

# **2018 ANNUAL REPORT**

**Phase II  
Stormwater Pollution Management Plan  
For  
Lake Charles Urbanized Area  
Calcasieu Parish, Louisiana**

# TABLE OF CONTENTS

I.	Identification	
	A. Executive Summary.....	Page 2
	B. Background.....	Page 3
	C. Name of sMS4.....	Page 3
	D. Contact Information.....	Page 3
	E. Impaired Water Bodies.....	Page 4
II.	Minimum Control Measures	
	A. Public Education and Outreach.....	Page 5
	B. Public Involvement and Participation.....	Page 9
	C. Illicit Discharge Detection and Elimination.....	Page 13
	D. Construction Site Runoff.....	Page 16
	E. Post-Construction Site Runoff.....	Page 18
	F. Pollution Prevention / Good Housekeeping.....	Page 20
	G. Certification Page.....	Page 22
III.	Appendix	
	A. Attachment #1	303(d) Impaired Water Bodies List for Calcasieu
	B. Attachment #2	Letter to Superintendent, Request for Permit, Permit
	C. Attachment #3	Water Plant Field Trip
	D. Attachment #4	Environmental Poster Contest and Commercial Contest
	E. Attachment #5	Permit Office Pamphlet Display & Sewer Handout
	F. Attachment #6	Home Show Event
	G. Attachment #7	CPPJ Website, Local News Interview, Paid Advertising
	H. Attachment #8	Waste and Recycling Locations
	I. Attachment #9	Drainage Presentations, Committee Meetings, Agendas
	J. Attachment #10	Storm Drain Marking & School Education
	K. Attachment #11	Anti-litter Campaign
	L. Attachment #12	Keep Calcasieu Beautiful
	M. Attachment #13	Solid Waste Center, Annual Usage and Recycling
	N. Attachment #14	Anti-litter Campaign & Krewe of Barkus
	O. Attachment #15	Poop Fairy & Rabies Clinic
	P. Attachment #16	EPA Region 6 Stormwater Conference Presentation
	Q. Attachment #17	Sewer Violation Letter
	R. Attachment #18	LUSC Presentation Invite
	S. Attachment #19	Report Litter
	T. Attachment #20	Solid Waste Information and Guidelines
	U. Attachment #21	Stormwater Violation and Complaint Form
	V. Attachment #22	Culvert Permit
	W. Attachment #23	Stormwater Permitting Information and Checklist

X. Attachment #24	BMPs Rack Cards
Y. Attachment #25	Stormwater Application & Acknowledgement for WQC
Z. Attachment #26	Stormwater Public Awareness on Website
AA. Attachment #27	Oil and Anti-Freeze Recycling
BB. Attachment #28	Various Facility Maintenance Records
CC. Attachment #29	Employee Training Video

**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 toward 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 77,000. 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. Several 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, fish and 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) Permit by the Louisiana Department of Environmental Quality. The sMS4 was reissued in March of 2013. 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:**

Lake Charles Urbanized Area  
Permit # LAR041019  
AI# 108485

**sMS4 Address:**

Calcasieu Parish Police Jury  
1015 Pithon Street  
P.O. Drawer 3287  
Lake Charles, LA 70602

No area has been added to the Lake Charles Urbanized area during the 2018 reporting year. All urbanized areas are covered either under the cities' sMS4 jurisdictions or that of Calcasieu Parish.

**Annual reporting period: January 1, 2018 through December 31, 2018****sMS4 Coordinator:**

Tara Ross Environmental Coordinator  
Division of Planning and Development  
Calcasieu Parish Police Jury  
901 Lakeshore Dr. 5<sup>th</sup> Floor  
P.O. Drawer 3287  
Lake Charles, LA 70602

**Chief Elected Official:**

Judd Bares President, Calcasieu Parish Police Jury  
1015 Pithon Street  
P.O. Drawer 3287  
Lake Charles, LA 70602



## **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, and plantation management, changes in tidal circulation /flushing, flow regulation/modification, impacts from hydrostructure, 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 than waterfowl. The area 303D listed water bodies are rated as Low and Moderate on the TMDL priority list for all water quality indicators. A list of actual water body subsegments and their uses, impairment, and possible source for contaminants is located in <http://deq.louisiana.gov/page/water-quality-integrated-report-305b303d> (Attachment #1).

# MINIMUM CONTROL MEASURES

## PUBLIC EDUCATION AND OUTREACH:

### 1. Public education and outreach on Stormwater impacts

#### **BMP 1-1 Classroom education on storm water pollution**

**Measurable Goal: Offer educational material concerning Stormwater to local schools as well as organizations and provide presentations upon request.**

Calcasieu Parish contacted the Superintendent of Calcasieu Parish School Board for permissions to offer education outreach materials and presentations to area schools when and where it may be needed. We were granted approval and the information was then forwarded to the area schools. (Attachment #2)

In 2018 Calcasieu Parish coordinated with the Environmental Club Representative from St. Louis and supervisors from the City of Lake Charles to guide an educational Field Trip for Environmental Students from St. Louis Catholic School (03/06/2018). During this field trip they toured the City Wastewater Plant A located on West Railroad Ave. City Managers, Supervisors, employees and Calcasieu Parish Environmental Coordinator each talked on the operations throughout each department of the plant and the importance of maintaining all aspects as it relates to water quality and the overall environmental health of the City of Lake Charles and Calcasieu Parish. (Attachment #3)

