

2022 ANNUAL REPORT

**Phase II
Storm Water Pollution Management Plan
For
Lake Charles Urbanized Area
Sulphur, La.
Calcasieu Parish, Louisiana**

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Executive Summary:

The Calcasieu River Basin is located in southwestern Louisiana. It is bordered by the Mermentau River to the east and the Sabine River to the west. Its headwaters arise in the hills west of Alexandria and flow in a north – to -south direction towards the Gulf of Mexico. The drainage area of the basin comprises approximately 3,910 square miles. The Lake Charles Urbanized Area is situated within the Calcasieu River watershed which is impacted by agricultural and forestry activities to the north, petrochemical industries toward the west, and population growth throughout the region.

The Lake Charles Urbanized Area lies within Calcasieu Parish and is comprised of the cities of Lake Charles, Sulphur, and Westlake as well as the populated areas surrounding those three cities. Lake Charles, the fifth largest city in the State of Louisiana has a population of approximately 72,000. The City of Sulphur's population is approximately 22, 500 and that of Westlake is just under 5,000. The urbanized areas surrounding the three cities include the unincorporated locations of Carlyss which lies south of Sulphur, Prien situated south-southwest of Lake Charles, and Moss Bluff located north of that city.

The Calcasieu River flows through the parish, creating an estuarine system of lakes and brackish waters throughout the region including Lake Charles, Prien Lake, Moss Lake and ultimately Calcasieu Lake in Cameron Parish before discharging to the Gulf of Mexico. A number of bayous including Bayou Serpent, Indian Bayou, English Bayou, Bayou D'Inde, Bayou Verdine, and Contraband Bayou discharge directly or indirectly into Calcasieu River as it meanders through the region.

The area lakes, rivers and waterways are used for primary and secondary contact recreation such as swimming, boating, and fishing, wildlife protection and preservation, and agricultural use. The Calcasieu River and ship channel are utilized for transportation, shipping and commerce to the area's petrochemical industries and the Port of Lake Charles, ranked as the eleventh largest port in the nation.

Background:

In 2003, the Lake Charles Urbanized Area was issued a small Municipal Separate Storm Sewer System (sMS4) by the Louisiana Department of Environmental Quality. The sMS4 is presently operating under its fourth five-year. Calcasieu Parish administers the permit and related program, including issuance of the Storm Water Annual Report. However, each co-permittee is responsible for the activities and related ordinances for their respective jurisdictions. The co-permittees continue to work together to meet compliance with the permit conditions and conduct quarterly meetings for information sharing and problem-solving purposes.

Name of sMS4:

Sulphur Urbanized Area
Permit# LAR041019
AI# 109975

sMS4 Address:

City of Sulphur
P. O. Box 1309
Sulphur, LA 70664-1309

No area has been added to the Sulphur Urbanized area during the 2022 reporting year. All urbanized areas are covered either under the cities' sMS4 jurisdictions or that of Calcasieu Parish.

Annual reporting period: January 1, 2022 through December 31, 2022

sMS4 Coordinator:

Austin Abrahams
Director of Public Works
City of Sulphur
101 N. Huntington Street
P. O. Box 1309
Sulphur, LA 70664-1309

Chief Elected Official:

Mike Danahay, Mayor
101 N. Huntington Street
P. O. Box 1309
Sulphur, LA 70664-1309

CO-Permittees:

Mayor Nicholas E. Hunter
City of Lake Charles
P.O. Box 900
Lake Charles, LA 70602

Tony Stelly, CPPJ President
1015 Python Street
P.O. Drawer 3287
Lake Charles, LA 70602

Mayor Hal McMillin
City of Westlake
P.O. Box 700
Westlake, LA 70669

Impaired Water Bodies:

According to the information from the 2006 Total Maximum Daily Load measurements, a number of the area waterways are impacted by one or more of several physical, chemical and/or biological water quality indicators including dissolved oxygen, total suspended solids, total dissolved solids, turbidity, low pH, chloride, sulfates, lead, mercury, and fecal coliform. The indicated or suspected sources of the impairments include irrigated crop production, non-irrigated crop production, sediment re-suspension, silviculture plantation management, changes in tidal circulation/flushing, flow regulation/modification, impacts from hydro structure, flow regulation/modification, and flow alterations from water diversions. Others include naturally occurring organic acids, toxics atmospheric deposition, and/or natural and unknown sources. Suspected biological sources include discharges from municipal separate storm sewer systems (MS4), sanitary sewer overflows, sewage discharges in unsewered areas, unpermitted discharge (domestic waste), on site- treatment systems (septic systems and similar decentralized systems), and wildlife other waterfowl. The area 303D listed water bodies are rated as Low on the TMDL priority list for all water quality indicators.

