# STORM WATER MANAGEMENT PROGRAM

THE CITY OF BRUNSWICK, GEORGIA

**JUNE 2023** 

Prepared to Meet the Requirements of the National Pollutant Discharge and Elimination System (NPDES) Phase II Municipal Separate Storm Sewer (MS4) Permit (NPDES Permit #GAG610000) Effective 12/6/2022 – 12/5/2027

# Table of Contents

PL	AN REV	IEW AND REVISION	••••
AC	RONYN	ıs	I
DE	FINITIO	NS	II
RE	SPONSI	BLE PARTY AND PLAN CERTIFICATION	VI
		CTION	
Α.		LIC EDUCATION AND OUTREACH	
	A.1	STORMWATER EDUCATION – PUBLIC PRESENTATIONS	1
	A.2.	PASSIVE EDUCATION SIGNAGE	
	A.3.	PUBLIC SERVICE ANNOUCEMENTS	
	A.4.	STORMWATER WEBSITE	
В.	PUB	LIC INVOLVEMENT / PARTICIPATION	б
	B.1.	COMMUNITY LITTER PICK-UP PROGRAM	6
	B.2.	RECYCLING EVENT	
	B.3.	CITIZEN HOTLINE	8
	B.4.	LITTER PREVENTION PUBLIC OUTREACH EVENT	10
c.	ILLIC	IT DISCHARGE DETECTION AND ELIMINATION	12
	C.1.	LEGAL AUTHORITY	12
	C.2.	MS4 OUTFALL MAP AND INVENTORY	14
	C.3.	ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) PLAN	16
	C.4.	ILLICIT DISCHARGE EDUCATION	18
	C.5.	Complaint Response	19
D.	CON	STRUCTION SITE STORMWATER RUNOFF CONTROL	20
	D.1.	LEGAL AUTHORITY	21
	D.2.	SITE PLAN REVIEW PROCEDURES	22
	D.3.	Inspection Program	24
	D.4.	ENFORCEMENT PROCEDURES	25
	D.5.	COMPLAINT RESPONSE	26
	D.6.	CERTIFICATION	27
Ε.	POS	T-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT & REDEVELOPMENT	28
	E.1.	LEGAL AUTHORITY	28
	E.2.	INVENTORY	31
	E.3.	Inspection Program	32
	E.4.	MAINTENANCE PROGRAM	
	E.5.	GREEN INFRASTRUCTURE / LOW IMPACT DEVELOPMENT (GI/LID) PROGRAM	
	E.6.	GI/LID STRUCTURE INVENTORY	
	E.7.	GI/LID STRUCTURE INSPECTION PROGRAM.	
	E.8.	GI/LID STRUCTURE MAINTENANCE PROGRAM	40
F.	POL	LUTION PREVENTION/ GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS	42
	F.1.	MS4 STRUCTURE INVENTORY AND MAP	42
	ГЭ	MCA INCRECTION PROCESSA	1

NPDES Pha	ise II M	IS4 SW	<b>VMP</b>
-----------	----------	--------	------------

	F.3.	MS4 Maintenance Program	46
	F.4.	STREET AND PARKING LOT CLEANING	47
	F.5.	EMPLOYEE TRAINING	
	F.6.	WASTE DISPOSAL	
	F.7.	NEW FLOOD MANAGEMENT PROJECTS	51
	F.8.	EXISTING FLOOD MANAGEMENT PROJECTS	52
	F.9.	MUNICIPAL FACILITIES	54
G.	ENFO	DRCEMENT RESPONSE PLAN	56
	G.1.	ENFORCEMENT RESPONSE PLAN (ERP)	56
н.	IMPA	AIRED WATERS	57
	H.1.	MONITORING AND IMPLEMENTATION PLAN (MIP)	57

#### **APPENDICES**

Appendix A: MS4 Permit and Notice of Intent (NOI)

- Notice of Intent-2022\_Brunswick
- Phase II Permit 2022-2027\_FINAL

#### Appendix B: Ordinances

- Chapter\_17\_Soil Erosion and Sedimentation Control
- Chapter 22A Stormwater Management Dec 2020
- Chapter\_25\_Clean Community Ordinance\_Litter\_Jan 2021

Appendix C: Illicit Discharge Detection and Elimination (IDDE) Plan

#### Appendix D: Inspection Checklists and Procedures

- Checklists
  - o E.3\_Pond Inspection Form
  - o E.3 Underground Detention Inspection Form
  - E.7 Bioretention Inspection Form
  - o E.7\_Cistern Inspection Form
  - o E.7\_Green Roof Inspection Form
  - o E.7 Permeable Pavers Inspection Form
  - o E.7 Pervious Concrete Inspection Form
  - o E.7 Vegetated Filter Strip Inspection Form
  - o F.3\_Ditch Cleaning Log
  - F.3 VacCon Truck Log Pipes & Inlets
  - o F.4\_Street Sweeping Log
  - F.8\_Checklist\_WQ Existing Flood Control Analysis\_City
  - o F.9\_Municipal Facility Inspection Form
- Procedures
  - o E.2-E.4\_Procedure\_Post Construction SW Mgmt Structures\_060423
  - o F.3\_Procedure\_MS4 Maintenance Program\_060423
  - o F.4 Procedure Street & Parking Lot Cleaning 060423
  - o F.8\_Procedure\_Water Quality Assessment-Existing-City\_060423
  - General\_Procedure\_All SWMP Inspections-GIS Attributes
- Stormwater Facility Inspection & Maintenance Agreement

# Appendix E: Enforcement Response Plan (ERP)

Appendix F: Maps and Inventories

- C.1-MS4 Outfall Inventory & Map
  - Outfall Inventory\_Table\_2023
  - o Outfall Inventory\_Map\_2023
- F.1-MS4 Inventory & Map
  - o MS4 Inventory\_Table\_June 2023
  - MS4 Inventory\_Map\_June 2023
- E.2-Retention-Detention Pond Inventory\_June 2023
- E.5-GI-LID Inventory\_June 2023
- F.9-Municipal Facility Inventory-June 2023

Appendix G: Green Infrastructure/Low Impact Development (GI/LID) Program

Appendix H: Impaired Waters Monitoring and Implementation Plan (MIP)

# **PLAN REVIEW AND REVISION**

This Stormwater Management Program (SWMP) is reviewed regularly to determine if the City of Brunswick needs to replace ineffective or infeasible Best Management Practices (BMPs), improve stormwater control measures, and to ensure compliance with the City's National Pollutant Discharge Elimination System (NPDES) Phase II Municipal Separate Storm Sewer System (MS4) Permit #GAG610000. Revisions, if needed, will be submitted to the Georgia Environmental Protection Division (EPD) for review at least 30 days prior to implementation of the modification. Plan revisions and their submittals to EPD will be documented in the log below starting in June 2023 and thereafter.

DATE OF PLAN REVISION	DESCRIPTION OF PLAN REVISIONS	STATUS
June 2023	SWMP revised to meet the requirements of Permit #GAG610000, which was re-issued and became effective for 12/06/22 – 12/05/27. Submitted to EPD for review in June 2023.	EPD review pending

# **ACRONYMS**

The following acronyms may be used in the City's SWMP, NPDES Phase II MS4 permit, and/or other SWMP supporting documentation.

BMPs Best Management Practices
CIP Capital Improvement Project
CSS Coastal Stormwater Supplement

CWA Clean Water Act

E&S Erosion & Sedimentation

EPD Georgia Environmental Protection Division

ERP Enforcement Response Plan

ESPC Erosion, Sedimentation & Pollution Control

GESA Georgia Erosion & Sedimentation Act

GIS Geographic Information System

GI/LID Green Infrastructure/Low Impact Development
GSMM Georgia Stormwater Management Manual
GSWCC Georgia Soil & Water Conservation Commission

IDDE Illicit Discharge Detection & Elimination

IWP Impaired Waters Plan
 KGIB Keep Golden Isles Beautiful
 LDP Land Disturbance Permit
 LIA Local Issuing Authority
 MCM Minimum Control Measure

MIP Impaired Waters Monitoring and Implementation Plan

MS4 Municipal Separate Storm Sewer System

NOI Notice of Intent

NRCS Natural Resources Conservation Service

NPDES National Pollutant Discharge Elimination System

POC Pollution of Concern

ROW Right of Way

SIC Standard Industrial Classification
SWCD Soil and Water Conservation District
SWMP Stormwater Management Program

TSS Total Suspended Solids

USEPA United States Environmental Protection Agency

# **DEFINITIONS**

The following definitions were established by the NPDES Phase II MS4 permit, signed on December 6, 2022, and are hereby included in the City of Brunswick's SWMP.

**Annual Report** - the document submitted by the permittee on an annual basis summarizing the SWMP activities conducted during the previous reporting period.

**Best Management Practice (BMP)** - both structural devices to store or treat stormwater runoff and non-structural programs or practices which are designed to prevent or reduce the pollution of the waters of the State of Georgia.

**Construction Activity** - the disturbance of soils associated with clearing, grading, excavating, filling of land, or other similar activities which may result in soil erosion.

**Construction General Permits (CGPs)** - the Georgia NPDES Permit for Stormwater Discharges Associated with Construction Activity Nos. GAR100001, GAR100002, and GAR100003, which identify the Manual for Erosion and Sediment Control in Georgia (Green Book) and stream buffer requirements.

**Control Measure** - any BMP or other method used to prevent or reduce the discharge of pollutants to the waters of the State of Georgia.

**Clean Water Act (CWA)** - the Federal Clean Water Act (formerly known as the Federal Water Pollution Control Act or the Federal Water Pollution Control Act Amendments of 1972), as amended.

**Director** - the Director of the Environmental Protection Division of the Department of Natural Resources, State of Georgia.

**Discharge** - the discharge of a pollutant.

**Discharge-related Activities** - includes activities which cause, contribute to, or result in stormwater point source pollutant discharge; and measures to control stormwater discharges, including the siting, construction and operation of BMPs to control, reduce or prevent stormwater pollution.

**EPA or USEPA** - the United States Environmental Protection Agency.

**EPD** - the Environmental Protection Division of the Department of Natural Resources, State of Georgia.

**Existing Permittee** - a Phase II municipal separate storm sewer system designated by EPD for coverage under this permit prior to the issuance date of this permit.

Green Infrastructure/Low Impact Development (GI/LID) – management approaches, such as better site design or conservation design, or systems and practices that use or mimic natural processes to reduce runoff and pollutant loading, that result in infiltration, evapotranspiration, or the harvesting and use of stormwater, or any of the stormwater best management practices described in the Georgia Stormwater Management Manual, Volume 2, or an equivalent local design manual.

**Illicit Connection** - any man-made conveyance connecting a non-stormwater discharge directly to a municipal separate storm sewer system.

**Illicit Discharge** - any direct or indirect non-stormwater discharge to a municipal separate storm sewer system, including, but not limited to, sewage, process wastewater, and washwater. The discharge may be continuous or intermittent in occurrence.

**Linear Transportation Projects** – construction projects on traveled ways including but not limited to roads, sidewalks, multi-use paths and trails, and airport runways and taxiways.

**Maximum Extent Practicable (MEP)** - the controls necessary for the reduction of pollutants discharged from a municipal separate storm sewer system. These controls may consist of a combination of BMPs, control techniques, system design and engineering methods, and such other provisions for the reduction of pollutants discharged from an MS4 as described in the SWMP.

Municipal Separate Storm Sewer System (MS4) - a conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels or storm drains, owned or operated by a municipality or other public body, designed or used for collecting or conveying stormwater runoff and is not a combined sewer or part of a Publicly Owned Treatment Works.

**National Pollutant Discharge Elimination System (NPDES)** - the program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits and imposing and enforcing pretreatment requirements under Sections 307, 402, 318, and 405 of the Clean Water Act.

**New Development** - land disturbing activities, structural development (construction, installation or expansion of a building or other structure), and/or creation of impervious surfaces on a previously undeveloped site.

**New Permittee** - a Phase II MS4 designated by EPD for coverage under this permit based on the 2020 or subsequent decennial U.S. Census, or based on other State designation criteria.