Calcasieu Parish continues to participate with the Environmental Affairs Committee of the Chamber Southwest Louisiana in a poster contest in which “Louisiana Litter Laws”, “Stormwater Pollution”, and “Louisiana Coastal Restoration and Protection” were the three topics choices. Information to anyone requesting had been made available through Region 5 Science Fair website, cppj.net and via e-mail requests. The contest was held January 8, 2018 in sequence with Regional Science Fair. Information on this contest has been circulating since September 2017. <http://www.lasciencefair.org/Forms/2018Poster.pdf> (Attachment #4)

Calcasieu Parish implemented an “Environmental Awareness Commercial Contest” in conjunction with the Environmental Affairs Committee of the Chamber Southwest Louisiana poster contest as the Parish’s part of the event for the 2018 Region 5 Science Fair. Topics for the commercial contest include “Wastewater Pollution”, “Air Quality Awareness” and “Louisiana Coastal Restoration and Protection”. As recognition, the top two-division winner’s commercials will be shown on the Parish’s website for one year. This will be a reoccurring event held each year in sequence with the Region 5 Science Fair. <http://www.lasciencefair.org/Forms/2018Commercial.pdf> (Attachment #4)

Calcasieu Parish made anti-littering presentations to eleven Calcasieu Parish Middle schools from September to December where the ill effects of litter from economic, pride, growth, new business and opportunities for their future were discussed. Roughly, 1,252 litterbags were given out between the eleven Calcasieu Parish middle schools. <http://www.cppj.net/residents/fighting-litter-in-calcasieu-parish/education>



Each year Calcasieu Parish Environmental Coordinator assists in the judging of environmental project entries in local Science and Social Studies Fairs.

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

**Measurable Goal: Prepare or acquire a variety of informative products that are tailored to reach the various audiences found in the urbanized area.**

Calcasieu Parish continues to make available to the public the Stormwater flyers and educational pamphlets and handouts in the Planning and Permits offices as well as other areas of governmental buildings. The flyer and pamphlet information that has been made available to the public through handouts at conventions, conferences and classrooms has included recycling, litter reduction, household hazardous waste reduction, and Stormwater pollution prevention materials. The literature is also provided at local workshops and other events during the year. In 2018 an informational display highlighting Best Management Practices for construction site stormwater runoff was installed in the Permits office. (Attachment #5)

Calcasieu Parish provides flyers developed by the Louisiana Department of Health and Hospitals regarding proper maintenance of individual mechanical sewer systems that have been mailed out to residents along with the letter from the parish announcing the sewer inspection program. In 2018, 1,445 inspection cards and flyers were mailed. This was also made available to the public at the parish government building and included with other handouts available at events. <http://new.dhh.louisiana.gov/assets/oph/Center-EH/sanitarian/onsitewastewater/HomeATUBrochure.pdf> (Attachment #5)

Calcasieu Parish was once again, provided a booth at the area Home Builders Association Home Show in March of 2018 and featured information on Stormwater, litter, and all available services in the Department of Planning and Development. Seven Parish Planning Department employees participated in the two-day event answering questions, providing informational handouts and educating attendees on various functions of the department. Flyers and other related information on permits, occupational licenses, adjudicated property, home construction, litter abatement, pollution prevention, and Stormwater compliance at construction sites were made available to the 1,470 attendees. Stormwater promotional items including pet waste dispensers, “Drink Up” stormwater pollution cups, reusable automobile trash bags and car air fresheners both with the Parish Litter Reporting Hotline number printed on them were all used as giveaways as part of outreach efforts. <http://www.hbaswla.org/> (Attachments #6)

### **BMP 1-3 Disseminate information using local media**

**Measurable Goal: Develop and maintain a Web page dedicated to Stormwater, water pollution and other issues affecting Calcasieu Parish’s Stormwater. Continue our anti-littering campaign and make improvements as needed. Investigate and utilize media outlets, including television, radio and news resources.**

As noted in years past much of the Stormwater media publicity disseminated during the 2018 calendar year related to inspection of individual mechanical sewer systems throughout the parish through the Calcasieu Parish sewer inspection program. Publicity for the program included announcements through the government channel as well as information on the parish website. As previously stated, notification letters were sent to selected area residents where the inspections would be taking place. Information regarding the progress of the sewer inspection program as well as proper maintenance continue to be made available on the parish's website. <http://www.cppj.net/services/planning-development/sewage-inspection-program> (Attachment #7)

Calcasieu Parish Environmental Coordinator appeared on KPLC TV and Fox 29 in 2018 to speak on water quality and litter/recycling in Calcasieu Parish. <http://www.kplctv.com/clip/14504051/video-where-to-recycle-in-the-lake-area/>  
<https://www.facebook.com/KPLCMidday/videos/vb.1535940543085836/1857678640912023/?type=2&theater>

