DEPARTMENT OF ENERGY & ENVIRONMENT
GOVERNMENT OF THE DISTRICT OF COLUMBIA

Continuing Planning Process for Water Quality Management 2018

Rain Garden at the National Arboretum
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List of Acronyms and Abbreviations

Blue Plains	Blue Plains Advanced Wastewater Treatment Plant
CPP	Continuing Planning Process
CSO	Combined Sewer Overflow
CSS	Combined Sewer System
CWA	Clean Water Act
CWC	Clean Water Construction
CWSRF	Clean Water State Revolving Fund
DC Water	District of Columbia Water and Sewer Authority
DDOE	District Department of Environment
District	District of Columbia
DOEE	Department of Energy and Environment
DWSPP	Drinking Water Source Protection Plan
DWSRF	Drinking Water State Revolving Fund
EPA	United States Environmental Protection Agency
FFCA	Federal Facilities Compliance Agreement
ICPRB	Interstate Commission on the Potomac River Basin
IP	Implementation Plan
LA	Load Allocation
LTCP	Long-Term Control Plan
MDE	Maryland Department of Environment
MOS	Margin of Safety
MS4	Municipal Separate Storm Sewer System
MWCOG	Metropolitan Washington Council of Governments
NPDES	National Pollutant Discharge Elimination System Permit

NPS	Nonpoint Source
NRA	Natural Resources Administration of the Department of Energy and Environment
PAH	Polycyclic Aromatic Hydrocarbons
PCBs	Polychlorinated Biphenyls
PPL	Project Priority List
PPRS	Project Priority Rating System
SDWA	Safe Drinking Water Act
SWAP	Source Water Assessment Program
TMDL	Total Maximum Daily Load
WIP	Watershed Implementation Plan
WLA	Wasteload Allocation
WPCA	District of Columbia Water Pollution Control Act
WQBEL	Water Quality-based Effluent Limitations
WQM	Water Quality Management Plan

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DISTRICT OF COLUMBIA

Continuing Planning Process for Water Quality Management

1 INTRODUCTION

The Continuing Planning Process (CPP) for Water Quality Management guides water quality decision making over a 20-year span, in increments of five years. The CPP is essential to clean water programs, both from a legal and a program management standpoint[1]. The CPP's core components are laws, rules, and guidance; water quality programs; monitoring and assessment; implementation; planning; and public information and involvement. The CPP contains links to other DOEE web pages, providing more detail on water quality programs. These pages contain links to numerous documents and reports that fulfill CPP requirements, give background and context to water quality issues, and supply water quality data.

The District of Columbia (District) submitted its first CPP document in 1976 and began a revision in 1981. The CPP document has been revised and resubmitted to United States Environmental Protection Agency (EPA) in 1986 and 2008. Since the last revision of the CPP document in September 2008, major changes to the region's environmental regulatory programs and Chesapeake Bay-related water quality criteria assessment programs have occurred. District agencies have reorganized and realigned water quality programs as well. This document updates the District's existing CPP to reflect these changes.

1.1 Continuing Planning Process and Clean Water Act Requirements

The Federal Clean Water Act (CWA) under Section 303 requires each state to maintain a CPP. Recognizing that changes in policies and processes occur over time, the CWA requires that such changes are consistent with the act's requirements. The CPP is required to provide information on the following processes[2]:

1. The process for developing effluent limits and schedules of compliance at least as stringent as those required by sections 301 (b)(1) and (2), 306 and 307, and at least as stringent as any requirements contained in applicable water quality standards.
2. The process for incorporating elements of waste treatment plans and basin plans under section 208, and applicable basin plans under section 209.
3. The process for developing total maximum daily loads and water quality-based effluent limits for pollutants in accordance with section 303(d) of the act and section 130.7(a) of the regulations.
4. The process for updating and maintaining water quality management plans.

1 Environmental Protection Agency (1975). *State Continuing Planning Process Handbook*. Washington, DC.
2 Section 303(e) of the Clean Water Act (CWA), and the Environmental Protection Agency's implementing regulations at 40 CFR §130.5 require that states have a continuing planning process (CPP) for all navigable waters.

5. The process for ensuring adequate authority for intergovernmental cooperation in the implementation of a water quality management program.
6. The process for establishing and ensuring adequate implementation of water quality standards and schedules of compliance.
7. The process for ensuring adequate controls over the disposition of all residual waste.
8. The process for developing an inventory and ranking in order of priority of needs for construction of waste treatment works.
9. The process of determining priority of permit issuance.

2 WATER QUALITY MANAGEMENT PLANNING AND IMPLEMENTATION OF THE CPP IN THE DISTRICT

2.1 Program Overview

The Department of Energy and Environment [3] was established through the District Department of Environment Establishment Act of 2005. DOEE's name was changed from the District Department of the Environment (DDOE) to the Department of Energy and Environment (DOEE) in 2015 per Mayor's Order 2015-191[4].

DOEE's mission is to improve the quality of life for the residents and natural inhabitants of the nation's capital by protecting and restoring the environment, conserving our natural resources, mitigating pollution, increasing access to clean and renewable energy, and educating the public on ways to secure a sustainable future. The agency's core responsibilities include, but are not limited to: enforcing environmental regulations; monitoring and assessing environmental risks; developing energy and environmental policies; issuing permits; and providing residents and local businesses with funding, technical assistance, and information on initiatives designed to ensure a more resilient and sustainable city.

DOEE's water quality programs are administered by the Natural Resources Administration (NRA). The NRA's core function is to conserve, protect, and improve the soil, water, and living resources of the District of Columbia and to protect its aquatic resources from pollution and degradation[5].

