

# 2022/2023 Milestone Priorities for Maryland's Phase III WIP

Sector	Milestone	Agency	Steps to Achieve MS Goals	Deliverable	End of MS Evaluation
Agriculture	<b>Agricultural Drainage Management</b>	MDA	<ol style="list-style-type: none"> <li>1) Add drainage management BMPs to MACS Program per CBPO expert panel guidelines.</li> <li>2) Collaborate with Conservation Partners to identify opportunities for implementation.</li> <li>3) Provide appropriate training for drainage management BMP design &amp; installation.</li> <li>4) Incorporate practices newly approved by the expert panel as part of cost-share programs.</li> </ol>	<b>An additional 3,242 acres managed under Agricultural Drainage Management, annually</b>	Current CAST model version does not fully credit newly approved BMPs for Ag Drainage Management. Expect updates with the adoption of CAST-23 by the Partnership.
	<b>Pasture and Grazing Management</b>	MDA	<ol style="list-style-type: none"> <li>1) Identify opportunities for additional stream exclusion fencing.</li> <li>2) Working with NRCS, MDA will conduct grazing management training for field.</li> <li>3) Re-engage the Horse Outreach Workgroup to provide technical assistance to equine operations.</li> <li>4) Collaborate with conservation partners in securing additional funding to support pasture/grazing operations management.</li> </ol>	<b>295 additional acres under Horse Pasture Management</b>  <b>2,433 additional acres managed through Prescribed Grazing</b>  <b>Working with NRCS and UME to conduct training and field events in order to promote grazing management</b>	On track. Equine Regional Team consisting of three planners has been formed to increase outreach to equine operations and increase adoption of Conservation Plans as well as Nutrient Management Plans.
	<b>Increased Technical Assistance</b>	MDA, DNR	<ol style="list-style-type: none"> <li>1) MDA has worked with the Governor's office to propose a reallocation of funding from the Chesapeake and Atlantic Coastal Bays Trust Fund to support up to 53 State positions within Maryland that will provide direct technical assistance to farmers and boost the State's BMP verification program to support the WIP. While the funding allocation was approved, the timeline for hiring is currently being evaluated given the anticipated fiscal impact from COVID-19. As of July 2022, MDA is able to move forward with hiring the final 28 positions of the total 53.</li> <li>2) In agreements between the Resource Conservation Program and Soil Conservation Districts, funding distribution has been aligned with demonstrated progress towards WIP goals at the local level.</li> </ol>	<b>Additional # positions hired, remaining of 53 created</b>  <b>New onboarding and training tools - planner and technician training workshops. Partnering with MASCD through a NFWF grant</b>	Hiring completed. Record year for planned acres, ~100,000 SCWQP Acres
	<b>Increase Conservation Practice Adoption on Leased Land</b>	MDA	<ol style="list-style-type: none"> <li>1) Work with conservation partners regarding outreach/education to non-operating landowners.</li> <li>2) Explore options to incentivize conservation participation with non-operation landowners.</li> <li>3) Work with conservation partners to evaluate/combine existing stewardship recognition programs (Certainty, FSCAP, CSP etc).</li> </ol>	<b>Continual collaborative outreach efforts</b>  <b>Additional # Landowners reached</b>	Co-sponsored Leasing Workshops to help landowners navigate leasing language and conservation cost-share programs. ALEI has created a site with the purpose of guiding landowners through the process of navigating leases and incorporating conservation language into them. ( <a href="https://agleasebuilder.org/">https://agleasebuilder.org/</a> )

Wastewater

<p><b>Increase Performance at Major Wastewater Treatment Plants</b></p>	<p>MDE</p>	<p>1) Utilize incentive based programs to improve performance at all significant Municipal wastewater treatment facilities: Maryland Bay Restoration Fund Operations and Maintenance Performance (BRF O&amp;M) Clean Water Commerce Act (CWCA) and WQ Trading Program. 2) Return key significant treatment facilities to effluent levels achieved in 2019 and continue to reduce effluent concentrations to a statewide flow weighted average of 2.85 to mitigate nutrient allocations related to climate change by 2025. 3) Complete consent decree to resolve violations at Back River and Patapsco WWTPs.</p>	<p><b>Using these incentives, continue to improve performance of MD's significant WWTPs to achieve the Phase III WIP goal of 3.25 mg/L of TN</b></p> <p><b>Further incentivize MD's significant WWTPs towards achieving 2.85 mg/L TN statewide average by 2025, to address MD's Climate Change allocations</b></p> <p><b>At the end of the milestones period, assess BRF O&amp;M funding and needs as it relates to WWTP performance to ensure additional reductions are being achieved</b></p> <p><b>Fully utilize the BRF O&amp;M performance grant and CWCA to maximize funding to meet WIP and climate goals</b></p> <p><b>At the end of the milestones period, evaluate if additional strategies are needed to achieve goals</b></p>	<p>Maryland spent \$11 million in performance grants which helps to incentivize operations below the Phase III WIP goal of 3.25 mg/L. These funds went to 54 WWTPs throughout the State in 19 counties.</p> <p>The full \$11 million was utilized under this program.</p> <p>Significant noncompliance was still observed at 2 MD WWTPs, with one showing signs of improvement for SFY23. Challenges with staffing and equipment were cited as the primary cause. MDE's actions are noted in the next MS.</p>
<p><b>Returning Major Wastewater Treatment Plants (WWTPs) to Compliance</b></p>	<p>MDE</p>	<p>1) Continue to enforce Consent Decrees for the 2 major wastewater treatment plants that were found in significant non-compliance (Back River and Patapsco). 2) Continue work with the Maryland Environmental Service to make improvements at the Back River and Patapsco WWTPs.</p>	<p><b>Monitor monthly discharge monitoring reports that verify maintenance improvements at these facilities show compliance with permit conditions and show trends in meeting the State's climate change goals for nitrogen and phosphorus</b></p>	<p>On March 27, 2022, Maryland Dept. of the Environment directed the Maryland Environmental Service (MES) to take charge of operations at Baltimore City's Back River Wastewater Treatment Plant (WWTP). <a href="https://mde.maryland.gov/programs/water/Compliance/Pages/Back-River-WWTP.aspx">https://mde.maryland.gov/programs/water/Compliance/Pages/Back-River-WWTP.aspx</a> MDE is pursuing a similar agreement at Patapsco WWTP. <a href="https://mde.maryland.gov/programs/water/Compliance/Pages/Patapsco-WWTP.aspx">https://mde.maryland.gov/programs/water/Compliance/Pages/Patapsco-WWTP.aspx</a></p>
<p><b>Continue to Upgrade Non-significant Wastewater Treatment Plants</b></p>	<p>MDE</p>	<p>1) Modify the permits for proposed facilities (1-2 per year) to allow for upgrade to ENR. 2) Modify the BRF ranking tool to allow for smaller facilities to qualify for State grants. 3) Prioritize upgrades for the largest, most cost efficient plants in this category.</p>	<p><b>2 of the largest non-significant WWTPs have been upgraded</b></p>	<p>2 new WWTPs ENR construction in SFY22. Vicor Cullen and Lewistown.</p> <p><a href="https://mde.maryland.gov/programs/water/BayRestorationFund/Documents/10-22-BRF-WWTP%20Update%20for%20BayStat.pdf">https://mde.maryland.gov/programs/water/BayRestorationFund/Documents/10-22-BRF-WWTP%20Update%20for%20BayStat.pdf</a></p>

