Maryland Department of the Environment

Grant Work Plan – FY 2017
Water Pollution Control Activities Funded Under MDE's PPG

Goal 2: Protecting America's Waters – Protect and restore our waters to ensure that drinking water is safe, and that aquatic ecosystems sustain fish, plants and wildlife, and economic, recreational and subsistence activities.			
Objective 2.1: Protect Human Health			
Objective 2.2: Protect and Restore Watersheds and Aquatic Ecosystems – Protect the quality of rivers, lakes, streams, and wetlands on a watershed basis, and protect urban, coastal, and ocean waters.			
Work Plan Component/ **Program:** Groundwater Protection **Work years**: 2.90	**EPA Contact(s):** Megan Keegan 215-814-5494	**State Contact(s):** Saeid Kasraei 410-537-3725	**PRC:** **202B06**
Program Description: Maryland Department of the Environment (MDE) is committed to protect the physical, chemical and biological integrity of the ground water resource, in order to protect human health and the environment, to ensure that in the future an adequate supply of the resource is available, and in all situations, to manage that resource for the greatest beneficial use of the citizens of the State.			

Environmental Outcomes	Measures	Outputs for FY 2017 (Commitments)	Status/Comment
Protect human health by reducing exposure to contaminants in drinking water.	**SDW-SP-4a) and b)**: Percent of community water systems and percent of population served by community water systems where risk to public health is minimized by source water protection.	**Activities:** Continue to meet with towns and water suppliers, attend public information meetings, to discuss protection of their ground water sources, and assist the towns and water suppliers with implementing wellhead protection programs. Continue to maintain and update as necessary the SDWIS Plus database for all community and non-community non-transient water supply systems. Continue to verify the locations of water supply wells using Global Positioning System (GPS) and update the SDWIS Plus database with verified location information. Continue to review and compile data that characterize Maryland's complex ground water resources. Continue to participate in the implementation of the State's Source Water Assessment Plan (SWAP) program as mandated under the Safe Drinking Water Act reauthorization. During the 1st quarter of FFY 2017 execute the annual Memorandum of Understanding with Maryland Center for Environmental Training to assist in undertaking the sponsorship of the annual State-County Ground Water Symposium. [HYPERLINK "http://www.mcet.org/mde/"] During the 1st quarter of FFY 2017 execute the annual Memorandum of Understanding with the Maryland Geological Survey (MGS) to continue the Ambient Monitoring Network Study. During the 1st quarter of FFY 2017 execute the annual Memorandum of Understanding with the Department of Health and Mental Hygiene (DHMH) that includes the analysis of drinking water samples for radionuclide testing.	

Goal 2: Protecting America's Waters – Protect and restore our waters to ensure that drinking water is safe, and that aquatic ecosystems sustain fish, plants and wildlife, and economic, recreational and subsistence activities.

Objective 2.1: Protect Human Health

Objective 2.2: Protect and Restore Watersheds and Aquatic Ecosystems – Protect the quality of rivers, lakes, streams, and wetlands on a watershed basis, and protect urban, coastal, and ocean waters.

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Environmental Outcomes	Measures	Outputs for FY 2017 (Commitments)	Status/Comment
Protect human health by reducing exposure to contaminants in drinking water.	**SDW-SP-4a) and b)**: Percent of community water systems and percent of population served by community water systems where risk to public health is minimized by source water protection.	Continue to complete GWUDI determinations for new systems and/or new wells in MD. Water Supply Program staff to attend training workshops related to ground water activities (such as the Towson University Geographic Information Sciences Workshop) in order to maintain the EPA Objective 2.1.	

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Objective 2.2: Protect and Restore Watersheds and Aquatic Ecosystems – Protect the quality of rivers, lakes and streams, and wetlands on a watershed basis and protect urban, coastal, and ocean waters.

Work Plan Component/Program:	**EPA Contact(s):**	**State Contact(s):**	**PRC:**
Permits **Work years**:	Mark Smith 215-814-3105	Edwal Stone 410-537-3599	**202B06**

Program Description: MDE has committed its resources to implementing TMDLs in discharge permits whenever a new or renewal permit application is received involving a watershed with an approved TMDL. In addition, the State has been divided into five permitting regions to be addressed in successive years to facilitate coordination of NPDES permits and to issue permits in the same watershed during one permit cycle. Furthermore, MDE is fully committed to implementing its Chesapeake Bay Tributary Strategy by incorporating Bay nutrient caps as permit limits for all significant industrial and municipal point source discharges of nutrients. MDE's TMDL and Bay Cap commitments continue to serve as the focal points for our determined efforts toward meeting the original goal of the Clean Water Act – fishable, swimmable waters.

