

City of Villa Rica

Municipal Separate Storm Sewer System (MS4)

Stormwater Management Program

June 4, 2018



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## Part 1 – Introduction

This Phase II MS4 Stormwater Management Program (SWMP) addresses stormwater management within the jurisdiction of the City of Villa Rica. It has been developed as required under the State of Georgia, Department of Natural Resources, Environmental Protection Division (EPD) *Authorization to Discharge Under the National Pollutant Discharge Elimination System Stormwater Discharges Associated With Small Municipal Separate Storm Sewer Systems (MS4) General Permit GAG610000*.

Noncompliance with any of the requirements of the Permit constitutes a violation of the Federal Clean Water Act and the Georgia Water Quality Control Act.

The objective of this SWMP is to reduce the discharge of pollutants from the MS4 to waters of the State to the maximum extent practicable, in order to protect water quality and to satisfy the appropriate Federal and State water quality requirements.

Date of Designation: March 7, 2014

Annual Report due date: February 15

### 1.1 General Information

- A. Name of small MS4: City of Villa Rica
- B. Name of responsible Official: Tom Barber  
Title: City Manager  
Mailing Address: 571 W Bankhead Highway  
City: Villa Rica  
State: Georgia  
Zip Code: 30180
- C. Designated stormwater management program contact:  
Name: Jameson Green  
Title: Watershed Protection Department Manager  
Mailing Address: 571 W. Bankhead Highway  
City: Villa Rica  
State: Georgia  
Zip code: 30180  
Telephone Number: (678) 840-1214  
Email address: [jgreen@villarica.org](mailto:jgreen@villarica.org)

### 1.2 Sharing Responsibility

- A. Has another entity agreed to implement a control measure on your behalf?  Yes  No

### 1.3 Certification Statement

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

Printed Name: Tom Barber Date: \_\_\_\_\_

Signature: \_\_\_\_\_ Title: City Manager

## **Part 2 – Public Education and Outreach on Stormwater Impacts**

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

The BMPs included in the list below are described in detail on the following pages. Each of these BMPs is considered critical to satisfying the requirements of the Federal Stormwater Phase II Regulations.

**BMP No. 1     Spring Utility Bill Insert**

**BMP No. 2     Watershed Protection Department Web Page**

**BMP No. 3     Brochures in City Hall**

**BMP No. 4     Fall Utility Bill Insert**

## **2.1 Best Management Practice (BMP) #1 – Spring Utility Bill Insert**

**Target Audience:** Citizens of Villa Rica / General Public

**Description of BMP:** Spring Utility Bill Insert

The City distributes educational materials describing the impact that typical residential spring activities can have on stormwater runoff and, ultimately, surface water quality. Typical activities discussed in the spring educational materials will be the application of landscape fertilizers, pesticides, and herbicides. The method of distribution will be to insert flyers in the City of Villa Rica water bills sent to all residential and commercial customers. A description of this program and examples of materials distributed are located in Appendix D1.

### **Measurable Goals:**

- The number of documents distributed each spring will be documented.

### **Documentation to be submitted with each Annual Report:**

- A copy of the documents distributed and the number of documents distributed

### **Schedule:**

- a. Interim milestone dates: Determine topic(s) to be addressed in flyer in January of each year
- b. Implementation date: Between January and March of each year
- c. Frequency of actions: Annually
- d. Month/Year of each action: March or April of each year

### **Person (position) responsible for overall management and implementation of the BMP:**

Watershed Protection Department Manager

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

Educating citizens concerning the impact of their actions on the water quality of the local streams and lakes is an important step in improving the quality of surface waters in and around Villa Rica.

### **How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

It is widely believed that greater public awareness will result in greater responsibility and compliance. The most reasonable and economical measure of the level of public awareness achieved by this BMP is the number of publications distributed each year.



## **2.2 Best Management Practice (BMP) #2 – Watershed Protection Web Page**

**Target Audience:** Citizens of Villa Rica / General Public

**Description of BMP:** Watershed Protection Web Page

The Watershed Protection Department maintains a page on the city website, <http://villarica.org>, which contains information on the City’s Stormwater Management Program and a copy of the current Watershed Protection Plan. Information concerning potential sources of pollutants from typical residences and businesses and how those pollutants can affect water quality, as well as actions citizens can take to reduce pollution from their residence or business is discussed on the webpage. The webpage is updated annually with new and/or additional information. A description of this program and examples of materials available on the website are located in Appendix D2.

**Measurable Goals:**

- The number of times the Watershed Protection Department page of the City website is visited will be tracked.

**Documentation to be submitted with each Annual Report:**

- A printed example of the webpage from the reporting period and the number of times the page was visited during the reporting period will be submitted with each Annual Report.

**Schedule:**

- a. Interim milestone dates: Publish and maintain throughout the year
- b. Implementation date: 2014
- c. Frequency of actions: Update at least annually
- d. Month/Year of each action: Continually during the permit cycle

**Person (position) responsible for overall management and implementation of the BMP:**

Watershed Protection Department Manager

**Rationale for choosing BMP and setting measurable goal(s):**

The city believes that a large percentage of the citizens of Villa Rica either own or have access to a computer with internet access. Therefore, the Watershed Protection page on the City’s website provides an easily accessible source of information for the general public. The use of the City’s web site to provide information on the impacts of the actions of individuals and businesses on the quality of the surface waters in and around the City is an effective method of promoting awareness.

**How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

The benefits of providing the citizens of Villa Rica with water quality information are difficult to measure. However, the City will track the numbers of times the Watershed Protection Department web page is visited. If the number of visits per year increases year-to-year, the BMP will be considered effective in increasing water quality awareness among the citizens of Villa Rica.

## **2.3 Best Management Practice (BMP) #3 – Brochures Placed in City Hall**

**Target Audience:** Citizens of Villa Rica / General Public

**Description of BMP:** Brochures Placed in City Hall

A variety of brochures and educational materials containing information concerning potential sources of stormwater pollutants will be placed in the lobby of City Hall for distribution to the general public. Specific topics covered by these materials will include pollutants generated by typical residential and business activities and how those pollutants can affect local water quality. In addition, the materials will describe actions citizens can take to reduce pollution will be made available. The brochures and educational materials will be updated and new materials added at least once per year. A description of this program and examples of materials distributed are located in Appendix D3.

**Measurable Goals:**

- The number and types of different brochures placed in City hall will be documented.

**Documentation to be submitted with each Annual Report:**

- The number and types of different brochures placed in City hall will be listed; and
- Copies of representative brochures displayed will be submitted.

**Schedule:**

- a. Interim milestone dates: Maintain a variety of brochures concerning stormwater on display
- b. Implementation date: 2014
- c. Frequency of actions: Update and/or add to brochures at least once per year
- d. Month/Year of each action: Continually during the permit cycle

**Person (position) responsible for overall management and implementation of the BMP:**

Watershed Protection Department Manager

**Rationale for choosing BMP and setting measurable goal(s):**

Residents of Villa Rica frequently visit City Hall to pay utility bills, obtain permits, or speak to city officials. Therefore, the presence of brochures and other educational materials in the lobby provides an easily accessible source of information for the general public. The information provided helps to educate residents on the impacts of their actions on the quality of the surface waters in and around the City, and is an effective method of promoting awareness.