Natural Filters

<p><b>Oyster Reef Restoration</b></p>	<p>DNR</p>	<p>1) Construct reef base on substrate and seed reefs in the St. Marys sanctuary. 2) Complete initial restoration in the St. Marys sanctuary (2022). 3) Construct 100 acres of reef base on substrate and seed sites in the Manokin sanctuary (2023). 4) Complete ground truthing surveys in the Manokin sanctuary (2022). 5) Continue planned second seeding as necessary in the Little Choptank and Tred Avon sanctuaries. 6) Continue monitoring and sampling to ensure successful metrics as defined by the Chesapeake Bay Agreement.</p>	<p><b>Complete all initial restoration in the St Marys, with 8.7 acres</b> <b>Complete 100 acres of initial restoration in the Manokin</b></p>	<p>1) complete; 2) complete; 3) complete; 4) complete; 5) in progress; 6) in progress</p>
<p><b>Tree Solutions Now Bill</b></p>	<p>DNR, MDE</p>	<p>1) 13 Tree Corps positions hired by MFS- contracted. 2) 1 Program Coordinator position hired by MDE- permanent position. 3) 5 Million Trees Program Guidance established by Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings. 4) CBT grant program established and advertised through wide partnerships.</p>	<p><b>5 Million Tree Program set up and supporting tree planting with an emphasis on urban underserved areas, documented by tree planting progress tracking</b></p>	<p>5 Million Trees Initiative established and ramping up, with DNR seedling production increased by a half million+, increased forest buffers and other tree planting, MDE tracking tools released, showing 493,829 total trees planted (since FY21) and 28,073 in urban, underserved areas, mapped and being served by DNR, MDOT, MDA, CBT (and CBT grants), and 5MT staff, MDE's new 5m Trees Initiative Coordinator was hired and the new 5m trees website and tracking tool are available at <a href="https://mde.maryland.gov/5mTrees">mde.maryland.gov/5mTrees</a></p>



Stormwater	A-StoRM	MDE	<p>Advancing Stormwater Resiliency in Maryland (A-StoRM) is an initiative mandated by State Bill 227 to make stormwater BMPs more resilient in the face of climate change.</p> <ol style="list-style-type: none"> <li>1) Standardize definitions of flooding.</li> <li>2) Incorporate NOAA Atlas 14 precipitation estimates into Stormwater Design Manual.</li> <li>3) Update design standards for Environmental Site Design practices for new and redevelopment.</li> <li>4) Identify frequently flooded areas post 2000.</li> <li>5) Draft regulations to require comprehensive watershed studies, where funding exists, for flood event areas identified.</li> <li>6) Create a regulations review stakeholder advisory group to address future needs.</li> </ol>	<p><b>A-STORM Report</b></p> <p><b>Updates to the Stormwater Design Manual</b></p> <p><b>Map of frequently flooded areas (post 2000)</b></p> <p><b>Draft regulations for requiring comprehensive watershed studies</b></p>	<p>A-STORM landing page: <a href="https://sb-227-maryland.hub.arcgis.com/">https://sb-227-maryland.hub.arcgis.com/</a></p> <p>A-STORM Report finalized in SFY22.</p> <p>Stormwater Design Manual updates are ongoing.</p> <p>Map: <a href="https://sb-227-maryland.hub.arcgis.com/pages/mapping-watershed-assessment">https://sb-227-maryland.hub.arcgis.com/pages/mapping-watershed-assessment</a></p> <p>Regulations for comprehensive watershed studies are still in development.</p>
Conowingo	Conowingo	All agencies	<p>Lead and champion continued Bay Program partnership progress adopting and implementing innovative best management practices, including natural filters (e.g., freshwater mussels, SAV planting /restoration, tidal wetland creation/restoration) and other innovative practices (e.g., Conowingo dredging), and conservation financing approaches through Conowingo WIP milestone development and implementation.</p>	<p><b>Include BMP and financing innovations in the Conowingo WIP milestones and in collaboration with EPA, the Conowingo WIP Steering Committee, and the PSC. Demonstrate continued progress on model implementation and/or development for evaluating dredging as a creditable pollution reduction practice. Advance collaboration on mussel restoration throughout the entire Susquehanna River watershed</b></p>	<p>Maryland continues to co-chair the Conowingo WIP Steering Committee with Pennsylvania to provide leadership and direction for the Conowingo WIP. Maryland also recently (Jan. 4th, 2023) approved the \$25-million in pay for success implementation funding to go to SRBC for Conowingo. Maryland is leading 2 BMP innovations - Conowingo dredging and mussel restoration to improve water quality. Maryland also recently developed a landing page to describe and provide links to documents related to the State's comprehensive strategy to address Conowingo impacts. That web site is available here - <a href="https://mde.maryland.gov/programs/water/TMDL/TMDLI mplementation/Pages/Conowingo-Dam-Impacts.aspx">https://mde.maryland.gov/programs/water/TMDL/TMDLI mplementation/Pages/Conowingo-Dam-Impacts.aspx</a> A detailed Conowingo progress report will be submitted to EPA that provides more detail on these and other actions.</p>

