## RESTORE CLEAN WATER ACTIONS: Federal Water Quality Two-Year Milestones for 2016 – 2017

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 (EO Strategy p. 121) leading to the 2025 implementation goal. This set of federal two-year milestones for water quality applies to calendar years 2016 and 2017. The list below presents the U.S. Environmental Protection Agency (EPA) and nine other federal agencies' agencies' (USDA, DoD, USACE, USGS, NPS, FWS, NOAA, DOT, and GSA) programmatic milestones that support the water quality goals and outcomes in the EO 13508 Strategy and the Chesapeake Bay Watershed Agreement. The milestones were selected to represent the activities that have the potential to have significant environmental outcomes, that require significant resources, or that directly support the jurisdictions in meeting Watershed Implementation Plan (WIP) commitments.

The federal milestones, along with the jurisdictional milestones, will contribute to the achievement of the outcomes stated in the strategy. 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 2016-2017 milestone period:

## **Numeric Milestones:**

- 60 percent of goal achieved for implementing nitrogen, phosphorus and sediment pollution reduction actions to achieve final Total Maximum Daily Load (TMDL) allocations, as measured through the phase 5.3 watershed model\*.
- EPA's portion of air deposition load reduction to tidal surface waters of 350,000 pounds of nitrogen. (20
  percent of the required load reductions from 2010 to achieve the 15.7 million pound air deposition load
  allocation to tidal waters)
- Apply 472,000 acres of conservation practices in conjunction with U.S. Department of Agriculture (USDA)
   High Priority Performance Goals.
- Over 700 federal facilities and properties across the Bay watershed have received 2017 and 2025 pollution reduction targets from the jurisdictions and EPA. These are posted online at <a href="http://www.chesapeakebay.net/groups/group/federal">http://www.chesapeakebay.net/groups/group/federal</a>.

## **Programmatic Milestones:**

RESTORE CLEAN WATER	
Target Date	Programmatic Milestone
TMDL/WIPs	
January 2016	Announce federal 2016-2017 water quality two-year milestones. (EPA, USDA, DoD, USACE, DOT, USGS, FWS, NPS NOAA, GSA)
May 2016	Evaluate jurisdictional 2016-2017 two-year milestones. (EPA)

<sup>\*</sup> This outcome used 2009 as the baseline year.

RESTORE CLEAN WATER	
Target Date	Programmatic Milestone
May 2016	Assess progress made to implement the federal and jurisdictional 2014-2015 two-year milestones and initiate appropriate federal actions to ensure jurisdictions remain on pace. (EPA)
2016	Deliver the Final Phase III WIP Stakeholder Assessment Report to the CBP partnership to help inform the Phase III WIP expectations development process. (EPA)
June 2017	Provide draft Phase III WIP Planning Targets to the jurisdictions and CBP partnership for input and review. (EPA)
May 2017	Provide Bay jurisdictions and federal agencies with results of mid-term evaluation of their 2016-2017 two-year milestones progress. (EPA)
October 2016	Provide preliminary Phase III WIP expectations for CBP partnership input and review. (EPA)
June 2017	Provide final Phase III WIP expectations to the jurisdictions. (EPA)
June 2017	Provide final expectations for two-year milestones development to the jurisdictions and federal agencies, after input from the CBP partnership and jurisdictions. (EPA)
December 2017	Release final Phase III WIP Planning Targets to the jurisdictions (EPA)
January-April 2016	Approve each Bay jurisdiction's Best Management Practice verification program contained within the Clean Water Act Section 117 grant Quality Assurance Project Plans (EPA).
2016	Identify and map all federal landholdings in the Chesapeake Bay watershed using Federal Facilities Editor Tool in order to inform the CBP Phase 6 Watershed Model. (EPA/USGS/multiple federal agencies)
October 2016 and October 2017	Federal agencies to report BMP implementation progress to EPA and the Bay jurisdictions annually. (Multiple Federal Agencies/EPA)
2017	All Federal agencies with Federal lands and facilities which received 2017 and 2025 pollution reduction targets from EPA and the Bay jurisdictions are to ensure that practices are in place to achieve an equivalent 60% reduction by the end of 2017 as described in the 2015 Protocol for Setting Targets, Planning BMPs and Reporting Progress for Federal Facilities and Lands. (Multiple Federal agencies)
2016/2017	Continue to provide funding to support a consortium of land grant universities in running expert BMP panels and other expert support to the partnership (EPA)

