



Maryland
Department of
the Environment

CLEAN WATER FUND

– FISCAL YEAR 2021 –

Prepared for:

Larry Hogan, Governor
State of Maryland

Bill Ferguson, Senate President
Maryland General Assembly

Adrienne A. Jones, House Speaker
Maryland General Assembly

House Environment & Transportation Committee

Senate Education, Health and Environmental Affairs Committee

December 2021

MARYLAND DEPARTMENT OF THE ENVIRONMENT
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I. **EXECUTIVE SUMMARY**

During the 2013 legislative session, Senate Bill 575 or Environment - Maryland Clean Water Fund - Annual Report passed requiring the Maryland Department of the Environment (MDE) to report on the status of the Maryland Clean Water Fund to the Senate Education, Health, and Environmental Affairs Committee, and the House Environment and Transportation Committee in accordance with subsection 2-1246 of the State Government Article. This report was compiled by the MDE Water and Science Administration (WSA) with input from the Land and Materials Administration (LMA), and Office of Budget and Infrastructure Financing (OBIF).

II. MARYLAND CLEAN WATER FUND ACTIVITIES

A. WATER AND SCIENCE ADMINISTRATION

1. Compliance Program:

The Compliance Program is primarily responsible for inspections and enforcement actions of the WSA. The program is organized into three inspection divisions, geographically located in field offices across the state, and the program's Enforcement Division, administrative, and support staff are centrally located in MDE's Baltimore headquarters. WSA issues permits and approvals with requirements, and conditions designed to minimize pollution and impacts to resources. The program is responsible for inspection, audit, and enforcement of permits and authorizations addressing industrial and municipal wastewater discharges to surface and groundwater, construction activities involving sediment control, stormwater management, tidal and nontidal wetlands, and waterway construction.

Each Regional Inspection Division performs inspections and works with local governments, businesses, and private citizens to ensure they operate or complete their activities in compliance with these issued permits or approvals and achieve the intended environmental result. The program assists the regulated community by determining the compliance status of sites and explaining federal, state, and local environmental laws and regulations. The program's inspection staff also respond to citizen complaints, and when necessary, take appropriate steps to ensure activities are conducted in compliance with applicable Maryland laws and regulations by developing litigation packages or developing settlements with the violators.

The Enforcement Division performs audits and works closely with the Office of the Attorney General on appropriate formal enforcement actions for violations issued by the National Pollutant Discharge Elimination System (NPDES) and state discharge permits, laws and regulations. Based upon the facts of each case, orders and penalty actions are taken by the division to regain compliance, address environmental harm, and deter future violations.

2. Wastewater Pollution Prevention and Reclamation Program:

The Wastewater Pollution Prevention and Reclamation Program operates to protect public health and water quality through NPDES, and state permits for surface water discharges – both industrial and municipal – and control of discharges to groundwater of the state through both state issued permits and through issuance of federally-delegated permits for Underground Injection Control. This includes responsibility for implementing Clean Water Act (CWA) permits to achieve Total Maximum Daily Load (TMDL) requirements for the Chesapeake Bay and local tributaries consistent with Maryland's Watershed Implementation Plan (WIP). Finally, this program also is responsible for individual wells and septic systems by overseeing programs delegated at the local level.

- **Discharge Permits for Surface Water Discharges:**

This functional area affects many of MDE's stakeholders on a daily basis through permitting activities for both industrial and municipal discharges. These permits implement the public health and water quality protections required by the NPDES as mandated under the CWA and Maryland water quality standards. Included within this functional area is control of stormwater associated with industrial activity, discharges from sewage treatment plants, pretreatment programs delegated to local municipalities, and wastewater discharge of industries such as power plants and mining operations. Applicants include municipalities, counties, federal facilities, schools, and commercial water and wastewater treatment plants, as well as, treatment systems for private residences that discharge to surface waters.