In 2017, DOEE implemented a realignment of the existing NRA structure. The purpose behind the realignment was to improve coordination of agency responsibilities within the different

3 The District Department of the Environment Establishment Act of 2005, effective February 15, 2006 (D.C. Law 16-51, as amended; D.C. Official Code §§ 8-151.01 *et seq.* (2008 Repl. & 2012 Supp.)).
4 Mayor's Order 2015-191, dated July 23, 2015, changes the Agency's name from District Department of the Environment (DDOE) to Department of Energy and Environment (DOEE).
5 The Water Pollution Control Act of 1984 is the primary source of the District's legal authority to prevent or reduce the discharge of pollutants to District waters for the purpose of achieving water quality objectives. The District Department of the Environment Establishment Act of 2005, D.C. Official Code § 8-151.01 et seq., established the agency currently known as DOEE, and charged it with protection of the District's natural resources.

administrations, divisions, and branches. This more accurately describes the core functions and responsibilities of various DOEE offices. NRA is currently organized into five administrative divisions and 11 branches. See Figure **1**.

More information about the organizational structure and core functions can be found at https://doee.dc.gov/page/natural-resources-administration.

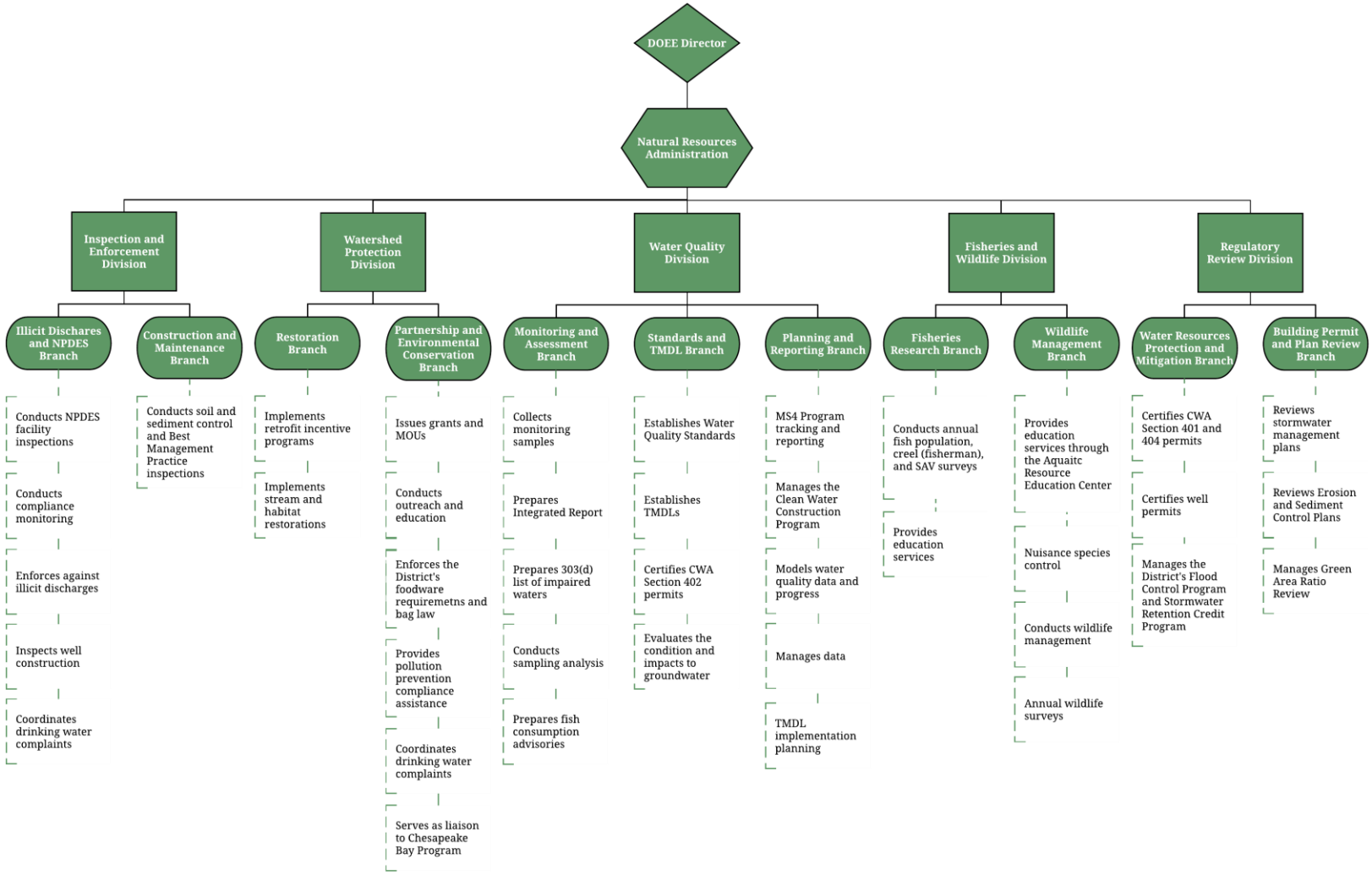

Figure 1 **Natural Resources Administration Organizational Chart, 2018**

2.2 Program Vision and Goals

The District's water quality program's overarching goal is to protect and restore District waterbodies, which supports the restoration of the Chesapeake Bay. This major goal pulls from every component of the CPP and crosses agency and jurisdictional boundaries.

2.2.1 Anacostia River, Potomac River, and Rock Creek

The main waterbodies in the District, the Potomac and Anacostia rivers and Rock Creek, routinely fall below water quality standards established to protect humans and the environment. Contaminants enter the District's rivers and streams through spills, contaminated property, stormwater discharges, combined sewer overflows (CSOs), non-point source runoff, and pollutants that originate from upstream jurisdictions. Water and sediment quality in these waterbodies have been degraded by nutrient loading (nitrogen and phosphorous), bacteria, toxic chemicals (polychlorinated biphenyls (PCB)), polycyclic aromatic hydrocarbons (PAH), pesticides, and trash and refuse.