# 2022/2023 Milestones for WIP Support

Sector	Milestone	Agency	Steps to Achieve MS Goals	Deliverable	End of MS Evaluation
Funding	<b>Submit Annual Chesapeake Bay Funding (i.e., JCR) Reports to MD Legislature</b>	All MD Agencies	Finish annual internal agency review of funding programs for sufficiency and proper targeting, while also looking to achieve important co-benefits like climate mitigation and adaptation. Identify any gaps in funding needed to achieve 2025 Bay Restoration goals.	<b>Submit reports to MD's Legislature by Dec. 1 of each year</b>	Complete for SFY 21, 22 & 23
	<b>Bay Restoration and Clean Water State Revolving Loan Funds</b>	MDE	<ol style="list-style-type: none"> <li>1) Continue to market the Bay Restoration Fund (BRF) and Clean Water State Revolving Fund (WQRLF) for stormwater management projects, MS4 implementation, and climate resiliency.</li> <li>2) Continue to use the Integrated Project Priority System (IPPS) for the BRF and WQRLF to improve the potential for high-benefit septic projects, stormwater management projects, MS4 implementation and climate resiliency.</li> </ol>	<p><b>Report number of projects funded through these grants</b></p> <p><b>Document the new ranking priority metrics</b></p>	<p>Project is ongoing. The annual opportunity to apply for funding is announced on MWIFA's website and via an email blast to a contact list of &gt; 1200. New ranking metrics can be found on the web:  <a href="https://mde.maryland.gov/programs/water/WQFA/Documents/FINAL%20WQ%20IPPS%20Rev%206%20Amend%201.pdf">https://mde.maryland.gov/programs/water/WQFA/Documents/FINAL%20WQ%20IPPS%20Rev%206%20Amend%201.pdf</a>. For SRF funding decisions for the two most recent years, please see the "Water Quality Revolving Loan Fund Intended Use Plan Table 1" documents posted at  <a href="https://mde.maryland.gov/programs/water/WQFA/Pages/index.aspx">https://mde.maryland.gov/programs/water/WQFA/Pages/index.aspx</a>. For BRF funding decisions, please see each Fiscal Year's Capital Budget as Enacted at  <a href="https://dbm.maryland.gov/budget/pages/capbudgethome.aspx">https://dbm.maryland.gov/budget/pages/capbudgethome.aspx</a>.</p>
	<b>Clean Water Commerce Act</b>	MDE	<ol style="list-style-type: none"> <li>1) Re-authorized in 2021 with \$20 million dollars/year for 9 years</li> <li>2) Purchases cost-effective pollution reduction credits</li> <li>3) Credits may be purchased from all sectors</li> <li>4) Provides incentive for private capital to perform restoration</li> <li>5) Creates an additional incentive for improving Wastewater Treatment Plant performance</li> </ol>	<p><b>Document results of practices implemented with this fund</b></p> <p><b>Maximize funds to achieve cost effective reductions</b></p>	<p>CWCA was reauthorized in 2022, a Request for Projects was issued in FY23, and projects selections were finalized in June 2023. We are currently working with selected projects on grant agreements and anticipate executing these agreements during FY24 which will initiate commencement of project implementation. Environmental outcomes will be paid for after outcomes are verified starting 1 year after project completion. The FY23 solicitation resulted in MDE funding 9 projects. Additionally, MDA funded 2 projects and the Environmental Policy Innovation Center funded 5 projects selected through the same application process. The total investment is over \$17.5 million will ensure 771,442 pounds of nitrogen are reduced over the lifetime of the projects.</p>



Funding	<b>Chesapeake and Atlantic Coastal Bays Trust Fund</b>	DNR	<p>1) Cost-Effective Non-point Source Pollution Reduction projects:</p> <p>a) Maintain full funding levels</p> <p>b) Update targeting methodology for project selection to include DEIJ, carbon and resiliency co-benefits</p> <p>c) Explore opportunities for increased funding through private capital</p> <p>d) Prioritize projects that foster healthy ecosystems, communities, and resilient economies</p> <p>2) Natural Filters Program projects: Maintain existing funding levels to implement natural filter BMPs on state and public lands. Natural filters practices improve both water quality and habitat by protecting, enhancing and restoring riparian buffers, wetlands, streams and living shorelines.</p>	<b>Report number of projects funded, and associated pounds of nutrients and sediment reduced through these grants</b>	In progress: SFY24 funded 169 project sites. Cumulative totals landuse practices FY13-22: 1,354,401 lbs of N; 200,851 lbs of P; 185,790 tons of S
	<b>Local Watershed Implementation Plan Funding</b>	DNR	<p>1) Continue to update or improve the process and ranking criteria to identify and provide funding to those local communities with the most cost effective projects for Bay restoration as needed.</p> <p>2) Promote program through outreach to local communities and local jurisdictions.</p>	<b>Sustained levels of state funding to support local watershed implementation planning</b>	Complete: See above
	<b>MACS</b>	MDA	Increased MACS funding to 100% for critical WIP BMPs, added a 30% COVID-related increase due to rising material costs, and looking to raise per-project cap.	<b>Will report the number of WIP eligible projects funded, and associated pounds of reduction, for this milestone period</b>	In Progress
	<b>319(h)</b>	MDE	Fund 1-3 restoration projects per year in watershed plan areas within the Chesapeake Bay watershed.	<b>1-3 completed restoration projects</b>	Completed projects include: Greensboro VFD restoration and Washington County SCD Antietam Creek Keedysville Stream Restoration
Modeling & Research	<b>Urban Development Growth and Land Preservation Accounting</b>	MDP	<p>1) Update Chesapeake Bay Modeling tools with the State's own projections of growth in the urban sector.</p> <p>2) Provide technical support to ensure land use data and Chesapeake Bay land Change model forecasts are accurate.</p> <p>3) Explore the use of the MD Dept. of Planning's Growth Simulation Model as an alternative for CBP modeling tools to account for 2025 projected growth.</p> <p>4) Continue to update and maintain Maryland's land preservation datasets to inform CBP modeling tools.</p>	<b>Provide growth numbers and other documentation to CBPO</b>	Continued service on the CBP Land Use Workgroup to ensure CBP land use data, impervious cover change data, and Chesapeake Bay Land Change model forecasts are as accurate as possible and incorporate Maryland's data and knowledge base.
	<b>Ecological Effects of Sea Level Rise</b>	DNR	<p>1) Coordinate with higher education and other partners to:</p> <p>a) Enhance models that quantify wave attenuation and the flood reduction benefits of nature-based features</p> <p>b) Use this information to inform conservation and restoration priorities for Maryland coastlines</p>	<b>Quantify the protective services of marsh, submerged aquatic vegetation, and living shorelines under current and future sea level conditions</b>	Statewide hydrodynamic and marsh models for various sea level rise and storm scenarios are complete. A regional SAV model was developed and finalized. Data are currently being incorporated into statewide tools to inform conservation and restoration priorities. Living shoreline evaluation is underway at 2 sites (Shady Side in Anne Arundel County, and Crisfield in Somerset County).
	<b>Incorporating Air Emission Reduction Strategies</b>	MDE	<p>1) Continue the effort to convene an action team to help quantify additional water quality impacts of future air emissions reductions strategies.</p> <p>2) Revise Quality Assurance Project Plans (QAPPs) to account for air emissions reduction BMPs related to the Volkswagen Settlement.</p>	<b>Investigate creation of an accounting system to track air emission BMPs</b>	Ongoing, recent discussion in the Watershed Technical Workgroup on this topic (Spring 2023). There was a commitment to look into this for post 2025 implementation.