Calcasieu Parish implemented an anti-litter campaign started in 2009 to present that has included televised announcements and billboards composed of actual local litter. Paid litter advertising through the O'Carroll Group, which does not include PSA's, for Calcasieu Parish in 2018 included 711 spots on local T.V. stations. The commercial that played on these viewed spots was entitled "Crime Scenes". Social Media hits for 2018 were as followed: 134,201 impressions, and 10,516 likes/comments/shares. There are 11 Digital Outdoor advertising locations that was estimated to receive 2,193,929 views and 1 full time billboard that received an estimated 20,075,000 views for 2018. The running slogan during 2018 was "Litter is a Crime". Automobile litter bags are made available at several area litter program sponsors' locations including banks and automobile cleaning sites. Calcasieu Parish has information on their websites [www.cppj.net](http://www.cppj.net) and <https://www.facebook.com/CalcasieuParishPoliceJury/> (Attachment #17)

Calcasieu Parish created a website dedicated to Stormwater education and outreach. The website includes facts about Stormwater, ways to eliminate or decrease Stormwater runoff and a page for kids. The webpage has had significant updates and changes throughout the year. <http://www.cppj.net/services/planning-development/stormwater> (Attachment #7)

#### **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. 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.**



Calcasieu Parish is routinely contacted by residents seeking alternative disposal options for materials that are normally disposed of through regular garbage service or illicitly dumped along rural roadways. In response, the parish Stormwater personnel have collected and continue to update the information on waste and recycling disposal location options available throughout the parish. The list of wastes and recyclables, as well as those previously mentioned, includes construction and demolition and other debris, yard waste, scrap metal, tires, oil and other automotive fluids, batteries, furniture, clothing, household goods, appliances, electronics, and mercury. The information is made available to the public through educational pamphlets and phone inquiries to the parish Public Works Department as well as the CPPJ website. <https://www.cppj.net/services/engineering-and-public-works/residential-solid-waste-convenience-centers> (Attachment #8)

## **PUBLIC INVOLVEMENT AND PARTICIPATION:**

### **2. Public Involvement/Participation**

#### **BMP 2-1 Make presentations to stakeholders**

**Measurable Goal: Develop “stock public presentation” for the Stormwater pollution program that describes current problems, including drainage deficiencies, area flooding issues and runoff water quality.**

Calcasieu Parish presented several presentations on Parishwide Watershed Planning to area engineers, developers, landowners, municipalities, jurors and SWLA Alliance. The presentation addressed several issues that affect our local watershed and the steps that the Police Jury is taking in formalizing an organizational structure for a Stormwater and Watershed Management Department. Discussion on the watershed master plan goals and objectives were the focus. <https://www.cppj.net/services/engineering-and-public-works/public-works/storm-water-master-planning> (Attachment # 9)

Calcasieu Parish in order to better form partnerships with area entities to address the importance of Stormwater pollution prevention at area facilities, has started production on a video presentation on preventing Stormwater pollution. This presentation is shown during meetings with area entities in the parish as well as municipalities’ parishwide. An introduction video to the SMS4 permitting program in Calcasieu Parish with contact information for presentation request has been added to the Stormwater page on cppj.net. <http://www.cppj.net/services/planning-development/stormwater/storm-water-management>.

#### **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.**

Calcasieu Parish had a storm drain marking event scheduled with an area high school in March of 2018, however due to inclement weather the event was cancelled.

Calcasieu Parish Environmental Coordinator organized, facilitated and provided one on one Stormwater training to an Eagle Boy Scout with disabilities. He was taught about Stormwater Runoff Pollution and provided information to bring back to his troop and teach to them so that he could receive his environmental awareness badge (03/13/2018). Storm drain markers were given to the troop to install for one of their troop activities. (Attachment #10)



## **BMP 2-3 Litter Reduction/Recycling**

**Measurable Goal: Establish programs for reducing litter throughout the area and develop method for determining success of programs. Provide information to and resources for the public to recycle through presentations, activities, and events.**

The anti-litter campaign introduced in Calcasieu Parish in 2009 continued during 2018. The litter program at the Calcasieu Parish Police Jury has been active on several fronts within the past year. Including media ads that are run via the C-Gov channel. In 2018 Calcasieu Parish produced a video entitled “Crime Scenes” that featured CPPJ employees examining a litter “crime scene”. The staged crime scenes were located at two Calcasieu Parish parks, one at Prien Lake Park and the other at the Moss Bluff Park. These scenes stayed on display for three months at each location and was covered by local media outlets highlighting the importance of reducing litter.

<http://www.cppj.net/residents/fighting-litter-in-calcasieu-parish>  
<http://www.kplctv.com/story/38005053/calcasieu-parish-police-jury/>  
<https://www.youtube.com/watch?v=-b16-Gejr5g> (Attachment #11)

Calcasieu Parish Keep Calcasieu Beautiful also participated with Keep Greater Lake Charles Beautiful assisted in the organizing, setting up and participation in E-Recycle Day (03/03/2018), Leaders Against Litter (03/23/2018), and Adopt-A-Spot (03/24/2018) during Keep America Beautiful Great American Clean-Up Month and Beach Sweep and Inland Waterway Clean Up (09/15/2018). <http://www.kplctv.com/story/37796159/local-leaders-and-volunteers-take-part-in-effort-to-keep-louisiana-beautiful/> <http://www.kplctv.com/story/37640662/over-750-cars-stopped-by-citgos-annual-e-recycle-day/> <http://www.kplctv.com/video/2018/09/12/volunteer-annual-beach-sweep-lake-charles/> <http://www.kplctv.com/video/2018/09/19/national-beach-sweep-day/> <http://www.kplctv.com/2018/09/13/park-cleanup-day-set-this-saturday/> <http://www.kplctv.com/clip/14289379/consider-this-recycling/> <http://www.kplctv.com/story/37589404/citgo-e-recycle-day/> (Attachment #12)

Calcasieu Parish maintains two drop off sites at two locations within the parish. The “manned” sites are located at the East and West Maintenance Facilities and make available to residents of the parish sites where household waste may be dropped off on weekdays. Items for inclusion are yard waste, white goods, residential construction and demolition waste, trash, large items such as furniture, as well as the waste tires. A total of 60,940 yards of non-recyclable trash had been collected in 2018 between the two dumpsites. (Attachment #13) <http://www.cppj.net/services/engineering-and-public-works/residential-solid-waste-convenience-centers>.