MINIMUM CONTROL MEASURES

PUBLIC EDUCATION AND OUTREACH:

1. Public education and outreach on storm water impacts

BMP 1-1 Classroom education on storm water pollution

Measurable Goal: The City of Sulphur will budget for biannual educational materials for local schools and distribute them to schools. These educational materials will be able to reach over 3,000 school age children.

The City of Sulphur distributed educational stormwater bags to all first graders in local elementary schools consisting of: E K. Elementary, Frasci Elementary, R. W. Vincent Elementary, W. T. Henning Elementary, and Maplewood Elementary.

The educational stormwater bags contained a storm water coloring page with crayons, pamphlet with current stormwater protocols and some goody items for kids.

(Attachments 1-3)

The Public Works Director and Public Relations Manager will be responsible for implementing this goal.

BMP 1-2 Educational displays, pamphlets, booklets, and utility bill inserts

Measurable Goal: The City of Sulphur will be implementing quarterly videos or PowerPoints to place on the City's webpage and City's YouTube page. This will allow the City of Sulphur to reach a broader audience to teach what helps and hurts drainage.

The City of Sulphur utilized informational pamphlets at City Hall and Water Billing/Inspections. The City gave these pamphlets out to customers seeking permits and new water services.

The City of Sulphur was not able to post PowerPoints or quarterly videos on the City of Sulphur's website or YouTube page. The Public Relations Representative Position was unfilled from May to August 2022 and with pre-planned events in the following months the new Public Relations Representative was unable to aid with videos or PowerPoints.

The City plans to do informative videos with different divisions of the City to help explain the Dos and Don'ts of preventing debris and contaminants from the water ways. The first planned video is with our Public Works Maintenance Division while they clean drains and ditches to show the proper way to dispose of debris and ways to prevent littering.

(Attachment 4)

The Public Works Director and Public Relations Representative will be responsible for creating the videos and ensuring placed on applicable City pages.

BMP 1-3 Disseminate information using local media

Measurable Goal: The City utilizes their Facebook page and regroup system to send out information.

The City of Sulphur promoted the Pick It Up Calcasieu to help with littering and cleanup to prevent debris from entering storm drains.

The City of Sulphur on March 23, 2022, promoted the Pick It Up Calcasieu program and was posted on the City of Sulphur's Facebook encouraging residents, businesses, and service groups to help pick up litter in Sulphur and surrounding areas.

The City of Sulphur also promoted on November 3, 2022, the Ward 4 Marshal's Office enforcing litter laws across Calcasieu Parish for the Pick It Up Calcasieu program.

(Attachment 5,6)

This section is the responsibility of the Public Works Director.

BMP 1-4 Inform public on proper disposal of household hazardous waste

Measurable Goal: Accumulate and publish lists of existing sites that accept recyclable items. The list will be published on the internet web page of each Co-permittee. The household hazardous waste initiative will be continued as part of the existing community program. A goal is to maintain at least one household hazardous waste drop-off location in the urbanized area that will be accessible during normal working hours, and to schedule at least one publicized household hazardous waste special collection day once each year.

The City also provides information on the City of Sulphur's website with links to help residents find where to donate electronic equipment and where local locations are.

There are businesses in the City of Sulphur that help with disposal of hazardous waste.

- *Walgreens helps with disposal of medication waste.*
- *Advanced Auto Parts helps with disposal of car oil waste and recycling of car batteries.*

(Attachments 7)

The Public Works Director is responsible for getting information regarding hazardous waste to the public.

2. Public Involvement /Participation

BMP 2-1 Public Involvement/Participation

Measurable Goal: Promote assistance and participation in the Clean City Contest or other emphasis on maintaining a clean environment.

The City of Sulphur did not have any participants this year in our Adopt-A-Spot program.

The City did promote the Pick It Up Calcasieu which corresponds to Adopt-A-Spot program.

The City for the 2023 year is planning to have interviews with local media to promote Adopt-A-Spot to get more local organizations involved. It should be noted that normally Maplewood Drive is an Adopt – A-Spot location but with recent construction on roadway to improve drainage and road the area could not be used.

(Attachment 5)

The City of Sulphur Public Works Director and PR Manager is responsible for promoting and recruiting participation in maintaining a clean environment.

BMP 2-2 Storm Drain Marking Program

Measurable Goal: Involve public, schools and organizational participation in installing storm drain markers throughout the urbanized area for public awareness purposes. Coordinate activity with GIS mapping of area storm drain locations.

The City of Sulphur has available “Only Rain Down the Storm Drain” stickers for mounting to storm drains upon request. Stickers are available to civic, school or other groups. The City of Sulphur had no new stickers placed this reporting year.

Storm drains covers, when replaced, will be replaced with covers that say, “Storm Drain”, “Storm Sewer”, or “Dump No Waste, Drains to River”. This is implemented on an as need basis.

