# STORMWATER MANAGEMENT PLAN and BEST MANAGEMENT PRACTICES for the CITY OF SCOTT LOUISIANA

#### I. INTRODUCTION:

Stormwater contributes to surface water quality in a number of ways, the most obvious being the ability to wash contaminants off the landscape and into the streams and ponds, and the ability to carry eroded sediments into streams and ponds. In a more natural state where much of the land area is covered with vegetation, stormwater is allowed to penetrate into the ground where sediments are filtered out, pathogens are diluted or allowed to expire, and nutrients are utilized by nearby vegetation. In more developed areas more of the land surface is covered with impervious surface (roofs, roads, sidewalks, parking lots, etc.). Stormwater has less opportunity to penetrate the earth, and is often channeled, collected, and diverted rapidly away from developed sites, often being discharged directly into streams or other waterbodies. The natural treatment capabilities of the soil and vegetation are bypassed.

Traditionally, stormwater management has concentrated on collecting stormwater and quickly removing it from developed areas in order to prevent local flooding and property damage. In the past decade or so, it has been recognized that this practice can increase flooding and other problems in the receiving waterbodies, and does very little to treat for stormwater contaminants. This has led to attempts to detain stormwater and release it at a controlled rate over an extended period of time. Even with detention, the amount of stormwater that is allowed to enter the soil and be naturally cleansed diminishes as the amount of impervious ground cover increases. This problem is exacerbated as we attempt to create more compact settlements separated by open space.

In Louisiana, the primary regulation of stormwater has been through the Louisiana Pollution Discharge Elimination System (LPDES) permit process administered by the Louisiana Department of Environmental Quality (LDEQ). Scott obtained an LPDES permit under the Lafayette Consolidated Government for Stormwater discharges in 2007 and, in conjunction therewith, has developed this Best Management Plan for Stormwater control. Stormwater management is not a problem that must be addressed only by private development. Publicly owned properties and, most importantly, publicly owned roads are important elements in the overall stormwater system. In many cases, storm water collected from City owned roads is discharged into private swales and detention ponds. On older roads water may be collected by roadside ditches and discharged into nearby swales, wetlands, or streams.

#### **II. THE PHASE II PLAN REQUIREMENTS:**

As noted above, Phase I requirements of the 1972 Clean Water Act focused on large dischargers while Phase II focused on small dischargers, including small MS4s. Since permits under Phase I were issued by the State, it is the State's responsibility to monitor and enforce the conditions of Phase I discharge permits. Phase II requirements became applicable in 2003, and apply to small MS4s, of which Scott is one.

Scott, as a small MS4, will develop, implement, and enforce a Stormwater Management

Plan designed to reduce the discharge of pollutants to the Maximum Extent Practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the 1972 Clean Water Act.

The City of Scott's Stormwater Management Plan includes the following six Minimum Control Measures which are addressed in detail below:

Public Education and Outreach Public Participation Illicit Discharge Detection and Elimination Construction Site Runoff Control Post Construction Runoff Control Pollution Prevention/Good Housekeeping

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## THE CITY OF SCOTT'S STORMWATER MANAGEMENT PLAN

Scott, Louisiana, is a small City in Lafayette Parish on the outskirts of the urbanizing area surrounding the City of Lafayette. Thirty years ago Scott was a small rural, agricultural community with very little non-residential/non-agricultural development. In the past two decades the City's population has increased to over 9,000 persons, and the City has become one of the fastest growing commercial/industrial centers in the State.

Like most Louisiana communities, Scott did not set about to consciously create a definable stormwater system. Historically, stormwater from public roads was collected in open ditches and conveyed to available swales or streams. More recently, new City roads may have catch basins and underground piping systems that convey the water either to available swales or to detention ponds which, in turn, discharge into available swales, streams, etc. In many cases the detention ponds are actually private. Stormwater on individual development sites may be conveyed by sheet flow or pipes to detention ponds before being discharged off-site. As a result, Scott's Municipal Storm Sewer System is somewhat difficult to define. It is not continuous. It has many separate outfall or discharge points, and some of the outfall points may be private. The City is currently working to create a GIS based map of its Municipal Storm Sewer System.