Environmental Outcomes	Measures	Outputs for FY 2017 (Commitments)	Status/Comment
Improved condition of water quality	**WQ-11**: Number, and national percent, of follow-up actions that are completed by assessed NPDES (National Pollutant Discharge Elimination System) programs (cumulative). **WQ-12a**: Percent of non-tribal facilities covered by NPDES permits that are considered current.* **WQ-19a:** Number of high priority state NPDES permits that are issued in the fiscal year. **WQ-13a**: Numbers of MS4s covered under either an individual or general permit. **13b:** Number of facilities covered under either an individual or general industrial storm water permit. **13c:** Number of sites covered under either an individual or general construction storm water site permit.	**Outputs:** Reissue 8 major NPDES permits and approximately 44 minors Reissue 80% of the Maryland's priority permits (same every year) Reissue at least 2 significant permits of nutrients to the Chesapeake Bay as identified in the June 9, 2005 letter. These permits must include nutrient limits consistent with the MD WQS for the Chesapeake Bay. **Activities:** Submit semi-annual progress report on the number of NPDES permits reissued. Provide semi-annual reports on current facilities covered under either an individual permit or general permit by type: (a) MS4s; (b) industrial storm water; (c) construction storm water. Along with the semi-annual status reports for the 106 grant, MDE will also provide information to EPA that contains details on any pollutant trades that have occurred, including NPDES permit number, buyer name, seller name, trading agreement signature date, date credits become effective, length of agreement, amount of credits, and origin of credits.	

# of MAJOR Permits Re-Issued ~		
# of Minor Permits Re-Issued ~		
# & % of Priority Permits Issued or Terminated		%
# of Significant Permits of Nutrients to the Bay Issued ~		
# of NPDES Permits Reissued		

# of Facilities covered

Individual Permit (DP) ~		General Permit - Seafood (SE) ~	
General Permit - Coal Mine (CM) ~		General Permit - Swimming Pools (SI) ~	
General Permit - Hydrostatic Testing (HT) ~		(a) MS4s ~	
General Permit - Marinas (MA) ~		(b) General Permit - Industrial Storm Water (ISW) ~	
General Permit - Mineral Mines (MM) ~		(c) Construction storm water ~	
Total ~			

# of Pollutant Trades -

NPDES #	Buyer Name	Seller Name	Trading Agreement Signa Date	Date Credits Effective	Length of Agreement	Amount of Credits (lbs/yr)	Origin of Credits
						TN= lb/yr Tp= lb/yr	

*Measures 12a for CAFOs reporting is addressed on Page 18 of this Work Plan.

Goal 2: Protecting America's Waters – Protect and restore our waters to ensure that drinking water is safe, and that aquatic ecosystems sustain fish, plants and wildlife, and economic, recreational and subsistence activities.

Objective 2.2: Protect and Restore Watersheds and Aquatic Ecosystems – Protect the quality of rivers, lakes and streams, and wetlands on a watershed basis, and protect urban, coastal, and ocean waters.

Work Plan Component/Program: Pretreatment **Work years:**	**EPA Contact(s):** Stephen Copeland 215-814-5792	**State Contact(s):** Edwal Stone 410-537-3599	**PRC:** **202B06**

Program Description: The main objectives of MDE's pretreatment program is to prevent non-domestic wastewater discharges from interfering with sewage treatment plant operations or contaminating its sludge, to protect worker safety at sewage plants and in collection systems, to prevent pass-through of toxics through treatment plants into the receiving streams, and to protect public safety.

Environmental Outcomes	Measures	Outputs for FY 2017 (Commitments)	Status/Comment
Improved condition of water quality.	**WQ-14:** Number, and national percent, of **(a)** Significant Industrial Users (SIUs) that are discharging to POTWs with Pretreatment Programs that have control mechanisms in place that implement applicable pretreatment requirements; and **(b)** Categorical Industrial Users (CIUs) that are discharging to POTWs without Pretreatment Programs that have control mechanisms in place that implement applicable pretreatment standards and requirements.	**Outputs:** Submit semi-annual report on the number of Significant Industrial Users (SIUs) in POTWs with Pretreatment Programs and the number of known Categorical Industrial Users (CIUs) in non-pretreatment POTWs to ensure that control mechanisms are in place. Provide number and percent of: (1) SIUs in approved programs that have control mechanisms in place that implement applicable requirements. (2) CIUs in POTWs without approved programs that have control mechanisms in place that implement applicable requirements. **Activities:** Conduct an audit of each approved program once every four years where those programs are inspected bi-annually, and at least every 5 years for those that are inspected annually. On a semi-annual basis, provide the name of the POTW inspected or audited, the permit number, and the PCI or audit date. Modify ICIS for POTWs required to have programs as changes are made. Provide a schedule for pretreatment program approval for these POTWs Provide a current list of known industrial users discharging to non-pretreatment POTWs. Provide a yearly update (fourth quarter) of this list and provide yearly targets for industrial (IU) inspections On a semi-annual basis, provide a listing of industrial user inspections performed with priority given to inspecting categorical industries in non-pretreatment cities. Provide the name of the IU inspected, the IU type (SIU, CIU), name and permit number of the POTW to which the facility discharges, and inspection date. Enter all required RIDE data elements for Pretreatment program based on audits, PCIs and Annual Reports into ICIS.	

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Work Plan Component/Program: Compliance/Inspection **Work years:**	**EPA Contact(s):** Rebecca Crane 215-814-2389	**State Contact(s):** Harry Hunsicker: 410-537-3510 Edwal Stone: 410-537-3599 Gary Kelman: 410-537-4423 Brian Clevenger: 410-537-3554 Edmon Larrimore: 410-537-3557	**PRC:** **202B06**

Program Description: MDE's objectives for WMA's Compliance Program; Sediment, Storm Water & Dam Safety Program; and LMA's Resource Management Program and Mining Program include the inspection of EPA-designated: NPDES Major municipal and industrial facilities, the inspection of NPDES Minor facilities, MS4s and targeted efforts dealing with CSOs, SSOs and CAFOs.