**Notice of Intent (NOI)** - the mechanism used to register for coverage under this general permit.

**Outfall** - the most downstream point (i.e. final discharge point) on an MS4 where it discharges to receiving waters of the State.

**Owner or Operator** - the owner or operator of any MS4 or any activity subject to regulation under the NPDES program.

**Permitted Area** - the area of a City or County that is covered by this General NPDES Stormwater Permit. For a City, it refers to the entire City limits; for a County, it refers only to that part of the County contained within an "Urbanized Area" as defined by the latest Decennial Census by the Bureau of the Census.

**Point Source** - any discernible, confined and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged into the waters of the State of Georgia. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

**Pollutant** - dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal and agricultural waste discharged into water.

**POTW** - Publicly Owned Treatment Works.

**Redevelopment** - the structural development (construction, installation or expansion of a building or other structure), creation or addition of impervious surfaces, replacement of impervious surface not part of routine maintenance, and land disturbing activities associated with structural or impervious development. Redevelopment does not include such activities as exterior remodeling.

**Small MS4** (defined in 40 CFR Part 122.26(b)(16)) - all separate storm sewers that are owned or operated by the United States, the State of Georgia, city, town, borough, county, parish, district, association, or other public body (either created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity or a designated and approved management agency under Section 208 of the CWA that discharges to the waters of the State of Georgia but is not defined as a "large" or "medium" MS4. This term includes systems similar to municipal MS4s, such as systems at military bases, large hospitals, universities, prison complexes, and highways and

other thoroughfares. This definition does not include separate storm sewers in very discrete areas, such as individual buildings.

State Act - the Georgia Water Quality Control Act, as amended.

**State Rules (Rules)** - the Georgia Rules and Regulations for Water Quality Control. Stormwater - stormwater runoff, snow melt runoff, and surface runoff and drainage.

**Stormwater Management Program (SWMP)** - the comprehensive program required to be developed and implemented under the terms and conditions of this permit, containing the procedures, schedules, forms and other documents needed to manage the quality of stormwater discharged from a MS4 to the maximum extent practicable in order to protect water quality.

Waters of the State - any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wells, wetlands, and all other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of the State which are not entirely confined and retained completely upon the property of a single individual, partnership, or corporation.

# RESPONSIBLE PARTY AND PLAN CERTIFICATION

# Responsible Official:

Regina McDuffie City Manager 601 Gloucester Street Brunswick, GA 31520 (912) 267-5500

# **Designated Stormwater Management Program Contacts:**

Garrow Alberson
Director, Public Works
525 Lakewood Avenue
Brunswick, GA 31520
(912) 267-5540
galberson@cityofbrunswick-ga.gov

# **Sharing Responsibility**

The City of Brunswick does not share responsibility with any other entity for implementation of the Best Management Practices outlined in this Plan.

# **Certification Statement**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed Name:	Regina McDuffie	Date: _	5/11/2023
Signature:	Frank -	_ Title: <u>_Cit</u>	y Manager

### Introduction

In 1987, amendments to the Clean Water Act (CWA) established a legal framework and requirements for the United States Environmental Protection Agency (USEPA) to develop a comprehensive, phased program for regulating municipal and industrial stormwater discharges under the National Pollutant Discharge Elimination System (NPDES) permit program. In response, the USEPA instituted Phase I of the NPDES Stormwater Program in November 1990. The Phase I program required medium to large communities with populations of at least 100,000 people and with municipal separate storm sewer systems (MS4s) to develop programs to address the quality of their stormwater discharges. These amendments to the CWA also placed stormwater management requirements on many industries based upon standard industrial classification (SIC) codes, including stormwater permitting requirements on construction activities that disturbed five or more acres of land.

The NPDES Phase II Stormwater regulations were established in December 1999. The Phase II stormwater requirements affect smaller communities with MS4s serving populations of less than 100,000 people, as well as construction activities that disturb one or more acres of land. Only those small MS4s located in "urbanized areas", as defined by the U.S. Bureau of the Census, are required to apply for a stormwater NPDES permit and develop a Stormwater Management Program (SWMP). The designated Stormwater Phase II permitting authority in the State of Georgia is the Environmental Protection Division (EPD) of the Georgia Department of Natural Resources.

The City of Brunswick was designated by the Georgia EPD as a City that must seek coverage under the NPDES Phase II regulations and, as required, prepared and submitted a Notice of Intent (NOI) and a SWMP. The City's SWMP was last reviewed and approved by the EPD in 2020. The Georgia EPD re-issued the NPDES Phase II MS4 permit on December 6, 2022 and the City of Brunswick submitted an NOI to continue coverage under the re-issued permit. A copy of the City's current permit and NOI is included in Appendix A.

The City of Brunswick has been designated as a permittee with a population exceeding 10,000 and therefore must meet certain minimum requirements and best management practices (BMPs). This Plan addresses six Minimum Control Measures (MCMs), with supporting documentation included in appendices:

- Public Education and Outreach
- Public Involvement/Participation
- Illicit Discharge Detection and Elimination
- Construction Site Stormwater Runoff Control
- Post-Construction Stormwater Management in New Development and Redevelopment (including a Green Infrastructure/Low Impact Development Program)
- Pollution Prevention/Good Housekeeping for Municipal Operations

The Georgia EPD has also required the City of Brunswick to expand its SWMP to include BMPs to address the following Plans and Programs, which are discussed in the SWMP and also included as appendices to the Plan:

- Enforcement Response Plan
- Impaired Waters Monitoring and Implementation Plan

# A. Public Education and Outreach

<u>40 CFR Part 122.34(b)(1) Requirement</u>: You must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff.

The BMPs listed below address the requirements above in accordance with the guidelines included in Table 4.2.1(a) of the NPDES Phase II MS4 permit.

#### A.1 STORMWATER EDUCATION – PUBLIC PRESENTATIONS

#### A.1.1. Target Audience:

Civic organizations and the general public

#### A.1.2. Description of BMP:

The City has developed a comprehensive Public Education Program and routinely speaks to civic groups, schools, and to various other community groups. Many people do not realize that common actions such as washing their car, littering, or not picking up after pets can have adverse impacts on water quality, and the City has implemented a strong public education and outreach program to raise public awareness about stormwater pollution prevention measures.

As part of their ongoing Public Education Program, City staff or an authorized designee will provide at least one public stormwater-related presentation during each reporting period. The City may work with local groups such as Keep Golden Isles Beautiful (KGIB), a local Keep America Beautiful and Keep Georgia Beautiful Foundation affiliate, to provide education presentations. Additional presentations may be scheduled during different outreach events and/or if requested by the general public. Educational materials will be provided as appropriate. Presentations will include information about the impacts of stormwater pollution, steps the public can take to improve water quality, or how to prevent and report illicit discharges. Topics for different talks will be tailored towards the target audience, if applicable. For example, presentation to gardening centers and golf clubs may discuss the impacts of fertilizers on water quality, and presentations to school groups may discuss common stormwater pollution prevention techniques that children may be able to assist with such as litter prevention and picking up after pets.

# A.1.3. Measurable Goal(s):

a. Provide at least one stormwater-related presentation to the community each reporting period, targeting civic organizations, schools, the library, etc.

# A.1.4. Documentation For Annual Report:

a. Synopsis of each presentation and/or copy of presentation/educational handouts

 Number of attendees and the date the presentation was given, as summarized in a summary tracking spreadsheet maintained by the KGIB – copy of spreadsheet and/or summary report from KGIB to be provided

# A.1.5. Schedule:

a. Minimum of one (1) speaking engagement: Each Reporting Period, 2023-2027

# **A.1.6.** Person (Position) Responsible for Overall BMP Management and Implementation: Public Works Director

# A.1.7. Rationale for choosing BMP and setting measurable goal(s):

Many groups and schools in the area already turn to the City to provide speakers for meetings. The City can improve public stormwater awareness by including stormwater pollution preventions-related topic in presentations.

# A.1.8. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit?

As educational presentations are continuously provided within the community, the general public will become better educated on stormwater management issues and reduce their impacts on local waterways. The City will report the number of speaking engagements and attendees as part of the City's Annual Report.

#### A.2. PASSIVE EDUCATION SIGNAGE

#### A.2.1. Target Audience:

General public

# A.2.2. Description of BMP:

Passive educational signage that targets litter prevention and stormwater-related education exists all around the City. A map of locations where educational signage exists within the City will be created and will also include example photos. For example, the KGIB placed two unique "Litter Prevention Sculptures" in community public spaces between 2017-2019, each portraying a coastal creature and highlighting the effects litter has on its environment. Information about these educational sculptures can be found at <a href="https://www.kgib.org/copy-of-ccga-nontraditional-recycli">https://www.kgib.org/copy-of-ccga-nontraditional-recycli</a> The passive educational signage locations include public parks, so they are visited by numerous residents and tourists each year.

# A.2.3. Measurable Goal(s):

- a. Each reporting period, update map with any new educational signage added.
- b. Evaluate the educational signage condition and maintenance needs at least once per each permit period by taking photographs.

# A.2.4. Documentation For Annual Report:

- a. Map and table of locations of stormwater-related and litter prevention signage.
- b. Photos of existing signage/art taken during inspection.

#### A.2.5. Schedule:

b. Each Reporting Period, 2023-2027

# A.2.6. Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

# A.2.7. Rationale for choosing BMP and setting measurable goal(s):

The BMP provides information to the general public on stormwater management related issues in a way that is visually appealing. The City believes education of the public is an effective means of developing long-term awareness of activities that can threaten water quality in local water ways. The City believes that this BMP will assist in the distribution of educational materials to residents and tourists that don't access the City's digital resources as described in other BMPs. Approximately 2.4 million tourists visit the Golden Isles' beaches and parks each year where passive educational signage is located.

# A.2.8. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit?

As these educational signs/artworks are placed in commonly visited publicly-accessed areas within the community, the general public will become better educated on stormwater management issues and reduce their impacts on local waterways. The City will report the number and location of educational signs as part of the City's Annual Report.

#### A.3. PUBLIC SERVICE ANNOUCEMENTS

# A.3.1. Target Audience:

General public, businesses and industries

# A.3.2. Description of BMP:

As part of a comprehensive Public Education Program, the City routinely airs radio announcements that discuss various measures that can be taken to prevent or reduce stormwater pollution and how to report stormwater-related issues to City staff. These announcements frequently feature animated marine characters ("Popcorn and Jumbo Shrimp") the City created to raise public awareness about stormwater-related issues.

As part of its ongoing educational program, the City will continue to air radio announcements that will include information about relevant stormwater-related topics to raise public awareness about the impacts of stormwater pollution and steps the public can take to improve water quality. The topics of the announcements will be changed on occasion to cover a variety of educational topics.

# A.3.3. Measurable Goal(s):

a. A minimum of 10, 30-second radio announcements will be aired each reporting period

# A.3.4. Documentation For Annual Report:

- a. Transcript of the radio commercial or audio file of recording
- b. Invoice from the local radio station showing the number of times the radio station played the commercial

# A.3.5. Schedule:

a. Each Reporting Period, 2023-2027

# A.3.6. Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

# A.3.7. Rationale for choosing BMP and setting measurable goal(s):

The BMP provides information to the general public on stormwater management related issues and reaches a wide audience.

# A.3.8. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit?

As educational messages are continuously given via radio announcements to the community, the general public will become better educated on stormwater management issues and reduce their impacts on local waterways.

#### A.4. STORMWATER WEBSITE

# A.4.1. Target Audience:

General public, businesses and industries

# A.4.2. Description of BMP:

The City will maintain a stormwater management webpage that can be viewed at https://www.brunswickga.org/publicworks/page/stormwater-management.

The City webpage includes educational information about the City's stormwater programs and activities, including information about stormwater discharges, pollution prevention strategies, illicit discharge prevention (see BMP C.4 for additional information), and how to report illicit discharges verbally and electronically. Also, the City added links to other websites that have relevant information about stormwater pollution prevention. The website will be updated each reporting period.