**How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

It is widely believed that greater public awareness will result in greater responsibility and compliance. The most reasonable and economical measure of the level of public awareness achieved by this BMP is the number of publications distributed each year.

## **2.4 Best Management Practice (BMP) #4 – Fall Utility Bill Insert**

**Target Audience:** Citizens of Villa Rica / General Public

**Description of BMP:** Fall Utility Bill Insert

The City distributes educational materials describing the impact that typical residential autumn activities can have on stormwater runoff and, ultimately, surface water quality. Typical activities discussed in the fall educational materials will handling leaf debris, proper use of de-icing products, and preparing landscaping for the winter. The method of distribution will be to insert flyers in the City of Villa Rica water bills sent to all residential and commercial customers. A description of this program and examples of materials distributed are located in Appendix D4.

**Measurable Goals:**

The number of documents distributed each fall will be documented.

**Documentation to be submitted with each Annual Report:**

A copy of the documents distributed and the number of items distributed will be submitted with each Annual Report.

**Schedule:**

- e. Interim milestone dates: Determine topic(s) to be addressed in flyer in July of each year
- f. Implementation date: Between July and September of each year
- g. Frequency of actions: Annually
- h. Month/Year of each action: September or October of each year

**Person (position) responsible for overall management and implementation of the BMP:**

Watershed Protection Department Manager

**Rationale for choosing BMP and setting measurable goal(s):**

Educating citizens concerning the impact of their actions on the water quality of the local streams and lakes is an important step in improving the quality of surface waters in and around Villa Rica.

**How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

It is widely believed that greater public awareness will result in greater responsibility and compliance. The most reasonable and economical measure of the level of public awareness achieved by this BMP is the number of publications distributed each year.

## **Part 3 – Public Involvement/Participation**

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

The BMPs included in the list below are described in detail on the following pages. Each of these BMPs is considered critical to satisfying the requirements of the Federal Stormwater Phase II Regulations.

**BMP No. 1      Storm Drain Stenciling Program**

**BMP No. 2      Annual Citywide Cleanup**

**BMP No. 3      Adopt-A-Road Program**

**BMP No. 4      Recycling Event Sponsorship**

### **3.1 Best Management Practice (BMP) #1 – Storm Drain Stenciling Program**

**Target Audience:**

Students between the ages of 6 and 12 that attend the Villa Rica summer camp programs.

**Description of BMP:** Storm Drain Stenciling Program

In cooperation with the Villa Rica Recreation Department’s Summer Day Camp and the Villa Rica Police Department Explorer programs, the Watershed Protection Department conducts a program to stencil drain inlets at Gold Dust Park and other areas of the City. The program includes a presentation on the importance of protecting the environment and water resources. After the presentation the campers and Explorers are divided into groups and assigned specific drain inlets to be stenciled. Each group has a counselor or supervisor to assist with the stenciling. A description of the stenciling program and photographs of activities are located in Appendix E1.

**Measurable Goals:**

The number of campers and Explorers participating in the program each summer and the number of drains stenciled will be documented.

**Documentation to be submitted with each Annual Report:**

- A summary of the program;
- The number of campers participating in the program;
- The number of drain inlets stenciled; and
- A map showing the location of drains stenciled during the year.

**Schedule:**

- a. Interim milestone dates: Late spring/early summer - schedule the program with the Summer Camp organizers
- b. Implementation date: During the Summer Camp
- c. Frequency of actions: Annually
- d. Month/Year of each action: Each summer during the permit cycle.

**Person (position) responsible for overall management and implementation of the BMP:**

Watershed Protection Department Manager

**Rationale for choosing BMP and setting measurable goal(s):**

It is widely believed that greater public awareness will result in greater responsibility and compliance. Educating the younger citizens in the community on the impacts of the actions of individuals and businesses on water quality will promote awareness of the importance of water quality not only for the students involved but also for their parents and other children in the community. In addition the general public will see the message stenciled on storm drains and be reminded not to dump non-stormwater into the drain.

**How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

The improvement of water quality as demonstrated by surface water monitoring, fewer water quality complaints from citizens, and fewer water quality problems observed by city maintenance employees will be used to determine the effectiveness of this BMP.



### **3.2 Best Management Practice (BMP) #2 – Citywide Clean-Up Week**

**Target Audience:** Citizens of Villa Rica / General Public

**Description of BMP:** Citywide Clean-Up Week

Each year the City will conduct a Citywide Clean-Up campaign. Over the period of one week, the City will pick up unwanted items that are not typically picked-up by the normal garbage pickup service. A description of the Citywide Clean-Up campaign as well as a copy of the advertising flyer for the 2017 event and results from the 2017 clean-up are located in Appendix E2.

**Measurable Goals:**

- One clean-up campaign will be conducted each year; and
- The quantity of material collected and properly disposed-of will be documented.

**Documentation to be submitted with each Annual Report:**

- Copies of promotional materials for the event; and
- An accounting of the quantity of material picked-up and properly disposed.

**Schedule:**

- a. Interim milestone dates: Schedule and promote the event – January of each year
- b. Implementation date: Spring of 2011
- c. Frequency of actions: Annually
- d. Month/Year of each action: Each year of the permit cycle

**Person (position) responsible for overall management and implementation of the BMP:**

Street Department

**Rationale for choosing BMP and setting measurable goal(s):**

The removal of problem items not typically picked-up by household garbage collection will reduce the likelihood of those items being illegally dumped, which would create a potential impact to stormwater discharges to the MS4. The volume of materials properly disposed-of is a measure of the success of the program.

**How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

This BMP will be considered effective if the number of illegal dumping and litter complaints decrease over the term of the permit and the number of citizens participating in the cleanup increases each year.

### **3.3 Best Management Practice (BMP) #3 – Adopt-A-Road**

**Target Audience:** Corporate Citizens of Villa Rica

**Description of BMP:** Adopt-A-Road

The City co-sponsors an Adopt-A-Road Program which encourages businesses in Villa Rica to participate by adopting a section of one of the roads in the City. The participating businesses commit to quarterly clean-up and beautification events on the section of road adopted. A description of an Adopt-A-Road participating company in the City is located in Appendix E3

**Measurable Goals:**

- Track the businesses participating

**Documentation to be submitted with each Annual Report:**

- Document any new Villa Rica businesses participating in the program; and
- Document the total number of Villa Rica businesses participating in the program.

**Schedule:**

- e. Interim milestone dates: Encourage businesses to participate in the program
- f. Implementation date: 2014
- g. Frequency of actions: Continually
- h. Month/Year of each action: Continually during the permit cycle

**Person (position) responsible for overall management and implementation of the BMP:**

Watershed Protection Department

**Rationale for choosing BMP and setting measurable goal(s):**

Removing litter from the road sides in the City prevents the litter from being washed into local surface water, improving overall water quality.

**How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

This BMP will be considered effective if less litter and debris is washed into local surface waterbodies on roads in the city.