	<b>Chesapeake &amp; Atlantic Coastal Bays Trust Fund Projects</b>	DNR	<p>1) Strategic &amp; Targeted Monitoring:</p> <p>a) Continue to monitor projects implemented through the Trust Fund for efficacy of implementation such as through site visits and review of as-builts</p> <p>b) Continue to conduct long-term monitoring of BMPs to assess performance and alignment with state investment goals</p> <p>2) Innovative Technology Fund:</p> <p>a) Develop new non-point source BMPs for nitrogen, phosphorus, and sediment reduction</p> <p>b) Expand partnerships with other programs that develop emerging technologies</p> <p>c) Ensure new practices are reviewed by the Chesapeake Bay Partnership, or other appropriate avenues</p> <p>d) Establish a new consortium called BlueTechMD, a group of experts from the private, non-profit, and university sectors all interested in bringing more investors and entrepreneurs into Maryland to grow its blue economy and sustainability technology ecosystem</p>	<p><b>Monitor Trust Fund BMPs to ensure they provide the stated benefit</b></p> <p><b>Continue investment in the Pooled Monitoring Initiative Restoration Research Grant</b></p> <p><b>Annually fund two research and development projects</b></p> <p><b>One commercial investment</b></p>	Trust Fund financed projects were monitored to assess their nutrient reduction and ecological uplift performance. Pooled Monitoring Initiative's Restoration Research Grant was funded annually at the amount of \$300,000.00/yr by Maryland DNR. This is in addition to other partners to the fund. ITF updates: more than a dozen R&D grants issued; two investments completed
	<b>Beneficial Use of Dredge Material</b>	DNR	<p>1) Pilot projects with application of dredge material</p> <p>2) Develop new targeting tools and partnerships</p> <p>3) Remove hurdles to implementation</p> <p>4) DNR hire a Coastal Restoration Specialist</p>	<b>Facilitate the advancement of coastal resiliency projects that incorporate beneficial use as a cost saving restoration strategy</b>	Pilot projects underway; BUILD tool released and updated; position hired
<b>Technical Assistance</b>	<b>Watershed Assistance Collaborative</b>	DNR	<p>1) Watershed Assistance Collaborative (WAC):</p> <p>a) Continue to provide dedicated staff and funding to support the program</p> <p>b) Expand the program's ability to serve additional communities and improve outreach</p>	<b>Fund and manage two Watershed Specialists' outreach; collaborate with three additional Specialists</b>	Upper Eastern Shore and Upper Western Shore specialists hired; continue working with remaining specialists.
	<b>Technical Support through Restoration Specialists</b>	DNR	<p>1) Continue to provide technical assistance to local governments, watershed organizations, private landowners and others interested in addressing water quality and natural resource management issues with the latest science and techniques.</p> <p>2) Advance restoration science, outcomes, and cost-efficiency within the Watershed Assistance Grant, the Trust Fund local solicitation, and the Natural Filters Program.</p>	<b>Provide continued hands-on landscape level technical assistance to local governments and non-governmental organizations implementing restoration projects</b>	Continued supporting existing staff with SFY24 plan to increase the level of field specialists to assist state and local partners identify, engineer, design, and provide construction oversight assistance of priority Chesapeake Bay restoration projects.
	<b>BMP Calculator</b>	DNR	<p>1) Operate and maintain a publically available online application to estimate nutrient and sediment reductions from site level projects.</p> <p>2) Integrate updates associated with Chesapeake Assessment Scenario Tool.</p> <p>3) Add new BMPs as they are approved.</p>	<b>Operate and maintain FieldDoc.com</b>	Complete: Issued contracts for operation and maintenance of the system.
	<b>Septic Connections</b>	MDE, MDP	Provide technical and policy assistance to local governments to facilitate connections of septic tanks to WWTPs.	<b>Report number of septic tanks connected</b>	137 septic tanks connected to sewers in FY2022
	<b>Stormwater Meetings</b>	MDE	<p>MDE will meet with stormwater permittees on a quarterly basis to discuss:</p> <p>a) WIP Expectations</p> <p>b) Emerging Pollutants</p> <p>c) Local Impairments</p>	<b>Quarterly meetings at MDE with Stormwater permittees</b>	2 MACO meetings in 2022, 1 in 2023
	<b>Develop Local Watershed Plans</b>	MDE	Our nonpoint program commits to assist with the development of local TMDL nonpoint source watershed restoration plans that contribute to Chesapeake Bay nutrient and sediment reductions.	<b>1-2 A-I criteria watershed plans completed</b>	1 plan (Conococheague Creek) was revised by MDE and sent back for revision, another for the Choptank is in review at EPA R3.
	<b>TIPP Tool Maintenance</b>	MDE	The TMDL Implementation Progress and Planning (TIPP) spreadsheet tool is meant to accompany the submission of Stormwater Wasteload Allocation (SW-WLA) Implementation Plans to MDE. It estimates load reductions at various points in the watershed planning process. This tool is used to help guide restoration and accounting efforts for meeting stormwater permit conditions.	<b>TIPP Tool will undergo updates as needed</b>	TIPP Tool was updated to correct various cell errors. An additional online tool began development in Fall 2023. Final release date for the online tool is estimated for Summer 2024.



Developing Partnerships	<b>Capacity Building Initiative</b>	DNR	Establish a partnership with Chesapeake Bay Trust to launch the Capacity Building Organization-Capacity Building Initiative (CBO-CBI). This program will identify historically underengaged community-based organizations that have not previously participated in two grant programs - the Watershed Assistance Grant Program and the Resiliency Through Restoration Initiative. Interested organizations will receive the technical assistance needed to develop robust proposals to these grant programs. This initiative will enhance the state's capacity to achieve Bay restoration goals and regulatory requirements by making the collective body of organizations pursuing restoration projects more inclusive.	<b>Launch and administer one year of the CBO-CBI</b>	Last year the Chesapeake Bay Trust and DNR partnered on CBO-CBI (EPA funding) with the goal to create more resilient MD communities, increase the number of applications from frontline communities to our restoration and resilience grant programs. Pilot initiative strived for intentional inclusion. The pilot year brought on contractors called connector groups who have established relationships with frontline communities and tasked with doing outreach to local organizations and pass them to technical assistance providers who conducted site assessments, identified projects, wrote and submitted grants. Now MDE and DNR-NOAA funds are coming on board to continue with this work. The RFPs for these contractual services under CBO-CBI are currently open.
	<b>Pursue Circuit Rider in the Choptank River</b>	MDE	As part of the nonpoint source program, work with Envision the Choptank to help provide support for a circuit rider that will assist with BMP placement, design, and grant application assistance to implement practices in underserved areas within Maryland.	<b>Partial support of a full time circuit rider for several years.</b>  <b>Report projects completed by position</b>	MDE has entered into a legal agreement to provide 50% financial support of the circuit rider for the Choptank watershed. We are working with CBF to fund the remaining 2 years at the moment.