Environmental Outcomes	**Measures**	**Outputs for FY 2017 (Commitments)**	**Status/Comment**
Reduce and eliminate pollution to surface waters.		**Outputs:** By September 30, annually, MDE WMA shall develop and implement (using the required MS Word template) a Compliance Monitoring Strategy (CMS) for the Core Program and Wet Weather Sources of the CWA NPDES program in accordance with the July 21, 2014 NPDES CMS Memo. The CMS shall address major and minor permittees in the core, pretreatment, CSO-SSO, MS4, Storm Water, CAFO and mining programs. MDE shall provide a narrative which will describe any deviations from the requirements of the CMS Policy with the submission of the Federal fiscal year 2017 CMS. Along with the semi-annual status reports for the 106 grant, MDE WMA and LMA will submit a comprehensive report using the CMS Template to report the number of major and minor permittee inspections in the core, pretreatment, CSO-SSO, MS4, Storm Water programs that were conducted since October 1, 2016 until March 31, 2017. By September 30, annually, MDE WMA will coordinate with MDE LMA to develop a comprehensive (using the required MS Word template) Compliance Monitoring Strategy (CMS) that addresses all NPDES sector programs in accordance with the July 21, 2014 NPDES CMS Memo including CAFO and mining permittees. To meet the semi-annual status report requirement for the 106 grant, MDE LMA will submit CAFO permittee universe, inspection and compliance information in accordance with the Clean Water Action Workplan State Reporting. MDE will provide end of year compliance monitoring strategy and grant work plan report (as a single report) for FY2017 by November 30, 2017. End of year report shall include number of LMA inspection activities at NPDES non-major mining permitted facilities. Submit the annual noncompliance report (ANCR) for non-major NPDES permittees no more than 60 days after the calendar year ending December 31, as required by 40 CFR 123:45.d (2).	

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Work Plan Component/Program: Compliance/Inspection (continued) **Work years:**	**EPA Contact(s):** Rebecca Crane 215-814-2389	**State Contact(s):** Harry Hunsicker 410-537-3510 Edwal Stone: 410- 537-3599 Gary Kelman: 410- 537-4423 Brian Clevenger: 410- 537-3554	**PRC:** **202B06**

Program Description: MDE's objectives for WMA's Compliance Program ; Sediment, Storm Water & Dam Safety Program; and LMA's Resource Management Program and Mining Program include the inspection of EPA-designated: NPDES Major municipal and industrial facilities, the inspection of NPDES Minor facilities, MS4s, and targeted efforts dealing with CSOs, SSOs and CAFOs.

Environmental Outcomes	Measures	Outputs for FY 2017 (Commitments)	Status/Comment
Reduce and eliminate pollution to surface waters.		**Activities as described in July 21, 2014 NPDES Compliance Monitoring Strategy Memo:** Traditional Minors should receive one inspection every five years. For Minors that discharge to a 303d listed waterbody a Comprehensive inspection should be conducted. In addition, the total number of Comprehensive inspections for all traditional Minors should be 5% of the total. Each MS4 permittee and co-permittee should receive an *on-site* audit or inspection at least once every seven years. The minimum compliance monitoring goal for MS4s is to determine compliance of each MS4 permittee and co-permittee at least once every five years by conducting one or more of the following compliance monitoring activities: on-site audit, MS4 inspection, or off-site desk audit (as defined in July 21, 2014 NPDES Compliance Monitoring Strategy Memo). The inspection goal for industrial stormwater permittees is to inspect at least 10% of the universe each year. Compliance monitoring activities should be conducted to locate industrial facilities that have failed to obtain permit coverage or file a "no exposure certification" under 40 CFR 122.26(g). Inspections of unpermitted industrial stormwater facilities, including those with "no exposure certification," will count toward the annual industrial stormwater coverage goal of 10%. The minimum recommended inspection frequency for construction stormwater sites of equal to or greater than one acre of disturbed area is a joint EPA and state goal to inspect at least 10% of the regulated construction sites annually. CSO/SSO Strategy Verify CSO compliance through normal facility inspections. Conduct inspections once every five years at each of the 5 CSO communities.	

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Work Plan Component/Program: Integrated Compliance Information System – ICIS **Work years:**	**EPA Contact(s):** Nancy Ford 215-814-5436	**State Contact(s):** Harry Hunsicker: 410-537-3626 Gary Kelman: 410 537-4423 Brian Clevenger: 410 537-3554	**PRC:** **202B06**

Program Description: MDE shall review information generated by ICIS in the QNCR for each quarter and any other information available regarding significant water pollution problems in Maryland and discuss the specific cases with EPA at enforcement meetings or via conference calls held once a quarter.