The parish-contracted waste hauling services and recyclers will continue to collect the materials. Waste Management contracted by CPPJ reported 34,889 tons of trash collected from roadside pickup. The intent of the program is focused on reducing litter and the likelihood of roadside dumping. Calcasieu Parish collected and recycled 14,569 tons of batteries and 8,832 yards of general recycled materials in 2018 between the two convenience stations. Residents and municipal governmental agencies from within the Parish may take tires to the designated site for recycling. A recycling contractor collects the tires from the maintenance facilities on a routine basis for



transport to the recycling facility. Tire drop off sites have been integrated into the two parish recycling and drop off stations located at the two maintenance facilities. There were 7,733 total number of tires collected between both sites in 2018. (Attachment #13)

During the Stormwater site plans review, applicants for construction permits for sites within the urbanized Stormwater area of Calcasieu Parish are informed of the requirements to maintain good housekeeping practices regardless of the size of the construction “footprint”. Emphasis is placed upon construction site litter and debris as well as waste concrete disposal practices. Approximately 430 Stormwater permits had been reviewed in 2018. <http://www.cppj.net/services/planning-development/building-permits/checklists-fee-schedules>

### **BMP 2-4 Public Participation with parish wide organizations**

Calcasieu Parish continues to add updates on litter reduction on the Parish website, including videos and adopt a road. Fetch the Litter Retriever, a creation made entirely of litter found in Calcasieu Parish, is often on display at parish wide events and make a featured appearance each year in the Krewe De Barkus parade each Mardi Gras, however the 2018 parade was canceled due to inclement weather. Fetch is used at areas schools to help bring awareness to the clean campus initiative. The program also provides a litter hot line for reporting littering. The program is ongoing. <http://www.cppj.net/residents/fighting-litter-in-calcasieu-parish>  
<http://www.kplctv.com/story/37474982/krewe-of-omega-krewe-of-barkus-parades-canceled-due-to-inclement-weather/> (Attachment #14)

Calcasieu Parishes Animal Services and Adoption Department holds two rabies clinics each year, this year the Stormwater “Poop Fairy” helped greet those entering the drive thru clinic. At the clinic, (03-16-2018) Calcasieu Parish gave away 250 promotional pet waste dispensers and 250 “Drink Up” stormwater pollution cups with stormwater pollution information on them, as part of outreach to pet owners in the parish. (Attachment #15)

Calcasieu Parish was referred by LDEQ to the Environmental and Regulatory Project Manager of Morris P. Herbert, Inc., Richard Martin, from Lafourche Parish to inform, present, educate and provide training, on CPPJ Sewer Inspection Program to help assist him in presenting an outline for the initiation of a similar program in Lafourche Parish (01/11/2018). Through emails, phone calls and meetings, the Environmental Coordinator assisted Mr. Martin in providing him with this information. (Attachment #16)

Calcasieu Parish Environmental Coordinator was contacted by Louisiana Department of Environmental Quality, Water Permits Division (02/21/2018), and requested to submit an abstract, as a representative for Louisiana, to be a speaker at the EPA Region 6 20<sup>th</sup> Annual Stormwater Conference in Albuquerque, New Mexico. It was stated by them that LDEQ uses



Calcasieu Parish as its model program and does an amazing job with the MS4, particularly the public outreach program. An abstract by the Environmental Coordinator and submitted (05/10/2018). The abstract was accepted (05/29/2018) and the presentation was given (08/22/2018) under the Education Discussions Track. Agenda <https://guidebook.com/guide/115626/poi/10257445/?pcat=560694> Guide Book Speaker Portfolio <https://guidebook.com/guide/115626/poi/10257445/?pcat=560694> Conference website <http://tamuk-isee.com/conferences/epa2018conference/> (Attachment 16)

## **ILLICIT DISCHARGE DETECTION AND ELIMINATION:**

### **3. Illicit Discharge Detection and Elimination.**

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

**Measurable Goal: Provide public information on proper management of individual sewer systems through public education and outreach. Develop and enhance an individual sewer system inspection program to include a goal of inspecting all systems in the area within a given period.**

Calcasieu Parish finalized a master plan for regionalization of the sewer systems within the Parish to incorporate the outlying areas into existing systems and/or develop new systems to serve those areas. The Parish has taken assumed responsibility for Sewer District 8 of Ward 4, Mossville Sewer, all sewer is sent to City of Sulphur, 27 connections. Waterworks District 2 of Ward 4, 228 connections. Waterworks District 5 of Wards 3 & 8, 1742 connections. Sewer District 11 of Ward 3, 803 connections the Parish continues to maintain these plants as well as manage the billing and customer service. In addition to the water and sewer districts that are being maintained by CPPJ there are 8 systems that CPPJ has agreed to maintain after construction. Oak Grove, 53 connections and Highland Hill 28 connections, Orleans Run (Phase 1), 88 connections, Courtyards, 50 connections, Ravenwood 36 connections, and Cooling Springs 130 mobile home connections, 39 RV connections as well as one dump site. Two new plants were added in 2018, Shadows 22 connections and Wallace Point 2, connections.