The program issues general discharge permits for different categories of industrial wastewater to increase the efficiency of MDEs permitting process. These permits are developed and issued to broad categories of business activities which are generally very similar in their wastewater characteristics. For example, general permits with standardized permit conditions have been established for surface and groundwater discharges from a variety of categories, including mineral mines, marinas, coal mines and industrial stormwater.

This functional area also controls industrial wastewater discharges into municipal sewer systems. This separate "pretreatment" permit is required for certain facilities that seek to discharge non-domestic wastewater to publicly-owned wastewater treatment works. MDE delegates to many local municipalities the authority to operate a pretreatment regulatory program. The pretreatment permit is issued locally from the municipal wastewater treatment utility in consultation with MDE

- **State Groundwater Discharge Permits:**

State Groundwater Discharge Permits are implemented by the program to protect groundwaters of the state. Discharges include both municipal and industrial wastewaters. Groundwater Discharge Permits control the disposal of treated municipal or industrial wastewater into the state's groundwater via spray irrigation and other land-treatment applications, as well as, into the subsurface by a drainfield or seepage pit. Permit conditions are set to protect water resources and public health.

- **Onsite Systems Delegation:**

This functional area provides technical guidance and regulatory interpretations to county approving authorities regarding implementation and technical assistance of well drilling and construction, septic system construction, best available technology (BAT) program implementation, soil evaluations, and subdivisions of land. The division handles digital databases of well records and provides information to drillers, residents, other programs, and local authorities. Well tags and permitting supplies are provided to all counties and training of local inspectors on well drilling practices. The division provides annual training and maintains a database for certified contractors. The BAT program handles oversight of the counties for 14,000 BAT units installed in Maryland, and works directly with vendors, manufactures, contractors, and the public on issues surrounding the

program, including financing, operation and maintenance, tracking of installations through the database, inspection audits of the installations statewide, and technology review.

3. Stormwater, Dam Safety, and Flood Management Program:

The Stormwater, Dam Safety, and Flood Management Program is responsible for administering three major statewide programs; erosion and sediment control, stormwater management, and dam safety. In order to accomplish its mission, the program is organized by four separate divisions.

- **Sediment and Stormwater Plan Review Division:**

This division reviews state and federal construction project plans for conformance with state standards, and policies relating to controlling runoff during and after construction. Additionally, this division shapes technical policy and provides technical assistance to local governments and the private sector with regard to stormwater management and sediment control.

- **Program Review Division:**

This division oversees the sediment control and stormwater management programs administered by counties and municipalities and is responsible for issuing NPDES municipal stormwater permits required under the CWA . This division also provides sediment control and stormwater management policy guidance, sediment control training, and technical assistance to local governments and the private sector regarding best management practices (BMPs) and new sediment control and stormwater management technology.

- **Dam Safety Permits Division:**

This division reviews and issues new dam construction permits, evaluates and performs structural, hydrologic and hydraulic analyses associated with new dam permit applications, and approves modifications to existing structures. Additionally, this division reviews, approves, and exercises emergency warning plans for “high” and “significant” hazard dams to ensure public safety during emergency situations, and unusual weather events.

- **Dam Safety Inspections Division:**

This division performs existing dam safety inspections, dam safety construction inspections, and issues dam condition compliance notices. Additionally, this division reviews, approves, and exercises emergency warning plans for “high” and “significant” hazard dams to ensure public safety during emergency situations, and unusual weather events.

4. Wetlands and Waterways Protection Program:

Maryland's Wetlands and Waterways Protection Program is responsible for the management, conservation, and protection of wetland and waterway resources through regulation development, interpretation and implementation of permitting programs. Aquatic resources managed under the program include tidal wetlands, nontidal wetlands, and nontidal waterways, including the 100-year nontidal floodplain. In general, the regulation of nontidal wetlands and waterways affects land development interests, and the regulation of tidal wetlands affects riparian property owners (construction of shoreline protection and piers) and the boating public (construction of marinas and dredging of channels). Another important distinction is while regulated activities conducted in nontidal wetlands affects private property owners, regulated activities conducted in tidal wetlands typically affects submerged lands owned by the state and held in trust for the benefit of the public. The program coordinates extensively with the U.S. Army Corps of Engineers (USACE), which is responsible for implementing the federal dredge and fill permitting program under the CWA.