The Anacostia and Potomac rivers and Rock Creek continue to be the focus of large-scale restoration efforts by the District government, neighboring jurisdictions, and community stakeholders. The District's Sustainable DC Plan has set a target that, by 2032, 100% of District waterways will be fishable and swimmable[6]. Major components of the District's efforts to protect and restore the Anacostia and Potomac rivers and Rock Creek include the Anacostia Sediment Project, stream and habitat restoration, stormwater retrofits, stewardship and education, implementation of the District's Municipal Separate Storm Sewer System (MS4) Permit[7], DC Water's Clean Rivers Project, and wetlands protection.

2.2.2 Chesapeake Bay

The Chesapeake Bay was the first estuary in the nation targeted by Congress for restoration and protection. The District has been a partner in Chesapeake Bay restoration efforts since the inception of the EPA's Chesapeake Bay Program in 1983.

The Chesapeake Bay Agreement is a regional compact of Maryland, Virginia, Pennsylvania, the District of Columbia, the Chesapeake Bay Commission, and EPA, initially signed in 1983. It has since been updated and re-signed in 1987, 2000, and 2014. These revisions accelerated restoration efforts, refined numeric goals, and aligned the program with state and local goals. The 2014 Chesapeake Bay Agreement committed the bay watershed jurisdictions to have all practices and controls installed by 2025 to achieve applicable water quality standards.

In 2010, the EPA issued a Total Maximum Daily Load (TMDL) "pollution diet" for the entire Chesapeake Bay watershed spanning six (6) states (New York, Pennsylvania, Delaware,

6 DOEE (2016). Sustainable DC Plan. http://www.sustainabledc.org/about/

7 EPA (2018). District of Columbia's National Pollutant Discharge Elimination System Municipal Separate Storm Sewer System Permit No. DC0000221, reissued on May 23, 2018. https://www.epa.gov/dc/district-columbia-phase-i-municipal-separate-storm-sewer-system-ms4-permit-reissuance.

Maryland, West Virginia, and Virginia) and the District of Columbia[8]. The TMDL set Chesapeake Bay watershed limits of 185.9 million pounds of nitrogen, 12.5 million pounds of phosphorus, and 6.45 billion pounds of sediment per year. This equates to a 25 percent reduction in nitrogen, a 24 percent reduction in phosphorus, and a 20 percent reduction in sediment. The pollution limits are further divided by jurisdiction and major river basin. The TMDL was issued because the goals of the previous Chesapeake Bay Agreements (1985 and 2000) aimed at cleaning up the Bay were not met according to the deadlines set in both agreements.

The Watershed Implementation Plans (WIP) detail how Chesapeake Bay watershed jurisdictions will achieve the TMDL allocations. Phase I and Phase II WIPs were developed and submitted to EPA in 2010 and 2012, respectively. Bay watershed jurisdictions, including the District, are currently developing Phase III WIPs, which are based on a midpoint assessment of progress and scientific analyses that are currently underway. Phase III WIPs will provide information on actions the Chesapeake Bay watershed jurisdictions intend to implement between 2018 and 2025 to meet restoration goals.

More information about the Chesapeake Bay TMDL can be found at https://doee.dc.gov/service/district-columbia-chesapeake-bay-program.

3 ELEMENTS OF CPP UNDER 40 CFR 130.5

This section describes the minimum requirements of CWA section 303(e) as outlined in 40 CFR section 130.5 for a state's CPP. Each subsection below identifies the required element and provides a detailed description of the District's water quality program components and documents that fulfill each requirement. Most documents can be viewed online at www.doee.dc.gov.

3.1 Developing Effluent Limits and Schedules of Compliance

The process for developing effluent limitations and schedules of compliance at least as stringent as those required by sections 301(b)(1) and (2), 306, and 307, and at least as stringent as any requirements contained in applicable water quality standards in effect under authority of section 303 of the Act. [40 CFR §130.5(b)(1)]

Effluent limits, schedules of compliance, and Water Quality-Based Effluent Limitations (WQBELs) are covered under the National Pollutant Discharge Elimination System Permit (NPDES), which is operated by EPA[9]. The District is not a delegated state under the EPA

8 Environmental Protection Agency (2010). *Chesapeake Bay Total Maximum Daily Load for Nitrogen, Phosphorus, and Sediment*. https://www.epa.gov/chesapeake-bay-tmdl/chesapeake-bay-tmdl-document.
9 Authorization for states, tribes, and territories is through a process that is defined by Clean Water Act (CWA) Section 402 (b) and 40 CFR Part 123. EPA is the Permitting Authority in the District of Columbia. A complete list

NPDES program, and, therefore, does not issue NPDES permits. The District does, however, issue CWA Section 401 state water quality certifications for NPDES permits.

3.2 Incorporating Elements of Waste Treatment Plans and Basin Plans

The process for incorporating elements of any applicable areawide waste treatment plans under section 208 and applicable basin plans under section 209 of the Act. [40 CFR §130.5(b)(2)]

The CWA mandates several types of water quality planning, including regional water quality planning under section 208 and basin-wide planning under section 209.

The Metropolitan Washington Council of Governments (MWCOG) is the designated CWA Section 208 planning agency for the Metropolitan Washington, DC area. MWCOG staff and the Water Resources Planning Board prepared a 208 Plan that was intended to provide, among other things, information on future wastewater treatment capacities, permit limits, and locations. It also included biosolids management plans and nonpoint source management plans. The 208 Plan was adopted by the MWCOG Board in 1978 and included a limit on the size of Blue Plains Advanced Wastewater Treatment Plant (Blue Plains).