The Calcasieu Parish mechanical sewer inspection program to address illicit discharges from failing sewer systems is the first in the state to encompass a parish-wide area. This program continues to this day.

During 2018, Calcasieu Parish code enforcement officers continued the complaint driven as well as routine sewer inspection program and identified number of violations of the parish sewer ordinance. A total of 3,043 sewer inspections were completed in 2018 with an estimate of over 629 violations being cited. Of those cited violations during 2018 only 94 remain in violation. Letters were sent to the locations to inform the owners of the need to repair their systems. (Attachment #17)

Calcasieu Parish Environmental Coordinator was asked to do a presentation on Sewer Illicit Discharge and Elimination at the 2018 Annual Louisiana Urban Stormwater Coalition Meeting. Calcasieu Parish was to present the format on how the Residential Mechanical Sewer System Inspection Program is ran, however this meeting was cancelled and will be rescheduled in 2019. (Attachment #18)



### **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.**

As noted earlier, the anti-litter campaign introduced in Calcasieu Parish in 2009 was continued during 2018. The program provides a litter hot line for reporting littering. The Calcasieu Parish Sheriff's Department continues to undertake surveillance of illicit dumping sites around the Parish to identify the possible sources and conduct follow up enforcement. In 2018, 83 litter violation letters were sent out in response to calls into the litter hot line. Calcasieu Parish Sheriff's Department issued the following littering citations in 2018, 27 Intentional Littering, 5 Gross Littering and 23 Simple Littering. (Attachment #19) <http://www.cppj.net/residents/fighting-litter-in-calcasieu-parish/report-litterers-here>

Calcasieu Parish continues to operate two solid waste drop-off sites within the parish. The manned sites make available to residents of the parish sites where household waste such as yard waste, white goods, large items, tires and garbage may be dropped off during weekdays for disposal or recycling. The intent of the program is focused on reducing litter and the likelihood of roadside dumping. (Attachment #20)

The two drop-off sites are located at the Parish's East and West Maintenance Facilities to better accommodate all areas of the Parish. Calcasieu Parish has continued the waste tire-recycling program for the area residents and municipal governmental agencies from within the Parish allowing for five tires per day per person daily to the designated site for recycling. The waste tire disposal sites were integrated into the drop-off locations. 7,733 tires were collected in 2018 between the two drop-off sites. <http://www.cppj.net/services/engineering-and-public-works/public-works/solid-waste/cppj-waste-management>

An ordinance was also passed in 2008 authorizing the City of Lake Charles to enter into a Joint Services Agreement with the Calcasieu Parish Sheriff's office for the Litter Abatement Program. That agreement continues to be in effect.

### **BMP 3-3 Response to illicit discharges from construction sites**

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

Calcasieu Parish inspected approximately 111 construction areas for illicit discharge within the urbanized area in 2018. If a construction site is found to have an illicit discharge, the parish may issue a stop work order followed by an assessment of civil penalties. The parish also continues to address complains from citizen. The complaint is investigated, images of the violation(s) are recorded, and the parish issues a violation letter requiring all Stormwater violations to be rectified or we may serve a stop work order. Citizens may fill out a complaint form on [cppj.net](http://www.cppj.net) Stormwater page as well as may make a formal complaint to CPPJ Environmental Coordinator. <http://www.cppj.net/services/planning-development/stormwater/storm-water-complaint-form> (Attachment #21)

Calcasieu Parish issues culvert permits to applicants wishing to install entryways to their property, if not previously existing. Specifications on pipe size and composition details are included in the guidelines. The owners are also informed of their responsibility to install storm water BMPs to minimize erosion of soil around the newly installed culvert. The owner is provided guidance on hay bale and silt fencing installation. Once completed, the culvert installation and BMPs are inspected. There were a total 431 culvert permits applications and 118 issued in Calcasieu Parish for 2018. <http://www.cppj.net/services/planning-development/building-permits/culvert-permits> (Attachment #22)

During 2018 Calcasieu Parish continued the Joint Services Agreements with the City of Westlake to conduct the city's construction inspections and include Stormwater permit compliance activities during the inspections in those areas.