The program is composed of four divisions: the Tidal Wetlands Division, the Nontidal Wetlands Division, the Waterway Construction Division, and the Regulatory and Customer Service Division, which includes the permit application in-processing unit. Each division plays a vital role in maintaining the health and function of the Chesapeake and Coastal bays as well as all waters of the state. The functions and values of the natural resources protected by these divisions include fish and wildlife habitat and migration, water quality enhancement, natural shoreline protection, flood protection, recreational opportunities, and aesthetics. For wetlands, in particular, a statutory goal has been established to achieve "no net loss" of wetland acreage and function and to strive for a net gain in wetlands over time. This goal is achieved through the regulatory program's permit application process, which focuses on the avoidance and minimization of impacts associated with development.

The Wetlands and Waterways Protection Program also has lead responsibility within MDE for implementing the CWA, Section 401 Water Quality Certification (WQC) requirements, and the Section 307 Federal Consistency provisions of the federal Coastal Zone Management Act (CZMA). The wetlands and waterways regulatory process implemented by each division of the program incorporates the CWA Section 401 WQC requirements, and the Section 307 Federal Consistency provisions of the CZMA. Section 401 of the CWA requires that any applicant for a federal permit or license to conduct an activity that results in a discharge to waters of the United States obtain a WQC from the state, which certifies that the proposed discharge will not result in a violation of the state's water quality standards. Section 307 of the CZMA requires that proposed federal activities, including direct federal actions, federal licenses or permits, and assistance to state and local governments have reasonably foreseeable effects on the state's coastal resources or uses, be consistent, to the maximum extent practicable with the enforceable policies of the state's federally-approved Coastal Zone Management Program (CZMP).

Maryland's CZMP is a "networked program" that is based on existing state laws and regulations. Thus, the Federal Consistency determination is a statement that a proposed federal action complies with and will be conducted in a manner consistent with applicable state laws and regulations. The vast majority of WQCs and Federal Consistency decisions made by the program are for CWA, Section 404 discharges requiring a permit from USACE. A 401 WQC is required whenever there may be a discharge to water associated with a federal license or permit. This includes licenses and permits issued by the Federal Energy Regulatory Commission.

- **Tidal Wetlands Division:**

This division regulates activities conducted in tidal wetlands and waters by avoiding and minimizing proposed impacts, and requiring mitigation for impacts determined to be unavoidable.

Authorization must be obtained before a person dredges, fills or otherwise alters a tidal wetland. The form of authorization is either a tidal wetlands license (for activities on state tidal wetlands) or a tidal wetlands permit (for activities on private tidal wetlands). The Board of Public Works (BPW) is responsible for licensing activities on state tidal wetlands. BPW has issued a General License for certain types of routine activities and delegated to MDE the authority to review qualification under the General License, on its behalf. Projects that exceed the scope of the General License require approval by BPW itself. Generally speaking, only very large or unusual projects require BPW review.

- **Nontidal Wetlands Division:**

This division regulates new or restorative activities conducted in nontidal wetlands and their regulated buffers (generally 25-feet although it is expanded to 100 feet for wetlands of special state concern or wetlands adjacent to steep slopes that contain highly erodible soils) through the implementation of a comprehensive program designed to avoid and minimize proposed impacts and to mitigate for impacts determined to be unavoidable. A permit or Letter of Authorization must be obtained from MDE prior to conducting a regulated activity. This division also oversees the implementation of mitigation activities required for all unavoidable impacts authorized by the Wetlands and Waterways Program through its permitting program.

- **Waterway Construction Division:**

This division regulates man made changes to nontidal waterways that affect their course, current or cross-section. The division ensures that activities in a nontidal waterway or its 100-year floodplain do not create flooding on adjacent property, maintain fish habitat and migration, and protect waterways from erosion associated with new construction and restoration projects.