Environmental Outcomes	**Measures**	**Outputs for FY 2017 (Commitments)**	**Status/Comment**
Maintain current NPDES permit data in PCS/ICIS.	Enter Electronic Reporting Rule required elements into ICIS-NPDES ensuring that all state information for the specified data families are entered into ICIS-NPDES and within the designated time frames stated.	**Outputs:** Enter new/current DMR and effluent limits data for majors into ICIS. Enter all Electronic Reporting Rule required elements into ICIS. In the event that MDE anticipates that it will be unable to perform any of the listed ICIS data entry due to circumstances beyond its reasonable control, it will notify the Region of the cause(s) and provide a target date when the data will be entered into ICIS. In certain situations MDE may request data entry assistance from the Region until the problem(s) preventing the data entry can be resolved. Within its resource limitations, EPA commits to assist in these situations. MDE will coordinate with EPA about entry of Single Event Violations into ICIS-NPDES, including single wet weather events (such as SSO events) and establish specific goals with a time line. MDE maintains a list of CSOs, SSOs, and bypasses on its webpage that EPA can use at any time to gather data about those single event violations. **Activities:** Ensure completeness, integrity and timely entry of data into ICIS through routine quality assurance/quality control and through reasonable support to national data quality projects. Develop and implement a Quality Assurance Plan/Standard Operating Procedure for ICIS activities. The levels of support and timing of any Headquarters requests for national data quality projects will be discussed on monthly ICIS conference calls as well as quarterly enforcement calls. MDE LMA will address CAFO data entry into ICIS. Enforcement Data 1. Enter to ICIS before November 28, February 28, May 28, and August 28 information sufficient for EPA to pull a QNCR. Take timely and appropriate enforcement action in accordance with EPA guidance dated May 1, 1997 (correspondence from the Director, WPD to the Director of each states Water Enforcement Program). 2. Identify POTWs with approved pretreatment programs that meet the criteria for reportable noncompliance (RNC) on the QNCR in accordance with RNC guidance dated 9/27/89. Also, identify actions taken which either resolve the violations or establish schedules to resolve them on the QNCR	

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Work Plan Component/Program: TMDL's **Work years:**	**EPA Contact(s):** Maria Garcia 215-814-3199	**State Contact(s):** Dinorah Dalmasy 410-537-3699	**PRC:** **202B06**

Program Description: MDE is charged under Section 303(d) of the federal Clean Water Act (CWA) (Title 40, Chapter 1, part 130.7 of the Code of Federal Regulations) to assess the state's water quality and publish a list of those waters not meeting water quality standards. Waterbodies listed as impaired may require the development of Total Maximum Daily Loads (TMDLs)

Environmental Outcomes	Measures	Outputs for FY 2017 (Commitments)	Status/Comment
Improved condition of water quality.	**WQ-27:** Extent of priority areas identified by each state that are addressed by EPA-approved TMDLs or alternative restoration approaches for impaired waters that will achieve water quality standards. These areas may also include protection approaches for unimpaired waters to maintain water quality standards.	**Outputs:** Develop TMDLs/Water Quality Analysis (WQAs) and Biological Stressor Identification (BSID) analysis according to MD Annual Workplan and Memorandum of Understanding. Federal funds, Section 106 and 604(b), and State general funds will be used to support all the activities associated with BSID Analysis and the eventual submittal of WQA and TMDL reports to EPA Region 3. In FFY 2017, the following impairment listings will be addressed through TMDL development, WQA or BSID analysis: 1) TMDLs for PCB's in the Conowingo Pool watershed (Harford Co., Zip Code 21034; Cecil Co., Zip Code 21918); 2) TMDLs for sediments in the Patuxent River Lower watershed (Calvert Co., Zip Codes 20639 & 20678; St. Mary's Co., Zip Codes 20636 & 20659; Prince Georges Co., Zip Code 20613; Anne Arundel Co., Zip Codes 20758), the Patuxent River Middle watershed (Prince George's Co., Zip Code 20772; Anne Arundel Co., Zip Code 20771) 3) a TMDL for chlorides in the Cabin John Creek watershed (Montgomery Co., Zip codes 20817 & 20854) . The TMDL for PCBs in the Conowingo Pool will begin development in FFY 17 but it is not anticipated that it will be completed and submitted to EPA until FFY 18. These listing will be addressed using a combination of 106 and 604(b) federal funds and State funds. Section 106 funds are used to pay for monitoring activities while 604(b) funds are used for TMDL Development. State general funds supplement both monitoring and TMDL development activities. In FFY 17, MDE has proposed the development of the following TMDL or alternative approaches under the 303(d) Vision prioritization strategy: 1) TMDLs for sediments in the Other West Chesapeake, Patuxent River Lower, and the Patuxent River Middle; 2) a TMDL for chlorides in the Cabin John Creek and 3) alternative approaches to address fecal coliform/shellfish area listings for the Wicomico River Mesohaline Chesapeake Bay Segment (WICMH) (Ellis Bay), WICMH (extended area), and Lower Choptank River Mesohaline Chesapeake Bay Segment (CHOMH2) (extended area).	

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Objective 2.2: Protect and Restore Watersheds and Aquatic Ecosystems – Protect the quality of rivers, lakes, streams, and wetlands on a watershed basis, and protect urban, coastal and ocean waters.