# A.4.3. Measurable Goal(s):

- a. Update webpage each reporting period
- b. Record the number of webpage hits using a tracker, such as Google Analytics or other comparable counting mechanisms

# A.4.4. Documentation For Annual Report:

- a. Number of webpage views
- b. Screenshot of webpage or summary of webpage changes

#### A.4.5. Schedule:

a. Each Reporting Period, 2023-2027

# A.4.6. Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

# A.4.7. Rationale for choosing BMP and setting measurable goal(s):

The BMP provides information to the general public on stormwater management related issues in an easy, widely-accessible format. Furthermore, because this information is updated each reporting period, the City can keep the public up-to-date on new and developing issues related to stormwater management and water resources issues.

# A.4.8. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit?

The City will track webpage hits using a tracker, such as Google Analytics, to determine if this BMP is reaching a wide audience.

# B. PUBLIC INVOLVEMENT / PARTICIPATION

40 CFR Part 122.34(b)(2) Requirement: You must, at a minimum, comply with State, Tribal, and local public notice requirements when implementing a public involvement/ participation program.

The BMPs listed below address the requirements above in accordance with the guidelines included in Table 4.2.2(a) of the NPDES Phase II MS4 permit.

# **B.1. COMMUNITY LITTER PICK-UP PROGRAM**

# **B.1.1.** Target Audience:

General public

# **B.1.2.** Description of BMP:

The City has an established littler pick-up program in partnership with KGIB. Volunteers pick up trash at dedicated outreach events in the community to prevent trash and other debris from washing into the City's stormwater system, marshes, and waterways. Debris and litter are collected and appropriately disposed of or recycled.

#### **B.1.3.** Measurable Goals:

a. 100 hours per year of volunteer labor for litter pick-up

# **B.1.4.** Documentation For Annual Report:

- a. Number of volunteer hours recorded during each reporting period based on the summary tracking spreadsheet (Excel file) maintained by the KGIB
- Amount of litter and debris collected from litter pick-up event(s) based on total number of trash bags collected per the KGIB tracking spreadsheet
- c. Copy of the summary tracking spreadsheet maintained by KGIB that includes information noted above

#### B.1.5. Schedule:

a. Each Reporting Period, 2023-2027

# B.1.6. Person (Position) Responsible for Overall BMP management and Implementation:

**Public Works Director** 

# **B.1.7.** Rationale for choosing BMP and setting measurable goal(s):

This BMP provides free assistance to the City and educates volunteers.

# B.1.8. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit?

Less litter in the streets, and therefore less litter entering the City's MS4 system, will indicate that the litter pick-up program is effective.

#### **B.2. RECYCLING EVENT**

# **B.2.1.** Target Audience:

General public

# **B.2.2.** Description of BMP:

The City of Brunswick will continue to host a "Bring One for the Chipper" program to encourage people to properly dispose of their Christmas trees. This campaign is part of KGIB's official annual Christmas tree recycling program. Residents are encouraged to bring Christmas trees to be chipped and recycled into mulch at this annual event, instead of dumping them along roadways, marshes, and creeks. The mulch is then used on City property and provided to residents. This event is advertised on local media.

# **B.2.3.** Measurable Goal(s):

- a. Hold the Bring One for the Chipper event once per year
- b. Advertise the event on local media (e.g., social media, newspaper)
- c. Maintain records of the number of trees recycled

#### **B.2.4.** Documentation For Annual Report:

- a. Number and/or amount of trees recycled
- b. Copy of outreach/promotional material advertising the event

# **B.2.5.** Schedule:

a. One event per year, 2023-2027

# B.2.6. Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

# B.2.7. Rationale for choosing BMP and setting measurable goal(s):

The objective of this event is to facilitate public participation in stormwater program implementation while making the public aware of issues related to dumping of organic materials in the drainage system. Debris, such as discarded trees, can block streams causing flooding and also cause water quality impairments as they decay.

# B.2.8. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit?

The City will keep records of the number or amount of trees collected and therefore prevent organic waste from entering the drainage system. This is a direct measurement of the effectiveness of this BMP in removing pollution.

#### **B.3. CITIZEN HOTLINE**

# **B.3.1.** Target Audience:

General public

# **B.3.2.** Description of BMP:

The City will maintain a Citizen Hotline so the public can call and ask questions about the City's Stormwater Program as well as report illicit discharge complaints and illegal dumping. Stormwater program questions and illicit discharge/illegal dumping complaints may be called in to the Public Works 24-Hour Dispatch Service hotline at (912) 267-3703 or reported to the City's Code Enforcement Officers. Contact information for the Citizen Hotline and City's Code Enforcement Officers is posted on the City's Stormwater and Public Works webpages. Stormwater questions, service requests, and complaints can also be reported electronically through the following webpage link:

https://www.brunswickga.org/publicworks/webform/public-works-service-request.

Each question or complaint is logged and responses to complaints are prioritized based on the severity of the issue and generally investigated within at least 72 hours. Follow up activities are documented.

# **B.3.3.** Measurable Goal(s):

- a. Advertise the Citizen Hotline on the City's stormwater webpage and through local media
- b. Staff and maintain Citizen Hotline
- c. Respond/address stormwater questions and complaints (generally within 72 hours of receipt)
- d. Investigate illicit discharge and illegal dumping complaints received and take appropriate action
- e. Document follow-up activities, including any enforcement actions

#### **B.3.4.** Documentation For Annual Report:

a. Provide a summary of questions and illicit discharge and illegal dumping complaints received and follow-up performed (e.g., complaint date, type of complaint, complaint status) during the reporting period

# **B.3.5.** Schedule:

a. Ongoing throughout the year, 2023-2027

# **B.3.6.** Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

# **B.3.7.** Rationale for choosing BMP and setting measurable goal(s):

Stormwater issues may be more easily identified and corrected by providing the public a way to report complaints and ask questions.

# B.3.8. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit

The City will maintain records of the number and types of questions and complaints investigated through this BMP.

#### B.4. LITTER PREVENTION PUBLIC OUTREACH EVENT

# **B.4.1.** Target Audience:

General public, businesses, and industries

# **B.4.2.** Description of BMP:

The City provides opportunities to solicit citizen involvement and encourage the public to help protect stormwater quality by reducing litter and recycling wastes. The City of Brunswick routinely partners with the Brunswick Downtown Development Authority, KGIB, and/or other entities to sponsor cleanup events in the City. Clean-up events may be organized as part of a Great American Cleanup, Georgia Cities Week cleanup event, or as part of another community event. The events are advertised to the public and volunteers are enlisted to clean up their neighborhoods or assist with cleanups in other neighborhoods that need assistance. The City may also encourage waste recycling and proper waste management by sponsoring or coordinating with other entities to host special waste collection events open to the general public for hard-to-recycle wastes and other items that are commonly discarded as litter.

The City will conduct at least one dedicated litter prevention public outreach activity from the list below in Section B.4.3 each reporting period to involve the public with administration of the City's SWMP. The event will be advertised on local media (e.g., social media, newspaper), and the City will maintain documentation that the event was held.

# **B.4.3.** Measurable Goal(s):

Perform at least one of the following public outreach activities each reporting period:

- a. Host a Cleanup Event within the City and properly dispose of litter and debris collected from the cleanup
- b. Operate a recycling / waste collection event for hard-to-recycle items and/or wastes commonly discarded as litter at an event open to City residents

# **B.4.4.** Documentation For Annual Report:

The following documentation for the selected public outreach event will be provided:

- a. Documentation of the event advertisement to City residents (e.g., screenshot, copy of the press release/article/post, or event flyer); number of volunteers that attended the event (summary tracking spreadsheet or sign-in log); and the amount of debris and litter collected during cleanup based on number of trash bags collected and/or documentation of debris and litter disposal records
- b. Documentation of the event advertisement to City residents (e.g., screenshot, copy of the press release/article/post, or event flyer) and proof that the event was held (e.g., photographs and/or summary of quantity of wastes/recyclables collected at the event)

#### **B.4.5.** Schedule:

a. Each Reporting Period, 2023-2027

# **B.4.6.** Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

# **B.4.7.** Rationale for choosing BMP and setting measurable goal(s):

Urban streams are often an unnoticed natural resource feature that only seems to garner the public's attention when flooding occurs or when a significant pollution event occurs. The objective of having a cleanup program or waste collection/recycling event is to facilitate public participation in the protection of urban streams such that people better understand their crucial role in local stormwater management. The intent is that people's participation in the cleanup/litter prevention activities will result in improved stream health as well as stream functionality. Once people interact more with these natural resource features, people will better understand how their behavior impacts local streams and creeks.

# B.4.8. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit?

The City will keep records of the amount of trash removed and/or volunteer participation. This is a direct measurement of the effectiveness of this BMP in removing trash, debris and pollution from the streams and creeks.

# C. ILLICIT DISCHARGE DETECTION AND ELIMINATION

40 CFR Part 122.34(b)(3) Requirement: You must develop, implement and enforce a program to detect and eliminate illicit discharges into your small MS4. You must:

- A) Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and location of all waters of the State that receive discharges from those outfalls;
- B) Effectively prohibit, through ordinance, or other regulatory mechanism, non-stormwater discharges into your storm sewer system and implement appropriate enforcement procedures and actions:
- C) Develop and implement a plan to detect and address non-stormwater discharges, including illegal dumping, to your system; and
- D) Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.

The BMPs listed below address the requirements above in accordance with the guidelines included in Table 4.2.3(a) of the NPDES Phase II MS4 permit.

#### C.1. LEGAL AUTHORITY

# **C.1.1.** Description of BMP:

The City has established adequate legal authority by adopting an Illicit Discharge Prohibition as part of their Stormwater Management Ordinance (Chapter 22A, Article II). A copy of the City's Stormwater Management Ordinance is included in Appendix B. The City's Stormwater Management Ordinance was approved in 2020. This ordinance prohibits the discharge of pollutants and other non-stormwater discharges into the City's storm sewer system and establishes appropriate enforcement procedures.

The City will review the Ordinance each reporting period, and revise it as needed to ensure illicit discharges are prohibited and submit a copy of the Ordinance, if revised, to the Georgia EPD with the Annual Report.

# C.1.2. Measurable Goal(s):

- a. Prohibit illicit discharges through the City's Stormwater Management Ordinance
- b. Review the ordinance each reporting period to determine if any updates are needed

# **C.1.3.** Documentation For Annual Report:

a. Copy of ordinance, if revised during the reporting period

# C.1.4. Schedule:

- a. Prohibit illicit discharges: Ongoing
- b. Review ordinance for needed updates: Each Reporting Period, 2023-2027

# **C.1.5.** Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

# C.1.6. Rationale for choosing BMP and setting measurable goal(s):

An Illicit Discharge Ordinance is necessary to provide the City with the authority to prevent illicit discharges.

# C.1.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit?

The stormwater management municipal code provides regulations that reduce illicit discharges and prevent illicit discharges from entering the MS4 and waters of the state.

#### C.2. MS4 OUTFALL MAP AND INVENTORY

# C.2.1. Description of BMP

The City of Brunswick has developed a GIS-based inventory and a map showing the location of outfalls from the MS4 and the names and location of all Waters of the State that receive discharges from those outfalls. A map and inventory of the MS4 outfalls is included in the IDDE Plan (Appendix C) and in Appendix D.

Due to its coastal location, many stormwater outfalls in the City are tidally-influenced or surcharged, meaning that these outfalls are often wet for natural reasons and not because of an illicit discharge. During the previous permit period, the City conducted field assessments and reviewed historical information on file to designate outfalls that were continuously "wet" due to tidal activity or surcharge of the system, and those that were dry. A "wet" designation means that the invert of the outfall is below the mean high tide or water level causing the drainage system to be flooded daily. Additional information about these outfall designations and the City's approach to field assessments for each type of MS4 outfall is discussed in the City's IDDE Plan (Appendix C).

Each year, the City will update the MS4 outfall map and inventory to reflect the addition of outfalls from new infrastructure projects or developments, and the removal of outfalls that have been reclassified or removed.