## CONSTRUCTION SITE RUNOFF:

### 4. Construction site Stormwater runoff control.

**Measurable Goal: Provide information regarding state and parish requirements to developers regardless of footprint size and location. Inspect the effectiveness of all existing construction site pollutant control measures, and modify as necessary or develop, implement, and enforce control measures. Require permit application for any construction that takes place within the delineated Stormwater area. Perform an inspection required BMPS as well as enforcement our Stormwater ordinance.**

Calcasieu Parish's Permits Department continued use of the forms for use in the building and construction permitting process to inform developers of the state and parish requirements. The forms in use through the department include the Contractor/Developer/Builder Environmental Permit Requirements, Stormwater BMP Inspection Report Requirements, Stormwater Permitting Requirements, Stormwater Erosion & Sediment Control Checklist, and the Stormwater BMP Site Inspection Report. Other information provided includes grading plans and permits as well as information on construction site BMPs and the Louisiana Department of Environmental Quality permit requirements for medium and large sites. <http://www.cppj.net/services/planning-development/stormwater/storm-water-management/stormwater-permits> (Attachment #23)

Calcasieu Parish requires a permit application for any construction that takes place within the delineated Stormwater area. The application requires a site map and plan. The plan is reviewed as well as modified, if needed, prior to approval. The applicant is required to contact CPPJ prior to beginning construction for an inspection of required BMPs. If an inspection reveals insufficiencies in the required BMPs the construction is not authorized to begin. Inspection continues through the construction process and if BMPs are not properly installed and maintained, a stop work order may be issued as well as civil penalties assessed. Rack cards of BMPs are made available to parishioners in the permit office as well as on the CPPJ website. <http://www.cppj.net/services/planning-development/stormwater/best-management-practices-bmp> (See Attachment #24)

In 2018 the Calcasieu Parish Stormwater personnel reviewed approximately 384 site plans for proposed construction sites within the Urbanized Area of the parish. During the site plans review, applicants for construction permits for sites within the urbanized storm water area of Calcasieu Parish are informed of the requirements to maintain good housekeeping practices regardless of the size of the construction "footprint". Emphasis is placed upon construction site litter and debris as well as waste concrete disposal practices. Footprints larger than 5 acres are required to provide a copy of their LPDES permit and SWPPP. (Attachment #25)

The Louisiana Department of Environmental Quality has requested that parishes provide land developers with written correspondence indicating that any proposed activities comply with the Parish's sMS4 Stormwater Management Plan. A total of 12 request for these written acknowledgements had been completed in 2018 by Calcasieu Parish. (Attachment #25)

Calcasieu Parish maintains a minimum of three Certified Stormwater Inspectors (CSI). In 2018, responses were made to a number of sites by Calcasieu Parish Stormwater inspectors to address

illicit discharges from construction sites into drainage ways or onto roadways throughout the parish. Continuing Education on Stormwater issues are obtained during the year.



## POST-CONSTRUCTION SITE RUNOFF:

### 5. Post-construction Stormwater pollution management in new development and redevelopments.

**Measurable Goal: Implement and enforce a program to address Stormwater 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.**

Existing parish zoning and floodplain ordinances authorize the requirement of post-construction Stormwater management plans for large projects. These ordinances are routinely enforced. The Stormwater ordinances for Calcasieu Parish includes language that addresses long-term post-construction Stormwater pollution process maintenance. [https://www.municode.com/library/la/calcasieu\\_parish\\_police\\_jury/codes/code\\_of\\_ordinances?nodeId=COOR\\_CH26ZODE\\_ARTVIITEDEST\\_DIV6STST](https://www.municode.com/library/la/calcasieu_parish_police_jury/codes/code_of_ordinances?nodeId=COOR_CH26ZODE_ARTVIITEDEST_DIV6STST)

Calcasieu Parish Planning personnel handles construction site plan reviews that include verification of planned Stormwater BMPs during both construction and post-construction phases of the project. Parish site inspections occur at pre, during and post-construction intervals. Commercial, subdivision, and individual residential site plans are handled separately and are reviewed by designated parish personnel. The staffs responsible for components of the development or construction is consulted on specific aspects of the project. On an as needed basis, other representatives including parish engineering, public works, planning and development, permits, code enforcement, Office of Emergency Preparedness, and environmental departments as well as representatives from the Louisiana Department of Health and Hospitals may be involved in the plan review process.

As the Calcasieu Parish Stormwater program progresses, it is anticipated that more post-construction related activity will occur. Existing developments in the final stages of construction and site stabilization are being reviewed and inspected by parish personnel for compliance with the parish post-construction Stormwater requirements. Continued public awareness of the parish Stormwater requirements is being presented daily to residential and commercial customers through the construction and development permitting process as well as in pamphlets located in the permitting office and on both the Permit page and Stormwater page on [www.cppj.net](http://www.cppj.net). Public awareness has shown an evident rise noted by the increased number of calls received from neighboring residents reporting conditions of non-compliance with the Stormwater requirements. (Attachment #26)

Over the last few years the Department of Public works has presented numerous presentations that addressed several issues affecting Calcasieu Parish and our local watershed. As a result, in

addressing these issues an ordinance amending various provisions relative to drainage standards have been made to Chapter 26 – Zoning and Development. These amendments were accepted in November of 2017 and has been put in place June 2018. <http://www.kplctv.com/story/38635135/parish-survey-shows-infrastructure-drainage-environment-top-concerns/> (Attachment #26)



## **POLLUTION PREVENTION / GOOD HOUSEKEEPING:**

### **6. Pollution Prevention/Good Housekeeping for Municipal and Parish 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 from municipal and parish operations.**

**Conduct employee training to prevent and reduce Stormwater pollution during routine maintenance activities.**

Calcasieu Parish continues to regulate and inspect the maintenance on erosion control devices on parish road projects as specified by Section 204 and Section 739 of the Louisiana Standard Specifications for Road and Bridges 2000 Edition. The Parish also requires that all new subdivision developments use temporary hay or straw bales, silt fencing, etc. for sediment and erosion control. The Parish Engineering Division inspects this during construction. Also, the Parish specifies that certain BMPs are part of the conditions for zoning approval concerning large developments (i.e. require installation of limestone at the exit of access roads for borrow pits to reduce dirt/dust collection on public roads, preserve existing vegetation and re-vegetating disturbed soils). <http://www.cppj.net/services/engineering-and-public-works/public-works/projects>