Work Plan Component/Program: TMDL's (Continued) **Work years:**	**EPA Contact(s):** Maria Garcia 215-814-3199	**State Contact(s):** Dinorah Dalmasy 410-537-3699	**PRC:** **202B06**

Program Description: MDE is charged under Section 303(d) of the federal Clean Water Act (CWA) (Title 40, Chapter 1, part 130.7 of the Code of Federal Regulations) to assess the state's water quality and publish a list of those waters not meeting water quality standards. Waterbodies listed as impaired may require the development of Total Maximum Daily Loads (TMDLs)

Environmental Outcomes	Measures	Outputs for FY 2017 (Commitments)	Status/Comment
Improved condition of water quality.	**WQ-27:** Extent of priority areas identified by each state that are addressed by EPA-approved TMDLs or alternative restoration approaches for impaired waters that will achieve water quality standards. These areas may also include protection approaches for unimpaired waters to maintain water quality standards.	MDE will continue to implement a prioritization strategy under the new 303(d) Vision that identifies within the 2016 IR: 1) priority lists of waters slated for near term (~2 year) TMDL development or alternative approaches; 2) priority waters scheduled for likely TMDL development or alternative approaches over 2016- 2022; 3) priority waters awaiting management to protect their current condition from degradation; and 4) the strategic rationale of the State in setting these priorities. MDE will continue to implement a public engagement strategy to communicate with the public EPA's Long Term Vision for Assessment, Restoration, and Protection under the Clean Water Act Section 303(d) Program. The public engagement strategy will identify key opportunities and actions to: communicate the Vision Goals to the public and other stakeholders and encourage their participation in achieving them; provide information about the purpose and critical importance of the program; and encourage their participation in the process of listing and developing TMDLs or alternatives. **Activities:** • Implement activities under the public engagement strategy. • Participate on monthly calls with EPA to discuss the State's TMDLs, TMDL alternative, development and results of the State's 303(d) program Vision prioritization strategy and/or its public engagement strategy, and efforts to coordinate Section 303(d) program priorities with other relevant programs (e.g., monitoring, nonpoint source control and NPDES programs). • Incorporate within the 2016 integrated report (IR) the State's prioritization strategy under the new 303(d) Vision, which includes: 1) priority lists of waters slated for near term (~2 year) TMDL development or alternative approaches; 2) priority waters scheduled for likely TMDL development or alternative approaches over 2016-2022; 3) priority waters awaiting management to protect their current condition from degradation; and 4) the strategic rationale of the State in setting these priorities. • Participate in monthly conference calls with EPA to update the status of the development of TMDLs presented above and discuss other TMDL program issues as needed. • Provide interim dates and milestones for these TMDLs scheduled for development in order to track progress made during the year. If progress is unsatisfactory in comparison to the listed dates and milestones, discuss with EPA the reasons for any delays and propose steps to ensure the required number of TMDLs is completed as scheduled.	

		• Semi-Annual Status Report on the development of these TMDLs and reports under the 604(b) Grant. • Semi-Annual Status Report on public activities conducted related to the development of these TMDLs and reports under the 604(b) Grant. • Semi-Annual Status Report on the development of TMDLs or alternative approaches under the State's prioritization strategy. • Semi-Annual Status Report on activities under the new 303(d) vision. • Final Status Report on the development of these TMDLs and reports under the 604(b) Grant. • Final Status Report on public activities conducted related to the development of these TMDLs and reports under the 604(b) Grant • Final Status Report on the development of TMDLs or alternative approaches under the State's prioritization strategy. • Final Status Report on activities under the new 303(d) vision.	

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Work Plan Component/Program: Water Quality Monitoring **Work years:**	**EPA Contact(s):** William Richardson 215-814-5675	**State Contact(s):** Matthew Rowe 410-537-3578	**PRC:** **202B06**

Program Description: Maryland has a comprehensive water quality monitoring strategy that involves collection of data from a variety of agencies and organizations. MDE and DNR are the primary producers of the data for water quality assessments, but other data from local governments, volunteers, academia and others are routinely solicited for assessment purposes. Maryland will continue its on-going monitoring programs for physical and chemical measures, benthic macro-invertebrates, bacterial indicators, fish community health, and shore-based sanitary surveys. Monitoring will be conducted to assess shellfish harvesting areas, develop information for TMDLs, identify causes of fish kills, and to assess long term trends at core network sites. Probabilistic monitoring will be conducted to assess area-wide trends. This monitoring will extend throughout the Chesapeake Bay and both its tidal and non-tidal tributaries. This strategy and monitoring will be periodically updated to reflect changing needs and focus.

Environmental Outcomes	**Measures**	**Outputs for FY 2017 (Commitments)**	**Status/Comment**
Number of Maryland's Watersheds where: water quality standards are met in at least 80% of the assessed water segments; and all assessed water segments maintain their quality and at least 20% of assessed water segments show improvement above conditions as 2002.		**Outputs:** Report the number of shellfish monitoring stations sampled semi-annually for bacteriological quality. Report the number of fish & shellfish tissue monitoring stations sampled semi-annually. Report the number of chemical water quality monitoring stations sampled semi-annually. Report the number of benthic macroinvertabrate monitoring stations sampled annually. Report the number of Core/Trend and Chesapeake and Tidal Tributary monitoring stations monitored annually for chemical conditions. **Activities:** Submit progress report on the implementation of Maryland Monitoring strategy annually. Report on the status of Sanitary Surveys conducted annually. Shellfish Monitoring - maintain schedule of monitoring to meet FDA requirements. Sewage Treatment Plant Monitoring – conduct monitoring as necessary to document discharge conditions for threshold evaluation and TMDL development.	

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Objective 2.2: Protect and Restore Watersheds and Aquatic Ecosystems – Protect the quality of rivers, lakes, streams, and wetlands on a watershed basis, and protect urban, coastal and ocean waters.