# C.2.2. Measurable Goal(s):

a. Each reporting period, maintain and update an outfall inventory database and map showing the location of all outfalls from the MS4 and the names and location of all Waters of the State that receive discharges from those outfalls, including "wet" and "dry" outfall designations

#### **C.2.3.** Documentation For Annual Report:

- a. Updated MS4 outfall inventory and map
- b. Number of outfalls added/removed during the reporting period
- c. Total number of outfalls

# C.2.4. Schedule:

a. Each Reporting Period, 2023-2027

# C.2.5. Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

# C.2.6. Rationale for choosing BMP and setting measurable goal(s):

The City needs an accurate inventory of its MS4 outfalls to implement an effective dry weather screening program. Ensuring that outfalls screened are actual MS4 outfalls will make the most efficient use of City resources.

# C.2.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit?

The City will maintain the records of the number and types of illicit discharges eliminated through implementation of the dry weather screening program.

# C.3. ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) PLAN

# C.3.1. Description of BMP

The City of Brunswick has established an IDDE Plan to inspect MS4 outfalls to determine if upstream facilities/connections are discharging non-stormwater flows to the drainage system and to eliminate those illicit discharges. A copy of the IDDE Plan is included in Appendix C.

The City will perform inspections and/or dry weather screening of the MS4 outfalls within its current inventory, and investigate any potential illicit discharges, in accordance with the procedures outlined in the IDDE Plan. Suspect or obvious illicit discharges require follow-up actions and activities, as specified in the IDDE Plan to determine the specific source(s) of contamination. Should the City positively identify any illicit discharges, the City will perform enforcement actions as dictated by the Stormwater Management Ordinance (Illicit Discharge provision), the IDDE Plan, and the City's Enforcement Response Plan (ERP) to remove positively identified illicit discharges. The City's ERP is included in Appendix E.

Each reporting period, the City will screen at least 5% of the total number of stormwater outfalls listed on the City's most current inventory of MS4 outfalls, and 100% of the inventory will be screened over the five-year permit period.

# C.3.2. Measurable Goal(s):

- a. Dry weather screen 100% of all MS4 outfalls over a five-year period with at least 5% of listed stormwater outfalls screened each reporting period
- b. Investigate and perform source tracing for 100% of all suspected illicit discharges
- c. Enforce the Stormwater Management Ordinance (w/Illicit Discharge provision), IDDE Plan, and ERP for 100% of positively identified illicit discharges

# **C.3.3.** Documentation For Annual Report:

- a. Number and percentage of MS4 outfalls inspected during the reporting period
- b. Documentation of inspections and dry weather screening, such as a table of individual inspection reports with a record for each outfalls inspected and the findings of that inspection, or a copy of the completed dry weather screening forms (Outfall Reconnaissance Inventory Form) for all MS4 Outfalls screened within the reporting period
- Records of any source tracing or enforcement activities conducted as a result of dry weather screening activities

# C.3.4. Schedule:

- a. Each Reporting Period, 2023-2027: Dry weather screen outfalls
- b. Ongoing, 2023 2027: Perform source tracing as needed
- c. Ongoing, 2023 2027: Enforce Illicit Discharge provision of the Stormwater Management Ordinance as needed

# **C.3.5.** Person (Position) Responsible for Overall BMP Management and Implementation: Public Works Director

# **C.3.6.** Rationale for choosing BMP and setting measurable goal(s):

Dry weather screenings are useful in identifying illicit discharges and sources. Appropriate corrective and enforcement actions will be taken if an illicit discharge is detected.

# C.3.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit?

The City will maintain the records of the number and types of illicit discharges investigated and eliminated through implementation of this BMP.

#### C.4. ILLICIT DISCHARGE EDUCATION

# C.4.1. Description of BMP

The City has developed an illicit discharge education program to inform the public, government employees, businesses and industrial facilities of the hazards associated with illegal discharges and how to prevent them in the household and/or workplace. The City will continue to implement an illicit discharge educational program by including education information on illicit discharges on the stormwater webpage and addressing illicit discharges in its outreach to the public at least once per year. The Stormwater Webpage will encourage residents to report illicit discharges and illicit dumping, include telephone numbers to facilitate reporting as well as include a link to allow residents to report illicit discharges/dumping through the City's website. This BMP is closely related to the Public Education BMPs A.1-A.4 and IDDE BMP C.5.

# C.4.2. Measurable Goal(s):

- a. Each reporting period, include illicit discharge education information, including information about how to report illicit discharges, on the City's Stormwater Webpage
- b. Provide educational handouts each reporting period that address illicit discharge prevention either through the City's website and/or as handouts at City Hall

# **C.4.3.** Documentation For Annual Report:

- a. Number of webpage views
- b. Screenshot of webpage
- c. Copy of educational handouts provided through the city's website and/or as handouts

#### C.4.4. Schedule:

a. Each Reporting Period, 2023-2027

# C.4.5. Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

# C.4.6. Rationale for choosing BMP and setting measurable goal(s):

This BMP will increase public awareness on the negative effects of illicit discharges into streams and how to prevent these occurrences.

# C.4.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit?

The City will establish an internal tracking mechanism to count the number of visitors that view and click on the Stormwater Webpage. This data will allow the City to track the number of visitors who view educational materials.

#### C.5. COMPLAINT RESPONSE

# C.5.1. Description of BMP

The City of Brunswick has implemented a program for receiving, investigating, and tracking the status of illicit discharge complaints. Complaints can be made by calling the City's Public Works 24-Hour Dispatch Service at (912) 267-3703 or Code Enforcement Officers. Contact information for these staff is listed on the City's webpage. Stormwater complaints can also be reported electronically through the City's webpage link:

https://www.brunswickga.org/publicworks/webform/public-works-service-request

Each question or complaint is logged and responses to complaints are prioritized based on the severity of the issue and generally investigated within at least 72 hours. All complaints received, the City's response, records of any investigation activities performed, and enforcement actions undertaken are recorded and this information is kept on file.

# C.5.2. Measurable Goal(s):

- a. Promote, publicize and facilitate public reporting of illicit discharges through the City's website
- b. Investigate and take appropriate action for illicit discharge complaints [typically within three (3) business days (72 hours)]
- c. Record illicit discharge complaints and actions, including the complaint date, type of complaint, date of investigation, and complaint status

#### C.5.3. Documentation For Annual Report

a. Summary of the illicit discharge complaints received (e.g., complaint date, type of complaint, date of investigation, complaint status) during the reporting period

#### C.5.4. Schedule:

a. Ongoing throughout the year, 2023-2027

# C.5.5. Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

# C.5.6. Rationale for choosing BMP and setting measurable goal(s):

Illicit discharges may be more easily identified and corrected by providing the public with a way to report complaints. Public complaints are often the first indicator of an illicit discharge.

# C.5.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit?

The City will maintain records of the number and types of illicit discharge complaints investigated and the number of illicit discharges eliminated through this BMP.

# D. CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

<u>40 CFR Part 122.34(b)(4) Requirement</u>: You must develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of stormwater discharges from construction activity disturbing less than one acre must be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. Your program must include:

- A) An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance;
- B) Requirements for construction site operators to implement appropriate erosion and sediment control best management practices;
- C) Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
- D) Procedures for site plan review which incorporate consideration of potential water quality impacts;
- E) Procedures for receipt and consideration of information submitted by the public; and
- *F)* Procedures for site inspection and enforcement of control measures.

The BMPs listed below address the requirements above in accordance with the guidelines included in Table 4.2.4(a) of the NPDES Phase II MS4 permit.

<u>NOTE:</u> The City of Brunswick is **not** a Local Issuing Authority (LIA) for Land Disturbance Activity (LDA) Permits as defined by the Georgia Erosion and Sedimentation Act (GESA). The Georgia EPD has determined that those local governments that do not have issuing authority for LDA Permits are not required to implement requirements of the Construction Site Stormwater Runoff Control Minimum Control Measure (MCM). The EPD and its staff are responsible for regulating, permitting, and enforcing State law for LDA Permits and the associated E&S requirements for the City of Brunswick.

#### D.1. LEGAL AUTHORITY

# **D.1.1.** Description of BMP

The City of Brunswick has adopted an Erosion, Sedimentation and Pollution Control Ordinance (E&S Ordinance) to reduce pollutants in stormwater runoff to the MS4 from construction activities. A copy of this ordinance is included in Appendix B. As noted above, the City of Brunswick is currently not an LIA for LDA Permits as defined by GESA and therefore is not required to update its E&S Ordinance to comply with GESA.

In accordance with permit requirements, the City's Clean Community Ordinance (i.e., Litter Ordinance) was previously updated to include requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality (see Section 25-13.4 of the Ordinance).

# D.1.2. Measurable Goal(s):

- a. Review the E&S ordinance each reporting period to determine if the City wishes to make any updates related to GESA standards
- b. Submit a copy of the ordinance(s), if revised as detailed above, to the Georgia EPD with the subsequent Annual Report

# **D.1.3.** Documentation For Annual Report:

a. Copy of ordinance, if revised during the reporting period

#### D.1.4. Schedule:

a. Ordinance review: Each Reporting Period, 2023-2027

# D.1.5. Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

# D.1.6. Rationale for choosing BMP and setting measurable goal(s):

Ordinances are necessary to provide the City with the authority to reduce construction activity pollutants from entering the City's MS4 and Waters of the State.

# D.1.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit?

Through enforcement of land disturbance activities, construction sites will handle and dispose of wastes properly.

#### D.2. SITE PLAN REVIEW PROCEDURES

# D.2.1. Description of BMP

The EPD and Natural Resources Conservation Service (NRCS) are responsible for reviewing all Erosion, Sedimentation, and Pollution Control (ES&PC) Plans for qualifying and development projects. ES&PC plans will be reviewed by the EPD and NRCS for compliance with the Manual for Erosion and Sedimentation Control in Georgia "Green Book". Each reporting period, the City will request information about qualifying projects reviewed by the EPD and NRCS for inclusion in the Annual Report.

# D.2.2. Measurable Goal(s):

a. All qualifying developments within the City of Brunswick will have their ES&PC plans reviewed by EPD and NRCS.

# **D.2.3.** Documentation For Annual Report:

The City is not an issuing authority; therefore, they do not review and approve ES&PC Plans in conjunction with a proposed land development project. ES&PC plan review and approval is the responsibility of the EPD.

The following information will be requested from the NRCS and EPD, and if received, will be provided in the City's Annual Report:

- a. List of site plans received.
- b. Number of site plans reviewed, approved, or denied during the reporting period.
- c. List or table of LDA Permits issued during the reporting period.

#### D.2.4. Schedule:

The City is not an issuing authority; therefore, they do not review and approve ES&PC Plans in conjunction with a proposed land development project. ES&PC plan review and approval is the responsibility of the EPD.

# D.2.5. Person (Position) Responsible for Overall BMP Management and Implementation:

The City is not an issuing authority; therefore, they do not review and approve ES&PC Plans in conjunction with a proposed land development project. ES&PC plan review and approval is the responsibility of the EPD.

# D.2.6. Rationale for choosing BMP and setting measurable goal(s):

The City is not an issuing authority; therefore, they do not review and approve ES&PC Plans in conjunction with a proposed land development project. ES&PC plan review and approval is the responsibility of the EPD.

# D.2.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit?

The City is not an issuing authority; therefore, they do not review and approve ES&PC Plans in conjunction with a proposed land development project. ES&PC plan review and approval is the responsibility of the EPD.

#### D.3. INSPECTION PROGRAM

#### D.3.1. Description of BMP

The EPD is responsible for conducting inspections of construction sites and enforcing E&S requirements. All projects with active land disturbance activities will be periodically inspected for compliance with the Georgia Erosion and Sedimentation Control Act and in general accordance with the City's E&S Ordinance by EPD staff. The permit requires that active construction sites be inspected at least once during the reporting period.

#### D.3.2. Measurable Goal(s):

a. 100% of active development sites with ongoing land disturbance activities will be periodically inspected by EPD staff

#### **D.3.3.** Documentation For Annual Report:

The City is not an issuing authority; therefore, they are not responsible for conducting E&S inspections. This is the responsibility of the EPD.

#### D.3.4. Schedule:

The City is not an issuing authority; therefore, they are not responsible for conducting E&S inspections. This is the responsibility of the EPD.

## D.3.5. Person (Position) Responsible for Overall BMP Management and Implementation:

The City is not an issuing authority; therefore, they are not responsible for conducting E&S inspections. This is the responsibility of the EPD.