Calcasieu Parish Public Works Facilities maintain Stormwater Pollution Prevention by recycling oil from their fleet maintenance operations, in 2018 a combined 1,680 gallons of oil was recycled between Public Works East and Public Works West. These facilities also continue to implement the revised spill incident and response form to the parish owned facilities. The parish hopes that this will help current and future parish employees prevent and reduce any pollution from entering storm drains as well as water bodies. (Attachment #27)

Calcasieu Parish continues to stay in compliance with the Good Housekeeping at each of its Public Works Facilities by carrying out routine on-site maintenance the Drop Site Compactor Pits and Wash Rack drains. Maintenance logs from both Public Works Facilities are kept throughout the year reflecting catch basin and culvert cleaning within Calcasieu Parish. A log of onsite maintenance is kept for the wash racks and trash compactor pits as well (Attachment #28)

Calcasieu Parish Environmental Coordinator along with CPPJ media department produced a new Pollution Prevention/Good Housekeeping training video during the year 2017 to train CPPJ employees. This video training was presented to both Public Works Maintenance Facilities. For the Pollution Prevention/Good Housekeeping training video presentation, there were total of 124 employees in attendance between both Public Works East and Public Works West. (Attachment #29)

Calcasieu Parish continues its plans for the Pollution Prevention/Good Housekeeping training video to be presented to the surrounding municipalities. An introduction of the Pollution Prevention/Good Housekeeping training video, with basic information for Calcasieu Parish's sMS4 permitting program, along with contact information for presentation request has been added to the Stormwater page on cppj.net. <http://www.cppj.net/services/planning-development/stormwater/storm-water-management>

Calcasieu Parish had recently made renovations to some of its existing facilities and one addition that was implemented to fulfill the Pollution Prevention/Good Housekeeping measure was the installation of five EZH2O Bottle Filling Stations. The EZH2O Bottle Filling Station is equipped with a green ticker that count the quantity of 16oz bottles saved from the landfill. In 2018, it is estimated that between the five installed EZH2O Bottle Filling Stations, 12,745 16oz bottles were saved from Calcasieu Parishes landfills. As good stewards of Calcasieu Parish, CPPJ Facility Management plans to continue to install EZH2O Bottle Filling Stations in future renovations. <http://www.chicagofaucetshoppe.com/Elkay-LZWSM8PK-EZH2O-Bottle-Filling-Station-p/elk-lzws8pk.htm>

**Certification:**

I certify under penalty of law that this document and all attachments were prepared 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: Bryan C. Beam

Title: Calcasieu Parish Administrator

Signature:

Date: May 20, 2019



# Phase II Storm Water Pollution Management Plan For City of Lake Charles Urbanized Area Calcasieu Parish, Louisiana

## Table of Contents

Appendix Contents.....	2
IDENTIFICATION.....	3
Executive Summary:.....	3
Background:.....	3
Name of sMS4:.....	4
Impaired Water Bodies:.....	5
MS4 Budget Information:.....	5
MINIMUM CONTROL MEASURES.....	7
1. Public education and outreach on storm water impacts.....	7
2. Public Involvement/Participation.....	11
3. Illicit Discharge Detection and Elimination.....	13
4. Construction site storm water runoff control.....	15
5. Post-construction storm water pollution management in new development and redevelopments.....	16
6. Pollution prevention/good housekeeping for municipal operations.....	16
<b>Certification.....</b>	<b>17</b>

## Appendix Contents

A. Attachment LC1	COLC Mercury Presentations
B. Attachment LC2	COLC Tuten Park Annual Report
C. Attachment LC3	COLC Great Urban Parks Campaign
D. Attachment LC4	COLC Mercury Recycling Performance Summary
E. Attachment LC5	Lake Charles Green Guide
F. Attachment LC6	TG Leaders Against Litter
G. Attachment LC7	COLC/TG Adopt-A-Spot
H. Attachment LC8	COLC/TG Clean Campus Results
I. Attachment LC9	COLC/TG e-Recycle Day
J. Attachment LC10	COLC/TC Trash Bash Event
K. Attachment LC11	COLC/TG Litter Prevention Luncheon
L. Attachment LC12	COLC/TG Beach Sweep Information
M. Attachment LC13	COLC Public Works Stormwater Yearly Report
N. Attachment LC14	COLC Property Standards Inspection/Violations
O. Attachment LC15	COLC Wastewater Plant Yearly Compliance Report
P. Attachment LC16	COLC Water Treatment Annual Inspections
Q. Attachment LC17	COLC Public Works Maintenance Yard Inspections
R. Attachment LC18	COLC Stormwater Grading Ordinance
S. Attachment LC19	COLC Stormwater Management Ordinance
T. Attachment LC20	COLC Stormwater Grading Permit

# IDENTIFICATION

## **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 toward 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 72,826. 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, fish and 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 second five-year permit with the permit having been renewed in December 2007. 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:**

Lake Charles Urbanized Area  
Permit # LAR041019  
AI# 108485

**sMS4 Address:**

Calcasieu Parish Police Jury  
1015 Pithon Street  
P.O. Drawer 3287  
Lake Charles, LA 70602

No area has been added to the Lake Charles Urbanized area during the 2018 reporting year. All urbanized areas are covered either under the cities' sMS4 jurisdictions or that of Calcasieu Parish.