### **3.4 Best Management Practice (BMP) #4 – Recycling Event Sponsorship**

**Target Audience:** Citizens of Villa Rica / General Public

**Description of BMP:** Sponsorship of Annual Recycling Events

Each year the City will co-sponsor a minimum of two recycling events with Keep Carroll Beautiful and other City and County organizations and businesses. Each event will have at least one drop-off location inside the City. The items collected at these recycling events will include tires, electronics, and hazardous materials. A description of the recycling events and brochures from two of the events sponsored in 2018 are located in Appendix E4.

**Measurable Goals:**

- At least two recycling events will be sponsored per year

**Documentation to be submitted with each Annual Report:**

- Copies of promotional materials for the events

**Schedule:**

- i. Interim milestone dates: Schedule and promote the event – January of each year
- j. Implementation date: Late winter to mid-spring
- k. Frequency of actions: At least twice per year
- l. Month/Year of each action: Typically March & April of each year of the permit cycle.

**Person (position) responsible for overall management and implementation of the BMP:**

Watershed Protection Department

**Rationale for choosing BMP and setting measurable goal(s):**

The removal of problem items not typically picked-up by household garbage collection will reduce the likelihood of those items being illegally dumped, which would create a potential impact to stormwater discharges to the MS4. The volume of materials properly disposed of is a measure of the success of the program.

**How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

This BMP will be considered effective if the number of illegal dumping and litter complaints decrease over the term of the permit, and the number of citizens participating in the cleanup increases each year.

## Part 4 – Illicit Discharge Detection and Elimination

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

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

The BMPs included in the list below are described in detail on the following pages. Each of these BMPs is considered critical to satisfying the requirements of the Federal Stormwater Phase II Regulations.

**BMP No. 1     Legal Authority**

**BMP No. 2     Outfall Map and Inventory**

**BMP No. 3     IDDE Plan**

**BMP No. 4     Education**

**BMP No. 5     Complaint Response**

## 4.1 Best Management Practice (BMP) #1 – Legal Authority

**BMP Title:** Legal Authority

### **Description of BMP:**

The Stormwater Management Ordinance prepared by the Metropolitan North Georgia Water Planning District has been adopted by the City of Villa Rica and is now included as Section 1000 of the City of Villa Rica Development Regulations. Section 1000 of the Regulations specifically addresses illicit discharges. A copy of the Development Regulations is located in Appendix C of this document.

### **Measurable Goals:**

Each year the ordinance will be reviewed and evaluated to determine if revision is required.

### **Documentation to be submitted with each Annual Report:**

- The results of the review and evaluation of the ordinance and details of any revisions made to the ordinance; and
- A copy of any adopted revision of the City Development Regulations.

### **Schedule:**

- a. Interim milestone dates: NA
- b. Implementation date: Original Adoption of Stormwater Management Ordinance - November 6, 2007  
Adoption of revised Development Regulations – May 1, 2018
- c. Frequency of actions: Review ordinance annually
- d. Month/Year of each action: Continually during the permit cycle

### **Person (position) responsible for overall management and implementation of the BMP:**

Watershed Protection Department Manager

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

The adoption of an ordinance that manages stormwater discharges and prohibits non-stormwater discharges to the MS4 is required by General Permit No. GAG610000.

### **How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

The improvement of water quality demonstrated by surface water monitoring, fewer water quality complaints from citizens, and fewer water quality problems observed by city maintenance employees will demonstrate that this BMP is effective.

## 4.2 Best Management Practice (BMP) #2 – Outfall Map and Inventory

**BMP Title:** Outfall Map and Inventory

**Description of BMP:**

Maintain an Outfall Map and Inventory delineating the location of all outfalls from the MS4 and the names and locations of all waters of the State that receive discharges from the MS4 outfalls. The Outfall Map and Inventory are located in Appendix II.

**Measurable Goals:**

- The City will track the number of outfalls added during each reporting period and the total number of outfalls in the MS4’s urbanized area; and
- Outfall Map and Inventory will be updated annually.

**Documentation to be submitted with each Annual Report:**

- The updated Outfall Map and Inventory showing any outfalls added during the year and the total number of outfalls on the MS4.

**Schedule:**

- a. Interim milestone dates: Map and Inventory submitted to the EPD for approval February 2018  
Update the Map and Inventory as outfalls are added or identified.
- b. Implementation date: NA
- c. Frequency of actions: Update as outfalls are added or identified
- d. Month/Year of each action: Continually throughout the permit cycle

**Person (position) responsible for overall management and implementation of the BMP:**

Watershed Protection Department Manager

**Rationale for choosing BMP and setting measurable goal(s):**

The Outfall Map and Inventory will be a valuable tool in planning and conducting inspections and maintenance of MS4 outfalls.

**How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

The effectiveness of the Outfall Map and Inventory will be evaluated based on the increased effectiveness of the MS4 inspections and maintenance.

### 4.3 Best Management Practice (BMP) #3 – IDDE Plan

**BMP Title:** Illicit Discharge Detection and Elimination (IDDE) Plan

**Description of BMP:**

The Illicit Discharge Detection and Elimination (IDDE) Plan has been developed, and includes procedures for the dry weather screening of outfalls, source tracing procedures, and discharge elimination procedures. Dry weather screening of outfalls will be conducted according to the procedures in the IDDE Plan. The approved IDDE Plan is located in Appendix F1.

**Measurable Goals:**

Measurable goals for this BMP will include:

- Conduct dry weather screening inspections of all outfalls located within one of the five designated City sectors each year;
- Conduct dry weather screening inspection of 100% of all MS4 outfalls within the permitted area within a 5-year period;
- Implement source tracing procedures for all inspected outfalls with dry weather flow;
- Implement illicit discharge enforcement procedures, if necessary; in accordance with the IDDE Plan (Appendix F1), the IDDE Ordinance in Section 1000 of the City’s Development Regulations (Appendix C), and the Enforcement Response Plan (Appendix A);
- Track the number of dry weather screenings of outfalls conducted; and
- Eliminate identified illicit discharges.

**Documentation to be submitted with each Annual Report:**

- The number of outfalls inspected and a copy of all completed Dry Weather Screening Outfall Checklists;
- Documentation of all investigations performed as a result of inspections conducted;
- Documentation of discharges eliminated and a copy of any documentation of illicit discharge compliance and enforcement activities; and
- A copy of the revised IDDE Plan, if revisions have been implemented.

**Schedule:**

- a. Interim milestone dates: Submitted for EPD approval February 2015
- b. Implementation date: February 2015
- c. Frequency of actions:
  - Conduct dry weather screening inspections of all outfalls in one designated City sector each year
  - Investigate and eliminate 100 % of illicit discharges – continually
- d. Month/Year of each action: Continually during the permit cycle

**Person (position) responsible for overall management and implementation of the BMP:**

Watershed Protection Department Manager

**Rationale for choosing BMP and setting measurable goal(s):**

The IDDE Plan will provide the methods and procedures to identify and eliminate illicit discharges to the MS4.

**How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

Inspecting 100% of all outfalls and eliminating all identified illicit discharges will result in improved water quality within the permitted area. The general improvement of water quality will be demonstrated through surface water monitoring, fewer water quality complaints from citizens, and fewer water quality problems observed by city maintenance employees.