RESTORE CLEAN WATER	
Target Date	Programmatic Milestone
2016/2017	Provide trainings on BayFAST/CAST/MAST/VAST to federal, state and local partners in the Bay watershed. (EPA)
2016/2017	Ensure BayFAST is enhanced to improve the usability of the tool by the users and its functionality in supporting annual progress reporting (EPA)
2016/2017	Ensure BayFAST is upgraded to be consistent with the partnership's Phase 6 Chesapeake Bay Watershed Model (EPA)
2016/2017	Continue to participate in and co-chair the Federal Facilities Workgroup to enhance collaborative efforts within the Chesapeake Bay Program Partnership. (DoD)
2016/2017	Support, to the extent practicable, the 'Protocol for Setting Targets, Planning BMPs, and Reporting Progress for Federal Facilities and Lands' and identify approaches to track reductions from regulated and non-regulated land uses. (DoD)
2016/2017	Continue to participate in jurisdictions' WIP processes by providing installation information and disseminating jurisdiction information throughout DoD to support effective implementation of future Phase III WIP expectations. (DoD)
2016/2017	Continue efforts to foster healthy lands and waters, by balancing public recreational uses and needs at USACE reservoirs and dams. (USACE)
2016/2017	Develop digital land use and boundary data for USACE properties in the Chesapeake Bay watershed (USACE)
2016/2017	Assess existing and future BMPs for USACE properties in the Chesapeake Bay watershed. (USACE)
	Agriculture
2016/2017	NRCS will continue to support voluntary actions by farmers and landowners to improve water quality by providing financial and technical 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), and Conservation Technical Assistance (CTA) funds. (USDA)
2016	Pilot the first incremental releases of Conservation Desktop that will enable a new user interface for Protracts in Conservation Desktop and replace Toolkit functionality in order to improve efficiency in the conservation planning process. (NRCS)
	I

RESTORE CLEAN WATER	
Target Date	Programmatic Milestone
2017	Pilot incremental releases of Conservation Desktop that will enable resource inventory, integrate resource concerns and integrate resource assessment and analysis tools in order to improve efficiency in the conservation planning process. (NRCS)
2016/2017	Support the development and implementation of agricultural certainty programs in the Bay watershed states. (USDA and State Agencies)
2016/2017	Coordinate lessons learned with Chesapeake Bay Program partners on the CEAP Chesapeake cropland studies (Part 1, Part 2, and the plans for Part 3 study) to discuss their utility for learning about the effectiveness of nutrient management on Chesapeake cropland and opportunities to fine-tune nutrient management to achieve the greatest water quality benefits." (NRCS)
2016/2017	USDA will work with State agencies and EPA to support accurate BMP reporting within the Chesapeake Bay watershed including, where appropriate, developing options for entering into and/or strengthening data sharing with the Bay states. (USDA)
2016/2017	USDA will enhance the delivery of technical assistance in support of riparian forest buffer restoration. (USDA)
2016/2017	USDA will develop and pilot strategies to ensure that federal, State, and NGO conservation programs create mutually reinforcing incentives for producers to install and maintain riparian forest buffers. (USDA)
2016/2017	USDA will improve riparian forest buffer outreach to landowners. (USDA)
2016/2017	USDA will work with the 6 bay states on implementing the Riparian Forest Buffer Task Force recommendations. (USDA)
2016	Conduct animal feeding operation (AFO) reviews in one Bay sub-watershed. (EPA)
2016	Complete the review of four CAFO permits and associated Nutrient Management Plans for each Bay jurisdiction. (EPA)
Atmospheric – Rules, Deposition, Allocations	
2016/2017 2016	Significantly reduce nitrogen deposition to the Bay and watershed by 2020 through implementation of national rules under the Clean Air Act. (EPA)  • Update the 2017 air deposition modeling scenario for the Chesapeake Bay watershed incorporating the federal plan to address interstate transport for the 2008 national ambient air quality standards and other recent finalized rules with significant NOx reductions. (EPA)