#### D.3.6. Rationale for choosing BMP and setting measurable goal(s):

The City is not an issuing authority; therefore, they are not responsible for conducting E&S inspections. This is the responsibility of the EPD.

## D.3.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit?

The City is not an issuing authority; therefore, they are not responsible for conducting E&S inspections. This is the responsibility of the EPD.

#### D.4. ENFORCEMENT PROCEDURES

#### D.4.1. Description of BMP

Because the City is not an LIA, the EPD is responsible for conducting inspections of construction sites, enforcing E&S requirements, and addressing enforcement requirements for E&S violations related to NPDES construction stormwater permits. If an E&S violation is found, the City relies on the EPD as the primary enforcement agency.

To supplement the enforcement efforts undertaken by the EPD, the City, at its discretion, may implement enforcement procedures for E&S violations documented at construction sites in accordance with the E&S Ordinance included in Appendix B and the escalating series of enforcement mechanisms available to City staff that are outlined in the City's ERP in Appendix E. This may include verbal warnings, written notices of violation (NOVs), stop work orders, and civil or criminal penalties. Violations may be investigated by the City and/or referred to the EPD for further enforcement and investigations.

### D.4.2. Measurable Goal(s):

- a. E&S-related violations will be enforced by the EPD, the primary enforcement agency since the City is not an LIA
- b. At its discretion, the City may implement enforcement actions for identified violations in accordance with the City's E&S ordinance

#### **D.4.3.** Documentation For Annual Report

a. Documentation of any enforcement actions taken by the City during the reporting period

#### D.4.4. Schedule:

a. Ongoing throughout the year, 2023-2027

### D.4.5. Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

### D.4.6. Rationale for choosing BMP and setting measurable goal(s):

Effective enforcement of the City's E&S Ordinance is necessary to ensure that the City properly regulates land disturbance activities that occur within the jurisdiction.

## D.4.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit

The City will maintain records of the number and nature of enforcement actions taken by the City in accordance with the ERP. Documentation regarding any enforcement actions undertaken will be submitted to EPD in the Annual Report each year.

#### D.5. COMPLAINT RESPONSE

### **D.5.1.** Description of BMP

The City of Brunswick has implemented a program for receiving, investigating, and tracking the status of E&S-related complaints. Complaints can be made by calling the City's Public Works 24-Hour Dispatch Service at (912) 267-3703 or Code Enforcement Officers. Contact information for these staff is listed on the City's webpage. Stormwater complaints can also be reported electronically through the City's webpage link:

https://www.brunswickga.org/publicworks/webform/public-works-service-request

Each question or complaint is logged and responses to complaints are prioritized based on the severity of the issue and generally investigated within at least 72 hours. All complaints received, the City's response, records of any investigation activities performed, and enforcement actions undertaken are recorded and this information is kept on file. Depending on the nature of the complaint, the City may contact the Georgia EPD for investigation and enforcement follow-up or the City may elect to investigate and follow-up with the complaint.

## D.5.2. Measurable Goal(s):

- a. Promote, publicize and facilitate public reporting of E&S-related complaints through the City's website
- b. Investigate and take appropriate action for E&S-related complaints, typically within three (3) business days (72 hours)
- c. Record E&S complaints and actions, including the complaint date, type of complaint, investigation date, and complaint status

#### **D.5.3.** Documentation For Annual Report:

a. Summary of the E&S complaints received (e.g., complaint date, type of complaint, investigation date, complaint status) during the reporting period

#### D.5.4. Schedule:

a. Ongoing throughout the year, 2023-2027

#### D.5.5. Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

#### D.5.6. Rationale for choosing BMP and setting measurable goal(s):

E&S problems may be more easily identified and corrected by providing the public a way to report complaints.

## D.5.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit

The City will maintain records of the number and types of E&S complaints received and investigated through implementation of this BMP.

#### D.6. CERTIFICATION

#### D.6.1. Description of BMP

GESA now requires all local government employees involved with plan review, site inspections, or E&S Ordinance enforcement, as well as construction site operators to undergo the applicable training seminars developed by the Georgia Soil and Water Conservation Commission (GSWCC). The City of Brunswick requires all applicable staff to receive this training as soon as possible after the start of their employment.

#### D.6.2. Measurable Goal(s):

a. Applicable City staff will receive E&S training and certification

#### **D.6.3.** Documentation For Annual Report:

a. Proof of certification for applicable City employees, including documentation of current certifications will be provided (e.g., printouts from the GSWCC website)

#### D.6.4. Schedule:

a. Certifications will be renewed as needed based on certification expiration dates

#### D.6.5. Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

#### D.6.6. Rationale for choosing BMP and setting measurable goal(s):

By requiring certification for City employees and construction site operators, the City will ensure that ES&PC Plans are correctly designed and implemented on each active construction site.

## D.6.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit

This BMP ensures that E&S BMPs are installed correctly to prevent sediment from leaving construction sites. State law mandates that discharge from developing sites cannot increase the total suspended solids (TSS) in the receiving stream by more than 25 NTUs so implementation of the approved ES&PC plan should help to achieve that water quality goal. The City will require that all personnel involved in E&S activities maintain their certifications and seek re-certification in accordance with the requirements of the GSWCC.

# E. POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT & REDEVELOPMENT

<u>40 CFR Part 122.34(b)(5)</u> Requirement: You must develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into your small MS4. You must:

- A) Develop and implement strategies which include a combination of structural and/or nonstructural BMPs appropriate for your community;
- B) Use an ordinance or other regulatory mechanism to address post-construction runoff from new development or redevelopment projects; and
- C) Ensure adequate long-term operation and maintenance of BMPs.

The BMPs listed below address the requirements above in accordance with the guidelines included in Table 4.2.5(a) of the NPDES Phase II MS4 permit.

#### **E.1. LEGAL AUTHORITY**

#### E.1.1. Description of BMP

The City has established legal authority to enforce a program to address stormwater runoff into the MS4 from new development and redevelopment projects through the adoption of Post Construction Stormwater Runoff standards that are included in the City's Stormwater Management Ordinance (Chapter 22A, Article III). A copy of the City's Stormwater Management Ordinance is included in Appendix B.

This ordinance requires the use of post-construction stormwater management and site planning and design criteria to protect stormwater from negative impacts associated with land development, including the stormwater design criteria established in the Coastal Stormwater Supplement (CSS) to the Georgia Stormwater Management Manual (GSMM). The design criteria and performance standards listed in the City's Ordinance are consistent with the latest version of the GSMM and CSS, and the requirements of Section 4.2.5.1 of the City's MS4 permit. The ordinance and design manual apply to new development and redevelopment that creates or adds more than 5,000 square feet of impervious surface or that involves land disturbing activities of 1 acre or more, including projects less than 1 acre if they are part of a larger common plan of development or sale.

The City will apply their adopted performance standards during the design of City-construction projects, with the possible exception of linear projects. If the City designs a linear construction project, for which it would be impossible to apply the performance standards, the City will

develop a feasibility program which sets reasonable criteria for determining when implementing performance standards for linear projects is infeasible. This will be submitted to EPD and applied to future linear construction projects upon submittal.

The City will review its Stormwater Management Ordinance each reporting period and revise it as needed to ensure appropriate post-construction stormwater controls are in place and submit a copy of the ordinance, if revised, to the Georgia EPD with the Annual Report.

#### E.1.2. Measurable Goal(s):

- a. Enforce the use of the Post-Construction Standards in the City's Stormwater Management Ordinance for applicable development and redevelopment
- b. Each reporting period, evaluate the City's Stormwater Management Ordinance for postconstruction stormwater runoff requirements to determine if revisions are required
- c. Update the ordinance, if required
- d. If and when needed, develop linear project feasibility program to apply to future linear projects

#### **E.1.3.** Documentation For Annual Report:

- a. Updated Post-Construction Standards / Stormwater Management Ordinance, if revised during the reporting period
- b. If developed, linear project feasibility program

#### E.1.4. Schedule:

- a. Enforce the use of the Stormwater Management Ordinance, Post-Construction Standards during plan review: Ongoing, 2023-2027
- b. Review of Stormwater Management Ordinance, Post-Construction Standards: Each Reporting Period, 2023-2027
- c. If and when needed, develop linear project feasibility program, and submit to EPD for approval

#### **E.1.5.** Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

### **E.1.6.** Rationale for choosing BMP and setting measurable goal(s):

Ordinances are an effective way to establish performance standards for runoff controls. In order to protect the environment from stormwater runoff impacts all new developments and redevelopment site plans have to address stormwater runoff quality and quantity impacts resulting from alteration of the landscape. The City's ordinance will promote the design and construction of structural and non-structural BMPs that will control and reduce the impacts of stormwater runoff from newly constructed and redeveloped sites.

## E.1.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:

The legal authority provides the City with the tools to regulate, identify, address, and correct potential stormwater issues. By taking a better site design approach to stormwater management plan design, the City will ensure that new and re-development projects comply with applicable post construction stormwater management requirements related to water quality.

#### E.2. INVENTORY

#### **E.2.1.** Description of BMP

The City of Brunswick has developed a Post-Construction Stormwater Inspection and Maintenance Program that details the City's procedures for inventorying, inspecting, and maintaining public and private stormwater management structures, including detention/retention ponds and underground detention. A copy is provided in Appendix D.

The City maintains an inventory of stormwater detention/retention ponds and underground detention structures. The inventory includes the number and type of structures, and ownership information (whether the structures are publicly- or privately-owned). The inventory identifies all ponds and underground detention structures owned and/or maintained by the City regardless of construction date. The inventory also lists privately-owned structures that were designed and constructed after December 9, 2008, and public structures owned by an entity other than City that were constructed after December 6, 2012.

The inventory will be updated at least once each reporting period as new structures are completed or existing structures are identified in accordance with the City's Post-Construction Stormwater Inspection and Maintenance Program Procedures provided in Appendix D.

#### **E.2.2.** Measurable Goal(s):

a. Update inventory each reporting period as new development and redevelopment occur, and existing structures are identified (detention/retention ponds and underground detention)

#### **E.2.3.** Documentation For Annual Report:

a. Updated inventory of post construction stormwater management structures, including structures added during the reporting year

#### E.2.4. Schedule:

a. Each Reporting Period, 2023-2027

#### E.2.5. Person (position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

#### **E.2.6.** Rationale for choosing BMP and setting measurable goal(s):

Developing an inventory of stormwater detention/retention ponds and underground detention is necessary to ensure continued maintenance and assist with inspection and maintenance procedures.

## E.2.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:

Routine inspection and required maintenance ensure that stormwater management structures continue to function to effectively treat stormwater runoff.

#### E.3. INSPECTION PROGRAM

### E.3.1. Description of BMP

The City of Brunswick has developed inspection procedures for stormwater management structures, including detention/retention ponds and underground detention structures. A copy of these procedures is provided in Appendix D.

City staff or their designated representatives will inspect 100% of inventoried structures within the 5-year permit period, and at least one inspection will be conducted each reporting period. If more than five (5) post-construction structures are listed on the inventory, the City will inspect at least 5% of the structures each reporting period.

Inspections will be documented using the inspection sheets included within the City's Post-Construction Stormwater Inspection and Maintenance Program in Appendix D or through a field collection application that is downloaded on City-owned smart phones and/or tablets and recorded within the City's GIS layer. The field collection application and paper inspection checklist contain the same questions. A table listing the information that will be collected and documented during site inspections within a GIS database is provided as part of the Procedures in Appendix D.

#### **E.3.2.** Measurable Goal(s):

a. Inspect 100% of inventoried public and private structures every 5 years, with at least one structure inspected each reporting period. If there are more than five (5) structures on the inventory, 5% of the structures will be inspected each reporting period.

#### **E.3.3.** Documentation For Annual Report:

- a. Number and percentage of stormwater management structures (ponds and underground detention) inspected during the reporting period
- b. Documentation of inspections conducted, such as a table of individual inspection reports with a record for each site inspected and the findings of that inspection, or a copy of the completed inspection checklist for each structure inspected during the reporting period

#### E.3.4. Schedule:

a. Each Reporting Period, 2023-2027: Inspections

#### **E.3.5.** Person (position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

#### **E.3.6.** Rationale for choosing BMP and setting measurable goal(s):

This BMP allows the City to ensure that stormwater management structures are operating effectively to remove pollutants.

