Office of the City Manager
City Hall/100 Central Avenue
Garden City, Georgia 31405

Ronald A. Feldner, P.E.
City Manager

October 5, 2017

Ms. Mildred Granderson
Environmental Protection Division
Non-Point Source Program
2 Martin Luther King, Jr. Dr., SW
Suite 1462
Atlanta, GA 30334

Re: MS4 SWMP for NPDES Permit No. GAS000208

Dear Ms. Granderson,

Please find enclosed for your review and approval, the 2017 Stormwater Management Program (SWMP) document for the City of Garden City, Georgia. This document is being submitted in accordance with NPDES Stormwater Permit Number GAS000208 and follows the format of the City's reissued NPDES Permit and includes:

- the SWMP components,
- the measurable goal(s) for each SWMP component, and
- a schedule for implementation of the component.

Please contact me at (912) 963-2754 or Ms. Jackie Jackson at (912) 963-2768 or jjackson@gardencity-ga.gov if you have questions or need additional information.

Sincerely,

CITY OF GARDEN CITY, GEORGIA

Ronald Feldner, P.E.,
City Manager

GARDEN CITY

City of Garden City, Georgia

Stormwater Management Program

National Pollutant Discharge & Elimination System (NPDES)
Phase I Medium Municipal Separate Storm Sewer System (MS4) Permit 2017

Submitted to:
Environmental Protection Division
Georgia Department of Natural Resources

September 25, 2017

TABLE OF CONTENTS

APPENDICES

Appendix A 1) NPDES Phase I MS4 Permit
2) Canal Maintenance MOU with Unincorporated Chatham County

Appendix B Maps & Inventory
1) MS4 Inventory / Maintenance Zone Map
2) MS4 Inventory Table

Appendix C Inspection Checklists
1) Outfall Reconnaissance Checklist
2) Source Tracing Forms
3) Detention Pond Inspection Field Form
4) Stormwater Inspection Checklist (HVPS, Municipal, Industrial)
5) Capital Improvement Program (CIP) Assessment Checklist
6) MS4 Stormwater Structure Inspection Checklist

Appendix D Ordinances & Legal Documents
1) Soil Erosion and Sedimentation Ordinance
2) Stormwater Management (Illicit Discharge Ordinance)
3) Stormwater Utility Ordinance

Appendix E Illicit Discharge Detection and Elimination Plan

Appendix F Enforcement Response Plan

Appendix G Impaired Waters Monitoring and Implementation Plan

Appendix H Green Infrastructure Plan

ACRONYMS/DEFINITIONS

BMPs	Best Management Practices
CIP	Capital Improvement Project
CSS	Coastal Stormwater Supplement to the GSMM
DoA	Georgia Department of Agriculture
E&S	Erosion & Sedimentation
EPD	Georgia Environmental Protection Division
ERP	Enforcement Response Plan
ESPCP	Erosion & Sedimentation Control Plan
GESA	Georgia Erosion & Sedimentation Act
GI	Green Infrastructure
GIS	Geographic Information System
GSMM	Georgia Stormwater Management Manual
GSWCC	Georgia Soil & Water Conservation Commission
HVPS	Highly Visible Pollution Source
IDDE	Illicit Discharge Detection and Elimination
IGP	Industrial General Permit
LDA	Land Disturbing Activities
LEED	Leadership in Energy and Environmental Design
LIA	Local Issuing Authority
LID	Low Impact Development
MOU	Memorandum of Understanding
MS4	Municipal Separate Storm Sewer System
MSDS	Materials Safety Data Sheet
NPDES	National Pollutant Discharge & Elimination System
POC	Pollutant of Concern
ROW	Right-of-Way
SWMP	Stormwater Management Program
SWP3	Stormwater Pollution Prevention Plan

EXECUTIVE SUMMARY

The City of Garden City received coverage under the National Pollutant Discharge and Elimination System (NPDES) Phase I Municipal Separate Storm Sewer System (MS4) Permit (GAS000208) on March 17, 2017, as required by provisions of the Georgia Water Quality Control Act and the Federal Clean Water Act. A copy of the permit is included in Appendix A. This permit requires the development of a Stormwater Management Program (SWMP), to address the following program elements, as stipulated in CFR 122.26(d)(2)(iv)(A) through 122.26(d)(2)(iv)(D):

- Structural and Source Control Measures
- Illicit Discharge Detection and Elimination
- Industrial Facility Stormwater Discharge Control
- Construction Site Management

The Georgia Environmental Protection Division (EPD) has also required the City of Garden City to expand its SWMP to include Best Management Practices (BMPs) to address the following required modifications:

- Highly Visible Pollutant Sources
- Enforcement Response Plan
- Impaired Waters Monitoring and Implementation
- Municipal Employee Training
- Public Education
- Public Involvement
- Post Construction
- Green Infrastructure/ Low Impact Development

The stormwater management program described within this document demonstrates the commitment of the City of Garden City to water resources protection.

SWMP IMPLEMENTATION RESPONSIBILITY

The City of Garden City shares responsibility for BMP permit implementation with one other entity. Unincorporated Chatham County performs routine canal maintenance on larger canals throughout Garden City in accordance with its MOU with the City which has also been included in Appendix A.

1. STRUCTURAL & SOURCE CONTROL MEASURES

Permit Section 3.3.1: Structural and Source Control Measures, Table 3.3.1

1.1. MS4 CONTROL STRUCTURE INVENTORY AND MAP

1.1.1. Description

The City of Garden 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 I Medium MS4 Permit defines the 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 of Garden City has completed a Geographic Information System (GIS) inventory and map of the MS4. The MS4 inventory and map is included in Appendix B. The City will continue to maintain and update this inventory on an annual basis. This will be accomplished through review of new development as-built maps as well as field inspections.

1.1.2. Measurable Goals:

- Provide an inventory and map of MS4 control structures.
- Update the inventory and map as necessary and provide the number of MS4 structures added during the reporting period in subsequent Annual Reports.

1.1.3. Schedule

- Annually during the 2017 – 2023 permit period.

1.1.4. Items to be included in Annual Report:

- An updated inventory and map of the MS4.

1.2. MS4 INSPECTION AND MAINTENANCE PROGRAM

1.2.1. Description

The City has adopted a five (5) zone approach to inspections and maintenance of the MS4 that allows for these activities to address 100% of the MS4 over the 5-year permit period. The City has broken up the MS4 into the following five operational zones, and will perform inspections of the MS4 structures within one zone per year, rotating the zones each year:

- Area 1: This zone includes "Old Garden City" north of Brampton road and east of State Highway 21.
- Area 2: This zone includes portions of Highway 80 east of the railroad viaduct and remaining areas west of State Highway 21. The Norfolk Southern rail line that runs just north of Old Louisville Road makes up the southern border of this area.
- Area 3: Bound to the west by Dean Forest Road, the Norfolk Southern rail line to the north, the CSX rail line to the south and east.
- Area 4: This zone includes all land south of the CSX rail line and north of Interstate 16. Bound on the west by Dean Forest Road and the city limits to the east.
- Area 5: This zone includes all incorporated area of the City south of Interstate 16.

A map illustrating the maintenance zones is included in Appendix B.

The City will visually inspect the MS4 within each maintenance zone in accordance with the following procedures:

- Inspections shall generally include a condition assessment of the various system elements including catch basins, ditches, and stormwater controls (i.e. detention ponds, catch basins, etc.).
- The condition assessment will include a visual evaluation of the structure that addresses structural condition and maintenance needed.

The following conditions will be noted and indicate that a structure is in need of maintenance:

Table 1: MS4 Inspection & Maintenance Criteria

Structure	Standard for Maintenance
Catch Basins	Sediment fills 1/3 depth to lowest invert
Ditches	25% filled with sediment
Piped Storm Drain Lines	35% filled with sediment
Detention Ponds	50% filled with sediment

- Piped storm drain lines will be visually inspected where they outfall into a structure or open drainage way unless access is restricted due to obstructions.
- Upon completion of an inspection, the City shall make a determination of the need for maintenance based on the results of the inspection and the maintenance criteria.
- Inspections shall be documented and records of the inspections shall be maintained by the City.

1.2.1.A. MS4 Maintenance Program

The City will perform maintenance of the MS4 based upon inspection findings. During inspection, the City will determine if maintenance of the various elements is needed. The City will also prioritize maintenance needs based on their potential impact to the functionality of the public MS4. Maintenance shall be prioritized and performed in general accordance with the following standards:

- If maintenance is required, the City shall 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 shall schedule appropriate maintenance as needed and in accordance with available City resources and standard procedures.
- The City shall 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).
- All stormwater management structures shall be maintained such that they function in general accordance with their design and the standards, criteria, and information presented in the latest edition of the Coastal Stormwater Supplement and Georgia Stormwater Management Manual.
- Materials removed from the MS4 during maintenance shall be disposed of properly, in accordance with applicable Federal and State laws.

1.2.2. Measurable Goals

- Conduct inspections of the MS4 structures within one maintenance zone per year so that 100% of the structures are inspected within the five-year permit period.
- Conduct maintenance on MS4 structures as needed.

1.2.3. Schedule

MS4 Inspections

- March 2018 – Complete Inspection Area Sector 2
- March 2019 – Complete Inspection Area Sector 1
- March 2020 – Complete Inspection Area Sector 3
- March 2021 – Complete Inspection Area Sector 4
- March 2022 – Complete Inspection Area Sector 5

MS4 Maintenance

- Ongoing, 2017 -2022: As Needed, based on inspections

1.2.4. Items to be included in Annual Report:

- Summary of MS4 Inspections including the number and percentage of total structures inspected during the reporting period.
- Table of individual inspection reports with a record for each structure inspected, and the findings of that inspection.
- Summary table of number of structures maintained.
- Summary of Work Orders completed related to MS4 structure maintenance.

1.3. PLANNING PROCEDURES

1.3.1. Description

1.3.1.A. Comprehensive Plan

The City of Garden City's Comprehensive Plan outlines goals and specific policies that are designed to protect the local quality of life. The Comprehensive Plan guides future land use, provides the framework for the City's zoning code, addresses natural resource protection, and recommends stormwater infrastructure improvements. The City adopted the Comprehensive Plan to meet planning goals through the year 2036.

The following goals and policies of the Comprehensive Plan impact the City's stormwater program and help to broaden the City's "green infrastructure" approach to stormwater management.

Vision: "A safe, family-oriented and business friendly city."

Garden City is committed to achieving this vision through:

- Balanced growth - guided by planning and management that promotes interconnected green space, a multi-modal transportation system, and mixed-use development.
- Advancement of community - by providing a variety of commercial, institutional, educational uses as well as housing styles, sizes, and prices.
- Sustainability - through diverse public and private partnerships used to create sustainable and livable communities that protect historic, cultural, and environmental resources.
- Fiscal responsibility - by diversifying local economics to support local needs, encourage cohesiveness, reduce waste, and enhance local wealth.

- Open government - through building local capacity to provide adequate operational management of urban services.
- Natural resource preservation – by recognizing natural resources are necessary to meet the needs of future generations.
- Cultural diversity - by recognizing different cultures bring different perspectives to the table, introducing new ideas, and personalities into strategic planning processes.
- Environmental stewardship - policymakers, regulators and developers supporting sustainable site planning and techniques that create a balance between built and natural systems.

1.3.2. Measurable Goals

- Review and update the Comprehensive Plan as needed.

1.3.3. Schedule

- Review planning procedures annually from 2017 – 2022.

1.3.4. Items to be included in the Annual Report

- A description of any changes made to the Comprehensive Plan

1.4. STREET MAINTENANCE

1.4.1. Description

1.4.1.A. Street Sweeping Program

The City implements a street sweeping program to reduce polluted runoff originating from streets with curb and gutter systems. The City of Garden City oversees annual street sweeping along major roads. To reduce polluted runoff originating from streets, roads, and highways from vehicle traffic, leaks and spills, and atmospheric deposition, the Department of Public Works will oversee the sweeping of all major curb and gutter roads in Garden City. Debris collected by the street sweeper is ultimately disposed of at a landfill in accordance with the landfill's rules and regulations. Records of street sweeping activities will be maintained by the City and submitted in the annual report.

1.4.1.B. Roadside Ditch Maintenance

Roadside ditches that are located within the City Right-of-Way (ROW) are considered part of the public MS4 and are inspected and maintained by the Public Works Department to ensure effective operation. The City of Garden City currently maintains approximately 60 miles of roadside ditches.

- Right-of-ways are mowed weekly during the growing season, and ditches are inspected at that time.
- Litter and debris is removed prior to mowing and is disposed of at a local landfill.
- When roadside ditch inspections indicate that emergent vegetation is interfering with normal flow, excess emergent vegetation will be removed by hand or machinery to ensure proper functioning of the ditches.
- Roadside ditches are cleaned if accumulated sediment or other deposits exceed the design depth.
- Roadside ditch inspection and maintenance activities will be recorded in a log, compiled, and reported in the Annual Report.

1.4.1.C. De-icing Procedures

De-icing is not often necessary in coastal Georgia, and the City of Garden City does not maintain a stockpile of any material for this purpose.

1.4.1.D. Roadway Construction Erosion & Sedimentation Control

The Department of Public Works is responsible for ensuring that all minimum measure BMPs required by the Georgia Erosion and Sedimentation Act are implemented for City of Garden City road construction projects where appropriate.

1.4.2. Measurable Goals:

- Perform routine street sweeping activities for curb and gutter roads annually.
- Maintain roadside ditches annually through mowing and litter removal activities.

1.4.3. Schedule

- Ongoing: 2017 – 2022.

1.4.4. Items to be included in Annual Report

- Provide documentation of street sweeping activities.
- Provide documentation of trash and debris removal activities during roadside ditch maintenance activities.

1.5. FLOOD MANAGEMENT PROJECTS

1.5.1. Description

1.5.1.A. Flood Management Capital Improvement Project Water Quality Impact Assessment for New Structures

The City of Garden City currently requires developers to comply with the City's Stormwater Management Ordinances, which detail the rules and regulations governing post-development stormwater management practices for new development and redevelopment. The regulations require developers to submit a stormwater site plan for all developments that are not specifically exempted within the ordinance. Site stormwater management plans must address water quality and water quantity issues in accordance with the requirements of the NPDES Phase I MS4 Permit, the latest edition of the Coastal Stormwater Supplement, and applicable local development regulations.

The stormwater site plan is reviewed by a Georgia-registered Professional Engineer (contracted or City staff) and approved by the Planning and Zoning Department before a land disturbing activities (LDA) Permit is issued and construction can begin.

1.5.1.B. Flood Management Capital Improvement Project Water Quality Impact Evaluation for Existing Structures

The City of Garden City operates a Capital Improvement Program to address structural flood management and drainage issues within the City's public systems. As part of this program, the City identifies the various drainage and flooding problems within the City and develops a proposed solution to the problem in the form of a Capital Improvement Project (CIP.) CIPs may include the installation of a new structure or the retrofit, upgrade, or replacement of an existing, inadequate structure.

The City of Garden City, or a contracted consultant, will conduct a water quality impact assessment during the design phase for drainage and flooding related CIPs as funding becomes available for their implementation. This assessment will be integrated with the City's current Capital Improvement Program such that as identified CIPs are funded for implementation, an assessment will be performed during the design phase. The assessment must be completed before the design of drainage CIP has been completed. The assessment will ensure that the drainage or flood-related CIP addresses the following:

- A description of how the proposed CIP will improve water quality.
- A description of potential water quality impacts from the proposed CIP and recommendation for mitigation of any impacts.
- The feasibility and/or cost of incorporating water quality enhancements in the CIP.

- Identification of the regulatory permits needed to construct the project including, but not limited to, an NPDES construction permit and a Section 404 permit.

The City will use the Capital Improvement Project (CIP) Impact Assessment Worksheet to perform this assessment, and a copy of this worksheet is included in Appendix C. This assessment for each CIP design will become a permanent part of the CIP file, and will be provided to EPD in the Annual Report.

1.5.2. Measurable Goal:

- Ensure new flood management projects are assessed for water quality impacts in accordance with the City's Stormwater Management Ordinance.
- Evaluate existing flood control devices as part of the City's Capital Improvement Program to determine if retrofitting the devices for additional pollutant removal is feasible.

1.5.3. Schedule

- Annually, 2017 – 2022: Ensure all new Flood Management Projects are assessed for water quality impacts.
- Annually, 2017 – 2022: Review all existing flood management facilities that are retrofitted through the City's CIP program during the reporting period.

1.5.4. Items to be included in the Annual Report

- The number of plans that include new flood management projects that were reviewed during the reporting period.
- A summary of all water quality assessments of existing flood management control structures that occurred during the reporting period.

1.6. MUNICIPAL WASTE FACILITIES

1.6.1. Description

The City does not currently have any municipal waste facilities that are not already addressed in Section 3.3.1 and 3.3.3 of the City's NPDES Permit and 1.7 of the SWMP.

1.7. MUNICIPAL FACILITIES

1.7.1. Description

This program element will address the following municipally-owned facilities with the potential to cause pollution, that are not addressed in Section 3.3.3 of the City's NPDES Permit, which will be referred to collectively as "Municipal Facilities." This list constitutes the City's inventory of municipal facilities with the potential to cause pollution.

- Public Works Facility/Wastewater Treatment Facility
- Fire Station #1
- Fire Station #2
- Police Department
- Bazemore Park Ballfields

City staff will inspect municipal facilities with the potential to discharge pollutants to the MS4; and all municipal facilities sites will be inspected at least once every 5 years. The Highly Visible Pollution Sources (HVPS) inspection checklist, found in Appendix C, shall be used for municipal site inspections and records shall be maintained on problems found and actions taken. If sites are found to need improvements, the appropriate department will be notified of the problem. City staff will then perform a re-inspection, after the stipulated timeframe, to ensure that proper action has been taken.

1.7.2. Measurable Goals

- The City will update the municipal facilities inventory annually with each annual report.
- The City will inspect the municipal facilities on the municipal facility inventory such that 100% of all the facilities are inspected every 5 years.
- The City will utilize the inspection checklist provided in Appendix C to record inspections.

1.7.3. Schedule

- 2017 – 2022, Inspect 100% of municipal facilities over the 5-year permit period.

1.7.4. Items to be included in the Annual Report

- A copy of the completed inspection checklist for each municipal facility.
- A summary of any activities conducted to address issues found during inspection, if necessary.

1.8. PESTICIDE, HERBICIDE, & FERTILIZER APPLICATION

1.8.1. Description

1.8.1.A. Pesticide Applicator Certification Program

The City of Garden City relies on the Georgia Department of Agriculture (DoA) to address requirements for Pesticide Applicator Training and Certification. The DoA requires commercial applicators of pesticides (herbicides and insecticides) to obtain and retain a "Commercial Pesticide Applicators License." The DoA also requires that distributors of restricted pesticides obtain and retain "Distributor Licenses." Continuing education units are required each year to maintain the license.

Prior to issuing a business license, the City of Garden City will require applicants who are likely to require a commercial pesticide applicators license to provide proof that they hold the appropriate State license.

1.8.1.B. Municipal Pesticide Use Standard Operating Procedures

The City of Garden City utilizes herbicide application on roadside ditches (less than 20 total miles) once per year. The City requires that the employees supervising the application of pesticide/herbicide be certified through the DoA program and that they participate in the continuing education requirements.

1.8.2. Measurable Goals:

- Continue to utilize Georgia DoA Program to certify commercial applicators within the City.
- Continue to adhere to State guidelines when performing any landscape chemical application within the City.

1.8.3. Schedule:

- Ongoing, 2017-2022: Continue to require Georgia DoA Program Certification for commercial applicators within the City.
- Ongoing, 2017-2022: Continue to abide by State guidelines.

1.8.4. Items to be Included in the Annual Report:

- Documentation of any program activities during the reporting period.

2. ILLICIT DISCHARGE DETECTION & ELIMINATION (IDDE)

Permit Section 3.3.2: Illicit Discharge Detection and Elimination Program (IDDE), Table 3.3.2

2.1. LEGAL AUTHORITY

2.1.1. Description

The City of Garden City has established adequate legal authority through Garden City's Code of Ordinances, *Chapter 30 – Environment; Article V: Stormwater Management*, last updated in August 2011 to prohibit illicit discharges and conduct an illicit discharge detection and elimination program. This ordinance prohibits illicit discharges to the public MS4, grants the City the authority to enter private property to investigate suspected illicit discharges, and also provides the City with the means to enforce violations of this ordinance. The ordinance is included in Appendix D.

2.1.2. Measurable Goal

- The City will annually evaluate the Illicit Discharge Ordinance to determine if revisions are required.

2.1.3. Schedule

- Annually during the 2017 - 2022 permit period: Annual Review of Illicit Discharge and Illegal Connection Ordinance.

2.1.4. Items to be included in the Annual Report

- If revisions are required, submit a copy of the revised ordinance to EPD in the Annual Report.

2.2. OUTFALL INVENTORY & MAP

2.2.1. Description

The City of Garden City has developed an outfall inventory and a 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.

To view the map and inventory of the MS4 Outfalls, please see the Illicit Discharge Detection and Elimination (IDDE) Plan included in Appendix E. Each year, the City will update the map to reflect the addition of outfalls from new infrastructure projects or developments. In subsequent annual reports, the City will remove from the inventory any outfalls that have been reclassified or removed.

2.2.2. Measurable Goals

- The City will maintain and update a 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 as part of the City's annual report.
- The City will maintain and update a database inventory of all outfalls from the MS4 within the City Limits of Garden City and provide with the City's annual report.

2.2.3. Schedule

- Annually during the 2017-2022 permit period – Update MS4 Outfall Map and Inventory.

2.2.4. Items to be included in the Annual Report

- An updated inventory and map of the MS4 outfalls with the names and locations of all waters of the State that receive discharges from those outfalls.

2.3. IDDE PLAN

2.3.1. Description

The City of Garden City's IDDE Plan consists of inspecting MS4 outfalls and sampling any dry weather flow to determine if upstream facilities/connections are discharging non-stormwater flows to the drainage system and eliminating all identified illicit discharges. The IDDE Plan is included in Appendix E.

The City will perform dry weather screening of the MS4 outfalls within its current inventory in accordance with the procedures outlined in the IDDE Plan. The City will investigate any potential illicit discharges in accordance with the procedures 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 Illicit Discharge Ordinance, the ERP, and the IDDE Plan to remove positively identified illicit discharges.

The City has established 5 screening districts each of which encompasses approximately 20% of the MS4 area of the City. The City utilizes handheld tablets used while in the field to log inspection locations via GPS/maps and the related information on the structures. This digital system will allow staff to print off completed forms in a pdf. format for ultimate inclusion in the annual reports. The City will complete the screening of outfalls in one district per year so that 100% of the inventory of MS4 outfalls is screened over a five-year period. A copy of the City's DWS district map is included in the IDDE Plan in Appendix E.

2.3.2. Measurable Goals

- Dry weather screen 100% of all MS4 outfalls over a five-year period.
- Investigate and perform source tracing for 100% of suspected illicit discharges.
- Enforce the Illicit Discharge Ordinance and ERP for 100% of positively identified illicit discharges.

2.3.3. Schedule

- March 2018 – Complete Screening in Area Sector 1
- March 2019 – Complete Screening in Area Sector 2
- March 2020 – Complete Screening in Area Sector 3
- March 2021 – Complete Screening in Area Sector 4
- March 2022 – Complete Screening in Area Sector 5

2.3.4. Items to be Included in the Annual Report

- Provide the number of MS4 outfalls screened during the reporting period.
- Provide a map and completed dry weather/outfall reconnaissance screening forms for all MS4 Outfalls screened within the reporting period.

- Records of any source tracing or enforcement activities conducted as a result of the dry weather screening activities.

2.4. SPILL RESPONSE PROCEDURES

2.4.1. Description

All new City of Garden City staff that work with potentially hazardous or polluting materials are trained within one year of the start of employment on proper use, storage, and disposal of commonly used hazardous or potentially polluting materials. Garden City's Fire Department annually holds a Basic Hazmat Awareness and Spill Training class for applicable City employees. Damming and diking procedures are taught during the training program and materials addressed include oil, petroleum products and other materials that might possibly enter the drainage systems.

Garden City staff will maintain records of any spills that occur and how those spills were resolved. Those records will be summarized and included in the Annual Report.

2.4.2. Measurable Goal

- Maintain documentation on any spill occurrences and cleanup performed.

2.4.3. Schedule

- Annually during the 2017 - 2022 permit period: Maintain documentation of any spills and cleanup activities.

2.4.4. Items to be included in the Annual Report

- Documentation on any spill occurrences and cleanup performed.

2.5. PUBLIC REPORTING PROCEDURES

2.5.1. Description

The City of Garden City has established procedures for addressing citizen complaints about water quality and reports of illicit discharges/illegal dumping. City administrative staff is responsible for receiving citizen complaint calls, and the caller's information is then passed to the Public Works Department, which is responsible for taking action to address calls that relate to water quality within two business days. The Public Works staff will record any actions taken to address the complaint on the work order and maintain a database of all the finished work orders related to potential illicit discharges, illegal dumping, and other water quality violations. The Public Works Department maintains a database of citizen complaints and provides monthly summaries to City Council. The City shall include a summary of this database in the Annual Report.

The City of Garden City maintains a link on the City's official website that allows for citizens and visitors to report concerns, including illicit discharges and illegal dumping. The link to this page can be found on the City's home page at:
http://www.gardencityga.org/index.aspx?page=242.

Information received through the website will be referred to the appropriate department. The City promotes this webpage as a part of other public education initiatives.

2.5.2. Measurable Goals

- Investigate 100% of all water quality complaints received.
- Take appropriate action for 100% of complaints requiring action.
- Record IDDE complaints and actions taken in the City's Work Order Database.

2.5.3. Schedule

- Ongoing, 2017 – 2022: Update Work Order Database update as calls are received.
- Ongoing, 2017 – 2022: Take action for complaints received, as appropriate.
- Annual, 2017 – 2022: Update website with promotional and educational information.

2.5.4. Items to be included in the Annual Report

- Summary of the Work Order Database, to include representative documentation of citizen complaints, investigations, and actions taken during the reporting period.

2.6. PROPER MANAGEMENT & DISPOSAL OF USED OIL & TOXIC MATERIALS

2.6.1. Description

2.6.1.A. Hazardous Material Public Education

Garden City maintains a link to a Recycling Markets Directory on the City's website to assist residents with locating facilities to recycle items such as motor oil, aluminum, paper, yard trimmings, etc. at: http://www.gardencity-ga.gov/index.aspx?page=226. Additionally, the Chatham County Resource Conservation Education Center maintains information on its website to help citizens of the County, including those in Garden City, to dispose of hazardous household waste properly. The website includes a listing of facilities and businesses that will accept waste oil, other toxic wastes, and recyclables from the general public. The City of Garden City will maintain a link on the City's web page to this information. The link can be found at the follow web address: http://www.gardencity-ga.gov/index.aspx?page=226

2.6.1.B. Recycling Program

The City of Garden City operates a curbside recycling program (through a contract with private hauler) for all City residents. The current schedule for the collection of recyclables is every other Thursday, provided that recyclables are placed in specialized carts, provided by the hauler. The items collected by the City for recycling include:

- Plastic bottles and containers
- Phone/Paperback books, junk mail, magazines, catalogs, newspapers and inserts, office paper, file folders, and paper bags
- Cardboard, food boxes, paper milk containers (note, all boxes must be flattened)
- Aluminum and metal containers and empty aerosol cans

2.6.2. Measurable Goals:

- Promote proper management and disposal of used oil and toxic materials by maintaining a web link to the Chatham County Resources Conservation website.
- Operate the curbside recycling program and drop off site for household waste.

2.6.3. Schedule

- Ongoing, 2017 – 2022: Maintain link to the Department of Community Affairs and Chatham County Resource Conservation Education Center website on City's webpage.
- Ongoing, 2017 – 2022: Continue to implement curbside recycling program.

2.6.4. Items to be included in the Annual Report

- Details of any activities performed during the reporting period including an estimate of recyclables collected.

2.7. SANITARY SEWER INFILTRATION CONTROLS

2.7.1 Description

The City of Garden City currently implements an inspection program to determine if the sanitary sewer system has any leaks, damage, or cross connections with the storm sewer or drainage system. Inspections of the sanitary sewer system are conducted and maintenance or capital improvements are performed, as needed. Maintenance may include repair, relining, or replacement of malfunctioning system elements. The City inspects active lift stations on a monthly basis, and will inspect sanitary lines upon complaint, alarm, or other evidence of failure.

2.7.2 Measurable Goal:

- Inspect 100% of suspected sewage spills from the sanitary sewer system reported to or by Garden City.
- Resolve 100% of sanitary sewer overflows or cross connections.
- Record and maintain information on all sanitary sewer spills in a database.

2.7.3 Schedule

- Ongoing, during the 2017 – 2022 permit period: Investigate and address suspected sewer overflows or discharges.

2.7.4 Items to be Included in the Annual Report

- Details on activities performed during the reporting period as recorded in the sanitary sewer spill log.

3 INDUSTRIAL FACILITIES STORMWATER DISCHARGE CONTROL

Permit Section 3.3.3: Industrial Facility Stormwater Discharge Control, Table 3.3.3

3.1 INDUSTRIAL FACILITY INVENTORY

3.1.1 Description

The City of Garden City currently maintains an inventory of industrial facilities that discharge to the City's MS4. The list is based on EPD's NPDES IGP permittee list and is included in Appendix A. Garden City will continue to modify and update this list as new facilities open or old facilities close. Garden City will submit any changes to the inventory in the Annual Report.

3.1.2 Measurable Goals

- Annual update of Industrial Facility Inventory

3.1.3 Schedule

- Annually during the 2017 – 2022 permit period: Update Industrial Facility Inventory

3.1.4 Items to be Included in the Annual Report

- Updated Industrial Facility Inventory

3.2 INDUSTRIAL STORMWATER INSPECTION PROGRAM

The City of Garden City will conduct on-site stormwater inspections for 100% of the facilities on the industrial inventory list over the course of the five (5) year permit period (2017 – 2022.)

- City staff will first determine whether the industrial facility discharges to the City MS4. If the facility does not discharge to the City MS4, it shall be removed from the Industrial Facility Inventory.
- City staff will check to ensure that the facility has submitted a Notice of Intent to be covered under the NPDES Industrial General Permit (IGP), if it is required.
- City staff will perform a cursory review of the implementation status of the facility's associated Stormwater Pollution Prevention Plan (SWP3).
- The City will perform an inspection of the facility utilizing the inspection checklist included in Appendix C.
- Should an inspection reveal a potential threat to water quality in the MS4, Garden City staff will notify the industry or business, provide them with a copy of the inspection checklist, and later perform a re-inspection to ensure that all necessary corrections were made.
- Enforcement of any identified illicit discharges will be handled in accordance with the City's Illicit Discharge Ordinance and Enforcement Response Plan.
- If the violation is still not corrected, EPD will be notified of the problem. The City will also notify EPD if assistance is needed for enforcement of the NPDES IGP or if there is a threat to Waters of the State. If EPD intervention does not ensure a resolution to the problem, the City of Garden City may elect to perform water quality monitoring at the facility outfall. In addition, the City may, during the investigation of a violation of the City's IDDE Ordinance, complete or require monitoring of a suspected industrial facility, in order to secure evidence to support the alleged violation.
- The City shall maintain records of inspections results, problems found, and actions taken. Documentation of these inspections will be submitted each year with the Annual Report.

3.2.1 Measurable Goals

- Inspect 100% of industrial facilities in the City's inventory over the 5-year permit period, and inspect at least 5% of the industrial facilities in the inventory annually.
- Provide water quality monitoring results, if monitoring is conducted during the year.

3.2.2 Schedule

- Annually from 2017 – 2022: Inspect at least 5% of industrial facilities in the City's inventory.

3.2.3 Items to be Included in the Annual Report

- Copy of completed inspection checklists for each industrial facility inspected during the reporting period.

3.3 ENFORCEMENT PROCEDURES

3.3.1 Description

If upon inspection, an industrial site is found to have issues that would be considered an illicit discharge, then the City will proceed to an enforcement action as outlined in the Enforcement Response Plan. If an illicit discharge has not taken place but practices on site indicate a high probability that such a discharge could occur, then the City will discuss with the property owner and/or the operator of the site the issues uncovered by the inspection. The City will also make the operator aware of the Georgia Stormwater Management Manual and the Coastal Stormwater Supplement that discusses pollution prevention and good housekeeping.

3.3.2 Measurable Goals:

- Implement enforcement procedures when violations are discovered during inspections of industrial facilities.
- Document enforcement actions taken in violation/enforcement action log.

3.3.3 Schedule

- Ongoing, 2017 – 2022 – Document enforcement actions in violation/enforcement log.

3.3.4 Items to be Included in Annual Report

- Documentation of enforcement actions taken during the reporting period.

3.4 EDUCATIONAL ACTIVIITIES

3.4.1 Description

The City will distribute the Georgia EPD's informational handout on the requirements of the NPDES IGP or other industrial stormwater best practices educational information to industrial facilities during industrial stormwater site inspections.

3.4.2 Measurable Goals

- Provide educational information to industrial facilities on the City's inventory during inspections.

3.4.3 Schedule

- Annually from 2017 – 2022: Provide education information to industrial facilities during inspections.

3.4.4 Items to be included in the Annual Report

- Copy of educational information distributed to industrial facilities.

4 CONSTRUCTION SITE MANAGEMENT

Permit Section 3.3.4: Industrial Facility Stormwater Discharge Control, Table 3.3.4

4.1 LEGAL AUTHORITY

The City has adopted the most current model Soil Erosion, Sedimentation, and Pollution Control Ordinance (E&S Ordinance), as written and distributed by EPD, and it is included in Appendix D. This ordinance meets the requirements of the NPDES Phase I MS4 Medium Permit and the requirements of the Georgia Erosion and Sedimentation Act (GESA).

The City of Garden City is currently a local issuing authority for LDA Permits as defined by GESA. Accordingly, the City administers the programs described below in accordance with the responsibilities related to being an issuing authority. EPD has taken the position that any program in compliance with the regulations of GESA will also be considered in compliance with those requirements of the NPDES Phase I MS4 program for Construction Site Structural and Non-Structural Control.

4.1.1 Measurable Goals

- Annually evaluate the E&S Ordinance to determine if revisions are required.

4.1.2 Schedule

- Annually from 2017 – 2022: Annual Review of E&S Ordinance

4.1.3 Items to be Included in the Annual Report

- If revisions are required, submit a copy of the updated E&S ordinance.

4.2 SITE PLAN REVIEW PROCEDURES

4.2.1 Description

All qualifying developments are required to comply with the local E&S Ordinance and obtain an LDA Permit prior to the start of any land disturbing activities that will disturb one or more acres of land within the City limits. Phased developments that disturb a total of one acre or more are also required to receive an LDA Permit.

The City's Erosion and Sedimentation (E&S) Ordinance requires submittal of an approved Erosion, Sedimentation, and Pollution Control Plan (ESPCP) prior to issuance of an LDA Permit. ESCPs received by Garden City are forwarded to the Georgia Soil and Water Conservation District (GSWCD) who review the plans for compliance with the requirements of the GESA and the Georgia Erosion and Sedimentation Control Manual. The ESPCP must be approved by the GSWCC prior to issuance of a LDA Permit by the City.

4.2.2 Measurable Goals

- Provide 100% of ESPCPs to GSWCD for their review and approval of compliance with GESA and the Garden City E&S Ordinance.
- Grant LDA permits only after ESPCP is approved by GSWCD.

4.2.3 Schedule

- Ongoing, 2017 – 2022: Review ESPCPs as they are submitted

4.2.4 Items to be Included in the Annual Report

- Number of site plans reviewed, approved, or denied during the reporting period.
- Number of Land Disturbance Activity Permits issued during the reporting period.

4.3 CONSTRUCTION SITE INSPECTION PROCEDURES

4.3.1 Description

The Garden City Planning and Zoning Department is responsible for the inspection program that targets all construction projects within the city limits. The inspections include checking all E&S control measures for compliance with the approved E&S plans and LDA Permit. The authority for such inspections follows the City's E&S Ordinance. If, upon inspection, a construction site is found to be in non-compliance with its approved E&S plan, LDA Permit, and the minimum requirements of the E&S Ordinance, the Planning and Zoning Department is responsible for enforcing the provisions of the E&S Ordinance. Enforcement measures can include notices of violation, stop work orders, and fines.

Inspections shall be conducted before, during and after land disturbance in accordance with the following procedures:

- City staff will conduct site inspections of all sites that have an LDA Permit after land disturbing activities commence to verify compliance with all applicable E&S requirements.
- Once a site is under construction it will be monitored through inspections on a regular basis until the site is stabilized. Inspections during the construction process will be prioritized as follows:
    - Proximity to local waterways
    - A significant rain event
    - Evidence of poor housekeeping
    - History of poor compliance
    - Evidence of absent or malfunctioning controls
- A final comprehensive site inspection will be conducted at all LDA Permit sites after land disturbing activities have ceased to ensure that the site has been adequately stabilized and that all excess materials have been removed.
- An E&S Inspection Checklist will be completed during each inspection. This checklist is important to document the inspection history and the record of compliance. The Planning and Zoning Department will keep records of inspections, violations, and enforcement actions.
- If enforcement measures are required, they shall be implemented in accordance with the SWMP, City's E&S Ordinance, and the ERP.

4.3.2 Measurable Goals

- 100% of construction sites with LDA permits inspected after installation of initial BMPs.
- 100% of construction sites with LDA permits inspected during construction.
- 100% of construction sites with LDA permits inspected at the close of land disturbing activities.
- Maintain records of all inspection activities conducted during the reporting period.

4.3.3 Schedule

- Ongoing throughout the 2017 – 2022 permit period: A minimum of three times per every construction site with a Land Disturbance Activity Permit.

4.3.4 Items to be Included in Annual Report

- Number and location of active construction sites and number of inspection activities occurring during the reporting period.

4.4 ENFORCEMENT PROCEDURES

4.4.1 Description

If a construction site shows evidence of violations during the inspection, a comprehensive site inspection will be conducted. If upon a comprehensive site inspection, the site is found to be in violation of the City's ordinance, the City will issue a written warning to the violator. The violator will then have up to five (5) business days to correct said violation. After five (5) business days, a follow-up inspection by City representatives will take place to verify that corrective measures have been taken for previously documented deficiencies.

Following the third and each subsequent violation, an immediate stop-work order shall be issued. No work shall be allowed on the site except to address those deficiencies identified in the inspection and subsequent re-inspections.

Stop work orders shall be issued immediately without prior warnings if any of the following are identified on a site:

- Regulated land disturbing activities are being undertaken without a Land Disturbance Activity Permit
- Failure to maintain a stream buffer
- Significant amounts of sediment as determined by the local issuing authority or by the director or his or her designee, have been or are being discharged into state waters and where best management practices have not been properly designed, installed, and maintained.

For a more detailed description of enforcement procedures regarding E&S violations, the reader is directed to the Enforcement Procedures located in the E&S Ordinance included in Appendix D, the IDDE Plan included in Appendix E, and the ERP (as approved by EPD) located in Appendix F.

4.4.2 Measurable Goals

- Follow enforcement procedures outlined in the City's E&S Ordinance and ERP for violations documented at construction sites.

4.4.3 Schedule

- Ongoing throughout the 2017 -2022 permit period: Implement enforcement procedures as appropriate based on the results of E&S inspections.

4.4.4 Items to be Included in the Annual Report

- Include Documentation of enforcement actions taken during the reporting period including the number, type, and location (e.g. Notice of Violation, Stop Work Order).

4.5 EDUCATIONAL/TRAINING ACTIVITIES

4.5.1 Description

GESA 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 GSWCC. The City requires all construction site operators to provide evidence in their LDA Permit application that they have received the appropriate certification. Evidence of site personnel certification must also be produced during an inspection, upon request. The City also requires all applicable staff to receive this training as soon as possible after the start of their employment.

4.5.2 Measurable Goals

- Ensure all MS4 staff involved in construction activities subject to the Construction General Permits (CGPs) are trained and certified in accordance with the rules adopted by the Georgia Soil and Water Conservation Commission.

4.5.3 Schedule

- Ongoing - Education/Training Activities.

4.5.4 Items to be Included in the Annual Report

- Provide a summary of the training attended by staff during the reporting period.
- Provide the number and type of current certifications held by MS4 staff.

5 HIGHLY VISIBLE POLLUTANT SOURCES (HVPS)

Permit Section 3.3.5: Highly Visible Pollutant Sources (HVPS), Table 3.3.5

5.1 HVPS FACILITY INVENTORY

5.1.1 Description

The City maintains an inventory of commercial businesses and facilities that are considered to be highly visible pollutant sources (HVPS). The City considers the following types of businesses to be HVPS:

- Auto Repair/Maintenance Facilities
- Gas Stations
- Car Washes
- Restaurant Outdoor Grease Containment
- Landscape and Garden Related Businesses

The inventory is included is updated annually based on changes to the business license database.

5.1.2 Measurable Goals

- Update the HVPS Inventory on an annual basis.

5.1.3 Schedule

- Annually from 2017-2022: Update HVPS Inventory.

5.1.4 Items to be Included in Annual Report

- Updated HVPS Inventory.

5.2 HVPS STORMWATER INSPECTION PROGRAM

The City will be responsible for conducting stormwater inspections on-site at facilities on the HVPS inventory list such that 100% of facilities are inspected over the permit period (2017 – 2022). Inspections shall be scheduled annually based on any evidence or knowledge of potential illicit discharge issues, impaired waterways, history of violations, etc.

A City inspector will visit the HVPS site and assess the condition and presence of pollutants on-site. A standardized HVPS Facility Stormwater Inspection checklist, included in Appendix C, shall be used to record the inspection results. City staff will inspect the site for evidence of stormwater pollution in the following areas and this information will be noted:

- Areas around machinery and/or equipment
- Areas prone to leaks and spills
- Outdoor storage and handling areas
- Waste generation, storage, treatment, and disposal areas
- Vehicle wash-down areas
- Fueling areas
- Loading and unloading areas

Documentation shall be maintained on all inspections, problems found, and actions taken.

5.2.1 Measurable Goal

- Inspect approximately 20% of HVPS sites each year so that 100% of HVPS sites are inspected within the permit period.

5.2.2 Schedule

- Annually from 2017 – 2022: Complete inspections of 20% of approximately HVPS Sites each year.

5.2.3 Items to be Included in the Annual Report

- Provide the total number of HVPS facilities and the number and percentage of inspections conducted during the reporting period.
- Provide a completed inspection checklist for each inspected HVPS site conducted that reporting period.

5.3 ENFORCEMENT PROCEDURES

5.3.1 Description

If upon inspection, an HVPS site is found to have issues that would be considered an illicit discharge, then the City will proceed with an enforcement action as outlined in the IDDE Plan or the Enforcement Response Plan. If an illicit discharge has not taken place but practices on site indicate a high probability that such a discharge could occur, then the City will discuss with the property owner and/or the operator of the site the issues uncovered by the inspection.

For violations that continue unabated, the City will implement the enforcement provisions of the approved IDDE Plan and the ERP including sending notifications, issuing violations, and taking enforcement measures necessary to abate the violation and/or restore the property.

5.3.2 Measurable Goal

- Implement enforcement procedures for violations noted during HVPS inspections.

5.3.3 Schedule

- Ongoing, 2017 – 2022: Take enforcement procedures, as needed and appropriate.

5.3.4 Items to be included in Annual Report

- Documentation of enforcement actions taken on HVPS sites during the reporting period.

5.4 EDUCATIONAL ACTIVITIES

5.4.1 Description

The City's website maintains stormwater information to inform business owners/operators how to control stormwater pollution according to their specific commercial activities. In addition, City staff distribute educational materials during HVPS inspections as well as directly mail education materials to targeted HVPS on the master inventory list.

5.4.2 Measurable Goal(s)

- Maintain HVPS educational material on City website
- Distribute HVPS educational material during facility inspections
- Directly mail HVPS educational material to HVPS on the City's facility list

5.4.3 Schedule

- Ongoing, 2017 – 2022: Maintain educational materials on website.
- Annually, 2017 – 2022: Distribute educational materials during HVPS inspections and/or through direct mail.

5.4.4 Items to be included in Annual Report

- Copy of educational material distributed during HVPS inspections.
- Weblink for HVPS educational materials.

5.5 MUNICIPAL EMPLOYEE TRAINING PROGRAM

5.5.1 Description

City employees will be trained either in-house or via an offsite training course on HVPS facility inspection and education programs on an annual basis. This training will include all municipal employees involved in HVPS activities. The City shall keep records of the training program including the training agenda and or materials as well as a list of attendees. This training may be held in conjunction with other required training programs described in the SWMP.

5.5.2 Measurable Goals

- Ensure that MS4 staff involved in HVPS activities obtain the appropriate education and training.

5.5.3 Schedule

- Annually, 2017 – 2022: Conduct employee training.

5.5.4 Items to be included in the Annual Report

- Summary of training conducted or attended during the reporting period. This may include agendas and/or training materials as well as a list of attendees.

6 ENFORCEMENT RESPONSE PLAN (ERP)

Permit Section 3.3.6: Enforcement Response Plan (ERP)

6.1 ERP DESCRIPTION

The City's Enforcement Response Plan (ERP) describes the actions taken for violations associated with the NPDES Permit and the SWMP. The ERP details the City's responses to any noted stormwater violations, including escalating enforcement responses to address repeat and continuing violations. The plan details:

- Which City ordinances provide the legal authority to undertake enforcement, including citation of specific ordinance sections;
- The enforcement mechanisms the permittee has the authority to use, including such actions as:
    - verbal warnings;
    - written notice of violations;
    - citations (with fines);
    - stop work orders;
    - withholding plan approval or other authorizations;
    - any other available enforcement mechanisms;
    - order for cessation or elimination of discharge; and
    - referral for judicial action/enforcement.
- Description of when each enforcement mechanism will be employed, including the path of escalation;
- Time frames for each step, including investigation of noncompliance, sequence and use of enforcement mechanisms, corrective action, re-inspection of site, etc.
- Description of the methods to be used to track any instances of noncompliance, including such items as:
    - name of the owner/operator of facilities and/or the location or address;
    - type of site (e.g. IDDE, construction, industrial, HVPS, etc.);
    - description of non-compliance;
    - description of enforcement action(s) used;
    - time frames for each step (e.g. investigation, corrective action, re-inspection);
    - documentation of inspection and enforcement actions taken;
    - documentation of referral to other departments or agencies; and
    - date of violation resolution.

6.1.1 Schedule

- The ERP must be reviewed annually and revised as necessary. The current approved ERP can be found in Appendix F.

6.1.2 Items to be included in the Annual Report

- If revised during the reporting period, the ERP will be submitted for review.

7 MONITORING FOR DISCHARGES TO IMPAIRED WATER BODIES

Permit Section 3.3.7: Impaired Waterbodies

7.1 IMPAIRED WATER BODY MONITORING PLAN

Garden City has identified the impaired waterbodies and pollutants of concern (POC) located within its jurisdiction using the latest approved Georgia 305(b)/303(d) List of Waters. The City's has a monitoring and implementation plan addressing each POC and annually checks whether an impaired waterbody within its jurisdiction has been added to the latest 305(b)/303(d) list. The Plan also includes:

- Sample locations, whether samples are collected instream (i.e. upstream and downstream), from outfalls during wet weather events, or a combination of both locations.;
- Sample type, frequency, and any seasonal considerations;
- Monitoring implementation schedule for each POC;
- A map showing the location of the impaired waterbodies, the monitoring location, and all identified MS4 outfalls located on the impaired waterbodies or occurring within one linear mile upstream of the waterbodies, or a schedule for confirming the location of these outfalls; and
- Description of proposed BMPs to be used to control and reduce the POCs and a schedule for implementation of these BMPs.

7.1.1 Impaired Waterbody Monitoring Description

There are currently two stream segments within the City of Garden City that are currently identified on the Georgia 305(b)/303(d) list for impaired stream segments, as shown in the table below:

Table 2: Impaired Stream Segments

Stream Segment	Reach Location	Evaluation/Use	Criterion Violated	Potential Cause	TMDL
Pipe Makers Canal	Unnamed Tributary u/s of Dean Forest Road to the Savannah River	Not Supporting/ Fishing	Fecal Coliform	Urban Runoff	Yes
Salt Creek	Headwaters to Hardin Canal	Not Supporting/ Fishing	Fecal Coliform / Nonpoint source / Unknown	Urban Runoff	Yes

The City has developed a plan to perform water quality monitoring of the impaired water bodies listed above. This plan includes stormwater management BMPs to address fecal coliform in the Lower Savannah watershed. For more information regarding best management practices designed to address water quality impairments, please see the Impaired Water Body Monitoring and Implementation Plan in Appendix G.

The City will analyze the trends in the monitoring data collected as part of this effort and assess the effectiveness of the BMPs for addressing the POC in the monitoring and implementation plan.

The City will also review Georgia EPD's updated 305(b)/303(d) list bi-annually for waters not supporting their designated use within their jurisdiction. For newly listed waterbodies, the City will propose an update to the Impaired Waters Monitoring and Implementation plan (Plan) for the pollutant of concern and submit a revised copy of the document to EPD for approval. Following approval of the Plan, the Plan will be implemented and a copy will be incorporated into the SWMP in Appendix G.

7.1.2 Measurable Goal

- Implement Impaired Water Body Monitoring and Implementation Plan.
- Bi-annual Review of the Review 305(b)/303(d) list, and update of Plan, if required.

7.1.3 Schedule

- Bi-Annual, 2017 – 2022: Review 305(b)/303(d) list and report on Impaired Water Body Monitoring and Implementation Plan.

7.1.4 Items to be Included in Annual Report

- Summary of monitoring data, any water quality trends, and plan implementation activities conducted during the previous reporting period.
- An assessment of the data trends for each POC.

8 PUBLIC EDUCATION

Permit Section 3.3.9: Public Education

8.1 PUBLIC EDUCATION

Garden City conducts a public education program that addresses water quality issues and the protection of water resources and encourages the use of green infrastructure/low impact development. The program covers such topics as litter control, illicit discharges, household hazardous waste disposal, and residential pesticide, fertilizer, and herbicide application, and GI/LID techniques.

8.1.2 Stormwater Webpage

The City of Garden City will maintain a webpage on the City's official website that is linked to the home page and contains information on stormwater management issues. The link to this page can be found on the City's home page at:
http://www.gardencityga.org/index.aspx?page=105

This website will be used to promote the City's and other area educational programs, workshops and public meetings including the following:

- Local Cleanups
- Adopt-A-Stream
- Local Educational Workshops on Stormwater Issues

The webpage also includes information on how to prevent stormwater pollution, illicit discharges and dumping, and a number/link to report illegal dumping, illicit discharges and other stormwater problems. The City will promote this webpage as a part of other public education initiatives. Webpage updates are conducted as more information becomes available about innovative design methodologies, including low impact development/green infrastructure, and sustainability efforts.

8.1.3 Measurable Goals

- Maintain and update website to include applicable and relevant educational materials.

8.1.4 Schedule

- Annually from 2017 – 2022: Review and update website educational material as necessary.

8.1.5 Items to be Included in Annual Report

- Link to educational information on City's webpage.
- A list of activities conducted during the reporting period.

8.2 PUBLIC INFORMATIONAL MATERIALS

The City will distribute brochures/fact sheets/guides designed to address stormwater pollution prevention at City Facilities, during City Events, or through direct mailings. These brochures will be chosen to address at least one of the following topics:

- Stormwater Pollution Prevention
- Good Housekeeping for Commercial Establishments
- Picking Up After Your Pet
- Proper Handling and Disposal of Hazardous Waste
- Septic System Maintenance
- Promotion of Public Involvement Activities
- Rain Barrel Construction

Brochures and outreach materials or messages will be reviewed on an annual basis and if available, electronic versions of the brochures will also be posted on the website.

8.2.1 Measurable Goals

- At least once a year place an appropriate pollution prevention message in the City's utility bills that are mailed directly to residents.
- Review and update brochures or direct mailings on an annual basis.

8.2.2 Schedule

- Annually from 2017 – 2022: Review brochures and update as necessary as well as restock brochure distribution points.
- Distribute public information materials at City events, at City facilities or through direct mail.

8.2.3 Items to be included in Annual Report

- Copies of any brochures/guides or messages distributed during the reporting period.

9 PUBLIC INVOLVEMENT PROGRAM

Permit Section 3.3.10: Public Involvement

9.1 MEDIA INVOLVEMENT

The media will be contacted with news stories about the implementation of the SWMP. Public access television, written articles, public service announcements, and advertisements may also be utilized, as appropriate to ensure SWMP messages are distributed to as many residents, visitors, and commercial operations as possible.

9.1.1 Measurable Goals

- Annually distribute articles and/or press releases detailing aspects of the City's SWMP.
- Ensure the SWMP is posted on the City's website for public review.

9.1.2 Schedule

- Annually during the 2017 – 2022 permit period: Distribute Press Releases on aspects of the City's SWMP.

9.1.3 Items to be Included in Annual Report

- Press Releases distributed to the media.
- Copies of any articles or advertisements detailing aspects of the City's SWMP.

9.2 CITY PUBLIC STORMWATER EDUCATION EVENT

The City of Garden City will organize an annual public education training session to educate interested parties on stormwater related topics and issues. The City will choose a location within the City and promote the event through the City's website, social media, utility bill mailers, and direct contact with volunteer groups. The City will keep records of the number of participants and attendees.

9.2.1 Measurable Goals

- Hold one public stormwater education session per year within the City of Garden City.
- Ensure the SWMP is posted on the City's website for public review.

9.2.2 Schedule

- Annually during the 2017 – 2022 permit period: Hold education session.

9.2.3 Items to be Included in Annual Report

- Promotional materials and training session handout materials
- Records of the number of volunteers and attendees that participate
- Link to the SWMP posted on the City's website.

9.3. REGIONAL SWMP COMMITTEE

To create opportunities for citizens to be participate in the SWMP, the City will work with Chatham County and the other jurisdictions within Chatham County to form a regional SWMP committee. The committee will encourage public participation by inviting citizens to attend an informational meeting that discusses the City's SWMP and educates citizens on the City's SWMP program and proper stormwater management practices to lessen pollutants in the MS4. The Committee will also serve as an advisory panel to the municipalities, providing opportunities for the jurisdictions to discuss stormwater practices that are effective and seek solutions for stormwater-related issues.

Each jurisdiction will be invited to nominate a department representative to sit on the Committee. The Committee will meet at a minimum of once/year, if not more frequently, and at least one meeting per year (or a session during the meeting time) will be made open to the public. The meetings may be held separately, or in conjunction with each other. The Public meeting will be advertised within each participating municipality to ensure that all citizens are notified of the meeting.

9.3.1. Measurable Goal

- Notify public within each jurisdiction of SWMP Meeting.
- Hold annual meeting of the regional SWMP Committee that is open to the public to discuss stormwater issues.
- Hold at least one meeting per year with SWMP Committee staff department members.

9.3.2. Schedule

- Annually during the 2017 – 2022 permit period: Convene meetings.

9.3.3. Items to be Included in Annual Report

- Summary of the public meeting announcement, including the date and method of publication.
- Agendas and sign in sheets for SWMP Committee meeting.

9.4 BRING ONE FOR THE CHIPPER

The City of Garden City will participate in the "Bring One for the Chipper" event to encourage people to properly dispose of their Christmas trees. The City will publicize the event and locations where residents can bring in old Christmas trees to be chipped and recycled into mulch. The mulch is then for use by residents at no charge. This event is advertised on the City's webpage, social media, and through local media via press releases.

9.4.1 Measurable Goals

- Annually publicize the "Bring One for the Chipper" event.

9.4.2 Schedule

- Annually during the 2017 – 2022 permit period: Publicize the "Bring One for the Chipper" event.

9.4.3 Items to be Included in Annual Report

- Promotional materials

9.5 CLEAN UP EVENT

9.5.1 Description

The City of Garden City will organize a clean-up event each year within the City to remove trash and debris from local roads and/or waterways. The City may coordinate this event in conjunction with other events such as Great American Cleanup, Adopt-A-Stream's Rivers Alive event, or other related events. The City will promote the event through the City's website, social media, and press releases to the media. The City will keep records of the number of participants as well as an estimate of the amount of trash and debris removed.

9.5.2 Measurable Goals

- Hold one clean up event per year within the City of Garden City

9.5.3 Schedule

- Annually from 2017 – 2022: Hold clean up event

9.5.4 Items to be Included in Annual Report

- Promotional materials
- Records of the number of participants
- Estimate of the amount of trash and debris removed

10 POST CONSTRUCTION

Permit Section 3.3.11: Post Construction

10.1 POST CONSTRUCTION STORMWATER CONTROLS

10.1.1 Description

The City developed, implemented, and enforces a program to address stormwater runoff into the MS4 from new development and redevelopment projects. The program must ensure controls are in place that will prevent or minimize water quality impacts. The Post-Construction Stormwater Management Program includes these performance standards:

- Stormwater Runoff Quality/Reduction;
- Stream Channel/Aquatic Resource Protection;
- Overbank Flood Protection; and
- Extreme Flood Protection.

The Stormwater Management Ordinance also contains provisions prohibiting illicit discharges and illegal dumping, requiring post-construction stormwater management, granting the City the authority to enter private property to conduct inspections, and establishing procedures for violations and enforcements.

The City of Garden City Stormwater Ordinance references the design guidelines recommended by the Coastal Stormwater Supplement (CSS) to the Georgia Stormwater Management Manual (GSMM). Under this ordinance, and the referenced CSS design standards, developers must comply with the rules and regulations governing the development of post-development stormwater management plans for new development and redevelopment. The regulations require developers to submit a Stormwater Management Site Plan for all developments disturbing more than 1.0 acre of land or adding more than 5,000 sqft of impervious surface. Stormwater management plans must address water quality and water quantity issues in accordance with CSS recommendations. This ordinance encourages site design that incorporates green infrastructure and infiltration of stormwater to reduce stormwater runoff rates and volume. The Stormwater Management Site Plan must be reviewed by a Georgia-certified Professional Engineer and approved by the City before a Land Disturbing Activity (LDA) Permit is issued and construction can begin.