RESTORE CLEAN WATER	
Target Date	Programmatic Milestone
2016	<ul> <li>Finalize a federal plan for states that do not submit a Clean Power Plan (CPP) state plan for existing sources. (EPA)</li> </ul>
2016/2017	<ul> <li>Finalize federal plan to implement the Emission Guidelines for Sewage Sludge Incinerators. (EPA)</li> </ul>
2016	<ul> <li>Finalize federal plan to address interstate transport for the 2008 ozone national ambient air quality standards (NAAQS). (EPA)</li> </ul>
2017	<ul> <li>Finalize implementation rule for the 2012 fine particulate matter (PM<sub>2.5</sub>) NAAQS. (EPA)</li> </ul>
2016	<ul> <li>Begin implementation of Tier 3 new vehicle emission standards and lowering of the sulfur content in gasoline. (EPA)</li> </ul>
2016/2017	Work with states to develop State Implementation Plan (SIP) revisions to reduce NOx emissions. (EPA)
2016/2017	<ul> <li>Review CPP state plans for existing power plants. (EPA)</li> </ul>
2016/2017	<ul> <li>Oversee state implementation of Clean Air Act 129 rules (CISWI, SSI, HMIWI). Once fully implemented, these rules will reduce emissions of NOx, as well as air toxics. (EPA)</li> </ul>
2016/2017	<ul> <li>Work with states to designate nonattainment areas for the 2015 ozone NAAQS. (EPA)</li> </ul>
2016/2017	<ul> <li>Work with states and review SIPs that address interstate transport for the 2008 ozone NAAQS. (EPA)</li> </ul>
2016/2017	<ul> <li>Work with states and review SIPs that address the 2012 PM<sub>2.5</sub></li> <li>NAAQS. (EPA)</li> </ul>

RESTORE CLEAN WATER	
Target Date	Programmatic Milestone
	Stormwater
2016/2017	Propose draft District of Columbia MS4 permit for comment. (EPA)
2016/2017	Meet quarterly with Federal Agencies and the District of Columbia Department of Energy and Environment (DC DOEE) as part of the 2013 Memorandum of Understanding among EPA, DoD, NPS and GSA regarding Federal Agency Stormwater Management in the District of Columbia. (NPS, DoD-Navy, NPS, GSA, EPA)
2016/2017	Conduct update of 2012 stormwater assessments for Pennsylvania and Virginia. (EPA)
2016	Revise the Phase II MS4 regulations to address the Ninth Circuit remand. (EPA)
2017	Reissue Construction General Permit (applicable to operators in the District of Columbia and Federal operators in Delaware). (EPA)
2016/2017	Conduct oversight review and comment, per NPDES Memorandum of Agreement, on draft state MS4 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)
2016/2017	Provide assistance to Virginia Department of Environmental Quality to review and comment on select TMDL implementation plans submitted by MS4 jurisdictions to evaluate if they have a schedule for implementing the necessary structural and non-structural controls and a final date to achieve the applicable waste load allocations. (EPA)
2016/2017	Conduct MS4 permittee and state inspector trainings in coordination with jurisdictions. (EPA)
2016/2017	Continue to provide support Bay states to strengthen reissued MS4 permits so that they are more specific and measurable. (EPA)
2016/2017	Continue to provide technical assistance to communities to help better implement stormwater programs. (EPA)
	Wastewater
2016/2017	Propose draft Blue Plains NPDES permit for comment. (EPA)
	Trading/Offsets
March 2016	Issue final "baseline demonstration" technical memorandum setting forth EPA expectations for the Bay jurisdictions' offset and trading programs. (EPA)