Scott has designed and is implementing this comprehensive Stormwater Management Plan to reduce pollutants to the Maximum Extent Practicable (MEP). The City of Scott Stormwater Management Plan spells out not only the Best Management Practices (BMPs) to be used to achieve each of the six minimal control measures, but must also a set of Measurable Goals (time lines, implementation objectives) to be used to track implementation and effectiveness of the BMPs.

#### **Minimum Control Measure 1 - Public Education and Outreach**

Scott has, and will continue to initiate public education efforts related to storm water and water quality issues. The target pollutant sources are commercial and residential construction site runoff and illicit discharges. The target audience will consist of contractors, residents, school students, municipal staff and community organizations. The target audiences were selected based on regulation requirements and based on the goal of educating the community about the impacts that storm water discharges have on local water bodies and the steps that the public can take to reduce pollutants in storm water runoff.

**Best Management Practices:** The following have been identified as Best Management Practices for public education and outreach.

1. <u>Distribution of educational material in mail-outs and media releases.</u> Distribute informational materials to contractors, that come into City Hall for permits, to increase awareness of mandatory compliance with the State laws and City ordinances regarding SWPPPs. To target the general public, continue to post anti-litter message on utility bills annually and sponsor anti-litter messages in the "Community Chronicles" newspaper.

- 2. City Website Post information about Project Front Yard and scheduled events on the City's webpage. Post educational content on environmental issues such as water quality, stormwater management, and erosion control.
- 3. Trash Management Contract with Lafayette Sheriff Dept for inmate crew with equipment picking up litter around the City.
- 4. Proper Disposal of Household Hazardous Wastes Sponsor hazardous chemical collection day for Scott residents.
- 5. School Presentations Reach out to local schools to present watershed pollution and prevention methods.

**Measurable Goals:** The following measurable goals are to be achieved:

1. Ongoing since 2007: Scott will focus on program organization and continued distribution of printed informational materials. Distribute 50-100 pamphlets to contractors and other related businesses annually.

**Responsible Party: Permitting Department** 

- 2. Ongoing since 2007: The City will continue to send anti-litter message on utility bills and publish message in the "Community Chronicles" on yearly basis. 2014: Post antilitter message on Scott web page (www.cityofscott.org) listing Scott's history of Cleanest City awards and promoting citizen pride in keeping Scott clean and safe. **Responsible Party: Utilities Department**
- 3. Ongoing since 2016: Planning to reach 20 percent of the general population through the City's website, continue participation in the Project Front Yard program sponsored by Lafayette Consolidated Government. By promoting the scheduled events such as the annual Trash Bash and distribution of rain barrels, Scott's citizens learn about water conservation and other environmental benefits of the program. Responsible Party: Utilities Department and Scott Project Front Yard Committee
- 4. Ongoing since 2011: Continue to budget for contracting for services from Lafayette Sheriff Dept, scheduling work crew a minimum of 40 hours per week picking up litter. Responsible Party: Public Works Department
- 5. Ongoing since 2012: Continue to conduct collection days for hazardous chemicals and white goods for Scott citizens. Monitor and log total material collected. Responsible Party: Public Works Department
- 6. Ongoing since 2015: Acadiana High School encourage participation in the Project Front Yard rain barrel painting contest. Work with elementary school staff at Sts. Peter & Paul School for environmental classroom presentations.

Responsible Party: Permitting Department and City Engineers

## **Minimum Control Measure 2 - Public Participation**

After going to considerable effort to educate the public about stormwater issues and stormwater management practices, Scott will provide an effective means for the educated public to participate in the overall stormwater management program. Citizens who participate facilitate decision-making and gain support for the public stormwater management program. Support from the public can reduce obstacles and challenges, and thus speed up implementation of the program.