10.1.2 Measurable Goal

- Annually evaluate the Stormwater Ordinance for post construction stormwater runoff to determine if revisions are required.
- Update the ordinance, if required.

10.1.3 Schedule

- Ongoing, 2017 – 2022: Enforce the Stormwater Management Ordinance.

- Annually during the 2017 – 2022 permit period: Review of Ordinance during plan review.

10.1.4 Items to be included in Annual Report

- Number of post construction stormwater runoff plans reviewed and approved during the reporting period.
- If the City's Stormwater Ordinance or Local Design Manual is updated during the reporting period, include the updated document(s).

11 GREEN INFRASTRUCTURE/LOW IMPACT DEVELOPMENT (GI/LID)

Permit Section 3.3.11(b): Green Infrastructure/Low Impact Development

11.1 GREEN INFRASTUCTURE/ LOW IMPACT DVEELOPMENT PROGRAM

Garden City evaluated its current ordinances and GI/LID techniques and practices, developed a GI/LID structure inventory, and created an inspection and maintenance schedule for GI/LID structures.

11.2 Ordinance Review

The City of Garden City has performed an assessment of its existing codes to determine if there are any regulations that present an obstacle to smart growth and a green infrastructure approach to stormwater management. The City utilized the Code and Ordinance Worksheet developed by the Center for Watershed Protection (CWP). The completed checklist and summary of recommended actions were included in the 2012 Annual Report. Based on the results of the assessment, the Planning and Zoning Department updated any ordinances or codes to remove the identified obstacles.

The City currently has several existing regulations that promote the use of green infrastructure for managing stormwater runoff and mitigating the negative impacts of new development. As part of this SWMP, the City of Garden City will continue 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.

11.2.1 Measurable Goals

- If revisions are determined to be warranted as a result of the annual evaluation, all changes will be submitted to EPD as part of the annual report.

11.2.2 Schedule

- Annually, 2017 – 2022: Review of City Ordinances

11.2.3 Items to be Included in Annual Report

- If updates to the City's Ordinances are made during the reporting period, include the updated code(s).

11.3 GI/LID PROGRAM, TECHNIQUES, AND PRACTICES

11.3.1 Description

The City of Garden City has developed and implemented a GI/LID Plan to address the following items:

1. GI/LID techniques and practices
2. GI/LID Structure Inventory
3. GI/LID Inspection Program

The GI/LID Plan was approved by EPD in correspondence received on January 7, 2016. A copy of the GI/LID Plan is included in Appendix H.

11.3.2 Measurable Goals

- Review the GI/LID Plan annual and make updates as needed.

11.3.3 Schedule

- Annually during 2017 – 2022: Review GI/LID Plan, and update as needed.

11.3.4 Items to be Included in Annual Report

- Any updates to GI/LID Plan

11.4 GI/LID STRUCTURE INVENTORY

11.4.1 Description

The City maintains an inventory of privately owned non-residential and publicly-owned water quality-related Green Infrastructure (GI) / Low Impact Development (LID) structures located within the City Limits of Garden City. The inventory includes at a minimum: bioswales, pervious pavements, rain gardens, cisterns, green roofs, and any other structure deemed appropriate by the City. The inventory will be reported in a table format that will include the following information:

- Type of Structure
- Location of Structure (Latitude & Longitude)
- Date Constructed

In addition to the type and location of each structure, the table will also include a summary of the total number of each structure. New GI/LID structures are identified through the plan review process and added to the inventory. An updated inventory will be included with each annual report.

11.4.2 Measurable Goals

- Update the inventory with new GI/LID structures and submit the updated inventory in each annual report.

11.4.3 Schedule

- Annually during the 2017 - 2022 permit period– Update GI/LID structure inventory.

11.4.4 Items to be included in Annual Report

- Most recent GI/LID Inventory

11.5 INSPECTION PROGRAM

11.5.1 Description

The City has developed a program to ensure that inspections are conducted on 100% of the privately owned non-residential and publicly owned GI/LID structures within a 5-year period. Maintenance will also be performed on all publicly-owned GI/LID structures, as needed.

The City requires developers of privately-owned non-residential GI/LID structures to complete an Inspection & Maintenance Agreement with the City, prior to the issuance of a permit for any land development activity. The Inspection & Maintenance agreement includes the following information:

- The person(s) responsible for carrying out the inspection and maintenance.
- A maintenance schedule stating when and how often routine inspection and maintenance will occur.
- Plans for annual inspections to ensure proper performance of the stormwater management system between scheduled maintenance.

During routine inspections, if the City staff determine that the owner is not properly maintaining their non-residential GI/LID structures, they will enforce the provisions of the Inspection & Maintenance Agreement and the Stormwater Management Ordinance.

11.5.2 Measurable Goals

- Inspect 100% of the total privately owned non-residential and publicly owned GI/LID structures within a five-year period. Provide the number and/or percentage of the total structures inspected during the reporting period in each annual report.
- Ensure that private owners are maintaining privately-owned non-residential GI/LID structures in accordance with their Inspection & Maintenance Agreements.
- Conduct maintenance on all publicly owned GI/LID structures, in accordance with EPD approved procedures.

11.5.3 Schedule

- Annually, 2017 - 2022 – Inspect non-residential GI/LID structures in one MS4 Zone.
- Annually, 2017 - 2022 – Inspect and maintain publicly-owned GI/LID structures in one MS4 Zone.

11.5.4 Items to be Included in Annual Report

- Number and percentage of GI/LID structures inspected during the reporting period.
- Number and percentage of publicly-owned GI/LID structures maintained during the reporting period.

Appendix A:

1) NPDES Phase I MS4 Permit
2) Canal Maintenance MOU with Unincorporated Chatham County

GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

Watershed Protection Branch
2 Martin Luther King, Jr. Drive
Suite 1152, East Tower
Atlanta, Georgia 30334
404-463-1511

MAR 17 2017

Honorable Don Bethune, Mayor
City of Garden City
100 Central Avenue
Garden City, Georgia 31405

RE: Municipal Separate Storm Sewer System
Phase I Medium MS4 Permit
NPDES Permit No. GAS000208

Dear Mayor Bethune:

Pursuant to the Georgia Water Quality Control Act, as amended, the Federal Clean Water Act, as amended, and the Rules and Regulations promulgated thereunder, we have today issued the attached National Pollutant Discharge Elimination System Permit (Permit) for your Municipal Separate Storm Sewer System.

On December 19, 2016, the Georgia Environmental Protection Division (EPD) transmitted a proposed draft Permit to you. The public comment period ended on January 27, 2017. We received several comments from various stakeholders. We have addressed the comments received and made minor Permit revisions. Attached please find EPD's response to comments.

Please be advised that on or after the effective date indicated in the attached NPDES Permit, the permittee must comply with all terms and conditions of this Permit.

Sincerely,

Richard E. Dunn
Director

RED/mag

Attachments

CC: Ron Feldner, P.E., City Manager (w/attachments)

Phase I Medium MS4
NPDES Permit No. GAS000208

GEORGIA
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Discharges From The

City of Garden City

Municipal Separate Storm Sewer System

In compliance with the provisions of the Georgia Water Quality Control Act (Georgia Laws 1964, p. 416, as amended), hereinafter called the "State Act", the Federal Clean Water Act, as amended (33 U.S.C. 1251 et seq.), hereinafter called the "Clean Water Act", and the Rules and Regulations promulgated pursuant to each of these Acts, all new and existing stormwater point sources covered under this permit are authorized to discharge stormwater from this municipal separate storm sewer system to the waters of the State of Georgia in accordance with the limitations, monitoring requirements and other conditions set forth in Parts I through 5 and Appendix A hereof.

This permit shall become effective on April 12, 2017.

This permit and the authorization to discharge shall expire at midnight, April 11, 2022.

Signed this 17th day of March 2017.

Director,
Environmental Protection Division

TABLE OF CONTENTS

PART 1. COVERAGE UNDER THIS PERMIT

1.1 Coverage

1.1.1 This permit covers all new and existing point source discharges of stormwater from the authorized municipal separate storm sewer system (MS4) to waters of the State of Georgia.

1.1.2 The permittee is liable for permit compliance and the implementation of the Stormwater Management Program (SWMP) for all point source discharges from the MS4 for which it is owner or operator.

1.1.3 Stormwater discharges regulated by other National Pollutant Discharge Elimination System (NPDES) permits that do not discharge to the MS4 are not covered by this permit (e.g., Publicly Owned Treatment Works and Combined Sewer System).

1.1.4 Discharges which are subject to regulation by other NPDES permits that discharge to waters of the State through the MS4 are still subject to those other NPDES permit requirements.

1.1.5 In order to continue coverage, the permittee must submit a permit application at least 180 days prior to the expiration date of the existing permit on a form provided by the Georgia Environmental Protection Division (EPD).

1.2 Definitions – See Appendix A

All terms used in this permit shall be interpreted in accordance with the definitions as set forth in the Georgia Water Quality Control Act, as amended, and the Federal Clean Water Act (CWA), as amended, unless otherwise defined in Appendix A.

PART 2. CRITERIA FOR RECEIVING WATERS

2.1 Receiving Water Standards

The permittee shall implement controls to reduce pollutants to the maximum extent practicable (MEP) in discharges from the MS4 to the waters of the State so as to not cause the following criteria to be exceeded in the receiving waters:

2.1.1 All waters shall be free from materials associated with municipal or domestic sewage, industrial waste, or any other waste which will settle to form sludge deposits that become putrescent, unsightly, or otherwise objectionable;

2.1.2 All waters shall be free from oil, scum, and floating debris associated with municipal or domestic sewage, industrial waste, or other discharges in amount sufficient to be unsightly or to interfere with legitimate water uses;

2.1.3 All waters shall be free from material related to municipal, industrial, or other discharges which produce turbidity, color, odor, or other objectionable conditions which interfere with legitimate water uses;

2.1.4 All waters shall be free from turbidity which results in a substantial visual contrast in a water body due to a man-made activity. The upstream appearance of a body of water shall be as observed at a point immediately upstream of a turbidity-causing man-made activity. That upstream appearance shall be compared to a point which is located sufficiently downstream from the activity so as to provide an appropriate mixing zone. For land disturbing activities, proper design, installation, and maintenance of best management practices (BMPs) and compliance with issued permits shall constitute compliance with this criterion.

2.1.5 All waters shall be free from toxic, corrosive, acidic, and caustic substances discharged from municipalities, industries, or other sources, such as nonpoint sources, in amounts, concentrations, or combinations which are harmful to humans, animals, or aquatic life.

PART 3. STORMWATER MANAGEMENT PROGRAM

The permittee shall update, implement, and enforce a SWMP designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP), in order to protect water quality and to satisfy the appropriate water quality requirements of the State Act and Rules (391-3-6-.16). The SWMP must include management practices, control techniques and system design and engineering methods, and other provisions for the control of such pollutants. The SWMP shall be submitted for approval by EPD within 180 days of the date of issuance of this permit. Regardless if the permittee's SWMP has been approved by EPD, the permittee is required to comply with the requirements of this Permit. The SWMP and its amendments, upon approval by EPD, shall become a part of this permit.

3.1 Legal Authority

The permittee must have adequate legal authority to control pollutant discharges into and from its MS4 and to meet the legal requirements of this permit.

3.2 Sharing Responsibility

The permittee may share implementation of one or more of the SWMP components with another entity, or the entity may assume full responsibility for that component. However, the permittee may rely on another entity only if:

3.2.1 The other entity is either implementing or will be implementing the SWMP component;

3.2.2 The particular component is at least as stringent as the corresponding permit requirement; and

3.2.3 The other entity agrees to implement the component on the permittee's behalf through a written agreement, memorandum of understanding, memorandum of agreement, contract, or other signed document that establishes the obligations of each party.

Written acceptance of this obligation is mandatory and must be maintained as a part of the SWMP. Conducting maintenance on a structure does not imply that the entity conducting the maintenance is the owner or operator of that structure. Even though the permittee may contract with another entity for component implementation, it is the permittee's responsibility to submit all Permit Applications, Annual Reports, Certification Statements, or any other information requested by EPD.

If the other entity fails to implement the component on the permittee's behalf, the permittee remains liable for any enforcement actions due to the failure to implement and/or report.

3.3 SWMP Components

The following information shall be used in developing and implementing the permittee's SWMP. The specific requirements can be found in Title 40 of the Code of Federal Regulations (CFR), Part 122.26. A detailed description of the activities related to each requirement must be reported on the annual report form provided by EPD.

3.3.1 Structural and Source Control Measures

The permittee must implement a program which incorporates structural and source control measures to reduce pollutants from runoff from commercial and residential areas that are discharged from the MS4 and includes a schedule for implementing the controls. At a minimum, the program must include the elements listed in Table 3.3.1 below:

Table 3.3.1

SWMP Component	Measurable Goals
1. MS4 Control Structure Inventory and Map	1.a. Provide an inventory and map of MS4 control structures as defined in the SWMP with each annual report. At a minimum, the inventory and map must include catch basins, ditches (miles or linear feet), detention/retention ponds, and storm drain lines (miles or linear feet).

	1.b. Provide the number of MS4 control structures added during the reporting period and the total number of structures in the inventory in each annual report.
2. MS4 Inspection and Maintenance Program	2.a. Conduct inspections of the MS4 control structures so that 100% of the structures are inspected within the 5-year permit term. All permittees must conduct at least one inspection per year. The MS4 inspections shall be executed in accordance with the schedule contained in the SWMP. Provide the number and percentage of the total structures inspected during the reporting period in each annual report. 2.b. Conduct maintenance on the MS4 control structures as needed. Provide the number and percentage of the total structures maintained during the reporting period in each annual report.
3. Planning Procedures	3.a. Develop or update, as needed, a comprehensive planning document which addresses, in part, areas of new development and redevelopment to reduce pollutants in discharges from the MS4. Describe any changes made to the stormwater portion of the document during the reporting period in each annual report.
4. Street Maintenance	4.a. Implement street maintenance and cleaning procedures specified in the SWMP. Documentation on activities conducted during the reporting period, such as litter removal, street sweeping, deicing material removal, road repair, etc., must be submitted in each annual report. Report details such as the amount of litter removed, miles of street swept, final disposal of waste, etc., and provide documentation in each annual report.
5. Flood Management Projects	5.a. Implement the procedures specified in the SWMP to ensure new flood management projects (e.g., detention and retention basins) are assessed for water quality impacts during the reporting period. Provide details in each annual report. 5.b. Implement the procedures specified in the SWMP to ensure existing structural flood control devices are evaluated during each reporting period to determine if retrofitting the devices for additional pollutant removal is feasible. Provide details in each annual report.

6. Municipal Facilities Excluding Any Facilities Addressed in Section 3.3.3	6.a. Maintain, and/or update an inventory of municipal facilities with the potential to cause pollution (e.g. water treatment plants, wastewater plants <1.0 MGD, waste transfer facilities) and provide in each annual report. 6.b. Implement the program to control runoff from municipal facilities with the potential to cause pollution. The program shall include the facility inspection prioritization, inspection frequency, and inspection documentation protocol as described in the SWMP. Conduct an inspection on 100% of the inventoried facilities within the 5-year permit term. For permittees with five or more municipal facilities included on the inventory, at a minimum, the permittee must conduct inspections on 5% of the municipal facilities annually, or if inspections are done by geographical area, then one entire area or sector must be inspected. Provide documentation of inspections in each annual report.
7. Pesticide, Fertilizer, and Herbicide Application	7.a. Utilize a program to reduce pollution by the application of pesticides, fertilizer, and herbicides by commercial applicators and distributors in accordance with the Georgia Department of Agriculture requirements. 7.b. Implement the program to reduce pollution caused by the municipal use of pesticides, fertilizers, and herbicides, as described in the SWMP. If municipal staff performs application of pesticides, fertilizers, and herbicides, ensure they are properly trained by the Georgia Department of Agriculture. Provide documentation of program activities in each annual report.

3.3.2 Illicit Discharge Detection and Elimination Program (IDDE)

The permittee must implement and enforce a program to detect and eliminate illicit discharges and improper disposal of pollutants into the MS4. At a minimum, the program, described in the SWMP, must include the elements listed in Table 3.3.2 below:

Table 3.3.2

SWMP Component	Measurable Goals
1. Legal Authority	1.a. Re-evaluate and modify the existing IDDE ordinance when necessary for compliance with this permit. The permittee must ensure that the ordinance provides the authority to conduct inspections and monitoring, control illicit discharges and

	connections, and control illegal dumping and spills into the MS4. The ordinance must include the permittee's authority to take legal action to eliminate illicit discharges or connections. If the ordinance is revised during the reporting period, submit a copy of the adopted ordinance with the annual report.
2. Outfall Inventory/Map	2.a. Provide an updated inventory and a 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 with each annual report. 2.b. Provide the number of outfalls added during the reporting period and the total number of outfalls in the inventory in each annual report.
3. IDDE Plan	3. Implement the IDDE Plan to detect and address non-stormwater discharges to the MS4 as described in the SWMP. The components of the IDDE Plan are as follows: 3.a. Conduct dry weather screening (DWS) inspections on 100% of total outfalls within the 5-year permit term, or an alternative method approved by EPD, in accordance with the procedures contained in the SWMP. For permittees with five or more outfalls included on the inventory, at a minimum, the permittee must conduct DWS inspections on 5% of the outfalls annually, or if inspections are done by a geographical area, then one area or sector must be inspected each year. If the permittee conducts stream walks of intermittent and perennial streams in conjunction with the DWS inspection, then 100% of the stream miles must be inspected within the 5-year permit term. At a minimum, the permittee must conduct stream walks on 5% of the stream miles annually, or if walks are done by a geographical area, then streams within one area or sector must be walked each year. If the permittee conducts stream walks for a reason other than DWS, then the permittee does not need to walk a specific number of miles; however, the permittee must document and report the number of stream miles walked, as well as the number of outfalls screened using each method (i.e., DWS, stream walks, alternative approved method). Provide the

	number and percentage of outfall inspections conducted during the reporting period and documentation of the inspections in each annual report. 3.b. Implement investigative and follow-up procedures when the results of the screening indicate a potential illicit discharge, including the sampling and/or inspection procedures described in the SWMP. If the source of the illicit discharge is identified as deriving from an adjacent MS4, the permittee must notify that MS4. Provide information on illicit discharge detection activities performed to eliminate any identified illicit discharges during the reporting period in each annual report. 3.c. Ensure any identified illicit discharges are eliminated. If necessary, implement the enforcement procedures described in the SWMP and in accordance with the Enforcement Response Plan (ERP) in Part 3.3.6 of this permit. Provide information on any enforcement actions taken for illicit discharges, such as through a spreadsheet or table, during the reporting period in each annual report.
4. Spill Response Procedures	4.a. Implement the procedures described in the SWMP to prevent, contain, and respond to spills that may discharge to the MS4 described in the SWMP. Provide documentation on spill occurrences and responses during the reporting period in each annual report.
5. Public Reporting Procedures	5.a. Implement the procedures described in the SWMP to promote, publicize, and facilitate public reporting of illicit discharges. The permittee must perform at least one formal notification to the public of methods available to report an observed illicit discharge (e.g. website posting, newsletter, bill insert) at least annually. Provide details on any activities conducted during the reporting period in each annual report. 5.b. Implement the procedures for receiving and responding to complaints related to illicit discharges described in the SWMP. Provide information on each complaint related to IDDE that was received

	and investigated during the reporting period in each annual report, including its status.
6. Proper Management and Disposal of Used Oil and Toxic Materials	6.a. Implement the activities to facilitate the proper management and disposal of used oil and toxic materials, including educational activities, household hazardous waste collection programs, etc., described in the SWMP. Provide details on any activities performed during the reporting period in each annual report.
7. Sanitary Sewer Infiltration Controls	7.a. If the permittee owns or operates the sanitary sewer system within its jurisdiction, implement the activities to detect and eliminate seepage and spillage from municipal sanitary sewers to the MS4 described in the SWMP. Provide details on activities performed during the reporting period in each annual report.

The following categories of non-stormwater discharges or flows must be addressed only if they are identified as significant contributors of pollutants to the MS4:

- water line flushing;
- landscape irrigation;
- diverted stream flows;
- rising ground waters;
- uncontaminated ground water infiltration (as defined in 40 CFR Part 35.2005(20));
- uncontaminated pumped ground water;
- discharges from potable water sources;
- foundation drains;
- air conditioning condensation;
- irrigation water;
- springs;
- water from crawl space pumps;
- footing drains;
- lawn watering;
- individual residential car washing;
- flows from riparian habitats and wetlands;
- dechlorinated swimming pool discharges;
- street wash water; and
- flows from firefighting activities.

3.3.3 Industrial Facility Stormwater Discharge Control

The permittee must implement and enforce a program to monitor and control pollutants in stormwater discharges from industrial facilities into the MS4. At a minimum, the program must contain the elements listed in Table 3.3.3 below:

Table 3.3.3

SWMP Component	Measurable Goals
1. Industrial Facility Inventory	1.a. Maintain and update an inventory of facilities with industrial activities that potentially discharge to the MS4. At a minimum, this shall include facilities listed on EPD's Industrial Stormwater General Permit (IGP) Notice of Intent (NOI) and No Exposure Exclusion (NEE) online listings. Provide an updated inventory in each annual report.
2. Inspection Program	2.a. Implement the industrial facility inspection program which includes the facility inspection prioritization, inspection frequency, and inspection documentation protocol described in the SWMP. Conduct inspections on 100% of the inventoried facilities that discharge to the MS4 within the 5-year permit term. For permittees with five or more industrial facilities included on the inventory, at a minimum, the permittee must conduct inspections on 5% of the industrial facilities on the inventory annually, or if inspections are done by a geographical area, then one area or sector must be inspected each year. Provide the total number of facilities and the number and percentage of inspections conducted during the reporting period and documentation of the inspections in each annual report. 2.b. Implement a monitoring program for stormwater runoff from industrial facilities, waste facilities, hazardous waste treatment, storage and disposal facilities, as defined in the SWMP. Provide the results of any monitoring conducted during the reporting period in each annual report. This shall include all facilities that the permittee determines are contributing a substantial pollutant loading to the MS4.
3. Enforcement Procedures	3.a. Implement the enforcement procedures

	described in the SWMP and in accordance with the ERP in Part 3.3.6 of this permit if a stormwater violation is noted at an industrial facility that discharges to the MS4. Provide documentation on any enforcement actions taken during the reporting period in each annual report.
4. Educational Activities	4.a. Implement educational activities for industrial facilities (e.g. brochure distribution, website posting) during the reporting period. Provide details of educational activities performed during the reporting period in each annual report.

3.3.4 Construction Site Management

The permittee must implement and enforce a program to maintain structural and/or non-structural BMPs to reduce pollutants in stormwater runoff from construction sites to the MS4 as defined in the SWMP. At a minimum, the program must contain the elements listed in Table 3.3.4 below:

Table 3.3.4

SWMP Component	Measurable Goals
1. Legal Authority	1.a. Re-evaluate and modify the existing Erosion and Sedimentation (E&S) ordinance when necessary for compliance with this permit. The permittee must ensure that the E&S ordinance provides the authority to issue land disturbing activity permits; require BMPs to prevent and minimize E&S; require erosion, sedimentation, and pollution control plan submission and review prior to commencing construction; conduct inspections and enforcement, including stop work orders, bond forfeiture, and monetary penalties; and require education and certification for persons involved in land development, design, review permitting, construction, monitoring, inspection, and other land disturbing activities. If the E&S ordinance is revised during the reporting period, submit a copy of the adopted ordinance in the annual report.
2. Site Plan Review Procedures	2.a. Implement the site plan review procedures described in the SWMP. 2.b. Provide a list of the site plans received and the number of plans reviewed, approved, or denied

	during the reporting period in each annual report. 2.c. Provide the number of Land Disturbing Activity (LDA) permits issued during the reporting period in each annual report.
3. Inspection Program	3.a. Implement the construction site inspection program to ensure that structural and non-structural BMPs at construction sites are properly designed and maintained as specified in the Construction General Permits (CGPs). 3.b. The construction site inspection program shall include the facility inspection prioritization, inspection frequency, and inspection documentation protocol described in the SWMP or in accordance with the Manual for Erosion and Sediment Control in Georgia and CGPs. 3.c. Provide the number of active sites and the number of inspections conducted during the previous reporting period in each annual report.
4. Enforcement Procedures	4.a. Implement enforcement procedures for E&S violations documented at construction sites during the reporting period as described in the SWMP and in accordance with the ERP in Part 3.3.6 of this permit. Provide documentation on any enforcement actions taken during the reporting period in each annual report, including the number and type (Notice of Violation, Stop Work Order, etc.).
5. Certification	5.a. All builders, developers, contractors, and other entities involved in construction activities subject to the CGPs shall comply with the certification requirements of the Georgia Erosion and Sedimentation Act and the rules adopted by the Georgia Soil and Water Conservation Commission. Ensure that MS4 staff involved in construction activities subject to the CGPs are trained and certified in accordance with the rules adopted by the Georgia Soil and Water Conservation Commission. Provide the number and type of current certification in each annual report.

3.3.5 Highly Visible Pollutant Sources (HVPS)

The permittee must implement and enforce a program to control pollutants in stormwater runoff from HVPS facilities into the MS4. At a minimum, the program must contain the elements listed in Table 3.3.5 below:

Table 3.3.5

SWMP Component	Measurable Goals
1. HVPS Facility Inventory	1.a. Maintain and/or update an inventory for HVPS facilities that discharge to the MS4. Provide an updated inventory in each annual report.
2. Inspection Program	2.a. Implement the HVPS facility inspection program which includes the facility inspection prioritization, inspection frequency, and inspection documentation protocol described in the SWMP. Conduct inspections on 100% of inventoried facilities that discharge to the MS4 during the 5-year permit term. For permittees with five or more HVPS facilities included on the inventory, at a minimum, the permittee must conduct inspections on 5% of the structures annually, or if inspections are done by a geographical area, then one area or sector must be inspected each year. Provide the total number of facilities and the number and percentage of inspections conducted during the reporting period and documentation in each annual report.
3. Enforcement Procedures	3.a. Implement enforcement procedures to be utilized if a stormwater violation is noted at an HVPS facility that discharges to the MS4 as described in the SWMP and in accordance with the ERP in Part 3.3.6 of this permit. Provide documentation on any enforcement actions taken at HVPS facilities during the reporting period in each annual report.
4. Educational Activities	4.a. Implement educational activities for HVPS facilities (e.g. brochure distribution, website posting) during the reporting period. Provide details of any educational activities performed during the reporting period in each annual report.

3.3.6 Enforcement Response Plan (ERP)

The permittee must develop and implement an ERP that describes the action to be taken for violations associated with the IDDE, construction, industrial, HVPS, and other SWMP programs. The ERP will detail the permittee's responses to any noted stormwater violations, including escalating enforcement responses to address repeat and continuing violations. The ERP must detail:

- Names of ordinances providing the legal authority to undertake enforcement, including citation of specific ordinance sections;
- Types of enforcement mechanisms available. For each area (IDDE, construction, industrial, HVPS, etc.), the ERP should list the enforcement actions that the permittee has the authority to use, including such actions as:
    - verbal warnings;
    - written notice of violations;
    - citations (with fines);
    - stop work orders;
    - withholding plan approval or other authorizations; and
    - any other available enforcement mechanisms.
- Description of when each enforcement mechanism will be employed, including the path of escalation;
- Time frames for each step, including investigation of noncompliance, sequence and use of enforcement mechanisms, corrective action by responsible party, re-inspection of site, etc.
- Description of the methods to be used to track, either manually or electronically, instances of noncompliance, including such items as:
    - name of owner/operator of facility and/or the location or address;
    - type of site (IDDE, construction, industrial, HVPS, etc);
    - description of noncompliance;
    - description of enforcement action(s) used;
    - time frames for each step (e.g. investigation, corrective action, re-inspection);
    - documentation of inspection and enforcement actions taken;
    - documentation of referral to other departments or agencies; and
    - date of violation resolution.

The ERP must be reviewed annually and revised as necessary. If revised during the reporting period, submit the ERP to EPD for review. The ERP is an addendum to the permittee's SWMP.

3.3.7 Impaired Waterbodies

The permittee must identify any impaired waterbodies located within its jurisdictional area, using the latest approved Georgia 305(b)/303(d) List of Waters (http:// www.epd.georgia.gov/georgia-305b303d-list-documents), which contain MS4 outfalls or are within one linear mile downstream of MS4 outfalls. Also, the pollutant of concern must be identified. The permittee shall propose a monitoring and implementation plan (Plan) addressing each pollutant of concern. The permittee

must check annually whether an impaired waterbody within its jurisdiction has been added to the latest 305(b)/303(d) list. Newly listed waterbodies must be addressed in the Plan and the SWMP must be revised accordingly. The permittee must report on all monitoring activities in subsequent annual reports. If a Total Maximum Daily Load (TMDL) containing a wasteload allocation specific to one or more of the permittee's outfalls is approved, then the wasteload allocation must be incorporated into the SWMP. All previous and newly approved TMDLs within the jurisdictional areas must be included in either the proposed Plan or a revision to the existing Plan.

The Plan shall include:

- Sample location, whether samples are collected instream (i.e., upstream and downstream), from outfalls during wet weather events, or a combination of both locations. Bacteriological samples must be collected instream. If the permittee chooses to conduct outfall sampling and there are multiple outfalls located on an impaired waterbody, then the permittee may choose representative outfalls for sampling in place of sampling all outfalls;
- Sample type, frequency, and any seasonal considerations;
- Implementation schedule to start monitoring for each pollutant of concern;
- Map showing the location of the impaired waterbodies, the monitoring location, and all identified MS4 outfalls located on the impaired waterbodies or occurring within one linear mile upstream of the waterbodies, or a schedule for confirming the location of these outfalls; and
- Description of proposed BMPs to be used to control and reduce the pollutants of concern and a schedule for implementation of these BMPs.

Following review and comment on the Plan by EPD, the permittee will incorporate necessary changes into the Plan.

Each Annual Report shall include;

- All monitoring data collected during the reporting period;
- An assessment of the data trends over time for each pollutant of concern. The assessment shall initially include a characterization of baseline conditions. The data assessment should include a written evaluation of whether water quality is improving, declining, fluctuating, or remaining constant (e.g. line graph). If monitoring identifies that an upstream MS4 is the source of the pollutant of concern, then the permittee must notify the immediately adjacent MS4.
- An assessment to determine the effectiveness of the BMPs employed and what, if any, additional adaptive BMP measures may be necessary to return the waterbody to compliance with State water quality standards. If BMP revisions and/or additional BMPs are necessary, then the revised Plan must be submitted to EPD for review.

For those waterbodies where the permittee is conducting monitoring, the data must be made available to other MS4 permittees upon request. In the event that monitoring is performed in accordance with an EPD-approved Sampling Quality and Assurance Plan, and a waterbody is removed from the 303(d) list of impaired waterbodies, then monitoring conducted under the Plan

may cease. Monitoring for the purposes of de-listing an impaired waterbody will benefit the permittee through reduced expenses associated with long-term testing.

3.3.8 Municipal Employee Training

The permittee must obtain stormwater-related training for its employees at least annually. The training should address such stormwater topics as are necessary for the employee to do his/her job and may include topics such as the inspection and maintenance of the MS4, good housekeeping practices at municipal facilities, illicit discharge detection and elimination, industrial facility inspections, construction site inspections, highly visible pollutant source inspections, green infrastructure and low impact development training, and runoff reduction/quality training. Documentation of the training activity, including the topic(s), date(s), and attendees must be provided in each annual report.

3.3.9 Public Education

Conduct a public education program that addresses water quality issues and the protection of water resources and encourages the use of green infrastructure/low impact development. The program should consider topics, such as litter control, illicit discharges, household hazardous waste disposal, residential pesticide, fertilizer and herbicide application, and GI/LID techniques. If the permittee participates in an existing regional program, then the annual report should summarize the activities performed during the reporting period. The permittee must implement its own public education program, with a minimum of three separate public education activities. The proposed program must be described in the SWMP, including a description of the activity, the frequency of the activity, and the method that will be used to document the activity. Documentation of educational activities conducted during the reporting period must be provided in each annual report.

Public education materials are available on numerous websites, including these suggested sites: U.S. EPA (www.epa.gov), Clean Water Campaign (www.cleanwatercampaign.org), and Center for Watershed Protection (www.cwp.org).

3.3.10 Public Involvement

Conduct a public involvement program that creates opportunities for citizens to participate in the SWMP. This can include involving the public in planning and implementation of activities. These activities can include such things as Adopt-A-Stream, Adopt-A-Road, Rivers Alive, storm drain stenciling, stakeholder advisory committees, comprehensive planning committees, etc. The proposed program must consist of a minimum of three separate public involvement activities. The proposed program must be described in the SWMP, including a description of the activity, the frequency of the activity, and the method that will be used to document the activity. Documentation of public involvement activities conducted during the reporting period must be provided in the annual report. If the permittee has a website, the SWMP), as well as any updates, must be posted on the website.

3.3.11 Post-Construction

3.3.11(a) Post-Construction Stormwater Controls

3.3.11(a)(1) Ordinance Review

The permittee must adopt ordinances or update existing ordinances, when necessary for compliance with this permit, to address development and enforcement of post-construction controls. The ordinance must provide the authority to conduct plan reviews, conduct inspections, enter into inspection and maintenance agreements, and pursue enforcement. If the ordinance is revised during the reporting period, submit a copy of the adopted ordinance with the annual report.

The ordinance revisions must include the adoption and implementation of the appropriate parts of either the latest edition of the Georgia Stormwater Management Manual GSMM (http://www.atlantaregional.com/environment/georgia-stormwater-manual) or an equivalent or more stringent local design manual, which must meet or exceed the performance standards listed in Section 3.3.11(a)(2). For Chatham County and the permittees located within Chatham County, the adopted manual shall include the Coastal Stormwater Supplement (CSS). All permittees must implement the GSMM and/or CSS to the maximum extent practicable. The permittee must provide documentation to EPD in the 2016-2017 annual report to demonstrate the date of the adoption of the appropriate design manual(s).

3.3.11(a)(2) Performance Standards

At a minimum, the permittee shall apply the standards for new development and redevelopment to any site that meets one or more of the following criteria:

- New development that creates or adds 5,000 square feet or greater of new impervious surface area, or that involves land disturbing activity of one acre of land or greater.

- Redevelopment that creates, adds, or replaces 5,000 square feet or greater of impervious surface area, or that involves land disturbing activity of one acre or more.

For sites meeting the above criteria, the permittee shall ensure that the following minimum standards are considered during the site plan preparation process:

<u>Stormwater Runoff Quality/Reduction</u>
Stormwater runoff shall be retained onsite or adequately treated prior to discharge. Until April 12, 2020, stormwater runoff shall be treated through one of the following two approaches:

a) The stormwater management system shall be designed to retain the first 1.0 inch of rainfall on the site, to the maximum extent practicable. The MEP applicability can be determined by the MS4 using criteria they establish, such as the feasibility criteria in

the GSMM. If the first 1.0 inch of rainfall can be retained onsite using runoff reduction methods, then additional water quality treatment is not required. If the 1.0 inch cannot be retained onsite, the remaining runoff from a 1.2 inch rainfall event must be treated to remove at least 80% of the calculated average annual post-development total suspended solids (TSS) load or equivalent as defined in the GSMM or in the equivalent manual. Or

For those permittees located in Chatham County and subject to the CSS, stormwater runoff shall be retained onsite or adequately treated prior to discharge. As identified in the CSS, reducing the runoff generated by 1.2 inches of rainfall is a reasonable initial target. If that target cannot be met, the permittee must ensure that adequate documentation is provided to show that no additional runoff reducing green infrastructure practices can be used on the development site. At a minimum, appropriate green infrastructure practices must be used to reduce the stormwater runoff volume generated by the 0.6 inch rainfall event (and the first 0.6 inches of all larger rainfall events). Any of the stormwater runoff generated by the 1.2 inch storm event (and the first 1.2 inches of all larger rainfall events) that is not reduced on the development site shall be intercepted and treated in one or more stormwater management practices that provide at least an 80 percent reduction in total suspended solids loads and that reduce nitrogen and bacteria loads to the maximum extent practicable. Or

b) The stormwater management system shall be designed to remove 80% of the average annual post-development total suspended solids (TSS) load or equivalent as defined in the GSMM or in the equivalent manual. Compliance with this performance standard is presumed to be met if the stormwater management system is sized to capture and treat the water quality treatment volume, which is defined as the runoff volume resulting from the first 1.2 inches of rainfall from a site.

No later than April 12, 2020, all permittees should have transitioned to exclusively using approach (a) to achieve compliance with this performance standard. This timeframe is to allow sufficient study, training, and planning on the part of the municipality. All site plan reviewers, construction site inspectors, and other personnel whose duties involve post-construction stormwater runoff are encouraged to receive training in the new GSMM and the runoff quality/reduction standard during that implementation phase. Pilot projects, advisory committees, and other programs intended to study and implement the runoff quality/reduction requirement are recommended.

Stream Channel/Aquatic Resource Protection

Stream channel and/or aquatic resource protection shall be provided by using the following approaches: 1) 24-hour extended detention storage of the 1-year, 24-hour return frequency storm event; 2) erosion prevention measures such as energy dissipation and velocity control; and 3) preservation of the applicable stream buffer.

Overbank Flood Protection
Downstream overbank flood protection shall be provided by controlling the post-development peak discharge rate to the predevelopment rate for the 25-year, 24-hour storm event.

Extreme Flood Protection
Extreme flood protection shall be provided by controlling the 100-year, 24-hour storm event such that flooding is not exacerbated.

Trout Stream Protection
For receiving waters with a trout stream designation, which contain outfalls from the permittee's MS4, the permittee must address the protection of the trout waters from impacts from the MS4 outfalls due to elevated temperature, as described in the SWMP.

3.3.11(a)(3) Linear Transportation Projects

The permittee must apply the performance standards listed in Part 3.3.11(a)(2) during the design of all construction projects. However, the permittee may be unable to apply the performance standards, all or in part, for linear transportation projects being constructed by the permittee. The permittee may develop a feasibility program which sets reasonable criteria for determining when implementing the performance standards in linear projects is infeasible. The permittee may develop this feasibility program and submit it to EPD for review. Upon submittal to EPD, the permittee may begin implementation of this feasibility program for linear transportation projects only.

3.3.11 (b) Green Infrastructure/Low Impact Development (GI/LID)

The permittee must implement a program to address GI/LID. At a minimum, the program must address the elements listed in Table 3.3.11(b)(2) below:

Table 3.3.11(b)(2)

GI/LID Program Elements	**Measurable Goals**
1. Legal Authority	1.a. The permittee shall continue 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 permittee shall assess those regulations governing residential and commercial development, road design, land use, and parking requirements. During the regulatory review, the permittee should consider the inclusion of incentives for use of GI/LID practices into the ordinance. If the

	ordinance(s) are revised during the reporting period, submit a copy of the adopted ordinance(s) with the annual report.
2. GI/LID Program	2.a. Implement the GI/LID program approved by EPD. The program shall include procedures for evaluating the feasibility and site applicability of different GI/LID techniques and practices, and various structures and practices to be considered. If the program is revised during the reporting period, submit the revised program to EPD for review with the annual report.
3. GI/LID Structure Inventory	3.a. Track the addition of GI/LID structures through the plan review process and ensure that the structures are added to the inventory. Provide an updated inventory including the type and total number of structures in each annual report.
4. Inspection and Maintenance Program	4.a. Conduct inspections and/or ensure that inspections are conducted on 100% of the total privately owned non-residential (e.g., mixed use development, commercial, etc.) and permittee-owned GI/LID structures within the 5-year permit term. For permittees with five or more GI/LID structures included on the inventory, at a minimum, the permittee must conduct inspections on 5% of the structures annually, or if inspections are done by geographical area, then one entire area or sector must be inspected each year. Provide the number and percentage of the total structures inspected during the reporting period in each annual report. 4.b. Conduct maintenance on the GI/LID structures owned by the permittee, as needed. Provide the number and/or percentage of the total structures maintained during the reporting period in each annual report. 4.c. Implement procedures for ensuring privately-owned non-residential GI/LID structures are maintained as needed. Provide documentation of these activities in each annual report.

Design information on GI/LID practices can be found on the Atlanta Regional Commission's website (http://www.atlantaregional.com/) for the GSMM and the CSS to the GSMM. Additional information on green infrastructure and better site design can be found on numerous websites, including these suggested sites: U.S. EPA (www.epa.gov), Center for Watershed Protection (www.cwp.org), Georgia Coastal Resource Division's "Georgia's Green Growth Guidelines" (http://coastalgadnr.org/cm/green.guide), and Green Infrastructure Center (www.gicinc.org). In addition, you may want to consult the following webpage on EPA's website: www.epa.gov/nps/lid.

3.4 Program Amendments

EPD may require a revision of the SWMP at any time it is deemed necessary by the Director to comply with the goals and requirements of the State Act, but specifically for any of the following reasons:

3.4.1 A change has occurred which will significantly impact the potential for the discharge of pollutants to the waters of the State of Georgia;

3.4.2 The permittee's program proves ineffective in controlling pollutants from the MS4 to the maximum extent practicable;

3.4.3 An adverse impact to water quality has been documented as a result of discharges from the MS4; or

3.4.4 To include more stringent requirements necessary to comply with new State or Federal statutory or regulatory requirements.

The Director shall notify the permittee of the required modifications in writing and set forth a schedule for the permittee to develop and implement the modified SWMP. The permittee may propose alternative SWMP modifications to EPD.

3.5 Program Approval

The SWMP may be modified by the permittee at any time. Written notification of proposed SWMP modifications must be submitted to EPD at least 30 days prior to implementation of the modification. EPD reserves the right to disapprove the SWMP modification.

PART 4. MONITORING AND REPORTING REQUIREMENTS

4.1 Annual Report

The permittee shall prepare an annual system-wide report covering the reporting period April 1 through March 31. The report shall be submitted by May 15th following the reporting period. EPD is preparing an electronic method of reporting (eReporting), and EPD will notify the permittee when the system is available for use. Upon notification, the permittee will be required submit the annual report electronically. The report must include a comprehensive summary of all

the SWMP activities conducted during the reporting period. The report shall be submitted using the form provided by EPD. The Phase I Medium Annual Report form is available on EPD's website at epd.georgia.gov. All applicable information required to complete the annual report shall be filled out and the certification statement shall be signed prior to submittal. A summary of the annual report requirements is as follows:

4.1.1 The status of implementing the components of the SWMP that are established as permit conditions;

4.1.2 Proposed changes to the SWMP;

4.1.3 Revisions, if necessary, to the assessment of controls;

4.1.4 A summary of data, including monitoring data that was accumulated throughout the reporting period;

4.1.5 Annual expenditures for the reporting period and the annual fiscal analysis for the upcoming reporting period. The permittee must submit its budget, including the necessary capital and operation and maintenance expenditures associated with MS4 permit compliance, including the funding source, as supporting documentation with its annual report ;

4.1.6 A summary describing the number and nature of enforcement actions, inspections, and public education programs; and

4.1.7 Identification of water quality improvements or degradation.

The permittee shall be responsible for the content of the report or the failure to provide information for the report relating to the MS4 for which it is the owner or operator. The permittee shall sign and certify the Annual Report as required under Part 5.10 of this permit.

4.2 Monitoring Procedures

4.2.1 The permittee must perform all monitoring described in the SWMP per Table 3.3.2, Table 3.3.3, and Table 3.3.7. The purpose of the monitoring is to identify potential sources of pollution, determine the best method to address water quality issues, and allow evaluation of the effectiveness of the SWMP. Implement additional monitoring if needed to identify pollution sources. If monitoring is being conducted for another reason (e.g., watershed assessment, watershed protection plan), then the data may be used to conduct the evaluation described above.

4.2.2 Monitoring must be conducted according to approved test procedures set forth in 40 CFR Part 136, unless other approved test procedures have been specified, excluding IDDE field screening procedures.

4.2.3 Parameters shall be analyzed to the detection limits specified by EPD. If a parameter is not detected at or above the detection limit, a value of "NOT DETECTED" will be reported for that sample and the detection limit will also be reported.

4.2.4 If the permittee monitors any parameter at the designated location(s) more frequently than required by this permit, the permittee shall analyze all samples using approved analytical methods specified in Part 4.2.2 of this permit. EPD may require more frequent monitoring or the monitoring of other parameters not specified in this permit or the SWMP by written notification to the permittee.

4.2.5 Laboratory and Analyst Accreditation. All monitoring data not prepared in situ shall be prepared by a laboratory accredited by the State of Georgia in accordance with EPD Rules for Commercial Environmental Laboratories 391-3-26, or, where the permittee does their own analysis with their own personnel, by a Laboratory Analyst certified in compliance with the Georgia State Board of Examiners for Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts Act. In situ means that the sample is analyzed at the point of collection and has not been transported any distance.

4.3 Retention of Records

4.3.1 The permittee shall retain copies of all reports required by this permit, all monitoring information and records of all other data required by or used to demonstrate compliance with this permit, including any additional monitoring performed which is not required by this permit, for a period of at least three years. After EPD's approval, the permittee will implement the latest revision of the SWMP, while retaining on file the previous version of the program for a period of at least three years. These periods may be modified by the Director by written notification at any time.

4.3.2 Records of monitoring information shall include:

- The date, exact place, time of sampling, or measurements;
- The individual(s) who performed the sampling or measurements;
- The date(s) analyses were performed;
- The individual(s) who performed the analyses;
- The analytical techniques or methods used; and
- The results of the analyses.

4.3.3 The permittee must submit its records to EPD upon written request. The permittee must make its records, including the SWMP, available to the public as required by open records requirements.

PART 5. STANDARD PERMIT CONDITIONS

5.1 Duty to Comply

5.1.1 The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and the State Act and is grounds for:

- Enforcement action;
- Permit termination, revocation and reissuance, or modification; or
- Denial of a permit renewal application.

5.1.2 The Clean Water Act and the State Act both provide that any person who falsifies or tampers with or knowingly renders inaccurate any monitoring device or method required under this permit, or who makes any false statement, representation, or certification in any record submitted or required by this permit, including monitoring reports or reports of compliance or noncompliance, shall, if convicted, be punished by a fine or by imprisonment, or by both. Both Acts include procedures for imposing civil penalties for violations or for negligent or intentional failure or refusal to comply with any final or emergency order of the Director.

5.1.3 If, for any reason, the permittee does not comply with, or will be unable to comply with any condition specified in this permit, the permittee shall provide EPD with an oral report within 24 hours from the time the permittee becomes aware of the circumstances, followed by a written report within five days. The written submission shall contain:

- Description of the noncompliance and its cause;
- Exact dates and times of noncompliance or, if not corrected, the anticipated time the noncompliance is expected to continue; and
- Steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

5.1.4 The permittee shall give written notice to EPD at least ten days before any planned changes in the permitted activity, which may result in noncompliance with permit requirements.

5.2 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

5.3 Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of the permit, the permittee must apply for and obtain a new permit.

5.4 Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

5.5 Proper Operation and Maintenance

The permittee shall at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances), owned or operated by the permittee to achieve compliance with the terms and conditions of this permit and with the requirements of the SWMP. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of adequate backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

5.6 Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for permit modification, revocation, reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

5.7 Property Rights

The issuance of this permit does not convey any property rights of either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property, any invasion of personal rights, or any infringement of Federal, State, or local laws and regulations.

5.8 Duty to Provide Information

The permittee shall provide to EPD, within a reasonable time frame, any information which the Director may request to determine compliance with this permit. The permittee shall also provide EPD with any requested copies of records required by this permit.

5.9 Inspection and Entry

The permittee shall allow the Director, the Regional Administrator of USEPA, and their authorized representatives, agents, or employees, after presentation of credentials to:

5.9.1 Enter the permittee's premises where a regulated facility or activity is located or conducted, or where records are kept under the terms and conditions of this permit;

5.9.2 Have access to and copy at reasonable times, any records required under the terms and conditions of this permit;

5.9.3 Inspect at reasonable times any facilities, equipment, (including monitoring and control equipment) practices, or operations regulated or required under this permit; and

5.9.4 Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

5.10 Signatory Requirements

5.10.1 All information submitted to EPD or that this permit requires the permittee to maintain shall be signed by either a principal executive officer or ranking elected official, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

5.10.1(a) The authorization is made in writing by the official person described above and submitted to EPD.

5.10.1(b) The authorization specifies either an individual or a position having responsibility for the overall operation of the municipality's SWMP such as the position of manager, operator, superintendent, or position of equivalent responsibility.

5.10.1(c) If an authorization is no longer accurate because of a different individual or position having been authorized, then a new authorization must be submitted to EPD prior to or together with any report, information, or application signed by the authorized representative.

5.10.2 Any person signing documents under this section shall make the following certification:

"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 gather and evaluate the information submitted. Based on 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."

5.11 Other Information

If the permittee becomes aware of a failure to submit any relevant facts or of submission of incorrect information in the SWMP, Annual Report, or any report to EPD, the permittee shall promptly submit the relevant facts or information.

5.12 Availability of Reports

Except for data determined by EPD to be confidential under Section 16 of the State Act or by the Regional Administrator of the USEPA under 40 CFR Part 2, all reports prepared according to the terms of this permit shall be available for public inspection at an office of EPD under the Georgia Open Records Act. All monitoring data, permit applications, permittees' names and addresses, and permits shall not be considered confidential.

5.13 Severability

The provisions of this permit are severable. If any permit provision or the application of any permit provision to any circumstance is held invalid, the provision does not affect other circumstances or the remainder of this permit.

5.14 Contested Hearings

Any person who is aggrieved or adversely affected by any action of the Director shall petition the Director for a hearing within 30 days of notice of this action.

5.15 Civil and Criminal Liability

The permittee is liable for civil and criminal penalties for noncompliance with this permit and must comply with applicable State and Federal laws. The permit cannot be interpreted to relieve the permittee of this liability even if it has not been modified to incorporate new requirements.

5.16 Transfer of Ownership

This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

5.17 Previous Permits

All previous State water quality permits issued to this permittee are hereby revoked by the issuance of this permit. The permit governs discharges from this MS4 under the NPDES.

Appendix A

Definitions

Annual Report – the document submitted by the permittee on an annual basis summarizing the SWMP activities conducted during the previous reporting period, in accordance with Part 4.1 of this permit.

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.

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.

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

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

Highly Visible Pollutant Source (HVPS) – a land use or activity that produces higher than normally found levels of pollutants in stormwater runoff. These facilities may include, but are not limited to, gasoline stations, auto repair shops, commercial car washes, home improvement stores, nurseries, kennels, veterinarian offices, etc. These facilities may also include industries that are not required to be covered under the IGP.

Illicit Connection – any man-made conveyance connecting a non-stormwater discharge directly to an MS4.

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

Industrial Activity – the activities related to manufacturing, processing, or raw materials storage areas of an industrial plant.

Industrial Facility – a facility that is eligible to be permitted under the IGP because it has an industrial activity.

Industrial Storm Water General Permit (IGP) – the Georgia NPDES Permit(s) for Storm Water Discharges Associated with Industrial Activity.

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 an MS4. 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 under the CWA.

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.

Operator – the entity that has the primary day-to-day operational control of the activities necessary to ensure compliance with the SWMP requirements and the MS4 permit conditions.

Outfall – the most downstream point (i.e., final discharge point) on an MS4 where it discharges to the receiving waters.

Owner – the legal title holder to the real property on which is located the facility or site where an SWMP activity takes place.

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.

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

State Rules or **Rules** – the Georgia Rules and Regulations for Water Quality Control.

Stormwater – stormwater runoff, snowmelt runoff, and surface runoff and drainage.

SWMP or **Program** – the Stormwater Management Program required to be developed and implemented under the terms and conditions of this permit and refers to a comprehensive program to manage the quality of stormwater discharged from an MS4.

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.

Office of the City Manager

Ronald A. Feldner, P.E.
Deputy City Manager

October 22, 2013

Mr. Robert Drewry, Director
Chatham County Public Works
7226 Varnedoe Drive
Savannah, GA 31406

RE: County Canal Maintenance Agreement

Dear Robert:

Enclosed please find two partially executed copies of the referenced document as well as a copy of the accompanying resolution. The City asks that the County return one fully executed copy to us for our files. I would like to thank you and the County staff for your time and efforts to pull together the Agreement over the last several weeks.

Please contact me with any questions.

Sincerely,

Garden City

Ronald Feldner, P.E.
Deputy City Manager

Enclosure: Two Copies of the Agreement a

STATE OF GEORGIA)
)
COUNTY OF CHATHAM)

A RESOLUTION AUTHORIZING THE CITY OF GARDEN CITY TO ENTER INTO AN AGREEMENT WITH CHATHAM COUNTY FOR THE CONTINUANCE OF THE COUNTY WIDE CANAL MAINTENANCE PROGRAM TO ASSIST WITH MAINTAINING THE CANALS LOCATED IN THE CITY; TO AUTHORIZE THE MAYOR AND COUNCIL TO EXECUTE THE AGREEMENT; TO PROVIDE AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

WHEREAS, the Chatham County Board of Commissioners has determined a need to continue the current County Wide Canal Maintenance Program to assist with the maintenance of the major canals within the limits of the City; and,

WHEREAS, the continued County Wide Canal Maintenance Program will consist of (1) machine cleaning to remove silt and vegetation, (2) spraying with herbicide to reduce aquatic growth, and (3) mowing canal maintenance roads, all without charge to the City; and,

WHEREAS, the three part maintenance program with the City will be carried out by the County as funds are available and subject to those certain conditions set forth in the agreement which is attached hereto as Exhibit "A;" and,

WHEREAS, the City deems its entering into an agreement with the County for the continuance of the County Wide Canal Maintenance Program as outlined above and more particularly set forth in the agreement attached hereto as Exhibit "A" to be in the best interest of its residents and businesses.

NOW, THEREFORE, be it resolved by the Mayor and Council for Garden City, Georgia, and it is hereby resolved:

1. The Mayor and Council for Garden City, Georgia, hereby authorize the City of Garden City, Georgia, to enter into the agreement attached hereto as Exhibit "A" wherein Chatham County agrees to continue the current County

Wide Canal Maintenance Program pursuant to the terms set forth therein for the purpose of providing assistance with the maintenance of the canals within in th City. Further, the City's City Council hereby authorizes the acting City Manager to execute the said agreement, together with any other document necessary to further the intent of this Resolution.

2. The effective date of this Resolution shall be when approved by the Mayor and Council.

So resolved, this 21st day of October, 2013.

CITY OF GARDEN CITY, GEORGIA

Rhonda Ferrell

RHONDA FERRELL
CLERK OF COUNCIL

Received and approved this 21st day of October, 2013.

Tennyson Holder

TENNYSON HOLDER
MAYOR, GARDEN CITY, GEORGIA

EXHIBIT "A"

STATE OF GEORGIA)
)
COUNTY OF CHATHAM)

AGREEMENT

THIS AGREEMENT, made and entered into as of the _____ day of _____, 2013 by and between Chatham County, a political subdivision of the State of Georgia, hereinafter referred to as **COUNTY** and Garden City, a municipal corporation organized and existing under the terms of the State of Georgia, hereinafter referred to as the **CITY.**

WITNESSETH:

WHEREAS, the Chatham County Board of Commissioners has determined a need for a County Wide Canal Maintenance Program to assist with the maintenance of the major canals within the limits of the City; and

WHEREAS, the County Wide Canal Maintenance Program will consist of machine cleaning to remove silt, vegetation, spraying with herbicide to reduce aquatic growth and mowing canal maintenance road; and

WHEREAS, the Chatham County Board of Commissioners has expressed a willingness to continue the County Wide Canal Maintenance Program to assist with maintaining the canals which are located in the CITY; and

WHEREAS, the Chatham County Board of Commissioners has expressed a willingness to participate in a three part maintenance program with the CITY as funds are available and subject to those certain conditions set forth in the agreement.

NOW, THEREFORE, in consideration of the mutual covenants and agreements, and the benefits to the parties, the CITY and the COUNTY agree as follows:

1. The COUNTY shall maintain an inventory of canals to include the name, designation code and mileage. The COUNTY shall execute and provide any revisions that the COUNTY deems necessary to reflect changes in the maintenance of the canal.

2. Changes or amendments to the canal inventory must be approved in writing by both parties.

I. Canal Cleaning

1. The COUNTY agrees to clean or remove the debris and vegetation from the designated canals once a year. The COUNTY will provide all labor, materials and equipment to perform the removal of silt, debris and vegetation regardless of character of materials or obstructions encountered in the channel of the canal.

2. The COUNTY will secure a utility locate number in accordance to the Georgia Dig Law, if necessary, prior to cleaning a canal's channel where a utility may be in conflict. The COUNTY shall be responsible for all costs involved in the repairing of underground or overhead utilities broke, ruptured or rendered inoperable by the canal cleaning operation. The CITY shall inform the COUNTY of any designated canal listed in its jurisdiction that may have utilities within the right of way of the canal.

3. The CITY will provide a clear access to and passage to the canal's maintenance road, which shall include the installation or removal of gates, the locking and unlocking of gates, removal of vehicles or other obstacles, installation or repairing of piped crossings. The CITY shall provide the labor, material and equipment to repair wash outs on the designated canal's slopes and maintenance road.

