Department of the Environment

CLEAN WATER FUND

– FISCAL YEAR 2019 –

Prepared for:

Larry Hogan, Governor
State of Maryland

William 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

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MARYLAND DEPARTMENT OF THE ENVIRONMENT
1800 Washington Boulevard | Baltimore, MD 21230 | www.mde.state.md.us/recycling
410-537-3314 | 800-633-6101 x3314 | TTY Users: 800-735-2258
Lawrence J. Hogan, Jr., Governor | Boyd K. Rutherford, Lt. Governor | Ben Grumbles, Secretary

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I. EXECUTIVE SUMMARY

Senate Bill 575 of 2013 requires the Maryland Department of the Environment to report on the status of the Maryland Clean Water Fund to the Senate Education, Health, and Environmental Affairs Committee and the House Environmental Matters Committee, now the House Environment and Transportation Committee, in accordance with subsection 2-1246 of the State Government Article, on the status of the Maryland Clean Water Fund. This report was compiled by the Water and Science Administration of the Maryland Department of the Environment with input from the Land and Materials Administration, and the Office of Budget and Infrastructure Financing.

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 Water and Science Administration (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 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 in the program 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's staff assist 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 in the Program performs audits, prepares case files and works closely with the Office of the Attorney General on appropriate formal enforcement actions for violations of issued 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 Permits Program

The Wastewater Permits Program operates to protect public health and water quality through federal National Pollutant Discharge Elimination System (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 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 the Department'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 Federal Clean Water Act 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 the Department's 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 (including construction activity).

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 (POTW). The Department 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 (POTW) in consultation with the Department.

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 well construction, septic system construction, best available technology (BAT) program implementation, soil evaluations and subdivisions of land. The Division manages a digital database 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 to the

counties for the 14,000 BAT units installed in Maryland working 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. Sediment, Stormwater and Dam Safety Program

The Sediment, Stormwater, and Dam Safety Program (SSDS) is responsible for administering three major statewide programs. These are erosion and sediment control, stormwater management, and dam safety. In order to accomplish its mission regarding these programs, the SSDS is organized by three separate divisions.

Sediment and Stormwater Plan Review 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: 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 Clean Water Act. 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 and new sediment control and stormwater management technology.

Dam Safety Division: Performs existing dam safety inspections; 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.

4. Wetlands and Waterways Program:

Maryland's Wetlands and Waterways Program is responsible for the management, conservation, and protection of wetland and waterway resources through regulation development and 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 that, 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 Army Corps of Engineers, which is responsible for implementing the federal dredge and fill permitting program under the Clean Water Act.

The Program is comprised of three Divisions, the Tidal Wetlands Division, the Nontidal Wetlands Division, and the Waterway Construction Division and a 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 Program also has lead responsibility within MDE for implementing the federal Clean Water Act (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 U.S. 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, that 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. 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 the Corps of Engineers. 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 (FERC).

Tidal Wetlands 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, consisting of the Governor, State Treasurer, and Comptroller of Maryland is responsible for licensing activities on state tidal wetlands. The Board has issued a General License for certain types of routine activities, and delegated to the Department the authority to review qualification under the General License, on the Board's behalf. Projects that exceed the scope of the General License require approval by the Board itself. Generally speaking, only very large or unusual projects require Board 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 the Department 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 manmade 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 Services Division:
This Division provides GIS screening and in-processing of permit applications. The Division also processes and uploads Public Notices to the website for pending permit applications.

5. Field Services Program:
The Field Services Program (FSP) currently provides field support to the Water and Science Administration (WSA) as well as to a diverse variety of permitting and enforcement units within the Department responsible for multiple (state and federally mandated) monitoring functions. The FSP is comprised 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 non-point).

Biological and Chemical Monitoring Division (BCMD):
TMDL monitoring: The Clean Water Act requires that impaired watersheds be evaluated and monitored in a comprehensive manner so 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 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. These data are 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 total maximum daily loads (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 National Pollutant Discharge Elimination System (NPDES) permit.

Water quality standards: The BCMD 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 group 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.

