DoD Goals and Objectives – including working with partners in defense communities to strategically target projects that simultaneously provide for mission assurance while also meeting water quality, land conservation, encroachment prevention, climate resilience, and DEIJ goals. • *Funding Projects to Achieve Mission Assurance Objectives – A Quick Guide* – a guide which laid out programs that could provide funding for both on-base and off-base climate resilience projects, matching requirements, partnership requirements, activities funded, and funding cycles. This factsheet has been

	cleared for external distribution and has been provided to partners. • *Climate Vulnerability Assessments for Mission Sustainment* – designed to help installations identify installations, infrastructure and facilities, stormwater assets, and natural resource habitats threatened by changes in climate. The DoD CBP's Annual Progress Report (APR) is its most important internal and external outreach tool for explaining the DoD's program and documenting progress towards DoD's Chesapeake Bay Program Partnership goals and objectives. The FY2021 and most recently published FY2022 APR identifies military installation projects with climate resilience co-benefits in the Chesapeake Bay Program Partnership's management strategy categories of Abundant Life, Conserved Land, Engaged Communities and Water Quality. The APR also highlights collaborative efforts with partners in cooperative community planning, REPI and Sentinel Landscape Program project implementation for climate resilience, and the establishment of DoD CBP climate metrics. Current and past editions of the APR can be found at: https://denix.osd.mil/chesapeake/dod-cbp-annual-progress-reports/

Report on the number and percent of major installations with a DoD Climate Assessment Tool (DCAT) threat assessment. The DCAT provides a screening-level assessment of an installation's future climate exposure related to eight hazards: coastal flooding, riverine flooding, heat, drought, energy demand, land degradation, wildfire, and historical extreme weather events. (DoD)	64 military installations in the watershed were provided with a DCAT assessment. This information can be used to guide installation resilience planning including the protection and enhancement of natural and nature-based features providing climate resilience and carbon sequestration co-benefits.
Report on significant collaborative efforts to enhance resilience (VCRMPF, SERDP research, MIR/CUP planning efforts, CBF Billion Oysters for the Bay, etc.) (DoD)	The DoD continues to collaborate with the Commonwealth of Virginia regarding updates and expansion of their Climate Resilience Master Plan. A Regional Community Planning and Liaison Office representative sits on the Commonwealth's Technical Advisory Committee to represent the Navy. The DoD CBP is working with a SERDP researcher to pilot a model for assigning the value of management of military installations to external, defense community ecosystem services. Reported results from two installations in the Chesapeake Bay watershed are expected by the end of CY2024 The DoD CBP is working with the Smithsonian Institution to develop a SERDP proposal to conduct research on the establishment of living bulkhead techniques on military installations in the Chesapeake Bay watershed. The DoD CBP is working with the Army

	Corps of Engineers Engineering with Nature Initiative to develop a toolkit and preliminary design for natural and nature-based projects to address climate resilience at Langley Air Force Base in VA. As part of the 2022 Chesapeake Bay Commanders' Conference (CBCC), the DoD CBP included presentations on: • Funding Methods for Climate Resilience • U.S. Army Corps of Engineers, Engineering with Nature Initiative • Naval Support Activity (NSA) Annapolis/U.S. Naval Academy Installation Resilience Plan • The DoD Climate Adaptation Plan (CAP) and Partnership Programmatic Two-year Water Quality Milestones • Sentinel Landscape Partnership Program Overview The CBCC also included novel, jurisdiction-specific breakout discussions to provide opportunities for Commanding Officers to meet with the jurisdiction counterparts, and other partners to facilitate progress in cooperative community planning, project identification, Sentinel Landscape designation, stormwater BMP data reconciliation and funding for climate resilience projects.

RESTORE CLEAN WATER - Monitoring and Science Support	Final Progress On/Off-Schedule
Programmatic Milestone	
Conduct trainings to jurisdictional and local partners on the Chesapeake Bay Watershed Data Dashboard. Conduct user testing and iteratively incorporate feedback to improve content and usability of the tool. (EPA, USGS)	Ongoing
Assess current decision-support tools developed and used by the Partnership and develop path forward for integrating new information on water quality and other outcomes. (EPA, USGS)	Ongoing. Integration of water quality assessments with CAST, other data sources, and additional tools.
Continue to support the Chesapeake Monitoring Cooperative's ongoing integrated non-traditional monitoring partners into the Chesapeake Bay Program Partnership's Nontidal and Tidal Monitoring Networks, thereby expanding data of documented quality available to support Chesapeake Bay and watershed restoration decision making. (EPA, USGS)	Ongoing
Collaborate with the all six states and DC to continue monitoring of nutrient and suspended-sediment conditions across the full range of hydrologic conditions at each of the stations in the CBP nontidal network and the associated river-input stations. Work through STAR Integrated Monitoring Networks work group to coordinate activities. (USGS working with States and EPA)	Ongoing. PSC Monitoring Review report published. New BIL funding is being applied to address recommendations of the report for monitoring needs, including addition of continuous water quality monitoring at River Input Monitoring sits.
Compute total loads to the Bay to help understand changes in tidal water-quality conditions. The CBP monitoring and modeling teams combine information from the RIM stations with loadings from unmonitored areas to estimate annual loads for N, P, and S. Activity is funded by EPA. (UMCES, PSU, USGS, EPA)	Ongoing
Conduct monitoring of tidal waters to assess attainment of water-quality standards and associated conditions. Monitoring conducted by multiple partners in MD and VA and funding provided mostly by USEPA. (EPA, MD, VA)	Ongoing
Analyze tidal monitoring data, including results from SAV surveys, to assess progress toward attainment of water-quality standards. The CBP monitoring team is responsible for the analysis and funded primarily by EPA. (EPA, UMCES, ICPRB, USGS)	Ongoing. The most recent results available on Chesapeake Progress, ICPRB and USGS websites.
Analyze tidal monitoring data to assess changes in water-quality conditions important for living resources. The CBP monitoring team works with state and academic partners to employ consistent trend methods for updates in nutrients, clarity, and selected parameters important for living	Ongoing. The trend results completed in 2022 and 2023 now include results from DC. The most recent results are available through the ITAT webpage.