4. Material removed from channel of canal is considered to be the property of the CITY. The CITY will obtain and provide a site for disposal of materials removed from the designated canal. The disposal site shall be within the guidelines of the Georgia Environmental Protection Division. The CITY shall be responsible for all costs to the disposal of materials.

II. Herbicide

1. The COUNTY will apply an environmentally acceptable herbicide chemical to the aquatic channel of each designated canal. The COUNTY will provide all labor, materials and equipment to apply the herbicide to the designated canals.

2. The COUNTY will insure that the application and handling of any herbicide will be performed under the supervision of staff with a current Georgia Department of Agriculture Pesticide Application License, categories 26 (Aquatic Pest Control) and 27 (Right of Way Pest Control).

3. The CITY will provide a clear access to and passage on the canal's maintenance road, which shall include the installation or removal of gates, the locking or unlocking of gates, the removal of vehicles or other obstacles and the installation or repairing of piped crossing.

III. Mowing

1. The COUNTY agrees to mow each designated canal's side slopes, access road, and the right-of-ways a minimum of three times per year during the growing season. The COUNTY will provide all labor, material and equipment to cut vegetation on the side slopes, access road and right-of-ways.

IV. Term

The term of this agreement is five (5) years with an annual automatic renewal. This agreement may be terminated within sixty (60) days by either party provided written notice is given. The COUNTY does not expressly or impliedly assume any other additional responsibilities or liabilities arising out of its operation in regard to canal cleaning or the application of herbicide. The laws of the State of Georgia shall govern this Agreement.

V. No Compensation to COUNTY

COUNTY service rendered pursuant to the County Wide Canal Maintenance Program shall be without charge to the CITY.

VI. Responsibility for Expenses and Compensation of Employees

The COUNTY shall compensate its employees during the time of rendering service pursuant to the County Wide Canal Maintenance Program. Such compensation shall include any workers' compensation benefits paid or due for personal injury or death while such employees are engaged in rendering such service.

VII. Liability

Any injury, disability, or death, incurred by any COUNTY employee while rendering service pursuant to the County Wide Canal Maintenance Program shall be deemed to have arisen out of, and to have been sustained in the course of, employment with the COUNTY. If any COUNTY employee, or anyone on his/her behalf, files a claim for workers' compensation benefits against the CITY for any injury claimed to have been sustained while furnishing service pursuant to the County Wide Canal Maintenance Program, the COUNTY shall indemnify, defend, and hold harmless the CITY with respect to such claim at no cost to the CITY.

IN WITNESS WHEREOF, said parties have hereunder set their hands and affixed their seals, the day and year written above.

CITY OF GARDEN CITY

BY: _____
Mayor

ATTEST: _____

Clerk to Council

BOARD OF COMMISSIONERS
CHATHAM COUNTY, GEORGIA

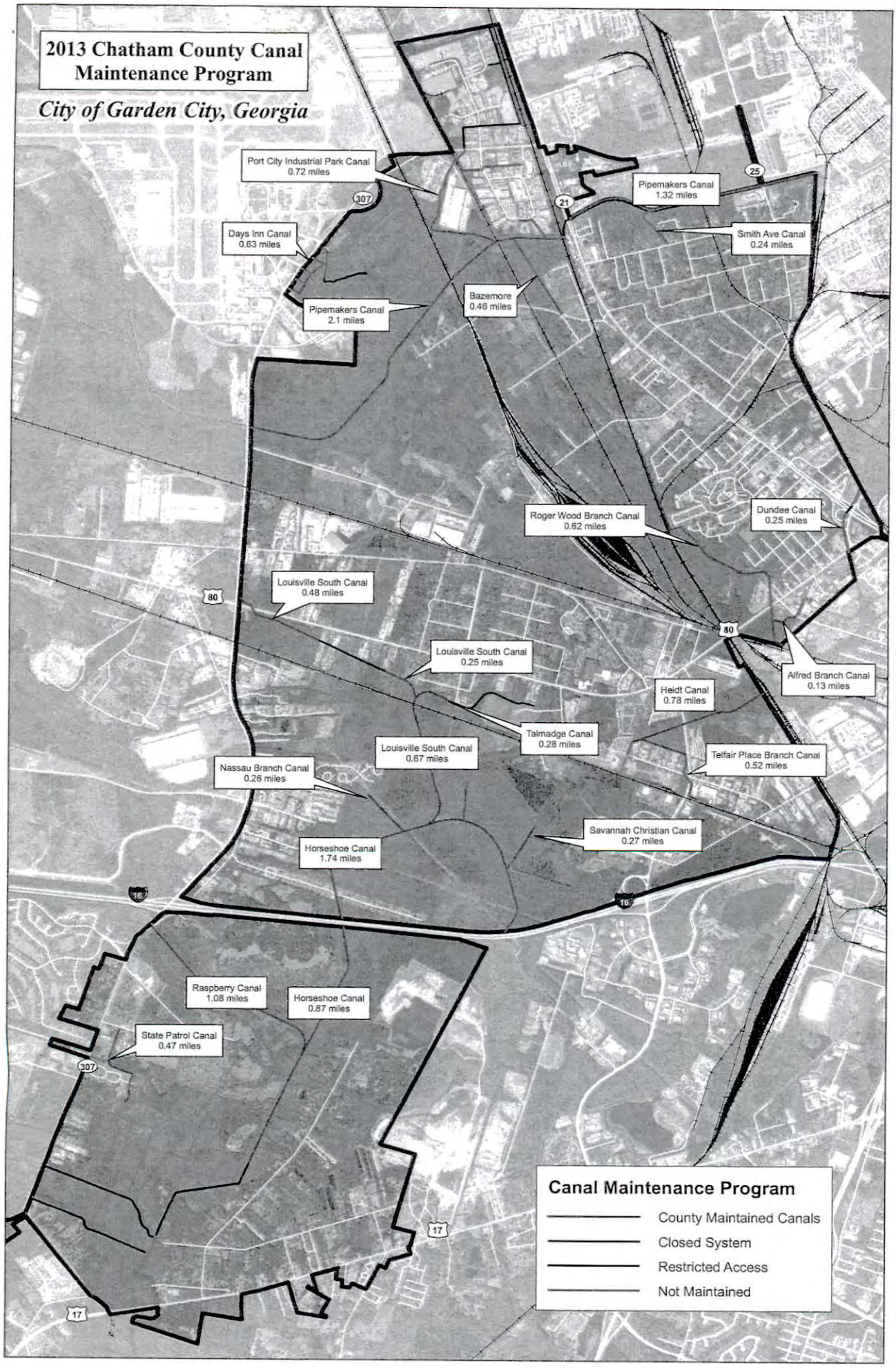
BY: _____
Albert J. Scott, Chairman

ATTEST: _____
Janice E. Bocook,
Clerk of Commissioners

CANAL CLEANING
GARDEN CITY

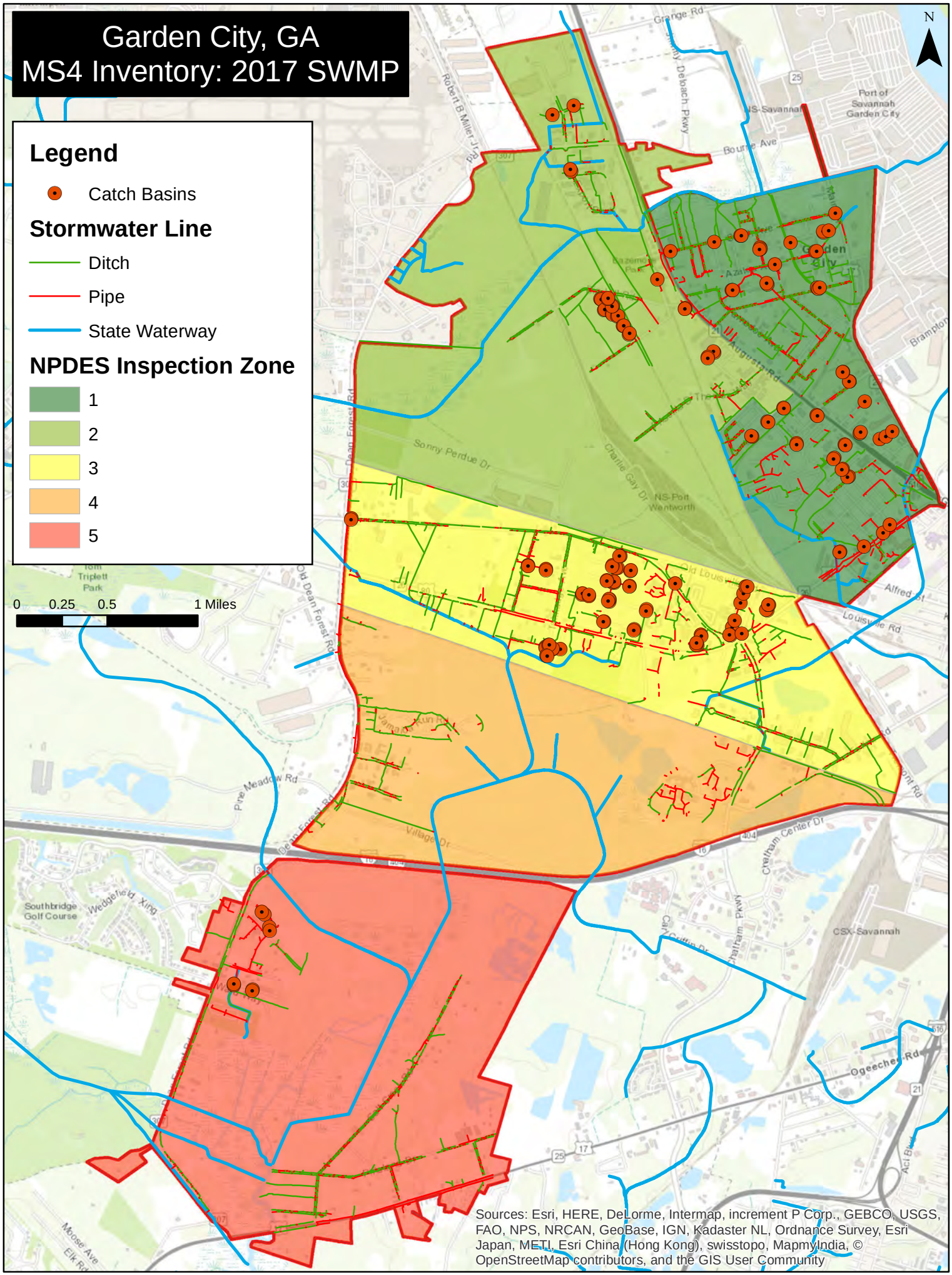
	CODE	NAME	EQUIP.	MILEAGE	START DATE	DATE	INITIALS	DATE	INITIALS
					ESTIMATED	COMPLETION		INSPECTION	
70	G - 49	HORSESHOE	82	0.43	04/01/13				
44	G - 49	HORSESHOE	83	0.74	09/23/13				
52	G - 49	HORSESHOE	83	1.78	04/01/13				
45	G - 49A	SAV'H CHRISTIAN	83	0.36	10/07/13				
71	G - 49B	LOUISVILLE S (-0.42)	82	0.62	05/13/13				
46	G - 49B	LOUISVILLE S	83	0.64	10/07/13				
72	G - 49BA	TALMAGE	82	0.23	04/08/13				
47	G - 49C	NASSAU BR	83	0.24	10/14/13				
73	G - 50	STATE PATROL	82	0.43	04/08/13				
48	G - 51	RASPBERRY	83	1.04	10/14/13				
74	G - 53	HEIDT	82	0.67	04/15/13				
75	G - 53A	TELFAIR PL BR	82	0.48	04/22/13				
29	G - 54	PIPE MAKERS	84	1.47	09/09/13				
30	G - 54	PIPE MAKERS	84	0.65	09/16/13				
1	G - 54K	IND. PARK DRIVE	82	0.72	04/22/13				
2	G - 54L	BAZEMORE BR	82	0.47	04/29/13				
22	G - 58	DUNDEE	83	0.24	07/15/13				
3	G - 58A	ROGERWOOD BR	82	0.45	04/29/13				
4	G - 58A	ROGERWOOD BR	82	0.20	05/06/13				
5	G - 58AA	ALFRED	82	0.15	05/06/13				
6	G - 74	DAYS INN	82	0.63	05/06/13				
	G - 54A	SMITH AV	84	0.21					

Total 12.85


2013 Chatham County Canal Maintenance Program
City of Garden City, Georgia
Port City Industrial Park Canal 0.72 miles
Days Inn Canal 0.63 miles
Pipemakers Canal 2.1 miles
Bazemore 0.46 miles
Pipemakers Canal 1.32 miles
Smith Ave Canal 0.24 miles
Roger Wood Branch Canal 0.62 miles
Dundee Canal 0.25 miles
Louisville South Canal 0.48 miles
Louisville South Canal 0.25 miles
Alfred Branch Canal 0.13 miles
Heidt Canal 0.78 miles
Talmadge Canal 0.28 miles
Louisville South Canal 0.67 miles
Telfair Place Branch Canal 0.52 miles
Nassau Branch Canal 0.26 miles
Savannah Christian Canal 0.27 miles
Horseshoe Canal 1.74 miles
Raspberry Canal 1.08 miles
Horseshoe Canal 0.87 miles
State Patrol Canal 0.47 miles
Canal Maintenance Program
County Maintained Canals
Closed System
Restricted Access
Not Maintained

Appendix B Maps & Inventory:

1) MS4 Inventory / Maintenance Zone Map
2) MS4 Inventory Table


Garden City, GA
MS4 Inventory: 2017 SWMP
Legend
Catch Basins
Stormwater Line
Ditch
Pipe
State Waterway
NPDES Inspection Zone
1
2
3
4
5
0 0.25 0.5 1 Miles
N
Grange Rd
Robert B Miller Jr Rd
Sonny Deloach Pkwy
Port of Savannah Garden City
Bourne Ave
Augusta Rd
Sonny Perdue Dr
Charlie Gay Dr
NS-Port Wentworth
Old Dean Forest Rd
Pine Meadow Rd
Village Dr
Cratham Center Dr
Cratham Pkwy
CSX-Savannah
Ogeechee Rd
Southbridge Golf Course
Wedgefield Xing
Alfred St
Louisville Rd
Brampton
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Total Inventory		
Structure Type	**Length (Linear FT)**	**Length (Miles)**
PIPE	194,055	36.75
DITCH	323,778	61.32
Total	**517,833**	**98.07**
	Structure Count	
CATCH BASIN	154	
Collection Status		
MS4 OUTFALLS	94	
PONDS	2	

Structure Type	Structure Material	Collection Status	Pipe Size	State Outfall	Ownership	SW Marker
CATCH BASIN	CONCRETE	INLET	18	NO	PUB	No
CATCH BASIN	CONCRETE	INLET	18	NO	PUB	No
CATCH BASIN	CONCRETE	INLET	24	NO	PUB	No
CATCH BASIN	CONCRETE	INLET	0	NO	PUB	No
CATCH BASIN	CONCRETE	INLET	0	NO	PUB	No
CATCH BASIN	CONCRETE	INLET	0	NO	PUB	Yes
CATCH BASIN	CONCRETE	INLET	0	NO	PUB	Yes
CATCH BASIN	BRICK	INLET	0	NO	PUB	Yes
CATCH BASIN	BRICK	INLET	0	NO	PUB	Yes
CATCH BASIN	BRICK	INLET	18	NO	PUB	No
CATCH BASIN	BRICK	INLET	0	NO	PUB	No
CATCH BASIN	BRICK	INLET	30	NO	PUB	No
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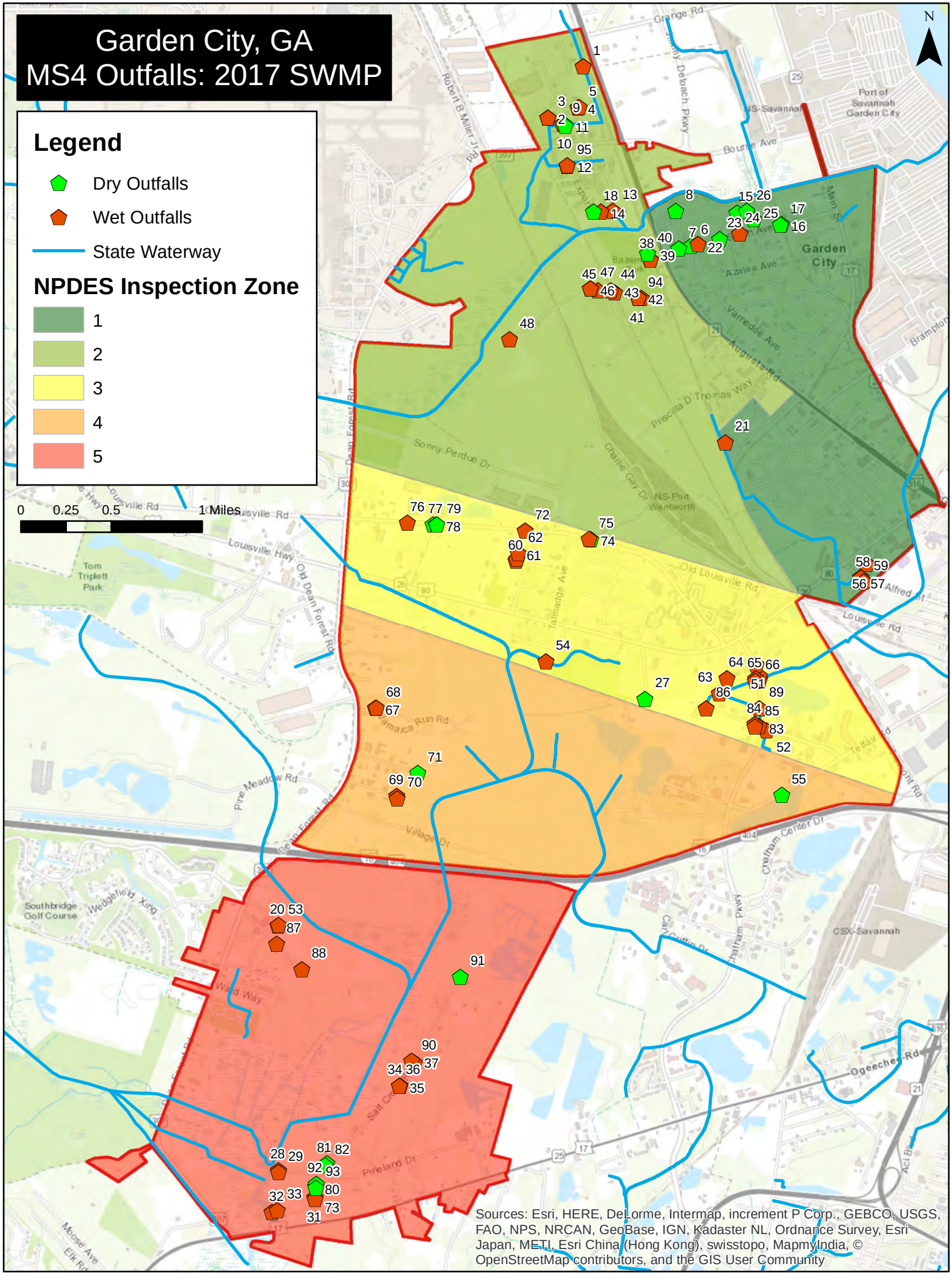
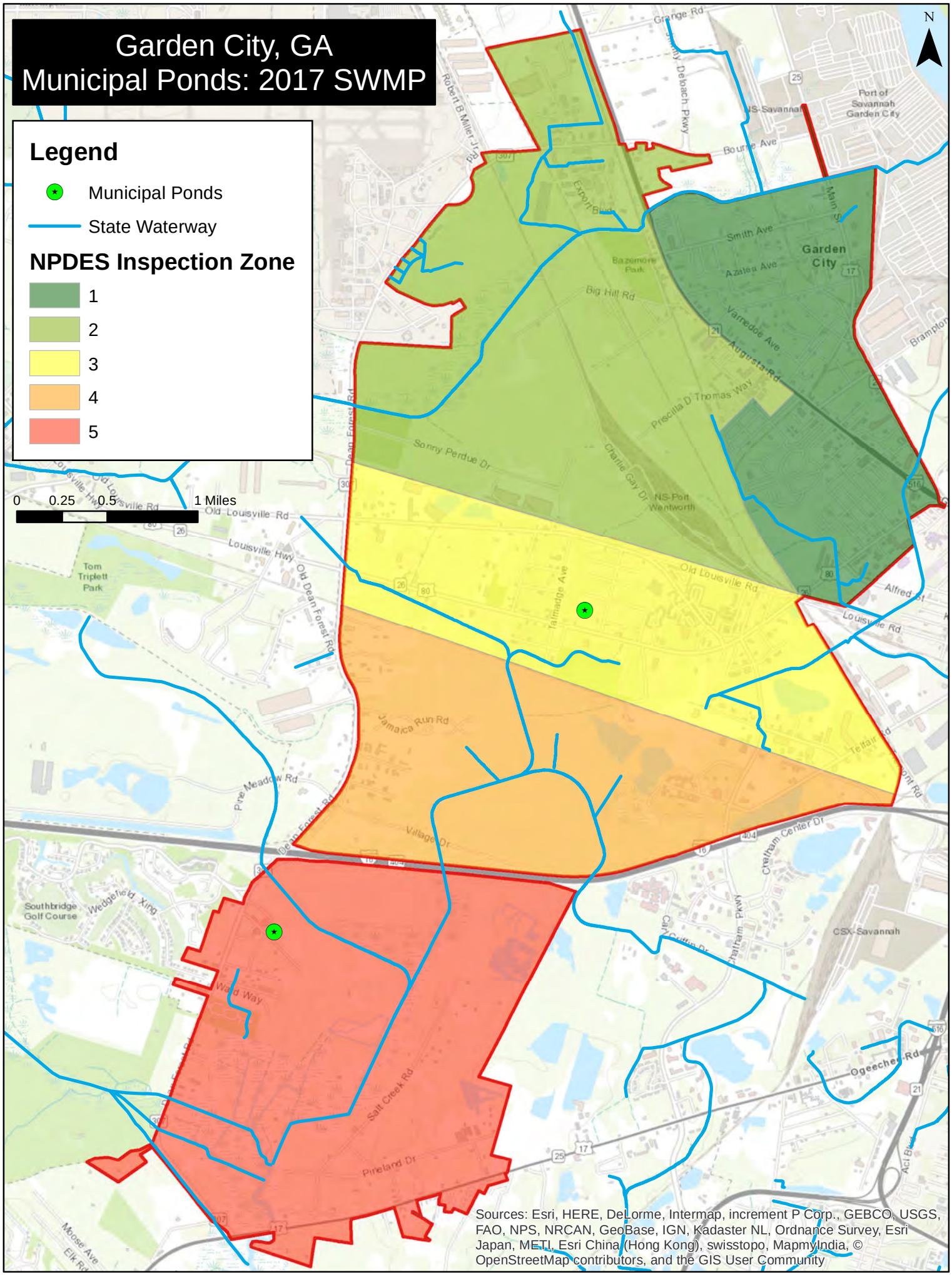

Garden City, GA
MS4 Outfalls: 2017 SWMP
Legend
Dry Outfalls
Wet Outfalls
State Waterway
NPDES Inspection Zone
1
2
3
4
5
0
0.25
0.5
1 Miles
N
Garden City
Port of Savannah Garden City
NS-Savannah
CSX-Savannah
NS-Port Wentworth
Grange Rd
Bourne Ave
Azalea Ave
Varnedoe Ave
Augusta Rd
Priscilla D Thomas Way
Sonny Perdue Dr
Charlie Gay Dr
Old Louisville Rd
Louisville Hwy
Old Dean Forest Rd
Dean Forest Rd
Talmadge Ave
Jamaica Run Rd
Pine Meadow Rd
Village Dr
Cratham Center Dr
Cratham Pkwy
Ogeechee Rd
Pineland Dr
Wedgefield Xing
Southbridge Golf Course
Tom Triplett Park
Robert B Miller Jr Rd
Sonny Deloach Pkwy
Main St
Alfred St
Brampton
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

OBJECTID	Wet/Dry Status	Reason	Waterway
1	Wet	Tidal	Port City Industrial Park Canal
2	Dry	N/A	Port City Industrial Park Canal
3	Wet	Groundwater/Wetland	Port City Industrial Park Canal
4	Wet	Groundwater/Wetland	Port City Industrial Park Canal
5	Wet	Groundwater/Wetland	Port City Industrial Park Canal
6	Dry	N/A	Pipemakers Canal
7	Dry	N/A	Pipemakers Canal
8	Dry	Tidal	Pipemakers Canal
9	Wet	Tidal	Port City Industrial Park Canal
10	Dry	N/A	Port City Industrial Park Canal
11	Dry	N/A	Port City Industrial Park Canal
12	Wet	Tidal	Export North Branch Canal
13	Wet	Tidal	Tributary to Pipemakers Canal
14	Wet	Tidal	Tributary to Pipemakers Canal
15	Dry	N/A	Pipemakers Canal
16	Dry	N/A	Pipemakers Canal
17	Dry	N/A	Pipemakers Canal
18	Dry	N/A	Tributary to Pipemakers Canal
20	Wet	Groundwater/Wetland	Raspberry Canal
21	Wet	Tidal	Roger Wood Branch Canal
22	Wet	Tidal	Pipemakers Canal
23	Dry	N/A	Pipemakers Canal
24	Wet	Tidal	Pipemakers Canal
25	Dry	N/A	Pipemakers Canal
26	Dry	N/A	Pipemakers Canal
27	Dry	N/A	Heidt Canal
28	Wet	Tidal	Salt Creek
29	Wet	Tidal	Salt Creek
30	Wet	Tidal	Salt Creek
31	Wet	Tidal	Salt Creek
32	Wet	Tidal	Salt Creek
33	Wet	Tidal	Salt Creek
34	Wet	Tidal	Horseshoe Canal
35	Wet	Tidal	Horseshoe Canal
36	Wet	Tidal	Horseshoe Canal
37	Wet	Tidal	Horseshoe Canal
38	Dry	N/A	Pipemakers Canal
39	Wet	Tidal	Pipemakers Canal
40	Dry	N/A	Pipemakers Canal
41	Wet	Tidal	Pipemakers Canal
42	Wet	Tidal	Pipemakers Canal
43	Wet	Tidal	Pipemakers Canal
44	Wet	Tidal	Pipemakers Canal
45	Wet	Tidal	Pipemakers Canal
46	Wet	Tidal	Pipemakers Canal
47	Wet	Tidal	Pipemakers Canal

48	Wet	N/A	Pipemakers Canal
49	Wet	Tidal	Heidt Canal
50	Wet	Tidal	Heidt Canal
51	Wet	Tidal	Heidt Canal
52	Wet	Tidal	Telfair Place Branch Canal
53	Wet	Groundwater/Wetland	Raspberry Canal
54	Wet	Tidal	Talmadge Canal
55	Dry	N/A	Pond
56	Wet	Tidal	Alfred Branch Canal
57	Wet	Tidal	Alfred Branch Canal
58	Wet	Tidal	Alfred Branch Canal
59	Wet	Tidal	Alfred Branch Canal
60	Wet	Groundwater/Wetland	Louisville South Canal
61	Wet	Groundwater/Wetland	Louisville South Canal
62	Wet	Groundwater/Wetland	Louisville South Canal
63	Wet	Tidal	Heidt Canal
64	Wet	Tidal	Heidt Canal
65	Wet	Tidal	Heidt Canal
66	Wet	Tidal	Heidt Canal
67	Wet	Tidal	Nassau Branch Canal
68	Wet	Tidal	Nassau Branch Canal
69	Wet	Groundwater/Wetland	Horseshoe Canal
70	Wet	Groundwater/Wetland	Horseshoe Canal
71	Dry	N/A	Horseshoe Canal
72	Wet	Groundwater/Wetland	Louisville South Canal
73	Wet	Tidal	Salt Creek
74	Dry	N/A	Talmadge Canal
75	Wet	Tidal	Talmadge Canal
76	Wet	Groundwater/Wetland	Louisville South Canal
77	Dry	N/A	Louisville South Canal
78	Wet	Groundwater/Wetland	Louisville South Canal
79	Dry	N/A	Louisville South Canal
80	Wet	Tidal	Salt Creek
81	Dry	N/A	Salt Creek
82	Dry	N/A	Salt Creek
83	Wet	Tidal	Telfair Place Branch Canal
84	Wet	Tidal	Telfair Place Branch Canal
85	Wet	Tidal	Telfair Place Branch Canal
86	Wet	Tidal	Heidt Canal
87	Wet	N/A	Raspberry Canal
88	Wet	Groundwater/Wetland	Raspberry Canal
89	Wet	Tidal	Telfair Place Branch Canal
90	Wet	Tidal	Horseshoe Canal
91	Dry	N/A	Horseshoe Canal
92	Dry	N/A	Salt Creek
93	Dry	N/A	Salt Creek
94	Wet	Tidal	Pipemakers Canal
95	Wet	Tidal	Export North Branch Canal


Garden City, GA
Municipal Ponds: 2017 SWMP
Legend
Municipal Ponds
State Waterway
NPDES Inspection Zone
1
2
3
4
5
0 0.25 0.5 1 Miles
N
Garden City
Port of Savannah Garden City
NS-Savannah
CSX-Savannah
NS-Port Wentworth
Old Louisville Rd
Louisville Hwy
Old Dean Forest Rd
Jamaica Run Rd
Pine Meadow Rd
Village Dr
Salt Creek Rd
Pineland Dr
Ogeechee Rd
Sonny Perdue Dr
Charlie Gay Dr
Priscilla D Thomas Way
Big Hill Rd
Augusta Rd
Varnedoe Ave
Azalea Ave
Smith Ave
Bourne Ave
Grange Rd
Tom Triplett Park
Southbridge Golf Course
Bazemore Park
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Appendix C: Inspection Checklists

1) Outfall Reconnaissance Checklist
2) Source Tracing Forms
3) Detention Pond Inspection Field Form
4) Stormwater Inspection Checklist (HVPS, Municipal, Industrial)
5) Capital Improvement Program (CIP) Assessment Checklist
6) MS4 Stormwater Structure Inspection Checklist

Outfall Reconnaissance Inventory (ORI) Form

Section 1: Background Data

Waters to which the MS4 Outfall discharges:			Outfall ID:		
Today's date:			Time :		
Investigator:			Form Completed by:		
Temperature (F):		Rainfall last 72 hours (in.):			
Latitude:		Longitude:		GPS Unit:	
Land Use in Drainage Area (Check all that apply):			Photo ID #s:		
□ Industrial	□ Ultra-Urban Res	□ Commercial	□ Open Space	□ Suburban Res	□ Institutional
Potential Pollutant Sources:			Known Industries:		
Notes:					

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	STRUCTURAL DAMAGE
□ Closed Pipe	□ RCP □ CMP □ PVC □ HDPE	□ Circular □ Single □ Elliptical □ Double	Diameter, circular: _____ Box: h - _____ w - _____	□ Cracking or Chipping □ Peeling Paint □ Corrosion
□ Manhole	□ Steel □ Other: _____	□ Box □ Triple □ Other:_____	Elliptical: h - _____ w - _____	□ Collapsing □ Missing parts □ Good condition
□ Open drainage	□ Concrete □ rip-rap □ Earthen	□ Trapezoid □ Parabolic □ Other:_____	Depth: _____ Top Width: _____	Bottom Width: _____
Submerged or surcharged?	□ Fully □ Partially □ No			
Flow Present?	□ Yes □ No	*If no, Skip to Section 4*	Flow Description:	□ Trickle □ Moderate □ Substantial
Tidal?	□ Yes □ No	*If Yes, stage:*	□ Ebb □ Flood	

Section 3: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? □ Yes □ No (*If No, Skip to Section 5)*

INDICATOR (CHECK if Present)	DESCRIPTION	COMMENTS
□ Sediment	□ None □ < 50% full □ > 50% full □ Completely full	
□ Deposits/Stains	□ Oily □ Flow Line □ Paint □ Other:	
□ Abnormal Vegetation	□ Excessive □ Inhibited	
□ Poor pool quality	□ Odors □ Colors □ Floatables □ Oil Sheen □ Suds □ Excessive Algae □ Other:	
□ Pipe benthic growth	□ Brown □ Orange □ Green □ Other:	

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? □ Yes □ No (*If No, Skip to Section 4)*

INDICATOR (Check if Present)	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
□ Odor	□ Sewage □ Rancid/sour □ Petroleum/gas □ Sulfide □ Other:	□ 1 - Faint	□ 2 - Easily detected	□ 3 - Noticeable from a distance
□ Color	□ Clear □ Brown □ Gray □ Yellow □ Green □ Orange □ Red □ Other:	□ 1 - Faint colors in sample bottle	□ 2 - Clearly visible in sample bottle	□ 3 - Clearly visible in outfall flow
□ Turbidity	See severity	□ 1 - Slight cloudiness	□ 2 - Cloudy	□ 3 - Opaque
□ Floatables (Does not include trash!)	□ Sewage (Toilet Paper, etc.) □ Suds □ Petroleum (oil sheen) □ Other:	□ 1 - Few/slight	□ 2 - Some	□ 3 - A lot; origin clear (e.g., floating sanitary materials)

Section 5: Overall Outfall Characterization

□ Unlikely □ Suspect (three or more indicators, or two indicators if one has a severity of 3) □ Obvious

Section 6: Data Collection

1. Field water quality monitoring? □ Yes □ No
2. Sample(s) collected from: □ Flow □ Pool
3. Results

Temp:_____ Salinity:_____ pH:_____ Conductivity: _____ Turbidity_____

4. Sterile sample for bacteria analysis? □ Yes □ No
5. Bacterial Results: _____ *Lab:* □ External lab □ City lab

Source Tracing Form

Outfall ID:	
Employee Conducting Source Tracing:	
1) Suspected illicit discharge/dumping discovered through which method?	☐ Citizen Complaint ☐ ORI ☐ Field Inspection
Describe the nature of the suspicious discharge?	
2) Are there known industrial stormwater discharges in the drainage basin of the outfall?	☐ Yes ☐ No
3) What source tracing actions are being taken? (Describe source tracing activities.)	☐ MS4 outfall field sampling ☐ Visual Inspection ☐ Site Inspection ☐ Upstream Sampling ☐ Dye Testing ☐ Line Video ☐ Other
4) Was the source of the illicit discharge/dumping identified?	☐ Yes ☐ No
5) Was the responsible party contacted?	☐ Yes ☐ No
6) Was an enforcement action taken? (Describe enforcement actions)	☐ Yes ☐ No
7) Was the source removed? (Describe actions taken)	☐ Yes ☐ No
Date:	
Signature:	

Operation and Maintenance Inspection Report for Stormwater Management Ponds

(Adapted from Watershed Management Institute, Inc.)

Inspector Name _____ Project Location

Inspection Date _____ _____

Stormwater Pond _____

Normal Pool _____ _____

Normally Dry _____ Watershed _____

Inspection Items	Checked? Yes / No	Maintenance Needed? Yes / No	Inspection Frequency	Comments
Pond Components				
1. Embankment and Emergency spillway				
a. Adequate vegetation and ground cover			A	
b. Embankment erosion			A	
c. Animal burrows			A	
d. Unauthorized plantings			A	
e. Cracking, bulging, or sliding of dam				
i. Upstream face			A	
ii. Downstream face			A	
iii. At or beyond toe Upstream			A	
Downstream			A	
iv. Emergency spillway			A	
f. Pond, toe & chimney drains clear and functioning			A	
g. Leaks on downstream face			A	
h. Abutment protection or riprap failures			A	
i. Visual settlement or horizontal misalignment of top of dam			A	
j. Emergency spillway clear of debris			A	
k. Other (specify)			A	
2. Riser and principal spillway				
Type: Reinforced concrete _____ Corrugated pipe _____ Masonry _____				
a. Low flow orifice obstructed			A	
b. Low flow trash rack			A	
i. Debris removal necessary				
ii. Corrosion control			A	
c. Weir trash rack			A	
i. Debris removal necessary				
ii. Corrosion control			A	

Inspection Items		Checked? Yes / No	Maintenance Needed? Yes / No	Inspection Frequency	Comments
d.	Excessive sediment accumulation inside riser			**A**	
e.	Concrete/Masonry condition Riser and barrels i. Cracks or displacement			**A**	
	ii. Minor spalling (<1")			**A**	
	iii. Major spalling (rebars exposed)			**A**	
	iv. Joint failures			**A**	
	v. Water tightness			**A**	
f.	Metal pipe condition			**A**	
g.	Control valve i. Operational/exercised			**A**	
	ii. Chained and locked			**A**	
h.	Pond drain valve			**A**	
	i. Operational/exercised			**A**	
	ii. Chained and locked			**A**	
i.	Outfall channels flowing			**A**	
j.	Other (specify)			**A**	
3.	Permanent pool (wet ponds)				
a.	Undesirable vegetative growth			**M**	
b.	Floating or floatable debris removal required			**M**	
c.	Visible pollution			**M**	
d.	High Water Marks			**M**	
e.	Shoreline problems			**M**	
f.	Other (specify)			**M**	
4.	Sediment forebays				
a.	Sedimentation Noted			**M**	
b.	Sediment removal when depth < 50% design depth			**M**	
5.	Dry pond areas				
a.	Vegetation adequate			**M**	
b.	Undesirable vegetative growth			**M**	
c.	Undesirable woody vegetation			**M**	
d.	Low flow channels clear of obstructions			**M**	
e.	Standing water or wet spots			**M**	
f.	Sediment and/or trash accumulation			**M**	
g.	Other (specify)			**M**	
6.	Condition of outfalls into pond				
a.	Riprap failures			**A,S**	
b.	Slope erosion			**A,S**	
c.	Storm drain pipes			**A,S**	
d.	Endwalls/headwalls			**A,S**	
e.	Other (specify)			**A,S**	

Inspection Items			Checked? Yes / No	Maintenance Needed? Yes / No	Inspection Frequency	Comments
7.	Other					
	a.	Encroachments on ponds or easement area			**M**	
	b.	Complaints from residents (describe on back)			**M**	
	c.	Aesthetics i. Grass height			**M**	
		ii. Graffiti removal necessary			**M**	
		iii. Other (specify)			**M**	
	d.	Any public hazards (specify)			**M**	
	e.	Maintenance access			**M**	
8.	Constructed wetland areas					
	a.	Vegetation healthy and growing			**A**	
	b.	Evidence of invasive species			**A**	
	c.	Excessive sedimentation in wetland area			**A**	

Inspection Frequency Key A=Annual, M=Monthly, S=After major storm

Summary

1. Inspectors Remarks: _____
   _____
   _____
   _____
   _____
   _____
   _____

2. Overall condition of Facility (Check one)
   _____ Acceptable
   _____ Unacceptable

3. Dates any maintenance must be completed by:
   _____
   _____
   _____

_____
Inspectors Signature

Industrial/HVPS Stormwater Inspection Checklist

Facility:	
Facility Location:	
Date of Inspection:	
Reason for Inspection:	
Weather:	

Has the facility applied for coverage under the NPDES Industrial Stormwater Permit?	**YES**	**NO**	**N/A**
Does facility have Stormwater Pollution Prevention Plan (SWP3)?	**YES**	**NO**	**N/A**
Has facility implemented the SWP3?	**YES**	**NO**	**N/A**
Is there evidence of stormwater pollutants leaving site? (If YES, explain below) Describe pollutants:			

Were stormwater issues discussed with on-site representative?	**YES**	**NO**
If YES, what is name and position of representative?	Name:	
	Position:	
Other comments/summary:		

Inspector Name:	
Company:	
Signature:	

Inspection Results:

Inspection Completed For:	YES/ NO/NA	PASS/ FAIL	Deficiencies Found	PHOTO #
Current Industrial NOI				
Stormwater Pollution Prevention Plan				
Areas around machinery and/or equipment				
Areas prone to leaks and spills				
Outdoor storage and handling areas				
Waste generation, storage, treatment and disposal areas				
Vehicle wash-down areas				
Fueling areas				
Loading and unloading areas				
Other:				

Inspect for the following:	
Stains, spots or puddles of oils, grease, or chemicals on concrete or around drains.	Torn bags of dry chemicals or bags exposed to rain
Leaking or corroded equipment, pipes, containers, or lines.	Broken or cracked dikes, walls, or other physical barriers
Improperly labeled or leaking drums	Improper outdoor storage of potential stormwater pollutants
Inadequate or inaccessible spill response equipment	Oily rags improperly discarded

Capital Improvement Project (CIP) Stormwater Impact Assessment

Project Name/ID Number: _____

Project Type: _____

Proposed Dates of Construction (start - finish): _____

Water Quality Impact

	Yes	No
The project will improve water quality by reducing velocity downstream associated with erosion.		
The project will replace a poorly functioning system that allows for the removal of pollutants currently entering the MS4 system.		
Other:		

Water Quality Enhancement Feasibility (Cost Estimations)

Enhancement Type*	Estimated Cost Increase	Feasible Yes/No
1.		
2.		
3.		

Regulatory Permits

	Yes	No
NPDES Construction Permit		
Section 404 Permit		
Other:		

Describe how this project adheres to the City design criteria, CSS and GSMM:

***Potential Enhancements Include:**

Reduced Clearing and Grading Limits
Use Fewer or Alternative Cul-de-Sacs
Create Landscaping Area in Parking Lot
Reduce Setbacks and Frontages
Green Roofs
Vegetated Filter Strips
Rain Garden
Dry Wells
Minimized Land Disturbance
Rainwater Harvesting
Reduce Roadway Lengths & Widths
Reduce Parking Lot Footprints
Reduce Building Footprint
Soil Restoration / Re-vegetation
Permeable Pavement
Grass Channels
Stormwater Planter
Bio-retention Area
Stormwater Planters
Dry Swales

MS4 Structure Inspection Forms

The following tables have been developed to illustrate the type of information that will be collected and recorded as part of the stormwater inspection program within a GIS Database using field GPS equipment.

Please note that inspections will be completed digitally and submitted with the annual report in a table format containing the values defined within each of the tables below.

Inspection Tables

Stormwater Structures

Stormwater Structures	Values	Description
Inspection Status	Complete, Partial Evaluation, Cannot Access, Cannot Locate, Cannot Open, None	
Inspection Date	Date	Date of the most recent inspection
Is there a Stormwater Marker	Yes, No	Indicates whether there is a stormwater marker
Collection Status	Inlet, Outlet, Junction, Unknown	States whether the structure is an inlet, outfall, or junction
Structure Type	Catch Basin, Drop Inlet, Yard Inlet, Curb Inlet, End of Pipe, Flared End Section, Headwall, Junction, Box Culvert, Other, Unknown	Identifies the type of stormwater structure
Structure Material	CMP, HDPE, PVC, Concrete, Brick, Metal, Terra Cotta, Other, Unknown	Defines the structure materials
Pipe Material	CMP, HDPE, PVC, Concrete, Metal, Terra Cotta, Other, Unknown	Identifies the pipe material at the structure
Pipe Size	Number	Size of the pipe in inches
Ownership	City, State, County, Unknown, Private - Residential, Private - Commercial	Identifies ownership and maintenance responsibility
MS4 Outfall	Yes, No	Indicates whether the structure is an MS4 outfall
Drains to	Name of State Water	Lists the name of the State Water where the structure eventually drains
Inspection Zone	Zone 1, Zone 2, Zone 3, Zone 4, Zone 5	Identifies the maintenance zone
Sediment	None, 1-25%, 26-50%, 51-75%, 76-100%	Indicates the amount of sediment present in the structure at the time of inspection
Debris	None, Minor, Moderate, Severe	Indicates the amount of debris present in the structure at the time of inspection
Erosion	None, Minor, Moderate, Severe	Defines the severity of erosion at the type of inspection
Vegetation	Natural, Overgrown Access, Overgrown Flow	Identifies the type of vegetation present at the time of inspection
Water	None, Standing, Flowing, Sump, Submerged, Unknown	Defines the presence of water at the time of inspection
Water Quality	Normal, Discoloration, Algae, Multiple, Litter/Floatables, Sheen, Foam, Precipitates, Unknown, N/A	Water quality observations
Structural Damage	No Damage, Low Priority, Damage Requiring Repair, Major Damage	Identifies the severity of damage present at the structure
Maintenance	Maintenance Needed, Routine, Priority Maintenance Needed, Structural Damage and Maintenance	Lists the type of maintenance recommended based on the inspection
Notes	General notes / observations	General notes / observations
Inspection Score	Numeric	Scores the overall condition of the structure based on the information gathered
X Coordinate	Longitude	Geographic Coordinates
Y Coordinate	Latitude	Geographic Coordinates

Ditches

Ditches	Values	Description
Inspection Status	Complete, Partial Evaluation, Cannot Access, Cannot Locate, None	
Inspection Date	Date	Date of the most recent inspection
Channel Material	Earthen, Rip Rap, Concrete, Other, Unknown,	Defines the general type of material that forms the channel of the ditch
Grading	None, Partial Length, Full Length	Indicates whether any grading has taken place along the ditch
Debris	None, Minor, Moderate, Severe	Indicates the amount of debris present in the structure at the time of inspection
Erosion	None, Minor, Moderate, Severe	Defines the severity of erosion at the type of inspection
Vegetation	Natural, Overgrown Access, Overgrown Flow	Identifies the type of vegetation present at the time of inspection
Water	None, Standing, Flowing, Sump, Submerged, Unknown	Defines the presence of water at the time of inspection
Water Quality	Normal, Discoloration, Algae, Multiple, Litter/Floatables, Sheen, Foam, Precipitates, Unknown, N/A	Water quality observations
Maintenance	Routine, Maintenance Needed, Unknown	Lists the type of maintenance recommended based on the inspection
Ownership	City, State, County, Unknown, Private - Residential, Private - Commercial	Identifies ownership and maintenance responsibility
Notes	General notes / observations	General notes / observations
Inspection Zone	Zone 1, Zone 2, Zone 3, Zone 4, Zone 5	Identifies the maintenance zone
Inspection Year	Year	Lists a year within the 5-year permit cycle when the ditch needs to be inspected

Stormwater Pipes

Stormwater Pipes	Values	Description
Inspection Date	Date	Date of the most recent inspection
Pipe Material	CMP, HDPE, PVC, Concrete, Metal, Terra Cotta, Other, Unknown	Identifies the pipe material at the structure
Pipe Size	Number	Size of the pipe in inches
Sediment	None, 1-25%, 26-50%, 51-75%, 76-100%	Indicates the amount of sediment present in the pipe at the time of inspection
Debris	None, Minor, Moderate, Severe	Indicates the amount of debris present in the pipe at the time of inspection
Observations		
Ownership	City, State, County, Unknown, Private - Residential, Private - Commercial	Identifies ownership and maintenance responsibility
Notes	General notes / observations	General notes / observations
Inspection Zone	Zone 1, Zone 2, Zone 3, Zone 4, Zone 5	Identifies the maintenance zone
Inspection Year	Year	Lists a year within the 5-year permit cycle when the ditch needs to be inspected

Appendix D : Ordinances & Legal Documents

1) Soil Erosion and Sedimentation Ordinance
2) Stormwater Management (Illicit Discharge Ordinance)
3) Stormwater Utility Ordinance

ARTICLE III. - EROSION AND SEDIMENTATION CONTROL[3]

Footnotes:

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Editor's note— Ord. No. 2010-9, § 1, adopted June 21, 2010, repealed former Art. III, §§ 30-51—30-71, and enacted a new Art. III as set out herein. Former Art. III pertained to the same subject matter and derived from Ord. No. 2009-15, § 1, adopted Nov. 16, 2009.

DIVISION 1. - GENERALLY

Sec. 30-51. - Title of article.

This article shall be known as the City Soil Erosion and Sedimentation Control Ordinance.

(Ord. No. 2010-9, § 1, 6-21-10)

Sec. 30-52. - Definitions.

The following definitions shall apply in the interpretation and enforcement of this article, unless otherwise specifically stated:

Best management practices (BMP's): These include sound conservation and engineering practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the 'Manual for Erosion and Sediment Control in Georgia' published by the commission as of January 1 of the year in which the land-disturbing activity was permitted.

Board: The board of natural resources.

Buffer: The area of land immediately adjacent to the banks of state waters in its natural state of vegetation, which facilitates the protection of water quality and aquatic habitat.

Certified personnel: A person who has successfully completed the appropriate certification course approved by the Georgia Soil and Water Conservation Commission.

Commission: The Georgia Soil and Water Conservation Commission (GSWCC).

CPESC: Certified professional in erosion and sediment control with current certification by Certified Profession in Erosion and Sediment Control, Inc., a corporation registered in North Carolina, which is also referred to as CPESC or CPESC, Inc.

Cut: A portion of land surface or area from which earth has been removed or will be removed by excavation; the depth below original ground surface to the excavated surface. Also known as excavation.

Department: The Georgia Department of Natural Resources (DNR).

Design professional: A professional licensed by the State of Georgia in the field of: engineering, architecture, landscape architecture, forestry, geology, or land surveying; or a person that is a Certified Professional in Erosion and Sediment Control (CPESC) with a current certification by Certified Professional in Erosion and Sediment Control, Inc.

Director: The director of the environmental protection division or an authorized representative.

District: The coastal soil and water conservation district.

Division: The Environmental Protection Division (EPD) of the Department of Natural Resources.

Drainage structure: A device composed of a virtually nonerodible material such as concrete, steel, plastic or other such material that conveys water from one place to another by intercepting the flow and carrying it to a release point for storm water management, drainage control, or flood control purposes.

Erosion: The process by which land surface is worn away by the action of wind, water, ice or gravity.

Erosion, sedimentation and pollution control plan: A plan required by the Erosion and Sedimentation Act, O.C.G.A. Chapter 12-7, that includes, as a minimum protections at least as stringent as the state general permit, best management practices, and requirements in section 30-54 of this article.

Fill: A portion of land surface to which soil or other solid material has been added; the depth above the original ground surface or an excavation.

Final stabilization: All soil disturbing activities at the site have been completed, and that for unpaved areas and areas not covered by permanent structures and areas located outside the waste disposal limits of a landfill cell that has been certified by EPD for waste disposal, 100 percent of the soil surface is uniformly covered in permanent vegetation with a density of 70 percent or greater, or equivalent permanent stabilization measures (such as the use of rip rap, gabions, permanent mulches or geotextiles) have been used. Permanent vegetation shall consist of: planted trees, shrubs, perennial vines; a crop of perennial vegetation appropriate for the time of year and region; or a crop of annual vegetation and a seeding of target crop perennials appropriate for the region. Final stabilization applies to each phase of construction.

Finished grade: The final elevation and contour of the ground after cutting or filling and conforming to the proposed design.

Grading: Altering the shape of ground surfaces to a predetermined condition; this includes stripping, cutting, filling, stockpiling and shaping or any combination thereof and shall include the land in its cut or filled condition.

Ground elevation: The original elevation of the ground surface prior to cutting or filling.

Land-disturbing activity: Any activity which may result in soil erosion from water or wind and the movement of sediments into state waters or onto lands within the state, including, but not limited to, clearing, dredging, grading, excavating, transporting, and filling of land but not including agricultural practices as described in Garden City Code subsection 30-53(5).

Larger common plan of development or sale: A contiguous area where multiple separate and distinct construction activities are occurring under one plan of development or sale. For the purposes of this paragraph, "plan" means an announcement; piece of documentation such as a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, or computer design; or physical demarcation such as boundary signs, lot stakes, or surveyor markings, indicating that construction activities may occur on a specific plot.

Local issuing authority: The governing authority of any county or municipality which is certified pursuant to O.C.G.A. § 12-7-8(a).

Metropolitan River Protection Act (MRPA): A state law referenced as O.C.G.A. § 12-5-440 et seq. which addresses environmental and developmental matters in certain metropolitan river corridors and their drainage basins.

Natural ground surface: The ground surface in its original state before any grading, excavation or filling.

Nephelometric turbidity units (NTU): Numerical units of measure based upon photometric analytical techniques for measuring the light scattered by finely divided particles of a substance in suspension. This technique is used to estimate the extent of turbidity in water in which colloidally dispersed or suspended particles are present.

NOI: A notice of intent form provided by EPD for coverage under the state general permit.

NOT: A notice of termination form provided by EPD to terminate coverage under the state general permit.

Operator: The party or parties that have: (A) operational control of construction project plans and specifications, including the ability to make modifications to those plans and specifications; or (B) day-to-day operational control of those activities that are necessary to ensure compliance with an erosion, sedimentation and pollution control plan for the site or other permit conditions, such as a person authorized to direct workers at a site to carry out activities required by the erosion, sedimentation and pollution control plan or to comply with other permit conditions.

Outfall: The location where storm water in a discernible, confined and discrete conveyance, leaves a facility or site or, if there is a receiving water on site, becomes a point source discharging into that receiving water.

Permit: The authorization necessary to conduct a land-disturbing activity under the provisions of this article.

Person: Any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, state agency, municipality or other political subdivision of the State of Georgia, any interstate body or any other legal entity.

Phase or phased: Sub-parts or segments of construction projects where the sub-part or segment is constructed and stabilized prior to completing construction activities on the entire construction site.

Project: The entire proposed development project regardless of the size of the area of land to be disturbed.

Properly designed: Designed in accordance with the design requirements and specifications contained in the "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the Georgia Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted and amendments to the manual as approved by the commission up until the date of NOI submittal.

Roadway drainage structure: A device such as a bridge, culvert, or ditch, composed of a virtually nonerodible material such as concrete, steel, plastic, or other such material that conveys water under a roadway by intercepting the flow on one side of a traveled roadway consisting of one or more defined lanes, with or without shoulder areas, and carrying water to a release point on the other side.

Sediment: Solid material, both organic and inorganic, that is in suspension, is being transported, or has been moved from its site of origin by wind, water, ice, or gravity as a product of erosion.

Sedimentation: The process by which eroded material is transported and deposited by the action of water, wind, ice or gravity.

Soil and water conservation district approved plan: An erosion, sedimentation and pollution control plan approved in writing by the Coastal Soil and Water Conservation District.

Stabilization: The process of establishing an enduring soil cover of vegetation by the installation of temporary or permanent structures for the purpose of reducing to a minimum the erosion process and the resultant transport of sediment by wind, water, ice or gravity.

State general permit: The National Pollution Discharge Elimination System (NPDES) general permit or permits for storm water runoff from construction activities as is now in effect or as may be amended or reissued in the future pursuant to the state's authority to implement the same through federal delegation under the Federal Water Pollution Control Act, as amended, 33 U.S.C. Section 1251 et seq. and O.C.G.A § 12-5-30(f).

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

Structural erosion, sedimentation and pollution control practices: Practices for the stabilization of erodible or sediment-producing areas by utilizing the mechanical properties of matter for the purpose of

either changing the surface of the land or storing, regulating or disposing of runoff to prevent excessive sediment loss. Examples of structural erosion and sediment control practices are riprap, sediment basins, dikes, level spreaders, waterways or outlets, diversions, grade stabilization structures and sediment traps, etc. Such practices can be found in the publication Manual for Erosion and Sediment Control in Georgia.

Trout streams: All streams or portions of streams within the watershed as designated by the Wildlife Resources Division of the Georgia Department of Natural Resources under the provisions of the Georgia Water Quality Control Act, O.C.G.A. § 12-5-20, in the rules and regulations for Water Quality Control, Chapter 391-3-6 at www.gaepd.org. Streams designated as primary trout waters are defined as water supporting a self-sustaining population of rainbow, brown or brook trout. Streams designated as secondary trout waters are those in which there is no evidence of natural trout reproduction, but are capable of supporting trout throughout the year. First order trout waters are streams into which no other streams flow except springs.

Vegetative erosion and sedimentation control measures: Measures for the stabilization of erodible or sediment-producing areas by covering the soil with:

(1) Permanent seeding, sprigging or planting, producing long-term vegetative cover, or

(2) Temporary seeding, producing short-term vegetative cover; or

(3) Sodding, covering areas with a turf of perennial sod-forming grass.

Such measures can be found in the publication Manual for Erosion and Sediment Control in Georgia.

Watercourse: Any natural or artificial watercourse, stream, river, creek, channel, ditch, canal, conduit, culvert, drain, waterway, gully, ravine, or wash in which water flows either continuously or intermittently and which has a definite channel, bed and banks, and including any area adjacent thereto subject to inundation by reason of overflow or floodwater.

Wetlands: Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

(Ord. No. 2010-9, § 1, 6-21-10)

Sec. 30-53. - Exemptions from article.