# E.3.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit

Routine inspection and required maintenance ensure that stormwater management structures continue to function to effectively treat stormwater runoff.

#### E.4. MAINTENANCE PROGRAM

#### **E.4.1.** Description of BMP:

In order to compel the maintenance of privately-owned detention/retention ponds and underground detention structures, the City adopted Post-Construction Standards, as detailed in BMP E.1 above, that require private owners to maintain their structural controls. The ordinance requires development projects that include stormwater management structures to develop an Inspection and Maintenance Agreement that must be approved with the stormwater management site plan. The post-construction standards and the maintenance agreement provide the City with the authority to inspect private stormwater facilities to ensure that they are being maintained in accordance with the agreement. Detailed inspection and maintenance procedures are outlined in the City's revised Post-Construction Stormwater Inspection and Maintenance Program provided in Appendix D. This applies to all public, non-City-owned structures on the City's inventory as well as privately-owned structures with construction completed after December 6, 2012. From this point forward, the City will obtain maintenance agreements on all new post-construction structures.

When issues are identified from an inspection, the City will send a letter to the affected private or public/non-City property owners notifying them of the findings of the inspection along with a timeframe for completion of repairs. Where maintenance agreements exist, the City will enforce maintenance via its stormwater ordinance; otherwise, the City will complete the maintenance if the property owner does not act on the request and the City will seek to recover costs based on provisions in the Stormwater Management Ordinance.

Where feasible the City will also encourage other public entities that own/operate stormwater management controls and do not have an Inspection and Maintenance Agreement to develop and sign one. The City of Brunswick has the responsibility to inspect and maintain stormwater facilities/ponds that are either on City property, have been accepted by the City for maintenance, or have not obtained a maintenance agreement (if constructed after December 6, 2012). The City will perform maintenance activities based on the results of the inspection and in accordance with its inspection and maintenance procedures.

## **E.4.2.** Measurable Goal(s):

- a. Implement the Post-Construction Stormwater Inspection and Maintenance Program included in Appendix D of this Plan
- Maintain 100% of City-owned or maintained stormwater management structures (ponds and underground detention) as needed and identified through inspections over a fiveyear period
- c. Ensure that 100% of all private stormwater management structures, as well as structures owned by public entities other than the City (where feasible), are designed in accordance with the City's Post-Construction Standards and have an Inspection and Maintenance Agreement
- d. Maintain copies of all maintenance agreements finalized after December 6, 2012 on file

e. Notify private owners (and public entities, where feasible/if applicable) with maintenance agreements of pond/underground detention maintenance needs identified through inspection

## **E.4.3.** Documentation for Annual Report:

- Documentation (via Excel spreadsheet summaries) of maintenance activities conducted by the City or their designated representative, including a list of structures maintained and type of maintenance
- b. Documentation of communication with owners of public, non-City or privately-owned detention/retention ponds and underground detention (e.g., letters to owners, enforcement actions)
- c. Summary list of maintenance agreements for stormwater management structures finalized after December 6, 2012 with Private or Public Entities (excluding the City) and total number of executed maintenance agreements

#### E.4.4. Schedule:

 a. Implement Post-Construction Stormwater Inspection and Maintenance Program, including inspection and maintenance of structures: Ongoing, 2023-2027 (see Program in Appendix D for specific timelines and schedules)

## **E.4.5.** Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

### **E.4.6.** Rationale for choosing BMP and setting measurable goal(s):

By requiring developers/property owners to develop plans for inspecting and maintaining their detention ponds or other stormwater facilities through an Inspection and Maintenance Agreement, the City has the legal means to ensure that these facilities will be maintained and function properly after construction is complete.

## E.4.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:

Detention/retention ponds are supposed to be designed to remove 80% of TSS. Routine inspection and appropriate maintenance ensure that ponds continue to function to meet this water quality goal.

## E.5. GREEN INFRASTRUCTURE / LOW IMPACT DEVELOPMENT (GI/LID) PROGRAM

#### **E.5.1.** Description of BMP

The City of Brunswick has been designated as a permittee with a population exceeding 10,000 by the Georgia EPD and is therefore required to develop a GI/LID Program that meets the requirements specified in Table 4.2.5(a).5.a of the facility's Phase II MS4 permit. To meet these requirements, the City developed a GI/LID Program that includes procedures for evaluating the feasibility and site applicability of different GI/LID techniques, allowable GI/LID structures, and procedures for the inspection and maintenance of the GI/LID structures. A copy of the City's current GI/LID Program is included in Appendix G. The City will review the GI/LID Program each reporting period to determine if updates are needed.

Because the City has been designated as a permittee with a population exceeding 10,000 by the GA EPD, the City is also required each reporting period to review and revise, where necessary, building codes, ordinances, and other regulations to ensure they do not prohibit or impede the use of GI/LID practices, including infiltration, reuse, and evapotranspiration. At a minimum, the City must assess those regulations governing road design and parking requirements. During the regulatory review, the City must also consider the inclusion of incentives for use of GI/LID practices into the ordinance.

During the 2012-2017 permit period, the City performed a comprehensive assessment of its existing codes to determine if there are any codes that present an obstacle to GI/LID approaches to stormwater management. The City utilized the Code and Ordinance Worksheet developed by the Center for Watershed Protection (CWP). After reviewing the City's codes, no revisions were required. The City also evaluated its existing codes each reporting period during the 2017-2022 permit period and determined that no revisions were required.

To meet the requirements of the City's 2022-2027 Phase II MS4 permit, the City will perform a comprehensive review of building codes, ordinances, and other applicable regulations during the 2023 reporting period. At a minimum, this review will assess regulations that govern road design and parking requirements using applicable sections of the Code and Ordinance Worksheet developed by the CWP, the Water Quality Scorecard developed by the Environmental Protection Agency (EPA) or another comprehensive code evaluation tool. If any revisions are necessary, the City will provide information about the revisions needed and a schedule for when the revisions will be completed. Thereafter for reporting years 2024-2027, the City will either complete another comprehensive evaluation or reference the first-year evaluation and certify that additional revisions are not necessary. Documentation of the annual reviews will be maintained.

#### E.5.2. Measurable Goal(s):

- a. Each reporting period, evaluate the GI/LID Program to determine if updates are needed
- b. During the 2023 reporting year, perform a comprehensive review of building codes, ordinance, and other applicable regulations. At a minimum, this review will assess regulations that govern road design and parking requirements using applicable sections of the Code and Ordinance Worksheet developed by the CWP, the Water Quality

- Scorecard or another comprehensive code evaluation tool. Prepare a report on proposed revisions, including schedule outlining the timeline to complete revisions.
- For reporting years 2024-2027, the City will either complete another comprehensive evaluation or reference the first-year evaluation and certify that additional revisions are not necessary
- d. Document the annual ordinance reviews and any revisions to the codes, ordinances, and regulations

#### **E.5.3.** Documentation For Annual Report:

- a. Results of the code/ordinance/regulation evaluation for GI/LID, including timeline for completing revisions
- b. Copy of the GI/LID Program if revised during the reporting period
- c. Copies of any updated code(s), if revisions were made
- d. Documentation of annual code/ordinance/regulation reviews

#### E.5.4. Schedule:

- a. 2023: Comprehensive review of building codes, ordinances, and regulations affecting GI/LID practices, and report outlining proposed revisions and timeline for completion
- b. Each Reporting Period, 2023-2027: review code/ordinance/regulations and GI/LID Program

## **E.5.5.** Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

### E.5.6. Rationale for choosing BMP and setting measurable goal(s):

GI/LID BMPs are a way to manage stormwater in a natural environment and increase on-site infiltration to reduce runoff. Tracking GI/LID structures can help determine their effectiveness at improving water quality and help the City to promote GI/LID practices. Building codes, municipal code, or other regulations which prohibit the use of GI/LID BMPs could negatively affect water quality.

## E.5.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:

Each type of GI/LID practice has an estimated pollutant removal efficiency. By encouraging the incorporation of these types of practices in new and redevelopment, the City can estimate the amount of pollutants being removed through these practices

#### E.6. GI/LID STRUCTURE INVENTORY

#### E.6.1. Description of BMP

The City of Brunswick maintains an inventory of GI/LID structures constructed after December 6, 2012 that are located within City limits. Sections 3.1.1 and 3.1.2 of the GI/LID Program included in Appendix G details the procedures the City uses for maintaining and updating the City's GI/LID structure inventory. The inventory includes, at a minimum, the number, type, and general location of GI/LID structures such as bioswales, permeable pavements, bioretention, cisterns, green roofs, and other structures deemed appropriate by the City that are owned by the City, other public entities, and privately-owned non-residential GI/LID structures. The inventory will be updated at least once each reporting period as new GI/LID structures are constructed or existing structures are identified and maintenance agreements will be obtained for newly-designed non-permittee owned structures as described in Section 3.1.3 of the GI/LID Program.

#### E.6.2. Measurable Goal(s):

- a. Each reporting period, update inventory as new GI/LID structures are constructed or existing structures are identified
- b. Obtain maintenance agreements for newly-designed non-permittee owned structures added to the City's GI/LID inventory

#### **E.6.3.** Documentation For Annual Report:

a. Updated inventory, including structures added during the reporting year (documentation requirements for maintenance agreements is discussed below in Section E.8)

#### E.6.4. Schedule:

a. Each Reporting Period, 2023-2027

## **E.6.5.** Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

## **E.6.6.** Rationale for choosing BMP and setting measurable goal(s):

Developing an inventory of GI/LID BMPs is necessary to ensure continued maintenance and assist with inspection and maintenance procedures. Tracking GI/LID structures can help determine their effectiveness at improving water quality and help the City to promote GI/LID practices.

## E.6.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit

Maintaining an accurate and updated list of GI/LID BMPs will ensure each practice is regularly tracked and inspected.

#### E.7. GI/LID STRUCTURE INSPECTION PROGRAM

#### E.7.1. Description of BMP

The City of Brunswick has developed and implemented inspection procedures for GI/LID structures as detailed in Section 3.2.1 of the GI/LID Program included in Appendix G. Inspections will be documented and documentation will be provided with the City's Annual Report as described in Section 3.2.2 of the GI/LID Program.

#### E.7.2. Measurable Goal(s):

- a. Inspect 100% of inventoried public and private structures every 5 years, with at least one structure inspected each reporting period. If there are more than five (5) structures on the inventory, 5% of the structures will be inspected each reporting period
- b. Document inspections

#### **E.7.3.** Documentation For Annual Report:

- a. Number and percentage of GI/LID structures inspected during the reporting period
- b. Documentation of inspections conducted, such as a table of individual inspection reports with a record for each site inspected and the findings of that inspection, or a copy of the completed inspection checklist for each structure inspected during the reporting period

#### E.7.4. Schedule:

a. Each Reporting Period, 2023-2027: Inspections

### E.7.5. Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

### E.7.6. Rationale for choosing BMP and setting measurable goal(s):

GI/LID BMPs are a way to manage stormwater in a natural environment and increase on-site infiltration to reduce runoff. Inspecting GI/LID structures can help determine their effectiveness at improving water quality and help the City to promote GI/LID practices.

## E.7.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:

Routine inspection of GI/LID BMPs ensure that these structures continue to function to effectively treat stormwater runoff, and if deficiencies are found, they can be relayed to the property owner for maintenance.

#### E.8. GI/LID STRUCTURE MAINTENANCE PROGRAM

#### E.8.1. Description of BMP

The City of Brunswick has developed an inspection program, as described above in Section E.7 and in the City's GI/LID Program (Appendix G), to ensure that all GI/LID structures are maintained in accordance with their design, the City of Brunswick Stormwater Management Ordinance and the recommendations of the CSS and other available local resources. If maintenance is needed for City-owned GI/LID structures, the City will follow the procedures and maintain documentation as described in Section 3.3.1 of the City's GI/LID Program. The City will ensure that private, non-residential GI/LID structures and publicly-owned structures owned by other entities are appropriately maintained as described in Section 3.3.2 of the GI/LID Program and maintain appropriate documentation. Maintenance agreements are required for all public, non-City-owned structures on the City's inventory as well as privately-owned non-residential structures with construction completed after December 6, 2017.