- **Regulatory and Customer Service Division:**

This division provides geographic information system screening and in-processing of permit applications. The division also processes and uploads Public Notices

to the website for pending permit applications. This division also manages individual WQC and CZMA consistency determinations.

5. Field Investigations and Environmental Response Program:

The Field Investigations and Environmental Response Program currently provides field support to WSA as well as a diverse variety of permitting and enforcement units within MDE responsible for multiple (state and federally mandated) monitoring functions. It is composed of three divisions with varying programmatic goals. Each program is associated with either monitoring to protect public health (drinking water, shellfish, algae blooms) or targeted environmental assessments (TMDL, Tier II, 319 nonpoint).

• Biological and Chemical Monitoring Division :

The CWA requires that impaired watersheds be evaluated and monitored in a comprehensive manner to identify all point and nonpoint sources of pollutants and to allocate the pollutant loads among the various sources. When impairments or potential impairments are demonstrated by CORE/Trend water monitoring data, Maryland Biological Stream Survey (MBSS) data, Chesapeake Bay Monitoring Program and/or other data, the intensive watershed monitoring and evaluations conducted under this program will confirm the extent of the impairment. This data is then used to calibrate the models necessary to develop and define the TMDL and permits needed to correct the impairment.

The targeting of the monitoring effort in impaired watersheds on the state's 303(d) list and NPDES modeling needs are established with the goal to provide the detailed spatial data needed for modeling and development of TMDLs necessary to achieve water quality standards. Also, this provides detailed data for determining permit limits for all facilities in a given watershed that are operating under NPDES permit.

The division provides field services and technical guidance, which include project, scope of work, budget, contract, and quality assurance project plan development in support of water quality standards development and statewide water quality assessments. This division supports the establishment of water quality standards through the generation of necessary field data needed to evaluate a water body attainment of its designated use.

The program's 319 Nonpoint Source Monitoring Section supports implementation activities that address nonpoint source pollution problems by generating field data used to determine the benefit of implementing specific BMPs and watershed management plans.

• Bioregulatory Monitoring and Response Division :

The division responds and investigates all reported instances of algae blooms and fish kills in the state in a timely manner. This division attempts to solve causation of many occurrences as practical and coordinates with various sister agencies for technical support and enforcement as necessary. If a pollution source is identified, appropriate action will be taken to remediate and enforce water pollution laws of the state.

This division maintains a critical safeguard to protect public health when an algae bloom investigation identifies the presence of a potential toxic algae species. The laboratory component of this division has the capability to detect the presence and level of toxins in the water column that have the potential to detrimentally affect drinking water sources, water contact recreation, and shellfish consumption. This division provides data and expertise to an established harmful algae bloom (HAB) workgroup composed of individuals from MDE, the Maryland Department of Health, and the Maryland Department of Natural Resources (DNR) that can quickly issue public health warnings and/or postings and inform local county environmental health officials of the public health threat.

The division ensures the protection of public health of all Maryland citizens consuming fish through the collection of targeted fish tissue species in tidal and nontidal waterways. The data generated is used by the Environmental Assessment and Standards Program to calculate human consumption advisories but also by the Integrated Water Planning Program for TMDL development.

The division plays an important role in supporting MDE's compliance of the CWA antidegradation regulations by providing capacity to conduct biological monitoring of high-quality waters that are experiencing development pressure. Targeted monitoring activities include coordination with Water Quality Assessment and Standards Program and DNR in site selections, QAPP development, adherence to MBSS protocols, and database management.

- **Compliance Monitoring Division :**

The U.S. Environmental Protection Agency (EPA) established the Public Water System Supervision Program under the authority of the 1974 Safe Drinking Water Act to set national limits of contaminant levels in public water systems. The Drinking Water Monitoring Section is a technical/monitoring component of the MDE's Water Supply Program, and receives an annual list of routine contaminant monitoring requirements for community and non-community non-transient public water systems. In addition, this division provides emergency monitoring requirements to include responses to contaminant detections and consumer complaints. This division also provides additional support through participation in the EPA unregulated contaminant monitoring program.