Work Plan Component/Program: Water Quality Monitoring - continued **Work years:**	**EPA Contact(s):** William Richardson 215-814-5675	**State Contact(s):** Matthew Rowe 410-537-3578	**PRC:** **202B06**

Program Description: Maryland has a comprehensive water quality monitoring strategy that involves collection of data from a variety of agencies and organizations. MDE and DNR are the primary producers of the data for water quality assessments, but other data from local governments, volunteers, academia and others are routinely solicited for assessment purposes. Maryland will continue its on-going monitoring programs for physical and chemical measures, benthic macro-invertebrates, bacterial indicators, fish community health, and shore-based sanitary surveys. Monitoring will be conducted to assess shellfish harvesting areas, develop information for TMDLs, identify causes of fish kills, and to assess long term trends at core network sites. Probabilistic monitoring will be conducted to assess area-wide trends. This monitoring will extend throughout the Chesapeake Bay and both its tidal and non-tidal tributaries. This strategy and monitoring will be periodically updated to reflect changing needs and focus.

Environmental Outcomes	**Measures**	**Outputs for FY 2017 (Commitments)**	**Status/Comment**
Number of Maryland's Watersheds where: water quality standards are met in at least 80% of the assessed water segments; and all assessed water segments maintain their quality and at least 20% of assessed water segments show improvement above conditions as 2002.	**WQ-SP10.N11:** Number of waterbodies identified in 2002 as not attaining water quality standards where standards are now fully attained. **WQ-SP11:** Remove the specific causes of waterbody impairment identified by states in 2002 (Cumulative) **WQ-SP12.N11**: Improve water quality conditions in impaired watersheds nationwide using the watershed approach. (cumulative) **WQ-SP13**: Ensure that the condition of the Nation's lakes do not degrade (i.e. there is no statistically significant increase in the percent of lakes rated "poor" & no statistically significant decrease in the lakes rated "good").	**Activities:** Fish Kill Investigations – provide 24-hour response capabilities to investigate the reports of fish kill events. Maintain CORE and TREND Monitoring. Maintain Chesapeake Bay Tributary Monitoring (Bay Program Initiatives) Conduct Benthic Macroinvertebrate monitoring in tidal and non-tidal portions of the State.	

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Objective 2.2: Protect and Restore Watersheds and Aquatic Ecosystems Water Quality – Protect the quality of rivers, lakes and streams on a watershed basis, and protect urban, coastal and ocean waters.			
Work Plan Component/Program: Water Quality Standards (Env Risk Assessment) **Work years:**	**EPA Contact(s):** Mark Barath 215-814-2759	**State Contact(s):** Matthew Rowe 410-537-3578	**PRC:** **202B06**
Program Description: The Water Quality Standards (WQS) task addresses the development and refinement of regulations to control the discharge of pollutants to surface waters. Updating the State's 303(d) list includes the compilation and evaluation of toxics data from reports and publications, as well as State and local monitoring data. This task also includes activities to expedite the development of TMDLs in accordance with priorities in the State 303(d) list.			

Environmental Outcomes	Measures	Outputs for FY 2017 (Commitments)	Status/Comment
Improved conditions of water quality.	**WQ-1a:** Number of numeric water quality standards for total nitrogen and for total phosphorus adopted by States & Territories and approved by EPA, or promulgated by EPA, for all waters within the States or Territory for each of the following waterbody types: lakes/reservoirs, rivers/streams, & estuaries (cumulative, out of a universe of 280) **WQ-01d**: Number of numeric water quality standards planned to be adopted within 3 years for total nitrogen and total phosphorus for all waters within the state or territory for each of the following waterbody types: lakes/reservoirs, rivers/streams, and estuaries, based on a full set of performance milestone information supplied annually by states and territories (cumulative, out of a universe of 280).	**Activity:** Development and promulgation of water quality standards and supporting regulations. This will be formally conducted on at least a triennial basis. Maryland will complete their next Triennial Review (TR) by year end. Current plans for the Triennial Review include adoption of updated ammonia criteria, adoption of the 2012 Recreational Water Quality Criteria, and updates to the list of Tier II high quality waters. Staff will also continue to review recently published EPA documentation on other nationally recommended criteria to consider for potential adoption during the next Triennial Review in 2019. MDE will continue monitoring nutrients and chlorophyll a levels in impoundments for the purpose of developing chlorophyll a endpoints. These endpoints will be used to revise nutrient TMDLs and potentially for criteria adoption. MDE will report on this study's progress during the mid-year report and end of year report. MDE will develop a schedule of milestones for development of a Nutrient Criteria Plan by the mid-year report using examples previously sent by EPA. Staff will also continue to remain engaged in nutrient criteria development efforts at EPA including efforts such as N-steps and plans to develop 304(a) nutrient criteria for lakes and reservoirs.	

Goal 2: Protecting America's Waters – Protect and restore our waters to ensure that drinking water is safe, and that aquatic ecosystems sustain fish, plants and wildlife, and economic, recreational and subsistence activities.

Objective 2.2: Protect and Restore Watersheds and Aquatic Ecosystems - Protect the quality of rivers, lakes, streams, and wetlands on a watershed basis, and protect urban, coastal, and ocean waters.