#### **4.4 Best Management Practice (BMP) #4 - Education**

**BMP Title:** Education

**Description of BMP:**

The City has implemented an illicit discharge education program to inform the employees, citizens, and business owners of Villa Rica of the impact illicit discharges have on the community and its water resources. The Illicit Discharge Education Program is located in Appendix F2 of this document.

**Measurable Goals:**

- The number or amount of educational items distributed to each target group will be tracked.

**Documentation to be submitted with each Annual Report:**

- A summary of the type and number of educational items distributed

**Schedule:**

- a. Interim milestone dates: Submit for EPD approval February 2015
- b. Implementation date: February 2015  
Revised procedure implemented June 2018
- c. Frequency of actions: Continually
- d. Month/Year of each action: Continually during the permit cycle

**Person (position) responsible for overall management and implementation of the BMP:**

Watershed Protection Department Manager

**Rationale for choosing BMP and setting measurable goal(s):**

An education BMP is required by General Permit No. GAG610000. Educational material addressing specific cases of illicit discharge targets an audience with a proven need for education. By targeting the entire neighborhood of the offenders a larger group is educated and observers of future potential discharges are being trained.

**How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

If repeated offences of illicit discharges do not occur in the same neighborhood this BMP will be considered effective.

## **4.5 Best Management Practice (BMP) #5 – Complaint Response**

**BMP Title:** Complaint Response

### **Description of BMP:**

Complaint Response procedures for illicit discharge complaints and observations have been developed and implemented. Illicit Discharge Complaint Response Procedures are located in Appendix F3.

### **Measurable Goals:**

- Document and investigate 100% of complaints received within 5 business days of receipt of the complaint; and
- Track complaints and their investigations in a database (including complaint date, complaint type, and complaint status).

### **Documentation to be submitted with each Annual Report:**

- List of all illicit discharge-related complaints received and investigated during the reporting period, including the type of complaint, the date of each complaint, enforcement action taken, the status of each investigation and follow-up; and
- Copies of any documentation of compliance and enforcement activities related to the complaint.

### **Schedule:**

- a. Interim milestone dates: Submitted for EPD approval February 2015
- b. Implementation date: February 2015
- c. Frequency of actions: Continually ongoing since 2011
- d. Month/Year of each action: Continually during permit cycle

### **Person (position) responsible for overall management and implementation of the BMP:**

Watershed Protection Department Manager

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

A complaint response BMP is required by General Permit No. GAG610000. Encouraging citizen participation in the protection of the City's water quality augments the City's inspection staff and engages citizens by increasing awareness of the impacts of illicit discharges on local water quality.

### **How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

The effectiveness of investigation and resolution of citizen complaints regarding illicit discharges on overall water quality will be measured by the number of illicit discharges documented annually.

## **Part 5 – Construction Site Stormwater Runoff Control**

*40 CFR Part 122.34(b)(4) Requirement: The permittee must develop, implement, and enforce a program to reduce the pollutants in any stormwater runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Stormwater discharges from construction activities disturbing less than one acre must be included in the permittee's program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. The program must include:*

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

The BMPs included in the list below are described in detail on the following pages. Each of these BMPs is considered critical to satisfying the requirements of the Federal Stormwater Phase II Regulations.

- BMP No. 1     Legal Authority**
- BMP No. 2     Site Plan Review Procedures**
- BMP No. 3     Inspection Program**
- BMP No. 4     Enforcement Procedures**
- BMP No. 5     Complaint Response**
- BMP No. 6     Certification**

## 5.1 Best Management Practice (BMP) #1 – Legal Authority

**BMP Title:** Legal Authority

### **Description of BMP:**

The Stormwater Management Ordinance prepared by the Metropolitan North Georgia Water Planning District has been adopted by the City of Villa Rica and is now included as Section 1000 of the City of Villa Rica Development Regulations. These regulations provide Villa Rica with the legal authority to require construction site operators to implement erosion and sedimentation controls and control waste at construction sites. A copy of the Development Regulations is located in Appendix C of this document.

### **Measurable Goals:**

- Each year the ordinance will be evaluated to determine if revisions are required.

### **Documentation to be submitted with each Annual Report:**

- If the *City of Villa Rica Development Regulations* are revised during the year a copy of the revised regulations will be submitted.

### **Schedule:**

- Interim milestone dates: NA
- Implementation date:
  - Original Adoption of Stormwater Management Ordinance - November 6, 2007
  - Adoption of revised Development Regulations – May 1, 2018
- Frequency of actions: Review ordinance annually
- Month/Year of each action: Continually during permit cycle

### **Person (position) responsible for overall management and implementation of the BMP:**

Community Development Director

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

The adoption of an ordinance that requires construction site operators to implement erosion and sedimentation controls and control waste at the construction site is required by General Permit No. GAG610000.

### **How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

The improvement of water quality demonstrated by surface water monitoring, fewer water quality complaints from citizens, and fewer water quality problems observed by city maintenance employees will demonstrate that this BMP is effective.

## **5.2 Best Management Practice (BMP) #2 – Site Plan Review Procedures**

**BMP Title:** Site Plan Review Procedures

### **Description of BMP:**

The City of Villa Rica is a designated Local Issuing Authority. Accordingly, all developers are required to comply with the City of Villa Rica Development Regulations in addition to Georgia Soil and Water Conservation Commission requirements. A land disturbance permit must be obtained prior to the start of any land disturbing activities that will disturb an area equal to or greater than one (1) acre that is located within city limits. A requirement of the permitting process is submittal of an Erosion and Sedimentation Control Plan (ESC Plan) by the site developer. Construction Site Plan Review Procedures have been developed and are located in Appendix G1.

### **Measurable Goals:**

- Review of 100% of all ESC Plans for compliance with Georgia Soil and Water Conservation Commission (GSWCC) requirements and the City of Villa Rica Development Regulations.
- Track the number of ESC Plans submitted, reviewed, approved, and denied during the reporting period.

### **Documentation to be submitted with each Annual Report:**

- A list of the number of ESC Plans submitted, reviewed, approved, and denied during the reporting period.

### **Schedule:**

- a. Interim milestone dates: Submitted for EPD approval February 2015
- b. Implementation date: February 2015
- c. Frequency of actions: Continual
- d. Month/Year of each action: Continually during the permit cycle

### **Person (position) responsible for overall management and implementation of the BMP:**

Community Development Director

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

The development of site plan review procedures is required by General Permit No. GAG610000.

### **How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

The review of ESPCPs will ensure that properly designed BMPs are installed at construction sites within the permitted area. Properly designed BMPs will minimize the adverse impacts of stormwater discharges from construction site.

### **5.3 Best Management Practice (BMP) #3 – Inspection Program**

**BMP Title:** Inspection Program

**Description of BMP:**

The City inspects all construction sites with current Land-Disturbing Permits issued by the City. Each site is inspected periodically for compliance with the approved ESC Plan, GSWCC requirements, and the City’s Development Regulations. The Construction Site Inspection Procedures have been developed and are located in Appendix G2.