(a) This article shall apply to any land-disturbing activity undertaken by any person on any land except for the following:

(1) Surface mining, as the same is defined in O.C.G.A. § 12-4-72, "The Georgia Surface Mining Act of 1968";

(2) Granite quarrying and land clearing for such quarrying;

(3) Such minor land-disturbing activities as home gardens and individual home landscaping, repairs, maintenance work, fences, and other related activities which result in minor soil erosion;

(4) The construction of single-family residences, when such construction disturbs less than one acre and is not a part of a larger common plan of development or sale with a planned disturbance of equal to or greater than one acre and not otherwise exempted under this paragraph; provided, however, that construction of any such residence shall conform to the minimum requirements as set forth in O.C.G.A. § 12-7-6 and this paragraph. For single-family residence construction covered by the provisions of this paragraph, there shall be a buffer zone between the residence and any state waters classified as trout streams pursuant to article 2 of chapter 5 of the Georgia Water Quality Control Act. In any such buffer zone, no land-disturbing activity shall be constructed between the residence and the point where vegetation has been wrested by normal stream flow or wave action from the banks of the trout waters. For primary trout waters, the buffer zone shall

be at least 50 horizontal feet, and no variance to a smaller buffer shall be granted. For secondary trout waters, the buffer zone shall be at least 50 horizontal feet, but the director may grant variances to no less than 25 feet. Regardless of whether a trout stream is primary or secondary, for first order trout waters, which are streams into which no other streams flow except for springs, the buffer shall be at least 25 horizontal feet, and no variance to a smaller buffer shall be granted. The minimum requirements of O.C.G.A. § 12-7-6(b) and the buffer zones provided by this paragraph shall be enforced by the local issuing authority;

(5) Agricultural operations as defined in O.C.G.A. § 1-3-3, "definitions", to include raising, harvesting or storing of products of the field or orchard; feeding, breeding or managing livestock or poultry; producing or storing feed for use in the production of livestock, including but not limited to cattle, calves, swine, hogs, goats, sheep, and rabbits or for use in the production of poultry, including but not limited to chickens, hens and turkeys; producing plants, trees, fowl, or animals; the production of aqua culture, horticultural, dairy, livestock, poultry, eggs and apiarian products; farm buildings and farm ponds;

(6) Forestry land management practices, including harvesting; provided, however, that when such exempt forestry practices cause or result in land-disturbing or other activities otherwise prohibited in a buffer, as established in subsections 30-54(c)(15) and (c)(16) of this article, no other land-disturbing activities, except for normal forest management practices, shall be allowed on the entire property upon which the forestry practices were conducted for a period of three years after completion of such forestry practices;

(7) Any project carried out under the technical supervision of the Natural Resources Conservation Service (NRCS) of the United States Department of Agriculture;

(8) Any project involving less than one acre of disturbed area; provided, however, that this exemption shall not apply to any land-disturbing activity within a larger common plan of development or sale with a planned disturbance of equal to or greater than one acre or within 200 feet of the bank of any state waters, and for purposes of this paragraph, "State Waters" excludes channels and drainage ways which have water in them only during and immediately after rainfall events and intermittent streams which do not have water in them year-round; provided, however, that any person responsible for a project which involves less than one acre, which involves land-disturbing activity, and which is within 200 feet of any such excluded channel or drainage way, must prevent sediment from moving beyond the boundaries of the property on which such project is located and provided, further, that nothing contained herein shall prevent the local issuing authority from regulating any such project which is not specifically exempted by paragraphs (1), (2), (3), (4), (5), (6), (7), (9) or (10) of this section;

(9) Construction or maintenance projects, or both, undertaken or financed in whole or in part, or both, by the department of transportation, the Georgia Highway Authority, or the state road and tollway authority; or any road construction or maintenance project, or both, undertaken by any county or municipality; provided, however, that construction or maintenance projects of the Department of Transportation or the state road and tollway authority which disturb one or more contiguous acres of land shall be subject to provisions of O.C.G.A. § 12-7-7.1; except where the department of transportation, the Georgia Highway Authority, or the state road and tollway authority is a secondary permittee for a project located within a larger common plan of development or sale under the state general permit, in which case a copy of a notice of intent under the state general permit shall be submitted to the local issuing authority, the local issuing authority shall enforce compliance with the minimum requirements set forth in O.C.G.A. § 12-7-6 as if a permit had been issued, and violations shall be subject to the same penalties as violations by permit holders;

(10) Any land-disturbing activities conducted by any electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the public service commission, any utility under the regulatory jurisdiction of the federal energy regulatory commission, any cable television system as defined in O.C.G.A. § 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission, or distribution of power; except where an electric membership corporation or municipal electrical system or any

public utility under the regulatory jurisdiction of the public service commission, any utility under the regulatory jurisdiction of the federal energy regulatory commission, any cable television system as defined in O.C.G.A. § 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission, or distribution of power is a secondary permittee for a project located within a larger common plan of development or sale under the state general permit, in which case the local issuing authority shall enforce compliance with the minimum requirements set forth in O.C.G.A. § 12-7-6 as if a permit had been issued, and violations shall be subject to the same penalties as violations by permit holders; and

(11) Any public water system reservoir.

(Ord. No. 2010-9, § 1, 6-21-10)

Sec. 30-54. - Minimum requirements for erosion, sedimentation and pollution control using best management practices.

(a) *General provisions.* Excessive soil erosion and resulting sedimentation can take place during land-disturbing activities if requirements of the ordinance and the NPDES general permit are not met. Therefore, plans for those land-disturbing activities which are not exempted by this article shall contain provisions for application of soil erosion, sedimentation and pollution control measures and practices. The provisions shall be incorporated into the erosion, sedimentation and pollution control plans. Soil erosion, sedimentation and pollution control measures and practices shall conform to the minimum requirements of subsections 30-54(b) and (c) of this article. The application of measures and practices shall apply to all features of the site, including street and utility installations, drainage facilities and other temporary and permanent improvements. Measures shall be installed to prevent or control erosion, sedimentation and pollution during all stages of any land-disturbing activity in accordance with requirements of this article and the NPDES general permit.

(b) *Minimum requirements/BMPs.*

(1) Best management practices as set forth in Garden City Code subsections 30-54(b) and (c) of this ordinance shall be required for all land-disturbing activities. Proper design, installation, and maintenance of best management practices shall constitute a complete defense to any action by the director or to any other allegation of noncompliance with paragraph (2) of this subsection or any substantially similar terms contained in a permit for the discharge of storm water issued pursuant to O.C.G.A. § 12-5-30(f), the "Georgia Water Quality Control Act". As used in this subsection the terms "proper design" and "properly designed" mean designed in accordance with the hydraulic design specifications contained in the "Manual for Erosion and Sediment Control in Georgia" specified in O.C.G.A. § 12-7-6(b).

(2) A discharge of storm water runoff from disturbed areas where best management practices have not been properly designed, installed, and maintained shall constitute a separate violation of any land-disturbing permit issued by a local issuing authority or of any state general permit issued by the division pursuant to O.C.G.A. § 12-5-30(f), the "Georgia Water Quality Control Act", for each day on which such discharge results in the turbidity of receiving waters being increased by more than 25 nephelometric turbidity units for waters supporting warm water fisheries or by more than ten nephelometric turbidity units for waters classified as trout waters. The turbidity of the receiving waters shall be measured in accordance with guidelines to be issued by the director. This paragraph shall not apply to any land-disturbance associated with the construction of single-family homes which are not part of a larger common plan of development or sale unless the planned disturbance for such construction is equal to or greater than five acres.

(3) Failure to properly design, install, or maintain best management practices shall constitute a violation of any land-disturbing permit issued by a local issuing authority or of any state general permit issued by the division pursuant to O.C.G.A. § 12-5-30(f), the "Georgia Water Quality Control Act", for each day on which such failure occurs.

(4) The director may require, in accordance with regulations adopted by the board, reasonable and prudent monitoring of the turbidity level of receiving waters into which discharges from land-disturbing activities occur.

(5) The LIA may set more stringent buffer requirements than stated in Garden City Code subsections 30-54(c)(15) and (c)(16), in light of O.C.G.A. § 12-7-6(c).

(c) The rules and regulations, ordinances, or resolutions adopted pursuant to O.C.G.A. § 12-7-1 et seq. for the purpose of governing land-disturbing activities shall require, as a minimum, protections at least as stringent as the state general permit; and best management practices, including sound conservation and engineering practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the Manual for Erosion and Sediment Control in Georgia published by the Georgia Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted, as well as the following:

(1) Stripping of vegetation, regarding and other development activities shall be conducted in a manner so as to minimize erosion;

(2) Cut-fill operations must be kept to a minimum;

(3) Development plans must conform to topography and soil type so as to create the lowest practical erosion potential;

(4) Whenever feasible, natural vegetation shall be retained, protected and supplemented;

(5) The disturbed area and the duration of exposure to erosive elements shall be kept to a practicable minimum;

(6) Disturbed soil shall be stabilized as quickly as practicable;

(7) Temporary vegetation or mulching shall be employed to protect exposed critical areas during development;

(8) Permanent vegetation and structural erosion control practices shall be installed as soon as practicable;

(9) To the extent necessary, sediment in run-off water must be trapped by the use of debris basins, sediment basins, silt traps, or similar measures until the disturbed area is stabilized. As used in this paragraph, a disturbed area is stabilized when it is brought to a condition of continuous compliance with the requirements of O.C.G.A. § 12-7-1 et seq.;

(10) Adequate provisions must be provided to minimize damage from surface water to the cut face of excavations or the sloping of fills;

(11) Cuts and fills may not endanger adjoining property;

(12) Fills may not encroach upon natural watercourses or constructed channels in a manner so as to adversely affect other property owners;

(13) Grading equipment must cross flowing streams by means of bridges or culverts except when such methods are not feasible, provided, in any case, that such crossings are kept to a minimum;

(14) Land-disturbing activity plans for erosion, sedimentation and pollution control shall include provisions for treatment or control of any source of sediments and adequate sedimentation control facilities to retain sediments on-site or preclude sedimentation of adjacent waters beyond the levels specified in Garden City Code subsection 30-54(b)(2);

(15) Except as provided in paragraph (16) of this subsection, there is established a 25-foot buffer along the banks of all state waters, as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action, except where the director determines to allow a variance that is at least as protective of natural resources and the environment, where otherwise allowed by the director pursuant to O.C.G.A. § 12-2-8, where a drainage structure or a roadway drainage structure must be constructed, provided that adequate erosion control measures are incorporated in the project plans and specifications, and are implemented; or along any

ephemeral stream. As used in this provision, the term 'ephemeral stream' means a stream: that under normal circumstances has water flowing only during and for a short duration after precipitation events; that has the channel located above the ground-water table year round; for which ground water is not a source of water; and for which runoff from precipitation is the primary source of water flow, unless exempted as along an ephemeral stream, the buffers of at least 25 feet established pursuant to part 6 of Article 5, Chapter 5 of Title 12, the "Georgia Water Quality Control Act", shall remain in force unless a variance is granted by the director as provided in this paragraph. The following requirements shall apply to any such buffer:

a. No land-disturbing activities shall be conducted within a buffer and a buffer shall remain in its natural, undisturbed state of vegetation until all land-disturbing activities on the construction site are completed. Once the final stabilization of the site is achieved, a buffer may be thinned or trimmed of vegetation as long as a protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed; provided, however, that any person constructing a single-family residence, when such residence is constructed by or under contract with the owner for his or her own occupancy, may thin or trim vegetation in a buffer at any time as long as protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed; and

b. The buffer shall not apply to the following land-disturbing activities, provided that they occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream; cause a width of disturbance of not more than 50 feet within the buffer; and adequate erosion control measures are incorporated into the project plans and specifications and are implemented: (i) Stream crossings for water lines; or (ii) Stream crossings for sewer lines; and

(16) There is established a 50-foot buffer as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action, along the banks of any state waters classified as "trout streams" pursuant to Article 2 of Chapter 5 of Title 12, the "Georgia Water Quality Control Act", except where a roadway drainage structure must be constructed; provided, however, that small springs and streams classified as trout streams which discharge an average annual flow of 25 gallons per minute or less shall have a 25-foot buffer or they may be piped, at the discretion of the landowner, pursuant to the terms of a rule providing for a general variance promulgated by the board, so long as any such pipe stops short of the downstream landowner's property and the landowner complies with the buffer requirement for any adjacent trout streams. The director may grant a variance from such buffer to allow land-disturbing activity, provided that adequate erosion control measures are incorporated in the project plans and specifications and are implemented. The following requirements shall apply to such buffer:

a. No land-disturbing activities shall be conducted within a buffer and a buffer shall remain in its natural, undisturbed, state of vegetation until all land-disturbing activities on the construction site are completed. Once the final stabilization of the site is achieved, a buffer may be thinned or trimmed of vegetation as long as a protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed; provided, however, that any person constructing a single-family residence, when such residence is constructed by or under contract with the owner for his or her own occupancy, may thin or trim vegetation in a buffer at any time as long as protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed; and

b. The buffer shall not apply to the following land-disturbing activities, provided that they occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream; cause a width of disturbance of not more than 50 feet within the buffer; and adequate erosion control measures are incorporated into the project plans and specifications and are implemented: (i) Stream crossings for water lines; or (ii) Stream crossings for sewer lines.

(d) Nothing contained in O.C.G.A. § 12-7-1 et seq. shall prevent any local issuing authority from adopting rules and regulations, ordinances, or resolutions which contain stream buffer requirements that exceed the minimum requirements in Garden City Code subsections 30-54(b) and (c).

(e) The fact that land-disturbing activity for which a permit has been issued results in injury to the property of another shall neither constitute proof of nor create a presumption of a violation of the standards provided for in this article or the terms of the permit.

(Ord. No. 2010-9, § 1, 6-21-10)

Secs. 30-55—30-65. - Reserved.

DIVISION 2. - ADMINISTRATION AND ENFORCEMENT

Sec. 30-66. - Application/permit process.

(a) *General.* The property owner, developer and designated planners and engineers shall design and review before submittal the general development plans. The local issuing authority shall review the tract to be developed and the area surrounding it. They shall consult the zoning ordinance, storm water management ordinance, subdivision ordinance, flood damage prevention ordinance, this article, and any other ordinances, rules, regulations or permits, which regulate the development of land within the jurisdictional boundaries of the local issuing authority. However, the owner and/or operator are the only parties who may obtain a permit.

(b) *Application requirements.*

(1) No person shall conduct any land-disturbing activity within the jurisdictional boundaries of the city without first obtaining a permit from the issuing authority of the city to perform such activity and providing a copy of notice of intent submitted to EPD if applicable.

(2) The application for a permit shall be submitted to the issuing authority and must include the applicant's erosion, sedimentation and pollution control plan with supporting data, as necessary. Said plans shall include, as a minimum, the data specified in paragraph (c) of this section. Erosion, sedimentation and pollution control plans, together with supporting data, must demonstrate affirmatively that the land-disturbing activity proposed will be carried out in such a manner that the provisions of Garden City Code subsections 30-54(b) and (c) of this section will be met. Applications for a permit will not be accepted unless accompanied by six copies of the applicant's erosion, sedimentation and pollution control plans. All applications shall contain a certification stating that the plan preparer or the designee thereof visited the site prior to creation of the plan in accordance with EPD Rule 391-3-7-.10.

(3) In addition to the local permitting fees, fees will also be assessed pursuant to O.C.G.A. § 12-5-23(5)(a), provided that such fees shall not exceed $80.00 per acre of land-disturbing activity, and these fees shall be calculated and paid by the primary permittee as defined in the state general permit for each acre of land-disturbing activity included in the planned development or each phase of development. All applicable fees shall be paid prior to issuance of the land-disturbance permit. In a jurisdiction that is certified pursuant to O.C.G.A. § 12-7-8(a) half of such fees levied shall be submitted to the division; except that any and all fees due from an entity which is required to give notice pursuant to O.C.G.A. § 12-7-17(9) or (10) shall be submitted in full to the division, regardless of the existence of a local issuing authority in the jurisdiction.

(4) Immediately upon receipt of an application and plan for a permit, the local issuing authority shall refer the application and plan to the district for its review and approval or disapproval concerning the adequacy of the erosion, sedimentation and pollution control plan. The district shall approve or disapprove a plan within 35 days of receipt. Failure of the district to act within 35 days shall be

considered an approval of the pending plan. The results of the district review shall be forwarded to the local issuing authority. No permit will be issued unless the plan has been approved by the district, and any variances required by Garden City Code subsections 30-54 (c)(15) and (16) has been obtained, all fees have been paid, and bonding, if required as per subsection (b)(6) of this section, have been obtained. Such review will not be required if the local issuing authority and the district have entered into an agreement which allows the local issuing authority to conduct such review and approval of the plan without referring the application and plan to the district. The local issuing authority with plan review authority shall approve or disapprove a revised plan submittal within 35 days of receipt. Failure of the local issuing authority with plan review authority to act within 35 days shall be considered an approval of the revised plan submittal.

(5) If a permit applicant has had two or more violations of previous permits, this article section, or the Erosion and Sedimentation Act, as amended, within three years prior to the date of filing the application under consideration, the local issuing authority may deny the permit application.

(6) The local issuing authority may require the permit applicant to post a bond in the form of government security, cash, irrevocable letter of credit, or any combination thereof up to, but not exceeding, $3,000.00 per acre or fraction thereof of the proposed land-disturbing activity, prior to issuing the permit. If the applicant does not comply with this section or with the conditions of the permit after issuance, the local issuing authority may call the bond or any part thereof to be forfeited and may use the proceeds to hire a contractor to stabilize the site of the land-disturbing activity and bring it into compliance. These provisions shall not apply unless there is in effect an ordinance or statute specifically providing for hearing and judicial review of any determination or order of the local issuing authority with respect to alleged permit violations.

(c) *Plan requirements.*

(1) Plans must be prepared to meet the minimum requirements as contained in Garden City Code subsections 30-54(b) and (c), or through the use of more stringent, alternate design criteria which conform to sound conservation and engineering practices. The Manual for Erosion and Sediment Control in Georgia is hereby incorporated by reference into this ordinance. The plan for the land-disturbing activity shall consider the interrelationship of the soil types, geological and hydrological characteristics, topography, watershed, vegetation, proposed permanent structures including roadways, constructed waterways, sediment control and stormwater management facilities, local ordinances and state laws. Maps, drawings and supportive computations shall bear the signature and seal of the certified design professional. Persons involved in land development design, review, permitting, construction, monitoring, or inspections or any land-disturbing activity shall meet the education and training certification requirements, dependent on his or her level of involvement with the process, as developed by the commission and in consultation with the division and the stakeholder advisory board created pursuant to O.C.G.A. § 12-7-20.

(2) Data required for site plan shall include all the information required from the appropriate Erosion, Sedimentation and Pollution Control Plan Review Checklist established by the commission as of January 1 of the year in which the land-disturbing activity was permitted.

(d) *Permits.*

(1) Permits shall be issued or denied as soon as practicable but in any event not later than 45 days after receipt by the local issuing authority of a completed application, providing variances and bonding are obtained, where necessary and all applicable fees have been paid prior to permit issuance. The permit shall include conditions under which the activity may be undertaken.

(2) No permit shall be issued by the local issuing authority unless the erosion, sedimentation and pollution control plan has been approved by the district and the local issuing authority has affirmatively determined that the plan is in compliance with this article, any variances required by Garden City Code subsections 30-54(c)(15) and (16) are obtained, bonding requirements, if necessary, as per Garden City Code subsection 30-66(b)(6) are met and all ordinances and rules and regulations in effect within the jurisdictional boundaries of the local issuing authority are met. If the permit is denied, the reason for denial shall be furnished to the applicant.

(3) Any land-disturbing activities by a local issuing authority shall be subject to the same requirements of this article, and any other ordinances relating to land development, as are applied to private persons and the division shall enforce such requirements upon the local issuing authority.

(4) If the tract is to be developed in phases, then a separate permit shall be required for each phase.

(5) The permit may be suspended, revoked, or modified by the Local Issuing Authority, as to all or any portion of the land affected by the plan, upon finding that the holder or his successor in the title is not in compliance with the approved erosion and sedimentation control plan or that the holder or his successor in title is in violation of this article. A holder of a permit shall notify any successor in title to him as to all or any portion of the land affected by the approved plan of the conditions contained in the permit.

(6) The LIA may reject a permit application if the applicant has had two or more violations of previous permits or the Erosion and Sedimentation Act permit requirements within three years prior to the date of the application, in light of O.C.G.A. § 12-7-7(f)(1).

(Ord. No. 2010-9, § 1, 6-21-10)

Sec. 30-67. - Inspection and enforcement.

(a) The building official will periodically inspect the sites of land-disturbing activities for which permits have been issued to determine if the activities are being conducted in accordance with the plan and if the measures required in the plan are effective in controlling erosion and sedimentation. Also, the local issuing authority shall regulate primary, secondary and tertiary permittees as such terms are defined in the state general permit. Primary permittees shall be responsible for installation and maintenance of best management practices where the primary permittee is conducting land-disturbing activities. Secondary permittees shall be responsible for installation and maintenance of best management practices where the secondary permittee is conducting land-disturbing activities. Tertiary permittees shall be responsible for installation and maintenance where the tertiary permittee is conducting land-disturbing activities. If, through inspection, it is deemed that a person engaged in land-disturbing activities as defined herein has failed to comply with the approved plan, with permit conditions, or with the provisions of this article, a written notice to comply shall be served upon that person. The notice shall set forth the measures necessary to achieve compliance and shall state the time within which such measures must be completed. If the person engaged in the land-disturbing activity fails to comply within the time specified, he shall be deemed in violation of this article.

(b) The local issuing authority must amend its ordinances to the extent appropriate within 12 months of any amendments to the Erosion and Sedimentation Act of 1975.

(c) The building official shall have the power to conduct such investigations as it may reasonably deem necessary to carry out duties as prescribed in this article, and for this purpose to enter at reasonable times upon any property, public or private, for the purpose of investigation and inspecting the sites of land-disturbing activities.

(d) No person shall refuse entry or access to any authorized representative or agent of the local issuing authority, the commission, the district, or division who requests entry for the purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper or interfere with any such representative while in the process of carrying out his official duties.

(e) The district or the commission or both shall semi-annually review the actions of counties and municipalities which have been certified as local issuing authorities pursuant to O.C.G.A. § 12-7-8(a). The district or the commission or both may provide technical assistance to any county or municipality for the purpose of improving the effectiveness of the county's or municipality's erosion, sedimentation and pollution control program. The district or the commission shall notify the division and request investigation by the division if any deficient or ineffective local program is found.

(f) The division may periodically review the actions of counties and municipalities which have been certified as local issuing authorities pursuant to O.C.G.A. § 12-7-8(a). Such review may include, but shall not be limited to, review of the administration and enforcement of a governing authority's ordinance and review of conformance with an agreement, if any, between the district and the governing authority. If such review indicates that the governing authority of any county or municipality certified pursuant to O.C.G.A. § 12-7-8(a) has not administered or enforced its ordinances or has not conducted the program in accordance with any agreement entered into pursuant to O.C.G.A. § 12-7-7(e), the division shall notify the governing authority of the county or municipality in writing. The governing authority of any county or municipality so notified shall have 90 days within which to take the necessary corrective action to retain certification as a local issuing authority. If the county or municipality does not take necessary corrective action within 90 days after notification by the division, the division shall revoke the certification of the county or municipality as a local issuing authority.

(Ord. No. 2010-9, § 1, 6-21-10)

Sec. 30-68. - Penalties and incentives.

(a) *Failure to obtain a permit for land-disturbing activity.* If any person commences any land-disturbing activity requiring a land-disturbing permit as prescribed in this article without first obtaining said permit, the person shall be subject to revocation of his business license, work permit or other authorization for the conduct of a business and associated work activities within the jurisdictional boundaries of the local issuing authority.

(b) *Stop-work orders.*

(1) For the first and second violations of the provisions of this article, the director or the local issuing authority shall issue a written warning to the violator. The violator shall have five days to correct the violation. If the violation is not corrected within five days, the director or the local issuing authority shall issue a stop-work order requiring that land-disturbing activities be stopped until necessary corrective action or mitigation has occurred; provided, however, that, if the violation presents an imminent threat to public health or waters of the state or if the land-disturbing activities are conducted without obtaining the necessary permit, the director or the local issuing authority shall issue an immediate stop-work order in lieu of a warning;

(2) For a third and each subsequent violation, the director or the local issuing authority shall issue an immediate stop-work order;

(3) All stop-work orders shall be effective immediately upon issuance and shall be in effect until the necessary corrective action or mitigation has occurred; and

(4) When a violation in the form of taking action without a permit, failure to maintain a stream buffer, or significant amounts of sediment, as determined by the local issuing authority or by the director or his or her designee, have been or are being discharged into state waters and where best management practices have not been properly designed, installed, and maintained, a stop work order shall be issued by the local issuing authority or by the director or his or her designee. All such stop work orders shall be effective immediately upon issuance and shall be in effect until the necessary corrective action or mitigation has occurred. Such stop work orders shall apply to all land-disturbing activity on the site with the exception of the installation and maintenance of temporary or permanent erosion and sediment controls.

(c) *Bond forfeiture.* If, through inspection, it is determined that a person engaged in land-disturbing activities has failed to comply with the approved plan, a written notice to comply shall be served upon that person. The notice shall set forth the measures necessary to achieve compliance with the plan and shall state the time within which such measures must be completed. If the person engaged in the land-disturbing activity fails to comply within the time specified, he shall be deemed in violation of this ordinance and, in addition to other penalties, shall be deemed to have forfeited his performance bond, if required to post one under the provisions of Garden City Code subsection 30-66(b)(6). The local

issuing authority may call the bond or any part thereof to be forfeited and may use the proceeds to hire a contractor to stabilize the site of the land-disturbing activity and bring it into compliance.

(d) *Monetary penalties.*

(1) Any person who violates any provisions of this article, or any permit condition or limitation established pursuant to this article, or who negligently or intentionally fails or refuses to comply with any final or emergency order of the director issued as provided in this article shall be liable for a civil penalty not to exceed $2,500.00 per day. For the purpose of enforcing the provisions of this article, notwithstanding any provisions in any City Charter to the contrary, municipal courts shall be authorized to impose penalty not to exceed $2,500.00 for each violation. Notwithstanding any limitation of law as to penalties which can be assessed for violations of county ordinances, any magistrate court or any other court of competent jurisdiction trying cases brought as violations of this article under county ordinances approved under this ordinance shall be authorized to impose penalties for such violations not to exceed $2,500.00 for each violation. Each day during which violation or failure or refusal to comply continues shall be a separate violation.

(Ord. No. 2010-9, § 1, 6-21-10)

Sec. 30-69. - Education and certification.

(a) Persons involved in land development design, review, permitting, construction, monitoring, or inspection or any land-disturbing activity shall meet the education and training certification requirements, dependent on their level of involvement with the process, as developed by the commission in consultation with the division and the stakeholder advisory board created pursuant to O.C.G.A. § 12-7-20.

(b) For each site on which land-disturbing activity occurs, each entity or person acting as either a primary, secondary, or tertiary permittee, as defined in the state general permit, shall have as a minimum one person who is in responsible charge of erosion and sedimentation control activities on behalf of said entity or person and meets the applicable education or training certification requirements developed by the commission present on site whenever land-disturbing activities are conducted on that site. A project site shall herein be defined as any land-disturbance site or multiple sites within a larger common plan of development or sale permitted by an owner or operator for compliance with the state general permit.

(c) Persons or entities involved in projects not requiring a state general permit but otherwise requiring certified personnel on site may contract with certified persons to meet the requirements of this article.

(d) If a state general permittee who has operational control of land-disturbing activities for a site has met the certification requirements of O.C.G.A. § 12-7-19(b)(1), then any person or entity involved in land-disturbing activity at that site and operating in a subcontractor capacity for such permittee shall meet those educational requirements specified in O.C.G.A § 12-7-19(b)(4) and shall not be required to meet any educational requirements that exceed those specified in said paragraph.

(Ord. No. 2010-9, § 1, 6-21-10)

Sec. 30-70. - Administrative appeal judicial review.

(a) *Administrative remedies.* The suspension, revocation, modification or grant with condition of a permit by the local issuing authority upon finding that the holder is not in compliance with the approved erosion, sediment and pollution control plan; or that the holder is in violation of permit conditions; or that the holder is in violation of any ordinance; shall entitle the person submitting the plan or holding the permit to a hearing before the mayor within 15 days after receipt by the local issuing authority of written notice of appeal.

(b) *Judicial review.* Any person, aggrieved by a decision or order of the local issuing authority, after exhausting his administrative remedies, shall have the right to appeal denovo to the Superior Court of Chatham County, Georgia.

(Ord. No. 2010-9, § 1, 6-21-10)

Sec. 30-71. - Validity and liability.

(a) *Validity.* If any section, paragraph, clause, phrase, or provision of this article shall be adjudged invalid or held unconstitutional, such decisions shall not affect the remaining portions of this article.

(b) *Liability.*

(1) Neither the approval of a plan under the provisions of this article, nor the compliance with provisions of this article shall relieve any person from the responsibility for damage to any person or property otherwise imposed by law nor impose any liability upon the local issuing authority or district for damage to any person or property.

(2) The fact that a land-disturbing activity for which a permit has been issued results in injury to the property of another shall neither constitute proof of nor create a presumption of a violation of the standards provided for in this article or the terms of the permit.

(3) No provision of this article shall permit any persons to violate the Georgia Erosion and Sedimentation Act of 1975, the Georgia Water Quality Control Act or the rules and regulations promulgated and approved thereunder or pollute any waters of the state as defined thereby.

(Ord. No. 2010-9, § 1, 6-21-10)

Secs. 30-72—30-90. - Reserved.

ARTICLE V. - STORMWATER MANAGEMENT[9]

Footnotes:

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Editor's note— Ord. No. 2011-15, § 1, adopted Aug. 15, 2011, repealed former Art. V, Div. 1, § 30-230—30-243, and enacted a new Art. Div. 1 as set out herein. Former Art. X, Div. 1 pertained to the same subject matter and derived from Ord. of 3-16-98, § 1.

DIVISION 1. - GENERALLY

Sec. 30-230. - Findings of fact.

It is hereby determined that:

(1) The land development process significantly alters the hydrologic response of development sites, increasing stormwater runoff rates, volumes and pollutant loads, which could increase incidents of flooding thereby endangering infrastructure, public and private property and human life;

(2) The land development process significantly alters the hydrologic response of development sites, increasing stormwater runoff rates, volumes and pollutant loads, and alters water levels and fluctuations and increases pollutant transport and deposition in wetlands, rivers and streams;

(3) The land development process significantly alters the hydrologic response of development sites, increasing stormwater runoff rates, volumes and pollutant loads, and alters salinity concentrations and fluctuations and increases primary productivity and pollutant transport and deposition in estuaries;

(4) The land development process significantly alters the hydrologic response of development sites, increasing stormwater runoff rates, volumes and pollutant loads, and increases bacteria transport and deposition in near coastal waters, which leads to beach contamination and poses a serious threat to human health;

(5) The land development process significantly alters the hydrologic response of development sites, increasing stormwater runoff rates and volumes, and decreases the amount of rainfall that is available to recharge shallow groundwater aquifers;

(6) The negative impacts of the land development process on local aquatic resources can adversely affect the health, safety and general welfare of the general public as well as the quality of life of its citizens;

(7) Every residential and nonresidential parcel of real property, both public and private, benefits from the implementation of stormwater management regulations as well as proper maintenance and operation of the municipal storm sewer system (MS4);

(8) The negative impacts of the land development process can be controlled and minimized through the management of stormwater runoff rates, volumes and pollutant loads;

(9) Communities located within Georgia's Coastal Nonpoint Source Management Area and area of special interest are required to comply with a number of state and federal regulations that require the adverse impacts of the land development process to be controlled and minimized;

(10) Therefore, the City of Garden City has determined that it is in the public interest to control and minimize the adverse impacts of the land development process and has established this set of local stormwater management regulations to control post-construction stormwater runoff rates, volumes and pollutant loads on development and redevelopment sites.

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-231. - Purpose and intent.

The purpose of this article is to protect and maintain the integrity of local aquatic resources and, consequently, the health, safety and welfare of the general public, by establishing localstormwater management regulations that control and minimize the adverse impacts of the land development process. The ordinance seeks to achieve these goals by enacting provisions that:

(1) Protect, maintain, and enhance the short-term and long-term public health, safety, and general welfare. This objective will be achieved by providing for regulation and management of a municipal storm sewer system, including public and private facilities in the city's service area.

(2) Comply with the Georgia Department of Natural Resources (DNR) and federal Environmental Protection Agency (EPA) stormwater regulations developed pursuant to the Clean Water Act. These requirements include:

a. Control the discharge of stormwater and contribution of pollutants to the municipal storm sewer system (MS4) by stormwater discharges associated with impervious area and the quality of stormwater discharged from sites with impervious area;

b. Prohibit illicit connections and/or discharges to the MS4;

c. Control discharge to municipal storm sewers of spills, dumping or disposal of materials other than stormwater; and

d. Control, through intergovernmental agreements, contribution of pollutants from one municipal/county system to another.

(3) Establish minimum requirements and procedures to regulate the adverse effects of increased stormwater runoff and development in flood hazard areas.

(4) Establishing decision-making processes that can be applied during the site planning and design process to help protect the integrity of local aquatic resources;

(5) Establishing post-construction stormwater management and site planning and design criteria to help protect natural resources from the direct impacts of the land development process and preserve existing hydrologic conditions on development sites;

(6) Establishing post-construction stormwater management and site planning and design criteria to help reduce flooding, channel erosion and pollutant transport and deposition in local aquatic resources;

(7) Establishing design guidelines for green infrastructure and stormwater management practices that can be used to meet the post-construction stormwater management and site planning and design criteria;

(8) Encouraging that green infrastructure practices, which include better site planning techniques, better site design techniques and low impact development practices, be used to the maximum extent practical on development sites;

(9) Establishing provisions for the long-term inspection and maintenance of green infrastructure and stormwater management practices to ensure that they continue to function as designed and pose no threat to public safety; and

(10) Establishing administrative procedures for the submittal, review, approval and disapproval of stormwater management plans and for the inspection of approved development projects.

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-232. - Applicability and exemptions.

(a) This article shall be applied to all land disturbing activities, unless exempt pursuant to subsection (b) of this section. The stormwater management regulations presented within shall be applied to any new development or redevelopment activity that meets one or more of the following criteria:

(1) New development that involves the creation of 5,000 square feet or more of impervious cover or that involves other land disturbing activities of one acre or more;

(2) Redevelopment that involves the creation, addition or replacement of 5,000 square feet or more of impervious cover or that involves other land disturbing activities of one acre or more.

(3) New development or redevelopment, regardless of size, that is part of a larger common plan of development, even though multiple, separate and distinct land disturbing activities may take place at different times and on different schedules.

(4) New development or redevelopment, regardless of size, that involves the creation or modification of a stormwater hotspot, as defined herein as well as in the City's Code of Ordinances, Stormwater Utility Credit Manual, the Georgia Stormwater Management Manual (GSMM) and other related guidance.

(b) The following activities are exempt from this article:

(1) New development or redevelopment that involves the creation, addition or replacement of less than 5,000 square feet of impervious cover and that involves less than one acre of other land disturbing activities.

(2) New development or redevelopment activities on individual residential lots that are not part of a larger common plan of development and do not meet any of the applicability criteria listed above.

(3) Additions or modifications to existing single-family homes and duplex residential units that do not meet any of the applicability criteria listed above.

(4) Development projects that are undertaken exclusively for agricultural or silvicultural purposes within areas zoned for agricultural or silvicultural land use.

(5) Maintenance and repairs of any green infrastructure or stormwater management practices deemed necessary by the city manager (or his designee).

(6) Any part of a land development project that was approved by the Garden City Mayor and City Council prior to the adoption of this ordinance provided that it meets the stipulations outlined in subsection (c) of this section.

(7) Redevelopment activities that involve the replacement of impervious cover when the original impervious cover was wholly or partially lost due to natural disaster or other acts of God.

(c) Phased developments with existing stormwater master plans. For phased development projects, a stormwater master plan shall be prepared to conceptually indicate how the minimum requirements of the city's previous stormwater management ordinance were to have been met. The stormwater master plan shall consolidate detention facilities to the maximum extent practical. The existence of a stormwater master plan does not necessarily preclude compliance with the requirements of this article for each subsequent phase as it is being developed. However, the city manager or his designee will favorably consider the existence of a site-specific stormwater master plan that is substantially compliant with subsection 30-239(b) of this article when evaluating the applicability of this ordinance to subsequent phases of development. The city manager or his designee may require that additional requirements be incorporated into the subsequent phases of development to protect the health, safety and welfare of the general public as well as to ensure compliance with applicable federal, state and local regulations.

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-233. - Scope of responsibility.

(a) The provisions of this article shall apply throughout the city and to drainage systems maintained by intergovernmental agreement between the city and the county and/or other municipal jurisdictions.

(b) The city manager or his designee shall be responsible for the administration, implementation, and enforcement of the provisions of this article.

(c) The city manager or his designee shall be responsible for the conservation, management, extension and improvement of the municipal storm sewer system, including activities necessary to control stormwater runoff and activities necessary to carry out stormwater management programs included in the city's NPDES Phase I Municipal Separate Storm Sewer System (MS4) permit.

(d) The application of this article and the provisions expressed herein shall be the minimum stormwater management requirements and shall not be deemed a limitation or repeal of any other local requirements authorized by state statute. Other stormwater project improvements and/or environmental requirements, as defined under state or federal law, may be required.

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-234. - Responsibility of the city.

The city planning and economic development department (the department) in consultation with the city public works department and the stormwater utility will:

(1) Administer, coordinate and oversee acquisition, design, and construction of municipal stormwater facilities and conveyances;

(2) Establish or oversee establishment and implementation of development standards and guidelines for controlling stormwater runoff;

(3) Determine the manner in which stormwater facilities should be operated;

(4) Observe the installation and the ongoing operation of private systems which discharge to the city municipal separate storm sewer system (MS4);

(5) Advise city council on issues related to stormwater;

(6) Manage facilities and properties controlled by the city and prescribe how they are used by others;

(7) Require that new, increased, or significantly changed stormwater contributions comply with the terms of this article and any local design manual (LDM); and

(8) Develop programs or procedures to control the discharge of pollutants into the municipal storm sewer system (MS4).

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-235. - Compatibility with other regulations.

This article is not intended to interfere with, modify or repeal any other ordinance, rule, regulation or other provision of law. The requirements of this article should be considered minimum requirements, and where any provision of this article imposes restrictions different from those imposed by any other ordinance, rule, regulation or other provision of law, whichever provision is more restrictive or imposes higher protective standards for human health or the environment shall control.

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-236. - Severability.

If the provisions of any section, subsection, paragraph, subdivision or clause of this article shall be judged invalid by a court of competent jurisdiction, such judgment shall not affect or invalidate the remainder of any section, subsection, paragraph, subdivision or clause of this article.

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-237. - Stormwater Management Local Design Manual (LDM).

Garden City will utilize the information presented in the latest edition of the Coastal Stormwater Supplement (CSS) to the GSMM, and the Garden City Stormwater Management Local Design Manual (LDM), to assist with implementation of this article. The LDM shall serve as a companion document to the CSS and the GSMM. The LDM shall endeavor to accomplish the following:

(1) Clarify discrepancies between the CSS and any section of the city's stormwater management ordinance and other related development regulations;

(2) Provide guidance to supplement information contained in the city's stormwater management ordinance and other related development regulations;

(3) Establish minimum stormwater management related design standards and criteria; and

(4) Further describe the stormwater management design preparation, submittal, review and approval requirements. The criteria within the LDM shall be considered minimum design standards and, in the event of a conflict, supersede design standards set forth in the CSS and/or the GSMM. A copy of the LDM shall be available from the city.

In addition, Garden City encourages the application of the practices and concepts contained in the Green Growth Guidelines to meet the goals and objectives of the Garden City Post Construction Stormwater Management Ordinance. A copy of the Green Growth Guidelines can be viewed and downloaded from the following link for use in site design activities (http://crd.dnr.state.ga.us/content/displaycontent.asp?txtDocument=969).

Garden City also encourages the use and application of the "Georgia-CSS-Site-Planning-Design-Worksheet-Final-Apr-09" spreadsheet tool to evaluate compliance with the CSS design guidelines. A copy of the spreadsheet tool can be obtained from the city or from the following website link (http://www.mpcnaturalresources.org/water-resources/georgia-storm-water.html).

These references and assistance tools may be updated and expanded periodically, based on additional information obtained through scientific research, performance monitoring and local experience.

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-238. - Definitions.

Accidental discharge shall be defined as a discharge prohibited by this article into the municipal storm sewer system which occurs by chance and without planning or consideration prior to occurrence.

Appeal authority shall mean the city council, one of whose purpose is to review appeals to this article and render decisions and variances.

Applicant shall mean a property owner or agent of a property owner who has submitted an application for a post-construction stormwater management development plan review.

Aquatic buffer shall mean an area of land located around or near a stream, wetland, or waterbody that has intrinsic value due to the ecological services it provides, including pollutant removal, erosion control and conveyance and temporary storage of flood flows.

Aquatic resource protection shall mean measures taken to protect aquatic resources from several negative impacts of the land development process, including complete loss or destruction, stream channel enlargement and increased salinity fluctuations.

Base flood elevation (BFE) shall mean the minimum expected water surface elevation identified by the Federal Emergency Management Agency (FEMA) or as determined by the city manager.

Best management practices (BMPs) shall mean a wide range of management procedures, activities, and prohibitions or practices which control the quality and/or quantity of stormwater runoff and which are compatible with the planned land use.

Better site design techniques shall mean site design techniques that can be used during the site planning and design process to minimize land disturbance and the creation of new impervious and disturbed pervious cover. Better site design techniques include reducing clearing and grading limits, reducing roadway lengths and widths and reducing parking lot and building footprints.

Better site planning techniques shall mean site planning techniques that can be used during the site planning and design process to protect valuable aquatic and terrestrial resources from the direct impacts of the land development process. Better site planning techniques include protecting primary and secondary conservation areas.

Building shall mean any structure, either temporary or permanent, having walls and a roof, designed for the shelter of any person, animal or property and occupying more than 100 square feet of area.

Channel shall mean a natural or artificial watercourse with a definite bed and banks that conducts continuously or periodically flowing water.

Clean Water Act shall mean the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq.).

Coastal stormwater supplement (CSS) shall mean the April 2009 edition of the CSS to the GSMM. This document is a technical design supplement to the GSMM that was developed for coastal Georgia. The CSS addresses stormwater management practices and BMPs that are specific and applicable to coastal stormwater quantity and quality issues.

Cooling water shall mean water used exclusively as a cooling medium in an appliance, device or apparatus.

Conservation areas shall mean permanently protected areas of a site that are preserved, in perpetuity, in an undisturbed, natural state.

Conservation easement shall mean a legal agreement between a land owner and a local, state or federal government agency or land trust that permanently protects conservation areas on the owner's land by limiting the amount and type of development that can take place within them but continues to leave the conservation areas in private ownership.

Conveyance shall mean stormwater features designed for the movement of stormwater through the drainage system, such as concrete or metal pipes, ditches, depressions, swales, etc.

Dedication shall mean the deliberate appropriation of property by its owner for general public use.

Department shall mean the Garden City Planning and Economic Development Department which is primarily responsible for implementation of the provisions of this article.

Detention shall mean the temporary storage of stormwater runoff in a stormwater management practice for the purpose of controlling the peak discharge rates and providing gravitational settling of pollutants.

Detention facility shall mean a permanent stormwater management facility whose primary purpose is to temporarily store stormwater above the normal groundwater surface elevation and release the stored runoff at controlled rates. Acceptable types may include but are not limited to lagoons, ponds, wetlands, parking areas, and subsurface pipes.

Developer shall mean a person who undertakes a land development project.

Development activity shall mean any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, dredging, clearing, grubbing, scraping, grading, filling, paving, excavation or other activities significantly disturbing the soil or vegetation.

Development project shall mean a new development or redevelopment project.

Development site shall mean a parcel of land where land disturbing activities have been or will be initiated to complete a land development project.

Director shall mean either the city manager or his designee.

Discharge shall mean the release of treated or untreated water to the municipal storm sewer system.

Drainage easement shall mean a legal right granted by a land owner to a grantee allowing the grantee to convey, treat or manage stormwater runoff on the private land subject to the drainage easement.

Easement shall mean an acquired legal right for the specific use of land owned by others.

Erosion and sediment control plan shall mean a plan that is designed to minimize and control the accelerated erosion and increased sediment loads that occur at a site during land disturbing activities.

Evapotranspiration shall mean the loss of water to the atmosphere through both evaporation and transpiration, which is the evaporation of water from the aerial parts of plants.

Extended detention shall mean the temporary storage of stormwater runoff in a stormwater management practice for an extended period of time, typically 24 hours or greater.

Extreme flood protection shall mean measures taken to protect downstream properties from dangerous extreme flooding events and help maintain the boundaries of the existing 100-year floodplain.

Fee in lieu contribution shall mean a payment of money in place of meeting all or part of the stormwater management criteria required by a post-construction stormwater management ordinance.

Flooding shall mean a volume of stormwater runoff that is too great to be confined within the banks of a stream, river or other aquatic resource or the limits of a stormwater conveyance feature and that overflows onto adjacent lands.

Flood hazard area shall mean those delineated geographical areas of special flood hazard identified by the Federal Emergency Management Agency (FEMA) or as determined by the city manager or his designee.

Georgia Stormwater Management Manual (GSMM) shall mean the latest edition of all volumes of the Georgia Stormwater Management Manual, a technical guidance document governing stormwater management design, construction and long-term maintenance activities in Georgia.

Governing body shall mean the elected officials of the city council.

Green infrastructure practices shall mean the combination of three complementary, but distinct, groups of natural resource protection and stormwater management practices and techniques, including better site planning and design techniques and low impact development practices, that are used to protect valuable terrestrial and aquatic resources from the direct impacts of the land development process, maintain pre-development site hydrology and reduce post-construction stormwater runoff rates, volumes and pollutant loads.

Hydrologic soil group (HSG) shall mean a Natural Resource Conservation Service classification system in which soils are categorized into four runoff potential groups. The groups range from Group A soils, with high permeability and little runoff produced, to Group D soils, which have low permeability rates and produce much more runoff.

Illicit connection and discharge shall mean a connection to a municipal storm sewer system which results in an unauthorized discharge that is not composed entirely of stormwater runoff except discharges pursuant to a National Pollutant Discharge Elimination System (NPDES) permit (other than the NPDES permit for discharges from the municipal storm sewer).

Impaired waters shall mean those streams, rivers, lakes, estuaries and other water bodies that currently do not meet their designated use classification and associated water quality standards under the Clean Water Act.

Impervious cover shall mean a surface composed of any material that greatly impedes or prevents the natural infiltration of water into the underlying native soils. Impervious surfaces include, but are not limited to, rooftops, buildings, sidewalks, driveways, streets and roads.

Industrial stormwater permit shall mean a national pollutant discharge elimination system (NPDES) permit issued to an industry or group of industries that regulates the pollutant levels associated with industrial stormwater discharges or specifies on-site pollution control strategies.

Infill development shall mean land development that occurs within designated areas based on local land use, watershed and/or utility plans where the surrounding area is generally developed, and where the site or area is either vacant or has previously been used for another purpose.

Infiltration shall mean the process of allowing stormwater runoff to percolate into the underlying native soils.

Infiltration practice shall mean a green infrastructure or stormwater management practice designed to provide infiltration of stormwater runoff into the underlying native soils. These stormwater management practices may be above or below grade.

Inspection and maintenance plan agreement shall mean a written agreement and plan providing for the long-term inspection and maintenance of all green infrastructure practices, stormwater management practices, stormwater conveyance features and stormwater drain infrastructure on a development site.

Jurisdictional wetland shall mean an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation, and are those waters of the United States that are under the jurisdictional of the Army Corps of Engineers (ACOE).

Land development shall mean any project undertaken to change or improve a site that involves one or more land disturbing activities.

Land disturbing activity (LDA) shall mean any activity that changes stormwater runoff rates, volumes and pollutant loads on a site. These activities include, but are not limited to, the grading, digging, cutting, scraping, or excavating of soil, the placement of fill materials, paving, construction, substantial removal of vegetation and any activity that bares soil or rock or involves the diversion or piping of any natural or manmade watercourse.

Land owner shall mean the legal or beneficial owner of land, including those holding the right to purchase or lease the land, or any other person holding proprietary rights in the land.

Low impact development (LID) practice shall mean small-scale stormwater management practices that are used to disconnect impervious and disturbed pervious surfaces from the storm drain system and reduce post-construction stormwater runoff rates, volumes and pollutant loads. Low impact development practices include soil restoration, site reforestation/revegetation, green roofs, vegetated filter strips and rain gardens.

Maintenance shall mean any action necessary to preserve stormwater management facilities in proper working condition, in order to serve the intended purpose set forth in this ordinance or to prevent structural failure of such facilities.

Municipal separate storm sewer system (MS4) shall mean a conveyance or system of conveyances (including roads with drainage systems, highways, rights-of-way, municipal streets, catch basins, curbs, gutters, ditches, canals, manmade channels, storm drains detention ponds, other stormwater facilities) which is:

(1) Owned or maintained by the city;

(2) Designed or used for collecting or conveying stormwater;

(3) Not a combined sewer; and

(4) Not part of a publicly owned treatment works (POTW).

National pollutant discharge elimination system (NPDES) stormwater discharge permit shall mean a permit issued by the United State Environmental Protection Agency (USEPA), or by a state under authority delegated pursuant to 33 USC § 1342(b), that authorizes the discharge of pollutants to waters of the state, whether the permit is applicable on an individual, group, or general area-wide basis.

New development shall mean a land development project undertaken on a previously undeveloped or unimproved site.

Nonpoint source pollution shall mean pollution from any source other than from a discernible, confined and discrete conveyance, such as a wastewater treatment plant or industrial discharge. Sources of nonpoint source pollution include, but are not limited to, agricultural, silvicultural, mining and construction activities, subsurface disposal and urban stormwater runoff.

Nonstructural stormwater management practice shall mean any natural resource protection or stormwater management practice or technique that uses natural processes and natural systems to intercept, convey, treat and/or manage stormwater runoff. Nonstructural stormwater management practices include, but are not limited to, protecting primary and secondary conservation areas, reducing clearing and grading limits, reducing roadway lengths and widths, reducing parking lot and building footprints, soil restoration, site reforestation/revegetation, green roofs, vegetated filter strips and rain gardens.

Off-site stormwater management practice shall mean a green infrastructure or stormwater management practice located outside the boundaries of a development site.

On-site stormwater management practice shall means a green infrastructure or stormwater management practice located within the boundaries of a development site.

Open tidal waters shall mean natural bodies of water influenced by daily tide fluctuations that have no downstream manmade flow restrictions.

Overbank flood protection shall mean measures taken to protect downstream properties from damaging overbank flooding events.

Owner shall mean the legal or beneficial owner of a piece of land, including, but not limited to, a mortgagee or vendee in possession, receiver, executor, trustee, lessee or other person, firm, or corporation in control of the site.

Permanent stormwater management practice shall mean a green infrastructure or stormwater management practice that will be operational after the land disturbing activities are complete and that is designed to become a permanent part of the site for the purposes of managing post-construction stormwater runoff.

Permit shall mean the permit issued by a local development review authority to an applicant, which is required for undertaking any land development project or land disturbing activities, typically referred to as a land disturbance activity (LDA) permit.

Person shall mean any and all persons, natural or artificial and includes any individual, firm, corporation, government agency, business trust, estate, trust, partnership, association, two or more persons having a joint or common interest, or any other legal entity.

Pollution shall mean the contamination or other alteration of any water's physical, chemical or biological properties, including change in temperature, taste, color, turbidity, or odor of such waters or discharge of any liquid, gaseous, solid, radioactive, or other substance into any such waters as will or is likely to create a nuisance or render such waters harmful, detrimental or injurious to the public health, safety or welfare or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life.

Post developed conditions shall mean the conditions following the completion of the land development activity in terms of topography, vegetation, land use, and rate and direction of stormwater runoff.

Pre-developed conditions shall mean those land use conditions that exist prior to the initiation of the proposed land development activity in terms of topography, vegetation, land use, and quality, rate, volume, and direction of stormwater runoff.

Post-development hydrology shall mean the set of hydrologic conditions that may reasonably be expected to exist on a development site, after the completion of all land disturbing and construction activities.

Pre-development hydrology shall mean the set of hydrologic conditions that exist on a development site prior to the commencement of any land disturbing activities (i.e. the wooded undisturbed/undeveloped condition).

Private shall mean property or facilities owned by individuals, corporations, and other organizations and not by city, county, state, or federal government.

Procedure shall mean a procedure adopted by the city, by and through the city manager or his designee, to implement a regulation or regulations adopted under this article, or to carry out other responsibilities as may be required by this article.

Receiving stream or receiving aquatic resource shall mean the body of water or conveyance into which stormwater runoff is discharged.

Recharge shall mean the replenishment of groundwater aquifers.

Record drawings shall mean a set of engineering or site drawings that delineate the permitted stormwater management facility as actually constructed.

Redevelopment shall mean a change to previously existing, improved property, including but not limited to the demolition or building of structures, filling, grading, paving, or excavating, but excluding ordinary maintenance activities, remodeling of buildings on the existing footprint, resurfacing of paved areas and exterior changes or improvements that do not materially increase or concentrate stormwater runoff or cause additional nonpoint source pollution.

Regional stormwater management practice shall mean a stormwater management practice designed to control stormwater runoff from multiple properties, where the owners or developers of the individual properties may participate in providing land, financing, design services, construction services and/or maintenance services for the practice.

Regulation shall mean any regulation, rule or requirement adopted by the city pursuant to the requirements of this article.

Responsible party shall mean any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity, or any other legal entity; or their legal representatives, agents, or assigns that is named on a stormwater inspection and maintenance plan agreement as responsible for the long-term operation and maintenance of one or more green infrastructure or stormwater management practices.

Retention facility shall mean a permanent facility whose primary purpose is to permanently store a given volume of stormwater runoff. Release of the given volume is by infiltration or evaporation.

Sanitary sewer system shall mean the complete sanitary sewer system of the city which discharges sewage directly or indirectly into the sewage treatment plant, including sanitary sewer pipelines, manholes and flushing inlets and appurtenances to the foregoing, but shall exclude any portion or facilities of the sewage treatment plant.

Site shall mean any lot, plot, parcel or tract of land.

Stop-work order shall mean an order issued that requires that all land disturbing activity on a site be stopped.

Stormwater shall mean stormwater runoff, snow melt runoff, and surface runoff and drainage.

Stormwater hotspot shall mean an area where land use or pollution generating activities have the potential to generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in stormwater runoff. Stormwater hotspots include, but are not limited to, fueling stations (including temporary fueling stations during construction), golf courses, public works yards and marinas.

Stormwater management shall mean the interception, conveyance, treatment, and management of stormwater runoff in a manner that is intended to prevent flood damage, channel erosion, habitat degradation and water quality degradation and to enhance and promote the public health, safety and general welfare.

Stormwater management facilities shall mean constructed or natural components of a stormwater drainage system, designed to perform a particular function, or multiple functions, including, but not limited to pipes, swales, ditches, canals, wetlands, culverts, street gutters, detention basins, flood hazard areas, retention basins, constructed wetlands, infiltration devices, catch basins, oil/water separators, sediment basins, natural and modular pavement.

Stormwater management plan shall mean a written document that details how stormwater runoff will be managed on a development site and that shows how the stormwater management criteria that apply to the development project have been met.

Stormwater management practice shall mean a practice or technique, either structural or nonstructural that is used to intercept stormwater runoff and change the characteristics of that runoff. Stormwater management practices are used to control post-construction stormwater runoff rates, volumes and pollutant

loads to prevent increased flood damage, channel erosion, habitat degradation and water quality degradation.

Stormwater management system shall mean the entire suite of green infrastructure and stormwater management practices and stormwater conveyance features that are used to intercept, convey, treat and manage stormwater runoff on a development site.

Stormwater retrofit shall mean a green infrastructure or stormwater management practice designed for an existing development site that previously had no green infrastructure or stormwater management practice in place or had a practice that was not meeting local stormwater management criteria.

Stormwater runoff shall mean the direct response of a land surface to precipitation and includes the surface and subsurface runoff that enters a ditch, stream, storm drain or other concentrated flow during and following the precipitation.

Stormwater runoff reduction shall mean providing for the interception, evapotranspiration, infiltration, or capture and reuse of stormwater runoff to help maintain pre-development site hydrology and help protect aquatic resources from several indirect impacts of the land development process, including decreased groundwater recharge, decreased baseflow and degraded water quality.

Subdivision shall mean the division of a parcel of land to create one or more new lots or development sites for the purpose, whether immediately or in the future, of sale, transfer of ownership, or land development, and includes divisions of land resulting from or made in connection with the layout or construction of a new street or roadway or a change in the layout of an existing street or roadway.

Variance shall mean the modification of the minimum stormwater management requirements for specific circumstances where strict adherence of the requirements would result in unnecessary hardship and not fulfill the intent of this article.

Water quality shall mean those characteristics of stormwater runoff that relate to the physical, chemical, biological or radiological integrity of water.

Water quality protection shall mean adequately treating stormwater runoff before it is discharged from a development site to help protect downstream aquatic resources from water quality degradation.

Water quantity shall mean those characteristics of stormwater runoff that relate to the rate and volume of the stormwater runoff.

Watercourse shall mean a permanent or intermittent stream or other body of water, either natural or manmade, which collects and/or conveys surface water.

Watershed management plan or subwatershed management plan shall mean a document, usually developed cooperatively by government agencies and other stakeholders, to protect, restore and/or otherwise manage the water resources found within a particular watershed or subwatershed. Watershed or subwatershed management plans commonly identify threats, sources of impairment, institutional issues and technical and programmatic solutions or projects to protect and/or restore water resources.

Watershed shall mean the drainage area contributing stormwater runoff to a single point in the stormwater system.

Wetland hydroperiod shall mean the pattern of fluctuating water levels within a wetland caused by the complex interaction of surface water, groundwater, topography, soils and geology within a wetland.

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-239. - Stormwater management design procedures and requirements.

(a) *Development plan submittal review requirements.* No owner or developer shall undertake any non-exempt development activity without first meeting the requirements of this article and receiving city approval for the proposed land development activity from Garden City. Unless specifically exempted by this article or granted a waiver by the city manager or his designee from specific requirements, any

owner or developer proposing a development project shall submit to Garden City the required information in a format specified by Garden City. The following items shall accompany the submittal package:

(1) Stormwater management concept plan prepared in accordance with subsection (b);

(2) Record of a consultation meeting held in accordance with subsection (c);

(3) Stormwater management design plan prepared in accordance with subsection (d);

(4) Stormwater management system inspection and maintenance agreement prepared in accordance with subsection (e);

(5) Application and development plan review fees submitted in accordance with subsections (f) and (g), and the city's most recently adopted fee schedule; and

(6) A statement from the developer that he/she understands that they will be required to post and that he/she can post a performance bond (or other means of security acceptable to Garden City) in accordance with applicable requirements of subsection (h).