Work Plan Component/Program: Water Quality Standards (Env Risk Assessment) - continued **Work years:**	**EPA Contact(s):** Mark Barath 215-814-2759	**State Contact(s):** Matthew Rowe 410-537-3578	**PRC:** **202B06**

Program Description: The Water Quality Standards (WQS) task addresses the development and refinement of regulations to control the discharge of pollutants to surface waters. Updating the State's 303(d) list includes the compilation and evaluation of toxics data from reports and publications, as well as State and local monitoring data. This task also includes activities to expedite the development of TMDLs in accordance with priorities in the State 303(d) list.

Environmental Outcomes	Measures	Outputs for FY 2017 (Commitments)	Status/Comment
Improved conditions of water quality.	**WQ-3a:** Number, and national percent, of States and Territories that within the preceding three year period, submitted new or revised water quality criteria acceptable to EPA that reflect new scientific information from EPA or other resources not considered in the previous standards.	Same activity as page 14	

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Work Plan Component/Program:	**EPA Contact(s):**	**State Contact(s):**	**PRC:**
Water Quality Assessment (Env Risk Assessment) DNR inter-agency agreement **Work years:**	William Richardson 215-814-5675	Matthew Rowe 410-537-3578	**202B06**

Program Description: MDE's shellfish growing water certification program is responsible for regulating the sanitary control of the shellfish harvest waters. This activity is divided into three parts: the bacteriological assessment of the waters in the growing areas; the identification and elimination of pollution sources (sanitary surveys); and the examination of shellstock samples as deemed necessary for levels of toxic chemical accumulation and as needed for levels of bacteriological contamination.

Environmental Outcomes	Measures	Outputs for FY 2017 (Commitments)	Status/Comment
Number of Maryland's Watersheds where: water quality standards are met in at least 80% of the assessed water segments; and all assessed water segments maintain their quality and at least 20% of assessed water segments show improvement above conditions as 2002.		**Output:** MDE will submit an off-year 305b update to EPA by April 1, 2017 and will conduct a data solicitation in preparation for the 2018 Integrated Report. **Activity:** Provide semi-annual updates to EPA on 303(d) status and the status of Maryland's Ambient Water Quality Monitoring System (AWQMS) central database repository.	

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Work Plan Component/Program: EPA Initiatives–CSO/SSO **Work years:**	**EPA Contact(s):** Rebecca Crane 215-814-2389	**State Contact(s):** Harry Hunsicker 410-537-3510	**PRC:** **202B06**

Program Description: MDE's objectives for WMA's Compliance Program include the inspection of EPA-designated NPDES Major municipal and industrial facilities, the inspection of NPDES Minor facilities and targeted efforts dealing with CSOs, SSOs and CAFOs.

Environmental Outcomes	Measures	Outputs for FY 2017 (Commitments)	Status/Comment
Implementation of LTCP resulting in improved condition of water quality.	**SS-1:** Number and national percent, using a constant denominator, of Combined Sewer Overflow (CSO) permits with a schedule incorporated into an appropriate enforceable mechanism, including a permit or enforcement order, with specific dates and milestones, including a completion date consistent with Agency guidance, which requires: 1) Implementation of a Long Term Control Plan (LTCP) which will result in compliance with the technology and water quality-based requirements of the Clean Water Act; or 2) implementation of any other acceptable CSO control measures consistent with the 1994 CSO Control Policy; or 3) completion of separation after the baseline date. (cumulative)	**Outputs:** 100% of CSO communities with schedules in place in permits or other enforceable mechanisms to implement approved LTCPs Submit semi-annual reports indicating the number of CSO communities that its CSOs schedules are being met, controls implemented, as required in either the permit or enforcement order compliance schedule consistent with the CSO policy. Presently there are five out of five CSS communities with approved LTCPs. **Activities:** CSO/SSO Strategy Implementation According to the July 21, 2014 NPDES Compliance Monitoring Strategy Memo, the minimum inspection frequency goal is for all major and non-major CSSs to receive at least one comprehensive inspection every five years and the minimum inspection coverage goal for SSSs is for regions and states to conduct comprehensive inspections of at least 5% of SSSs each year. Update state inventory of all CSO communities; including those that have implemented, or are on a schedule to implement, a long-term control plan, as well as the mechanism used (e.g., permit requirement, enforcement action). Initiate appropriate enforcement action against CSO communities not in compliance with the CSO policy, including requirements in permits or enforcement orders. Evaluate and address CSOs within one mile of drinking water intakes. Provide copies of enforcement actions taken to achieve this measure to EPA as issued, and inventory within priority watersheds upon request, unless maintained in PCS/ICIS. Ensure the State SSO inventory is up to date.	

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Work Plan Component/Program: EPA Initiatives – CAFO's **Work years:**	**EPA Contact(s):** Kyle Zieba 215-814-2774 Mark Zolandz 215-814-2319	**State Contact(s):** Gary Kelman 410-537-4423	**PRC:** **202B06202B06**

Program Description: MDE's Land Management Administration CAFO program objectives include development of the program and permitting / inspecting CAFOs as described below.