# Other 2022/2023 WIP Milestones

Sector	Milestone	Agency	Steps to Achieve MS Goals	Deliverable	End of MS Evaluation
Agriculture	<b>Traditional Cover Crop Implementation</b>	MDA	<ol style="list-style-type: none"> <li>1) Continue to work with the agricultural community to ensure strong participation in the Maryland Cover Crop Program.</li> <li>2) Continue to evaluate and refine program policies in consideration of environmental and economic factors.</li> <li>3) Develop a Soil Health Program that will also help promote the benefits of cover crops in row crop production.</li> </ol>	<p><b>470,000 acres of traditional cover crop</b></p> <p><b>Through the Healthy Soils Program, expanding acres enrolled in extended season and multi-specie cover crops</b></p>	Maintained levels of participation in traditional cover crop program while now offering the Cover Crop Plus program, offering higher incentive payments and other incentive add-ons for farmers planting cover crops and utilizing additional best management practices to improve soil health.
	<b>Soil Conservation and Water Quality Planning</b>	MDA	<ol style="list-style-type: none"> <li>1) Continue to work with USDA-NRCS and local Soil Conservation Districts in SCWQP development.</li> <li>2) Work with the Conservation Partnership to identify and address Technical Assistance gaps.</li> </ol>	<p><b>1,000,000 acres managed under a Conservation Plan</b></p>	Now that hiring has been completed, onboarding and training of those additional planners continues. Coordinated efforts between MDA and the Conservation Partnership have been made to identify tools available for prioritizing conservation planning.
	<b>Tillage Management</b>	MDA	Through the Soil Health Program, highlight the co-benefits provided by long-term utilization of tillage management practices.	<p><b>Work towards 248,000 acres of conservation tillage annually</b></p> <p><b>643,000 acres of high residue tillage annually</b></p>	<p>MDA continues to promote the co-benefits of Tillage Management practices through the Soil Health Program as well as through the deliverance of technical assistance in addressing resource concerns for operations looking to implement a SCWQP.</p> <p>MDA also worked with NASS to conduct an updated survey, capturing the high levels of tillage management practices being utilized across the state.</p>

**Agriculture**

<p><b>Animal Waste Management Systems</b></p>	<p>MDA</p>	<p>1) Continue to work with USDA-NRCS and local Soil Conservation Districts to identify and address resource concerns in the area of animal waste management. 2) Continued funding of storage facilities through MACS and EQIP.</p>	<p><b>Poultry - 100% AU Dairy - 90% AU Livestock - 50% AU</b></p>	<p>These practices are now eligible for up to 100% cost-share through MDA's MACS Program.</p> <p>An effort has been made to address where gaps remain and reach out to operations such as those in the equine communities where there may be gaps in implementation. Verification of beyond credited practices continues to provide an updated dataset of those practices still being properly utilized across the state.</p>
<p><b>Grass &amp; Riparian Buffers</b></p>	<p>MDA</p>	<p>1) Incentivize implementation of grass buffers through enrollment in the Conservation Reserve Enhancement Program. 2) Collaborate with Conservation Partners to identify implementation opportunities in conjunction with other practices. 3) Collaborate with sister agencies, across multiple programs, to support shared goals for tree planting initiatives.</p>	<p><b>Additional 4,295 acres a year, both grass and forest, newly implemented or verified</b></p> <p><b>Plan to complete future round(s) of the Conservation Buffer Initiative</b></p>	<p>MDA's Conservation Initiative Buffer Program is entering its 3rd program year, and allows an opportunity for the implementation of buffers with more flexible management conditions and contract lengths - that still provide a water quality benefit.</p>
<p><b>Nutrient Management Core Nitrogen</b></p>	<p>MDA</p>	<p>1) Continue to work with the agricultural community to ensure fertilizers, manure, and other nutrient sources are applied in an effective and environmentally sound manner. 2) Continue to provide education and training regarding proper nutrient application in adherence with a nutrient management plan and all current regulations.</p>	<p><b>70% compliance rate</b></p>	<p>MDA's Nutrient Management Program continues to offer trainings and workshops to provide guidance on proper nutrient application. NM Consultants provide a source of guidance across the state, with that team being fully staffed.</p>

**Agriculture**

<p><b>Pocomoke and Wicomico River Basins</b></p>	<p>MDA</p>	<p>Data from 2014 to 2016 showed the Pocomoke and Wicomico Rivers as having some of the highest levels of summer dissolved oxygen open water criteria exceedances in Maryland. EPA's evaluation of Maryland's Phase III WIP recommended that the state, "target implementation in the most impaired segments." Wicomico, Worcester, and Somerset counties, where the Pocomoke and Wicomico river basins are located, have collectively committed to:</p> <ol style="list-style-type: none"> <li>1) Working within the Soil Conservation District partnership to address natural resource concerns and provide direct technical assistance, planning an additional 1,800 acres a year.</li> <li>2) An additional 1,800 acres treated through agricultural drainage management practices by 2023.</li> <li>3) Continuing to manage 100% of their poultry waste through animal waste management practices, as well as a 10% increase of the amount of livestock waste managed by 2023.</li> <li>4) Continue to support manure transport to alternative uses, or to other geographical areas with nutrient needs, for these watersheds.</li> </ol>	<p><b>Regionally</b></p> <p><b>110,000 acres managed under a conservation plan</b></p> <p><b>An additional 1,900 acres treated through Ag Drainage Management Practices</b></p> <p><b>Animal Waste Management Systems:</b> <b>Poultry - 100% AU</b> <b>Livestock - 50% AU</b></p> <p><b>4,000 tons transported annually for alternative use</b></p>	<p>The implementation of Ag Drainage Management Practices continues to increase, as well as the tonnage transported through the Manure Transport Program.</p> <p>An increase in acres managed under a conservation plan is anticipated to increase as new hires are onboarded and trained through the multiple Planner certification levels.</p>
<p><b>Increase Conservation Practice Adoption on Leased Land</b></p>	<p>MDA</p>	<ol style="list-style-type: none"> <li>1) Work with conservation partners regarding outreach/education to non-operating landowners.</li> <li>2) Explore options to incentivize conservation participation with non-operation landowners.</li> <li>3) Work with conservation partners to evaluate/combine existing stewardship recognition programs (Certainty, FSCAP, CSP etc).</li> </ol>	<p><b>Continual collaborative outreach efforts</b></p> <p><b>Additional # Landowners reached</b></p>	