3.3 Developing TMDLs and Water Quality-Based Effluent Limits

The process for developing TMDLs and individual water-quality based effluent limitations for pollutants in accordance with section 303(d) of the Act and 40 CFR §130.7(a). [40 CFR §130.5(b)(3)]

DOEE's TMDL program focuses on restoring polluted rivers, streams, and other surface waterbodies. The District's Integrated Report identifies which waterbodies are impaired for which pollutants from the 303(d) list. TMDLs are then prepared for the paired waterbodies and pollutants.

A TMDL sets the quantity of a pollutant that may be introduced into a waterbody without exceeding the applicable water quality standard. A TMDL is typically defined as the sum of the wasteload allocations (WLAs) assigned to point sources, the load allocations (LAs) assigned to nonpoint sources, and a margin of safety (MOS). The TMDL is commonly expressed as:

$$TMDL = WLA + LA + MOS$$

The District has partnered with Chesapeake Bay watershed states, federal agencies, and regional organizations and will continue to work cooperatively to develop cost-effective, scientifically defensible, and consensus-driven TMDLs. The District of Columbia has conducted two dozen TMDL studies, which developed WLAs and LAs for over 350 pollutant/waterbody

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of NPDES Permits issued by EPA within the District of Columbia is found at https://www.epa.gov/npdes-permits/district-columbia-npdes-permits.

combinations. The District is currently updating two regional TMDLs for the Anacostia River: trash and toxics.

Development of TMDLs also involves public participation. Draft TMDLs are published for a 30-day public comment period prior to submission to EPA. A formal notice announcing the 30-day public comment period for the draft TMDL is published in the *D.C. Register* and posted to DOEE's website. The notice is also sent to a list of stakeholders through direct communication. Copies of the draft TMDLs are posted on DOEE's website for interested parties to access. For major TMDLs, public meetings are also held during the comment period. Stakeholders are invited to attend the meetings and express their views or concerns related to potential load allocations and technical/policy issues. All comments are considered before finalizing the TMDLs and submitting them to the EPA for approval. Additional information about DOEE's public participation program is found in Section 4 of this document.

More information about the District's TMDL program can be found at https://doee.dc.gov/service/water-quality-success-story-tmdl-program.

3.3.1 Monitoring

DOEE monitors and assesses the quality of District rivers, streams, and groundwater. Water quality monitoring activities provide the chemical, physical, and biological data needed to:

- Support and inform pollution prevention and enforcement efforts.
- Determine water quality standards attainment (CWA Section 305(b)).
- Establish, review, and revise water quality standards (CWA Section 303(c)).
- Identify causes and sources of water quality impairments (CWA Sections 303(d), and 305(b)).
- Support WLA tracking efforts and evaluate progress toward TMDL goals.
- Issue fish consumption, swim, and health advisories for District waterbodies.
- Assess the health of watersheds and habitats.

DOEE's water quality monitoring programs conduct monitoring to meet individual program goals and regulatory requirements. The goals of the individual monitoring programs provide the necessary information to meet core water quality objectives. (See Figure 2 Goals and Objectives of DOEE's Water Quality Monitoring Programs.).

The core goals of the District's water quality monitoring program are:

1. Assess progress in maintaining and restoring District waters.
2. Evaluate effectiveness of the District's MS4 program.
3. Prevent and control nonpoint source (NPS) pollution in District watersheds.