**Best Management Practices:** There are two aspects of proposed public participation activities. One is to provide a vehicle for participation in public discussions and decisions on storm water management. The other is to provide specific hands-on actions that City residents and business owners can take to reduce storm water problems.

- 1. <u>Community Clean-Up Events</u> The City annually coordinates litter and debris collection along city roadways, providing supplies and handling disposal of solid waste gathered during the event.
- 2. <u>Storm Drain Marking</u> The City will distribute materials to local youth groups and civic organizations to place markers on storm drains reminding citizens to help protect our streams from pollution.
- 3. <u>Facilitate Citizen Recycling</u> Scott has secured recycling access for residents through City curbside garbage collection services.
- 4. <u>Community Hotline</u> Scott has established and monitors an email hot line for reports by citizens of illegal dumping in waterways and other environmental concerns.

**Measurable Goals:** The following measurable goals will serve as benchmarks for the effective implementation of the above Best Management Practices.

- 1. <u>Ongoing since 2019:</u> City will continue to schedule and organize the annual event. Responsible Party: Public Works Department
- 2. <u>Ongoing since 2013</u>: Provide "No Dumping, Drains to Bayous" decals for marking storm drains to youth groups with goal of marking 100 storm drains annually in several Scott neighborhoods.

Responsible Party: Public Works Department and City Engineers

3. <u>Ongoing since 2012</u>: Continue to provide curbside recycling in yearly garbage collection contract renewal.

Responsible Party: Utilities Department

4. <u>Ongoing since 2007</u>: City will continue improving awareness through website and monitoring of complaints. Log complaints related to illicit storm water discharges. Responsible Party: Utilities Department

#### Minimum Control Measure 3 - Illicit Discharge Detection and Prevention

For purposes of stormwater management, an illicit discharge is defined by Federal Regulations as "any discharge to an MS4 that is not composed entirely of stormwater....", with exceptions for certain NPDES-permitted industrial sources and the following non-storm water sources:

- Discharges or flows from firefighting activities (excludes predictable and controllable discharges from a firefighting training facility)
- Fire hydrant flushings
- Potable water including: water line flushings using potable water, drinking fountain overflows, lawn watering runoff, and similar sources of potable water
- Uncontaminated air conditioning or compressor condensate
- Residual street wash water and pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed)
- Routine external building wash down which does not use detergents
- Drainage from landscape watering
- Rising ground waters
- Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20))
- Uncontaminated pumped ground water
- Foundation drains
- Irrigation water
- Uncontaminated spring water
- Water from crawl space pumps
- Footing drains
- Water from individual residential car washing
- Flows from riparian habitats and wetlands
- Dechlorinated swimming pool discharges
- Other similar occasional incidental discharges (for example, non-commercial or charity car washes) where such discharges will not cause a problem either due to the nature of the discharge or controls the MS4 places on the discharge

Since MS4s are not designed to treat non-stormwater wastes, these illicit discharges result in untreated wastes being discharged directly to the receiving waters.

Non-stormwater wastes can enter a stormwater system in a variety of ways, including accidental spills, surface disposal of wastes, dumping of wastes into stormwater catch basins, or conscious (but illegal) connection of waste lines to the stormwater system. With the exception of accidental spills, there are no categories known to be significant contributors of pollutants to the MS4.

Scott has implemented and enforces an illicit discharge detection and elimination program which contains the following elements:

1. A prohibition (via ordinance) on non-stormwater discharges into the MS4, along with appropriate enforcement mechanisms;

2. A plan for detecting and eliminating non-stormwater discharges, including illegal

dumping, into the MS4; and

3. An educational program specifically addressing illegal discharges.

4. If a significant issue is found, after assessment, it will be posted on the City website or door markers will distributed to affected residents.

To date, none of those specifically identified flows or discharges have been identified as significant polluters in Scott.