Agriculture	<p><b>Phosphorus Management Tool</b></p>	MDA	<p>1) Continue to fund and support the Manure Transport Program which provides financial assistance to farmers for transportation of manure to a producer or alternative use facility where it can be utilized in accordance with a Nutrient Management Plan.</p> <p>2) Continue to work with Delmarva Land to Litter Collaborative and other partners, identifying solutions to the challenge of managing litter in order to achieve our water quality goals.</p> <p>3) Continue to work within Soil Conservation Districts to identify and address resource concerns in the area of animal waste management as well as provide continued funding of storage facilities through MACS and EQIP, as highlighted in our Animal Waste Management System milestones.</p>	<p><b>Manure Transport Funding Support</b></p> <p><b>Animal Waste Management System Milestones</b></p>	<p>The PMT is now fully implemented.</p> <p>The Manure Transport Program offers increased rates and a more streamlined application process, seeing increased participation in the program.</p> <p>AWMS are eligible for up to 100% cost-share through our Conservation Grants Program.</p>
	<p><b>CAFO Permit</b></p>	MDE	<p>1) Prioritize the registration of the remaining 18 AFOs that were not registered at the end of the 14AF/A General Discharge (GD) Permit and register these facilities under the 19AF GD Permit.</p> <p>2) Continue the renewal of AFO facilities under the 19AF GD Permit.</p>	<p><b>19AF GD Permit registration of AFOs that were not registered under the 14AF/A GD Permit</b></p> <p><b># of AFOs currently registered under the 19AF GD Permit</b></p>	<p>1) 11 as of 10.31.23</p> <p>2) 325 as of 10.31.23</p>
Wastewater	<p><b>Septic Upgrades to BAT</b></p>	MDE	Continue to use the Bay Restoration Fund to upgrade septic systems to Best Available Technology (BAT) within the Critical Area.	<b>Fund 1,800 BAT upgrades in the critical area</b>	713 systems upgraded in the Critical Area
	<p><b>Regulations Amendment</b></p>	MDE	Amend regulations to include loading rate decreases when Best Available Technology (BAT) or Membrane Bioreactor (MBR) technology is utilized for systems that discharge <5,000 gallons per day.	<b>Regulation Amendment</b>	In Progress
	<p><b>Bermed Infiltration Pond Removal</b></p>	MDE	<p>1) Finalize BIP Action Plan</p> <p>2) Implement plan to close BIPs and connect to wastewater facilities</p>	<b>Work on 2 priority facilities identified in the action plan</b>	<p>Action plan has been finalized and at least one BIP has been removed and homes connected to an ENR Wastewater Treatment Plant.</p> <p><a href="https://mde.maryland.gov/Pages/BIPs.aspx">https://mde.maryland.gov/Pages/BIPs.aspx</a></p>

Natural Filters

<p><b>Expand existing tree planting programs</b></p>	<p>DNR</p>	<p>1) Work in 5 counties to increase the number of contracts on residential properties in the Lawn to Woodland program. 2) Providing economic incentives through the "Marylanders Plant Trees" program which encourages citizens to plant individual trees on residential properties. 3) Incentivize tree planting and forest buffers through updated Accounting Guidance for fifth-generation MS4 permits. 4) Continuing with the Healthy Forests, Healthy Waters initiative, prioritize riparian buffer plantings through decision criteria scoring.</p>	<p><b>Maintain contract numbers in Lawn to Woodland program</b></p> <p><b>Maintain number of vouchers provided in Marylanders Plant Trees program</b></p> <p><b>300 acres planted via Healthy Forests, Healthy Waters</b></p>	<p>Lawn to Woodland program is not currently funded, and residential acres were planted through Chesapeake/Coastal Bays Trust Fund applications for HFHW and Western MD.</p> <p>With pandemic restrictions, the number of Marylanders Plant Trees coupons declined, and increased outreach to increase program use is planned for new 5 Million Trees staff.</p> <p>Exceeded 300 acres planted via Healthy Forests, Healthy Waters and W MD plantings- 748.4 Non-CREP acres planted in FY21 and FY22.</p>
<p><b>Maryland Stream ReLeaf</b></p>	<p>DNR</p>	<p>1) Establish partnerships to identify focus areas and complementary programs that expand forest buffers. 2) Identify riparian forest buffer priority projects in the Lower Susquehanna watershed (Cecil and Harford Counties).</p>	<p><b>2 meetings per year to coordinate the partnership</b></p> <p><b>Develop riparian forest buffer restoration and conservation strategies for the program</b></p>	<p>2 meetings per year were held in FY21 and FY22 to coordinate the partnership and guide strategy development.</p> <p>Developed riparian forest buffer restoration and conservation strategies for the program, presented in April 2022 to the Chesapeake Bay Program.</p>



Stormwater		<b>Incorporate Conservation Plus</b>	DNR, MDP	<p>For the first time, land conservation activities will count toward our Bay goals. This is due to the fact that the Chesapeake Bay Program (CBP) now considers land conservation a best management practice (BMP) similar to cover crops, septic system upgrades, wetlands restoration, and oyster aquaculture. Maryland is recognized as a leader in land conservation and, in order to take advantage of this new opportunity, will:</p> <p>1) Sustain funding for state land conservation and preservation programs to support the expected 2019-2025 forecast. Maryland will continue to support the Maryland Agricultural Land Preservation Foundation, Rural Legacy Program, and Program Open Space State-side.</p> <p>2) Work with state agencies and local governments to apply state and local land conservation programs as appropriate to reduce the modelled impacts to the bay of future growth, maximize bay health restoration opportunities, and mitigate the impacts of climate change to our natural and built infrastructures.</p>	<p><b>Sustained levels of state funding for Program Open Space, Rural Legacy, and Maryland Agricultural Land Preservation Foundation</b></p> <p><b>Refined targeting of Maryland's land conservation programs to address impacts from modelled future growth and climate change</b></p>	Complete - See Priorities section
	<b>Stormwater Goals</b>	MDE	Before the Phase I permit can be issued, permittees are required to perform a "Maximum Extent Practicable" (MEP) analysis of their programs to determine the BMP implementation level that they could reasonably achieve with available and future funding levels.	<b>MEP analyses for MDOT-SHA</b>	Complete	
	<b>Implementation of SW Goals</b>	MDE	Review all Phase I MS4 Annual Reports, any new MEP analyses, and fiscal analyses on an annual basis for ensuring MS4 permit compliance.	<p><b>Review of milestones from Annual Reports</b></p> <p><b>Annual Report and FAP Review for all jurisdictions in 2021</b></p>	5 MEP reviews, no FAP reviews in 2022. 10 FAP reviews in 2023.	
	<b>Urban Nutrient Management</b>	MDA	Continue to support and expand the management of nutrient applications on urban land.	<p><b>285,000 acres managed under urban NM - Commercial Applicator</b></p> <p><b>466,000 acres managed under urban NM - DIY Applicator</b></p>	<p>291,700 acres managed under Urban NM Commercial Applicator in SFY22</p> <p>476,524 acres managed under Urban NM DIY Applicator in SFY22</p>	
	<b>Industrial Stormwater Compliance</b>	MDE	<p>1) Continue to work with industrial sites to bring unpermitted sites into compliance.</p> <p>2) Continue to focus on areas with requests for residual designation.</p>	<b>Report on number of sites brought into compliance from 2021</b>	The new 20SW industrial stormwater permit was just issued in February 2023 and 971 facilities applied. For the last year of the previous 12SW permit's life (January 2022 - January 2023) 28 new facilities have been added and 100 terminated for defunct businesses.	