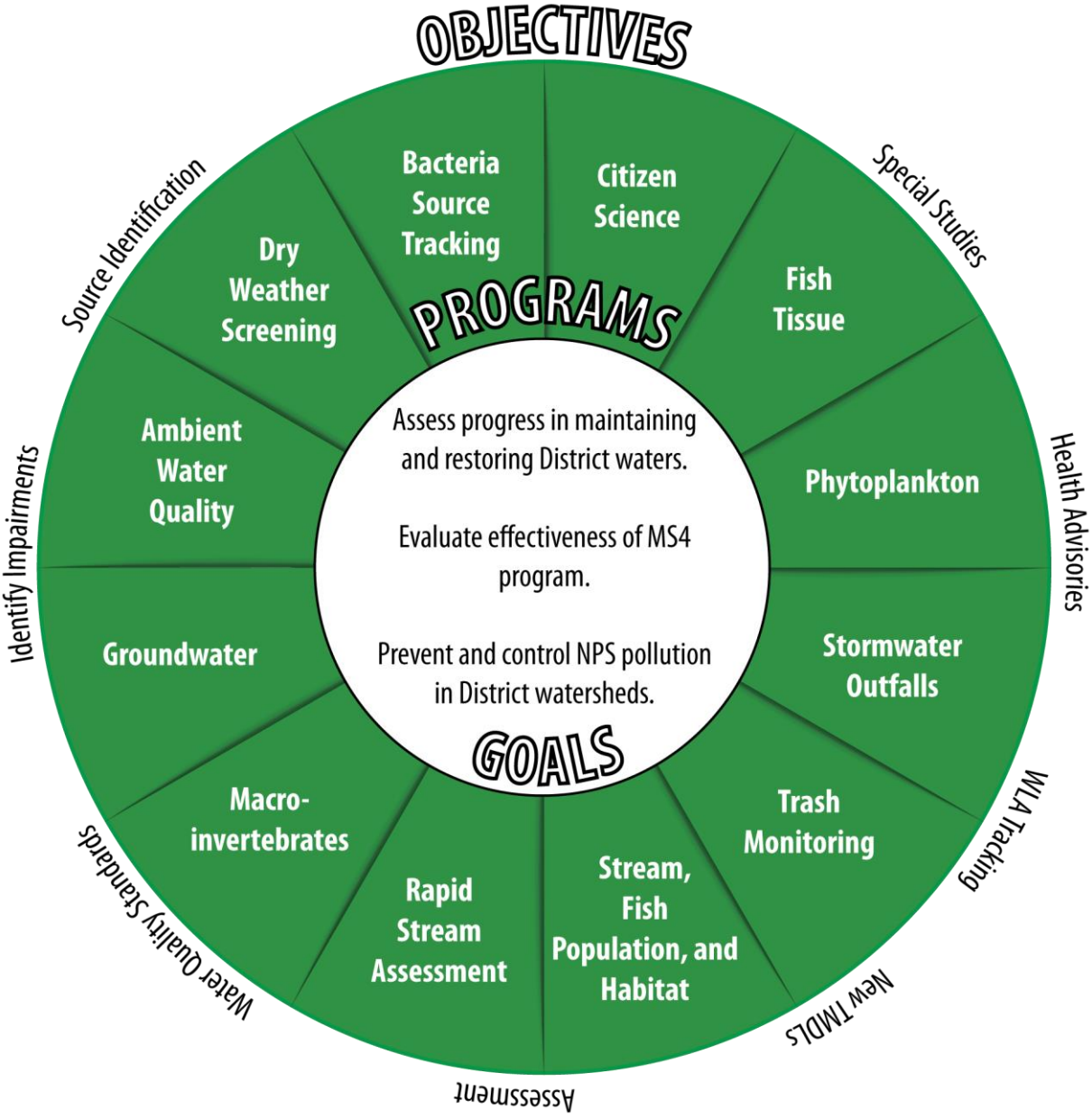

Figure 2 Goals and Objectives of DOEE's Water Quality Monitoring Programs

3.3.2 Data Accessibility and Public Participation

Retention, documentation, and accessibility of high quality data are the foundation on which the success of monitoring programs rests. Careful data management will:

- Improve quality and lower the cost of operations.
- Make the government more open, transparent, and accountable.
- Enhance collaboration among agencies, with partner organizations, and with the public.
- Allow residents and stakeholder to make informed decisions about District water quality.

DOEE prioritizes making data easily accessible to the public and external stakeholders. To realize this priority, DOEE is acquiring environmental database software to make water quality data centralized and accessible. This software will ensure DOEE collects, maintains, and manages information to promote discovery, access, and sharing for all parties.

DOEE will synthesize data from this software and other water quality program databases into a story map to provide the public with information about the health of the District's waterways, restoration projects in each watershed, monitoring data, and additional work needed to meet water quality objectives. A story map is an online tool that combines maps with text, website links, images, data, and video to provide an interactive educational experience.

3.3.3 305(b) and 303(d) Integrated Reporting

As required by sections 305(b) and 303(d) of the CWA, the District's Integrated Report combines the comprehensive biennial reporting requirements of CWA Section 305(b) and Section 303(d) listings of waters for which TMDL limitations may be required. This report describes ongoing efforts to monitor, assess, track and restore the chemical, physical, and biological integrity of District waters. The integrated report uses the dataset collected through all the water quality monitoring programs discussed in subsection 3.3.1 of this document and also data submitted via a data request to stakeholders.

Public participation is an integral part in the development of the District's Integrated Report. The Integrated Report is only finalized after considering all comments received from the public.

The District's recent Integrated Reports can be found at https://doee.dc.gov/publication/integrated-report-epa-and-us-congress-regarding-dcs-water-quality.

3.3.4 TMDL Implementation

DOEE has developed a Consolidated TMDL Implementation Plan (IP) that includes a schedule for compliance using benchmarks and interim milestones, and relies on a combination of model outputs and monitoring data to demonstrate attainment of applicable WLAs. The Consolidated TMDL IP focuses on achieving load reductions in all of the District's TMDL watersheds

simultaneously and using a consolidated modeling approach to track and report on these load reductions in a consistent, transparent, and straightforward manner.

A draft of the Consolidated TMDL IP was published for public comment and submitted to EPA in May 2015. In August 2016, DOEE updated the draft IP in response to comments from stakeholders and EPA.

The core of these updates to the Consolidated TMDL IP are a series of new, programmatic milestones the District has committed to in the interest of accelerating the pace of stormwater management implementation.

These programmatic milestones include:

1. Committing $12.75 million to establish a Stormwater Retention Credit Purchase Agreement program.
2. Developing a list of targeted watersheds and targeted implementation approaches.
3. Evaluating options for increasing the District's stormwater fee.
4. Working to revise and update District TMDLs, including:
    a. Identifying priority TMDLs in need of revision.
    b. Developing a monitoring work plan to support TMDL revisions.
    c. Conducting intensive monitoring to support TMDL revisions.
    d. Completing the first round of priority TMDL revisions.
5. Conducting an analysis of potential changes to existing stormwater management regulations.
6. Updating the Implementation Plan Modeling Tool and the TMDL IP.

The Consolidated TMDL Implementation Plan can be found at https://dcstormwaterplan.org/documents-and-deliverables/.

3.3.5 Water-Quality Based Effluent Limits

Water Quality Based Effluent Limitations (WQBELs) are covered under the NPDES program, administered by EPA.

3.3.6 303(d) Program New Vision

DOEE has been working to implement EPA's *Long-Term Vision for Assessment, Restoration, and Protection under the Clean Water Act Section 303(d) Program*[10] since it was initiated in 2013.

This new Long-Term Vision has six pillars (engagement, prioritization, protection, integration, alternatives, and assessment) addressed in stages as follows:

1. 2016 – Engagement
2. 2016 – Prioritization, Protection, Integration
3. 2018 – Alternatives
4. 2020 – Assessment (site-specific)
5. 2022 – Evaluate accomplishments of the Vision and Goals

The District's Stakeholder Engagement Strategy and Prioritization Strategy were finalized and incorporated as parts of the revised 2016 Integrated Report[11], which was approved by EPA on February 2, 2017. The draft Prioritization Strategy provides a framework for identifying high, medium, and low priority waters for TMDL development efforts, including alternative actions that are best suited to the broader water quality goals and values in the District. It incorporates several factors in the prioritization process, including stakeholder input, pollutants of concern, and funding availability. The Stakeholder Engagement Strategy outlines DOEE's engagement framework, consultation approaches, and includes metrics by which outcomes will be measured.