**Best Management Practices**: The following have been identified as Best Management Practices for detecting and eliminating discharges of non-storm water waste into Scott's municipal storm sewer system:

- 1. <u>Identifying Illicit Connections and Illegal Dumping</u> Utilities department employees monitor Scott's drainage and sewer systems for possible enforcement and fines as provided by City ordinances and State law.
- 2. <u>Detection of Failing Septic Systems</u> The Sewer Supervisor and staff continue to look for sewer leaks. Make renovations to the City's sewer infrastructure as required to address infiltration problems.
- 3. <u>Industrial Connections</u> Monitoring of categorical dischargers within Scott.

**Measurable Goals:** The following measurable goals will serve as benchmarks for the effective implementation of the above Best Management Practices.

- 1. <u>Ongoing since 2008:</u> City employees monitor system and conduct inspections as authorized under City's Illicit Discharge and Connection to Storm Sewer Ordinance. Non-compliance notices will be issued until all have been corrected and/or permitted to cease the illicit discharges. City Engineer checks weekly DMRs for influent CBOD spikes at sewer treatment facility for violations.
- 2. <u>Ongoing since 2008</u>: The Scott Sewer Department will continue to conduct annual smoke testing of sewer manholes around the City to identify sewer leaks. Budget for repairs and obtain grant funding to rehab sewer manholes, pump stations and lines.
- 3. <u>Ongoing since 2013</u>: Require periodic testing of effluent discharges from categorical dischargers. Monitor DMRs on continual basis for compliance with City Sewer Use Ordinance. Report violators to LDEQ and/or suspend City sewer service to those businesses.

# Responsible Party: Utilities Department

# Minimum Control Measure 4 - Construction Site Runoff Control

Construction sites are potentially major sources of suspended solids in storm water runoff. Construction normally removes the soil's protective vegetative cover leaving the underlying soil exposed to wind, rain and other forms of erosion. Scott has developed and is implementing a construction site runoff control program which includes the following:

1. Establishment of a procedure for identifying construction activities.

2. Establishing procedures to assist the LDEQ in inspecting permitted construction sites by reporting signs of non-compliance such as eroding soil and turbid waters.

3. Establishment of procedures to ensure that construction activities undertaken by the City are properly permitted and implemented in accordance with the terms of the City's stormwater discharge permit.

4. Review of the City's existing policies and ordinances regarding their effectiveness in managing construction related erosion and sediment and controlling waste, and with the requirements of the stormwater discharge permit for large and small construction sites.

5. Adoption of an erosion control ordinance, planning, zoning or subdivision regulation, or other regulatory mechanism for development activities.

**Best Management Practices:** The following have been identified as best management practices for the City to undertake to achieve this control measure.

1. <u>Construction Site Inspection by Municipal Inspectors</u> Enforce Scott ordinance for construction site runoff control.

**Measurable Goals:** The following measurable goals will serve as benchmarks for the effective implementation of the above Best Management Practices.

1. <u>Ongoing since 2008</u>: By ordinance requirement, developers are to submit a copy of their project SWPPP prior to obtaining permit for land clearing operations. City staff will maintain records of all SWPPPs filed for permits. Also actively enforce City Storm Water Pollution Prevention and Land Clearing ordinance for construction site BMP's such as site erosion control, silt fences, construction entrances, dust control, rip-rap and proper SWPPP documentation. Inform developers of Scott's legal authority and possible fines and legal actions for violations of the ordinance. Conduct inspections and follow-up visits to ensure BMPs are implemented correctly. Chief Inspector to continue enforcing ordinance and training City personnel in spotting site runoff violations.

#### **Responsible Party:** Permitting Department

### Minimum Control Measure 5 - Post Construction Runoff Control

Long term impacts on surface water quality may result from stormwater management practices that carry on long after construction of developments is complete. These "post construction" control measures are designed into development projects to address specific aspects of stormwater runoff: a)Verify the post construction site is stabilized with no erosion observed; and b)Private detention ponds have erosion controls installed and are functioning properly. Additionally, the City is planning to install regional detention ponds to improve storm water quality.