	<p><b>Phase II MS4 Permit Compliance</b></p>	<p>MDE</p>	<p>1) MDE continues to provide extensive outreach and assistance with Phase II permittees so they understand permit conditions and obligations. 2) Currently there are a total of 89 municipal, State, and federal permittees throughout Maryland which are submitting annual reports which MDE will review. 3) Years 2 through 5 will be used to develop their BMP implementation plans to meet the third generation permit conditions.</p>	<p><b># of annual reports completed and reviewed by MDE</b>  <b>Report BMP Implementation Progress</b></p>	<p>MDE completed 90 Phase II reviews and submitted Phase II data to the NEIEN node for SFY22</p>
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# 2022/2023 Climate Mitigation and Resiliency Milestones

	Milestone	Agency	Steps to Achieve MS Goals	Deliverable	End of MS Evaluation
<b>Climate Change</b>	<b>Addressing 2025 Climate Loads</b>	MDE	<ol style="list-style-type: none"> <li>1) Submit a narrative strategy documenting how Maryland plans to achieve the additional 1.124 million lbs of nitrogen it needs to reduce by 2025.</li> <li>2) Submit CAST scenario to EPA showing that Maryland has a plan to meet WIP targets with the additional load reductions due to Climate Change.</li> </ol>	<b>Climate load allocation strategy (WIP addendum)</b>  <b>CAST Scenario</b>	Complete
	<b>Minimizing Risks of Climate-Driven Water Changes through Water Program Adaptation</b>	MDE	Enhance water program permits and approvals, policies and funding programs to incorporate additional flood protection and pollution prevention considerations that reduce water-driven climate risks.	<b>Annual progress report. documenting accomplishments</b>	2022 Complete. Further reports, ongoing. MDE's Water and Science Administration will also have a Climate Dashboard in 2024. The Dashboard will track progress on climate enhancements to permits, among other things.
	<b>Coast Smart Construction Criteria</b>	DNR	<ol style="list-style-type: none"> <li>1) Develop and implement training program to increase competency in the use of the 2020 Coast Smart Construction Program Update.</li> <li>2) Coast Smart Council and identified partners annually review the Coast Smart Construction Program criteria to ensure it meets the resiliency needs for state and local capital investment.</li> </ol>	<b>1) Training program materials and annual offering</b> <b>2) Assessment of criteria assessment included in the Coast Smart Annual report.</b>	Informal outreach on Coast Smart Construction Program continued, formal training program still to be developed. Coast Smart Council met 4 times in 2022 & 4 in 2023
	<b>Climate Mitigation and Adaptation Synergies</b>	DNR	Work with higher education institutions and stakeholders to develop indicators of climate mitigation and resiliency progress. Use developed and existing indicators to communicate combined progress on both climate mitigation / resiliency and bay health.	<b>Develop and publish a suite of indicators to communicate and measure progress on climate adaptation across Maryland including those relevant to Maryland's Bay Health goals</b>	UMCES report card issued in 2022 & 2023
	<b>Adaptation Framework</b>	DNR	<ol style="list-style-type: none"> <li>1) Release the Adaptation Framework (Framework) through ARWG and MCCC.</li> <li>2) Determine priority actions to integrate into annual ARWG workplan.</li> <li>3) Building off the indicators and metrics from the Adaptation Report Card, develop a tracking approach that identifies best metrics/indicators for progress tracking, lead organization or agency, and timeline for implementation of goals, strategies and activities.</li> <li>4) Implement prioritized actions.</li> <li>5) Report on progress annually through the ARWG and assess next years priority actions.</li> <li>6) Periodically review the implementation and tracking plan to identify any additional tracking metrics that need to be identified.</li> </ol>	<b>Report on goal and strategy progress (using the Report Card as well as newly identified and developed indicators for progress) in the Maryland Commission on Climate Change annual report and Adaptation and Resiliency Work Group Workplans</b>	Framework was released, in 2023 ARWG developed the Next Generation Adaptation Plan with a first draft to be released by the end of the year.

<p><b>Local Engagement and Education: Maryland Climate Leadership Academy</b></p>	<p>DNR</p>	<p>The Maryland Climate Leadership Academy will advance the capacity of state and local government agencies, infrastructure organizations and businesses to develop and implement sound climate change initiatives thus ensuring current and future public health, security and economic prosperity. The Academy will continue to support the work of the Maryland Climate Change Commission and State of Maryland in their efforts to address climate change and meet goals related to the mitigation of and adaptation to the effects of climate change in Maryland.</p>	<p><b>1) Host three additional cohorts of the Certified Climate Change Professional (CCP) training program each year</b>  <b>2) Develop and implement sector specific training for local elected leaders, planners and others as identified</b>  <b>3) Launch the Online Learning Lab at the Maryland Climate Leadership Academy website</b></p>	<p>Complete</p>
<p><b>Water Reuse</b></p>	<p>MDE</p>	<p>Continue implementing one or more water reuse pilot projects with local jurisdictions to address water supply shortages while exploring and accounting for reduced nutrient discharges to the Chesapeake Bay.</p>	<p><b>One or more pilot studies under development</b></p>	<p>Westminster Indirect Potable Reuse: A bench-scale pilot project has demonstrated the viability of using membrane technology to treat wastewater effluent for indirect potable reuse. HB 848 was adopted to establish an indirect potable reuse program at MDE providing for the issuance of the necessary permits. This pilot will establish technical and legal systems that provide options that build water supply resilience to drought in Maryland.</p>
<p><b>Hazard Mitigation Watershed Planning</b></p>	<p>MDE</p>	<p>1) Continue the process of integrating hazard mitigation planning into local TMDL watershed implementation plans.                  2) Work with local officials to find ways to use BMPs to lower Flood Insurance rates for our citizens.</p>	<p><b>Two local watershed plans with hazard mitigation incorporated</b></p>	<p>Ongoing</p>