The LDM provides additional details and requirements pertaining to the preparation, submittal, review and approval process associated with stormwater management design and development plans. If an owner or developer has been granted a waiver by the city manager or his designee, written documentation pertaining to the specific items that will be submitted as well as those that will not be submitted must be provided to the city at the onset of the project.

(b) *Stormwater management concept plan.* Prior to the preparation and submittal of a stormwater management design plan review and approval request, the owner or developer shall submit to Garden City a stormwater management concept plan illustrating the layout of the proposed development project and showing, in general, how post-construction stormwater runoff will be managed on the development site.

Green infrastructure practices (i.e., better site planning techniques, better site design techniques, low impact development practices) are encouraged to be used during the creation of a stormwater management concept plan. Green infrastructure practices include, but are not limited to, protecting primary and secondary conservation areas, reducing clearing and grading limits, reducing roadway lengths and widths, reducing parking lot and building footprints, soil restoration, site reforestation/revegetation, green roofs, vegetated filter strips and rain gardens. Section 7.1 of the LDM provides additional detail regarding the requirements for the stormwater management concept plan.

(c) *Consultation meeting and coordination.* All applicants are encouraged to attend a consultation meeting with Garden City staff to discuss the proposed development project, the stormwater management concept plan and the approach that will be used to satisfy the post-construction stormwater management and site planning and design criteria that apply to the development site. This consultation meeting should take place in advance of submittal of the stormwater management concept plan, for the purposes of verifying site conditions and the feasibility of the stormwater management concept plan.

(d) *Stormwater management design plan.* Subsequent to approval of the stormwater management concept plan, the owner or developer shall submit to Garden City for review and approval, a stormwater management design plan that details how post-development stormwater runoff will be controlled or managed on the development site. The stormwater management design plan shall detail how the proposed development project will meet the post-construction stormwater management and site planning and design criteria that apply to the development site.

A copy of the stormwater management concept plan shall be included with the submittal of the stormwater management design plan. The stormwater management design plan should be consistent with the stormwater management concept plan. If any significant changes were made to the plan of development, the city manager or his designee may ask for a written statement providing rationale for any of the changes that were made. Section 7 of the LDM provides additional detail regarding the requirements for the stormwater management design plan.

(e) *Stormwater management system inspection and maintenance plan agreement.* Prior to the issuance of a LDA Permit for any new development or redevelopment activity that requires one, the applicant or owner of the development site, if different, must execute an inspection and maintenance plan agreement that shall be binding on all subsequent owners of the site, unless the stormwater management system is dedicated to and accepted by Garden City. A sample copy of the stormwater facility inspection and maintenance plan agreement is included in the Garden City Stormwater Management LDM. Section 7.8 of the LDM provides additional detail regarding the requirements for the stormwater facility inspection and maintenance plan agreement.

(f) *Stormwater management design submittal and approval procedure.* The LDM provides detailed information regarding the procedures and requirements for the stormwater management design plan submittal and approval process. The process is generally described in the ensuing paragraphs of this section of the article.

(1) Stormwater management design review and approval requests shall be filed with Garden City in a format specified by the city.

(2) Stormwater management design review and approval requests shall include the items set forth herein.

(3) The city manager or his designee shall inform the applicant whether the stormwater management design plan and the inspection and maintenance plan agreement are approved or disapproved.

(4) If the design package, stormwater management design plan, and/or the inspection and maintenance plan agreement are not approved, the city manager (or his designee) shall notify the applicant of that fact in writing. The applicant must revise any item not meeting the requirements of this article and resubmit the package.

(5) Upon a finding by the city manager or his designee that the stormwater management design package; stormwater management design plan; and the inspection and maintenance agreement plan (if applicable) meet the requirements of this article, the city manager or his designee will approve the stormwater management design for the development project, provided that all other applicable legal requirements for the issuance of a LDA permit have been met.

(6) Notwithstanding approval of the stormwater management design, in undertaking the new development or redevelopment activity, the applicant or other responsible person shall be subject to the following requirements:

a. The applicant shall comply with all applicable requirements of the approved stormwater management design plan and the provisions of this ordinance and shall certify that all land disturbing and development activities will be completed in accordance with the approved stormwater management design plan;

b. The development project shall be conducted only within the area specified in the approved stormwater management design plan;

c. The city manager (or his designee) shall be allowed to conduct periodic inspections of the development project in accordance with applicable sections of this article;

d. No changes may be made to an approved stormwater management design plan without review and written approval by the city manager (or his designee); and

e. Upon completion of the development project, the applicant or other responsible person shall submit a statement certifying that the project has been completed in accordance with the approved stormwater management design plan. The applicant or other responsible person shall also submit as built plans for the stormwater management system, as required under the applicable sections of this article.

(g) *Development review fees.* Garden City will develop and periodically amend the fee schedule related to the costs associated with the administrative, managerial and technical review activities related to implementation of this article. In accordance with the adopted fee schedule, the city will collect a nonrefundable development review fee at the time the stormwater management design package is

submitted to Garden City for initial review. The development review fees that are collected shall be used to support the administrative, managerial and technical review activities associated with the plan review and approval process as well as the development inspection of related project elements that are subject to the requirements of this article.

(h) *Performance bonds.* Garden City shall require, from the owner, a surety or performance bond, letter of credit (or other means of security acceptable to Garden City) immediately prior to the issuance of a LDA permit for any new development or redevelopment activity. The amount of the security shall not be less than the total estimated construction cost of the post-construction stormwater management system to be installed on the development site. The bond shall include provisions relative to forfeiture for failure to complete the work specified in the approved stormwater management plan, compliance with the provisions of this article, other applicable laws and regulations and any time limitations.

The performance bond shall not be fully released without a final inspection by the city of the completed work; submittal of as-built plans including certification that the stormwater management system complies with the approved stormwater management design plan and the requirements of this article; a recorded inspection and maintenance plan agreement; and final construction acceptance by the city. All as-built certification work shall be completed in accordance with applicable sections of this article and the LDM. A procedure may be used to release parts of the bond held by the city after various stages of construction have been completed and approved by the city. It will be the responsibility of the applicant to outline in the writing the procedures used by the city with regard to partially releasing performance bonds. The procedures shall be documented in writing by the city prior to the approval of a stormwater management design plan.

(i) *Maintenance bonds.* The owner shall post a maintenance bond (letter of credit or other means of security acceptable to Garden City) on the stormwater management system for a two year period after completion and acceptance of the facility by the city. It shall be owner's obligation to provide all maintenance for a two year period after acceptance of the system by the city. The maintenance bond shall be an amount equal to 25 percent of the initial bond amount posted for the construction of the stormwater management system on the development site.

(j) *Compliance through off-site stormwater management practices or direct discharge into open tidal waters.* All stormwater management design plans shall include on-site stormwater management practices, unless arrangements are made with the city manager or his designee to manage post-construction stormwater runoff in an off-site or regional stormwater management practice. The off-site or regional stormwater management practice must be located on property legally dedicated to that purpose, be designed and sized to meet the post-construction stormwater management criteria presented in the Garden City LDM, provide a level of stormwater quality and quantity control that is equal to or greater than that which would be provided by on-site green infrastructure and stormwater management practices and have an associated inspection and maintenance plan agreement. In addition, appropriate stormwater management practices shall be installed, where necessary, to protect properties and drainage channels that are located between the development site and the location of the off-site or regional stormwater management practice.

To be eligible for compliance through the use of off-site stormwater management practices, the applicant must submit a stormwater management design plan to Garden City that shows the adequacy of the off-site or regional stormwater management practice and demonstrates, to the satisfaction of the city manager or his designee, that the off-site or regional stormwater management practice will not result in the following impacts:

(1) Increased threat of flood damage or endangerment to public health or safety;

(2) Deterioration of existing culverts, bridges, dams and other structures;

(3) Accelerated streambank or streambed erosion or siltation;

(4) Degradation of in-stream biological functions or habitat; or,

(5) Water quality impairment in violation of state water quality standards and/or violation of any other state or federal regulations.

In addition, the requirement for on-site stormwater management practices can be waived if one of the two conditions stipulated below can be met to the satisfaction of the city manager or his designee: (i) the development directly discharges into open tidal waters or (ii) provisions are made to provide for a drainage system with adequate capacity to carry site runoff flows to open tidal waters. The city will require the developer or owner to coordinate this request with adjacent or downstream property owners and/or local governments as outlined in applicable sections of the LDM.

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-240. - Illicit discharge and illicit connection.

(a) *Prohibition.*

(1) It is unlawful for any person to throw, drain, run, or otherwise discharge to any component of the municipal storm sewer system or to cause, permit or suffer to be thrown, drained, run, or allow to seep or otherwise discharge into such system all matter of any nature excepting only such storm or surface water as herein authorized.

(2) It shall be unlawful for any person to maliciously, willfully, or negligently break, damage, destroy, uncover, deface, modify, or tamper with any stormwater structure, appurtenance, or equipment.

(3) It shall be unlawful, without prior written authorization of the city manager or his designee, to alter in any way any part of the stormwater system including, but not limited to, rerouting, removing, deepening, widening, enlarging, filling or obstructing any part of the stormwater system including fencing easements and rights-of-way which render the system inaccessible to equipment necessary to perform maintenance and repairs.

(4) It is unlawful for any person, company, corporation, etc. to connect any pipe, open channel, any other conveyance system that discharges anything except stormwater or unpolluted water which is approved by the city manager or his designee, based on the exemptions listed below, to the municipal storm sewer system.

(5) Improper connections in violation of this article must be disconnected and redirected, if applicable, to the city's sanitary sewer system upon approval by the city manager or his designee and in accordance with the Garden City Code of Ordinances.

(b) *Exemptions.* The following activities are exempt from the prohibition provision above:

(1) Water line flushing performed by a government agency, diverted stream flows, rising groundwaters, and unpolluted groundwater infiltration.

(2) Unpolluted pumped groundwater.

(3) Unpolluted discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, and street wash water.

(4) Unpolluted discharges or flows from fire fighting.

(5) Other unpolluted discharges with approval from the city manager or his designee.

(c) *Watercourse protection.* Every person owning property through which a watercourse passes, or such person's lessee, shall keep and maintain that part of the watercourse within the property free of trash, debris, excessive vegetation, and other obstacles that would pollute, contaminate, or significantly retard the flow of water through the watercourse. In addition, the owner shall maintain existing privately owned structures within or adjacent to a watercourse, so that such structures will not become a hazard to the use, function, or physical integrity of the watercourse.

(d) *Accidental discharge.* In the event of an accidental discharge to the MS4 of any material or substance other than stormwater runoff, the person concerned shall inform the Garden City Code Enforcement

staff, and all other impacted entities immediately but no later than two hours after said person becomes aware of the incident and notify the city as to the nature, quantity and time of occurrence of the discharge. The person concerned shall take immediate steps to contain, treat, or take other actions to minimize effects of the discharge on the municipal storm sewer system and receiving streams. The person shall also take immediate steps to ensure no recurrence of the discharge.

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-241. - Construction inspection of stormwater management systems.

The LDM provides additional information and details regarding approved construction materials and practices regarding stormwater management controls and systems.

(1) *Notice of construction commencement.* The applicant must notify Garden City via letter, or via another communication method agreed to by the city, prior to the commencement of construction on a development site. In addition, the applicant must notify the city manager or his designee in advance of the installation of critical components of the stormwater management system shown on the approved stormwater management design plan. The city manager or his designee may, at his discretion, issue verbal or written authorization to proceed with the installation of critical components of the stormwater management system, such as permanent green infrastructure and stormwater management practices, based on site-specific factors.

(2) *Construction phase observation.* The city may perform periodic observation of the green infrastructure and stormwater management practices installation work as depicted on the approved stormwater management design plan. The observation work shall be conducted by city staff or authorized representatives of the city manager or his designee during construction. Construction observation work shall utilize the approved stormwater management design plan for establishing compliance with the provisions of this article. All observation work shall be documented in written reports that contain the following information:

a. The date and location of the inspection;

b. The name of the inspector;

c. Whether construction is in compliance with the approved stormwater management design plan;

d. Violations of the approved stormwater management design plan; and,

e. Any other variations from the approved stormwater management plan.

If any violations are found, the applicant shall be notified in writing about the nature of the violation and the remedial measures that are required to bring the action or inaction into compliance with the approved stormwater management design plan, as described in subsection 30-243(b). In the event that the remedial measures described in such notice have not been completed by the date set forth in the notice, any one or more of the enforcement actions outlined in subsection 30-243(c) of this article may be taken against the applicant.

(3) *Final inspection and as-built plans.* Subsequent to the final installation and stabilization of all green infrastructure and stormwater management practices shown on the approved stormwater management design plan, and before the issuance of a certificate of occupancy or a certificate of construction acceptance (if appropriate), the applicant is responsible for documenting that the project has been completed in accordance with the approved stormwater management design plan through the submittal of as-built plans for all stormwater management practices shown on the approved stormwater management design plan. The as-built plans must show the final design specification data for all green infrastructure and stormwater management practices (i.e. invert elevations, slopes, facility and pipe locations, dimensions, etc). In addition, a licensed professional engineer must provide a design certification that the development has been constructed in substantial accordance with the approved stormwater management design plan.

A final inspection may be conducted by the city manager or his designee to confirm the accuracy of the as-built plans as well as the information provided in the design certification. A final inspection is required before any performance bond or other guarantee can be released, unless otherwise agreed to by the city manager or his designee per subsection 30-239(h) of this article. All as-built certification work shall be completed in accordance with applicable sections of this article and the LDM.

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-242. - Ongoing inspection and maintenance of stormwater management systems.

(a) *Maintenance responsibility.* The responsible party named in the recorded stormwater management system inspection and maintenance plan agreement, shall maintain in good condition and promptly repair and restore all green infrastructure and stormwater management practices, maintenance access routes and appurtenances, including, but not limited to surfaces, walls, drains, dams, structures, vegetation, erosion and sediment control practices and other devices. Such repairs and restoration and maintenance activities shall be performed in accordance with an approved inspection and maintenance plan agreement.

If the responsible party named in the recorded inspection and maintenance plan agreement is a homeowner's association, or other association, the responsible party shall submit to the city manager or his designee a copy of a recorded declaration that provides:

(1) That green infrastructure and stormwater management practices are part of the common elements of the development site and shall be subject to the requirements of the stormwater management system inspection and maintenance plan agreement;

(2) That membership in the entity responsible for maintenance shall be mandatory and automatic for all homeowners or parcel owners of the development site and their successors;

(3) That the entity responsible for maintenance shall have lien authority, or a mechanism comparable and satisfactory to the city, to ensure the collection of dues from all members;

(4) That the requirements of the inspection and maintenance plan agreement shall receive priority for expenditures by the entity responsible for maintenance except for any other expenditures that are required by law to have a higher priority;

(5) That a separate fund shall be maintained by the entity responsible for maintenance for the routine maintenance, reconstruction and repair of the green infrastructure and stormwater management practices, and kept in an account insured by the Federal Deposit Insurance Corporation (FDIC), or by another method acceptable to the city;

(6) That the routine maintenance, reconstruction and repair fund shall contain at all times the dollar amount reasonably determined from time to time by Garden City to be adequate to pay for the probable reconstruction and repair cost (but not routine maintenance cost) of the stormwater management system for a three-year period; unless otherwise agreed to by the city; and

(7) That, to the extent permitted by law, the entity responsible for maintenance shall not enter into voluntary dissolution unless responsibility for the green infrastructure and stormwater management practices is transferred to an appropriate successor.

In lieu of an inspection and maintenance plan agreement, Garden City may accept the dedication of any existing or future green infrastructure or stormwater management practice for maintenance, provided that such practice meets all of the requirements of this article, is in proper working order at the time of dedication and includes adequate and perpetual access and sufficient area for inspection and regular maintenance. Such adequate and perpetual access shall be accomplished by granting of an easement to Garden City or through a fee simple dedication to Garden City.

(b) *Inspections.* The city manager or his designee, bearing proper credentials and identification, shall be permitted to enter, in accordance with local, state and federal laws, all properties for regular inspections, periodic investigations, observation, measurement, enforcement, sampling and testing, in accordance with provisions of this article. The city manager or his designee shall duly notify the owner of said property or the representative on site prior to the inspection, except in the case of an emergency. The city manager or his designee, bearing proper credentials and identification, shall be permitted to enter, in accordance with local, state and federal laws, all properties for which the city holds a negotiated easement for inspection, repairs, maintenance and other purposes related to any portion of the stormwater management facilities lying within said easement.

(1) The city manager or his designee shall determine inspection schedules necessary to enforce the provisions of this article.

(2) Measurements, tests and analyses performed by the department or required of any discharger to the MS4 shall be in accordance with applicable sections of the City Code of Ordinances, unless another method is approved by the city manager or his designee.

(3) All inspections should be documented in written reports that contain the following information:

a. The date and location of the inspection;

b. The name of the person who performed the inspection;

c. The condition of:

1. Vegetation and filter media;

2. Fences and other safety devices;

3. Spillways, valves and other hydraulic control structures;

4. Embankments, slopes and safety benches;

5. Reservoirs and permanent pools;

6. Inlet and outlet channels and structures;

7. Underground drainage structures;

8. Sediment and debris accumulation in storage and forebay areas; and

9. Any other item that could affect the proper function of the stormwater management system.

(4) Upon completion of the field inspection, the inspector shall prepare a written description of repair, restoration and maintenance needs for the system in a summary format. If any repair, restoration or maintenance needs are found, the responsible party shall be notified in writing about the repair, restoration or maintenance needs and the remedial measures that are required to bring the stormwater management system into compliance with the provisions of this article and the approved stormwater management system inspection and maintenance plan agreement, as described in subsection 30-243(b). In the event that the remedial measures described in such notice have not been completed by the date set forth in the notice, any one or more of the enforcement actions outlined in subsection 30-243(c) of this article may be taken against the responsible party named in the approved stormwater management system inspection and maintenance plan agreement.

(c) *Records of maintenance activities.* The responsible party shall make and maintain records of all inspections, maintenance and repairs, and shall retain the records for a minimum of five years. These records shall be made available to Garden City during inspections and at other reasonable times upon request of Garden City.

(d) *Failure to maintain.* If the responsible party fails or refuses to meet the terms and conditions of an approved stormwater management system inspection and maintenance plan agreement and/or the requirements of this article, Garden City or its authorized representative may correct a violation by

performing the work necessary to place the green infrastructure or stormwater management practice in proper working condition after 30 days written notice. The exception to the 30-day period would be if the city properly establishes that the violation constitutes an immediate danger to public health or safety in which case the city would grant 24 hours notice to the property owner.

(e) *Cost recovery for city funded stormwater management services.* If Garden City performs repair, remediation and/or maintenance work in accordance with the provisions of this article, and other applicable city ordinances, the city may assess the responsible party (or parties) for the cost of the work. This cost shall be in the form of a lien on the property and may be placed on the customer's stormwater utility bill for such property and collected in the ordinary manner for such fees by Garden City.

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-243. - Enforcement, variances, and appeals.

(a) *Enforcement.* Any action or inaction that violates the provisions of this article or the requirements of an approved stormwater management design plan, land development related permit, or inspection and maintenance plan agreement, may be subject to the enforcement actions outlined in this section. Any such action or inaction that is continuous with respect to time may be deemed to be a public nuisance and may be abated by injunctive or other equitable relief. The imposition of any of the penalties described below shall not prevent such equitable relief.

(b) *Notice of violation.* If Garden City determines that an owner, applicant or other responsible person has failed to comply with the provisions of this article, or the terms and conditions of an approved stormwater management design plan, LDA permit, or the inspection and maintenance plan agreement, it shall issue a written notice of violation (NOV) to said owner, applicant or other responsible entity. Where an entity is engaged in a new development or redevelopment activity covered by this ordinance without having first secured approval of the stormwater management design, the NOV shall be served on the owner, person or entity in charge of the new development or redevelopment activity being conducted on the development site.

The NOV shall contain the following information:

(1) The name and address of the owner, applicant or other responsible person;

(2) The address or other description of the site upon which the violation is occurring;

(3) A statement specifying the nature of the violation;

(4) A description of the remedial measures necessary to bring the action or inaction into compliance with the provisions of this article, or the terms and conditions of the approved stormwater management design plan, land development related permit, or inspection and maintenance plan agreement, and the date for the completion of such remedial plan by the responsible parties;

(5) A statement of the penalty or penalties that may be assessed against the person to whom the NOV is issued; and

(6) A statement that the determination of violation may be appealed to Garden City by filing a written notice of appeal within 30 days after the NOV (except, that in the event the violation constitutes an immediate danger to public health or safety, a written notice of appeal must be filed within 24 hours after the NOV).

(c) *Penalties.* In the event that the remedial measures described in the NOV have not been completed by the date set forth for completion in the NOV, any one or more of the following actions or penalties may be taken or assessed against the person to whom the NOV was issued.

Before taking any of the following actions or imposing any of the following penalties, Garden City shall first notify the owner, applicant or other responsible person or entity in writing of its intended action and shall provide a reasonable opportunity of not less than ten days (except, that in the event the violation

constitutes an immediate danger to public health or safety, 24 hours' notice shall be sufficient) to correct the violation. In the event the owner, applicant or other responsible person fails to correct the violation by the date set forth in said notice, Garden City may take any one or more of the following actions or impose any one or more of the following penalties:

(1) *Stop-work order.* The city manager or his designee may issue a stop work order that shall be served on the owner, applicant or other responsible person. The stop work order shall remain in effect until the owner, applicant or other responsible person has taken the remedial measures set forth in the NOV or has otherwise corrected the violation or violations described therein. The stop-work order may temporarily be withdrawn or modified by city manager or his designee to enable the applicant or other responsible person to take the remedial measures necessary to correct such violation or violations.

(2) *Withhold certificate of occupancy (CO)* . City manager or his designee may refuse to issue a CO for the building or other structure constructed or being constructed on the development site until the owner, applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise corrected the violation or violations described therein.

(3) *Suspension, revocation, or modification of LDA permit.* The city manager or his designee may suspend, revoke or modify the LDA permit authorizing the development project. A suspended, revoked or modified LDA permit may be reinstated after the owner, applicant or other responsible person has taken the remedial measures set forth in the NOV or has otherwise corrected the violation or violations described therein. The LDA permit may be modified by the city manager or his designee to enable the owner, applicant or other responsible person to take the remedial measures necessary to correct such violation or violations.

(4) *Civil penalties.* In the event the owner, applicant or other responsible person fails to take the remedial measures set forth in the NOV or otherwise fails to correct the violation or violations described therein, by the date set forth in the notice of violation, Garden City may impose a penalty not to exceed $1,000.00 (depending on the severity of the violation) for each day the violation remains un-remedied after the date set forth in the NOV. In assessing the civil penalty, Garden City may consider the following factors:

a. Damages to the city, including compensation for the damage or destruction to the MS4, and also including any penalties, costs, and attorney fees incurred by the city as the result of the illegal activity, as well as the cause of the discharge or violation;

b. The severity of the discharge and its effects upon the MS4 and upon the quality and quantity of the receiving waters;

c. Effectiveness of action taken by the violator to cease the violation;

d. The technical and economic reasonableness of reducing or eliminating the discharge; and

e. The economic benefit gained by the violator.

(5) *Criminal penalties.* For intentional and flagrant violations of this article, Garden City may issue a citation to the owner, applicant or other responsible person, requiring said person to appear in municipal court to answer to criminal charges for such violation. Upon conviction, such person shall be punished by a fine not to exceed $1,000.00, imprisonment for up to 60 days or both. Each act of violation and each day upon which any violation shall occur shall constitute a separate offense.

(d) *Appeals.*

(1) Any person aggrieved by a decision of the city manager or his designee (including any decision with reference to the granting or denial of a variance from the terms of this article) may appeal same by filing a written notice of appeal with the city manager within five days of the issuance of said decision by the city manager or his designee. A notice of appeal shall state specific reasons.

(2) The city manager shall prepare and send to city council and appellant a written response to said notice of appeal within ten days of receipt of the notice of appeal.

(3) All appeals shall be heard by city council. The hearing shall be held within 30 days after receipt of notice of appeal or a date mutually agreed upon in writing by the appellant and the city manager. The city council shall then make its findings within ten days of the appeal hearing.

(4) If the appellant is dissatisfied with city council's decision, he or she can appeal said decision to the superior court of the county.

(e) *Variances from requirements.* The city manager or his designee may grant a variance from requirements of this article if exceptional circumstances applicable to a site exist such that strict adherence to the provisions of the ordinance will result in unnecessary hardship and will not fulfill the intent of the ordinance. The city manager or his designee may grant a variance from requirements of this article if the proposed development activity will not:

(1) Increase in rate, volume, or concentration of runoff to the existing downstream storm sewer system;

(2) Increase the base flood elevation upstream or downstream; or

(3) Have a negative impact on any wetland, watercourse, or water body; or

(4) Contribute to degradation of water quality.

A written request for a variance shall be required and shall state the specific variance sought and the reasons a variance should be granted. The request shall be accompanied by all necessary supporting data and provided in a format that is deemed acceptable by the city. The city manager or his designee will conduct a review of the variance request within ten working days of receiving the request.

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-244. - Cooperation with other governments.

The city may enter into agreements with other local governments to carry out the purpose of this article. These agreements may include, but are not limited to, enforcement of provisions, resolution of disputes, cooperative monitoring of water quality and cooperative management and inspection of stormwater system and management programs.

(Ord. No. 2011-15, § 1, 8-15-11)

Secs. 30-245—30-260. - Reserved.

DIVISION 2. - STORMWATER UTILITY ENTERPRISE FUND

Sec. 30-261. - Purpose.

This division establishes the Garden City Stormwater Utility and sets up the Stormwater Enterprise Fund.

(Ord. No. 2008-28, § 1, 11-17-08)

Sec. 30-262. - Findings of fact.

The Garden City Mayor and City Council make the following findings of fact:

(1) The City of Garden City is authorized by the Georgia Constitution of 1983, including, without limitation, Article IX, Section II, Paragraphs I and III thereof and O.C.G.A. § 36-82-62 to provide stormwater management services, systems and facilities throughout the corporate boundaries of the City of Garden City (hereinafter "the city" or "Garden City").

(2) In promulgating the regulations contained in this section, Garden City is acting pursuant to authority granted by the Constitution and laws of the State of Georgia and its City Charter to provide for stormwater collection and disposal. A system for the collection, conveyance, storage, treatment and disposal of stormwater provides benefits to all properties within the city and surrounding areas.

(3) Failure to effectively manage stormwater runoff:

a. May cause erosion of lands, threaten businesses and residences, and other facilities with water damage and may environmentally impair the rivers, streams and other bodies of water within, and downstream of, the city.

b. Can adversely affect the operations of the sanitary sewer system operated by the city thereby increasing the likelihood of infiltration and inflow into the sanitary sewer system; and,

c. Contributes to the potential degradation of the quality of both surface water and groundwater resources.

(4) The city presently owns and operates stormwater management systems and facilities, which have been developed over many years. The future usefulness and operational function of the existing stormwater management systems and facilities owned and operated by the city, and the additions and improvements thereto, rests on the ability of the city to effectively manage, protect, control, regulate, use, and enhance stormwater systems and facilities within the city in concert with the management of other water resources within the city. In order to do so, the city must have both a comprehensive stormwater management program as well as an adequate and stable funding source for its comprehensive program operation and drainage-related capital improvement needs.

(5) The city is required under federal and state regulations (i.e., the Federal Clean Water Act, the city's national pollutant discharge elimination system (hereinafter "NPDES") phase I stormwater permit) to provide enhanced management of stormwater runoff quality to mitigate the impacts of pollutants which may be discharged from the public municipal separate storm sewer system (MS4) and stormwater conveyance system into State of Georgia or United States' waters.

(6) Compliance with the regulatory obligations of the city's NPDES phase I stormwater permit, NPDES wastewater discharge permit, the coastal comprehensive plan and the city's watershed protection plan will affect the cost of providing stormwater management services, systems and facilities above what is currently being spent for stormwater quality management, drainage system maintenance, floodplain management, capital drainage projects and other program activities.

(7) The cost of operating and maintaining the city's stormwater management system and the funding of necessary repairs, replacements, improvements and extensions thereof should, to the extent practicable, be allocated in relationship to the services received from the city's stormwater management program.

(8) The professional engineering and financing analysis and related documents prepared by the city's consulting stormwater engineer properly assesses and defines the city's stormwater management program problems, needs, goals, priorities as well as the stormwater management program funding strategy.

(9) Given the stormwater management program problems, needs, goals, priorities and funding strategy identified in the aforementioned professional engineering and financing analysis, it is appropriate to authorize the formation of an organizational and accounting entity dedicated specifically to the management, maintenance, protection, control, regulation, use, and

enhancement of stormwater management services, systems and facilities within the city in concert with other water resource management programs.

(10) Stormwater management is applicable and needed throughout the incorporated areas of the city. While specific service and facility demands may differ from area to area at any given point in time, a stormwater management system and service area encompassing all lands and water bodies within the incorporated areas of the city is consistent with the present and future needs of the community.

(11) The stormwater management services rendered may differ depending on many factors and considerations, including but not limited to location, demands and impacts imposed on the stormwater management systems and programs, and risk exposure. It is practical and equitable to allocate the cost of stormwater management among the owners of improved properties in proportion to the demands the properties impose on the city's stormwater management services which result in services to such properties and the owners thereof. The fair and equitable apportionment of costs via the user fee charge should correlate to the stormwater management services provided to that property and the runoff demand that the property imposes on the public drainage system and the city stormwater management program.

(12) The stormwater management needs in the city include, but are not limited to, protection of the public health, safety, and welfare of the community. Provision of stormwater management services renders and/or results in both a service and a benefit to all properties, property owners, citizens, and residents of the city in a variety of ways.

(13) A stormwater management program provides the most practical and appropriate means of properly delivering stormwater management services throughout the city, and the most equitable means to implement an enhanced level of service for stormwater management within the city through stormwater user fee charges, user fees and other mechanisms.

(14) The presence and amount of impervious surfaces on each improved property is the most important factor influencing the cost of the stormwater management services provided by the city, or to be provided by the city in the future, to that property such that the amount of impervious surfaces on each property is the most appropriate parameter for calculating a periodic stormwater user fee charge. Therefore, the city deems it appropriate to impose a stormwater user fee charge upon all improved properties that may discharge, directly or indirectly, into the public drainage system, whether the property is private or public in nature.

(15) A schedule of stormwater utility user fee charges based in part on the area of impervious surface located on each improved property is the most appropriate and equitable means of allocating the cost of stormwater management services throughout the city. Stormwater utility user fee charges may be designed with specific modifiers to further enhance customer equity, as well as customer understanding of the user fee charge rate structure, while at the same time minimizing the city's customer account management and maintenance efforts.

(16) Stormwater utility user fee charges may be supplemented by other types of fees and charges which address specific needs, including, but not limited to, special service fees, special assessments, revenue bonds, use of proceeds from special purpose local option sales taxes (SPLOST) and other forms of revenue, as deemed appropriate by the mayor and city council.

(17) The existence of privately owned and maintained on-site stormwater control facilities, activities or assets which reduce, or otherwise mitigate, the impact of a particular property on the city's storm water management program, and the stormwater utility's cost of providing stormwater management services and/or stormwater management systems and facilities, should be taken into account to reduce the user fee charge on that property either in the form of a direct reduction or a credit, and such reduction or credit should be conditioned upon continuing provision of such services, systems, facilities, activities or assets in a manner complying with the standards and codes as determined by the stormwater utility. Credits for privately owned and maintained stormwater management systems, facilities, activities or assets shall be generally proportional to

the affect that such systems have on the reduction and mitigation of the stormwater runoff impacts from the property.

(18) It is imperative that the proceeds from all user fee charges for stormwater management services, systems or facilities, together with any other supplemental revenues raised or otherwise allocated specifically to stormwater management services, systems or facilities, be dedicated solely to those purposes, and such proceeds of user fee charges and supplemental revenues shall therefore be deposited into the city stormwater utility enterprise fund and shall remain in that fund and be dispersed only for stormwater management capital, operating and nonoperating costs, lease payments and debt service of bonds or other indebtedness for stormwater management purposes.

(19) In order to protect the health, safety and welfare of the public, the governing authority of Garden City hereby concludes a stormwater utility, funded by a dedicated stormwater utility enterprise fund, is warranted as the best available means of addressing the foregoing needs and legal requirements. By separate ordinance, the city will enact a user fee rate structure to establish user fees for the provision of stormwater management services.

(Ord. No. 2008-28, § 1, 11-17-08)

Sec. 30-263. - Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Act means and refers to the Clean Water Act as amended by the Water Quality Act of 1987 (33 U.S.C. § 1251 et seq.), as amended, and the rules and regulations promulgated by the United States Environmental Protection Agency pursuant thereto.

Customers of the stormwater utility shall include all persons, properties, and entities serviced by and/or benefiting from the services provided by the city's stormwater management program and the stormwater utility. These services include, but are not necessarily limited to, the stormwater utility's administration, management, maintenance, expansion, and improvement of the public stormwater management systems for the handling of stormwater runoff of private and public properties, and the regulation of the public and private stormwater management systems, controls, facilities, and activities.

Hydrologic response defines the manner and means whereby stormwater collects, remains, infiltrates, and is conveyed from a property. Hydrologic response is dependent on several factors including, but not limited to, the presence of impervious surface, the parcel's size, the parcel's shape, the parcel's topography, the parcel's vegetative canopy, the parcel's groundwater characteristics, the parcel's on-site operations, the parcel's stormwater controls, the parcel's antecedent moisture as well as the parcel's geologic and hydro-geologic characteristics.

Impervious area shall mean and have the same definition as impervious surface.

Impervious surface means those areas which prevent or impede the infiltration of stormwater into the soil in the manner in which it entered the soil, in natural conditions, prior to development and causes stormwater runoff to collect, concentrate or flow in a manner materially different from what would occur if the land were in an unaltered natural condition. Common impervious surfaces include, but are not limited to, rooftops, buildings or structures, sidewalks, walkways, patio areas, driveways, parking lots, storage areas, awnings and other fabric or plastic coverings, and other surfaces such as compacted soil and gravel, which prevent or impede the natural infiltration of rainfall and stormwater runoff which existed prior to development.

Improved property (or developed property) means property altered from its natural state by construction or installation of more than 500 square feet of impervious surfaces.

Service area means the entire land area within the corporate limits of the city.

Stormwater management services mean all services provided by the city which relate to the:

(1) Transfer, control, conveyance or movement of stormwater runoff through the incorporated portions of the city;

(2) Maintenance, repair and replacement of existing stormwater management systems and facilities;

(3) Planning, development, design and construction of additional stormwater management systems and facilities to meet current and anticipated needs;

(4) Regulation of the use of stormwater management services, systems and facilities; and

(5) Compliance with applicable state and federal stormwater management regulations and permit requirements.

Stormwater management services may address the quality of stormwater runoff as well as the quantity thereof.

Stormwater management systems and facilities mean those natural and manmade channels, swales, ditches, rivers, streams, creeks, branches, reservoirs, ponds, drainage ways, inlets, catch basins, pipes, headwalls, storm sewers, lakes and other physical works, properties and improvements which transfer, control, convey, detain, retain, treat or otherwise influence the movement of stormwater runoff.

Stormwater utility manager means the person appointed by the mayor and city council to administer the provisions of this article.

Stormwater user fee charge means the periodic user fee charge imposed pursuant to this article by the Garden City Stormwater Utility for providing stormwater management services. This term shall exclude special charges to the owners of particular properties for services, systems or facilities related to stormwater management, including, but not limited to, charges for development plan review, inspection of development projects, on-site stormwater control systems and other stormwater management related services provided by Garden City for which a corresponding fee is collected for the service rendered.

Undeveloped land means land in its unaltered natural condition or which is modified to such a minimal degree as to have a hydrologic response comparable to land in an unaltered natural condition shall be deemed undeveloped. For purposes of this article, undeveloped land includes property altered from its natural condition by the creation or installation of 500 square feet or less of impervious surface.

User is defined as any person who uses property, which maintains connection to, discharges to, or otherwise receives services from the city for stormwater management.

(Ord. No. 2008-28, § 1, 11-17-08)

Sec. 30-264. - Stormwater utility and enterprise fund established.

(a) There is hereby established a stormwater utility to be known as the Garden City Stormwater Utility, which shall be responsible for stormwater management services throughout the incorporated areas of the city, and which shall provide for the management, protection, control, regulation, use and enhancement of the city's stormwater management systems and facilities and stormwater management services.

(b) There is hereby established a stormwater utility enterprise fund in the city budgeting and accounting systems for the purpose of dedicating and protecting all funding applicable to the purposes and responsibilities of the Garden City stormwater management program and stormwater utility, including, but not limited to, rates, charges, and fees as may be established by the city council from time to time, and other funds that may be transferred or allocated to the Garden City Stormwater Utility.

(c) All revenues and receipts of the stormwater utility shall be placed in the stormwater utility enterprise fund in trust, to be expended solely for stormwater management purposes. All expenses and capital investments of the stormwater utility shall be paid from the stormwater utility enterprise fund; provided,

however, that other revenues, receipts and resources not accounted for in the stormwater utility enterprise fund may be applied to stormwater management services as deemed appropriate by the city.

(d) The city shall place responsibility with the stormwater utility manager for operation, maintenance and regulation of the stormwater utility and stormwater management program services performed, owned and operated or maintained by Garden City, and other related assets, including, but not limited to, properties, other than road rights-of-way, upon which such stormwater management systems and facilities are located, easements, rights-of-entry and access and certain equipment used solely for stormwater management.

(Ord. No. 2008-28, § 1, 11-17-08)

Sec. 30-265. - Stormwater utility service area.

There shall be one stormwater utility service area in the city which shall encompass the municipal boundaries of Garden City. The city has established that all developed properties within the municipal boundaries receive stormwater management program services from the city. Improved/developed properties within the defined service area will receive a stormwater user fee charge bill because they are directly or indirectly connected to the city's drainage system and they receive stormwater services from the city.

(Ord. No. 2008-28, § 1, 11-17-08)

Sec. 30-266. - Scope of responsibility for stormwater management systems and facilities.

(a) The city owns or has rights established by written agreements which allow it to operate, maintain, improve and access those stormwater management systems and facilities which are located:

(1) Within public road rights-of-way;

(2) On private property but within legally dedicated easements granted to, and accepted by, the city;

(3) On private property where the city has been granted, by written agreements, for rights-of-entry, rights-of-access, rights-of-use or other permanent provisions for operation, maintenance, improvement and access to the stormwater management system facilities located thereon;

(4) On land dedicated to, and accepted by, the city solely for the operation, maintenance, improvement and access to the stormwater management systems and facilities located thereon; or

(5) On public land which is owned by the city and/or land of another governmental entity upon which the city has agreements providing for the operation, maintenance, improvement and access to the stormwater management systems and facilities located thereon.

(b) Operation, maintenance and/or improvement of stormwater management systems and facilities which are located on private or public property not owned by the city, and for which there has been no written agreement granting easements, rights-of-entry, rights-of-access, rights-of-use or other form of dedication thereof to the city for operation, maintenance, improvement and access of such stormwater management systems and facilities shall be and remain the legal responsibility of the property owner, except as otherwise provided for by the state and federal laws and regulations.

(c) It is the express intent of this article to protect the public health, safety and welfare of people and property in general, but not to create any special duty or relationship with any individual person, or to any specific property within or outside the municipal boundaries of the city. The city expressly reserves the right to assert all available immunities and defenses in any action seeking to impose monetary damages or equitable remedies upon the city, its elected officials, officers, employees and agents arising out of any alleged failure or breach of duty or relationship.

(d) If any permit, plan approval, inspection or similar act is required by the city as a condition precedent to any activity or change upon property not owned by the city pursuant to this or any other regulatory ordinance, regulation or rule of the city, or under federal or state law, the issuance of such permit, plan approval or inspection shall not be deemed to constitute a warranty, express or implied, nor shall it afford the basis for any action, including any action based on failure to permit, negligent issuance of a permit, negligent plan approval, or negligent maintenance of any permitted stormwater management system or facility not expressly dedicated to and accepted by the city for further maintenance in an action seeking the imposition of money damages or equitable remedies against the city, its council members, mayor, officers, employees or agents.

(Ord. No. 2008-28, § 1, 11-17-08)

Sec. 30-267. - Stormwater user fee charges.

(a) It shall be the policy of the city that user fee charges for stormwater management services to be provided by the stormwater utility in the designated service area shall be equitably derived through methods which have a demonstrable relationship to the varied demands and impacts imposed on the stormwater management services by individual properties and/or the level of service rendered by, or resulting from, the provision of stormwater management services. Stormwater user fee charge rates shall be adopted via the rate ordinance and be structured so as to be uniform within the customer class, and the resultant user fee charges shall bear a substantial relationship to the cost of providing stormwater management services. User fee charge rates shall be in addition to other rates, charges, or fees employed for stormwater management within the incorporated areas of the city as defined herein.

(b) To the extent practicable, credits against stormwater user fee charges shall be provided for on-site stormwater control systems and activities constructed, operated, maintained and performed to the city's standards by public and private property owners which eliminate, mitigate or compensate for the impact that the property or person may have upon stormwater runoff discharged to public stormwater management systems and facilities, or to private stormwater management systems and facilities which impact the proper function of public stormwater management systems and facilities.

(Ord. No. 2008-28, § 1, 11-17-08)

Sec. 30-268. - Enforcement methods and inspections.

(a) All property owners of improved property within the incorporated areas of the city shall provide, manage, maintain, and operate on-site stormwater management systems sufficient to collect, convey, detain, and discharge stormwater runoff in a safe manner consistent with all applicable city development regulations, ordinances, and state and federal laws. Any failure to meet this obligation shall constitute a violation of this article and be subject to citation and prosecution in the Garden City Municipal Court. Each day such violation exists shall constitute a separate offense.

(b) Alternately, in the event a public nuisance is deemed to exist by the mayor and city council, the city may elect to sue in municipal court to abate such nuisance. In the event a public nuisance is found by the court to exist, which the property owner fails to abate within such reasonable time as allowed by the Garden City Municipal Court, the city may enter upon the property and cause work as is reasonably necessary to be performed, with the actual cost thereof assessed against the property owner in a similar manner as a tax levied against the property. From date of filing of such abatement action, the city shall have lien rights which may be perfected, after judgment, by filing a notice of lien on the general execution docket of the Chatham County Superior Court.

(c) The city shall have the right for its employees or designated agents to enter upon public and private property during reasonable hours, and after reasonable notice to the owner thereof, in order to assure

compliance with the provisions of this article, and state and federal law. Such inspections shall generally be limited to the following purposes:

(1) Inspecting or conducting engineering analyses on existing stormwater management systems and facilities located on-site;

(2) Verification and review of information contained within a stormwater utility credit manual application; and

(3) Determining that stormwater management systems and facilities need to be constructed.

(Ord. No. 2008-28, § 1, 11-17-08)

Secs. 30-269—30-280. - Reserved.

DIVISION 3. - STORMWATER UTILITY RATE ORDINANCE

Sec. 30-281. - Purpose.

This division shall serve the purpose of establishment and set up of the stormwater utility rate structure and billing rate.

(Ord. No. 2009-2, § 1, 2-2-09)

Sec. 30-282. - Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Credit means a reduction in the amount of a customer's stormwater user fee charge in recognition of a customer's efforts to mitigate the stormwater runoff impact that developed property has on the city stormwater management services and systems, and/or the efforts of a customer to offset the city's cost for implementation of stormwater management program (SWMP) activities such as public education, watershed stewardship, etc.

Dwelling unit shall mean a structure, which contains one or more bedrooms, a bathroom and a kitchen facility, designed for occupancy by a single-family unit.

Manufactured home park means a common development (with a single-property owner or entity) of more than two factory-built or pre-fabricated housing structures that have been partially or entirely assembled at another location and moved into the development.

Residential equivalent unit (REU) means the stormwater user fee charge billing unit increment related to the median horizontal impervious surface area footprint of 3,000 square feet for a typical single-family residential parcel within Garden City.

Unless otherwise defined within this article, the definitions included in the Stormwater Utility Enterprise Fund Ordinance (Code section 30-261 et seq.) are adopted herein by reference.

The professional engineering and financing analysis documents entitled: The Garden City SWMP Assessment Funding Feasibility Study (Technical Memorandum dated November 14, 2007); The Garden

City SWMP Assessment Funding Feasibility Study Addendum (Technical Memorandum dated November 12, 2008, or the most recent version); and applicable supporting, project-related documents are incorporated herein by reference.

(Ord. No. 2009-2, § 1, 2-2-09)

Sec. 30-283. - Stormwater utility customer classes.

(a) The stormwater utility shall establish specified customer classes within the service area to reflect differences in impervious surface and stormwater runoff characteristics; stormwater management program services provided by the city to the stormwater utility customers; and the respective demand that those customers' properties place on the city SWMP and drainage system components. The stormwater utility classes will encompass all developed and undeveloped properties within the city and are defined as follows:

    (1) The SFR class shall consist of all developed properties classified as single-family residential customers per the applicable definition.

    (2) The NSFR class shall consist of all developed properties classified as non-single-family residential customers per the applicable definition.

    (3) The undeveloped class shall consist of properties classified as undeveloped per the applicable definition.

(b) Documentation pertaining to the stormwater utility customer classes shall be kept on file in the office of the stormwater utility manager for public inspection.

(Ord. No. 2009-2, § 1, 2-2-09)

Sec. 30-284. - Stormwater user fee charge rates.

(a) The stormwater utility shall recover the cost of providing stormwater services and facilities by imposing a stormwater user fee on all developed properties within the service area in a fair and equitable manner. The stormwater utility shall apportion the cost of delivering stormwater services to all developed properties based on the demand the property places on the city's stormwater management program and the stormwater services provided by the city.

(b) Stormwater user fee charge rates shall be set and may be modified from time to time by the mayor and city council. A schedule of said rates shall be on file in the office of the city clerk of Garden City. In setting or modifying such rates, it shall be the goal of the city to establish rates that are fair, equitable and reasonable, and together with other funding sources available to the Garden City Stormwater Utility such as special service fees and charges deemed appropriate by the mayor and city council to customers for services, systems, and/or facilities related to stormwater management (e.g. credit application fees, plan review fees, development inspection fees, regulatory compliance inspection fees and other fees related to provision of stormwater management services), are sufficient to support the cost of the stormwater management services, including, but not limited to, the payment of principal and interest on debt obligations, lease payments, operating expenses, capital outlays, non-operating expenses, provisions for prudent reserves and other costs as deemed appropriate by the city.

(c) The basis for calculation of the stormwater user fee charge to all developed property within the city is established in this article. The city shall assign or determine the customer class, amount of impervious area and other pertinent factors as may be needed for the fair, reasonable and equitable allocation of the costs to deliver stormwater management services and to calculate the stormwater user fee charges for all developed properties in the city.

(d) Stormwater user fee charges shall be based upon the total number of residential equivalent units (REUs) associated with developed properties within the city. Each REU shall correspond to 3,000 square feet of impervious surface.

(1) Gravel and compacted soil driveways, parking areas, and roads on private property will be considered impervious surface and included in the customer's REU calculation because of the hydrologic response characteristics of these materials. However, the total surface area associated with these materials will be calculated at 90 percent of the total REUs to reflect the hydrologic response characteristics of these materials. Application of the 90 percent factor to these materials is based on applicable literature sources and reference documents outlined in the applicable sections of the project documents cited in section 30-282.

(e) Calculation of charges. The periodic stormwater user fee charges imposed on all developed properties shall be $4.75 multiplied by the number of REUs for each customer account.

(1) The number of REUs that will be utilized to calculate the user fee charge shall be in accordance with the following:

a. SFR customer class: Each SFR customer account shall be charged 1.0 REU per month unless one of the conditions outlined below applies:

1. If two customer accounts are assigned to a SFR property (i.e. a duplex) then each customer account on that parcel will be charged 0.5 REU per month for billing purposes.

2. If the SFR property has an impervious surface amount that exceeds 9,000 square feet (or three REUs) then a custom stormwater user fee bill will be calculated for the customer account using the NSFR user fee charge calculation approach outlined herein.

b. NSFR customer class: Each NSFR customer shall be charged one REU for each 3,000 square feet, or increment thereof, of impervious surface located on the property to establish the total number of REUs for billing. Fractional REUs will be rounded to one decimal place to establish the number of REUs for billing each month.

c. Undeveloped land customer class: Undeveloped land shall be assigned zero REUs and will not receive a stormwater user fee bill.

(f) Stormwater user fee charges shall be billed on the customer's monthly public utility bill (except as stipulated below) starting with the first billing cycle in February 2009 as called for in this article and the Stormwater Utility Enterprise Fund Ordinance.

(1) Customers that do not receive a monthly public utility bill from the city shall be billed for stormwater services via another method and frequency established by the city administrator.

(2) The property owner will be charged for the total impervious surface for residential customer accounts that are part of a larger common development such as manufactured home parks and apartment complexes.

(3) The city will generally bill the property owner's tenant for the stormwater user fee charge in situations where the tenant has opened an account with the city for public utility services (i.e., water, sewer, and/or sanitation). In selected cases, it may be necessary for the city to bill the landlord or property owner for stormwater services where accurate and equitable apportionment of the user fee charges to multiple accounts on a site is not practical.

(Ord. No. 2009-2, § 1, 2-2-09)

Sec. 30-285. - Stormwater user fee charge exemptions.

(a) Except as provided in this section or otherwise provided by law, no developed public or private property located in the incorporated area of the city shall be exempt from the stormwater user fee charges. No

exception, credit, offset, or other reduction in stormwater user fee charges shall be granted based on age, tax status, economic status, race, religion, disability, or other condition unrelated to the stormwater utility's cost of providing stormwater management program services and facilities.

(b) Exemptions to the stormwater user fee charges are as follows:

(1) Parcels which contain 500 square feet, or less, of impervious surfaces shall be exempt from stormwater user fee charges.

(2) Railroad rights-of-way (tracks) shall be exempt from stormwater user fee charges. This exemption is in recognition of routine drainage system maintenance and capital construction activities undertaken by the rail road company associated with rights-of-way and drainage conveyance systems. However, railroad stations, yards, maintenance buildings, and/or other improved property used for railroad operations shall not be exempt from stormwater user fee charges.

(3) Georgia Department of Transportation (GDOT) streets and rights-of-way shall be exempt from stormwater user fee charges. This exemption is in recognition of routine drainage system maintenance and capital construction activities undertaken by GDOT in association with GDOT rights-of-way road and drainage conveyance systems. However, maintenance buildings and/or other improved property used for GDOT purposes shall not be exempt from stormwater user fee charges. All other state, federal, and county improved properties are subject to the user fee charges on the same basis as private properties.

(4) Chatham County owned public streets and rights-of-way shall be exempt from stormwater user fee charges. This exemption is in recognition of routine drainage system maintenance and capital construction services undertaken by the county. However, other improved property used for county purposes shall not be exempt from stormwater user fee charges.

(Ord. No. 2009-2, § 1, 2-2-09)

Sec. 30-286. - Stormwater user fee charge credits.

(a) The Stormwater utility manager shall grant credits or adjustments based on the technical and procedural criteria set forth in the Stormwater Utility Credit Manual (credit manual), which is incorporated into this division by reference and made a part hereof. Copies of the credit manual will be maintained by and made available from the stormwater utility manager.

(1) Customers may apply for credits and/or adjustments in accordance with the credit manual.

(2) A stormwater user fee charge credit shall be determined based on the technical requirements, standards and criteria contained in the credit manual. The amount of credit, or reduction of the stormwater user fee charge, shall be in accordance with the criteria contained in the credit manual.

(3) Any credit allowed against the stormwater user fee charge is conditioned on continuing compliance with the city's design and performance standards as stated in the credit manual and/or upon continuing provision of the controls, systems, facilities, services, and activities provided, operated, and maintained by the customer. The stormwater utility manager may revoke a credit at any time for noncompliance with applicable standards and criteria as established in the credit manual or this article.

(4) In order to obtain a credit, the customer must make application to the city on forms provided by the stormwater utility manager for such purpose, and in accordance with the procedures outlined in the credit manual.

(5) The application for any credit or adjustment must be in writing and must include the information necessary to establish eligibility for the credit or adjustment, and be in the format described in the credit manual. The customer's public utility account must be paid and current prior to review and

approval of a stormwater utility credit application by the city. Incomplete applications will not be accepted for consideration and processing.

(b) When an application for a credit is deemed complete by the stormwater utility manager, he/she shall have 30 days from the date the complete application is received to approve the credit in whole, approve the credit in part, or deny the credit. The stormwater utility manager's decision shall be in writing and will be mailed to the address provided on the adjustment request, and service shall be complete upon mailing. Credits applied for by the customer and approved in whole or in part, shall apply to all stormwater user fee charges in accordance with the terms defined in the credit manual.

(Ord. No. 2009-2, § 1, 2-2-09)

Sec. 30-287. - Stormwater user fee charge billing, delinquencies, collections, adjustments.

Failure to receive a stormwater utility user fee charge bill is not justification for nonpayment. The property owner and/or utility customer account holder, as identified from city public utility billing database information and public land records of Chatham County, shall be obligated to pay the applicable stormwater user fee charge.

(1) *Billing.*

a. Stormwater user fee charges shall begin to accrue February 1, 2009, and shall be billed prospectively. A bill for stormwater user fee charges may be sent through the United States Postal Service or by alternative means, notifying the stormwater utility customer of the following items (as a minimum): the stormwater user fee charge amount (less any approved credits), the date the payment is due and the date when payment is past due.

b. Unless otherwise billed directly to the property owner, the stormwater user fee charge will be billed and collected on a common statement and collected along with other city utility services from the person in whose name such services have been placed on account with the city. If and when the account is closed or becomes delinquent, the bills for unpaid previous service as well as for current and future service shall be sent to the property owner.

c. Frequency of the billing of stormwater user fee charges shall be specified by the city administrator.

d. Failure to receive a bill shall not be justification for nonpayment. Regardless of the party to whom the bill is initially directed, the owner of each developed property subject to stormwater user fee charges shall be ultimately obligated to pay stormwater user fee charges and any interest at the rate of 18 percent per annum on delinquent stormwater user fee charge payments.

e. If a property is unbilled, or if no bill is sent for a particular tract of developed property, the stormwater utility may back bill for a period of up to one year, but shall not be entitled to any interest or any delinquency charges during the back billed period.

(2) *Delinquencies and collections.*

a. Unpaid stormwater service fees shall be collected by filing suit to collect on an unpaid account and by using all methods allowed by Georgia law to collect on any judgment obtained thereby, including enforcement of any lien resulting from any such judgment. Unless reduced to a judgment and a writ of fieri facias issued, the unpaid user fee charge shall not constitute a direct lien against the owner and/or the property.

b. A late charge shall be assessed against the customer for the unpaid balance of any stormwater utility user fee charge that becomes delinquent in accordance with applicable state law and city ordinance provisions. In addition, the city shall assess all costs of collection, including attorney's fees and court costs, against the property owner.

(3) *Adjustments.*

a. The stormwater utility manager shall administer the procedures and standards for the adjustment of the stormwater user fee charge.

1. If a customer believes his/her stormwater user fee is incorrect, the customer may seek an adjustment of the stormwater user fee charge allocated to a property at any time by submitting the request in writing to the stormwater utility manager and setting forth in detail the grounds upon which relief is sought. The customer's public utility account must be paid and current prior to consideration of an adjustment request by the city.

2. Customers requesting the adjustment shall be required, at their own expense, to provide accurate impervious area and other supplemental information to the stormwater utility manager, including, but not limited to, a survey certified by a registered land surveyor or a professional engineer.

   Submittal of this information will be required if the city staff cannot make a determination based on field inspection and/or review of existing city aerial photography. Failure to provide the required information within the time limits established by the stormwater utility manager, as may be reasonably extended, may result in denial of the customer's adjustment request.

3. Once a completed adjustment request and all required information are received by the stormwater utility manager, the stormwater utility manager shall within 30 calendar days render a written decision.

4. In considering an adjustment request, the stormwater utility manager shall consider whether the calculation of the stormwater user fee charge for the property is correct.

5. The stormwater utility manager's decision shall be in writing and will be mailed to the address provided on the adjustment request, and service shall be complete upon mailing.

6. If the result of an adjustment is that a refund is due the applicant, the refund will be applied as a credit on the applicant's next stormwater user fee charge bill.

(Ord. No. 2009-2, § 1, 2-2-09)

Sec. 30-288. - Appeals and hearings.

(a) *Appeals.* An appeal to the city administrator may be taken by any property owner or customer aggrieved by any decision of the stormwater utility manager. The appeal shall be taken within 30 days of the decision of the stormwater utility manager by filing with the city administrator a notice of appeal in writing specifying the grounds thereof. Upon the filing of the notice of appeal, the stormwater utility manager shall forthwith transmit to the city administrator all documentation constituting the record upon which the decision appealed from was taken.

(b) *Hearing.* The city administrator shall fix a reasonable time for hearing the appeal and give written notice to the appellant at least ten days prior to the hearing date. The notice shall indicate the place, date and time of the hearing. The city administrator shall affirm, reverse, affirm in part, or reverse in part the decision of the stormwater utility manager after hearing the evidence. If the decision of the stormwater utility manager is reversed in whole or in part, resulting in a refund or credit due to the property owner or customer, then such refund or credit shall be calculated retroactive to the date of the initial appeal. The decision of the city administrator shall be final, and there shall be no further administrative action. Any person aggrieved or dissatisfied with the decision of the city administrator may petition the Superior Court of Chatham County for Writ of Certiorari.