Environmental Outcomes	**Measures**	**Outputs for FY 2017 (Commitments)**	**Status/Comment**
Improved conditions of water quality. Maintain current NPDES Permit data in ICIS NPDES	**WQ-12.a**: Percent of non-tribal facilities covered by NPDES permits that are considered current. **WQ-13:** Number, and national percent, of facilities covered under either an individual or general: d) CAFO Permit. **Enter WENDB data elements into ICIS-NPDES ensuring that all state information for the specified data families are entered into ICIS-NPDES and within the designated time frames stated.**	**Outputs:** Provide any updates to the CAFO Compliance/Enforcement SOP which includes a Compliance Monitoring Strategy to ensure priority inspections address the goals of the Chesapeake Bay Protection and Restoration Strategy. Provide reports as described under "Activities". Reduce and eliminate pollution to surface waters. Conduct State Activities as described in Clean Water Action Work Plans. **Activities:** 1. During FY 2017, inspect 20% of all CAFO facilities registered in accordance with the Compliance Monitoring Strategy. Report the number of inspections of registered CAFO facilities semi-annually. 2. Provide a list of all active CAFO facilities that have submitted NOIs. Active facilities are ones that currently require registration and do not include facilities that have applied, but have subsequently been sold or changed operators, with the new owner or owner/operator submitting a new NOI. Active CAFO facilities also do not include operators that are no longer operating as an animal feeding operation. 3. Conduct CAFO determination at medium/small AFOs when discharges are suspected in accordance with the Maryland CAFO compliance and enforcement strategy. 4. Report the number of active CAFO facilities waiting to be registered under GP with required plans either 1) a comprehensive nutrient management plan (CNMP) or 2) a nutrient management plan (NMP) plus soil conservation and water quality plan (SCWQP) 5. Report facilities fitting the federal definition of CAFO who do not self-identify (suspected facilities).6. Provide semi-annual reports on current CAFO facilities covered under the Maryland General Discharge Permit for Animal Feeding Operations by type (CAFOs and MAFOs). 7. Attend EPA Region 3 States NPDES Annual Meeting. 8. Provide projected number of CAFO's to be registered under the renewal of MDG01.	

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Objective 2.2: Protect and Restore Watersheds and Aquatic Ecosystems – Protect the quality of rivers, lakes, streams, and wetlands on a watershed basis, and protect urban, coastal, and ocean waters

Work Plan Component/Program: Enforcement **Work years**:	**EPA Contact (s):** Chris Menen: 215-814-2368 Rebecca Crane: 215-814-2389	**State Contacts**: Harry Hunsicker 410-537-3510Edwal Stone: 410 537-3599 Gary Kelman: 410 537-4423 Brian Clevenger: 410 537-3554	**PRC: 202B06**

Program Description: Initiate actions outlined in the Clean Water Act (CWA) Action Plan aimed to focus our NPDES planning and resources on the most significant sources of water quality impairment. The Office of Enforcement and Compliance Assurance and the Office of Water requested that Region 3 work with Maryland Department of the Environment to identify water quality priorities at the national, regional and state level. The Strengthening EPA and State Performance work plans focus on individual NPDES program areas to ensure a coordinated and integrated planning process across the permitting and enforcement programs.

Environmental Outcomes	Measures	Outputs for FY 2017 (Commitments)	Status/Comment
Reduce and eliminate pollution to surface waters		**Outputs:** Provide semi-annual status report and end-of-year report via 106 grant plan reporting for each FY 2017 NPDES Permitting and Enforcement Work Plan. Conduct *State Activities* as described in Attachment 1 - Chesapeake Bay Watershed Point Sources. Conduct *State Activities* as described in Attachment 2 - Concentrated Animal Feeding Operations (CAFOs) Conduct *State Activities* as described in Attachment 3 - State Review Framework (SRF) and Permit Quality Review (PQR) Conduct *State Activities* as described in Attachment 4 – Municipal Stormwater (MS4) **Activity:** State implementation of the FY 2017 NPDES Permitting and Enforcement WorkPlans. The FY 2017 focus areas for Maryland are: CAFO, Chesapeake Bay Watershed Point Sources, MS4, State Review Framework and Permit Quality Review (see attachments). General storm water permits will be inspected in accordance with the Clean Water Action Work Plans for MS4 Stormwater and the FY 2017 Compliance Monitoring Strategy (per field observations or complaints).	

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Objective 2.2: Protect and Restore Watersheds and Aquatic Ecosystems – Protect the quality of rivers, lakes, streams, and wetlands on a watershed basis, and protect urban, coastal, and ocean waters.

Work Plan Component/Program: Enforcement **Work years:**	**EPA Contact(s):** Rebecca Crane 215-814-2389	**State Contact(s):** Harry Hunsicker 410-537-3510	**PRC:** **202B06**

Program Description: MDE's Enforcement actions relating to major facilities and inspection data are reported to EPA via ICIS.

Environmental Outcomes	Measures	Outputs for FY 2017 (Commitments)	Status/Comment
Maximize compliance to protect human health and the environment through compliance assistance, compliance incentives, and enforcement	Percentage of major facilities with timely enforcement actions.	**Outputs:** Evaluate Quarterly Noncompliance Reports (QNCRs) and take timely and appropriate enforcement actions at major facilities. Provide electronic copies of enforcement actions regarding major facilities, no later than 30 days after the end of each quarter to Rebecca Crane at crane.rebecca@epa.gov. Initiate enforcement action against all communities not in compliance with CSO requirements. **Activities:** Adequately prepare for and conduct quarterly enforcement meetings /conference calls with EPA. For facilities which discharge to the Chesapeake Bay, work towards the goal of continuously reducing the number of facilities in SNC. Submit a semiannual report on the number of compliance assistance activities conducted at major facilities. Identify the number of CSO communities receiving compliance assistance, list the facilities.	