Scott is the sole responsible party for enforcement to ensure long term operation and maintenance of post construction BMPs.

**Best Management Practices:** Scott has identified the following Best Management Practices for achieving the objective or developing, implementing and enforcing a program to reduce pollutants in storm water runoff to the maximum extent practicable.

- 1. <u>Ordinance for Post-Construction Runoff</u>: Scott will enforce City ordinance for construction site runoff control.
- 2. <u>Private Detention Ponds</u>: City staff reviews design and inspects construction of all development storm water detention facilities.
- 3. <u>City Regional Detention Ponds</u>: Construct and maintain regional detention ponds to improve the quality of storm water runoff.

**Measurable Goals:** The following Measurable Goals will serve as benchmarks for the effective implementation of the above Best Management Practices.

- 1. <u>Ongoing since 2008</u>: All recently completed developments are site inspected by City staff for compliance with the Post Construction Runoff ordinance. Developers are informed of Scott's legal authority and possible fines and legal actions for violations of the ordinance. Responsible Party: Permitting Department
- Ongoing since 2008: Regular inspections are conducted and reports written by City staff, with follow-up visits, to ensure detention pond BMPs are implemented correctly. Responsible Party: Public Works Department and City Engineers
- 3. <u>Planned for 2019</u>: Begin planning and construction of several regional detention ponds located within the City.

Responsible Party: Public Works Department and City Engineers

# Minimum Control Measure 6 - Pollution Prevention/Good Housekeeping for Municipal Operations

Scott will develop an operation and maintenance program for preventing or reducing pollutant runoff form municipal operations, including, at a minimum: new construction and land disturbance, maintenance of fleet and buildings, parks, open space, and storm water systems which will include the following:

1. A training component, maintenance schedules, and inspection procedures for long term structural controls; and

2. A list of industrial facilities owned or operated by the municipality and demonstration that it is in compliance with permit requirements for stormwater discharges.

**Best management Practices:** Scott has identified the following Best Management Practices for achieving the objective of Good Housekeeping/ Pollution Prevention for Municipal Operations:

- 1. <u>Operations Equipment Maintenance</u>: Emphasis is placed on special handling and cleanup of hazardous materials at the City maintenance shop.
- 2. <u>Storm Drain System Cleaning</u>: Remove accumulated sediments, floatables and other debris during maintenance operations.
- 3. <u>Used Oil Recycling</u>: Scott utilizes recycling at its maintenance facilities.
- 4. <u>Facilitate Citizen Recycling</u> Scott has secured recycling access for residents through City curbside garbage collection services.
- 5. <u>Hazardous Waste Training</u>: City employee training will be instituted for the proper handling of dangerous or hazardous materials.

**Measurable Goals:** The following Measurable Goals will serve as benchmarks for the effective implementation of the above Best Management Practices.

- 1. <u>Ongoing since 2008</u>: All municipal equipment (light duty trucks, dump trucks, heavy equipment, etc.) is serviced at the City maintenance facility. New oils are stored at the garages in delineated containment areas. Floor drains in these areas will have absorbent pads placed in them to capture minor drips and leaks. Heavy equipment and fuel stations are equipped with spill prevention kits for pollution clean-up
- 2. <u>Ongoing since 2008</u>: All drainage system removed spoil, sediments, floatables and other debris is deposited in dumpsters for pick up by garbage collection.
- 3. <u>Ongoing since 2008</u>: All waste oil is barreled for pick up by an oil recycling company.
- 4. <u>Ongoing since 2012</u>: Continue to provide curbside recycling in yearly garbage collection contract renewal.
- 5. <u>Ongoing since 2015</u>: Prepare educational materials and schedule annual training for City staff in proper handling, storage and disposal of hazardous chemicals.

Responsible Party: Public Works Department