(Ord. No. 2009-2, § 1, 2-2-09)

Secs. 30-289—30-299. - Reserved.

Sec. 30-230. - Findings of fact.

It is hereby determined that:

(1) The land development process significantly alters the hydrologic response of development sites, increasing stormwater runoff rates, volumes and pollutant loads, which could increase incidents of flooding thereby endangering infrastructure, public and private property and human life;

(2) The land development process significantly alters the hydrologic response of development sites, increasing stormwater runoff rates, volumes and pollutant loads, and alters water levels and fluctuations and increases pollutant transport and deposition in wetlands, rivers and streams;

(3) The land development process significantly alters the hydrologic response of development sites, increasing stormwater runoff rates, volumes and pollutant loads, and alters salinity concentrations and fluctuations and increases primary productivity and pollutant transport and deposition in estuaries;

(4) The land development process significantly alters the hydrologic response of development sites, increasing stormwater runoff rates, volumes and pollutant loads, and increases bacteria transport and deposition in near coastal waters, which leads to beach contamination and poses a serious threat to human health;

(5) The land development process significantly alters the hydrologic response of development sites, increasing stormwater runoff rates and volumes, and decreases the amount of rainfall that is available to recharge shallow groundwater aquifers;

(6) The negative impacts of the land development process on local aquatic resources can adversely affect the health, safety and general welfare of the general public as well as the quality of life of its citizens;

(7) Every residential and nonresidential parcel of real property, both public and private, benefits from the implementation of stormwater management regulations as well as proper maintenance and operation of the municipal storm sewer system (MS4);

(8) The negative impacts of the land development process can be controlled and minimized through the management of stormwater runoff rates, volumes and pollutant loads;

(9) Communities located within Georgia's Coastal Nonpoint Source Management Area and area of special interest are required to comply with a number of state and federal regulations that require the adverse impacts of the land development process to be controlled and minimized;

(10) Therefore, the City of Garden City has determined that it is in the public interest to control and minimize the adverse impacts of the land development process and has established this set of local stormwater management regulations to control post-construction stormwater runoff rates, volumes and pollutant loads on development and redevelopment sites.

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-231. - Purpose and intent.

The purpose of this article is to protect and maintain the integrity of local aquatic resources and, consequently, the health, safety and welfare of the general public, by establishing localstormwater management regulations that control and minimize the adverse impacts of the land development process. The ordinance seeks to achieve these goals by enacting provisions that:

(1) Protect, maintain, and enhance the short-term and long-term public health, safety, and general welfare. This objective will be achieved by providing for regulation and management of a municipal storm sewer system, including public and private facilities in the city's service area.

(2) Comply with the Georgia Department of Natural Resources (DNR) and federal Environmental Protection Agency (EPA) stormwater regulations developed pursuant to the Clean Water Act. These requirements include:

   a. Control the discharge of stormwater and contribution of pollutants to the municipal storm sewer system (MS4) by stormwater discharges associated with impervious area and the quality of stormwater discharged from sites with impervious area;

   b. Prohibit illicit connections and/or discharges to the MS4;

   c. Control discharge to municipal storm sewers of spills, dumping or disposal of materials other than stormwater; and

   d. Control, through intergovernmental agreements, contribution of pollutants from one municipal/county system to another.

(3) Establish minimum requirements and procedures to regulate the adverse effects of increased stormwater runoff and development in flood hazard areas.

(4) Establishing decision-making processes that can be applied during the site planning and design process to help protect the integrity of local aquatic resources;

(5) Establishing post-construction stormwater management and site planning and design criteria to help protect natural resources from the direct impacts of the land development process and preserve existing hydrologic conditions on development sites;

(6) Establishing post-construction stormwater management and site planning and design criteria to help reduce flooding, channel erosion and pollutant transport and deposition in local aquatic resources;

(7) Establishing design guidelines for green infrastructure and stormwater management practices that can be used to meet the post-construction stormwater management and site planning and design criteria;

(8) Encouraging that green infrastructure practices, which include better site planning techniques, better site design techniques and low impact development practices, be used to the maximum extent practical on development sites;

(9) Establishing provisions for the long-term inspection and maintenance of green infrastructure and stormwater management practices to ensure that they continue to function as designed and pose no threat to public safety; and

(10) Establishing administrative procedures for the submittal, review, approval and disapproval of stormwater management plans and for the inspection of approved development projects.

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-232. - Applicability and exemptions.

(a) This article shall be applied to all land disturbing activities, unless exempt pursuant to subsection (b) of this section. The stormwater management regulations presented within shall be applied to any new development or redevelopment activity that meets one or more of the following criteria:

   (1) New development that involves the creation of 5,000 square feet or more of impervious cover or that involves other land disturbing activities of one acre or more;

   (2) Redevelopment that involves the creation, addition or replacement of 5,000 square feet or more of impervious cover or that involves other land disturbing activities of one acre or more.

(3) New development or redevelopment, regardless of size, that is part of a larger common plan of development, even though multiple, separate and distinct land disturbing activities may take place at different times and on different schedules.

(4) New development or redevelopment, regardless of size, that involves the creation or modification of a stormwater hotspot, as defined herein as well as in the City's Code of Ordinances, Stormwater Utility Credit Manual, the Georgia Stormwater Management Manual (GSMM) and other related guidance.

(b) The following activities are exempt from this article:

(1) New development or redevelopment that involves the creation, addition or replacement of less than 5,000 square feet of impervious cover and that involves less than one acre of other land disturbing activities.

(2) New development or redevelopment activities on individual residential lots that are not part of a larger common plan of development and do not meet any of the applicability criteria listed above.

(3) Additions or modifications to existing single-family homes and duplex residential units that do not meet any of the applicability criteria listed above.

(4) Development projects that are undertaken exclusively for agricultural or silvicultural purposes within areas zoned for agricultural or silvicultural land use.

(5) Maintenance and repairs of any green infrastructure or stormwater management practices deemed necessary by the city manager (or his designee).

(6) Any part of a land development project that was approved by the Garden City Mayor and City Council prior to the adoption of this ordinance provided that it meets the stipulations outlined in subsection (c) of this section.

(7) Redevelopment activities that involve the replacement of impervious cover when the original impervious cover was wholly or partially lost due to natural disaster or other acts of God.

(c) Phased developments with existing stormwater master plans. For phased development projects, a stormwater master plan shall be prepared to conceptually indicate how the minimum requirements of the city's previous stormwater management ordinance were to have been met. The stormwater master plan shall consolidate detention facilities to the maximum extent practical. The existence of a stormwater master plan does not necessarily preclude compliance with the requirements of this article for each subsequent phase as it is being developed. However, the city manager or his designee will favorably consider the existence of a site-specific stormwater master plan that is substantially compliant with subsection 30-239(b) of this article when evaluating the applicability of this ordinance to subsequent phases of development. The city manager or his designee may require that additional requirements be incorporated into the subsequent phases of development to protect the health, safety and welfare of the general public as well as to ensure compliance with applicable federal, state and local regulations.

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-233. - Scope of responsibility.

(a) The provisions of this article shall apply throughout the city and to drainage systems maintained by intergovernmental agreement between the city and the county and/or other municipal jurisdictions.

(b) The city manager or his designee shall be responsible for the administration, implementation, and enforcement of the provisions of this article.

(c) The city manager or his designee shall be responsible for the conservation, management, extension and improvement of the municipal storm sewer system, including activities necessary to control

stormwater runoff and activities necessary to carry out stormwater management programs included in the city's NPDES Phase I Municipal Separate Storm Sewer System (MS4) permit.

(d) The application of this article and the provisions expressed herein shall be the minimum stormwater management requirements and shall not be deemed a limitation or repeal of any other local requirements authorized by state statute. Other stormwater project improvements and/or environmental requirements, as defined under state or federal law, may be required.

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-234. - Responsibility of the city.

The city planning and economic development department (the department) in consultation with the city public works department and the stormwater utility will:

(1) Administer, coordinate and oversee acquisition, design, and construction of municipal stormwater facilities and conveyances;

(2) Establish or oversee establishment and implementation of development standards and guidelines for controlling stormwater runoff;

(3) Determine the manner in which stormwater facilities should be operated;

(4) Observe the installation and the ongoing operation of private systems which discharge to the city municipal separate storm sewer system (MS4);

(5) Advise city council on issues related to stormwater;

(6) Manage facilities and properties controlled by the city and prescribe how they are used by others;

(7) Require that new, increased, or significantly changed stormwater contributions comply with the terms of this article and any local design manual (LDM); and

(8) Develop programs or procedures to control the discharge of pollutants into the municipal storm sewer system (MS4).

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-235. - Compatibility with other regulations.

This article is not intended to interfere with, modify or repeal any other ordinance, rule, regulation or other provision of law. The requirements of this article should be considered minimum requirements, and where any provision of this article imposes restrictions different from those imposed by any other ordinance, rule, regulation or other provision of law, whichever provision is more restrictive or imposes higher protective standards for human health or the environment shall control.

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-236. - Severability.

If the provisions of any section, subsection, paragraph, subdivision or clause of this article shall be judged invalid by a court of competent jurisdiction, such judgment shall not affect or invalidate the remainder of any section, subsection, paragraph, subdivision or clause of this article.

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-237. - Stormwater Management Local Design Manual (LDM).

Garden City will utilize the information presented in the latest edition of the Coastal Stormwater Supplement (CSS) to the GSMM, and the Garden City Stormwater Management Local Design Manual (LDM), to assist with implementation of this article. The LDM shall serve as a companion document to the CSS and the GSMM. The LDM shall endeavor to accomplish the following:

(1) Clarify discrepancies between the CSS and any section of the city's stormwater management ordinance and other related development regulations;

(2) Provide guidance to supplement information contained in the city's stormwater management ordinance and other related development regulations;

(3) Establish minimum stormwater management related design standards and criteria; and

(4) Further describe the stormwater management design preparation, submittal, review and approval requirements. The criteria within the LDM shall be considered minimum design standards and, in the event of a conflict, supersede design standards set forth in the CSS and/or the GSMM. A copy of the LDM shall be available from the city.

In addition, Garden City encourages the application of the practices and concepts contained in the Green Growth Guidelines to meet the goals and objectives of the Garden City Post Construction Stormwater Management Ordinance. A copy of the Green Growth Guidelines can be viewed and downloaded from the following link for use in site design activities (http://crd.dnr.state.ga.us/content/displaycontent.asp?txtDocument=969).

Garden City also encourages the use and application of the "Georgia-CSS-Site-Planning-Design-Worksheet-Final-Apr-09" spreadsheet tool to evaluate compliance with the CSS design guidelines. A copy of the spreadsheet tool can be obtained from the city or from the following website link (http://www.mpcnaturalresources.org/water-resources/georgia-storm-water.html).

These references and assistance tools may be updated and expanded periodically, based on additional information obtained through scientific research, performance monitoring and local experience.

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-238. - Definitions.

Accidental discharge shall be defined as a discharge prohibited by this article into the municipal storm sewer system which occurs by chance and without planning or consideration prior to occurrence.

Appeal authority shall mean the city council, one of whose purpose is to review appeals to this article and render decisions and variances.

Applicant shall mean a property owner or agent of a property owner who has submitted an application for a post-construction stormwater management development plan review.

Aquatic buffer shall mean an area of land located around or near a stream, wetland, or waterbody that has intrinsic value due to the ecological services it provides, including pollutant removal, erosion control and conveyance and temporary storage of flood flows.

Aquatic resource protection shall mean measures taken to protect aquatic resources from several negative impacts of the land development process, including complete loss or destruction, stream channel enlargement and increased salinity fluctuations.

Base flood elevation (BFE) shall mean the minimum expected water surface elevation identified by the Federal Emergency Management Agency (FEMA) or as determined by the city manager.

Best management practices (BMPs) shall mean a wide range of management procedures, activities, and prohibitions or practices which control the quality and/or quantity of stormwater runoff and which are compatible with the planned land use.

Better site design techniques shall mean site design techniques that can be used during the site planning and design process to minimize land disturbance and the creation of new impervious and disturbed pervious cover. Better site design techniques include reducing clearing and grading limits, reducing roadway lengths and widths and reducing parking lot and building footprints.

Better site planning techniques shall mean site planning techniques that can be used during the site planning and design process to protect valuable aquatic and terrestrial resources from the direct impacts of the land development process. Better site planning techniques include protecting primary and secondary conservation areas.

Building shall mean any structure, either temporary or permanent, having walls and a roof, designed for the shelter of any person, animal or property and occupying more than 100 square feet of area.

Channel shall mean a natural or artificial watercourse with a definite bed and banks that conducts continuously or periodically flowing water.

Clean Water Act shall mean the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq.).

Coastal stormwater supplement (CSS) shall mean the April 2009 edition of the CSS to the GSMM. This document is a technical design supplement to the GSMM that was developed for coastal Georgia. The CSS addresses stormwater management practices and BMPs that are specific and applicable to coastal stormwater quantity and quality issues.

Cooling water shall mean water used exclusively as a cooling medium in an appliance, device or apparatus.

Conservation areas shall mean permanently protected areas of a site that are preserved, in perpetuity, in an undisturbed, natural state.

Conservation easement shall mean a legal agreement between a land owner and a local, state or federal government agency or land trust that permanently protects conservation areas on the owner's land by limiting the amount and type of development that can take place within them but continues to leave the conservation areas in private ownership.

Conveyance shall mean stormwater features designed for the movement of stormwater through the drainage system, such as concrete or metal pipes, ditches, depressions, swales, etc.

Dedication shall mean the deliberate appropriation of property by its owner for general public use.

Department shall mean the Garden City Planning and Economic Development Department which is primarily responsible for implementation of the provisions of this article.

Detention shall mean the temporary storage of stormwater runoff in a stormwater management practice for the purpose of controlling the peak discharge rates and providing gravitational settling of pollutants.

Detention facility shall mean a permanent stormwater management facility whose primary purpose is to temporarily store stormwater above the normal groundwater surface elevation and release the stored runoff at controlled rates. Acceptable types may include but are not limited to lagoons, ponds, wetlands, parking areas, and subsurface pipes.

Developer shall mean a person who undertakes a land development project.

Development activity shall mean any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, dredging, clearing, grubbing, scraping, grading, filling, paving, excavation or other activities significantly disturbing the soil or vegetation.

Development project shall mean a new development or redevelopment project.

Development site shall mean a parcel of land where land disturbing activities have been or will be initiated to complete a land development project.

Director shall mean either the city manager or his designee.

Discharge shall mean the release of treated or untreated water to the municipal storm sewer system.

Drainage easement shall mean a legal right granted by a land owner to a grantee allowing the grantee to convey, treat or manage stormwater runoff on the private land subject to the drainage easement.

Easement shall mean an acquired legal right for the specific use of land owned by others.

Erosion and sediment control plan shall mean a plan that is designed to minimize and control the accelerated erosion and increased sediment loads that occur at a site during land disturbing activities.

Evapotranspiration shall mean the loss of water to the atmosphere through both evaporation and transpiration, which is the evaporation of water from the aerial parts of plants.

Extended detention shall mean the temporary storage of stormwater runoff in a stormwater management practice for an extended period of time, typically 24 hours or greater.

Extreme flood protection shall mean measures taken to protect downstream properties from dangerous extreme flooding events and help maintain the boundaries of the existing 100-year floodplain.

Fee in lieu contribution shall mean a payment of money in place of meeting all or part of the stormwater management criteria required by a post-construction stormwater management ordinance.

Flooding shall mean a volume of stormwater runoff that is too great to be confined within the banks of a stream, river or other aquatic resource or the limits of a stormwater conveyance feature and that overflows onto adjacent lands.

Flood hazard area shall mean those delineated geographical areas of special flood hazard identified by the Federal Emergency Management Agency (FEMA) or as determined by the city manager or his designee.

Georgia Stormwater Management Manual (GSMM) shall mean the latest edition of all volumes of the Georgia Stormwater Management Manual, a technical guidance document governing stormwater management design, construction and long-term maintenance activities in Georgia.

Governing body shall mean the elected officials of the city council.

Green infrastructure practices shall mean the combination of three complementary, but distinct, groups of natural resource protection and stormwater management practices and techniques, including better site planning and design techniques and low impact development practices, that are used to protect valuable terrestrial and aquatic resources from the direct impacts of the land development process, maintain pre-development site hydrology and reduce post-construction stormwater runoff rates, volumes and pollutant loads.

Hydrologic soil group (HSG) shall mean a Natural Resource Conservation Service classification system in which soils are categorized into four runoff potential groups. The groups range from Group A soils, with high permeability and little runoff produced, to Group D soils, which have low permeability rates and produce much more runoff.

Illicit connection and discharge shall mean a connection to a municipal storm sewer system which results in an unauthorized discharge that is not composed entirely of stormwater runoff except discharges pursuant to a National Pollutant Discharge Elimination System (NPDES) permit (other than the NPDES permit for discharges from the municipal storm sewer).

Impaired waters shall mean those streams, rivers, lakes, estuaries and other water bodies that currently do not meet their designated use classification and associated water quality standards under the Clean Water Act.

Impervious cover shall mean a surface composed of any material that greatly impedes or prevents the natural infiltration of water into the underlying native soils. Impervious surfaces include, but are not limited to, rooftops, buildings, sidewalks, driveways, streets and roads.

Industrial stormwater permit shall mean a national pollutant discharge elimination system (NPDES) permit issued to an industry or group of industries that regulates the pollutant levels associated with industrial stormwater discharges or specifies on-site pollution control strategies.

Infill development shall mean land development that occurs within designated areas based on local land use, watershed and/or utility plans where the surrounding area is generally developed, and where the site or area is either vacant or has previously been used for another purpose.

Infiltration shall mean the process of allowing stormwater runoff to percolate into the underlying native soils.

Infiltration practice shall mean a green infrastructure or stormwater management practice designed to provide infiltration of stormwater runoff into the underlying native soils. These stormwater management practices may be above or below grade.

Inspection and maintenance plan agreement shall mean a written agreement and plan providing for the long-term inspection and maintenance of all green infrastructure practices, stormwater management practices, stormwater conveyance features and stormwater drain infrastructure on a development site.

Jurisdictional wetland shall mean an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation, and are those waters of the United States that are under the jurisdictional of the Army Corps of Engineers (ACOE).

Land development shall mean any project undertaken to change or improve a site that involves one or more land disturbing activities.

Land disturbing activity (LDA) shall mean any activity that changes stormwater runoff rates, volumes and pollutant loads on a site. These activities include, but are not limited to, the grading, digging, cutting, scraping, or excavating of soil, the placement of fill materials, paving, construction, substantial removal of vegetation and any activity that bares soil or rock or involves the diversion or piping of any natural or manmade watercourse.

Land owner shall mean the legal or beneficial owner of land, including those holding the right to purchase or lease the land, or any other person holding proprietary rights in the land.

Low impact development (LID) practice shall mean small-scale stormwater management practices that are used to disconnect impervious and disturbed pervious surfaces from the storm drain system and reduce post-construction stormwater runoff rates, volumes and pollutant loads. Low impact development practices include soil restoration, site reforestation/revegetation, green roofs, vegetated filter strips and rain gardens.

Maintenance shall mean any action necessary to preserve stormwater management facilities in proper working condition, in order to serve the intended purpose set forth in this ordinance or to prevent structural failure of such facilities.

Municipal separate storm sewer system (MS4) shall mean a conveyance or system of conveyances (including roads with drainage systems, highways, rights-of-way, municipal streets, catch basins, curbs, gutters, ditches, canals, manmade channels, storm drains detention ponds, other stormwater facilities) which is:

(1) Owned or maintained by the city;

(2) Designed or used for collecting or conveying stormwater;

(3) Not a combined sewer; and

(4) Not part of a publicly owned treatment works (POTW).

National pollutant discharge elimination system (NPDES) stormwater discharge permit shall mean a permit issued by the United State Environmental Protection Agency (USEPA), or by a state under authority delegated pursuant to 33 USC § 1342(b), that authorizes the discharge of pollutants to waters of the state, whether the permit is applicable on an individual, group, or general area-wide basis.

New development shall mean a land development project undertaken on a previously undeveloped or unimproved site.

Nonpoint source pollution shall mean pollution from any source other than from a discernible, confined and discrete conveyance, such as a wastewater treatment plant or industrial discharge. Sources of nonpoint

source pollution include, but are not limited to, agricultural, silvicultural, mining and construction activities, subsurface disposal and urban stormwater runoff.

Nonstructural stormwater management practice shall mean any natural resource protection or stormwater management practice or technique that uses natural processes and natural systems to intercept, convey, treat and/or manage stormwater runoff. Nonstructural stormwater management practices include, but are not limited to, protecting primary and secondary conservation areas, reducing clearing and grading limits, reducing roadway lengths and widths, reducing parking lot and building footprints, soil restoration, site reforestation/revegetation, green roofs, vegetated filter strips and rain gardens.

Off-site stormwater management practice shall mean a green infrastructure or stormwater management practice located outside the boundaries of a development site.

On-site stormwater management practice shall means a green infrastructure or stormwater management practice located within the boundaries of a development site.

Open tidal waters shall mean natural bodies of water influenced by daily tide fluctuations that have no downstream manmade flow restrictions.

Overbank flood protection shall mean measures taken to protect downstream properties from damaging overbank flooding events.

Owner shall mean the legal or beneficial owner of a piece of land, including, but not limited to, a mortgagee or vendee in possession, receiver, executor, trustee, lessee or other person, firm, or corporation in control of the site.

Permanent stormwater management practice shall mean a green infrastructure or stormwater management practice that will be operational after the land disturbing activities are complete and that is designed to become a permanent part of the site for the purposes of managing post-construction stormwater runoff.

Permit shall mean the permit issued by a local development review authority to an applicant, which is required for undertaking any land development project or land disturbing activities, typically referred to as a land disturbance activity (LDA) permit.

Person shall mean any and all persons, natural or artificial and includes any individual, firm, corporation, government agency, business trust, estate, trust, partnership, association, two or more persons having a joint or common interest, or any other legal entity.

Pollution shall mean the contamination or other alteration of any water's physical, chemical or biological properties, including change in temperature, taste, color, turbidity, or odor of such waters or discharge of any liquid, gaseous, solid, radioactive, or other substance into any such waters as will or is likely to create a nuisance or render such waters harmful, detrimental or injurious to the public health, safety or welfare or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life.

Post developed conditions shall mean the conditions following the completion of the land development activity in terms of topography, vegetation, land use, and rate and direction of stormwater runoff.

Pre-developed conditions shall mean those land use conditions that exist prior to the initiation of the proposed land development activity in terms of topography, vegetation, land use, and quality, rate, volume, and direction of stormwater runoff.

Post-development hydrology shall mean the set of hydrologic conditions that may reasonably be expected to exist on a development site, after the completion of all land disturbing and construction activities.

Pre-development hydrology shall mean the set of hydrologic conditions that exist on a development site prior to the commencement of any land disturbing activities (i.e. the wooded undisturbed/undeveloped condition).

Private shall mean property or facilities owned by individuals, corporations, and other organizations and not by city, county, state, or federal government.

Procedure shall mean a procedure adopted by the city, by and through the city manager or his designee, to implement a regulation or regulations adopted under this article, or to carry out other responsibilities as may be required by this article.

Receiving stream or receiving aquatic resource shall mean the body of water or conveyance into which stormwater runoff is discharged.

Recharge shall mean the replenishment of groundwater aquifers.

Record drawings shall mean a set of engineering or site drawings that delineate the permitted stormwater management facility as actually constructed.

Redevelopment shall mean a change to previously existing, improved property, including but not limited to the demolition or building of structures, filling, grading, paving, or excavating, but excluding ordinary maintenance activities, remodeling of buildings on the existing footprint, resurfacing of paved areas and exterior changes or improvements that do not materially increase or concentrate stormwater runoff or cause additional nonpoint source pollution.

Regional stormwater management practice shall mean a stormwater management practice designed to control stormwater runoff from multiple properties, where the owners or developers of the individual properties may participate in providing land, financing, design services, construction services and/or maintenance services for the practice.

Regulation shall mean any regulation, rule or requirement adopted by the city pursuant to the requirements of this article.

Responsible party shall mean any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity, or any other legal entity; or their legal representatives, agents, or assigns that is named on a stormwater inspection and maintenance plan agreement as responsible for the long-term operation and maintenance of one or more green infrastructure or stormwater management practices.

Retention facility shall mean a permanent facility whose primary purpose is to permanently store a given volume of stormwater runoff. Release of the given volume is by infiltration or evaporation.

Sanitary sewer system shall mean the complete sanitary sewer system of the city which discharges sewage directly or indirectly into the sewage treatment plant, including sanitary sewer pipelines, manholes and flushing inlets and appurtenances to the foregoing, but shall exclude any portion or facilities of the sewage treatment plant.

Site shall mean any lot, plot, parcel or tract of land.

Stop-work order shall mean an order issued that requires that all land disturbing activity on a site be stopped.

Stormwater shall mean stormwater runoff, snow melt runoff, and surface runoff and drainage.

Stormwater hotspot shall mean an area where land use or pollution generating activities have the potential to generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in stormwater runoff. Stormwater hotspots include, but are not limited to, fueling stations (including temporary fueling stations during construction), golf courses, public works yards and marinas.

Stormwater management shall mean the interception, conveyance, treatment, and management of stormwater runoff in a manner that is intended to prevent flood damage, channel erosion, habitat degradation and water quality degradation and to enhance and promote the public health, safety and general welfare.

Stormwater management facilities shall mean constructed or natural components of a stormwater drainage system, designed to perform a particular function, or multiple functions, including, but not limited to pipes, swales, ditches, canals, wetlands, culverts, street gutters, detention basins, flood hazard areas, retention basins, constructed wetlands, infiltration devices, catch basins, oil/water separators, sediment basins, natural and modular pavement.

Stormwater management plan shall mean a written document that details how stormwater runoff will be managed on a development site and that shows how the stormwater management criteria that apply to the development project have been met.

Stormwater management practice shall mean a practice or technique, either structural or nonstructural that is used to intercept stormwater runoff and change the characteristics of that runoff. Stormwater management practices are used to control post-construction stormwater runoff rates, volumes and pollutant loads to prevent increased flood damage, channel erosion, habitat degradation and water quality degradation.

Stormwater management system shall mean the entire suite of green infrastructure and stormwater management practices and stormwater conveyance features that are used to intercept, convey, treat and manage stormwater runoff on a development site.

Stormwater retrofit shall mean a green infrastructure or stormwater management practice designed for an existing development site that previously had no green infrastructure or stormwater management practice in place or had a practice that was not meeting local stormwater management criteria.

Stormwater runoff shall mean the direct response of a land surface to precipitation and includes the surface and subsurface runoff that enters a ditch, stream, storm drain or other concentrated flow during and following the precipitation.

Stormwater runoff reduction shall mean providing for the interception, evapotranspiration, infiltration, or capture and reuse of stormwater runoff to help maintain pre-development site hydrology and help protect aquatic resources from several indirect impacts of the land development process, including decreased groundwater recharge, decreased baseflow and degraded water quality.

Subdivision shall mean the division of a parcel of land to create one or more new lots or development sites for the purpose, whether immediately or in the future, of sale, transfer of ownership, or land development, and includes divisions of land resulting from or made in connection with the layout or construction of a new street or roadway or a change in the layout of an existing street or roadway.

Variance shall mean the modification of the minimum stormwater management requirements for specific circumstances where strict adherence of the requirements would result in unnecessary hardship and not fulfill the intent of this article.

Water quality shall mean those characteristics of stormwater runoff that relate to the physical, chemical, biological or radiological integrity of water.

Water quality protection shall mean adequately treating stormwater runoff before it is discharged from a development site to help protect downstream aquatic resources from water quality degradation.

Water quantity shall mean those characteristics of stormwater runoff that relate to the rate and volume of the stormwater runoff.

Watercourse shall mean a permanent or intermittent stream or other body of water, either natural or manmade, which collects and/or conveys surface water.

Watershed management plan or subwatershed management plan shall mean a document, usually developed cooperatively by government agencies and other stakeholders, to protect, restore and/or otherwise manage the water resources found within a particular watershed or subwatershed. Watershed or subwatershed management plans commonly identify threats, sources of impairment, institutional issues and technical and programmatic solutions or projects to protect and/or restore water resources.

Watershed shall mean the drainage area contributing stormwater runoff to a single point in the stormwater system.

Wetland hydroperiod shall mean the pattern of fluctuating water levels within a wetland caused by the complex interaction of surface water, groundwater, topography, soils and geology within a wetland.

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-239. - Stormwater management design procedures and requirements.

(a) *Development plan submittal review requirements.* No owner or developer shall undertake any non-exempt development activity without first meeting the requirements of this article and receiving city approval for the proposed land development activity from Garden City. Unless specifically exempted by this article or granted a waiver by the city manager or his designee from specific requirements, any owner or developer proposing a development project shall submit to Garden City the required information in a format specified by Garden City. The following items shall accompany the submittal package:

(1) Stormwater management concept plan prepared in accordance with subsection (b);

(2) Record of a consultation meeting held in accordance with subsection (c);

(3) Stormwater management design plan prepared in accordance with subsection (d);

(4) Stormwater management system inspection and maintenance agreement prepared in accordance with subsection (e);

(5) Application and development plan review fees submitted in accordance with subsections (f) and (g), and the city's most recently adopted fee schedule; and

(6) A statement from the developer that he/she understands that they will be required to post and that he/she can post a performance bond (or other means of security acceptable to Garden City) in accordance with applicable requirements of subsection (h).

The LDM provides additional details and requirements pertaining to the preparation, submittal, review and approval process associated with stormwater management design and development plans. If an owner or developer has been granted a waiver by the city manager or his designee, written documentation pertaining to the specific items that will be submitted as well as those that will not be submitted must be provided to the city at the onset of the project.

(b) *Stormwater management concept plan.* Prior to the preparation and submittal of a stormwater management design plan review and approval request, the owner or developer shall submit to Garden City a stormwater management concept plan illustrating the layout of the proposed development project and showing, in general, how post-construction stormwater runoff will be managed on the development site.

Green infrastructure practices (i.e., better site planning techniques, better site design techniques, low impact development practices) are encouraged to be used during the creation of a stormwater management concept plan. Green infrastructure practices include, but are not limited to, protecting primary and secondary conservation areas, reducing clearing and grading limits, reducing roadway lengths and widths, reducing parking lot and building footprints, soil restoration, site reforestation/revegetation, green roofs, vegetated filter strips and rain gardens. Section 7.1 of the LDM provides additional detail regarding the requirements for the stormwater management concept plan.

(c) *Consultation meeting and coordination.* All applicants are encouraged to attend a consultation meeting with Garden City staff to discuss the proposed development project, the stormwater management concept plan and the approach that will be used to satisfy the post-construction stormwater management and site planning and design criteria that apply to the development site. This consultation meeting should take place in advance of submittal of the stormwater management concept plan, for the purposes of verifying site conditions and the feasibility of the stormwater management concept plan.

(d) *Stormwater management design plan.* Subsequent to approval of the stormwater management concept plan, the owner or developer shall submit to Garden City for review and approval, a stormwater management design plan that details how post-development stormwater runoff will be controlled or managed on the development site. The stormwater management design plan shall detail how the proposed development project will meet the post-construction stormwater management and site planning and design criteria that apply to the development site.

A copy of the stormwater management concept plan shall be included with the submittal of the stormwater management design plan. The stormwater management design plan should be consistent with the stormwater management concept plan. If any significant changes were made to the plan of development, the city manager or his designee may ask for a written statement providing rationale for any of the changes that were made. Section 7 of the LDM provides additional detail regarding the requirements for the stormwater management design plan.

(e) *Stormwater management system inspection and maintenance plan agreement.* Prior to the issuance of a LDA Permit for any new development or redevelopment activity that requires one, the applicant or owner of the development site, if different, must execute an inspection and maintenance plan agreement that shall be binding on all subsequent owners of the site, unless the stormwater management system is dedicated to and accepted by Garden City. A sample copy of the stormwater facility inspection and maintenance plan agreement is included in the Garden City Stormwater Management LDM. Section 7.8 of the LDM provides additional detail regarding the requirements for the stormwater facility inspection and maintenance plan agreement.

(f) *Stormwater management design submittal and approval procedure.* The LDM provides detailed information regarding the procedures and requirements for the stormwater management design plan submittal and approval process. The process is generally described in the ensuing paragraphs of this section of the article.

(1) Stormwater management design review and approval requests shall be filed with Garden City in a format specified by the city.

(2) Stormwater management design review and approval requests shall include the items set forth herein.

(3) The city manager or his designee shall inform the applicant whether the stormwater management design plan and the inspection and maintenance plan agreement are approved or disapproved.

(4) If the design package, stormwater management design plan, and/or the inspection and maintenance plan agreement are not approved, the city manager (or his designee) shall notify the applicant of that fact in writing. The applicant must revise any item not meeting the requirements of this article and resubmit the package.

(5) Upon a finding by the city manager or his designee that the stormwater management design package; stormwater management design plan; and the inspection and maintenance agreement plan (if applicable) meet the requirements of this article, the city manager or his designee will approve the stormwater management design for the development project, provided that all other applicable legal requirements for the issuance of a LDA permit have been met.

(6) Notwithstanding approval of the stormwater management design, in undertaking the new development or redevelopment activity, the applicant or other responsible person shall be subject to the following requirements:

a. The applicant shall comply with all applicable requirements of the approved stormwater management design plan and the provisions of this ordinance and shall certify that all land disturbing and development activities will be completed in accordance with the approved stormwater management design plan;

b. The development project shall be conducted only within the area specified in the approved stormwater management design plan;

c. The city manager (or his designee) shall be allowed to conduct periodic inspections of the development project in accordance with applicable sections of this article;

d. No changes may be made to an approved stormwater management design plan without review and written approval by the city manager (or his designee); and

e. Upon completion of the development project, the applicant or other responsible person shall submit a statement certifying that the project has been completed in accordance with the approved stormwater management design plan. The applicant or other responsible person

shall also submit as built plans for the stormwater management system, as required under the applicable sections of this article.

(g) *Development review fees.* Garden City will develop and periodically amend the fee schedule related to the costs associated with the administrative, managerial and technical review activities related to implementation of this article. In accordance with the adopted fee schedule, the city will collect a nonrefundable development review fee at the time the stormwater management design package is submitted to Garden City for initial review. The development review fees that are collected shall be used to support the administrative, managerial and technical review activities associated with the plan review and approval process as well as the development inspection of related project elements that are subject to the requirements of this article.

(h) *Performance bonds.* Garden City shall require, from the owner, a surety or performance bond, letter of credit (or other means of security acceptable to Garden City) immediately prior to the issuance of a LDA permit for any new development or redevelopment activity. The amount of the security shall not be less than the total estimated construction cost of the post-construction stormwater management system to be installed on the development site. The bond shall include provisions relative to forfeiture for failure to complete the work specified in the approved stormwater management plan, compliance with the provisions of this article, other applicable laws and regulations and any time limitations.

The performance bond shall not be fully released without a final inspection by the city of the completed work; submittal of as-built plans including certification that the stormwater management system complies with the approved stormwater management design plan and the requirements of this article; a recorded inspection and maintenance plan agreement; and final construction acceptance by the city. All as-built certification work shall be completed in accordance with applicable sections of this article and the LDM. A procedure may be used to release parts of the bond held by the city after various stages of construction have been completed and approved by the city. It will be the responsibility of the applicant to outline in the writing the procedures used by the city with regard to partially releasing performance bonds. The procedures shall be documented in writing by the city prior to the approval of a stormwater management design plan.

(i) *Maintenance bonds.* The owner shall post a maintenance bond (letter of credit or other means of security acceptable to Garden City) on the stormwater management system for a two year period after completion and acceptance of the facility by the city. It shall be owner's obligation to provide all maintenance for a two year period after acceptance of the system by the city. The maintenance bond shall be an amount equal to 25 percent of the initial bond amount posted for the construction of the stormwater management system on the development site.

(j) *Compliance through off-site stormwater management practices or direct discharge into open tidal waters.* All stormwater management design plans shall include on-site stormwater management practices, unless arrangements are made with the city manager or his designee to manage post-construction stormwater runoff in an off-site or regional stormwater management practice. The off-site or regional stormwater management practice must be located on property legally dedicated to that purpose, be designed and sized to meet the post-construction stormwater management criteria presented in the Garden City LDM, provide a level of stormwater quality and quantity control that is equal to or greater than that which would be provided by on-site green infrastructure and stormwater management practices and have an associated inspection and maintenance plan agreement. In addition, appropriate stormwater management practices shall be installed, where necessary, to protect properties and drainage channels that are located between the development site and the location of the off-site or regional stormwater management practice.

To be eligible for compliance through the use of off-site stormwater management practices, the applicant must submit a stormwater management design plan to Garden City that shows the adequacy of the off-site or regional stormwater management practice and demonstrates, to the satisfaction of the city manager or his designee, that the off-site or regional stormwater management practice will not result in the following impacts:

(1) Increased threat of flood damage or endangerment to public health or safety;

(2) Deterioration of existing culverts, bridges, dams and other structures;

(3) Accelerated streambank or streambed erosion or siltation;

(4) Degradation of in-stream biological functions or habitat; or,

(5) Water quality impairment in violation of state water quality standards and/or violation of any other state or federal regulations.

In addition, the requirement for on-site stormwater management practices can be waived if one of the two conditions stipulated below can be met to the satisfaction of the city manager or his designee: (i) the development directly discharges into open tidal waters or (ii) provisions are made to provide for a drainage system with adequate capacity to carry site runoff flows to open tidal waters. The city will require the developer or owner to coordinate this request with adjacent or downstream property owners and/or local governments as outlined in applicable sections of the LDM.

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-240. - Illicit discharge and illicit connection.

(a) *Prohibition.*

(1) It is unlawful for any person to throw, drain, run, or otherwise discharge to any component of the municipal storm sewer system or to cause, permit or suffer to be thrown, drained, run, or allow to seep or otherwise discharge into such system all matter of any nature excepting only such storm or surface water as herein authorized.

(2) It shall be unlawful for any person to maliciously, willfully, or negligently break, damage, destroy, uncover, deface, modify, or tamper with any stormwater structure, appurtenance, or equipment.

(3) It shall be unlawful, without prior written authorization of the city manager or his designee, to alter in any way any part of the stormwater system including, but not limited to, rerouting, removing, deepening, widening, enlarging, filling or obstructing any part of the stormwater system including fencing easements and rights-of-way which render the system inaccessible to equipment necessary to perform maintenance and repairs.

(4) It is unlawful for any person, company, corporation, etc. to connect any pipe, open channel, any other conveyance system that discharges anything except stormwater or unpolluted water which is approved by the city manager or his designee, based on the exemptions listed below, to the municipal storm sewer system.

(5) Improper connections in violation of this article must be disconnected and redirected, if applicable, to the city's sanitary sewer system upon approval by the city manager or his designee and in accordance with the Garden City Code of Ordinances.

(b) *Exemptions.* The following activities are exempt from the prohibition provision above:

(1) Water line flushing performed by a government agency, diverted stream flows, rising groundwaters, and unpolluted groundwater infiltration.

(2) Unpolluted pumped groundwater.

(3) Unpolluted discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, and street wash water.

(4) Unpolluted discharges or flows from fire fighting.

(5) Other unpolluted discharges with approval from the city manager or his designee.

(c) *Watercourse protection.* Every person owning property through which a watercourse passes, or such person's lessee, shall keep and maintain that part of the watercourse within the property free of trash, debris, excessive vegetation, and other obstacles that would pollute, contaminate, or significantly retard the flow of water through the watercourse. In addition, the owner shall maintain existing privately owned structures within or adjacent to a watercourse, so that such structures will not become a hazard to the use, function, or physical integrity of the watercourse.

(d) *Accidental discharge.* In the event of an accidental discharge to the MS4 of any material or substance other than stormwater runoff, the person concerned shall inform the Garden City Code Enforcement staff, and all other impacted entities immediately but no later than two hours after said person becomes aware of the incident and notify the city as to the nature, quantity and time of occurrence of the discharge. The person concerned shall take immediate steps to contain, treat, or take other actions to minimize effects of the discharge on the municipal storm sewer system and receiving streams. The person shall also take immediate steps to ensure no recurrence of the discharge.

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-241. - Construction inspection of stormwater management systems.

The LDM provides additional information and details regarding approved construction materials and practices regarding stormwater management controls and systems.

(1) *Notice of construction commencement.* The applicant must notify Garden City via letter, or via another communication method agreed to by the city, prior to the commencement of construction on a development site. In addition, the applicant must notify the city manager or his designee in advance of the installation of critical components of the stormwater management system shown on the approved stormwater management design plan. The city manager or his designee may, at his discretion, issue verbal or written authorization to proceed with the installation of critical components of the stormwater management system, such as permanent green infrastructure and stormwater management practices, based on site-specific factors.

(2) *Construction phase observation.* The city may perform periodic observation of the green infrastructure and stormwater management practices installation work as depicted on the approved stormwater management design plan. The observation work shall be conducted by city staff or authorized representatives of the city manager or his designee during construction. Construction observation work shall utilize the approved stormwater management design plan for establishing compliance with the provisions of this article. All observation work shall be documented in written reports that contain the following information:

a. The date and location of the inspection;

b. The name of the inspector;

c. Whether construction is in compliance with the approved stormwater management design plan;

d. Violations of the approved stormwater management design plan; and,

e. Any other variations from the approved stormwater management plan.

If any violations are found, the applicant shall be notified in writing about the nature of the violation and the remedial measures that are required to bring the action or inaction into compliance with the approved stormwater management design plan, as described in subsection 30-243(b). In the event that the remedial measures described in such notice have not been completed by the date set forth in the notice, any one or more of the enforcement actions outlined in subsection 30-243(c) of this article may be taken against the applicant.

(3) *Final inspection and as-built plans.* Subsequent to the final installation and stabilization of all green infrastructure and stormwater management practices shown on the approved stormwater

management design plan, and before the issuance of a certificate of occupancy or a certificate of construction acceptance (if appropriate), the applicant is responsible for documenting that the project has been completed in accordance with the approved stormwater management design plan through the submittal of as-built plans for all stormwater management practices shown on the approved stormwater management design plan. The as-built plans must show the final design specification data for all green infrastructure and stormwater management practices (i.e. invert elevations, slopes, facility and pipe locations, dimensions, etc). In addition, a licensed professional engineer must provide a design certification that the development has been constructed in substantial accordance with the approved stormwater management design plan. A final inspection may be conducted by the city manager or his designee to confirm the accuracy of the as-built plans as well as the information provided in the design certification. A final inspection is required before any performance bond or other guarantee can be released, unless otherwise agreed to by the city manager or his designee per subsection 30-239(h) of this article. All as-built certification work shall be completed in accordance with applicable sections of this article and the LDM.

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-242. - Ongoing inspection and maintenance of stormwater management systems.

(a) *Maintenance responsibility.* The responsible party named in the recorded stormwater management system inspection and maintenance plan agreement, shall maintain in good condition and promptly repair and restore all green infrastructure and stormwater management practices, maintenance access routes and appurtenances, including, but not limited to surfaces, walls, drains, dams, structures, vegetation, erosion and sediment control practices and other devices. Such repairs and restoration and maintenance activities shall be performed in accordance with an approved inspection and maintenance plan agreement.

If the responsible party named in the recorded inspection and maintenance plan agreement is a homeowner's association, or other association, the responsible party shall submit to the city manager or his designee a copy of a recorded declaration that provides:

(1) That green infrastructure and stormwater management practices are part of the common elements of the development site and shall be subject to the requirements of the stormwater management system inspection and maintenance plan agreement;

(2) That membership in the entity responsible for maintenance shall be mandatory and automatic for all homeowners or parcel owners of the development site and their successors;

(3) That the entity responsible for maintenance shall have lien authority, or a mechanism comparable and satisfactory to the city, to ensure the collection of dues from all members;

(4) That the requirements of the inspection and maintenance plan agreement shall receive priority for expenditures by the entity responsible for maintenance except for any other expenditures that are required by law to have a higher priority;

(5) That a separate fund shall be maintained by the entity responsible for maintenance for the routine maintenance, reconstruction and repair of the green infrastructure and stormwater management practices, and kept in an account insured by the Federal Deposit Insurance Corporation (FDIC), or by another method acceptable to the city;

(6) That the routine maintenance, reconstruction and repair fund shall contain at all times the dollar amount reasonably determined from time to time by Garden City to be adequate to pay for the probable reconstruction and repair cost (but not routine maintenance cost) of the stormwater management system for a three-year period; unless otherwise agreed to by the city; and

(7) That, to the extent permitted by law, the entity responsible for maintenance shall not enter into voluntary dissolution unless responsibility for the green infrastructure and stormwater management practices is transferred to an appropriate successor.

In lieu of an inspection and maintenance plan agreement, Garden City may accept the dedication of any existing or future green infrastructure or stormwater management practice for maintenance, provided that such practice meets all of the requirements of this article, is in proper working order at the time of dedication and includes adequate and perpetual access and sufficient area for inspection and regular maintenance. Such adequate and perpetual access shall be accomplished by granting of an easement to Garden City or through a fee simple dedication to Garden City.

(b) *Inspections.* The city manager or his designee, bearing proper credentials and identification, shall be permitted to enter, in accordance with local, state and federal laws, all properties for regular inspections, periodic investigations, observation, measurement, enforcement, sampling and testing, in accordance with provisions of this article. The city manager or his designee shall duly notify the owner of said property or the representative on site prior to the inspection, except in the case of an emergency. The city manager or his designee, bearing proper credentials and identification, shall be permitted to enter, in accordance with local, state and federal laws, all properties for which the city holds a negotiated easement for inspection, repairs, maintenance and other purposes related to any portion of the stormwater management facilities lying within said easement.

(1) The city manager or his designee shall determine inspection schedules necessary to enforce the provisions of this article.

(2) Measurements, tests and analyses performed by the department or required of any discharger to the MS4 shall be in accordance with applicable sections of the City Code of Ordinances, unless another method is approved by the city manager or his designee.

(3) All inspections should be documented in written reports that contain the following information:

a. The date and location of the inspection;

b. The name of the person who performed the inspection;

c. The condition of:

1. Vegetation and filter media;

2. Fences and other safety devices;

3. Spillways, valves and other hydraulic control structures;

4. Embankments, slopes and safety benches;

5. Reservoirs and permanent pools;

6. Inlet and outlet channels and structures;

7. Underground drainage structures;

8. Sediment and debris accumulation in storage and forebay areas; and

9. Any other item that could affect the proper function of the stormwater management system.

(4) Upon completion of the field inspection, the inspector shall prepare a written description of repair, restoration and maintenance needs for the system in a summary format. If any repair, restoration or maintenance needs are found, the responsible party shall be notified in writing about the repair, restoration or maintenance needs and the remedial measures that are required to bring the stormwater management system into compliance with the provisions of this article and the approved stormwater management system inspection and maintenance plan agreement, as described in subsection 30-243(b). In the event that the remedial measures described in such notice have not been completed by the date set forth in the notice, any one or more of the enforcement actions outlined in subsection 30-243(c) of this article may be taken against the

responsible party named in the approved stormwater management system inspection and maintenance plan agreement.

(c) *Records of maintenance activities.* The responsible party shall make and maintain records of all inspections, maintenance and repairs, and shall retain the records for a minimum of five years. These records shall be made available to Garden City during inspections and at other reasonable times upon request of Garden City.

(d) *Failure to maintain.* If the responsible party fails or refuses to meet the terms and conditions of an approved stormwater management system inspection and maintenance plan agreement and/or the requirements of this article, Garden City or its authorized representative may correct a violation by performing the work necessary to place the green infrastructure or stormwater management practice in proper working condition after 30 days written notice. The exception to the 30-day period would be if the city properly establishes that the violation constitutes an immediate danger to public health or safety in which case the city would grant 24 hours notice to the property owner.

(e) *Cost recovery for city funded stormwater management services.* If Garden City performs repair, remediation and/or maintenance work in accordance with the provisions of this article, and other applicable city ordinances, the city may assess the responsible party (or parties) for the cost of the work. This cost shall be in the form of a lien on the property and may be placed on the customer's stormwater utility bill for such property and collected in the ordinary manner for such fees by Garden City.

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-243. - Enforcement, variances, and appeals.

(a) *Enforcement.* Any action or inaction that violates the provisions of this article or the requirements of an approved stormwater management design plan, land development related permit, or inspection and maintenance plan agreement, may be subject to the enforcement actions outlined in this section. Any such action or inaction that is continuous with respect to time may be deemed to be a public nuisance and may be abated by injunctive or other equitable relief. The imposition of any of the penalties described below shall not prevent such equitable relief.

(b) *Notice of violation.* If Garden City determines that an owner, applicant or other responsible person has failed to comply with the provisions of this article, or the terms and conditions of an approved stormwater management design plan, LDA permit, or the inspection and maintenance plan agreement, it shall issue a written notice of violation (NOV) to said owner, applicant or other responsible entity. Where an entity is engaged in a new development or redevelopment activity covered by this ordinance without having first secured approval of the stormwater management design, the NOV shall be served on the owner, person or entity in charge of the new development or redevelopment activity being conducted on the development site.

The NOV shall contain the following information:

(1) The name and address of the owner, applicant or other responsible person;

(2) The address or other description of the site upon which the violation is occurring;

(3) A statement specifying the nature of the violation;

(4) A description of the remedial measures necessary to bring the action or inaction into compliance with the provisions of this article, or the terms and conditions of the approved stormwater management design plan, land development related permit, or inspection and maintenance plan agreement, and the date for the completion of such remedial plan by the responsible parties;

(5) A statement of the penalty or penalties that may be assessed against the person to whom the NOV is issued; and

(6) A statement that the determination of violation may be appealed to Garden City by filing a written notice of appeal within 30 days after the NOV (except, that in the event the violation constitutes an immediate danger to public health or safety, a written notice of appeal must be filed within 24 hours after the NOV).

(c) *Penalties.* In the event that the remedial measures described in the NOV have not been completed by the date set forth for completion in the NOV, any one or more of the following actions or penalties may be taken or assessed against the person to whom the NOV was issued.

Before taking any of the following actions or imposing any of the following penalties, Garden City shall first notify the owner, applicant or other responsible person or entity in writing of its intended action and shall provide a reasonable opportunity of not less than ten days (except, that in the event the violation constitutes an immediate danger to public health or safety, 24 hours' notice shall be sufficient) to correct the violation. In the event the owner, applicant or other responsible person fails to correct the violation by the date set forth in said notice, Garden City may take any one or more of the following actions or impose any one or more of the following penalties:

(1) *Stop-work order.* The city manager or his designee may issue a stop work order that shall be served on the owner, applicant or other responsible person. The stop work order shall remain in effect until the owner, applicant or other responsible person has taken the remedial measures set forth in the NOV or has otherwise corrected the violation or violations described therein. The stop-work order may temporarily be withdrawn or modified by city manager or his designee to enable the applicant or other responsible person to take the remedial measures necessary to correct such violation or violations.

(2) *Withhold certificate of occupancy (CO)* . City manager or his designee may refuse to issue a CO for the building or other structure constructed or being constructed on the development site until the owner, applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise corrected the violation or violations described therein.

(3) *Suspension, revocation, or modification of LDA permit.* The city manager or his designee may suspend, revoke or modify the LDA permit authorizing the development project. A suspended, revoked or modified LDA permit may be reinstated after the owner, applicant or other responsible person has taken the remedial measures set forth in the NOV or has otherwise corrected the violation or violations described therein. The LDA permit may be modified by the city manager or his designee to enable the owner, applicant or other responsible person to take the remedial measures necessary to correct such violation or violations.

(4) *Civil penalties.* In the event the owner, applicant or other responsible person fails to take the remedial measures set forth in the NOV or otherwise fails to correct the violation or violations described therein, by the date set forth in the notice of violation, Garden City may impose a penalty not to exceed $1,000.00 (depending on the severity of the violation) for each day the violation remains un-remedied after the date set forth in the NOV. In assessing the civil penalty, Garden City may consider the following factors:

a. Damages to the city, including compensation for the damage or destruction to the MS4, and also including any penalties, costs, and attorney fees incurred by the city as the result of the illegal activity, as well as the cause of the discharge or violation;

b. The severity of the discharge and its effects upon the MS4 and upon the quality and quantity of the receiving waters;

c. Effectiveness of action taken by the violator to cease the violation;

d. The technical and economic reasonableness of reducing or eliminating the discharge; and

e. The economic benefit gained by the violator.

(5) *Criminal penalties.* For intentional and flagrant violations of this article, Garden City may issue a citation to the owner, applicant or other responsible person, requiring said person to appear in municipal court to answer to criminal charges for such violation. Upon conviction, such person

shall be punished by a fine not to exceed $1,000.00, imprisonment for up to 60 days or both. Each act of violation and each day upon which any violation shall occur shall constitute a separate offense.

(d) *Appeals.*

(1) Any person aggrieved by a decision of the city manager or his designee (including any decision with reference to the granting or denial of a variance from the terms of this article) may appeal same by filing a written notice of appeal with the city manager within five days of the issuance of said decision by the city manager or his designee. A notice of appeal shall state specific reasons.

(2) The city manager shall prepare and send to city council and appellant a written response to said notice of appeal within ten days of receipt of the notice of appeal.

(3) All appeals shall be heard by city council. The hearing shall be held within 30 days after receipt of notice of appeal or a date mutually agreed upon in writing by the appellant and the city manager. The city council shall then make its findings within ten days of the appeal hearing.

(4) If the appellant is dissatisfied with city council's decision, he or she can appeal said decision to the superior court of the county.

(e) *Variances from requirements.* The city manager or his designee may grant a variance from requirements of this article if exceptional circumstances applicable to a site exist such that strict adherence to the provisions of the ordinance will result in unnecessary hardship and will not fulfill the intent of the ordinance. The city manager or his designee may grant a variance from requirements of this article if the proposed development activity will not:

(1) Increase in rate, volume, or concentration of runoff to the existing downstream storm sewer system;

(2) Increase the base flood elevation upstream or downstream; or

(3) Have a negative impact on any wetland, watercourse, or water body; or

(4) Contribute to degradation of water quality.

A written request for a variance shall be required and shall state the specific variance sought and the reasons a variance should be granted. The request shall be accompanied by all necessary supporting data and provided in a format that is deemed acceptable by the city. The city manager or his designee will conduct a review of the variance request within ten working days of receiving the request.

(Ord. No. 2011-15, § 1, 8-15-11)

Sec. 30-244. - Cooperation with other governments.

The city may enter into agreements with other local governments to carry out the purpose of this article. These agreements may include, but are not limited to, enforcement of provisions, resolution of disputes, cooperative monitoring of water quality and cooperative management and inspection of stormwater system and management programs.

(Ord. No. 2011-15, § 1, 8-15-11)

Secs. 30-245—30-260. - Reserved.

Sec. 30-261. - Purpose.

This division establishes the Garden City Stormwater Utility and sets up the Stormwater Enterprise Fund.

(Ord. No. 2008-28, § 1, 11-17-08)

Sec. 30-262. - Findings of fact.

The Garden City Mayor and City Council make the following findings of fact:

(1) The City of Garden City is authorized by the Georgia Constitution of 1983, including, without limitation, Article IX, Section II, Paragraphs I and III thereof and O.C.G.A. § 36-82-62 to provide stormwater management services, systems and facilities throughout the corporate boundaries of the City of Garden City (hereinafter "the city" or "Garden City").

(2) In promulgating the regulations contained in this section, Garden City is acting pursuant to authority granted by the Constitution and laws of the State of Georgia and its City Charter to provide for stormwater collection and disposal. A system for the collection, conveyance, storage, treatment and disposal of stormwater provides benefits to all properties within the city and surrounding areas.

(3) Failure to effectively manage stormwater runoff:

a. May cause erosion of lands, threaten businesses and residences, and other facilities with water damage and may environmentally impair the rivers, streams and other bodies of water within, and downstream of, the city.

b. Can adversely affect the operations of the sanitary sewer system operated by the city thereby increasing the likelihood of infiltration and inflow into the sanitary sewer system; and,

c. Contributes to the potential degradation of the quality of both surface water and groundwater resources.

(4) The city presently owns and operates stormwater management systems and facilities, which have been developed over many years. The future usefulness and operational function of the existing stormwater management systems and facilities owned and operated by the city, and the additions and improvements thereto, rests on the ability of the city to effectively manage, protect, control, regulate, use, and enhance stormwater systems and facilities within the city in concert with the management of other water resources within the city. In order to do so, the city must have both a comprehensive stormwater management program as well as an adequate and stable funding source for its comprehensive program operation and drainage-related capital improvement needs.

(5) The city is required under federal and state regulations (i.e., the Federal Clean Water Act, the city's national pollutant discharge elimination system (hereinafter "NPDES") phase I stormwater permit) to provide enhanced management of stormwater runoff quality to mitigate the impacts of pollutants which may be discharged from the public municipal separate storm sewer system (MS4) and stormwater conveyance system into State of Georgia or United States' waters.

(6) Compliance with the regulatory obligations of the city's NPDES phase I stormwater permit, NPDES wastewater discharge permit, the coastal comprehensive plan and the city's watershed protection plan will affect the cost of providing stormwater management services, systems and facilities above what is currently being spent for stormwater quality management, drainage system maintenance, floodplain management, capital drainage projects and other program activities.

(7) The cost of operating and maintaining the city's stormwater management system and the funding of necessary repairs, replacements, improvements and extensions thereof should, to the extent practicable, be allocated in relationship to the services received from the city's stormwater management program.

(8) The professional engineering and financing analysis and related documents prepared by the city's consulting stormwater engineer properly assesses and defines the city's stormwater management

program problems, needs, goals, priorities as well as the stormwater management program funding strategy.