<p><b>Water Quality and Climate Change Resiliency Portfolio</b></p>	<p>DNR, MDE</p>	<p>Work with existing stakeholders in the climate space (i.e, Maryland's Climate Change Commission and Adaptation and Resiliency Work Group) to identify a pipeline of projects that prepares Maryland and its communities to build climate resilience by taking advantage of existing and emerging funding opportunities that promote the use of natural infrastructure. Use the Resiliency Opportunity Zone (ROZ) targeting framework to inform selection of communities to develop area specific project portfolios.</p>	<p><b>Select two communities based on the Targeted Resilience Area analysis and additional criteria evaluated by the MCCC Adaptation and Resiliency Workgroup. Procure the services of a contractor to provide technical services and stakeholder outreach to the selected communities for the purpose of developing area specific project portfolios</b></p>	<p>In progress, with multiple potential flooding reduction projects identified for each pilot geography. The lead contractor and subcontractors are assessing co-benefits of each project and will be providing DNR and partners with a prioritized list of projects in late fall, 2023. A second public engagement meeting for each pilot area will be held in late fall to present project options and solicit feedback, with a final portfolio including one funding ready project for each pilot area to be produced by December 2023.</p>
<p><b>Living Shorelines</b></p>	<p>MDE, DNR</p>	<p>Work with NGO's as possible aggregators to manage prospective living shoreline projects on private properties. Financial assistance will be provided in the form of zero-interest loans through the Shoreline Conservation Service program.</p>	<p><b>1) Report on number of aggregators engaged 2) Report on number of private landowners serviced with a zero-interest loan</b></p>	<p>1 loan issued in 2022. St. Catherines Island (Jefferson Island Club Inc - Non-profit).</p>
<p><b>SAV Restoration and Climate Research</b></p>	<p>DNR, MDE</p>	<p>1) Work with TNC to determine a path forward to blue carbon crediting of SAV restoration efforts. 2) Partner on the development of Technical Guidance Manual and Outreach Materials for Small-scale Submerged Aquatic Vegetation Restoration in the Chesapeake Bay and its tidal tributaries. 3) Sit on the steering committee for the STAC workshop on Evaluating a Systems Approach to BMP Crediting. 4) Serve as SAV Element Lead for STAC workshop on rising watershed and bay water temperatures. 5) Lead the "Modeling Climate Impacts on Submerged Aquatic Vegetation (SAV) in the Chesapeake Bay" Project. 6) Conduct Living Shoreline and Submerged Aquatic Vegetation Compatibility Study.</p>	<p><b>Report on number and extent of SAV restoration projects</b></p>	<p>11 Restoration Projects Implemented in 2022 and 2023; .51 Acres Seeded</p>
<p><b>Resiliency through Restoration Initiative</b></p>	<p>DNR</p>	<p>1) Demonstrate how nature-based features can enhance community resilience to climate change impacts: a) Target projects which reduce climate change risk to our citizens b) Design and implement up to 15 nature-based community resiliency projects c) Provide funding, training and technical assistance that will assist practitioners d) Monitor projects to evaluate success, MyCoast Restoration Tracker</p>	<p><b>Complete 15 nature-based community resiliency projects</b></p>	<p>11 projects constructed</p>

	<b>Advancing Blue Carbon Initiatives</b>	DNR, MDE	<p>1) Synthesis of current blue carbon research and policy in the state.</p> <p>2) Link research efforts to management needs such as Margaret A Davidson Fellow methane research on restored and natural marsh systems.</p> <p>3) Identify data inputs to begin development of Chesapeake Bay model of Wetlands to Market.</p> <p>4) MDE items from Dr. Lamb.</p> <p>5) Assess opportunities for Blue Carbon crediting market (TNC pilot).</p> <p>6) Blue Carbon workshops.</p>	<b>Host bluecarbon workshops</b>	Blue Carbon workshops held in 2022; Blue Carbon was added to Maryland's Greenhouse Gas Inventory in 2022 with a methodology document available on MDE's website, TNC/DNR project on a blue carbon feasibility assessment will be concluded by the end of 2023.
	<b>Ocean Acidification Plan</b>	Multiple agencies	Target tidal restoration for carbon sequestration to meet both Chesapeake Bay water quality and Atlantic Ocean acidification goals.	<b>Status on blue carbon strategies and actions including monitoring</b>	Draft carbonate monitoring strategy by MDE, DNR & UMCES
	<b>Industrial Stormwater</b>	MDE	The industrial stormwater permit was issued effective February 1, 2023. This included provisions that account for anticipated impacts of climate change.	<b>Finalized permit with section addressing higher flows</b>	The permit was issued February 1, 2023. The requirements in the new permit were challenged in court and part of a limited remand. The Department will be evaluating input gained by November 2023, and consider a final determination.



# Additional 2022/2023 Milestones for Maryland

Sector	Milestone	Agency	Steps to Achieve MS Goals	Deliverable	End of MS Evaluation
Protection	<b>Guidance for Protecting Tier II Streams</b>	MDE	Complete 1st step of analysis through literature review and basic research to identify existing guidance documentation and processes that can support high quality/high value streams.	<b>Summary report on the status of high quality/high value streams protection guidance</b>  <b>Guidance reference compendium</b>	In Progress
	<b>Maryland Healthy Watersheds Assessment</b>	MDE	Complete the Maryland Healthy Watersheds Assessment using a \$75,000 grant awarded to the Maintaining Healthy Watershed Goal Implementation Team by the Chesapeake Bay Trust. The project seeks to create a relative state watershed health baseline, on the segment-catchment scale, based on metrics known to influence watershed health, as well as identify vulnerability indicators.	<b>1) Provide MDHWA date to MD IMAP</b> <b>2) Geodatabase</b> <b>3) Final Report</b> <b>4) SOPs/Protocol Documentation</b>	Complete: 1) Provide MDHWA date to MD IMAP 2) Geodatabase 3) Final Report 4) SOPs/Protocol Documentation
	<b>Combined Program Review</b>	MDE, DNR	Pilot integration of the Antidegradation Tier II Environmental Review with the Department of Natural Resource's Power Plant Review Program. (forms, templates, and other documentation completed in the previous MS period)	<b>SOPs for special condition development and implementation guidance</b>	In Progress
Trading	<b>Water Quality Trading Program Enhancement</b>	MDE, MDA	1) Work to include credits from agriculture into the WQ Trading Program. 2) Finalize WQ Trading Registry and online marketplace. 3) Work to increase the quantity of credit buyers in the program through encouragement of participation by non-traditional partners.	<b>1) Consolidation and update of the Chesapeake Bay Nutrient Trading Registry tool</b> <b>2) Certify credits from an agricultural source</b> <b>3) Begin development of new online marketplace</b>	1. Ongoing, start incorporating in 2024 for MD 2. Not enough demand and complicated 3. Stalled, focus on incorporating RIBITS first
EJ	<b>Support the Bay Program's DEIJ Directive</b>	MDE/DNR/MDA	Support the Bay Program Partnership's DEIJ strategy and implementation plan in all Bay Program workgroups Maryland agencies lead or participate in.	<b>Continued attendance and participation</b>	MDA has hired a new Coordinator for Equity and Climate Initiatives. She will be working across all MDA Programs.
	<b>Implement MDE's EJ policy in Compliance Programs</b>	MDE	Prioritize EJ communities to implement enhanced compliance and pollution prevention efforts.	<b>Implement MDE's EJ Screening Tool to prioritize EJ communities for compliance focus.</b> <b>Identify one or more EJ pilot communities for implementation</b>	In Progress

	<b>Develop and Publish DEIJ Plan</b>	DNR	DNR commits to developing a departmental wide DEIJ plan and issuing the plan on their website.	<b>Complete DNR's plan and disseminate on its website so it is easy to find and navigate.</b>	In progress - individual Unit plans are complete and the Agency is hiring a DEIJ coordinator to continue the development of the agency plan
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