319 non-point source monitoring: The FSP 319 Nonpoint Source Monitoring Section staff 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 (BMRD):
Algae bloom and fish kill investigations: The BMRD responds and investigates all reported instances of algae blooms and fish kills in the state in a timely manner. This group attempts to solve causation of as 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.

HAB confirmation and response: This group 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. It

provides data and expertise to an established HAB workgroup comprised of individuals from MDE, MDH, and DNR that can quickly issue public health warnings and/or postings and inform local county environmental health officials of the public health threat.
Fish tissue consumption advisories: The BMRD ensures the protection of public health of all Maryland citizens consuming fish through the collection of targeted fish tissue species in tidal and non-tidal 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.

Tier II biological assessments: The BMRD plays an important role in supporting the Departments compliance of the CWA anti-degradation 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 (CMD):
Drinking water monitoring: The EPA established the Public Water System Supervision (PWSS) Program under the authority of the 1974 Safe Drinking Water Act (SDWA) to set national limits of contaminant levels in public water systems. The FSP 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 group provides emergency monitoring requirements to include responses to contaminant detections and consumer complaints. This group also provides additional support through the participation in EPA unregulated contaminant monitoring (UCMR) program.

Shellfish monitoring: 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 FDA for compliance with the NSSP. This group also performs harmful algae bloom surveillance in support of Maryland's HAB Program and coordinates with academia in joint research ventures addressing Vibrios and remote sensing opportunities.

Pollution source assessment: The NSSP, of which Maryland participates, requires an assessment of all potential pollutions sources from drainage basin's surrounding shellfish harvesting waters. Inspections of residential, agricultural, and commercial properties are documented and all identified pollution sources are remediated by appropriate enforcement agencies. This program is audited by the FDA for compliance with the NSSP.

Aquaculture monitoring: 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

The 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 and the General Discharge Permit for Animal Feeding Operations (AFO).

LMA uses these funds for costs associated with salaries and fringe, operating costs, Inspection and Monitoring of Sewage Sludge Utilization Activities Agreements with four (4) counties, contractual work for AFO Section and NPDES permit inspections.

III. FINANCIAL STATEMENT

FY 2019, July 1, 2018 – June 30, 2019

A.	Beginning Fund Balance (7/01/18)	$ 155,093.01
	All Open Encumbrances (FY 2016 - FY 2018)	90,544.48
	Reconciled Adjusted Balance	$ 245,637.49
B.	FY 2019 Receipts	
	Permit Fees	$ 868,374.85
	Fines & Penalties	$1,647,280.53
	Fees	$ 458,112.06
	Revenue Accrued	$ 33,839.13
	Total	$3,007,606.57
C.	Total Funds available FY 2019 (A+B)	$3,253,244.06

D. FY 2019 Expenditures

Salaries and Wages	1,259,736.05
Technical and Special Fees	78,449.49
Communications	61,312.41
Travel	6,529.39
Vehicle Replacement, Operations, and Maintenance	287,096.59
Contractual Services	254,969.42
Supplies and Materials	11,407.09
Equipment	-81,411.38
Grants	114,340.34
Fixed Charges	9,668.97
Total Expenditures	**2,002,098.37**

E.	Indirect Costs	$ 283,096.71
F.	Year End Fund Balance 6/30/19 (C-D-E)	$ 968,048.98

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Fund Expenditures by Administration

FY 2019, July 1, 2018 – June 30, 2019

	WSA	**LMA**		**Total Expenditures**
Salaries and Wages	206,105.88	1,053,630.17		1,259,736.05
Technical and Special Fees	71,882.79	6,566.70		78,449.49

Communications	51,297.24	10,015.17		61,312.41
Travel	5,967.30	562.09		6,529.39
Vehicle Replace-ment, Operations and Maintenance	271,452.66	15,643.93		287,096.59
Contractual Services	301,786.69	-46,817.27		254,969.42
Supplies and Materials	10,982.08	425.01		11,407.09
Equipment	-81,428.10	16.72		-81,411.38
Grants	110,046.32	4,294.02		114,340.34
Fixed Charges	8,869.15	799.82		9,668.97
Total Expenditures	**956,962.01**	**1,045,136.36**		**2,002,098.37**