Issue draft "MS4 and construction mitigation" technical memoranda setting forth EPA expectations for the Bay jurisdictions' offset and trading programs and explore means for addressing "interstate trading" considerations. (EPA)  Update previously-issued technical memoranda, as needed. (EPA)  Conduct update of previous 2012 trading and offset assessments for all jurisdictions. (EPA)  Conduct draft sector load growth evaluation. (EPA)  Conduct final sector load growth evaluation. (EPA)  Review Bay jurisdictions' trading and offset regulations and policies and support Bay jurisdictions as they develop trading and/or offset programs. (EPA)  Work with other Federal agencies to build capacity that will support an efficient and robust trading market. (USDA, EPA, DOT)  Toxic Contaminants  Conduct monitoring in D.C. and Maryland to support revision of toxics
forth EPA expectations for the Bay jurisdictions' offset and trading programs and explore means for addressing "interstate trading" considerations. (EPA)  Update previously-issued technical memoranda, as needed. (EPA)  Conduct update of previous 2012 trading and offset assessments for all jurisdictions. (EPA)  Conduct draft sector load growth evaluation. (EPA)  Conduct final sector load growth evaluation. (EPA)  Review Bay jurisdictions' trading and offset regulations and policies and support Bay jurisdictions as they develop trading and/or offset programs. (EPA)  Work with other Federal agencies to build capacity that will support an efficient and robust trading market. (USDA, EPA, DOT)  Toxic Contaminants
Conduct update of previous 2012 trading and offset assessments for all jurisdictions. (EPA)  Conduct draft sector load growth evaluation. (EPA)  Conduct final sector load growth evaluation. (EPA)  Review Bay jurisdictions' trading and offset regulations and policies and support Bay jurisdictions as they develop trading and/or offset programs. (EPA)  Work with other Federal agencies to build capacity that will support an efficient and robust trading market. (USDA, EPA, DOT)  Toxic Contaminants
Conduct draft sector load growth evaluation. (EPA)  Conduct final sector load growth evaluation. (EPA)  Review Bay jurisdictions' trading and offset regulations and policies and support Bay jurisdictions as they develop trading and/or offset programs. (EPA)  Work with other Federal agencies to build capacity that will support an efficient and robust trading market. (USDA, EPA, DOT)  Toxic Contaminants
Conduct final sector load growth evaluation. (EPA)  Review Bay jurisdictions' trading and offset regulations and policies and support Bay jurisdictions as they develop trading and/or offset programs. (EPA)  Work with other Federal agencies to build capacity that will support an efficient and robust trading market. (USDA, EPA, DOT)  Toxic Contaminants
Review Bay jurisdictions' trading and offset regulations and policies and support Bay jurisdictions as they develop trading and/or offset programs. (EPA)  Work with other Federal agencies to build capacity that will support an efficient and robust trading market. (USDA, EPA, DOT)  Toxic Contaminants
support Bay jurisdictions as they develop trading and/or offset programs.  (EPA)  Work with other Federal agencies to build capacity that will support an efficient and robust trading market. (USDA, EPA, DOT)  Toxic Contaminants
efficient and robust trading market. (USDA, EPA, DOT)  Toxic Contaminants
Conduct monitoring in D.C. and Maryland to support revision of toxics
TMDLs in the Anacostia River. (EPA)
Take appropriate action on proposed PCB TMDLs submitted in the Bay watershed for local waters. (EPA)
Issue final pretreatment standards for pollutant discharges, including mercury and other metals, from dental offices. (EPA)
Finalize Management Standards for Hazardous Waste Pharmaceuticals Rule. (EPA)
Complete 2016-2017 work plans for toxic contaminants reduction and research management strategies. (EPA, FWS, USGS working with Toxic Contaminant Work Group)
Develop a GIS desktop tool to identify potential land sources of contamination in the watershed. The use of EJ SCREEN will be evaluated to identify the location of such sites in areas with diverse populations. (EPA)
Evaluate sites to identify industries or processes that used PCBs to better focus resources on identifying and investigating these sites. Share this information and investigate potential sources through coordination with the appropriate authority. (EPA)
r C C i

RESTORE CLEAN WATER	
Target Date	Programmatic Milestone
2016/2017	Ensure permits are consistent with the PCB TMDLs and review permits with a focus on ensuring PCB TMDL effluent limitations are clear and enforceable. (EPA)
2016/2017	Conduct state oversight and independent compliance monitoring and enforcement and take appropriate action, as necessary, to ensure that permittees are in compliance. (EPA)
2016/2017	Conduct research on occurrence and effects of toxic contaminants on fish and wildlife with an emphasis on endocrine-disputing chemicals. (USGS, FWS).
2016/2017	USGS will work with Pennsylvania, West Virginia, and Maryland in agricultural areas of the watershed, while FWS, USGS, and Maryland DNR will assess the effects of contaminants on fish and shell fish in selected tidal waters. (USGS)
December 2016	Summarize information from USGS and cooperator studies on the status of fish health over the last 10 years in the watershed and relation to toxic contaminants. Release literature search of the effects of toxic contaminants on wildlife in the Bay and its watershed. (USGS)
December 2017	Develop an approach based on the Toxic Contaminants Summary Report (CBP, 2013) to assess the relative risk of contaminants to help inform policy and prevention strategies. (USGS, EPA working with Toxic Contaminant Work Group)
2016	Publish a proposed rule for public comment regarding authorized uses of PCBs and whether certain use authorizations should be ended or phased out because they can no longer be justified under section 6(e) of the Toxic Substances Control Act. (EPA)