## E.8.2. Measurable Goal(s):

- a. Maintain 100% of City-owned GI/LID structures as needed
- b. Ensure that 100% of all private, non-residential GI/LID structures and GI/LID structures owned by public entities other than the City are appropriately maintained
- c. Notify private owners and other public entities of maintenance needs identified by inspections

#### **E.8.3.** Documentation For Annual Report:

- a. The number of City-owned GI/LID structures maintained during the reporting period and documentation of maintenance activities
- b. Updated summary list of Maintenance Agreements
- Documentation of activities taken to ensure proper maintenance of publicly-owned GI/LID structures owned by other entities and privately-owned non-residential GI/LID structures

#### E.8.4. Schedule:

a. Each Reporting Period, 2023-2027

### E.8.5. Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

#### **E.8.6.** Rationale for choosing BMP and setting measurable goal(s):

GI/LID BMPs are a way to manage stormwater in a natural environment and increase on-site infiltration to reduce runoff. Maintaining GI/LID structures can help ensure their effectiveness at improving water quality and help the City to promote GI/LID practices.

# E.8.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:

Routine inspection and required maintenance ensure that GI/LID BMPs continue to function to effectively treat stormwater runoff. If deficiencies are present, they can be addressed by the property owner.

# F. POLLUTION PREVENTION/ GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

40 CFR Part 122.34(b)(6) Requirement: You must develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. Using training materials available from the USEPA and other organizations as guidance, the permittee must, as a part of this program, include employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance.

The BMPs listed below address the requirements above in accordance with the guidelines included in Table 4.2.6(a) of the NPDES Phase II MS4 permit.

#### F.1. MS4 STRUCTURE INVENTORY AND MAP

#### F.1.1. Description of BMP

The City's MS4 is made up of the structures and facilities that are used for collecting, conveying, storing and/or treating stormwater from the source drainage area to the point of final outlet. The City's NPDES Phase II Small MS4 Permit defines a MS4 as follows:

"Municipal Separate Storm Sewer System or an MS4 means a conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains, owned or operated by a municipality or other public body, designed or used for collecting or conveying stormwater runoff and is not a combined sewer or part of a Publicly Owned Treatment Works."

The City's stormwater system is comprised of the following structures that are regulated by the City's MS4 Permit and that are owned and/or operated by the City:

- Catch Basins
- Storm Drain Lines
- Ditches
- Municipal Detention / Retention Ponds and Underground Detention

The City has developed an inventory and map of the MS4 structures owned and/or operated by the City. This inventory is in GIS format. Catch basins, ditches, detention/retention ponds/underground detention, and pipes/storm drain lines are included in this inventory. The City's inventory of MS4 structures is updated each reporting period as new structures are added or identified, and submitted to EPD in the Annual Report.

#### F.1.2. Measurable Goal(s):

a. Maintain and update an inventory and map each reporting period of the City's MS4 structures, including catch basins, ditches, City-owned detention/retention ponds, and storm drain lines

#### **F.1.3.** Documentation For Annual Report:

- a. Updated MS4 structure inventory and map, at a minimum including catch basins, ditches, City-owned detention/retention ponds and underground detention, and storm drain lines
- b. Total number of MS4 structures added during the reporting period
- c. Total number of MS4 structures

#### F.1.4. Schedule:

a. Each Reporting Period, 2023-2027

### F.1.5. Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

#### F.1.6. Rationale for choosing BMP and setting measurable goal(s):

This BMP provides the information necessary for the City of Brunswick to implement the MS4 Inspection and Maintenance Program.

## F.1.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit?

The MS4 must function as designed in order to reduce pollutants discharged from the system. Knowledge of the MS4 system components and locations will ensure that the system continues to function to meet this water quality goal through routine inspection and appropriate maintenance.

#### F.2. MS4 INSPECTION PROGRAM

#### F.2.1. Description of BMP

The City will inspect 100% the MS4 features identified within the MS4 inventory over the five-year period of this permit, with at least 5% of MS4 structures inspected each year. The City inspects and maintains the stormwater drainage systems within the right-of-way (ROW) as well as stormwater controls on property owned by the City or within an easement with an express acceptance by the City.

The City will visually inspect MS4 structures and document the inspections in accordance with the following procedures:

- Inspections will generally include a visual condition assessment of the various system elements including catch basins, storm drain lines, ditches, and visible areas of detention/retention ponds and underground detention structures.
- Storm drain lines will be visually inspected where they outfall into a structure or open drainage way, unless access is restricted due to obstructions.
- Visible areas of underground detention structures, such as where stormwater enters or outfalls, will be visually inspected; underground components that are not visible without entry will not be inspected.
- Inspections will be documented through a field collection application that is downloaded on City-owned smart phones and/or tablets and will be recorded within the City's GIS layer.
- A table listing the information that will be collected and documented during site inspections within a GIS database is provided in Appendix D.

#### F.2.2. Measurable Goal(s):

a. Inspect 100% of the MS4 structures (catch basins, ditches, City-owned detention/retention ponds and underground detention, and storm drain lines) within 5 years, with a minimum of 5% of inspections occurring each reporting period

#### **F.2.3.** Documentation For Annual Report:

- a. Copy of inspection records
- b. The number and percentage of structures inspected during the reporting period

### F.2.4. Schedule:

a. Each Reporting Period, 2023 – 2027: Inspections

### F.2.5. Person (Position) Responsible for Overall BMP Management and Implementation:

Public Works Director

## F.2.6. Rationale for choosing BMP and setting measurable goal(s):

This BMP allows the City of Brunswick to ensure that the MS4 is functioning properly and to reduce the pollutants discharged from the system.

## F.2.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit?

The MS4 must function as designed in order to reduce pollutants discharged from the system. Routine inspection of the entire system over the 5-year permit period and appropriate maintenance ensures that the MS4 continues to function to meet this water quality goal.

#### F.3. MS4 MAINTENANCE PROGRAM

#### F.3.1. Description of BMP

The City will perform maintenance based on the results of the MS4 inspections. Maintenance typically includes debris removal, cleaning of inlet and outlet structures, sediment and vegetation removal, and earthwork activities. If maintenance is required, the City will determine if the maintenance need is structural (i.e., the structure needs to be repaired or replaced) or if the maintenance need is routine (i.e., sediment needs to be cleared, debris removed, or vegetation trimmed back). The City will also decide if the maintenance need should be prioritized for more immediate action, (i.e., malfunction or failure of the system is possible if the maintenance need is not addressed). The City will schedule appropriate maintenance as needed and in accordance with available City resources and standard procedures.

Maintenance activities will be recorded in the City's Work Order database, work log tables, or tracked through a field collection application that is downloaded on City-owned smart phones and/or tablets and recorded within the City's GIS layer, as described in Appendix D.

## F.3.2. Measurable Goal(s):

a. Maintain MS4 structures as needed, and as funding is available

#### **F.3.3.** Documentation For Annual Report:

- a. Summary of maintenance activities and/or copy of maintenance logs
- b. Number of each type of structure maintained during the reporting period

#### F.3.4. Schedule:

a. Ongoing as needed, 2023-2027

### F.3.5. Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

#### F.3.6. Rationale for choosing BMP and setting measurable goal(s):

This BMP allows the City to ensure that the MS4 is functioning properly and to reduce the pollutants discharged from the system.

## F.3.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit?

The MS4 must function as designed in order to reduce pollutants discharged from the system. Routine inspections and appropriate maintenance ensure that the MS4 continues to function to meet this water quality goal. Documented maintenance of the MS4 system will indicate that this BMP is effective.

#### F.4. STREET AND PARKING LOT CLEANING

#### F.4.1. Description of BMP

The City conducts street sweeping to keep leaves and debris from being washed into the City's MS4 structures from City streets and/or public parking lots. Street sweeping is conducted in accordance with the Street Sweeping Procedures included in Appendix D.

The City also has an established litter pick-up program in partnership with KGIB as detailed in BMP B.1 as part of the City's Public Involvement/Participation Program. Volunteers pick up trash at dedicated outreach events in the community to prevents trash and other debris from washing into the City's stormwater system, marshes, and waterways. Debris and litter are collected and appropriately disposed of or recycled.

#### F.4.2. Measurable Goal(s):

a. Sweep at least one mile of City streets

### **F.4.3.** Documentation For Annual Report:

a. Documentation of street sweeping activities during the reporting period using work log sheets, including the total number of miles swept

#### F.4.4. Schedule:

a. Ongoing throughout the year, 2023-2027

#### F.4.5. Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

#### F.4.6. Rationale for choosing BMP and setting measurable goal(s):

This BMP will reduce the amount of litter and other pollutants being discharged from City streets into the MS4.

## F.4.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit?

The removal of trash and debris from streets will indicate that this BMP is effective.

#### F.5. EMPLOYEE TRAINING

## F.5.1. Description of BMP

The City will conduct annual employee training for employees responsible for implementation of the SWMP. City employees will be trained during each reporting period on stormwater topics that are necessary for that employee to do their job. Training topics may be rotated throughout the 5-year permit period to ensure that City staff receive the training applicable to their job responsibilities and/or to cover topics relevant to issues the City may currently be experiencing. Training may be provided via in-person meetings, PowerPoint presentations and/or videos, or the City may send employees offsite to an applicable training course.

Employee "categories" that may receive training include the following:

employee categories that may receive training include the following:		
Employee	Primary Job Duties	<b>Examples of Relevant Training Topics</b>
Category		
Public Works Staff	Maintenance of stormwater infrastructure and streets/ROWs; green infrastructure maintenance; litter pick-up; investigating illicit discharges; pond maintenance	<ul> <li>BMPs for stormwater structure and street/ROW maintenance</li> <li>Good housekeeping practices for municipal facilities</li> <li>Proper waste management and disposal practices</li> <li>How to identify and eliminate illicit discharges</li> <li>Green infrastructure &amp; pond maintenance practices</li> </ul>
Planning and Zoning / Engineering Staff	Site plan review; permitting; construction site inspections and enforcement (limited as the City is not an LIA)	<ul> <li>Site plan review procedures</li> <li>How to track additions of new structures for MS4/outfall/pond/green infrastructure inventories, etc.</li> <li>Green infrastructure design and construction</li> <li>Construction site inspections / requirements of the E&amp;S ordinance</li> </ul>
Code Enforcement Staff	Enforcement of local ordinances	<ul> <li>Training regarding use of the City's         Enforcement Response Plan     </li> <li>Tracking of site investigations and complaint resolution</li> </ul>
City Hall Administrative Staff / City Clerk	Logging stormwater-related questions and complaints into the City's Work Order system; public education and public involvement activity coordination; ordinance updates; webpage management	<ul> <li>Educational topics to include in Public Education/Public Involvement BMPs &amp; stormwater webpage</li> <li>Ways to encourage active public participation</li> <li>Regulatory requirements for local ordinances</li> </ul>

The City of Brunswick will facilitate one (1) training session per year for City employees who are involved in implementation of the SWMP. Alternatively, City staff may attend an established offsite training program that address stormwater issues.

## F.5.2. Measurable Goal(s):

- a. Provide annual training for employees
- b. Document educational training events

### F.5.3. Documentation For Annual Report:

- a. Documentation of training activities, including a summary of training materials or training agenda, employee categories, and sign-in sheets used for documenting employee participation
- b. Name and number of training attendees and date of training

### F.5.4. Schedule:

a. Each Reporting Period, 2023-2027

## F.5.5. Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

## F.5.6. Rationale for choosing BMP and setting measurable goal(s):

This BMP will help prevent water quality impacts due to activities undertaken by employees during municipal operations.

## F.5.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit?

Good housekeeping improvements at municipal facilities will indicate that the training program is effective.