(9) Given the stormwater management program problems, needs, goals, priorities and funding strategy identified in the aforementioned professional engineering and financing analysis, it is appropriate to authorize the formation of an organizational and accounting entity dedicated specifically to the management, maintenance, protection, control, regulation, use, and enhancement of stormwater management services, systems and facilities within the city in concert with other water resource management programs.

(10) Stormwater management is applicable and needed throughout the incorporated areas of the city. While specific service and facility demands may differ from area to area at any given point in time, a stormwater management system and service area encompassing all lands and water bodies within the incorporated areas of the city is consistent with the present and future needs of the community.

(11) The stormwater management services rendered may differ depending on many factors and considerations, including but not limited to location, demands and impacts imposed on the stormwater management systems and programs, and risk exposure. It is practical and equitable to allocate the cost of stormwater management among the owners of improved properties in proportion to the demands the properties impose on the city's stormwater management services which result in services to such properties and the owners thereof. The fair and equitable apportionment of costs via the user fee charge should correlate to the stormwater management services provided to that property and the runoff demand that the property imposes on the public drainage system and the city stormwater management program.

(12) The stormwater management needs in the city include, but are not limited to, protection of the public health, safety, and welfare of the community. Provision of stormwater management services renders and/or results in both a service and a benefit to all properties, property owners, citizens, and residents of the city in a variety of ways.

(13) A stormwater management program provides the most practical and appropriate means of properly delivering stormwater management services throughout the city, and the most equitable means to implement an enhanced level of service for stormwater management within the city through stormwater user fee charges, user fees and other mechanisms.

(14) The presence and amount of impervious surfaces on each improved property is the most important factor influencing the cost of the stormwater management services provided by the city, or to be provided by the city in the future, to that property such that the amount of impervious surfaces on each property is the most appropriate parameter for calculating a periodic stormwater user fee charge. Therefore, the city deems it appropriate to impose a stormwater user fee charge upon all improved properties that may discharge, directly or indirectly, into the public drainage system, whether the property is private or public in nature.

(15) A schedule of stormwater utility user fee charges based in part on the area of impervious surface located on each improved property is the most appropriate and equitable means of allocating the cost of stormwater management services throughout the city. Stormwater utility user fee charges may be designed with specific modifiers to further enhance customer equity, as well as customer understanding of the user fee charge rate structure, while at the same time minimizing the city's customer account management and maintenance efforts.

(16) Stormwater utility user fee charges may be supplemented by other types of fees and charges which address specific needs, including, but not limited to, special service fees, special assessments, revenue bonds, use of proceeds from special purpose local option sales taxes (SPLOST) and other forms of revenue, as deemed appropriate by the mayor and city council.

(17) The existence of privately owned and maintained on-site stormwater control facilities, activities or assets which reduce, or otherwise mitigate, the impact of a particular property on the city's storm water management program, and the stormwater utility's cost of providing stormwater management services and/or stormwater management systems and facilities, should be taken

into account to reduce the user fee charge on that property either in the form of a direct reduction or a credit, and such reduction or credit should be conditioned upon continuing provision of such services, systems, facilities, activities or assets in a manner complying with the standards and codes as determined by the stormwater utility. Credits for privately owned and maintained stormwater management systems, facilities, activities or assets shall be generally proportional to the affect that such systems have on the reduction and mitigation of the stormwater runoff impacts from the property.

(18) It is imperative that the proceeds from all user fee charges for stormwater management services, systems or facilities, together with any other supplemental revenues raised or otherwise allocated specifically to stormwater management services, systems or facilities, be dedicated solely to those purposes, and such proceeds of user fee charges and supplemental revenues shall therefore be deposited into the city stormwater utility enterprise fund and shall remain in that fund and be dispersed only for stormwater management capital, operating and nonoperating costs, lease payments and debt service of bonds or other indebtedness for stormwater management purposes.

(19) In order to protect the health, safety and welfare of the public, the governing authority of Garden City hereby concludes a stormwater utility, funded by a dedicated stormwater utility enterprise fund, is warranted as the best available means of addressing the foregoing needs and legal requirements. By separate ordinance, the city will enact a user fee rate structure to establish user fees for the provision of stormwater management services.

(Ord. No. 2008-28, § 1, 11-17-08)

Sec. 30-263. - Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Act means and refers to the Clean Water Act as amended by the Water Quality Act of 1987 (33 U.S.C. § 1251 et seq.), as amended, and the rules and regulations promulgated by the United States Environmental Protection Agency pursuant thereto.

Customers of the stormwater utility shall include all persons, properties, and entities serviced by and/or benefiting from the services provided by the city's stormwater management program and the stormwater utility. These services include, but are not necessarily limited to, the stormwater utility's administration, management, maintenance, expansion, and improvement of the public stormwater management systems for the handling of stormwater runoff of private and public properties, and the regulation of the public and private stormwater management systems, controls, facilities, and activities.

Hydrologic response defines the manner and means whereby stormwater collects, remains, infiltrates, and is conveyed from a property. Hydrologic response is dependent on several factors including, but not limited to, the presence of impervious surface, the parcel's size, the parcel's shape, the parcel's topography, the parcel's vegetative canopy, the parcel's groundwater characteristics, the parcel's on-site operations, the parcel's stormwater controls, the parcel's antecedent moisture as well as the parcel's geologic and hydro-geologic characteristics.

Impervious area shall mean and have the same definition as impervious surface.

Impervious surface means those areas which prevent or impede the infiltration of stormwater into the soil in the manner in which it entered the soil, in natural conditions, prior to development and causes stormwater runoff to collect, concentrate or flow in a manner materially different from what would occur if the land were in an unaltered natural condition. Common impervious surfaces include, but are not limited to, rooftops, buildings or structures, sidewalks, walkways, patio areas, driveways, parking lots, storage areas, awnings and other fabric or plastic coverings, and other surfaces such as compacted soil and gravel, which prevent or impede the natural infiltration of rainfall and stormwater runoff which existed prior to development.

Improved property (or developed property) means property altered from its natural state by construction or installation of more than 500 square feet of impervious surfaces.

Service area means the entire land area within the corporate limits of the city.

Stormwater management services mean all services provided by the city which relate to the:

(1) Transfer, control, conveyance or movement of stormwater runoff through the incorporated portions of the city;

(2) Maintenance, repair and replacement of existing stormwater management systems and facilities;

(3) Planning, development, design and construction of additional stormwater management systems and facilities to meet current and anticipated needs;

(4) Regulation of the use of stormwater management services, systems and facilities; and

(5) Compliance with applicable state and federal stormwater management regulations and permit requirements.

Stormwater management services may address the quality of stormwater runoff as well as the quantity thereof.

Stormwater management systems and facilities mean those natural and manmade channels, swales, ditches, rivers, streams, creeks, branches, reservoirs, ponds, drainage ways, inlets, catch basins, pipes, headwalls, storm sewers, lakes and other physical works, properties and improvements which transfer, control, convey, detain, retain, treat or otherwise influence the movement of stormwater runoff.

Stormwater utility manager means the person appointed by the mayor and city council to administer the provisions of this article.

Stormwater user fee charge means the periodic user fee charge imposed pursuant to this article by the Garden City Stormwater Utility for providing stormwater management services. This term shall exclude special charges to the owners of particular properties for services, systems or facilities related to stormwater management, including, but not limited to, charges for development plan review, inspection of development projects, on-site stormwater control systems and other stormwater management related services provided by Garden City for which a corresponding fee is collected for the service rendered.

Undeveloped land means land in its unaltered natural condition or which is modified to such a minimal degree as to have a hydrologic response comparable to land in an unaltered natural condition shall be deemed undeveloped. For purposes of this article, undeveloped land includes property altered from its natural condition by the creation or installation of 500 square feet or less of impervious surface.

User is defined as any person who uses property, which maintains connection to, discharges to, or otherwise receives services from the city for stormwater management.

(Ord. No. 2008-28, § 1, 11-17-08)

Sec. 30-264. - Stormwater utility and enterprise fund established.

(a) There is hereby established a stormwater utility to be known as the Garden City Stormwater Utility, which shall be responsible for stormwater management services throughout the incorporated areas of the city, and which shall provide for the management, protection, control, regulation, use and enhancement of the city's stormwater management systems and facilities and stormwater management services.

(b) There is hereby established a stormwater utility enterprise fund in the city budgeting and accounting systems for the purpose of dedicating and protecting all funding applicable to the purposes and responsibilities of the Garden City stormwater management program and stormwater utility, including, but not limited to, rates, charges, and fees as may be established by the city council from time to time, and other funds that may be transferred or allocated to the Garden City Stormwater Utility.

(c) All revenues and receipts of the stormwater utility shall be placed in the stormwater utility enterprise fund in trust, to be expended solely for stormwater management purposes. All expenses and capital investments of the stormwater utility shall be paid from the stormwater utility enterprise fund; provided, however, that other revenues, receipts and resources not accounted for in the stormwater utility enterprise fund may be applied to stormwater management services as deemed appropriate by the city.

(d) The city shall place responsibility with the stormwater utility manager for operation, maintenance and regulation of the stormwater utility and stormwater management program services performed, owned and operated or maintained by Garden City, and other related assets, including, but not limited to, properties, other than road rights-of-way, upon which such stormwater management systems and facilities are located, easements, rights-of-entry and access and certain equipment used solely for stormwater management.

(Ord. No. 2008-28, § 1, 11-17-08)

Sec. 30-265. - Stormwater utility service area.

There shall be one stormwater utility service area in the city which shall encompass the municipal boundaries of Garden City. The city has established that all developed properties within the municipal boundaries receive stormwater management program services from the city. Improved/developed properties within the defined service area will receive a stormwater user fee charge bill because they are directly or indirectly connected to the city's drainage system and they receive stormwater services from the city.

(Ord. No. 2008-28, § 1, 11-17-08)

Sec. 30-266. - Scope of responsibility for stormwater management systems and facilities.

(a) The city owns or has rights established by written agreements which allow it to operate, maintain, improve and access those stormwater management systems and facilities which are located:

  (1) Within public road rights-of-way;

  (2) On private property but within legally dedicated easements granted to, and accepted by, the city;

  (3) On private property where the city has been granted, by written agreements, for rights-of-entry, rights-of-access, rights-of-use or other permanent provisions for operation, maintenance, improvement and access to the stormwater management system facilities located thereon;

  (4) On land dedicated to, and accepted by, the city solely for the operation, maintenance, improvement and access to the stormwater management systems and facilities located thereon; or

  (5) On public land which is owned by the city and/or land of another governmental entity upon which the city has agreements providing for the operation, maintenance, improvement and access to the stormwater management systems and facilities located thereon.

(b) Operation, maintenance and/or improvement of stormwater management systems and facilities which are located on private or public property not owned by the city, and for which there has been no written agreement granting easements, rights-of-entry, rights-of-access, rights-of-use or other form of dedication thereof to the city for operation, maintenance, improvement and access of such stormwater management systems and facilities shall be and remain the legal responsibility of the property owner, except as otherwise provided for by the state and federal laws and regulations.

(c) It is the express intent of this article to protect the public health, safety and welfare of people and property in general, but not to create any special duty or relationship with any individual person, or to any specific property within or outside the municipal boundaries of the city. The city expressly reserves

the right to assert all available immunities and defenses in any action seeking to impose monetary damages or equitable remedies upon the city, its elected officials, officers, employees and agents arising out of any alleged failure or breach of duty or relationship.

(d) If any permit, plan approval, inspection or similar act is required by the city as a condition precedent to any activity or change upon property not owned by the city pursuant to this or any other regulatory ordinance, regulation or rule of the city, or under federal or state law, the issuance of such permit, plan approval or inspection shall not be deemed to constitute a warranty, express or implied, nor shall it afford the basis for any action, including any action based on failure to permit, negligent issuance of a permit, negligent plan approval, or negligent maintenance of any permitted stormwater management system or facility not expressly dedicated to and accepted by the city for further maintenance in an action seeking the imposition of money damages or equitable remedies against the city, its council members, mayor, officers, employees or agents.

(Ord. No. 2008-28, § 1, 11-17-08)

Sec. 30-267. - Stormwater user fee charges.

(a) It shall be the policy of the city that user fee charges for stormwater management services to be provided by the stormwater utility in the designated service area shall be equitably derived through methods which have a demonstrable relationship to the varied demands and impacts imposed on the stormwater management services by individual properties and/or the level of service rendered by, or resulting from, the provision of stormwater management services. Stormwater user fee charge rates shall be adopted via the rate ordinance and be structured so as to be uniform within the customer class, and the resultant user fee charges shall bear a substantial relationship to the cost of providing stormwater management services. User fee charge rates shall be in addition to other rates, charges, or fees employed for stormwater management within the incorporated areas of the city as defined herein.

(b) To the extent practicable, credits against stormwater user fee charges shall be provided for on-site stormwater control systems and activities constructed, operated, maintained and performed to the city's standards by public and private property owners which eliminate, mitigate or compensate for the impact that the property or person may have upon stormwater runoff discharged to public stormwater management systems and facilities, or to private stormwater management systems and facilities which impact the proper function of public stormwater management systems and facilities.

(Ord. No. 2008-28, § 1, 11-17-08)

Sec. 30-268. - Enforcement methods and inspections.

(a) All property owners of improved property within the incorporated areas of the city shall provide, manage, maintain, and operate on-site stormwater management systems sufficient to collect, convey, detain, and discharge stormwater runoff in a safe manner consistent with all applicable city development regulations, ordinances, and state and federal laws. Any failure to meet this obligation shall constitute a violation of this article and be subject to citation and prosecution in the Garden City Municipal Court. Each day such violation exists shall constitute a separate offense.

(b) Alternately, in the event a public nuisance is deemed to exist by the mayor and city council, the city may elect to sue in municipal court to abate such nuisance. In the event a public nuisance is found by the court to exist, which the property owner fails to abate within such reasonable time as allowed by the Garden City Municipal Court, the city may enter upon the property and cause work as is reasonably necessary to be performed, with the actual cost thereof assessed against the property owner in a similar manner as a tax levied against the property. From date of filing of such abatement action, the city shall have lien rights which may be perfected, after judgment, by filing a notice of lien on the general execution docket of the Chatham County Superior Court.

(c) The city shall have the right for its employees or designated agents to enter upon public and private property during reasonable hours, and after reasonable notice to the owner thereof, in order to assure compliance with the provisions of this article, and state and federal law. Such inspections shall generally be limited to the following purposes:

(1) Inspecting or conducting engineering analyses on existing stormwater management systems and facilities located on-site;

(2) Verification and review of information contained within a stormwater utility credit manual application; and

(3) Determining that stormwater management systems and facilities need to be constructed.

(Ord. No. 2008-28, § 1, 11-17-08)

Secs. 30-269—30-280. - Reserved.

Sec. 30-281. - Purpose.

This division shall serve the purpose of establishment and set up of the stormwater utility rate structure and billing rate.

(Ord. No. 2009-2, § 1, 2-2-09)

Sec. 30-282. - Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Credit means a reduction in the amount of a customer's stormwater user fee charge in recognition of a customer's efforts to mitigate the stormwater runoff impact that developed property has on the city stormwater management services and systems, and/or the efforts of a customer to offset the city's cost for implementation of stormwater management program (SWMP) activities such as public education, watershed stewardship, etc.

Dwelling unit shall mean a structure, which contains one or more bedrooms, a bathroom and a kitchen facility, designed for occupancy by a single-family unit.

Manufactured home park means a common development (with a single-property owner or entity) of more than two factory-built or pre-fabricated housing structures that have been partially or entirely assembled at another location and moved into the development.

Residential equivalent unit (REU) means the stormwater user fee charge billing unit increment related to the median horizontal impervious surface area footprint of 3,000 square feet for a typical single-family residential parcel within Garden City.

Unless otherwise defined within this article, the definitions included in the Stormwater Utility Enterprise Fund Ordinance (Code section 30-261 et seq.) are adopted herein by reference.

The professional engineering and financing analysis documents entitled: The Garden City SWMP Assessment Funding Feasibility Study (Technical Memorandum dated November 14, 2007); The Garden City SWMP Assessment Funding Feasibility Study Addendum (Technical Memorandum dated November 12, 2008, or the most recent version); and applicable supporting, project-related documents are incorporated herein by reference.

(Ord. No. 2009-2, § 1, 2-2-09)

Sec. 30-283. - Stormwater utility customer classes.

(a) The stormwater utility shall establish specified customer classes within the service area to reflect differences in impervious surface and stormwater runoff characteristics; stormwater management program services provided by the city to the stormwater utility customers; and the respective demand that those customers' properties place on the city SWMP and drainage system components. The stormwater utility classes will encompass all developed and undeveloped properties within the city and are defined as follows:

    (1) The SFR class shall consist of all developed properties classified as single-family residential customers per the applicable definition.

    (2) The NSFR class shall consist of all developed properties classified as non-single-family residential customers per the applicable definition.

    (3) The undeveloped class shall consist of properties classified as undeveloped per the applicable definition.

(b) Documentation pertaining to the stormwater utility customer classes shall be kept on file in the office of the stormwater utility manager for public inspection.

(Ord. No. 2009-2, § 1, 2-2-09)

Sec. 30-284. - Stormwater user fee charge rates.

(a) The stormwater utility shall recover the cost of providing stormwater services and facilities by imposing a stormwater user fee on all developed properties within the service area in a fair and equitable manner. The stormwater utility shall apportion the cost of delivering stormwater services to all developed properties based on the demand the property places on the city's stormwater management program and the stormwater services provided by the city.

(b) Stormwater user fee charge rates shall be set and may be modified from time to time by the mayor and city council. A schedule of said rates shall be on file in the office of the city clerk of Garden City. In setting or modifying such rates, it shall be the goal of the city to establish rates that are fair, equitable and reasonable, and together with other funding sources available to the Garden City Stormwater Utility such as special service fees and charges deemed appropriate by the mayor and city council to customers for services, systems, and/or facilities related to stormwater management (e.g. credit application fees, plan review fees, development inspection fees, regulatory compliance inspection fees and other fees related to provision of stormwater management services), are sufficient to support the cost of the stormwater management services, including, but not limited to, the payment of principal and interest on debt obligations, lease payments, operating expenses, capital outlays, non-operating expenses, provisions for prudent reserves and other costs as deemed appropriate by the city.

(c) The basis for calculation of the stormwater user fee charge to all developed property within the city is established in this article. The city shall assign or determine the customer class, amount of impervious area and other pertinent factors as may be needed for the fair, reasonable and equitable allocation of the costs to deliver stormwater management services and to calculate the stormwater user fee charges for all developed properties in the city.

(d) Stormwater user fee charges shall be based upon the total number of residential equivalent units (REUs) associated with developed properties within the city. Each REU shall correspond to 3,000 square feet of impervious surface.

    (1) Gravel and compacted soil driveways, parking areas, and roads on private property will be considered impervious surface and included in the customer's REU calculation because of the hydrologic response characteristics of these materials. However, the total surface area associated with these materials will be calculated at 90 percent of the total REUs to reflect the hydrologic response characteristics of these materials. Application of the 90 percent factor to

these materials is based on applicable literature sources and reference documents outlined in the applicable sections of the project documents cited in section 30-282.

(e) Calculation of charges. The periodic stormwater user fee charges imposed on all developed properties shall be $4.75 multiplied by the number of REUs for each customer account.

(1) The number of REUs that will be utilized to calculate the user fee charge shall be in accordance with the following:

a. SFR customer class: Each SFR customer account shall be charged 1.0 REU per month unless one of the conditions outlined below applies:

1. If two customer accounts are assigned to a SFR property (i.e. a duplex) then each customer account on that parcel will be charged 0.5 REU per month for billing purposes.

2. If the SFR property has an impervious surface amount that exceeds 9,000 square feet (or three REUs) then a custom stormwater user fee bill will be calculated for the customer account using the NSFR user fee charge calculation approach outlined herein.

b. NSFR customer class: Each NSFR customer shall be charged one REU for each 3,000 square feet, or increment thereof, of impervious surface located on the property to establish the total number of REUs for billing. Fractional REUs will be rounded to one decimal place to establish the number of REUs for billing each month.

c. Undeveloped land customer class: Undeveloped land shall be assigned zero REUs and will not receive a stormwater user fee bill.

(f) Stormwater user fee charges shall be billed on the customer's monthly public utility bill (except as stipulated below) starting with the first billing cycle in February 2009 as called for in this article and the Stormwater Utility Enterprise Fund Ordinance.

(1) Customers that do not receive a monthly public utility bill from the city shall be billed for stormwater services via another method and frequency established by the city administrator.

(2) The property owner will be charged for the total impervious surface for residential customer accounts that are part of a larger common development such as manufactured home parks and apartment complexes.

(3) The city will generally bill the property owner's tenant for the stormwater user fee charge in situations where the tenant has opened an account with the city for public utility services (i.e., water, sewer, and/or sanitation). In selected cases, it may be necessary for the city to bill the landlord or property owner for stormwater services where accurate and equitable apportionment of the user fee charges to multiple accounts on a site is not practical.

(Ord. No. 2009-2, § 1, 2-2-09)

Sec. 30-285. - Stormwater user fee charge exemptions.

(a) Except as provided in this section or otherwise provided by law, no developed public or private property located in the incorporated area of the city shall be exempt from the stormwater user fee charges. No exception, credit, offset, or other reduction in stormwater user fee charges shall be granted based on age, tax status, economic status, race, religion, disability, or other condition unrelated to the stormwater utility's cost of providing stormwater management program services and facilities.

(b) Exemptions to the stormwater user fee charges are as follows:

(1) Parcels which contain 500 square feet, or less, of impervious surfaces shall be exempt from stormwater user fee charges.

(2) Railroad rights-of-way (tracks) shall be exempt from stormwater user fee charges. This exemption is in recognition of routine drainage system maintenance and capital construction activities undertaken by the rail road company associated with rights-of-way and drainage conveyance systems. However, railroad stations, yards, maintenance buildings, and/or other improved property used for railroad operations shall not be exempt from stormwater user fee charges.

(3) Georgia Department of Transportation (GDOT) streets and rights-of-way shall be exempt from stormwater user fee charges. This exemption is in recognition of routine drainage system maintenance and capital construction activities undertaken by GDOT in association with GDOT rights-of-way road and drainage conveyance systems. However, maintenance buildings and/or other improved property used for GDOT purposes shall not be exempt from stormwater user fee charges. All other state, federal, and county improved properties are subject to the user fee charges on the same basis as private properties.

(4) Chatham County owned public streets and rights-of-way shall be exempt from stormwater user fee charges. This exemption is in recognition of routine drainage system maintenance and capital construction services undertaken by the county. However, other improved property used for county purposes shall not be exempt from stormwater user fee charges.

(Ord. No. 2009-2, § 1, 2-2-09)

Sec. 30-286. - Stormwater user fee charge credits.

(a) The Stormwater utility manager shall grant credits or adjustments based on the technical and procedural criteria set forth in the Stormwater Utility Credit Manual (credit manual), which is incorporated into this division by reference and made a part hereof. Copies of the credit manual will be maintained by and made available from the stormwater utility manager.

(1) Customers may apply for credits and/or adjustments in accordance with the credit manual.

(2) A stormwater user fee charge credit shall be determined based on the technical requirements, standards and criteria contained in the credit manual. The amount of credit, or reduction of the stormwater user fee charge, shall be in accordance with the criteria contained in the credit manual.

(3) Any credit allowed against the stormwater user fee charge is conditioned on continuing compliance with the city's design and performance standards as stated in the credit manual and/or upon continuing provision of the controls, systems, facilities, services, and activities provided, operated, and maintained by the customer. The stormwater utility manager may revoke a credit at any time for noncompliance with applicable standards and criteria as established in the credit manual or this article.

(4) In order to obtain a credit, the customer must make application to the city on forms provided by the stormwater utility manager for such purpose, and in accordance with the procedures outlined in the credit manual.

(5) The application for any credit or adjustment must be in writing and must include the information necessary to establish eligibility for the credit or adjustment, and be in the format described in the credit manual. The customer's public utility account must be paid and current prior to review and approval of a stormwater utility credit application by the city. Incomplete applications will not be accepted for consideration and processing.

(b) When an application for a credit is deemed complete by the stormwater utility manager, he/she shall have 30 days from the date the complete application is received to approve the credit in whole, approve the credit in part, or deny the credit. The stormwater utility manager's decision shall be in writing and will be mailed to the address provided on the adjustment request, and service shall be complete upon mailing. Credits applied for by the customer and approved in whole or in part, shall apply to all stormwater user fee charges in accordance with the terms defined in the credit manual.

(Ord. No. 2009-2, § 1, 2-2-09)

Sec. 30-287. - Stormwater user fee charge billing, delinquencies, collections, adjustments.

Failure to receive a stormwater utility user fee charge bill is not justification for nonpayment. The property owner and/or utility customer account holder, as identified from city public utility billing database information and public land records of Chatham County, shall be obligated to pay the applicable stormwater user fee charge.

(1) *Billing.*

a. Stormwater user fee charges shall begin to accrue February 1, 2009, and shall be billed prospectively. A bill for stormwater user fee charges may be sent through the United States Postal Service or by alternative means, notifying the stormwater utility customer of the following items (as a minimum): the stormwater user fee charge amount (less any approved credits), the date the payment is due and the date when payment is past due.

b. Unless otherwise billed directly to the property owner, the stormwater user fee charge will be billed and collected on a common statement and collected along with other city utility services from the person in whose name such services have been placed on account with the city. If and when the account is closed or becomes delinquent, the bills for unpaid previous service as well as for current and future service shall be sent to the property owner.

c. Frequency of the billing of stormwater user fee charges shall be specified by the city administrator.

d. Failure to receive a bill shall not be justification for nonpayment. Regardless of the party to whom the bill is initially directed, the owner of each developed property subject to stormwater user fee charges shall be ultimately obligated to pay stormwater user fee charges and any interest at the rate of 18 percent per annum on delinquent stormwater user fee charge payments.

e. If a property is unbilled, or if no bill is sent for a particular tract of developed property, the stormwater utility may back bill for a period of up to one year, but shall not be entitled to any interest or any delinquency charges during the back billed period.

(2) *Delinquencies and collections.*

a. Unpaid stormwater service fees shall be collected by filing suit to collect on an unpaid account and by using all methods allowed by Georgia law to collect on any judgment obtained thereby, including enforcement of any lien resulting from any such judgment. Unless reduced to a judgment and a writ of fieri facias issued, the unpaid user fee charge shall not constitute a direct lien against the owner and/or the property.

b. A late charge shall be assessed against the customer for the unpaid balance of any stormwater utility user fee charge that becomes delinquent in accordance with applicable state law and city ordinance provisions. In addition, the city shall assess all costs of collection, including attorney's fees and court costs, against the property owner.

(3) *Adjustments.*

a. The stormwater utility manager shall administer the procedures and standards for the adjustment of the stormwater user fee charge.

1. If a customer believes his/her stormwater user fee is incorrect, the customer may seek an adjustment of the stormwater user fee charge allocated to a property at any time by submitting the request in writing to the stormwater utility manager and setting forth in detail the grounds upon which relief is sought. The customer's public utility account must be paid and current prior to consideration of an adjustment request by the city.

2. Customers requesting the adjustment shall be required, at their own expense, to provide accurate impervious area and other supplemental information to the stormwater utility manager, including, but not limited to, a survey certified by a registered land surveyor or a professional engineer.

   Submittal of this information will be required if the city staff cannot make a determination based on field inspection and/or review of existing city aerial photography. Failure to provide the required information within the time limits established by the stormwater utility manager, as may be reasonably extended, may result in denial of the customer's adjustment request.

3. Once a completed adjustment request and all required information are received by the stormwater utility manager, the stormwater utility manager shall within 30 calendar days render a written decision.

4. In considering an adjustment request, the stormwater utility manager shall consider whether the calculation of the stormwater user fee charge for the property is correct.

5. The stormwater utility manager's decision shall be in writing and will be mailed to the address provided on the adjustment request, and service shall be complete upon mailing.

6. If the result of an adjustment is that a refund is due the applicant, the refund will be applied as a credit on the applicant's next stormwater user fee charge bill.

(Ord. No. 2009-2, § 1, 2-2-09)

Sec. 30-288. - Appeals and hearings.

(a) *Appeals.* An appeal to the city administrator may be taken by any property owner or customer aggrieved by any decision of the stormwater utility manager. The appeal shall be taken within 30 days of the decision of the stormwater utility manager by filing with the city administrator a notice of appeal in writing specifying the grounds thereof. Upon the filing of the notice of appeal, the stormwater utility manager shall forthwith transmit to the city administrator all documentation constituting the record upon which the decision appealed from was taken.

(b) *Hearing.* The city administrator shall fix a reasonable time for hearing the appeal and give written notice to the appellant at least ten days prior to the hearing date. The notice shall indicate the place, date and time of the hearing. The city administrator shall affirm, reverse, affirm in part, or reverse in part the decision of the stormwater utility manager after hearing the evidence. If the decision of the stormwater utility manager is reversed in whole or in part, resulting in a refund or credit due to the property owner or customer, then such refund or credit shall be calculated retroactive to the date of the initial appeal. The decision of the city administrator shall be final, and there shall be no further administrative action. Any person aggrieved or dissatisfied with the decision of the city administrator may petition the Superior Court of Chatham County for Writ of Certiorari.

(Ord. No. 2009-2, § 1, 2-2-09)

Secs. 30-289—30-299. - Reserved.

Appendix E:

Illicit Discharge Detection and Elimination Plan

Illicit Discharge Detection & Elimination (IDDE) Plan

Illicit Discharge Detection & Elimination (IDDE) Plan

1. Background

The City's drainage system is unique to the lower coastal plain of Georgia and the Southeastern United States in that the system is tidally influenced and designed to discharge to large drainage canals or ponds that in turn discharge to local streams and rivers. This makes the actual point where the MS4 discharges to "Waters of the State" somewhat difficult to identify with any certainty. Furthermore, because many of the MS4 invert elevations are at or below groundwater and tidal elevations, the MS4 is often partially and sometimes completely submerged, and often has flowing water at the MS4 outfalls even in dry weather. These coastal conditions can make a traditional dry weather screening program difficult to implement.

The Center for Watershed Protection (CWP) worked with Dr. Robert Pitt of the University of Alabama to develop the manual, "Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments" in 2004. This manual specifically references this potential issue and states that dry weather screening "*can be problematic in coastal communities where outfalls are located along the waterfront and may be submerged at high tide. The ORI [Outfall Reconnaissance Inventory] methods need to be significantly changed to address these constraints*." This CWP guidance manual details an IDDE approach based on an evaluation of physical parameters that form the basis of the City's proposed approach to dry weather screening.

Florida, which sits largely in the same geographic province, has similar conditions, which were recognized by the Florida Department of Environmental Protection (DEP) in their NPDES Stormwater Program guidance manual, dated January 31, 2013. This manual includes the following statement,

> *"Florida's hydrologic and water table conditions make dry weather field screening impossible in many areas. Instead, the Department has concluded that more environmental benefits can be achieved through the implementation of a proactive illicit discharge detection program, which is set forth in the remaining sections of Part III.A.7 of this permit. During the MS4 Part 1 application process, permittees were required to conduct 'dry weather field screening' to evaluate the possible occurrence of illicit connections and improper dumping. The theory is that dry weather flows should not be occurring in the stormwater system and are indicative of non-stormwater discharges. However, in Florida, where high water tables and tidally influenced stormwater conveyance systems are very common, dry weather screening did not prove useful. Accordingly, dry weather field screening is not required in Florida. Instead, permittees are required to implement both a "proactive" and a "reactive" program to identify and eliminate illicit discharges from the MS4 as described below."*

The Florida Department of Transportation (FDOT) designed a proactive IDDE program based upon visual inspections made by field crews during the normal course of their daily activities. Training is provided to all field crews to ensure that they can identify field conditions that could be indicative of illicit discharges and illicit dumping. If field crews identify a suspicious condition in

the field, they notify NDPES staff who will then perform field screening, sampling, or other appropriate source tracing activity. The FDOT Proactive IDDE plan also includes responding to citizen complaints about illicit discharges and illegal dumping.

The EPA Guide to MS4 Permits acknowledges that there are these types of unique situations and permits an acceptable modification as follows:

> *"For those areas that have ponding or flow during dry weather, permit writers may consider allowing permittees the flexibility to look for indicators of an illicit discharge before conducting water quality tests due to baseline flow (e.g. baseflow, groundwater flow, irrigation return flows) in certain areas. In these cases, permit writers could require that sensory indicators (i.e. odor, color, turbidity, and floatables) be evaluated."*

Based on the limited guidance and successful examples for IDDE in coastal areas, the City has developed the following procedures to identify and eliminate illicit discharges and illegal dumping.

2. Wet & Dry MS4 Outfall Inventory & Map

During the last NPDES Phase I Medium MS4 permit cycle, the City worked with EPD to develop a system to identify "wet" MS4 outfalls through field inspections. The City has completed a full inspection of its MS4 outfalls and identified which MS4 outfalls routinely have flowing or static water due to one or more of the following conditions:

- MS4 outfall is subject to tidal activity, i.e. the MS4 outfalls experiences ebb and flood tidal flows twice per day
- MS4 outfall is surcharged due to groundwater, canal, or pond water elevations.

In many situations, the system that flows to the MS4 outfall is experiencing the same condition.

The City's current inventory of MS4 outfalls includes 79 outfalls, of which both wet and dry conditions are represented throughout the system. A copy of the map and a listing of the MS4 outfalls have been included in Appendix A of this document.

3. Outfall Reconnaissance Inventory & Screening

Outfall reconnaissance procedures described in the following subsections have been developed using the Center for Watershed Protection *Illicit Discharge Detection and Tracking Guide*, dated December 2011, *Illicit Discharge Detection, and Elimination: A Guidance Manual for Program Development and Technical Assessments*, dated 2004, and the EPA's *Guide for MS4 Permits*. Procedures included below are deemed to be the most appropriate for coastal waters as well as most likely to identify an illicit connection or illegal dumping.

3.1 Field Screening Procedures

Field screening will be conducted at all wet and dry MS4 Outfalls within the MS4 Inventory over the five-year period of this permit, with at least 5% of the MS4 Outfalls being screened in each given year. Physically inaccessible outfalls will be screened by identifying an upstream field screening point, where the inspection can occur. Field screening will take place during dry weather conditions (i.e. no rain event for 72 hours previous to sample event). The results of the observations will be recorded on the Outfall Reconnaissance Inventory (ORI) form (Appendix B) or within a GIS database by City staff.

City staff will visit wet and dry MS4 outfalls in the field and record background data on the MS4 outfall as listed in Section 1 of the ORI form.

Section 1: Background Data					
Waters to which the MS4 Outfall discharges:			Outfall ID:		
Today's date:			Time :		
Investigator:			Form Completed by:		
Temperature (F):	Rainfall last 72 hours (in.):				
Latitude:	Longitude:		GPS Unit:		
Land Use in Drainage Area (Check all that apply):			Photo ID #s:		
□ Industrial	□ Ultra-Urban Res	□ Commercial	□ Open Space	□ Suburban Res	□ Institutional
Potential Pollutant Sources:			Known Industries:		
Notes:					

City staff will also identify the physical condition of the MS4 outfall and will complete a description of the outfall as shown in Section 2 of the ORI form. City staff will record the presence of flowing or static water and will also use the Dry and Wet MS4 Outfall inventory to determine if that outfall should be dry or wet during dry weather.

Section 2: Outfall Description				
LOCATION	**MATERIAL**	**SHAPE**	**DIMENSIONS (IN.)**	**STRUCTURAL DAMAGE**
□ Closed Pipe	□ RCP □ CMP	□ Circular □ Single	Diameter, circular: _____	□ Cracking or Chipping
	□ PVC □ HDPE	□ Elliptical □ Double	Box: h - _____ w - _____	□ Peeling Paint
				□ Corrosion
□ Manhole	□ Steel	□ Box □ Triple	Elliptical: h - _____ w - _____	□ Collapsing
	□ Other: _____	□ Other:_____		□ Missing parts
				□ Good condition
□ Open drainage	□ Concrete □ rip-rap	□ Trapezoid □ Parabolic	Depth: _____	Bottom Width: _____
	□ Earthen	□ Other:_____	Top Width: _____	
Submerged or surcharged	□ Fully □ Partially	□ No	MS4 Outfall is identified as □ Wet □ Dry	
Flow Present?	□ Yes □ No	*If no, Skip to Section 4*	Flow Description: □ Trickle □ Moderate □ Substantial	
Tidal?	□ Yes □ No	*If Yes, stage:*	□ Ebb □ Flood	

For all wet and dry MS4 outfalls, City staff will perform the visual assessment of physical indicators included in Section 3 of the ORI Form.

Section 3: Physical Indicators for Both Flowing and Non-Flowing Outfalls		
Are physical indicators that are not related to flow present? □ Yes □ No (*If No, Skip to Section 5)*		
INDICATOR (CHECK if Present)	**DESCRIPTION**	**COMMENTS**
□ Sediment	□ None □ < 50% full □ > 50% full □ Completely full	
□ Deposits/Stains	□ Oily □ Flow Line □ Paint □ Other:	
□ Abnormal Vegetation	□ Excessive □ Inhibited	
□ Poor pool quality	□ Odors □ Colors □ Floatables □ Oil Sheen □ Suds □ Excessive Algae □ Other:	
□ Pipe benthic growth	□ Brown □ Orange □ Green □ Other:	

For wet and dry MS4 Outfalls with dry-weather flow, City staff will perform the additional visual assessment of physical indicators included in Section 4 of the ORI form:

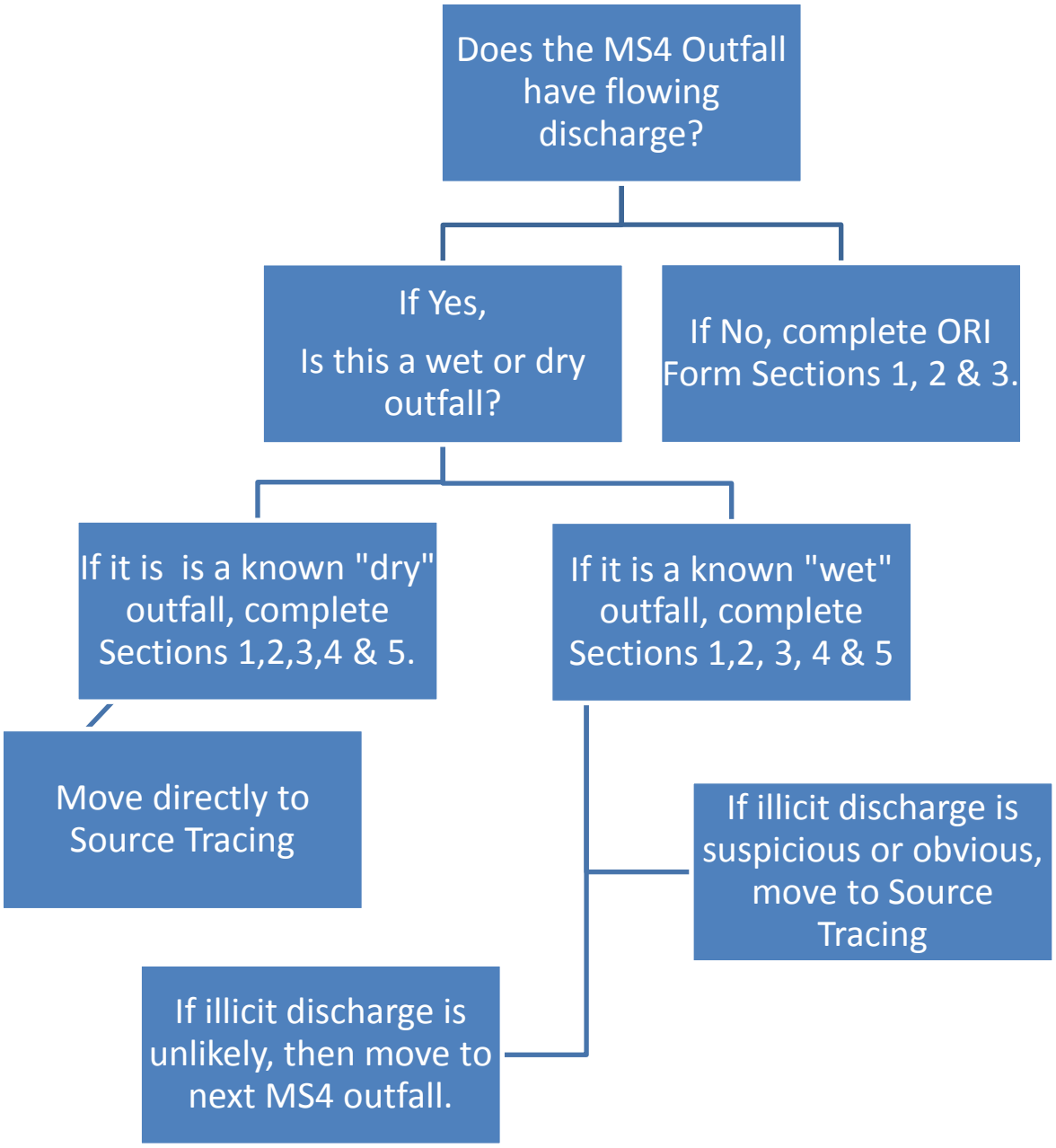
Section 4: Physical Indicators for Flowing Outfalls Only				
Are any physical indicators present in the flow? □ Yes □ No (*If No, Skip to Section 4)*				
INDICATOR (Check if Present)	**DESCRIPTION**	**RELATIVE SEVERITY INDEX (1-3)**		
□ Odor	□ Sewage □ Rancid/sour □ Petroleum/ga □ Sulfide □ Other:	□ 1 - Faint	2 - Easily detecte	□ 3 - Noticeable from a distance
□ Color	□ Clear □ Brown □ Gray □ Yellow □ Green □ Orange □ Red □ Other:	□ 1 - Faint colors in sample bottle	□ 2 - Clearly visible in	□ 3 - Clearly visible in outfall flow
□ Turbidity	See severity	□ 1 - Slight cloudines	□ 2 - Cloudy	□ 3 - Opaque
□ Floatables (Does not include	□ Sewage (Toilet Paper, etc.) □ Suds □ Petroleum (oil sheen) □ Other:	□ 1 - Few/slight	□ 2 - Some	□ 3 - A lot; origin clear (e.g., floating sanitary

Based on the results of these physical assessments, City staff will characterize the Wet and Dry MS4 outfalls based on the likelihood of an illicit discharge or illegal dumping being present within that system. If a Wet MS4 Outfall with dry-weather flow has three (3) phisical indicators, or two (2) physical indicators where one of those indicators has a severity index of 3, then an illicit discharge is suspected, and City staff will initiate source tracing for that MS4 outfall. If a Dry MS4 Outfall has any dry-weather flow, an illicit discharge should be suspected and will trigger source tracing. In some cases, the illicit discharge and its potential source may be considered obviouis, i.e. if sanitary floatables are present, then there is obviously a sanitary sewer discharge or connection to the MS4. Staff will complete Section 5 on the outfall reconnaisance inventory form, based on the assessment of the inspection results.

Section 5: Overall Outfall Characterization		
□ Unlikely	□ Suspect (three or more indicators, or two indicators if one has a severity of 3)	□ Obvious

If a Dry or Wet MS4 outfall has flow that is considered suspect or obvious, City staff will proceed directly to source tracing, including field sampling, as described in Section 5.1.

Figure 1: Flow Chart of ORI Process



4. Proactive IDDE Inspection Program

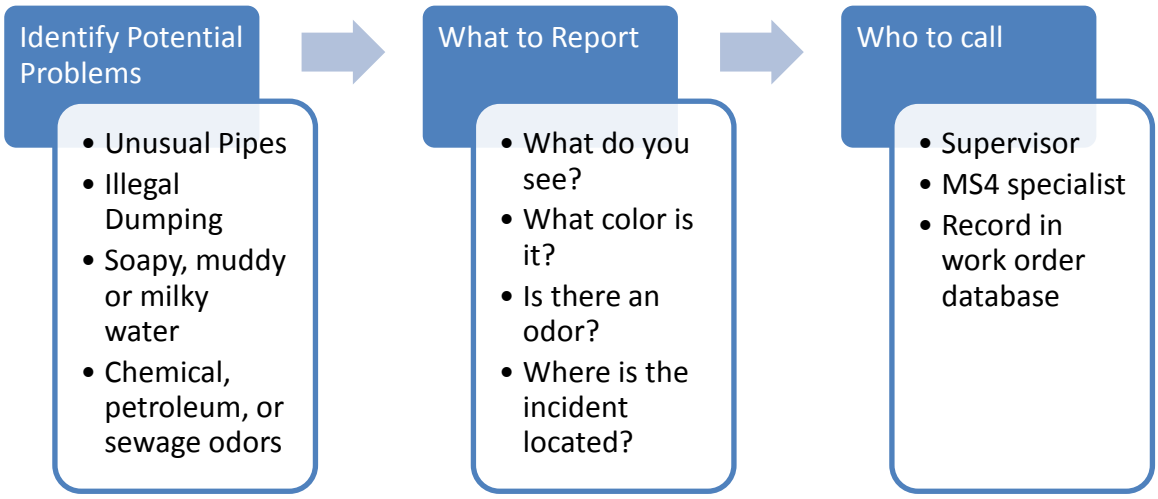
The City will formalize ongoing activities to create a proactive IDDE inspection program. The City has several different departments, many of which have responsiblities that result in their staff being out in the field on a daily basis. For example, the City's Public Works crews perform maintenance activities in the open and closed drianage systems, as well as within the water distribution and sanitary sewer collection system on a daily basis. The Fire Department, Police Department, and Code Enforcement are also enaged in daily field operation activities throughout the City.

Historical SWMP documentation indicates that many illicit discharges and illegal dumping incidents have been idientified first by field crews, and then subseuently reported to MS4-specfic staff, who then investigate and address any illegal activities.

In recognition of the resource that these field crews represent, the City will provide training to field personnel from various depratments such that they will be able to identify potential illicit discharges in the field, and effectively report these findings to the correct personnel.

The diagram below shows the basic concept behind this approach, and the main focus of the annual training.

Figure 2: Annual Training Process



The City will provide this training to field staff on an annual basis, and will keep records of the training including a sign-in sheet and the training materials. Potentiall illicit discharges and illegal dumping identified in the field will be recorded in the City's work order database. The results of the inspection by MS4 staff and any source tracing work completed will also be recorded using the checklists included in the IDDE Plan.

5. Source Tracing

Once an illicit discharge is suspected or obvious, the City will attempt to trace the source of the illicit discharge as soon as possible. Illicit discharges are considered suspect under the following conditions:

- Known "Dry" MS4 Outfall that has dry-weather flow
- "Wet" MS4 Outfall that has three or more physical indicators or two or more physical indicators when one of those indicators has a severity of three (3).

City staff will utilize the Source Tracing form to record the results of any source tracing activities. Depending on the type of illicit discharge detected and access to the storm sewer system, City staff may employ one or more of the following methods:

5.1 Field Sampling

If dry-weather flow is observed from a dry or wet MS4 outfall, City staff may perform field sampling of the discharge as noted below. If the source of the potential illicit charge is obvious based on the field screening, then the City may opt to perform alternative source tracing techniques.

- Measure the discharge in-stream for the following parameters: pH, temperature, conductivity, salinity, and turbidity.
- Collect grab samples for fecal coliform if the field results above indicate potential sewage or when there is visual evidence including milky white or gray color and floatables, a sewage odor, or other applicable evidence of potential sanitary sewer discharge. Fecal grab samples will be cooled with ice and taken to an accredited laboratory for fecal coliform analysis within six hours of sample event. Fecal samples will only be performed as needed due to cost considerations.
- City staff will complete Section 6 of the ORI form:

Section 6: Data Collection					
1. Field water qualtiy monitoring? □ Yes □ No					
2. Sample(s) collected from: □ Flow □ Pool					
3. Results					
Temp:_____	Salinity:_____	pH:_____	Conductivity: _____		Turbidity_____
4. Sterile sample for bacteria analysis? □ Yes □ No					
5. Bacterial Results: _____		*Lab:* □ External lab □ City lab			

- Please note, if the MS4 Outfall was dry but contained evidence of illegal dumping, City staff may elect to choose one of the other source tracing procedures listed in Section 3.

Baseline Limits for Field Sampling Parameters

If field sampling detects limits of the above-mentioned parameters that exceed the baseline limits described below, an illicit discharge is possible, and an attempt to trace the source using

the procedures outlined in Section 3 will be performed. The following parameters were chosen to address the potential contaminates most likely to be found in the area, including wastewater, wash water, construction site runoff, and industrial contaminants.

Table 1: Field Sampling Baseline Limits

Parameter	Baseline Limit	Considerations	Potential Source of Contamination
pH	< 5.0 or > 9.0		Low pH – Industries including textile mills, pharmaceuticals, metal finishers/fabricators, companies dealing in resins, fertilizers, or pesticides.
			High pH – Industries including soap, metal plating, concrete, lime, and rubber or plastic producers.
Turbidity	> 100 NTU	Waters in coastal Georgia are generally slow moving and have a lot of naturally occurring suspended sediment.	Construction site runoff.
Conductivity	See conversion table	Saline waters will have high conductivity associated with salt content.	Presence of contaminating ions from wastewater (sanitary or industrial).
Fecal Coliform*	>10,000 CFU/100 ml (grab sample) (CWP)	Fecal coliform well in excess of standards may indicate the presence of sanitary sewage.	Animal waste or sanitary sewage.

*Center for Watershed Protection recommends fecal coliform standards for the purposes of ORI.

Quality Assurance/Quality Control (QA/QC) Procedures

- Field tests must be performed twice during each sampling event to confirm results.
- Probes used to measure temperature, turbidity, conductivity, salinity, and pH must be calibrated at the start of each day when sampling will take place. Readings should be taken directly in outfall flow, if possible. If in-flow sampling is not possible, then a container or bucket should be used to collect a sample to take readings. The bucket should be rinsed twice with flow from outfall and readings taken on the third fill.
- Fecal coliform samples must be taken directly in the outfall flow in a sterilized container to avoid contamination. Samples shall be stored in a cooler with ice and processed within six hours of the event.

5.2 Visual Inspections

City staff will walk the stormwater system upstream from the MS4 outfall to inspect for evidence of illicit discharge such as land disturbing activities near the stormwater system, water color associated with illicit discharge, or stains and deposits showing the path of a discharge or spill.

5.3 Site Inspections

When a private site or facility is suspected as the source of an illicit discharge, City staff may elect to perform a stormwater inspection on-site at that facility, business, or residence. The inspection will search for the potential source including improperly stored material and floor drains connected to the storm sewer system. Staff will keep a record of the inspection and the findings. The checklist created for industrial/HVPS stormwater inspections will be used if the site is a commercial business or industry.

5.4 Upstream Sampling

The City may sample upstream from the field-sampling site for the parameter that was above the baseline limits. A sample will be taken above each pipe/connection to the system. When a sample is taken and the parameter is no longer detectable, any pipes/connections to the system between the last detectable sample and the clean sample is likely to lead to an illicit discharge.

5.5 Dye Testing

If dry weather screening results indicate a possible illicit discharge of sewage, City staff may conduct dye testing at residences and facilities near the outfall. Dye testing uses a brightly colored fluorescent substance to detect illicit connections to the MS4, trace cross connections, or to determine the functionality of septic systems. During an on-site inspection of a residence or facility, dye is flushed down a toilet or poured down a sink. If there is an illicit connection between the sanitary sewer and the storm sewer, the dye will appear in the MS4 downstream of this connection. This method is relatively inexpensive and only requires the ability to get on-site to put the dye in the sanitary system.

6. Source Removal

Once City staff have traced a source and they have informed the Code Enforcement Officer or his designee, it shall be the Code Enforcement Officers responsibility to enforce the applicable provisions of the Illicit Discharge Ordinance and the ERP. This ordinance gives representatives of the City the authority to enter the property from which the illicit discharge is suspected, and to require the responsible party to remove the source and pay for related costs. The City may also choose to require the responsible party to pay fines or suffer other penalties as outlined within their Stormwater Management Ordinance. Enforcement shall be conducted in accordance with the City's approved Enforcement Response Plan (ERP).

7. Data Collection and Reporting

The City will maintain records of Wet and Dry MS4 outfall screening, any source tracing activities, and documentation of any enforcement actions taken. This information will be maintained in a database and included in the Annual Report to EPD.

Appendix F :

Enforcement Response Plan

GARDEN CITY, GEORGIA
ENFORCEMENT RESPONSE PLAN

The City of Garden City has established adequate legal authority through its Stormwater Management Ordinance to prohibit illicit discharges and conduct an illicit discharge detection and elimination program. This ordinance prohibits illicit discharges to the public MS4, grants the City the authority to enter private property to investigate suspected illicit discharges, and also provides the City with the means to enforce violations of this ordinance. The purpose of this ERP is to outline the actions and procedures that will be used by city staff during instances of non-compliance.

This Enforcement Response Plan includes a breakdown of the various Standard Operating Procedures which describe and define the steps available to Garden City for the handling of violations associated with illicit discharges and construction site violations.

Ordinances and Authorization

Chapter 30 of the Garden City Code of Ordinances contains the City's Stormwater Management Ordinance (Article V). The Stormwater Management ordinance, per section 30-231, was designed to meet the following goals:

- Protect, maintain, and enhance the short-term and long-term public health, safety, and general welfare. This objective will be achieved by providing for regulation and management of a municipal storm sewer system, including public and private facilities in the city's service area.
- Comply with the Georgia Department of Natural Resources (DNR) and federal Environmental Protection Agency (EPA) stormwater regulations developed pursuant to the Clean Water Act. These requirements include:
    - Control the discharge of stormwater and contribution of pollutants to the municipal storm sewer system (MS4) by stormwater discharges associated with impervious area and the quality of stormwater discharged from sites with impervious area;
    - Prohibit illicit connections and/or discharges to the MS4;
    - Control discharge to municipal storm sewers of spills, dumping or disposal of materials other than stormwater; and
    - Control, through intergovernmental agreements, contribution of pollutants from one municipal/county system to another.
- Establish minimum requirements and procedures to regulate the adverse effects of increased stormwater runoff and development in flood hazard areas.
- Establishing decision-making processes that can be applied during the site planning and design process to help protect the integrity of local aquatic resources;
- Establishing post-construction stormwater management and site planning and design criteria to help protect natural resources from the direct impacts of the land development process and preserve existing hydrologic conditions on development sites;
- Establishing post-construction stormwater management and site planning and design criteria to help reduce flooding, channel erosion and pollutant transport and deposition in local aquatic resources;
- Establishing design guidelines for green infrastructure and stormwater management practices that can be used to meet the post-construction stormwater management and site planning and design criteria;

- Encouraging that green infrastructure practices, which include better site planning techniques, better site design techniques and low impact development practices, be used to the maximum extent practical on development sites;
- Establishing provisions for the long-term inspection and maintenance of green infrastructure and stormwater management practices to ensure that they continue to function as designed and pose no threat to public safety; and
- Establishing administrative procedures for the submittal, review, approval and disapproval of stormwater management plans and for the inspection of approved development projects.

Sections 30-233, 30-234, and 30-243 provide the City with the authority to administer and enforce the regulations of the stormwater management ordinance.

Chapter 30 of the Garden City Code of Ordinances contains the City's Erosion and Sedimentation Control Ordinance (Article III). It references the current state laws and has been revised to include requirements for additional sedimentation and erosion contrail and stormwater management. Specific changes included requirements for additional sedimentation and erosion control on new development sites, additional stormwater BMPs for water quality improvement and stream channel protection, and limiting clearing of natural vegetation and re-establishing permanent vegetation.

Identification of Potential Violations

The sources of illicit discharge exist in any community: the Public, Industrial/Commercial Operations, City Employees, and active construction sites. Each group has the potential to impact the environment with an illicit discharge.

Examples of illicit discharges for each group are listed below:

- Public – improper disposal of household wastes, illegal dumping
- Industrial/Commercial – improper disposal of hazardous waste, illegal dumping, petroleum spills
- City Employees – petroleum spills, improper storage and disposal of hazardous waste.
- Active Construction Sites – sediment, erosion, construction waste

Other scenarios for non-compliance may include:

- Failure to install appropriate BMPs on a construction site
- Failure to maintain a detention pond
- Illicit connection to the MS4
- Accidental discharge of a pollutant into the MS4

Each of these constitutes a violation and must be corrected immediately.

Enforcement Mechanism Summary

The enforcement mechanisms listed below are available to the City and are consistent with the provisions defined in section 30-243 of the City's Stormwater Management Ordinance.

Verbal Warning. A verbal warning may consist of a direct conversation, phone call, or email to notify the responsible person / property owner of a minor violation. Verbal notification should only be used for minor violations that are relatively easy to rectify. The City may also use a verbal warning in addition to

notice of violation to give the property owner advance notice of the violation. The City will keep record of all verbal warnings issued.

Notice of Violation. If Garden City determines that an owner, applicant or other responsible person has failed to comply with the provisions of this article, or the terms and conditions of an approved stormwater management design plan, LDA permit, or the inspection and maintenance plan agreement, it shall issue a written notice of violation (NOV) to said owner, applicant or other responsible entity. Where an entity is engaged in a new development or redevelopment activity covered by this ordinance without having first secured approval of the stormwater management design, the NOV shall be served on the owner, person or entity in charge of the new development or redevelopment activity being conducted on the development site.

Penalties. In the event that the remedial measures described in the NOV have not been completed by the date set forth for completion in the NOV, any one or more of the following actions or penalties may be taken or assessed against the person to whom the NOV was issued.