The National Shellfish Sanitation Program (NSSP), of which Maryland participates, establishes temporal and spatial monitoring frequencies of shellfish harvesting waters. The Shellfish Monitoring Section generates the data base necessary for the classification of shellfish harvesting waters of the Chesapeake Bay, coastal bays, and Atlantic Ocean. This program is audited annually by U.S. Food and Drug Administration (FDA) for compliance with the NSSP. This division also performs HAB surveillance in support of Maryland's program, and coordinates with academia in joint research ventures addressing Vibrios and remote sensing opportunities.

The NSSP, of which Maryland participates, requires an assessment of all potential pollutant sources from drainage basin's surrounding shellfish harvesting waters. Inspections of residential, agricultural, and commercial properties are documented and any

identified pollution sources are remediated by appropriate enforcement agencies. This program is audited by the FDA for compliance with the NSSP.

The success of the emerging aquaculture industry has required a subsequent expansion of the monitoring activities of the shellfish program to assure the protection of public health and compliance with the NSSP. In addition to water quality monitoring, each near-shore aquaculture site requires a yearly assessment of surrounding properties for potential pollution sources. Due to the proximity of these pollution sources to these near-shore sites harvesting shellfish directly for the market and public consumption, increased inspections are necessary to protect public health. This program is audited by the FDA for compliance with the NSSP.

B. LAND AND MATERIALS ADMINISTRATION

LMA contributes to the Clean Water Fund from the Sewage Sludge Generator fees, the Sewage Sludge Utilization (SSU) Permit Application fees, and penalties for violations of SSU Permits, General Discharge Permit for Animal Feeding Operations (AFO), and Annual Concentrated Animal Feeding Operations Permit Fees.

LMA uses these funds for costs associated with, Inspection and Monitoring of Sewage Sludge Utilization Activities Agreements with four counties, contractual work for AFO Section and NPDES permit inspections, salaries and fringe, and operating costs.

III. FINANCIAL STATEMENT

FY21, July 1, 2020 – June 30, 2021

A. Ending Fund Balance 6/30/20	\$ 340,737.88
B. <u>FY21 Receipts</u>	
Permit Fees	\$ 883,569.36
Fines & Penalties ¹	\$6,272,521.11
Fees- sewage sludge	\$ 532,424.51
Revenue Accrued	<u>\$ 125,835.17</u>
Total	\$7,814,350.15

C. FY21 Expenditures

Salaries and Wages	1,930,290.35
Technical and Special Fees	21,156.00
Communications	74,045.05
Travel	140.85
Vehicle Replacement, Operations, and Maintenance	82,789.29
Contractual Services	562,882.45
Supplies and Materials	550.83
Equipment	0
Grants	475,402.67
Fixed Charges	34,655.06
Total Expenditures	3,181,912.55

D. Indirect Costs \$ 483,968.90

E. Year End Fund Balance 6/30/21 \$4,489,206.58

¹ Includes: \$4.5 million from Conowingo Dam restricted use penalty and \$0.65 million Verso penalty

Fund Expenditures by Administration

FY21, July 1, 2020 – June 30, 2021

	WSA	LMA		Total Expenditures
Salaries and Wages	136,090.25	1,794,200.10		1,930,290.35
Technical and Special Fees	21,156.00	0		21,156.00
Communications	64,287.59	9,757.46		74,045.05
Travel	41.40	99.45		140.85
Vehicle Replacement, Operations and Maintenance	78,122.71	4,666.58		82,789.29
Contractual Services	561,019.56	1,862.89		562,882.45
Supplies and Materials	414.48	136.35		550.83
Equipment	0	0		0
Grants	475,402.67			475,402.67
Fixed Charges	34,110.38	544.68		34,655.06
Total Expenditures	1,370,645.04	1,811,267.51		3,181,912.55