**Measurable Goals:**

- 100% of construction sites with current Land-Disturbing Permits are inspected after the initial installation of BMPs;
- 100% of construction sites with current Land-Disturbing Permits are inspected regularly during construction activities;
- 100% of construction sites with current Land-Disturbing Permits are inspected for proper stabilization after land disturbing activities have ceased;
- 100% of inspections are recorded on the City Inspection Log; and

**Documentation to be submitted with each Annual Report:**

- A list of all active construction sites, and
- A copy of the City Inspection Log.

**Schedule:**

- a. Interim milestone dates: Submit for EPD approval February 2015
- b. Implementation date: February 2015
- c. Frequency of actions: Continual
- d. Month/Year of each action: Continually during the permit cycle

**Person (position) responsible for overall management and implementation of the BMP:**

Community Development Director

**Rationale for choosing BMP and setting measurable goal(s):**

The development of construction site inspection procedures to ensure that structural and non-structural BMPs are properly designed and maintained, and that construction site waste is properly controlled, is required by General Permit No. GAG610000.

**How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

The inspection of construction sites at crucial points in the construction process will verify that BMPs are properly installed and maintained. This BMP will be considered effective if the proper installation and maintenance of BMPs minimizes the adverse impacts of stormwater discharges from construction sites.

## 5.4 Best Management Practice (BMP) #4 – Enforcement Procedures

**BMP Title:** Enforcement Procedures

### **Description of BMP:**

The City has implemented an Enforcement Response Plan (ERP) that describes the actions to be taken in response to construction site violations of this SWMP and the Permit. The ERP details the City's level of response to specific types of violations and repeated or continuing violations. The ERP is located in Appendix A.

### **Measurable Goals:**

- Document the type and status of all construction site enforcement actions taken during the reporting period.

### **Documentation to be submitted with each Annual Report:**

- A list of the number, type, and status of all construction site enforcement actions taken during the year.

### **Schedule:**

- Interim milestone dates: Submitted for EPD approval February 2015
- Implementation date: February 2015
- Frequency of actions: Continual
- Month/Year of each action: Continually during the permit cycle

### **Person (position) responsible for overall management and implementation of the BMP:**

Community Development Director

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

As a Local Issuing Authority, the City is required to implement this BMP under GESCA and Permit No. GAG610000.

### **How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

The effectiveness of enforcing installation and maintenance of construction site BMPs will be measured by the quality of stormwater discharged from construction sites as well as the number of complaints documented annually.



## 5.5 Best Management Practice (BMP) #5 – Complaint Response

**BMP Title:** Complaint Response

### **Description of BMP:**

Response Procedures for construction site discharge complaints and observations has been implemented. The Construction Site Complaint Response Procedures are located in Appendix G3.

### **Measurable Goals:**

- Document and investigate 100% of complaints received within 5 business days of receipt of the complaint; and
- Track complaints and their investigations in a database (including complaint date, complaint type, and complaint status).

### **Documentation to be submitted with each Annual Report:**

- A list of all complaints received and investigated during the reporting period, including the date of each complaint, a description of the complaint, the status of the investigation and any follow-up actions taken; and
- Copies of any documentation of compliance and enforcement activities related to the complaint.

### **Schedule:**

- a. Interim milestone dates: Submitted for the EPD approval February 2015
- b. Implementation date: February 2015
- c. Frequency of actions: Continual
- d. Month/Year of each action: Continually during the permit cycle

### **Person (position) responsible for overall management and implementation of the BMP:**

Community Development Director

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

Encouraging citizen input into the protection of the City's water quality augments the efforts of the City's inspection staff. This also engages citizens by increasing their awareness of the impacts of construction site stormwater discharge on local water quality.

### **How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

The effectiveness of the investigation and resolution of citizen complaints regarding construction site stormwater discharge will be measured by the number of complaints documented annually.

## 5.6 Best Management Practice (BMP) #6 - Certification

**BMP Title:** Certification

### **Description of BMP:**

All City staff involved with erosion and sedimentation control inspections or ESCP reviews receive training and certification from the Georgia Soil and Water Conservation Commission (GSWCC) and are required to maintain the appropriate certifications. Appendix G4 contains the Employee GSWCC Certification Log.

### **Measurable Goals:**

Ensure that all City staff conducting site inspections or ESC Plan reviews maintain the appropriate GSWCC certification.

### **Documentation to be submitted with each Annual Report:**

The number and type of certifications held by City staff members

### **Schedule:**

- a. Interim milestone dates: NA
- b. Implementation date: September 2014
- c. Frequency of actions: Annual review of staff certification status
- d. Month/Year of each action: December of each year during the permit cycle.

### **Person (position) responsible for overall management and implementation of the BMP:**

Community Development Director

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

General Permit No. GAG610000 requires that all City staff involved in construction site plan review or inspections maintain the appropriate GSWCC certifications.

### **How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

Properly trained and certified staff members ensure the proper design, installation and maintenance of BMPs at construction sites. The proper design, installation and maintenance of BMPs will minimize the adverse impacts of stormwater discharges from construction sites, and this BMP will be considered effective.

## **Part 6 – Post-Construction Stormwater Runoff Management in New Development and Redevelopment**

40 CFR Part 122.34(b)(5) Requirement: *The permittee must develop, implement, and enforce a program to address stormwater runoff into the MS4 from new development and redevelopment projects, including projects less than one acres if they are part of a larger common plan of development or sale. You must:*

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

The BMPs included in the list below are described in detail on the following pages. Each of these BMPs is considered critical to satisfying the requirements of the Federal Stormwater Phase II Regulations.

**BMP No. 1     Legal Authority**

**BMP No. 2     Inventory**

**BMP No. 3     Inspection Program**

**BMP No. 4     Maintenance Program**

**BMP No. 5     GI/LID Structures**

**BMP No. 6     GI/LID Program (must be submitted to the EPD for approval February 15, 2020)**

**BMP No. 7     GI/LID Inspection and Maintenance Program (beginning in 2020)**

## 6.1 Best Management Practice (BMP) #1 – Legal Authority

**BMP Title:** Legal Authority

### **Description of BMP:**

The legal authority to require new development and redevelopment projects to implement stormwater runoff management controls is provided by Section 800 of the City of Villa Rica Development Regulations – Post-Development Stormwater Management for New Development and Redevelopment. When implemented, these stormwater runoff management controls prevent or minimize water quality impacts to the extent required by the latest Georgia Stormwater Management Manual (GSMM). A copy of the Development Regulations is located in Appendix C.

### **Measurable Goals:**

- Each year the ordinance will be evaluated to determine if revisions are required.

### **Documentation to be submitted with each Annual Report:**

- A copy of any adopted revisions of Section 800 of the Development Regulations.

### **Schedule:**

- Interim milestone dates: NA
- Implementation date: Original Adoption of Stormwater management Ordinance - November 6, 2007  
Adoption of revised Development Regulations – May 1, 2018
- Frequency of actions: Review ordinance annually
- Month/Year of each action: December of each year during the permit cycle

### **Person (position) responsible for overall management and implementation of the BMP:**

Watershed Protection Manager

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

The adoption of a post-construction ordinance that includes the adoption of the GSMM or a local design manual is required by General Permit No. GAG610000.