Before taking any of the following actions or imposing any of the following penalties, Garden City shall first notify the owner, applicant or other responsible person or entity in writing of its intended action and shall provide a reasonable opportunity of not less than ten days (except, that in the event the violation constitutes an immediate danger to public health or safety, 24 hours' notice shall be sufficient) to correct the violation. In the event the owner, applicant or other responsible person fails to correct the violation by the date set forth in said notice, Garden City may take any one or more of the following actions or impose any one or more of the following penalties:

- Stop-work order
- Withhold certification of occupancy (CO)
- Suspension, revocation, or modification of LDA permit
- Civil penalties
- Criminal penalties

This section below describes the Erosion and Sedimentation Control enforcement mechanisms available to the City and is consistent with the provisions of sections 30-67 and 30-68 of chapter 30 of the Garden City code of ordinances.

Verbal Warning. A verbal warning may consist of a direct conversation, phone call, or email to notify the responsible person / property owner of a minor violation. Verbal notification should only be used for minor violations that are relatively easy to rectify. The City may also use a verbal warning in addition to notice of violation to give the property owner advance notice of the violation. The City will keep record of all verbal warnings issued.

Failure to obtain a permit for land-disturbing activity. If any person commences any land-disturbing activity requiring a land-disturbing permit as prescribed in this article without first obtaining said permit, the person shall be subject to revocation of his business license, work permit or other authorization for the conduct of a business and associated work activities within the jurisdictional boundaries of the local issuing authority.

Stop-work orders. For the first and second violations of the provisions of this article, the director or the local issuing authority shall issue a written warning to the violator. The violator shall have five days to correct the violation. If the violation is not corrected within five days, the director or the local issuing

authority shall issue a stop-work order requiring that land-disturbing activities be stopped until necessary corrective action or mitigation has occurred; provided, however, that, if the violation presents an imminent threat to public health or waters of the state or if the land-disturbing activities are conducted without obtaining the necessary permit, the director or the local issuing authority shall issue an immediate stop-work order in lieu of a warning;

For a third and each subsequent violation, the director or the local issuing authority shall issue an immediate stop-work order;

All stop-work orders shall be effective immediately upon issuance and shall be in effect until the necessary corrective action or mitigation has occurred; and

When a violation in the form of taking action without a permit, failure to maintain a stream buffer, or significant amounts of sediment, as determined by the local issuing authority or by the director or his or her designee, have been or are being discharged into state waters and where best management practices have not been properly designed, installed, and maintained, a stop work order shall be issued by the local issuing authority or by the director or his or her designee. All such stop work orders shall be effective immediately upon issuance and shall be in effect until the necessary corrective action or mitigation has occurred. Such stop work orders shall apply to all land-disturbing activity on the site with the exception of the installation and maintenance of temporary or permanent erosion and sediment controls.

Enforcement Action

The guidelines listed below are not intended to be comprehensive. As such, the guidelines can, and should be modified when specific conditions require deviation. Public safety and welfare along with environmental protection are the first priority and any enforcement mechanism should be escalated as necessary to mitigate potential damages.

Step 1 – Verbal Warning

- The condition or type of violation can be addressed easily while the inspector remains onsite
- The property owner / responsible party is given up to a maximum of two weeks to correct the condition.

Either of these scenarios require a follow-up inspection to verify compliance. If corrective actions have not been completed, the City will determine the best course of action, which may include issuance of a NOV or penalties.

Step 2 – Enforcement

Businesses found to be in violation will be issued a Notice of Violation (NOV). Section 30-243 of the City's Code of Ordinances defines this process and states that the NOV shall include the following information:

- The name and address of the owner, applicant or other responsible person;
- The address or other description of the site upon which the violation is occurring;
- A statement specifying the nature of the violation;
- A description of the remedial measures necessary to bring the action or inaction into compliance with the provisions of this article, or the terms and conditions of the approved stormwater

management design plan, land development related permit, or inspection and maintenance plan agreement, and the date for the completion of such remedial plan by the responsible parties;

- A statement of the penalty or penalties that may be assessed against the person to whom the NOV is issued; and
- A statement that the determination of violation may be appealed to Garden City by filing a written notice of appeal within 30 days after the NOV (except, that in the event the violation constitutes an immediate danger to public health or safety, a written notice of appeal must be filed within 24 hours after the NOV).
- All violations and associated activities will be recorded in a written report, a digital database, and maintained by the City.
- Photographs and other evidence will be collected and maintained by the City and recorded.
- The City will conduct a follow up inspection to confirm that violations have been corrected.

Step 3 – Penalties

Section 30-243 gives the City the authority to apply penalties against the person to whom the NOV was issued. This will occur when the remedial measures described in the NOV have not been completed by the date set in the NOV. Before taking any of the following actions or imposing any of the following penalties, Garden City shall first notify the owner, applicant or other responsible person or entity in writing of its intended action and shall provide a reasonable opportunity of not less than ten days (except, that in the event the violation constitutes an immediate danger to public health or safety, 24 hours' notice shall be sufficient) to correct the violation.

Failure to correct the action may result in one or more of the following:

- Stop-work order
- Withhold certification of occupancy (CO)
- Suspension, revocation, or modification of LDA permit
- Civil penalties
- Criminal penalties

Any person aggrieved may appeal the decision by filing written notice of appeal within five days of issuance of the action(s) listed above. The City has the ability to re-inspect sites as needed or as deemed necessary.

Bond forfeiture. If, through inspection, it is determined that a person engaged in land-disturbing activities has failed to comply with the approved plan, a written notice to comply shall be served upon that person. The notice shall set forth the measures necessary to achieve compliance with the plan and shall state the time within which such measures must be completed. If the person engaged in the land-disturbing activity fails to comply within the time specified, he shall be deemed in violation of this ordinance and, in addition to other penalties, shall be deemed to have forfeited his performance bond, if required to post one under the provisions of Garden City Code subsection 30-66(b)(6). The local issuing authority may call the bond or any part thereof to be forfeited and may use the proceeds to hire a contractor to stabilize the site of the land-disturbing activity and bring it into compliance.

Monetary penalties. Any person who violates any provisions of these ordinances, or any permit condition or limitation, or who negligently or intentionally fails or refuses to comply with any final or emergency order of the director issued as provided in this article shall be liable for a civil penalty not to exceed $1,000.00 per day. For the purpose of enforcing the provisions of these ordinances, notwithstanding any

provisions in any City Charter to the contrary, municipal courts shall be authorized to impose penalty not to exceed $1,000.00 for each violation. Notwithstanding any limitation of law as to penalties which can be assessed for violations of county ordinances, any magistrate court or any other court of competent jurisdiction trying cases brought as violations of this article under county ordinances approved under this ordinance shall be authorized to impose penalties for such violations not to exceed $1,000.00 for each violation. Each day during which violation or failure or refusal to comply continues shall be a separate violation.

Appeals

Section 30-243 of the City's ordinance formally defines the process for appeals. Any person aggrieved by a decision of the City Manager or his designee (including any decision with reference to the granting or denial of a variance from the terms of this article) may appeal same by filing a written notice of appeal with the city manager within five days of the issuance of said decision by the city manager or his designee. A notice of appeal shall state specific reasons.

The City Manager shall prepare and send to city council and appellant a written response to said notice of appeal within ten days of receipt of the notice of appeal.

All appeals shall be heard by city council. The hearing shall be held within 30 days after receipt of notice of appeal or a date mutually agreed upon in writing by the appellant and the city manager.

The City Council shall then make its findings within ten days of the appeal hearing. If the appellant is dissatisfied with City Council's decision, he or she can appeal said decision to the Superior Court of the County.

Appropriate Responses

The City will take into consideration factors to determine the type of appropriate actions / responses. These factors include a determination of the severity of the problem, duration of non-compliance, effects on the State waters, effects on the MS4, compliance history of the violator, and general good faith of the violator.

In a scenario in which a violation has occurred, the City will determine if this is an isolated incident and a verbal warning or a NOV sent to the violator may be sufficient. Severe violations would be addressed with immediate formal notice and severe enforcement actions. If a violation has occurred over a long period of time, enforcement actions will be escalated appropriately. If the violation has resulted in environmental harm to the water quality of State waters, then the City shall respond with severe enforcement actions. If the violator has damaged the MS4 or has caused such an action that will require additional costs, the City may assess the recovery of these costs as part of the assessment of penalties. The history of a violator will be taken into account when assessing enforcement actions.

Time Frames

Once a violation has been brought to the City's attention. The City will contact the violator / property owner immediately. The violator / property owner will be notified to take steps to immediately stop any ongoing actions that constitute the violation and to ensure that such actions do not occur again. The violator / property owner may either immediately correct the violation, or will be given two weeks to correct the problem, assuming the violation does not constitute an immediate water quality risk or pose

a risk to human health and safety. Depending on the situation, the City may elect to issue a formal notice of violation (NOV) in accordance with the enforcement mechanisms described above. Penalties may be assessed once it is determined that the violation has not been corrected within the appropriate time frame.

A violator / property owner wishing to appeal shall follow the timeframes and procedures outlined in the appeals section above.

Citizen Complaints / Tracking

Members of the public can greatly assist the City by being the eyes and ears of the City. Citizens are encouraged to contact the City if they see illegal dumping or illicit discharge activities. The City of Garden City's official website provides contact information and an email link (on the main webpage) for citizens wishing to report illicit discharges or illegal dumping. Garden City takes each complaint seriously and follows the procedures listed below to follow up on every complaint or tip.

1. When a complaint is received, all possible known information is recorded in the citizen database.
2. Inspection or investigation of the complaint is scheduled within two business days of receiving a compliant (note - an immediate inspection may occur based on the severity of the violation).
3. Property or site is inspected.
4. Any and all violations are documented and photographed.
5. Attempt is made to have an in person meeting with owner, operator, tenant, and/or manager of property.
6. Case file is opened if violation has occurred.
7. The database is reviewed to check for previous violations at the same site
8. Enforcement strategy is established (see enforcement mechanisms / actions)
9. The City may re-inspect the site to confirm compliance
10. Case file closed out when property is in compliance with date of final inspection and compliance recorded.

The City maintains a database of citizen complaints and case files and uses this information to track violations, issuance of enforcement actions, deadlines for compliance, and other information about the violation / property. This database as well and stormwater inspections and maintenance activities are submitted to the Georgia Environmental Protection Division annually.

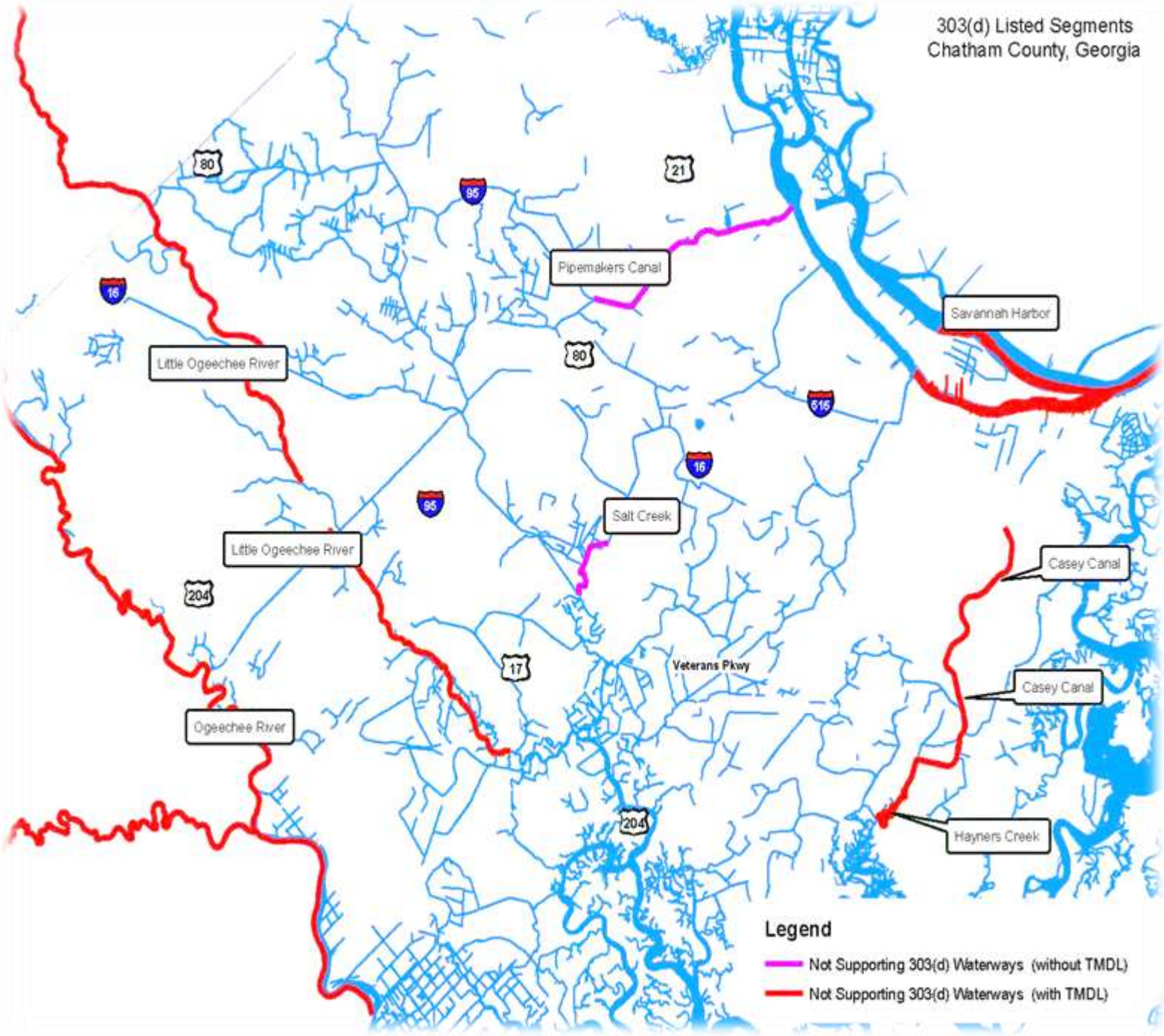
This City currently has 2 certified erosion and sedimentation control inspectors who are responsible for completing field reports for all site inspections.

Appendix G:

Impaired Waters Monitoring and Implementation Plan

Impaired Waters Monitoring & Implementation Plan

City of Garden City



The following report includes the monitoring results for the Impaired Waters Monitoring and Implementation Plan (IWMIP) in compliance with the NPDES Phase I MS4 Permit and Stormwater Management Plan for the City of Garden City. This Plan identifies the 303(d) Impaired waterways and outlines the ongoing water quality monitoring being conducted to track impairments within these water bodies.

The Georgia 305(b)/303(d) 2014 List of Waters released by EPD identifies the following impaired stream segments with approved or pending TMDLs in Garden City.

Waterway (*As Described by EPD*)	Water Use Classification	Criterion Violated	Potential Cause	TMDL
Pipemakers Canal (Dean Forrest Rd to Savannah River)	Fishing	FC	Urban Runoff	No
Salt Creek	Fishing	FC	Urban Runoff	No

MONITORING RESULTS

The Impaired Waters Monitoring Implementation Plans proposed the use of Garden City's existing sampling programs to track water quality impairments related to Pipemakers Canal and Salt Creek. The report herein includes the results of this monitoring program. The target levels are the fecal coliform levels established in Georgia's Water Quality Standards. Georgia State Water Quality Standards for Fecal Coliform are established in Georgia Rule and Regulations for Water Quality, November 1996. The criterion for fecal coliform bacteria from May through October is a 30-day geometric mean of 200 mpn/100 ml and from November through April a 30-day geometric mean of 1,000 mpn/100 ml with a maximum of 4,000 mpn/100 ml.

The Georgia 305(b)/303(d) 2010 List of Waters released by EPD identifies two impaired stream segments in the City of Garden City. These two segments are Salt Creek and Pipemakers Canal and are being addressed in accordance with the City's TMDL Monitoring & Implementation Plan. Per the City's plan, bacteria sampling, including fecal coliform and enterococci, is based on a geomean requiring the collection of four samples over a 30-day period. Sampling to calculate three bacteria geomeans per year are performed, including two geomeans during the summer period from May through October. Due to the tidal influence on each stream, samples are taken on an outgoing tide as close to the low-stand ebb tide as possible.

Pipemakers Canal

Pipemakers Canal was listed for a fecal coliform water quality impairment in the 2010 303(d) list from an unnamed tributary upstream of Dean Forrest to the Savannah River. The results of the 2016-2017 sampling e vents are summarized below:

Summary of Results for Fecal Sampling		
Site 1	Pipemakers Canal @ Dean Forest Rd	Results
	Geomean 1 – Spring 2016	78.72
	Geomean 2 – Summer 2016	240.42*
	Geomean 3 – Fall 2016	1271.19*
	Geomean 4 – Winter 2016	475.31
Site 2	Pipemakers Canal @ Main Street	
	Geomean 1 – Spring 2016	144.65
	Geomean 2 – Summer 2016	1550.13*
	Geomean 3 – Fall 2016	587.1
	Geomean 4 – Winter 2016	519.81

Summary of Results for Enterococcus Sampling		
Site 1	Pipemakers Canal @ Dean Forest Rd	Results
	Geomean 1 – Spring 2016	66.2
	Geomean 2 – Summer 2016	105.8
	Geomean 3 – Fall 2016	685.62
	Geomean 4 – Winter 2016	51.47
Site 2	Pipemakers Canal @ Main Street	
	Geomean 1 – Spring 2016	162.8
	Geomean 2 – Summer 2016	187.07
	Geomean 3 – Fall 2016	266.45
	Geomean 4 – Winter 2016	90.43

*Exceeded limits

Overall, results have improved since 2015. Both sampling sites were within acceptable limits during winter months, whereas in 2014, only the upstream location was within acceptable limits during the same time period.

Upstream results fluctuated for both FC and enterococcus throughout the year, making it difficult to identify the potential source. The drainage basin is heavily urbanized in some locations, indicating that non-point sources contributions of fecal bacteria are possible. Additionally, this waterbody is tidal, and the segment directly downstream of the Main Street site runs through the Georgia Ports Authority container storage yard. There could be potential sources of fecal bacteria on site at this facility that are then flushed upstream with the incoming tide.

The following BMPs are listed in Garden City's IWMIP to address fecal coliform issues within this watershed:

- Highly Visible Pollutant Inspections & Education
- Sanitary Sewer Spill Response Plan
- Sanitary Sewer Inspection Program
- Dry Weather Screening

BMP	Description	Water Quality Parameters Addressed
4.3.1 Erosion & Sedimentation Control Inspections	Garden City inspects all land disturbing activities to prevent erosion and sediment from entering local waterways.	Mercury, DO, FC, Dieldrin
5.2.2. Highly Visible Pollutant Inspections	Garden City has added vet offices and dog kennels to its list of HVPs to be inspected.	FC, DO
2.7.1 Sanitary Sewer Spill Response Plan	Garden City has developed a sanitary sewer spill response plan to address sanitary sewer overflows	FC, DO
2.7.2 Sanitary Sewer Inspections	Garden City inspects and maintains its sanitary sewer system to prevent discharges to the MS4	FC, DO
2.2.1 Dry Weather Screening	Garden City will perform stream walks to search for potential illicit discharges.	FC, DO, Mercury
2.7.4 Septic Tank Inspections	Chatham County Health Department performs inspection of septic systems prior to operation and when there is evidence of failure.	FC, DO
1.3.1 Roadway Maintenance	Garden City operates a street sweeper to remove organic materials from the streets and drainage system.	DO
1.2.1 Post Construction Stormwater Management Control Requirements	Garden City has required all new development to meet the requirements of the GSMM and CSS.	Fecal, DO

Garden City will continue to implement these BMPs and will monitor the trend in fecal coliform results as more data is collected. In addition, the City is working to address any possible onsite sources of fecal coliform contamination in stormwater runoff from the WWTP through the City's Stormwater Pollution Prevention Plan (SWP3).

Salt Creek

Salt Creek was listed for fecal coliform water quality impairment in the 2010 303(d) list from the headwaters to the Hardin Canal. Garden City performs Fecal Coliform and Enterococcus monitoring upstream of the listed segment on Salt Creek. The results of the 2016-2017 sampling events are summarized in the table below:

Summary of Results for Fecal Sampling		
Site 5	Salt Creek @ Hardin Canal	
	Geomean 1 – Spring 2016	298.24*
	Geomean 2 – Summer 2016	483.31*
	Geomean 3 – Fall 2016	601.2
	Geomean 4 – Winter 2016	519.93
Summary of Results for Enterococcus Sampling		
Site 5	Salt Creek @ Hardin Canal	
	Geomean 1 – Spring 2016	123.4
	Geomean 2 – Summer 2016	287.2
	Geomean 3 – Fall 2016	304.24
	Geomean 4 – Winter 2016	98.04

*Exceeded Limits

Similar to the downstream sampling location on Pipemakers Canal, results exceeded EPD standards two of the four geomeans during the spring/summer months. One likely source is a package Wastewater Treatment Plant operated privately for a mobile home park. This facility has an NPDES discharge permit, but is often in violation of their permitted limits. Sanitary sewer is not available in this area yet, and the private owner lacks the financial resources to fund a sanitary sewer connection or to upgrade the plant.

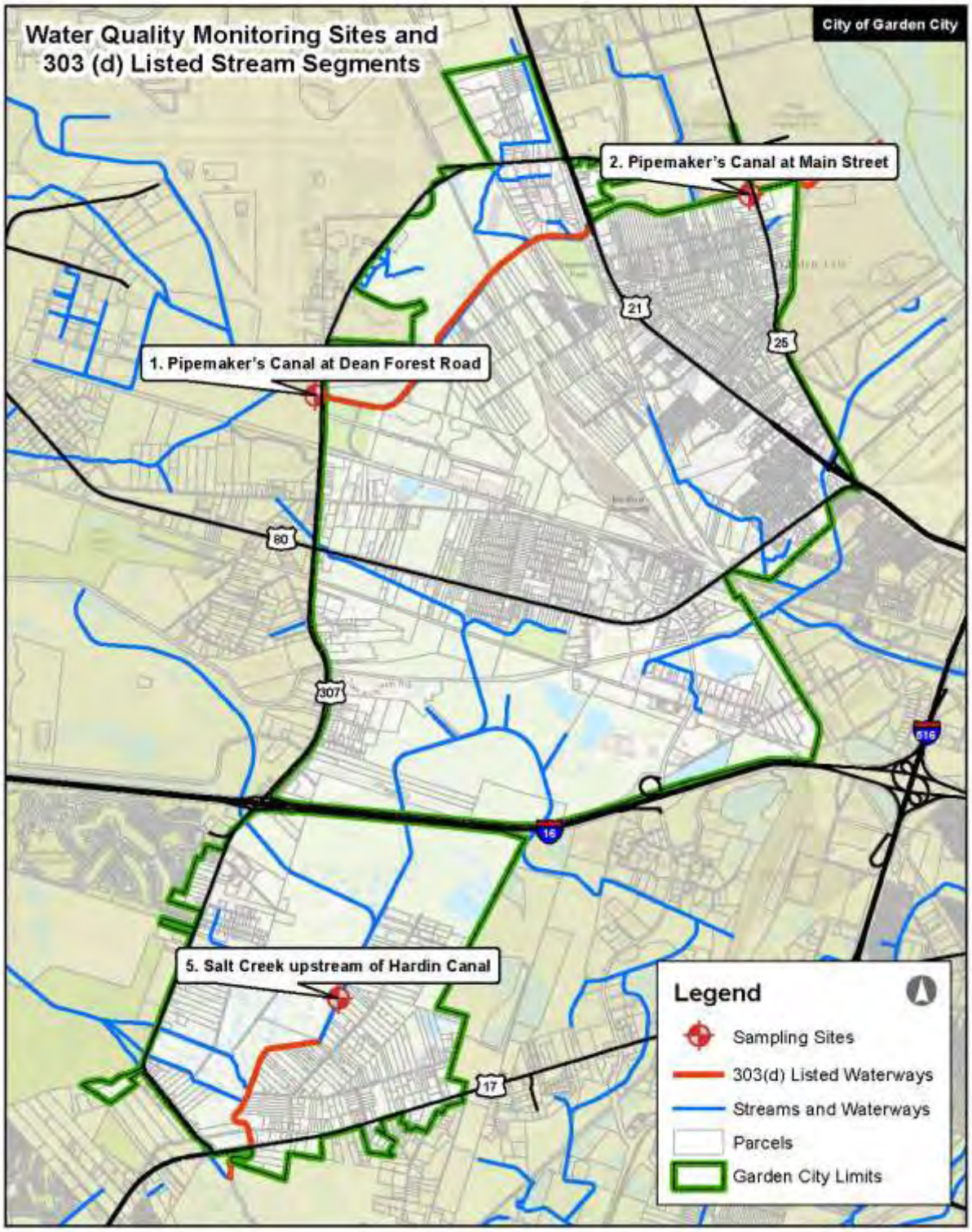
Septic systems are another potential source within the Salt Creek watershed, and the City addresses that issue by offering septic system owners a financial incentive to properly care for their systems. Residents and businesses in this area can get a credit on their stormwater utility bill for inspecting and/or maintaining their septic system. Additionally, the Chatham County Health Department provides septic system education. The City continues to work with the Health Department and the Department of Community Affairs to implement a more comprehensive septic system education program and is seeking funding to assist homeowners with the cost of inspections and maintenance.

The Salt Creek watershed is not very urbanized, and is a tidal estuarine system. It is also likely that there are significant wildlife sources of fecal bacteria in this watershed. The City will continue to implement the BMPs included within the Impaired Waters Monitoring and Implementation

Plan to address potential fecal coliform contamination, and will monitor the trend in fecal coliform results over the next few years as more data is collected. The BMPs are listed below:

- Erosion & Sedimentation Control Inspections
- Highly Visible Pollutant Inspections
- Sanitary Sewer Inspection Program
- Dry Weather Screening
- Post Construction Stormwater Management Control Requirements
- Sanitary Sewer Spill Response Plan
- Septic Tank Inspections
- Roadway Maintenance/Street

BMP	Description	Water Quality Parameters Addressed
4.3.1 Erosion & Sedimentation Control Inspections	Garden City inspects all land disturbing activities to prevent erosion and sediment from entering local waterways.	Mercury, DO, FC, Dieldrin
5.2.2. Highly Visible Pollutant Inspections	Garden City has added vet offices and dog kennels to its list of HVPs to be inspected.	FC, DO
2.7.1 Sanitary Sewer Spill Response Plan	Garden City has developed a sanitary sewer spill response plan to address sanitary sewer overflows	FC, DO
2.7.2 Sanitary Sewer Inspections	Garden City inspects and maintains its sanitary sewer system to prevent discharges to the MS4	FC, DO
2.2.1 Dry Weather Screening	Garden City will perform stream walks to search for potential illicit discharges.	FC, DO, Mercury
2.7.4 Septic Tank Inspections	Chatham County Health Department performs inspection of septic systems prior to operation and when there is evidence of failure.	FC, DO
1.3.1 Roadway Maintenance	Garden City operates a street sweeper to remove organic materials from the streets and drainage system.	DO
1.2.1 Post Construction Stormwater Management Control Requirements	Garden City has required all new development to meet the requirements of the GSMM and CSS.	Fecal, DO


Water Quality Monitoring Sites and
303 (d) Listed Stream Segments
City of Garden City
2. Pipemaker's Canal at Main Street
1. Pipemaker's Canal at Dean Forest Road
5. Salt Creek upstream of Hardin Canal
21
25
80
307
516
16
17
Legend
Sampling Sites
303(d) Listed Waterways
Streams and Waterways
Parcels
Garden City Limits

Changes Between the 2014 and Draft 2016 305b/303d List of Waters

Reach Name/ID	Reach Location/County	Basin/Water Type	Change from 2014 to Draft 2016 List
Middle Fork Broad River GAR030601040119	Stephens Creek to North Fork Broad River Franklin	Savannah Stream	New supporting reach based on 2013 data from RV_01_140.
Nails Creek GAR030601040210	Carlan Creek to the Hudson River Franklin	Savannah Stream	Changed year by which the TMDL was to be drafted from 2014 to 2015.
North Fork Little River GAR030601050104	Pond 1.2 miles upstream McWhorter Road to Raiden Creek Oglethorpe	Savannah Stream	New not supporting reach for Bio F based on 2012 data from WRD 1240.
Payne Creek GAR030601040117	Headwaters to Middle Fork Broad River Franklin	Savannah Stream	New not supporting reach for Bio F based on 2012 data from WRD 1229.
Pickens Creek GAR030601030415	Headwaters to Lake Richard B. Russell Elbert	Savannah Stream	New support reach based on 2012 data from WRD 1243.
Pipe Makers Canal GAR030601090312	Unnamed Tributary upstream of Dean Forest Road to the Savannah River Chatham	Savannah Coastal Stream	Changed year by which the FC TMDL was to be drafted from 2014 to 2015.
Popcorn Creek GAR030601020114	Headwaters to Burton Lake Rabun	Savannah Stream	New Category 3 reach based on 2013 data from RV_01_261. The pH probe was not working correctly for part of the year. More data is needed before making an assessment on pH.
Rae's Creek GAR030601060609	Headwaters to Cranes Creek Richmond	Savannah Stream	Changed year by which the Bio F TMDL was to be drafted from 2014 to 2015.

Changes Between the 2014 and Draft 2016 305b/303d List of Waters

Reach Name/ID	Reach Location/County	Basin/Water Type	Change from 2014 to Draft 2016 List
Mud River GAR030602040717	New Teakettle Creek to Sapelo Sound McIntosh	Ogeechee Coastal Stream	Added FCG(As) to Category 3 and moved water from Category 1 to Category 3 based on restrictions in 2015 fish consumption guidance book. The water will remain in Category 3 for FCG(As) until a study is completed to quantify the inorganic fraction of arsenic in fish tissue.
North Newport River GAR030602040410	Payne Creek to Carrs Neck Creek Liberty	Ogeechee Coastal Stream	Moved from Category 1 to Category 3 for DO based on 2010-2015 data from CRD 3242.
Ogeechee Creek GAR030602020201	Rd. S2178 to Ogeechee River near Oliver Screven	Ogeechee Stream	Added FC based on 2013 data from RV_02_296. Also, revised "notes" column to reflect that the DO TMDL was revised again in 2014
Ogeechee River GAR030602040318	Canoochee River to Richmond Hill Chatham, Bryan	Ogeechee Stream	Created reach by splitting GAR030602040305 (Ogeechee River - Black Creek to Richmond Hill at the Canoochee River). Put this section in Category 3 for DO and removed FC as the station that showed FC was a problem is now in the upstream reach.
Ogeechee River GAR030602020605	Black Creek to Canoochee River Bryan, Effingham, Chatham	Ogeechee Stream	Created reach by splitting GAR030602040305 (Ogeechee River - Black Creek to Richmond Hill) at the Canoochee River.
Rocky Creek GAR030602010607	Reubens Branch to Dry Branch Burke	Ogeechee Stream	Changed year by which the Bio F TMDL was to be drafted from 2014 to 2015.
Rocky Creek GAR030602010608	Unnamed tributary 0.2 miles downstream Gough Spur Road to Reubens Branch Burke	Ogeechee Stream	New supporting reach based on 2014 data from RV_02_380
Salt Creek GAR030602040212	Headwaters to Hardin Canal Chatham	Ogeechee Coastal Stream	Changed year by which the FC TMDL was to be drafted from 2014 to 2015.

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Group: **[G-1970] Aquanymphes**

Site: **[S-3404] Salt Creek** Return to Site

Filter dates between and Filter Clear date filter

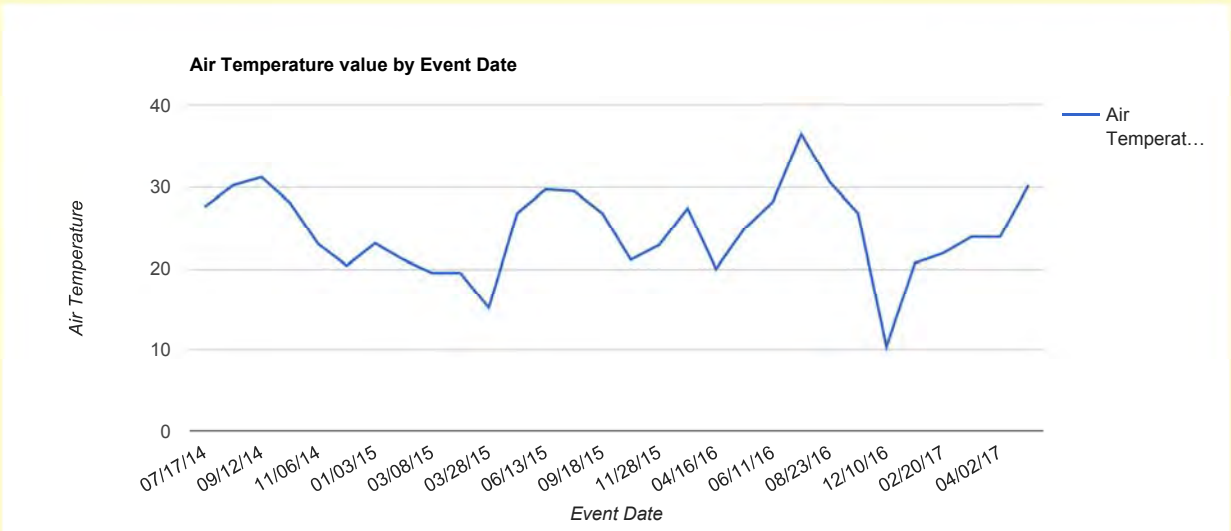
Export

Date/Time		7/17/2014 5:00:00 PM	8/14/2014 5:33:00 PM	9/12/2014 6:00:00 PM	10/8/2014 6:00:00 PM	11/6/2014 6:00:00 PM	12/
Time spent monitoring	minutes	60	60	60	60	60	
Air Temperature	°C	27.6	30.2	31.2	28.1	23	
Conductivity	µs/cm	-	10.9	0	11.6	-	
Dissolved Oxygen	mg/L	3.1	2.8	3.35	4.35	6.7	
DO %Saturation	%	41.37	37.36	42.97	51.39	71.4	
pH		7	7	7	7	7	
Water Temperature	°C	29.6	29.6	27.5	23.2	18.1	
Event ID		41017 form	41362 form	41706 form	42238 form	42865 form	

Select a different parameter to put it on the secondary axis.: Air Temperature

Display: line bar

Air Temperature, °C (range 10.4 - 36.5, average 24.70)



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Group Name: Aquanymphes
Site Name: Salt Creek
City: Savannah
County: Chatham
Watershed Name: Ogeechee Coastal Watershed
Latitude/Longitude: 32.0414/-81.204

Monitoring Events

Event_ID	Event_Date	EventDate	Time_Spent	Air_Temp	Water_Temp	PH	DissolvedOxygen	DO_Saturation
51833	4/16/2016 13:30	4/16/2016	30	20	18.4	6	5.1	54.69
52706	5/23/2016 12:00	5/23/2016	45	24.9	24.5	6.5	3.4	41.19
53384	6/11/2016 14:30	6/11/2016	30	28.2	25.4	6	2.25	27.73
53791	7/23/2016 16:00	7/23/2016	30	36.5	32	7	3.15	44
54151	8/23/2016 17:00	8/23/2016	30	30.6	30.6	7.25	3.8	51.68
54795	10/16/2016 15:00	10/16/2016	30	26.8	22.8	6.5	3.7	43.37
56086	12/10/2016 13:00	12/10/2016	30	10.4	10.4	7	7.05	63.15
56677	1/21/2017 15:30	1/21/2017	30	20.7	18	7	5.55	59.02
57081	2/20/2017 17:00	2/20/2017	30	21.9	16.8	7	5.65	58.57

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Click here for an interactive version 

Salt Creek [S-3404] is one of **2** sites monitored by Group **[G-1970] Aquanymphes**

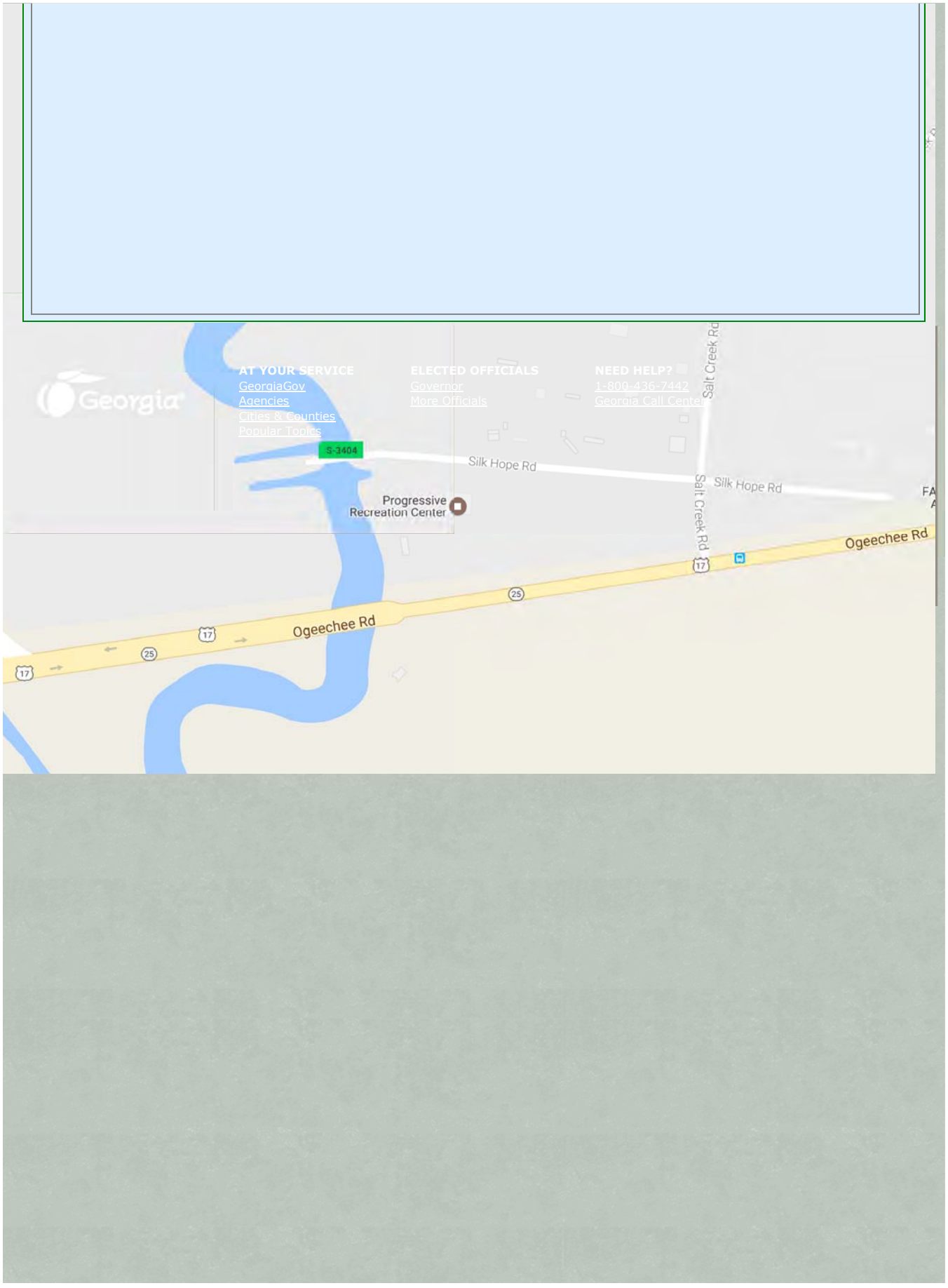
Site Description: Salt Creek boat ramp and park on Silk Hope Rd next to Progressive Rec Center off of Hwy 17.

Special Information:Numerous fishing sites in need of cleanup Lots of trash collecting in drainage ditches as well

This site has **29** recorded monitoring events.

[Download to Excel]

At a glance	
Site:	Salt Creek [S-3404]
Group:	**[G-1970] Aquanymphes**
Lat, Long:	32.0414 , -81.204
Altitude:	2 meters (7 feet)
Watershed:	Ogeechee Coastal Watershed
City:	Savannah, Georgia
County:	Chatham
Events:	29
First sampled:	07/17/2014
Local Coordinator:	• **Blake Caldwell**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S-3404
Silk Hope Rd
Progressive
Recreation Center
Salt Creek Rd
Ogeechee Rd
17
25

Appendix H:

Green Infrastructure Plan

GREEN INFRASTRUCTURE/LOW IMPACT DEVELOPMENT (GI/LID) PLAN

GARDEN CITY, GEORGIA
NPDES Permit #: GAS000208

Georgia Department of Natural Resources
Environmental Protection Division • Watershed Protection Branch
2 Martin Luther King Jr. Drive • Suite 1152 East • Atlanta • Georgia 30334
(404) 463-1511; Fax (404) 656-2453
Judson H. Turner, Director

January 7, 2016

Mr. Ron Feldner, City Manager
City of Garden City
Post Office Box 7548
Garden City, Georgia 31408

RE: Municipal Separate Storm Sewer System
NPDES Permit No. GAS000208 (Permit)
Green Infrastructure/Low Impact Development Program

Dear Mr. Feldner:

In a letter dated October 19, 2015, the Georgia Environmental Protection Division (EPD) provided comments to the City of Garden City (City) on its Green Infrastructure/Low Impact Development Design Program (GI/LID Program). We have received the City's November 20, 2015 submission responding to our comments. Based on our review of the revisions, your GI/LID Program can now be approved.

Thank you for your cooperation in this matter. If you have any questions regarding this review feel free to call me at (404) 651-8541 or contact me via email at lyn.mickelson@dnr.ga.gov.

Sincerely,

Lyndell C. Mickelson
Environmental Compliance Specialist
Stormwater Unit

Cc: Benny Googe, Public Works Director
Jackie Jackson, Savannah-Chatham County Municipal Planning Commission

Introduction

Green Infrastructure (GI) uses vegetation, soils, and natural processes to manage water and create healthier built environments with fewer negative impacts on surrounding green space and wildlife habitat. At the scale of a large city or region, green infrastructure refers to the overall network of natural areas that provide habitat, flood protection, cleaner air, and cleaner water. At the scale of a neighborhood or site, green infrastructure refers to stormwater management systems that mimic nature by soaking up and storing water. These site-specific techniques are collectively described as Low Impact Development (LID), an approach to development that works with nature to manage stormwater as close to its source as possible. LID employs site design priorities such as preserving and recreating natural landscape features, minimizing impervious surfaces, and incorporating stormwater as an on-site resource rather than a waste product.

Specific to coastal Georgia, the Coastal Stormwater Supplement (CSS) to the Georgia Stormwater Management Manual describes GI as natural areas that provide ecological benefits in urban areas as well as post-construction stormwater management practices that are designed to be "green" (source control with natural systems) rather than "gray" (offsite disposal or treatment with conventional storm sewers, etc.). The CSS specifies that LID practices disconnect impervious and disturbed pervious surfaces from the storm drain system and reduce post-construction stormwater runoff rates, volumes and pollutant loads. Examples of LID include soil restoration, site reforestation/vegetation, green roofs, vegetated filter strips and bioretention.

The CSS goes on to state that *GI planning requires the support of federal, state and local policies, programs and regulations encouraging the use of innovative watershed and stormwater management tools*. The innovative techniques that can be found in this "toolbox" include:

1. Using comprehensive land use planning and zoning to direct growth away from sensitive aquatic and terrestrial resources;
2. Using land acquisition and better site planning techniques to protect and conserve valuable natural resources:
3. Using better site design techniques to minimize land disturbance; and
4. Using small-scale stormwater management practices (LID) to reduce post-construction stormwater runoff rates, volumes and pollutant loads.

GI planning, design, and intergovernmental coordination together with LID techniques can not only help protect valuable terrestrial and aquatic resources from the direct impacts of land development, but also provide additional benefits such as reduced sanitary and combined sewer overflow, reduced energy demand, urban heat island mitigation, improved air quality, and improved health for Georgia's coastal communities.

GI/LID Program Minimum Elements

Garden City NPDES Phase I MS4 Permit contains the following requirements for GI/LID:

GI/LID Program Elements	Measurable Goal	Status/ Completion Date
1. Legal Authority	1.a. The ordinance evaluation required by Part 3.3.10 (b) (1) shall be completed and a written report submitted to EPD with the 2011-2012 Annual Report	Completed June 19, 2010
	1.b. Any necessary ordinance revisions must be completed and adopted ordinances submitted to EPD by April 13, 2014.	Completed April 2014
2. GI/LID Program	2.a. Develop a program describing the GI/LID techniques and practices to be implemented by the permittee. The program shall include procedures for evaluating the feasibility and site applicability of different GI/LID techniques and practices, and various structures and practices to be considered. The program must be submitted to EPD for review with the 2014-2015 annual report. Upon approval, the program will become a part of the SWMP.	Completed April 2015
3. GI/LID Structure Inventory	3.a. Develop an inventory of GI/LID structures located within the permittee's jurisdiction, including the total number of each type of structure. Provide the inventory with the 2014-2015 annual report.	There are currently no GI/LID structures located within the permittee's jurisdiction.
	3.b. Track the addition of new GI/LID structures through the plan review process and ensure the structures are added to the inventory. Provide an updated inventory in each annual report, beginning with the 2015-2016 annual report.	To begin with the addition of a GI/LID structure located within the permittee's jurisdiction.
4. Inspection Program	4.a. Conduct inspections on 100% of the total non-residential GI/LID structures within a 5-year period, beginning in April 2015. Provide the number and/or percentage of the total structures inspected during the reporting	To begin with the addition of a GI/LID structure located within

GI/LID Program Elements	Measurable Goal	Status/ Completion Date
	period in each annual report.	the permittee's jurisdiction.
	4.b. Conduct maintenance on the non-residential GI/LID structures owned by the permittee, as needed, beginning in April 2015. Provide the number and/or percentage of the total structures maintained during the reporting period in each annual report.	To begin as needed with the addition of a GI/LID structure located within the permittee's jurisdiction.
	4.c. Develop procedures for ensuring privately-owned non-residential GI/LID structures are maintained as needed. Provide the procedures to EPD for review with the 2014-2015 annual report. Upon EPD approval, implement the procedures and provide documentation in each subsequent annual report.	Completed April 2015 pending approval by EPD.

1. Legal Authority

The above jurisdiction adopted the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual on August 15, 2011 in accordance with the above NPDES permit.

Furthermore, Garden City has reviewed its land development ordinances and made the following determination regarding any ordinance adoptions/amendments needed to implement GI/LID:

2. GI/LID Program

Permit Requirement: "Develop a program describing the GI/LID techniques and practices to be implemented by the permittee. The program shall include procedures for evaluating the feasibility and site applicability of different GI/LID techniques and practices, and various structures and practices to be considered. The program must be submitted to EPD for review with the 2014-2015 annual report."

Garden City will implement a program to encourage the use of GI/LID techniques in new development, redevelopment and through retrofitting of previously developed property.

a. New Development and Redevelopment:

Garden City has adopted the CSS as its guide and technical reference for both post-construction stormwater management design and construction for new development and redevelopment

projects, both public and private, creating more than 5,000 square feet of impervious surface. The design criteria require newly designed stormwater drainage systems to reduce stormwater runoff volume and treat water quality through implementation of GI/LID techniques including infiltration, better site design, and better site planning. Preservation of natural resources may also be afforded GI/LID credits. Applicable GI/LID techniques and implementation methodology are described in Section 7.0 of the CSS manual titled, "Green Infrastructure Practices." Additional information on the design specifications for specific stormwater control practices is included in Chapter 9: Stormwater Management Practices.

Garden City adopted its current Post Construction Stormwater Management Ordinance (Article V. Stormwater Management); the CSS as its Technical Reference Document; and its Stormwater Management Local Design Manual (LDM) on August 15, 2011. The ordinance and the accompanying documents had an effective date of April 1, 2012 to comply with applicable requirements of the City's NPDES MS4 Permit. The three elements listed above comprise the City's stormwater regulation strategy as it pertains to storm water runoff quantity and quality issues that must be addressed during the various stages of a land development project.

1. GI/LID Inventory

Permit Requirement: *"Develop an inventory of GI/LID structures located within the permittee's jurisdiction, including the total number of each type of structure. Provide the inventory with the 2014-2015 annual report. Track the addition of new GI/LID practices and structures through the plan review process and ensure the structures are added to the inventory. Provide an updated inventory in each annual report, beginning with the 2015-2016 annual report."*

Definition of GI/LID Structure:

The Garden City considers the following structures to be GI/LID structures, and will be included in this inventory. These LID practices are recommended for Garden City, and are permitted under current regulations. Standards and specifications for these BMPs are included in Chapter 7 of the CSS. For inventory purposes, Garden City only recognizes best management practices (BMP's) and structures specifically designed, engineered and approved for stormwater management through the Garden City process. As additional GI/LID techniques become recognized and generally accepted by stormwater practitioners, they may be added to this plan:

• Green Roofs • Permeable pavement (Pervious concrete, concrete grid pavers, permeable interlocking pavers, plastic grid pavers, etc.) • Improved Grassed Channels • Simple Downspout Disconnection	• Rain Gardens • Stormwater Planters • Dry Wells • Rainwater Harvesting • Bioretention Areas • Infiltration Practices

Exclusion: This inventory does not include, nor will this plan cover, any BMPs on privately-owned, residential parcels, or other BMPs already addressed through other NPDES Phase I MS4 permit requirements or programs, including, but not limited to: grassed ditches, detention and retention ponds, and the structural controls within the storm sewer system.

GI/LID Inventory Collection and Maintenance:

The inventory was conducted through field investigations, and includes the "GI/LID Type" as listed above, in addition to pertinent parameters outlined below:

- Unique ID
- GI/LID Type
- Lat/Long
- Owner
- Land Use Type: Public/municipal, commercial, industrial, etc.
- Owner Contact Information
- Installation Date
- Inspection History
- Maintenance History
- Photo

The inventory is maintained in a GIS database and will be updated on an annual basis and included in the Annual Report. A copy of the current inventory with the location of the GI/LID structures is included in the Appendix.

2. Inspection Program

Permit Requirement "Conduct inspections on 100% of the total non-residential GI/LID structures within a 5-year period, beginning in April 2015. Provide the number and/or percentage of the total structures inspected during the reporting period in each annual report. Conduct maintenance on the non-residential GI/LID structures owned by the permittee, as needed, beginning in April 2015. Provide the number and/or percentage of the total structures maintained during the reporting period in each annual report. Develop procedures for ensuring privately-owned non-residential GI/LID structures are maintained as needed. Provide the procedures to EPD for review with the 2014-2015 annual report. Upon EPD approval, implement the procedures and provide documentation in each subsequent annual report.

Inspections

Inspections of GI/LID structures will be conducted in accordance with the same schedule maintained for other BMP inspections conducted by Garden City staff. Accordingly, Garden City staff will inspect approximately 20% of GI/LID structures included in the inventory noted above on an annual basis, such that over a five year period 100% of all structures will be inspected. However, the City intends to evaluate the maintenance requirements and inspection

frequencies of all new “green infrastructure” Best Management Practices (BMPs) according to the Coastal Stormwater Supplement (CSS).

Inspections will be conducted to ensure that all GI/LID structures are maintained in accordance with their design, the Garden City Stormwater Management Ordinance and the recommendations of the CSS. Procedures for inspecting the various GI/LID techniques are included below:

LID Technique	Inspection Procedures
Green Roofs	Inspect waterproof membrane for leaks.
	Inspect outflow and overflow areas for sediment accumulation.
	Inspect green roof for dead or dying vegetation.
Permeable Pavement Systems	Inspect to ensure that the permeable pavement surface is clear of sediment and debris.
	Check the permeable pavement system for excessive ponding and dead or dying vegetation (if applicable).
	Inspect permeable pavement system for drawdown following rainfall events. (Failure to drawdown within 72 hours after the end of a rainfall event may indicate permeable pavement system failure.)
	Inspect permeable pavement surface for deterioration or breaking/flaking.
Vegetated Filter Strips and other Infiltration Practices	Inspect vegetated filter strip following rainfall events for presence of erosion, trash and debris.
	Inspect level spreader for clogging and sediment accumulation.
	Inspect vegetated filter strip for dead or dying vegetation.
Grass Channels/Swales	Inspect vegetated grass channel following rainfall events for presence of trash and debris.
	Inspect grass channel for sediment accumulation. Sediment should not fill more than 25% of the original channel cross-section.
	Inspect grass channel for the formation of rills and gullies.
	Inspect grass channel for dead or dying vegetation.
Simple Downspout	Inspect to ensure that downspout directs water away from impervious surfaces such as driveways, sidewalks, and streets.

LID Technique	Inspection Procedures
Disconnections	Inspect the pervious areas located below simple downspout disconnections following rainfall events for erosion.
Rain Gardens/ Bioretention Cells	Inspect inflow area for sediment accumulation.
	Inspect rain garden for erosion and the formation of rills and gullies.
	Inspect rain garden for dead or dying vegetation.
Stormwater Planters	Inspect inflow and outflow areas for sediment accumulation, trash and debris.
	Inspect stormwater planter for dead or dying vegetation.
Dry Wells	If used to "receive" non-rooftop runoff, ensure that the contributing drainage area is stabilized.
	Inspect vegetative cover on the surface of the dry well following rainfall events for evidence of erosion.
	Inspect gutters and downspouts that direct runoff to dry well for accumulated leaves or debris.
	Inspect dry well following rainfall events. Check observation well to ensure that complete drawdown has occurred within 72 hours after the end of a rainfall event. Failure to drawdown within this timeframe may indicate dry well failure.
	If applicable, inspect pretreatment devices for sediment accumulation.
	Inspect storage tank screens and pretreatment devices. Inspect top layer of filter fabric for sediment accumulation.
Rainwater Harvesting Systems/Rain Barrels	Inspect gutters and downspouts for accumulated leaves or debris.
	Inspect storage tank screens.
	Inspect pretreatment devices for sediment accumulation.

LID Technique	Inspection Procedures
	Inspect storage tank for algal blooms.
	Inspect overflow areas for erosion and the formation of rills and gullies.

Garden City staff will utilize the checklist included in Appendix B to inspect the GI/LID structures and will include the results of the inspection in the GI/LID Inventory Database. A summary of inspections conducted will be included in the Annual Report. If inspections indicate that a Garden City -owned GI/LID structure is in need of maintenance, the Garden City will perform that maintenance as outlined below. If an inspection indicates that a non-residential, privately owned BMP requires maintenance, the Garden City will notify the private owner of the results of the inspection and any recommended actions.

Maintenance:

When the inspection indicates that Garden City -owned LID structures are in need of maintenance, the Garden City will perform that maintenance, as appropriate, in accordance with the recommendations set forth in Chapter 7 of the CSS. A summary of maintenance activities completed will be included in the Annual Report.

In order to ensure that private, non-residential GI/LID structures are maintained by their private owner in accordance with the CSS, Garden City has ensured that its existing *Stormwater Facility Inspection and Maintenance Agreement* adopted in August 2011 can be utilized for land development sites that construct GI/LID structures designed as part of the site's stormwater management system. The existing maintenance agreement already requires the developer of the site to develop a maintenance program and identify a responsible party for implementation of the prescribed maintenance activities. The City has required this agreement to be executed prior to approval of the Stormwater Site Plan, per Garden City Stormwater Management Ordinance. This agreement will allow Garden City to enforce maintenance standards on all storm water management facilities, including private, non-residential GI/LID structures that have been constructed after April 1, 2012. A copy of the agreement is contained in the aforementioned LDM.

Inspection Report for GI/LID Structures

Location/Facility: _____

Address: _____

Date: _____ Inspector:_____ _____

Inspection Items:	Pass	Fail	N/A	Comments
Green Roofs				
Inspect waterproof membrane for leaks.				
Inspect outflow and overflow areas for sediment accumulation.				
Inspect green roof for dead or dying vegetation.				
Other:				
Permeable Pavement Systems				
Permeable pavement surface is clear of sediment and debris.				
Excessive ponding and dead or dying vegetation (if applicable).				
Drawdown following rainfall events. (Drawdown within 72 hours of a rainfall event)				
Inspect surface for deterioration or spalling.				

Other:				
Vegetated Filter Strips/Infiltration Practice				
Presence of erosion, trash and debris.				
Inspect level spreader for clogging and sediment accumulation.				
Inspect vegetated filter strip for dead or dying vegetation.				
Other:				
Grass Channels/Swales				
Presence of trash and debris.				
Sediment does not fill more than 25% of the original channel cross-section.				
Inspect for the formation of rills and gullies.				
Inspect for dead or dying vegetation.				
Other:				
Inspection Items:	Pass	Fail	N/A	Comments
Simple Downspout Disconnections				
Downspout directs water away from impervious surfaces				
Inspect areas located below downspout for erosion.				
Other:				

Rain Gardens/ Bioretention Cells				
Inspect inflow area for sediment accumulation.				
Inspect rain garden for erosion and the formation of rills and gullies.				
Inspect rain garden for dead or dying vegetation.				
Other:				
Stormwater Planters				
Accumulation of sediment, trash or debris.				
Dead or dying vegetation.				
Other:				
Dry Wells				
If used to “receive” non-rooftop runoff, ensure that the contributing drainage area is stabilized.				
Inspect surface of the dry well for evidence of erosion.				
Inspect gutters and downspouts for accumulated leaves or debris.				
Inspect pretreatment devices for sediment accumulation.				
Inspect top layer of filter fabric for sediment accumulation.				

Complete drawdown occurs within 72 hours after the end of a rainfall event.				
Other:				
Rainwater Harvesting Systems				
Inspect gutters and downspouts for accumulated leaves or debris.				
Inspect storage tank screens.				
Inspect pretreatment devices for sediment accumulation.				
Inspect storage tank for algal blooms.				
Inspect overflow areas for erosion and the formation of rills and gullies.				
Other:				

Signature: _____