The City’s PR Representative position was unfilled from May 2022 to August 2022; therefore, schools were not contacted for the 2022 year. The new Public Relations Representative that was hired in August is currently reaching out to Sulphur High School Art club to make designs to enter into a contest that will take place in March 2023 and the group to vote on the winning art will consist of the PW Director, Mayor and two council members. The second competition will be between middle school art classes in October 2023.

(Attachment 8, 8a)

The City of Sulphur Public Works Director and Public Relations Representative is responsible for promoting and recruiting participation with the schools for the drainage contest and placing stickers.

BMP 2-3 Litter Reduction / Recycling

Measurable Goal: The City of Sulphur is considering moving towards a mobile recycling center that will have locations throughout the City. This will lower contamination in our recycling. Press releases will periodically be issued to encourage recycling. The City also informs all residents of the Parish disposal site when our recycle bins are full.

The City of Sulphur is no longer able to offer recycling to their residents due to our current contract with our waste disposal company. The City of Sulphur encourages residents to visit the Calcasieu Parish Convenience Center, where recycling is available. The City provides information about the free site on their website and when residents reach out to us on email and telephone. The city also has pamphlets for the Calcasieu Parish Convenience Center at City Hall’s front desk and at the Water Department to be handed out to residents.

(Attachment 9, 10)

The City of Sulphur PR Manager and Public Works Director are responsible for continuing to promote recycling through the City of Sulphur.

3. Illicit Discharge Detection and Elimination

BMP 3-1 Address illicit discharge from failing private sewage treatment systems

Measurable Goal: The City of Sulphur will utilize informational handouts given during the permit process for any developments utilizing a private sewage treatment system. The City will provide a way to report illicit discharge directly to the City. There will be an option to report anonymously.

The City had no private sewage treatment systems that were permitted in the 2022 year. There were no reports of any illicit discharges from the public.

Reporting of illicit discharges may be reported from landowners, citizens, and government agency, or city employees. Below are the steps the City follows once reported:

- *Fire Department and Public Works staff member will visit the site of the alleged discharge and begin to collect evidence.*
 - *Evidence may include samples and photos.*
- *First Person on site will determine the need for mitigation, estimate the volume and begin tracing source of the discharge*

If illicit discharge of an unknown source is confirmed the City will utilize the following methods to track the source of the illicit discharge:

- *Smoke testing. (Smoke testing will allow the City to find locations where manholes or cleanouts have been removed. This will also enable the City to follow the upstream path of storm sewer.*
- *CCTV. (CCTV'ing of the storm sewer will give a visual aid as to where discharge is coming from.*

Removing the Source of the illicit discharge will depend on the type of discharge occurred.

- *A City employee will communicate with the violator regarding the consequences. In accordance with Chapter 24 of the Code of Ordinances, Noncompliance can result in revoked permits, and the following fines:*
 - *First Offense: Two hundred fifty dollars (\$250.00) per day, per offense.*
 - *Second Offense: Five hundred dollars (\$500.00) per day, per offense.*
 - *Third Offense and thereafter: One thousand dollars (\$1,000.00) per day, per defense.*

If the illicit discharge is found to be a direct connection, the City reserves the right to remove the owner's access to the stormwater system.

Sanitary leaks on the City side are tracked and monitored using a ticket system in Navline. The problem is not resolved until the site is inspected by a Supervisor and the ticket is closed.

Through smoke testing, the City may find leaks on the citizen side. If this occurs the property owners are sent certified letters by mail giving them 30 days to repair their leak.

All staff involved with monitoring and enforcing the illicit discharge detection plan will meet after every incident to discuss items that will make the process better. Documentation for every illicit discharge event will be held on the City's server.

Should there be a release that is reportable, the City will collect all necessary documentation. Upon review of the documentation and the Stormwater Management Plan, the City will make revisions, if needed, to prevent future release.

(Attachment 11, 12)

The City of Sulphur Inspections/ Permitting and Public Works Director are responsible for managing and dealing with complaints that may occur.

BMP 3-2 Implement initiatives to control illegal dumping

Measurable Goals: Implementation of a public awareness program to reduce litter and illegal dumping within the area. Enhance enforcement process for violations of ordinance requirements to include increased surveillance and more stringent fines.

The City of Sulphur has previously adopted an anti-littering ordinance (Section 17-5). The City has on its web site provisions for the public to advise the City of known ordinance violations or solid waste collection issues. Also on the web site is promotional information for the two solid waste drop-off sites operated by the Parish.

The City continues to address the issue of grass being blown into the storm drains through our code enforcement division. The City issued no violation letters for grass in the roadway during the 2022 year.

The street crews continue to sweep the streets, clear the drains, clean catch basins, slope mow ditches and blow out culverts to remove potential for blockages affecting the drainage ways.