### **How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

The improvement of water quality demonstrated by surface water monitoring, fewer water quality complaints from citizens, and fewer water quality problems observed by city maintenance employees will demonstrate that this BMP is effective.

## **6.2 Best Management Practice (BMP) #2 – Inventory**

**BMP Title:** Post-Construction Stormwater Management Structures Inventory

### **Description of BMP:**

The City will maintain an inventory of all publicly-owned post-construction water management structures (detention/retention ponds and water quality vaults) and those privately-owned structures designed after the Georgia EPD mandated date of adoption of the GSMM (December 9, 2008). The inventory will include the number and type of structures, as well as their ownership status. The City will update the inventory as new structures are completed or existing structures are identified. The completed Post-Construction Stormwater Management Structures Inventory is located in Appendix H1.

### **Measurable Goals:**

- Maintain the Post-Construction Stormwater Management Structures Inventory; and
- Update the inventory as new structures are completed or existing structures are identified.

### **Documentation to be submitted with each Annual Report:**

- The updated Post-Construction Stormwater Management Structures Inventory.

### **Schedule:**

- Interim milestone dates: NA
- Implementation date: September 2014
- Frequency of actions: Update as new structures are added or identified
- Month/Year of each action: Continually throughout the permit cycle.

### **Person (position) responsible for overall management and implementation of the BMP:**

Watershed Protection Department Manager

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

The Post-Construction Stormwater Management Structures Inventory will be a valuable tool for planning and conducting inspections and maintenance of post-construction stormwater structures.

### **How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

The effectiveness of the Post-Construction Stormwater Management Structures Inventory in reducing pollution to stormwater will be evaluated based on the number of structures inspected and maintained each year.

### **6.3 Best Management Practice (BMP) #3 – Inspection Program**

**BMP Title:** Inspection Program

**Description of BMP:**

The City has implemented Post-Construction Stormwater Control Structure Inspection Procedures for all publicly-owned post-construction water management structures and those privately-owned structures designed after the City adopted the GSMM, included in the inventory in BMP#2. The inspections are conducted in accordance with procedures outlined in the City’s Post-Construction Stormwater Control Structure Inspection Procedures (Appendix H2), and the GSMM. The Inspection Procedures will include a schedule of inspections that will complete the inspection of 100% of the structures within a five (5) year period. The Post-Construction Stormwater Control Structure Inspection Procedures are located in Appendix H2.

**Measurable Goals:**

- Inspect all structures included in the inventory developed in BMP #2 and within one of the five designated sectors of the City each year so that 100% of the structures are inspected within the 5-year period.

**Documentation to be submitted with each Annual Report:**

- Copies of the Detention Pond Inspection Report of Findings for each structure inspected during the year

**Schedule:**

- a. Interim milestone dates: Submitted for EPD approval February 2017
- b. Implementation date: February 2017
- e. Frequency of actions: Inspect all structures in one sector each year
- f. Month/Year of each action: Continually during the permit cycle

**Person (position) responsible for overall management and implementation of the BMP:**

Watershed Protection Department Manager

**Rationale for choosing BMP and setting measurable goal(s):**

The inspection of all post-construction stormwater control structures will provide the data needed to properly schedule maintenance activities on these structures.

**How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

The effectiveness of the Post-Construction Stormwater Management Structures Inspection Program in reducing pollution to stormwater will be evaluated based on the number inspections conducted that identify needed corrective action. Completion of the identified corrective action will result in improved water quality in the impacted receiving waters.

## 6.4 Best Management Practice (BMP) #4 – Maintenance Program

**BMP Title:** Maintenance Program

### **Description of BMP:**

The City has implemented a long-term operation and maintenance program for post-construction stormwater management structures for all permittee-owned post-construction water management structures. The maintenance will be conducted in accordance with the procedures outlined in the City's Post Construction Stormwater Control Structure Maintenance Procedures (Appendix H3), and the GSMM to the maximum extent practicable. The Maintenance Program will include a procedure for determining when maintenance is required and how maintenance activities will be prioritized. The Post-Construction Stormwater Control Structure Maintenance Procedures will be located in Appendix H3. The Post-Construction Stormwater Control Structure Maintenance Log is located in Appendix H2.

For all privately-owned structures for which construction was completed after the effective date of the previous permit iteration (December 6, 2012), the City requires a signed and executed *Stormwater Facility Maintenance Agreement* (Appendix H3) before the project is approved. The City does not and will not maintain privately-owned post-construction stormwater management structures.

For publicly-owned structures owned by other entities that are located within the City's jurisdiction, the City will maintain a signed and executed *Stormwater Facility Maintenance Agreement*. The City does not and will not maintain publicly-owned structures owned by other municipal entities other than the City itself.

### **Measurable Goals:**

- Maintain copies of all executed Maintenance Agreements between the City and the privately-owned structures where construction was completed after the effective date of the last permit iteration;
- Maintain copies of all executed Maintenance Agreements between the City and the owners of publicly-owned structures not owned by the City; and
- Maintain a Post-Construction Stormwater Control Structure Maintenance Log which documents maintenance performed on permittee-owned structures.

### **Documentation to be submitted with each Annual Report:**

- For permittee-owned structures, documentation of structures maintained and the type of maintenance activities conducted during the year;
- For privately-owned structures for which the owner is providing maintenance, a summary list of all finalized maintenance agreements between the City and the owner of the structure and the total number of maintenance agreements to date; and
- For publicly-owned structures owned by other entities, list of all finalized maintenance agreements between the City and the owner of the structure and the total number of maintenance agreements for publicly-owned structures executed to date.



**Schedule:**

- a. Interim milestone dates: Submitted for EPD approval February 2017
- b. Implementation date: February 2017
- g. Frequency of actions: Continually throughout the year
- h. Month/Year of each action: Continually during the permit cycle

**Person (position) responsible for overall management and implementation of the BMP:**

Watershed Protection Department Manager (Permittee-owned)  
Community Development Director (Private-owned and Publicly-owned by other entities)

**Rationale for choosing BMP and setting measurable goal(s):**

The development of this Maintenance Program is required by General Permit No. GAG610000.

**How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

The effectiveness of the Post-Construction Stormwater Management Structures Maintenance Program in reducing pollution to stormwater will be evaluated based on the number of structures where the need for corrective action identified during inspections was completed. Completion of the identified corrective action will result in improved water quality in the impacted receiving waters.

## **6.5 Best Management Practice (BMP) #5 – GI/LID Structures**

**BMP Title:** Green Infrastructure/Low Impact Development (GI/LID) Structures

### **Description of BMP:**

The City maintains an inventory of water-quality-related Green Infrastructure/Low Impact Development (GI/LID) structures (bioswales, pervious pavement, rain gardens, cisterns, and green roofs) located within the permitted area and constructed after the effective date of the previous permit iteration (December 6, 2012). The inventory must, at a minimum, include the number and type of each permittee-owned structures publicly-owned structures owned by other entities, and privately-owned non-residential structures. The inventory will be updated as new structures are identified through the review process and completed and existing structures are identified. The GI/LID Structure Inventory is located in Appendix H4.