RESTORE CLEAN WATER	
Target Date	Programmatic Milestone
	Oversight and Enforcement
	Monitoring and Science Support
June 2016	Summarize patterns in water-quality criteria attainment over time in tidal waters from 1985-2014. (EPA, USGS working with UMCES)
December 2016	Provide an update describing temporal and regional patterns in water quality standards attainment of dissolved oxygen, water clarity/SAV and chlorophyll. (EPA, USGS working with UMCES)
December 2016	Publish a new Ambient Water Quality Criteria Technical Addendum that provides updated guidance on water quality standards attainment assessment methods for the tidal Bay jurisdictions. (EPA/USGS)
December 2016	Begin to implement recommendations based upon the water quality-focused Building Environmental Intelligence report to expand monitoring with non-traditional partners. The first activity will be to integrate the role of Citizen Science to address gaps in water-quality-related monitoring and assessment needs. (EPA, USGS, UMCES and CBP partners working through the Scientific, Technical Assessment, and Report (STAR) team)
December, 2016	Begin to assess additional (non-water quality) monitoring needs associated with the 2014 Chesapeake Bay Watershed Agreement. (EPA, USGS, UMCES, with through STAR and STAC)
Annually, beginning in 2016	Implement new process for quantifying trends in tidal water-quality parameters. The new process incorporates advances in methods to provide more information on trends in water-quality patterns over time.  (UMCES/EPA, Maryland DNR, Virginia DEQ)
2016/2017	Provide updates of nutrient and sediment load trends in the Bay watershed to help assess progress toward implementing the Bay TMDL. Updates of loads at the River-Input Monitoring stations will be provided annually with results from additional stations in the non-tidal network provided every two years. (USGS working with states and EPA)
2016/2017	Continue to explain watershed trends of nutrients and sediment to support the Mid-Point Assessment. The effects of nutrient sources, land-use change, and BMPs will be investigated and presented for the watershed and several major source sectors (agricultural, urban, and atmospheric deposition) and support explaining trends in tidal watershed (next item). (USGS, EPA, and academic partners working through the STAR team)
2016/2017	Develop and apply new approaches for quantifying and explaining water- quality trends in tidal waters. (USGS, EPA, and academic partners working through the STAR team)

RESTORE CLEAN WATER	
Target Date	Programmatic Milestone
2016/2017	Enhance the Chesapeake Bay Partnership water-quality models to support decision-making for the MPA and Phase III of the WIPs. The monitoring information and land use data is being used to enhance the CBP Watershed model and estuary water-quality model. (managed through STAR Modeling Workgroup with support from USGS, EPA, and USACE).
2016/2017	EPA will work with NOAA to utilize information from the Chesapeake Bay Interpretive Buoy System (CBIBS) data to enhance tidal results. (EPA/NOAA)
2016/2017	Complete ChesapeakeProgress, one of a suite of ChesapeakeStat tools that will provide progress on all <i>Chesapeake Bay Watershed Agreement</i> to oversight stakeholders. (EPA)
January 2016	Complete ChesapeakeDecisions, a second in the suite of ChesapeakeStat tools that will allow decision-makers to make better decisions based on adaptive management. (EPA)
2017	Continue to update TMDL Tracker and make available through the ChesapeakeProgress and ChesapeakeDecisions sites. (EPA)
EPA Grant Support to States and the District of Columbia	
2016/2017	Provide financial support to Bay jurisdictions, as authorized, through EPA's assistance programs including CWA Section 319, SRF, CWA 117 CBIG and CBRAP. (EPA)
2016/2017	Provide financial support to localities and other entities through the Innovative Nutrient and Sediment Reduction Grants and the Small Watershed Grants, as authorized. (EPA)

## **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

CBIBS – Chesapeake Bay Interpretive Buoy System

CBIG - Chesapeake Bay Implementation Grants

CBRAP - Chesapeake Bay Regulatory and Accountability Program grants

CEAP - Conservation Effects Assessment Project

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

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

NOAA – National Oceanic and Atmospheric Administration

NPDES - National Pollutant Discharge Elimination System

NRCS - Natural Resources Conservation Service

NPS - National Park Service

PCB - polychlorinated biphenyl

SAV – Submerged Aquatic Vegetation

STAC - Scientific and Technical Advisory Committee

STAR – Scientific and Technical Assessment Research 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

USGS - U.S. Geological Survey

Virginia DEQ - Virginia Department of Environmental Quality

WIP – Watershed Implementation Plan