The City of Sulphur has swept over 40 miles of roadway (routine), flushed, repaired /replaced, and cleaned 63 drain lines and catch basins.

The City of Sulphur Code Enforcement and Public Works Maintenance Department are responsible for issues violation letters and keeping the drainage ways clean of debris.

(Attachments 13,14,15)

BMP 3-3 Response to illicit discharges from construction sites

Measurable Goal: Develop programs to detect and eliminate illicit discharges to the drainage system from construction sites.

The City's Building Inspection Department and Public Works Director reviews construction plans. The review includes applicable storm water management provisions. The Department also conducts field inspections of the permitted construction sites.

The Public Works Director is currently revising the Storm Water Ordinance to have more stringent protocols under Section 24-26 Specific prohibitions and requirements, to help detect and eliminate illicit discharges to the drainage system.

The City of Sulphur's Building Inspection Department and Public Works Director is responsible for the management of the program to prevent illicit discharge to the drainage system form construction sites.

(Attachment 20)

4. Construction Site storm water runoff control

BMP 4-1

Measurable Goal: Assess the effectiveness of all existing construction site pollutant control measures, and modify as necessary or develop, implement, and enforce control measures to create an effective program to reduce pollutants in any storm water runoff from construction activities that results in a land disturbance of greater than or equal to one acre. Reduction of storm water pollutant discharges from construction activity disturbing less than one acre will be included in that program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more.

The City's Building Inspection Department with the Public Works Director reviews plans for proposed construction sites within the city limits. During the site plans review, applicants are informed of applicable storm water and drainage requirements. Inspectors include Storm Water provision review as part of their inspections.

The Public Works Director is revising the Stormwater Ordinance to have more rigorous ordinances to implement better control of construction activities and increasing controls of site development.

The Building Inspection Department and Public Works Director is responsible for management of this program.

(Attachment 12,16, 20)

5. Post-construction storm water pollution management in new development and redevelopments.

Measurable Goal: Develop, implement, and enforce a program to address storm water pollutant runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. Develop and implement strategies which include a combination of appropriate structural and /or non-structural BMPs and an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects. The City will develop a post construction stabilization plan in addition to previous goals.

The City's Building Inspection Department and Public Works Director reviews plans for proposed construction sites within the city limits. During the site plans review, applicants are informed of applicable storm water and drainage requirements. Inspectors include Storm Water provision review as part of their site inspections. Measures promoting coordination of storm water management efforts between the City and Calcasieu Parish Gravity Drainage District are provided in the City's Subdivision Ordinance and its Storm Water Ordinances.

The Public Works Director is currently revising the Storm Water Ordinance to have stricter protocols to address post construction runoff in newly proposed Section 24-58 Control Measures.

The Public Works Director and Building Inspection Department are responsible for management of this program.

(Attachments 12, 16, 17, 20)

6. Pollution prevention / Good Housekeeping for Municipal Operations

Measurable Goals: Develop and implement an operation and maintenance program for jurisdictional facilities to include a training component with an ultimate goal of preventing or reducing pollutant runoff with municipal operations. Conduct employee training to prevent and reduce storm water pollution during routine maintenance activities.

Erosion control measures are routinely included in the drawings for the City's capital improvement projects. The City has the Professional of Record or his representative inspect the site during construction. Additionally, the City has assigned a staff person who is responsible for periodic site visits to the work site.

The City of Sulphur's Public Works Department utilizes their supervisors to visit all work sites. During a day, a supervisor will float from worksite to worksite. Periodic site visits mean multiple daily visits to each work site.

The City's Water and Wastewater Plants utilizes SCADA to inform operators of any malfunctioning equipment to reduce wastewater overflows. If an overflow occurs at the Wastewater Plant, operators utilize Wastewater Specialties for all cleanups and disinfection. The Public Works Maintenance shop is equipped with a spill kit for any spills on site. Our water and wastewater employees receive stormwater training during their yearly education hours. This includes 7 Wastewater employees, 6 Water employees, 3 Maintenance Supervisors, and the Public Works Director.

The City of Sulphur's Public Works Street Crews do daily maintenance of the stormwater system utilizing vac truck and personnel, cleaning ditches and rights-of-ways. Catch Basins are routinely, yearly, inspected for operation and obstructions. New catch basins are placed as far from sanitary sewer manholes as possible to prevent any potential backups from entering the stormwater systems. Silt and garbage are removed while drainage lines and catch basins are flushed. Silt and garbage are then dewatered and disposed of at a landfill, while water is sent to Wastewater Plant.

The City of Sulphur Public Works Wastewater Department is still in the process of undergoing major rehabilitation. Please see attachment 18 for list of upcoming /ongoing projects.

Certification:

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

Name: Austin Abrahams

Title: Director of Public Works

Signature:

Date: February 22, 2023