#### F.6. WASTE DISPOSAL

#### F.6.1. Description of BMP

The City of Brunswick will properly dispose of wastes including litter, debris, sediment, and other pollutants, removed from the drainage system during maintenance, street sweeping, litter pickup, or any other municipal activity. Waste collected from municipal sweeping and cleanup activities will be tracked and will be disposed of properly in a permitted solid waste landfill. Uncontaminated soils and sediment will be used as needed as fill material; it will not be left unsecured to erode back into the storm drainage system.

## F.6.2. Measurable Goal(s):

- a. Properly dispose of 100% of wastes removed from the MS4
- b. Track and record waste disposal activities

#### **F.6.3.** Documentation For Annual Report:

a. Records of waste disposed at the landfill and/or removed from the MS4 (e.g., landfill weight tickets/receipts, tracking log, etc.)

#### F.6.4. Schedule:

a. Ongoing, 2023-2027

#### F.6.5. Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

### F.6.6. Rationale for choosing BMP and setting measurable goal(s):

This BMP ensures wastes resulting from stormwater management activities are disposed of appropriately and prevented from re-entering MS4.

## F.6.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit?

The City will keep records of debris removed from the MS4 and disposed of at the landfill.

#### F.7. NEW FLOOD MANAGEMENT PROJECTS

#### F.7.1. Description of BMP

The City will ensure that all new flood management projects (e.g., detention/retention ponds) are assessed for water quality impacts during the design phase. The City's Water Quality Assessment Procedures for New Flood Management Projects are described below.

In general, if a new development or redevelopment project triggers applicability to the City's Post-Construction Stormwater Management Ordinance (Sec. 22A-52 & Sec 22A-53), the project will be required to comply with the stormwater management ordinance requirements which address water quality as well as water quantity protection. Therefore, these projects will require a hydrology report to address both the water quality and water quantity requirements of the ordinance. This report and associated submittals are reviewed by the City's Development Review Team (DRT), which includes a group of departmental representatives assigned by the City Manager to meet periodically and review construction, subdivision, and other plans. These projects, that are applicable to stormwater ordinance requirements and review by the DRT, will then also trigger the requirement for a maintenance agreement.

#### F.7.2. Measurable Goal(s):

a. Ensure 100% of new flood control projects comply with the City ordinance

#### F.7.3. Documentation For Annual Report:

a. List of plans reviewed during the reporting period where flood management projects were assessed for water quality impacts during the reporting period and note the plans that resulted in improved pollutant reduction.

### F.7.4. Schedule:

a. Ongoing, 2023-2027

#### F.7.5. Person (Position) Responsible for Overall Management and Implementation:

**Public Works Director** 

#### F.7.6. Rationale for choosing BMP and setting measurable goal(s):

This BMP will improve the water quality treatment potential of flood control projects throughout the City.

## F.7.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit?

The GSMM provides pollutant removal efficiencies for all types of detention/retention facilities constructed or retrofitted in accordance with the GSMM standards. The City will provide information in the Annual Report on the number of new stormwater management structures constructed in accordance with GSMM standards.

#### F.8. EXISTING FLOOD MANAGEMENT PROJECTS

#### F.8.1. Description of BMP

The City developed Water Quality Assessment Procedures to ensure that existing City flood management projects (i.e., detention and retention ponds) are assessed for potential retrofitting to address water quality impacts. These Procedures were revised during the previous permit period and approved by the EPD. The City's Water Quality Assessment Procedures for Existing Flood Management Projects are provided in Appendix D.

Water Quality Assessments will be performed to assess the potential to retrofit these publiclyowned structures to incorporate additional control measures to improve water quality treatment. The assessment will also analyze the facility's compliance with the City's Post-Construction Stormwater Management Ordinance, which requires that stormwater management controls address specified water quality as well as water quantity criteria.

The City will perform Water Quality Assessments for all City-owned detention and retention ponds during the 5-year permit period. If more than five flood management structures are listed on the inventory, the City will assess at least one of the flood management structures each reporting period. If an assessment was previously performed on an existing flood management structure using the most recent GSMM, prior to the effective date of this permit, then an additional assessment may not need to be performed and the City will document this determination. Assessments of flood management structures will be documented using a paper checklist. A copy of the inspection checklist is provided in Appendix D.

Retrofitting activities will be conducted as specified in the Water Quality Assessment Procedures in Appendix D and as funding becomes available for their implementation.

## F.8.2. Measurable Goal(s):

- a. Perform Water Quality Assessment for 100% of City-owned detention and retention ponds within the 5-year permit period (unless a previous assessment was conducted using the most recent GSMM and the City has documentation, in which case the assessment may not need repeated). If more than 5 structures are listed on the inventory, at least one assessment will be performed each reporting period
- b. Evaluate potential retrofitting, if applicable

#### **F.8.3.** Documentation For Annual Report:

- a. Records of any assessment and/or retrofitting activities conducted during the reporting period
- b. Table listing the existing flood management structures, date and results of the assessment, and status of any retrofitting activities

#### F.8.4. Schedule:

a. 2023 Reporting Period: Provide documentation of previously completed assessments and status of retrofitting activities

b. Each Reporting Period, 2023-2027: Inspections (if fewer than 5 structures, 100% over 5-year permit period)

## **F.8.5.** Person (position) responsible for overall management and implementation of the BMP: Public Works Director

### F.8.6. Rationale for choosing BMP and setting measurable goal(s):

This BMP will improve the water quality treatment potential of existing flood control projects undertaken and funded by the City.

## F.8.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit

The GSMM provides water quality BMP design criteria and pollutant removal efficiencies for all types of flood control projects constructed or retrofitted in accordance with the GSMM standards. The City will provide information in the Annual Report on the number of existing flood control projects assessed and the number of flood control projects retrofitted to meet GSMM standards.

#### F.9. MUNICIPAL FACILITIES

#### F.9.1. Description of BMP

The City has developed an inventory of municipal facilities with the potential to cause pollution that are City-owned and located within the permitted area. The City will update its Municipal Facility Inventory at least once each reporting period and City staff or their designated representatives will inspect 100% of inventoried municipal facilities within the 5-year permit period (at least one inspection will be conducted each reporting period). If more than five (5) municipal facilities are listed on the inventory, the City will inspect at least 5% of the municipal facilities each reporting period. Inspections of Municipal Facilities will be documented using a paper checklist or through a field collection application that is downloaded on City-owned smart phones and/or tablets and will be recorded within the City's GIS layer. The field collection application and paper inspection checklist contain the same questions. A table listing the information that will be collected and documented during site inspections within a GIS database and a copy of a paper inspection checklist are provided in Appendix D.

If sites with needed improvements are identified, the appropriate department will be notified of the problem and a site re-inspection may be performed if deemed necessary. Records will be maintained on problems found and actions taken.

#### F.9.2. Measurable Goal(s):

- a. Update inventory of City-owned municipal facilities, located within the permitted area, with the potential to cause pollution each reporting period
- b. Inspect 100% of inventoried facilities every 5 years, with at least one inspection conducted each reporting period. If there are more than five (5) municipal facilities on the inventory, 5% of the municipal facilities will be inspected each reporting period.
- c. Document inspections

### **F.9.3.** Documentation For Annual Report:

- a. Copy of updated municipal facility inventory
- Documentation of inspections conducted during the reporting period, such as a table of individual inspection reports with a record for each site inspected and findings, or a copy of the completed inspection checklist for each municipal facility inspected
- c. Documentation of any activities conducted to address issues identified during the site inspection

#### F.9.4. Schedule:

a. Each Reporting Period, 2023-2027: Inspections and inventory review/update

## F.9.5. Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

## F.9.6. Rationale for choosing BMP and setting measurable goal(s):

This BMP will prevent or identify and remove illicit discharges from municipal facilities and improve general good housekeeping practices.

## F.9.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit

Corrective actions made as a result of inspections will indicate that this BMP is effective.

### G. ENFORCEMENT RESPONSE PLAN

## G.1. ENFORCEMENT RESPONSE PLAN (ERP)

#### **G.1.1.** Description of BMP

The City of Brunswick has developed and will continue to implement its ERP, which specifies the types of enforcement mechanisms the City will undertake, escalation of enforcement, time frames for investigation, and an administrative fine schedule. The ERP, included in Appendix E, was approved by the Georgia EPD during the previous permit cycle. The City will review the ERP each reporting period and revise it as necessary. If the ERP is revised, the City will submit it to EPD for review.

### **G.1.2.** Measurable Goal(s):

- a. Implement enforcement actions as stipulated in the City's ERP
- b. Review the ERP each reporting period to determine if any updates are needed

#### **G.1.3.** Documentation for Annual Report:

a. Copy of ERP, if updated during the reporting period

#### G.1.4. Schedule:

- a. Ongoing, 2023-2027: ERP implementation
- b. Each Reporting Period, 2023-2027: Review and update, if needed, of ERP

## **G.1.5.** Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

#### **G.1.6.** Rationale for choosing BMP and setting measurable goal(s):

Effective enforcement of the City ordinances is necessary to ensure that they appropriately regulate various aspects of the SWMP to protect water quality.

## G.1.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit?

As part of its annual review process, the City will evaluate enforcement actions taken throughout the year to determine to determine if these actions have successfully reduced stormwater pollution and/or reduced stormwater violations.

### H. IMPAIRED WATERS

### H.1. MONITORING AND IMPLEMENTATION PLAN (MIP)

#### H.1.1. Description of BMP

The City of Brunswick has developed an Impaired Waters Monitoring and Implementation Plan (MIP) for all 305(b)/303(d) listed waters to reduce the pollutant of concern (POC) in each impaired segment. This plan includes procedures for water quality monitoring that will be performed for impaired streams and BMP implementation.

The City updated the MIP in 2022 to reflect changes to the most recent 305(b)/303(d) listed waters and a copy of the updated Plan was submitted to EPD with the City's 2022 Annual Report for EPD's review and approval. EPD recently provided comments on the submission on May 11, 2023. The City wishes to discuss these further and seek more clarification during the 2023 reporting period. As a result, the City is resubmitting the previously approved MIP (approved on November 9, 2020) and will continue to implement that version until the MIP is updated during a later date in the 2023 reporting period.

The City will perform water quality monitoring as summarized in Section 3 of the City's MIP and analyze the results each reporting period. Over the course of this program, the City will attempt to identify water quality trends and potential sources of any water quality impairments or improvements. The City will also perform an assessment to determine the effectiveness of the BMPs employed and what, if any, adaptive BMP measures may be necessary to return the water to compliance with State water quality standards.

The City will also review the latest 305(b)/303(d) list each reporting period to determine if any new impaired waters have been added. If there are newly-listed impaired waters, or if the City changes its procedures, the City will revise the MIP to address the POC and incorporate the information required by Section 4.4.2 of the Phase II MS4 permit.

### H.1.2. Measurable Goal(s):

- a. Approval of revised MIP by EPD
- b. Implement the MIP
- c. Review most recent 305(b)/303(d) list, and update MIP, if necessary
- d. Perform assessment of data trends over time for each POC, including a written characterization of baseline conditions and subsequent evaluations on whether water quality is improving, declining, fluctuating, or remaining constant
- e. Perform assessment to determine the effectiveness of the BMPs employed and if additional BMPs may be necessary

#### H.1.3. Documentation for Annual Report:

- a. Copy of MIP, if updated during the reporting period
- b. Monitoring data collected during the reporting period

- c. Assessment of data trends over time for each POC
- d. Assessment of the effectiveness of the BMPs and if any additional BMPS are necessary

#### H.1.4. Schedule:

- a. 2023: Update the Impaired Waters Monitoring and Implementation Plan based on comments received from EPD on the 2022 Annual Report submission.
- b. Ongoing, 2023-2027: Impaired Waters Monitoring and Implementation Plan
- c. Each Reporting Period, 2023-2027: Review and update, if needed, of Monitoring and Implementation Plan

## H.1.5. Person (Position) Responsible for Overall BMP Management and Implementation:

**Public Works Director** 

### H.1.6. Rationale for choosing BMP and setting measurable goal(s):

Identifying and implementing BMPs targeted at the POC(s) will help to address known water quality impairments within local streams.

## H.1.7. How will the City determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit?

Prioritized implementation of BMPs targeted at the POC of listed waterways should improve water quality conditions within these waterways.