resources. The effort is funded primarily by EPA. (UMCES, ICPRB, USGS, agencies in MD and VA, EPA)	
Conduct surveys of submerged aquatic vegetation (SAV) to provide information for attainment of water-quality standards and assess progress toward SAV acreage goals. (VIMS, EPA)	Ongoing Awarded an RFA to explore using Artificial Intelligence as the CBP continues to monitor SAV
Complete the third 2-year cycle of the Biennial Strategy Review System, an adaptive management process designed to improve our effectiveness in achieving the Chesapeake Agreement Goals and Outcomes.	Completed. The 2022 2024 workplan is available through ChesapeakeDecisions.
USGS and NOAA will provide technical leadership to complete the Chesapeake Bay mainstem vertical profile hypoxia monitoring pilot and work with the Chesapeake Bay Program to explore longer term implementation. USGS efforts are through the CBP monitoring team. (USGS, NOAA)	Completed. Deployment and maintenance for 2022 pilot (2 stations) and 2023 (3 stations) completed Quality Assurance Plan for hypoxia system completed. Resources from EPA and NOAA have been acquired for the phased implementation of a 10-array system by 2025.

RESTORE CLEAN WATER - EPA Grant Support to States and the District of Columbia	**Final Progress On/Off-Schedule**
Programmatic Milestone	
Provide financial support to Bay jurisdictions, as authorized and assuming adequate appropriations, through EPA's assistance programs including CWA Section 319, SRF, CWA, Sewer Overflow and Stormwater Reuse Municipal Grants (OSG), 117 CBIG and CBRAP. The recent passing of the Bipartisan Infrastructure Law will provide supplemental funding for the Chesapeake Bay Program and SRF programs for the next five years.(EPA)	Ongoing. CWA 319 2022 awards: $14,725,200 CWA 319 awards: 2023 awards:$ $14,713,800 CWSRF w/BIL 2022 awards: $330,081,000 CWSRF w/IIJA R3 2023 awards: $334,184,000 CWA OSG 2022 awards: $4,404,000 CWA OSG 2023 R3 awards: $5,578,000 CWA 117:

	CBIG/CBRAP: FY22 Annual Appropriation: $35,360,132 FY22 IIJA: $15,000,000 FY23 Annual Appropriation: $38,899,879 FY23 IIJA: $20,192,558
Provide financial support to localities and other entities, as authorized and assuming adequate appropriations, through the Innovative Nutrient and Sediment Reduction Grants (INSR) and the Small Watershed Grants (SWG). (EPA)	Ongoing. INSR: FY22 Annual Appropriation: $9,625,000 FY22 IIJA: $10,000,000 FY23 Annual Appropriation: $10,000,000 FY23 IIJA: $8,000,000 SWG: FY22 Annual Appropriation: $9,625,000 FY22 IIJA: $15,000,000 FY23 Annual Appropriation: $10,000,000 FY23 IIJA: $13,000,000 *FY23 funds yet to be awarded. Expected in February 2024.

Acronym Guide

BayFAST/CAST/MAST/VAST – Federal Assessment Scenario Tool/Chesapeake AST/Maryland AST/Virginia AST
BMP – Best Management Practice
CAFO – Concentrated Animal Feeding Operation
CBP – Chesapeake Bay Program
CBIG – Chesapeake Bay Implementation Grants
CBRAP – Chesapeake Bay Regulatory and Accountability Program Grants
CEAP – Conservation Effects Assessment Project
CWA - Clean Water Act
DNREC - Department of Natural Resources and Environmental Control
DoD – Department of Defense
DOT – Department of Transportation
EJ SCREEN – Environmental Justice Screening and Mapping Tool
EO Strategy – Executive Order 13508 Strategy for Protecting and Restoring the Chesapeake Bay Watershed
EPA – Environmental Protection Agency
FSA - Farm Services Agency
FWS – Fish and Wildlife Service
GIS – Geographic Information System
GSA - General Services Administration
Maryland DNR – Maryland Department of Natural Resources
MS4 – Municipal Separate Storm Sewer System
NAAQS – National Ambient Air Quality Standards
NFWF - National Fish and Wildlife Foundation
NOAA – National Oceanic and Atmospheric Administration
NOx - Nitrogen Oxides
NPDES – National Pollutant Discharge Elimination System
NRCS – Natural Resources Conservation Service
NPS – National Park Service
PCB – Polychlorinated Biphenyl
RACT - Reasonably Available Control Technology
SAV – Submerged Aquatic Vegetation
SIP - State Implementation Plan
SRF - State Revolving Fund
STAC – Scientific and Technical Advisory Committee

STAR – Scientific and Technical Assessment Reporting team
TMDL – Total Maximum Daily Load
UMCES – University of Maryland Center for Environmental Science
USACE – U.S. Army Corps of Engineers
USDA – U.S. Department of Agriculture
USFS- U.S. Forest Service
USGS – U.S. Geological Survey
WIP – Watershed Implementation Plan
WQ GIT - Water Quality Goal Implementation Team