3.4 Updating and Maintaining Water Quality Management Plans

The process for updating and maintaining Water Quality Management (WQM) plans, including schedules for revision. [40 CFR §130.5(b)(4)]

The District's Water Quality Management Plan is a compilation of various programs and documents, as described in Table 1. Each component of the Water Quality Management Plan is updated individually. The updating processes vary in their triggers, participants, and timeframes. Many of these documents include public comment periods.

10 Environmental Protection Agency (2013). A Long-Term Vision for Assessment, Restoration, and Protection under the Clean Water Act Section 303(d) Program. https://www.epa.gov/tmdl/impaired-waters-and-tmdls-new-vision-cwa-303d-program-updated-framework-implementing-cwa-303d#vision.
11 DOEE 2016 Integrated Report. https://doee.dc.gov/publication/integrated-report-epa-and-us-congress-regarding-dcs-water-quality.

Table 1 District of Columbia Water Quality Management Plans

Document Name	Description	Next Update	Location
District of Columbia Chesapeake Bay TMDL Watershed Implementation Plan (WIP)	Phase I and Phase II WIPs describe actions and controls to be implemented by 2017 and 2025 to achieve applicable water quality standards	Phase III WIP will be submitted to EPA in 2019	https://doee.dc.gov/node/21972
Anacostia River, Rock Creek, and Oxon Run Watershed Implementation Plans	Plans for how the District of Columbia can achieve and maintain the TMDL limits necessary to meet water quality standards for the District's streams and rivers	Updated as needed	https://doee.dc.gov/publication/watershed-implementation-plans
District Integrated Reports	Website repository of District Integrated Reports and Section 303(d) list	Updated biennially	https://doee.dc.gov/publication/integrated-report-epa-and-us-congress-regarding-dcs-water-quality
TMDL Documents	Website repository of TMDLs for District waterbodies	Updated as TMDLs are created or revised	https://doee.dc.gov/service/total-maximum-daily-load-tmdl-documents
Consolidated TMDL Implementation Plan	Plan and timetable for how and when the District's MS4 WLAs will be attained	Updated plan due to EPA nine months prior to the expiration of the current MS4 Permit	https://dcstormwaterplan.org/documents-and-deliverables/
Revised Stormwater Management Plan	Plan that describes the District's approach to stormwater management	Updated every five years	https://doee.dc.gov/publication/ms4-discharge-monitoring-and-annual-reports

Document Name	Description	Next Update	Location
Anacostia River Sediment Project	Plan to determine the nature, extent, and location of contamination in the Anacostia River, evaluate the potential for human health and ecological risks, study the best method(s) for river clean up, present a proposed cleanup approach for public comment, and make a final decision on the best cleanup method(s)	Updated as needed	https://doee.dc.gov/anacostiasediment
Policy on the Protection of District's Groundwater	Strategy for protecting groundwater in the District of Columbia	Updated as needed	https://doee.dc.gov/publication/policy-protection-districts-groundwater
Revised Monitoring Framework	Plan to ensure compliance with the MS4 permit; to help DOEE evaluate the effectiveness of the MS4 program; and to provide information that will inform management decisions	Updated as needed	https://dcstormwaterplan.org/documents-and-deliverables/
2008 Anacostia Trash Reduction Plan	Assessment of types and sources of trash and a five-year plan to make significant reductions in the amount of trash in the Anacostia River	Updated as needed	https://doee.dc.gov/service/anacostia-river-trash-reduction-plan

3.5 Assuring Adequate Authority for Intergovernmental Cooperation

The process for assuring adequate authority for intergovernmental cooperation in the implementation of the state WQM program. [40 CFR §130.5(b)(5)]

DOEE is the primary implementation and enforcement agency for water quality management programs in the District. DOEE has the authority to enter into interagency agreements to ensure cooperation in the District's water quality management program[12].

Regional Initiatives

DOEE actively participates in many regional programs and initiatives located throughout the Chesapeake Bay Region. This allows the District to address water quality concerns that cross jurisdictional boundaries. The District is a member of the Interstate Commission on the Potomac River Basin (ICPRB)[13], the Metropolitan Washington Council of Governments (MWCOG)[14], the Chesapeake Bay Program, and the Chesapeake Bay Executive Council.

Multi-Jurisdictional TMDLs

DOEE also works with neighboring states in developing and implementing multi-jurisdictional TMDLs. In 2010, a TMDL for trash was developed through a cooperative agreement between EPA Region III, DOEE, and the Maryland Department of the Environment (MDE). To align metrics for tracking and reporting on trash reduction and removal between jurisdictions, DOEE, Prince George's County, MD, and Montgomery County, MD entered into a multi-jurisdictional collaboration.

In 2010, a TMDL for the entire 64,000-square-mile Chesapeake Bay watershed was established. The TMDL identifies the necessary pollution reductions from major sources of nitrogen, phosphorus and sediment across the Chesapeake Bay watershed jurisdictions and sets pollution limits necessary to meet water quality standards. Chesapeake Bay watershed jurisdictions include Delaware, Maryland, New York, Pennsylvania, Virginia, West Virginia and the District of Columbia.