### **Measurable Goals:**

- The inventory will be updated as new structures are identified through the review process and completed and existing structures are identified.

### **Documentation to be submitted with each Annual Report:**

- An updated inventory that includes new structures completed or existing structures identified during the year.

### **Schedule:**

- Interim milestone dates: NA
- Implementation date: September 2014
- Frequency of actions: Review and update annually
- Month/Year of each action: Third quarter of each year of the permit cycle

### **Person (position) responsible for overall management and implementation of the BMP:**

Watershed Protection Department Manager

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

The development and maintenance of the inventory is required by General Permit No. GAG610000. Tracking GI/LID structures will measure the effectiveness of the City's efforts to encourage further development of this type.

### **How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

If GI/LID structures are added to the inventory during the term of the permit, this BMP will be considered effective.

## **Part 7 – Pollution Prevention/Good Housekeeping for Municipal Operations**

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

The BMPs included in the list below are described in detail on the following pages. Each of these BMPs is considered critical to satisfying the requirements of the Federal Stormwater Phase II Regulations.

- BMP No. 1 MS4 Control Structure Inventory and Map**
- BMP No. 2 MS4 Inspection Program**
- BMP No. 3 MS4 Maintenance Program**
- BMP No. 4 Street and Parking Lot Cleaning**
- BMP No. 5 Employee Training**
- BMP No. 6 Waste Disposal**
- BMP No. 7 New Flood Management Projects**
- BMP No. 8 Existing Flood Management Projects**
- BMP No. 9 Municipal Facilities**

## **7.1 Best Management Practice (BMP) #1 - Control Structure Inventory and Map**

**BMP Title:** MS4 Control Structure Inventory and Map

### **Description of BMP:**

The City will maintain a MS4 Control Structure Inventory and Map delineating MS4 control structures within the permitted area. The inventory and map will include catch basins, linear feet or miles of ditches, retention/detention ponds, and linear feet or miles of storm drain lines. The City will update the inventory and map as new structures are completed and existing structures are identified. The completed MS4 Control Structure Inventory and Map are located in Appendix II.

### **Measurable Goals:**

- Update the Inventory and Map as new structures are completed and existing structures are identified.

### **Documentation to be submitted with each Annual Report:**

- An updated Inventory and Map; and
- The number of structures added during the year, as well as the total number of structures.

### **Schedule:**

- a. Interim milestone dates: Map & Inventory submitted for EPD approval February 2018
- b. Implementation date: February 2018
- c. Frequency of actions: Update as new structures are added or identified
- d. Month/Year of each action: Continually throughout the permit cycle

### **Person (position) responsible for overall management and implementation of the BMP:**

Watershed Protection Department Manager

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

The inventory and map will be a valuable tool for the City to schedule and track inspections and maintenance of the MS4 structures.

### **How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

The effectiveness of the Control Structures Inventory and Map in reducing pollution to stormwater will be evaluated based on the increased efficiency and effectiveness of the MS4 control structure inspections and maintenance.

## **7.2 Best Management Practice (BMP) #2 – Inspection Program**

**BMP Title:** MS4 Control Structure Inspection Procedures

### **Description of BMP:**

The City has implemented an inspection program for all MS4 control structures (catch basins, ditches, detention/retention ponds, and storm drain lines). The program includes a schedule in which all control structures are inspected within five (5) years. The inspections will be conducted in accordance with the MS4 Inspection Procedures located in Section 1 of the *Stormwater Management Operating Procedures* located in Appendix J and the Georgia Stormwater Management Manual.

### **Measurable Goals:**

- Complete inspection of all MS4 control structures located within one of the five designated sectors of the City each year so that 100% of the structures are inspected within a five-year period.

### **Documentation to be submitted with each Annual Report:**

- The number and percentage of total structures inspected for each year.

### **Schedule:**

- Interim milestone dates: Submitted for EPD approval September 2014
- Implementation date: September 2014
- Frequency of actions: Continually
- Month/Year of each action: Continually during the permit cycle

### **Person (position) responsible for overall management and implementation of the BMP:**

Watershed Protection Department Manager

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

The inspection of all MS4 control structures will help ensure that all structures receive necessary maintenance and that the system is operating as designed.

### **How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

Inspecting 100% of all MS4 control structures will identify and result in repairs to the structures and improve water quality within the permitted area. The general improvement of water quality will be demonstrated through surface water monitoring, fewer water quality complaints from citizens, and fewer water quality problems observed by city maintenance employees will demonstrate that this BMP is effective.

### **7.3 Best Management Practice (BMP) #3 – Maintenance Program**

**BMP Title:** MS4 Maintenance Program

**Description of BMP:**

The City has implemented a maintenance program for all MS4 control structures (catch basins, ditches, detention/retention ponds, and storm drain lines). The program specifies such things as prioritization and factors determining the need for maintenance. The maintenance will be conducted in accordance with the MS4 Maintenance Procedures found in Section 2 of the *Stormwater Management Operating Procedures* located in Appendix J.

**Measurable Goals:**

- Conduct maintenance in accordance with the MS4 Maintenance Procedures.

**Documentation to be submitted with each Annual Report:**

- The number of each type of structure maintained during the year.

**Schedule:**

- a. Interim milestone dates: Submitted to EPD for approval February 2015
- b. Implementation date: February 2015
- c. Frequency of actions: Continually
- d. Month/Year of each action: Continually during the permit cycle

**Person (position) responsible for overall management and implementation of the BMP:**

Watershed Protection Department Manager

**Rationale for choosing BMP and setting measurable goal(s):**

The development of the MS4 Maintenance Program is required by General Permit No. GAG610000.

**How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

The maintenance of MS4 control structures will result in improved water quality within the permitted area. The general improvement of water quality will be demonstrated through surface water monitoring, fewer water quality complaints from citizens, and fewer water quality problems observed by city maintenance employees. This program will be determined to be effective when the number of control structures identified during inspections as requiring maintenance decreases year to year.

## **7.4 Best Management Practice (BMP) #4 – Community Service Litter Removal Program**

**BMP Title:** Community Service Litter Removal Program

### **Description of BMP:**

The city has implemented a Community Service trash/litter removal program. Individuals sentenced by the Villa Rica Municipal Court to perform community service as part of a plea or conviction are subject to perform various tasks for the City. These tasks include assisting in cleaning roadways, sidewalks, ditches, gutters, and rights-of-ways by removing trash and other debris. The refuse items collected represent a broad spectrum of materials from small paper scraps to tires. The collected rubbish is disposed of in keeping with MS4 Waste Disposal Procedures (Appendix J Section 4). This program helps not only to maintain the City's aesthetic appeal but also prevents loose waste items from washing into storm drains, culverts, and ultimately the City's surface waters.

### **Measurable Goals:**

- Number of miles of roadway where trash and litter have been removed; and
- The volume of trash and litter disposed of from the program.

### **Documentation to be submitted with each Annual Report:**

- The number of miles of roadway where trash and litter have been removed; and
- The volume of trash and litter removed and disposed of from the program.