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12 D.C. Official Code § 1-301.01(k) (District agencies) (Repl. 2006; Suppl.2012) authorizes District agencies to enter into MOUs for orders placed with other Departments, at actual cost.
13 ICPRB was authorized by an Act of Congress in 1940 and is an advisory, non-regulatory interstate compact agency of the Potomac basin states of Maryland, Pennsylvania, Virginia, West Virginia, and the District of Columbia. More information can be found at www.potomacriver.org/.
14 MWCOG is an independent, nonprofit association, with a membership of 300 elected officials from 24 local governments, the Maryland and Virginia state legislatures, and U.S. Congress. More information about MWCOG can be found at www.mwcog.org.

3.6 Establishing and Ensuring Adequate Implementation of Water Quality Standards and Schedules of Compliance

The process for establishing and assuring adequate implementation of new or revised water quality standards, including schedules of compliance, under §303(c) of the Act. [40 CFR §130.5(b)(6)]

Water quality standards are the cornerstones of the District's water quality management program. Water quality standards are used to derive NPDES permit limits, make 303(d) listing decisions, and develop TMDLs, as well as assess the District's surface waters bodies.

DOEE's Water Quality Standards Program oversees the establishment and triennial review of water quality standards. The standards establish water quality goals for a waterbody and provide a regulatory basis for controls. Water Quality Standards include four components:

1. Designated uses of a surface waterbody (e.g., stream or river).
2. Criteria to protect designated uses.
3. Anti-degradation requirements to protect existing uses and high quality waters.
4. General policies to address implementation issues.

Designated uses are specified in the Water Quality Standards for each waterbody, whether or not that use is being attained (e.g., recreation, navigation, protection of fish). Designated uses reflect the state's management goals for their waterbodies. Water Quality Standards criteria are specific, regulated parameters that are either numeric (e.g., pH, metals, toxic chemicals, hardness) or narrative, established to protect waterbody uses. Numeric criteria are presented as either a range of allowable concentrations or a single concentration. Narrative criteria are usually in the form of a "free from" statement, for example, "the river shall be free from floating debris". The designated uses for District waters are found in Table 2.

Table 2 Categories of Designated Uses for District of Columbia Surface Waters

Categories of Designated Uses that Determine Water Quality Standards	Classes of Water
Primary contact recreation	A
Secondary contact recreation and aesthetic enjoyment	B
Protection and propagation of fish, shellfish and wildlife	C
Protection of human health related to consumption of fish & shellfish	D
Navigation	E

The EPA mandates that every state and the District adopt national Water Quality Standards criteria. States and the District have the option to adopt Water Quality Standards criteria that are more stringent than the national Water Quality Standards criteria, provided scientific research is available as support. The District adopts the national Water Quality Standards criteria.

3.6.1 Triennial Review

EPA mandates that Water Quality Standards regulations, criteria, and implementation policies are reviewed triennially. This triennial review is completed to ensure that standards meet public concerns, reflect new scientific and technical information, and follow EPA guidelines. If a state or the District proposes changes to Water Quality Standards, the draft changes are subject to a public notice, 30-day comment period, and public hearing. After public comments are addressed, the changes are finalized. If no further comments are received, the final Water Quality Standards are submitted to EPA for review and approval.

In 2016, EPA published and promulgated "Final Rulemaking to Update the Federal Water Quality Standards Regulations" under 40 CFR Part 131. The purpose of EPA's Regulatory Revision is to provide nationwide standards to clarify the triennial review process and formalize the public involvement process.

The Final Rule updated six major areas in the national Water Quality Standards regulations:

1. Water Quality Standards must be reviewed and approved by EPA
2. Designated uses of waters
3. Triennial reviews of state and authorized tribal Water Quality Standards
4. Antidegradation provisions to protect water quality
5. Water Quality Standards variances
6. Permit compliance schedule authorizing provisions

For its 2016 triennial review, the District is updating criteria for cadmium, ammonia, and the human health criteria of 94 organic chemicals.

3.7 Assuring Adequate Controls over the Disposition of All Residual Waste

The process for assuring adequate controls over the disposition of all residual waste from any water treatment processing. [40 CFR §130.5(b)(7)]

The Washington Aqueduct, a Division of the U.S. Army Corps of Engineers, maintains and operates the Dalecarlia and McMillan Water Treatment Plants which serve potable water to the District of Columbia, Arlington County, and the City of Falls Church, VA. The Aqueduct is responsible for compliance with all of the regulations which pertain to water treatment such as filtration, disinfection and chemical contaminant removal, and corrosion control.

None of the District's waterbodies have been designated for either public water supply or drinking water uses. Though the Potomac River is the source of the District's drinking water, the

intakes are located outside the District's boundaries. The drinking water intakes are located at Great Falls and Little Falls, MD.

In March 2003, a revised NPDES permit (DC0000019)[15] for the Washington Aqueduct was issued that placed effluent limitations on total suspended solids, iron, and aluminum. The Washington Aqueduct and EPA entered into a Federal Facilities Compliance Agreement (FFCA) to allow Washington Aqueduct to continue to produce drinking water while developing and implementing a new residuals management process. The FFCA provided a legally mandated plan for the Washington Aqueduct to achieve and maintain compliance with the NPDES Permit.

To comply with their NPDES Permit, the Washington Aqueduct implemented the Residual Management Project that would minimize or eliminate the discharge of residuals to the Potomac River. The Residuals Management Project involved the construction of equipment and facilities to collect water treatment residuals from three locations; Dalecarlia Sedimentation Basins, Georgetown Reservoir, and the Dalecarlia Reservoir Forebay. The residuals are then conveyed to a central treatment facility where they are thickened in gravity thickeners, dewatered by centrifuge, and loaded into trucks for off-site land disposal. The last discharge of water treatment plant residuals to the Potomac River was made in February 2015.

More information about the residuals management project at the Washington Aqueduct can be found at http://www.nab.usace.army.mil/Missions/Washington-Aqueduct/Residuals-Project .

3.8 Developing an Inventory and Ranking in Order of Priority of Needs for Construction of Waste Treatment Works

The process for developing an inventory and ranking, in order or priority of needs for construction of waste treatment works required to meet the applicable requirements of sections 301 and 302 of the Act. [40 CFR §130.5(b)(8)]

3.8.1 Clean Water Construction

The District funds construction of waste treatment works as defined in Section 212 of 33 U.S.C. 1292, with an annual allocation of funding from the EPA Clean Water State Revolving Fund (CWSRF) program. DOEE is responsible for ensuring that those funds are spent on projects that will be most effective at improving District water quality, for the health of the environment and the people who live, work, and visit the city.

In 2007, and again in 2016, the DOEE Clean Water Construction program (CWC) worked with EPA and local stakeholders to develop a process for creating and maintaining an inventory of ranked wastewater treatment projects. This is the District's Project Priority Rating System (PPRS). A detailed description of this ranking system is posted on the DOEE CWC webpage https://doee.dc.gov/service/clean-water-construction-grant-program. The process is designed to

15 EPA (2008). Washington Aqueduct Water Treatment Plant National Pollutant Discharge Elimination System Permit No. DC0000019, reissued on October 20, 2008. https://www.epa.gov/npdes-permits/washington-aqueduct-water-treatment-plant.

direct funding to projects that have the potential to achieve the highest return in attainment of water quality and for the protection of public health.

The products of this system are three ranked lists of proposed wastewater treatment projects, called Project Priority Lists (PPL). DOEE develops a separate list for each of the three categories of wastewater treatment works. These categories are Sewage Infrastructure Projects, the Stormwater Grey Infrastructure Projects, and Stormwater Green Infrastructure Projects. The PPRS defines each category and presents the associated scoring criterion. Projects that receive the highest score represent those which are needed most, and, therefore, considered highest in priority for investment of public funding. This means the project with the highest score has a ranking of 1, the next highest score ranks 2, etc.

To prepare DOEE's annual application to EPA's CWSRF program, DOEE uses the PPLs to identify the most highly-ranked new proposals. DOEE determines which projects to fund by considering the amount of funding available and which projects are ready to proceed. DOEE then adds these projects to the work plan that is submitted with the District's CWC grant application to EPA.

Funded projects are removed from the PPL, and projects that were not funded remain on the PPL. To prepare for the next round of funding, DOEE updates the PPL with new projects. Annually, DOEE solicits applications for new projects and awards points according to PRRS scoring criterion. The new projects are added to the existing PPL: sorted by category and ordered by score - highest score to lowest- thereby creating three ranked lists. When complete, the lists are presented to the public for comment, and sent to EPA for review and approval.

3.8.2 Safe Drinking Water

The Safe Drinking Water Act (SDWA) Amendments of 1996 (Public Law 104-182) authorize a Drinking Water State Revolving Fund (DWSRF) program to assist public water systems to finance improvements needed to achieve or maintain compliance with SDWA requirements and to protect public health. For the DWSRF, DC Water is the grantee for project grants while DOEE is its agent. The U.S. Army Corps of Engineers Office at Blue Plains can receive funds for oversight and management of these projects.

In 1999, EPA in conjunction with DC Water developed a PPRS for DWSRF projects. The PPRS scores drinking water projects based on their contribution to protecting public health, improving compliance with regulatory standards, and maintaining drinking water reliability, safety, and environment.

The PPL for DWSRF is routinely updated to remove projects when grants are awarded, to reflect new estimated costs and schedules, and to include new projects. Projects are displayed on the PPL in priority order. The project with the highest priority rating score (i.e., the most important) is listed first. The remaining projects are listed in order of descending score.

3.9 Determining Priority of Permit Issuance

The process for determining the priority of permit issuance. [40 CFR §130.5(b)(9)]

As required under Section 401 of the CWA, DOEE's Water Quality Division provides Water Quality Certification for draft NPDES permits. EPA Region III is the permitting authority for the NPDES program in the District of Columbia. However, EPA works with the District very closely in determining priorities for issuing permits to ensure local water quality concerns are properly addressed.

DOEE certifies general and individual water quality NPDES permits issued by EPA and dredge and fill permits issued by the US Army Corps of Engineers. DOEE also reviews well permit applications to install wells in private and public space.

4 PUBLIC PARTICIPATION

Stakeholder engagement and public participation is a key part of DOEE's water quality program. DOEE uses formal public comment, collaboration, partnerships, and open data to ensure the public has the opportunity to participate in a meaningful and effective way.

4.1 Public Comment

As described throughout this document, many water quality programs require a formal public comment period. DOEE publishes a notice in the *D.C. Register* prior to formal comment periods on proposed rulemaking or other applicable activities. Generally, comment periods last for 30-90 days and may include a public hearing. The notice and copies of any accompanying documents are posted on the DOEE website and often sent directly to stakeholders. If substantive comments are received during this process, DOEE prepares a response to each comment and makes this document available on the DOEE website.

Additional public participation and engagement strategies are discussed throughout this document for each required element.

4.2 Public Involvement

DOEE's public participation efforts include a broad notification and distribution of public comment and public hearing opportunities, reports, request for grant applications, monitoring data, volunteer events, and compliance information. Public involvement is also facilitated through DOEE's quarterly meetings with environmental non-profits regarding water quality program development, partnership opportunities, and available grants.

Water quality-related publications, datasets, and events can be found at the following links:

- DOEE Public Notices and Public Hearings: https://doee.dc.gov/service/public-notices-hearings
- DOEE Calendar of Events: https://doee.dc.gov/events
- Real Time Monitoring Data: https://stormcentral.waterlog.com/public/dcwater
- District of Columbia Open Data: https://dc.gov/page/open-data
- District of Columbia Map Data: https://dc.gov/node/850722