### **Schedule:**

- a. Interim milestone dates: Submitted to EPD for approval June 2018
- b. Implementation date: January 2018
- c. Frequency of actions: Continually
- d. Month/Year of each action: Continually during the permit cycle

### **Person (position) responsible for overall management and implementation of the BMP:**

Police Department

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

Removing litter from roadways will prevent the litter from being washed into the MS4 by stormwater.

### **How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

This BMP will be considered effective when there is a reduction in the amount of litter entering the MS4.

## **7.5 Best Management Practice (BMP) #5 – Employee Training**

**BMP Title:** Employee Training

### **Description of BMP:**

At least once per year the City will conduct employee training. Employees involved in the operation, inspection, and maintenance of the MS4 and in the operation of municipal facilities with the potential to cause stormwater pollution will receive training in the components and goals of this SWMP. The employee training procedures and schedules are located in Appendix I2.

### **Measurable Goals:**

- Conduct training sessions annually for all employees involved in the operation, inspection, and maintenance of the MS4 and in the operation of municipal facilities with the potential to cause stormwater pollution.

### **Documentation to be submitted with each Annual Report:**

- The number of employees attending sessions, the training dates, and the topics covered

### **Schedule:**

- a. Interim milestone dates: Submitted for EPD approval September 2014
- b. Implementation date: September 2014
- c. Frequency of actions: Annually
- d. Month/Year of each action: During each year of the permit cycle.

### **Person (position) responsible for overall management and implementation of the BMP:**

Watershed Protection Department Manager

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

Training employees involved in operation, inspection, and maintenance procedures is critical to the operation of the system. Training employees of facilities with the potential to cause stormwater pollution will reduce the potential for the pollution of stormwater entering the MS4.

### **How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

This BMP will be considered successful when the operation of the MS4 is more effective and the potential to cause pollution from Municipal facilities is reduced.



## **7.6 Best Management Practice (BMP) #6 – Waste Disposal**

**BMP Title:** Waste Disposal

### **Description of BMP:**

The City has implemented procedures for the proper disposal of all waste generated from the operation and maintenance of the MS4. The Waste Disposal Procedures are found in Section 4 of the Operating Procedures located in Appendix J.

### **Measurable Goals:**

- Properly dispose of 100% of waste generated by the operation and maintenance of the MS4; and
- Track the amount of MS4 waste disposed by the City.

### **Documentation to be submitted with each Annual Report:**

- Summary of the disposal of MS4 waste generated from the MS4; and
- Copies of the weight tickets received from the disposal facility.

### **Schedule:**

- a. Interim milestone dates: Submitted for EPD approval September 2014
- b. Implementation date: September 2014
- c. Frequency of actions: Continually
- d. Month/Year of each action: Continually during the permit cycle

### **Person (position) responsible for overall management and implementation of the BMP:**

Watershed Protection Department Manager

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

The proper disposal of waste recovered during the operation of the MS4 will ensure that the waste is permanently removed from the stormwater system, which is critical to the successful operation of the system.

### **How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

The waste removed and properly disposed-of during the operation and maintenance of the MS4 is material that will not be discharged from the MS4 to waters of the State, which will ensure the effectiveness of this BMP.

## **7.7 Best Management Practice (BMP) #7 – New Flood Management Projects**

**BMP Title:** New Flood Management Projects

### **Description of BMP:**

The City has implemented procedures to assess water quality impacts of all new development projects with a flood management component during the plan review process. The New Flood Management Project Review Procedures are found in Section 5 of the Operating Procedures located in Appendix J

### **Measurable Goals:**

- Review 100% of all new flood management projects submitted to the City; and
- Track the number of new development projects with a flood management component accessed for water quality impact during the review process.

### **Documentation to be submitted with each Annual Report:**

- The number of plans for flood management projects reviewed

### **Schedule:**

- a. Interim milestone dates: Submitted for EPD approval September 2014
- b. Implementation date: September 2014
- c. Frequency of actions: Continually
- d. Month/Year of each action: Continually during the permit cycle

### **Person (position) responsible for overall management and implementation of the BMP:**

Community Development Director

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

Ensuring that all new projects with a flood management component are properly assessed is critical to maintaining water quality downstream of all new projects.

### **How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

Maintaining and improving the water quality downstream of new flood management projects as demonstrated by surface water monitoring, fewer water quality complaints from citizens, and fewer water quality problems observed by city maintenance employees will be used to determine the effectiveness of this BMP.

## **7.8 Best Management Practice (BMP) #8 – Existing Flood Management Projects**

**BMP Title:** Existing Flood Management Projects

### **Description of BMP:**

The City has implemented procedures for the assessment of existing flood management structures within the City jurisdiction. The Procedures for the Assessment of Existing Flood Management Structures is found in Section 6 of the Operating Procedures located in Appendix J.

### **Measurable Goals:**

- Assess a minimum of one existing flood management structure per year.

### **Documentation to be submitted with each Annual Report:**

- A summary of the assessment of the flood management structures conducted

### **Schedule:**

- a. Interim milestone dates: Submitted for EPD approval February 2015
- b. Implementation date: February 2015
- c. Frequency of actions: A minimum of one structure per year
- d. Month/Year of each action: Continually during the permit cycle

### **Person (position) responsible for overall management and implementation of the BMP:**

Watershed Protection Department Manager

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

Assessing existing flood management structures for water quality impacts allows the City to prevent or remediate the potential negative impacts of design or maintenance of these structures.

### **How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

Maintaining and improving the water quality downstream of existing flood management projects will demonstrate the effectiveness of this BMP.

## **7.9 Best Management Practice (BMP) #9 – Municipal Facilities**

**BMP Title:** Municipal Facilities

### **Description of BMP:**

The City maintains an Inventory of Municipal Facilities with the Potential to Cause Pollution that is updated as new structures are added. The completed inventory is located in Appendix I3. The City has implemented Inspection Procedures for Municipal Facilities with the Potential to Cause Pollution (Section 7 of the Operating Procedures located in Appendix J). The City inspects facilities each year so that 100% of all facilities will be inspected within a five year period.

### **Measurable Goals:**

- Update the inventory annually; and
- Inspect facilities each year so that 100% of the facilities will be inspected within the five year period,
- Conduct inspections according to the Inspection Procedures for Municipal Facilities found in Section 7 of the Operating Procedures located in Appendix J.

### **Documentation to be submitted with each Annual Report:**

- The updated inventory; and
- A list of all inspections completed during the reporting period.

### **Schedule:**

- a. Interim milestone dates: Submitted to EPD for approval February 2015
- b. Implementation date: February 2015
- c. Frequency of actions: Inventory updated as new structures are added; and Inspections conducted once per year.
- d. Month/Year of each action: Continually during the permit cycle

### **Person (position) responsible for overall management and implementation of the BMP:**

Watershed Protection Department Manager

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

Developing an inventory of municipal facilities with the potential to cause pollution allows the City to monitor these facilities and improve existing BMPs or implement new BMPs, if necessary.

### **How you will determine whether this BMP is effective in reducing pollution to stormwater in accordance with Part 5.1.4 of the Permit:**

The reduction of the potential to cause pollution from municipal facilities will demonstrate that this BMP is effective.