**Annual reporting period: January 1, 2018 through December 31, 2018**

**sMS4 Coordinator:**

Tara Ross  
Division of Planning and Development  
Calcasieu Parish Police Jury  
1015 Pithon Street  
P.O. Drawer 3287  
Lake Charles, LA 70602

**Chief Elected Official:**

Judd Bares, President, Calcasieu Parish Police Jury  
1015 Pithon Street  
P.O. Drawer 3287  
Lake Charles, LA 70602

**Co-Permittees:**

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

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

Mayor Robert Hardey

City of Westlake  
P.O. Box 700  
Westlake, LA 70669

**Report Preparer:**

Tara Ross – CPPJ Environmental Coordinator  
Irvin Louque – City of Lake Charles

**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 hydrostructure, 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 un-sewered areas, unpermitted discharge (domestic waste), on-site treatment systems (septic systems and similar decentralized systems), and wildlife other than waterfowl. The area 303D listed water bodies are rated as Low on the TMDL priority list for all water quality indicators. A list of the actual water body subsegments and their uses, impairment, and possible source of contaminants is located in **Attachment #1.**

**MS4 Budget Information:**

City of Lake Charles has two separate budgets for storm water activities. Physical aspects including drainage and engineering, site inspections, final storm water site plan reviews and water quality management issues are handled through Engineering and Public Works Division. The Planning and Development Division has oversight of the construction permitting and initial stormwater site plans reviews.

The City of Lake Charles annual budget items for storm water activities are included in miscellaneous contractual activities as well as street maintenance supply. The city's 2018 fiscal year begins began October 1, 2017 and ended September 30, 2018.

**Street Division Contractual Services & Projects:**

Actual 2017	\$ 327,170
Budget 2019	\$ 755,425

**Street Maintenance Supplies:**

Actual 2017	\$ 220,732
-------------	------------

Budget 2019           \$ 323,000

**Responsible Parties for all areas of compliance with the Minimum Control Measures include the following:**

James Marshall, Randy Guillory, Ronald Young  
City of Lake Charles  
Department of Public Works  
4331 E. Broad Street  
Lake Charles, LA 70615



## MINIMUM CONTROL MEASURES

### 1. Public education and outreach on storm water impacts

#### **BMP 1-1 Classroom education on storm water pollution**

**Measurable Goal: Implementation or pilot classroom education program with an initial goal of conducting a minimum of one presentation to each middle school.**

Representative of the City of Lake Charles Wastewater Department provided educational outreach regarding recycling to local schools, churches, and groups totaling approximately 910 attendants. **Attachment LC1**

The City of Lake Charles has recognized that urban/storm water run-off present and future environmental concerns and requires both traditional engineering solutions and green stormwater infrastructure. One of the ways the City of Lake Charles is educating the public about green stormwater infrastructure is through its use in the landscaping of public parks. Since 2012, Tuten Park has played a leading role in supporting and developing a sustainable solution using a plant-based technology that mimics nature's wetlands and ponds. Local students, community organizations can observe, study, and maintain the green initiatives for future implementation in their neighborhoods. **Attachment LC2**

The City understands the importance of maintaining the natural habitat of the park. Tuten Park contains 4.8 acres of Jurisdictional Wetlands formed in a "pimple-mounded" topography. The wetland areas will act as natural habitats for local plants and animals. These very important eco-systems will be maintained and studied by our local students. Selected delineated areas will also be enhanced with additional native wetland plant varieties to create a better habitat for small animals, reptiles, and insects. Riverside Park, located in North Lake Charles on the banks of the Calcasieu River contains approximately 200 acres of wetlands, largely comprised of freshwater marsh and cypress-tupelo gum swamp. Riverside Park has been the site of field trips and classes based on the plants and wildlife that inhabit the wetlands of the park.

In 2018, the City of Lake Charles applied for and received a Great Urban Parks Campaign grant from the National Recreation and Parks Association to construct bioswales, rain gardens, and a walking trail at Hillcrest Park, located in east Lake Charles. These green stormwater projects will serve to educate the public on stormwater and drainage issues, native plants, and pollinators in the coming years and is slated to be mostly complete by September 2020. **Attachment LC3**

The City of Lake Charles has worked with the Calcasieu Parish and private schools, gardening clubs, Boy and Girl Scouts, Team Green organizations, and Louisiana Urban Forestry Council, LA Environmental Research Center, and Coastal Plain Conservatory to provide programs to SWLA students. During the 2018 Arbor Day Event over 200 students as well as adults attended the classes held at Tuten Park.

To further implement sustainable solutions a rain garden was designed and constructed adjacent to the Education Building. The 4800 square feet of “rain garden” encompasses various native water plants to Louisiana and is maintained to also attract butterflies.

Bio-retention ponds, commonly called “rain gardens,” are landscape features that help control rainwater runoff. The runoff for this location comes from the roof of the Educational Building, walking path, and adjacent compacted lawn areas. Impervious surfaces cause problems, especially during the large storm events. Structures, low-lying depressions and other landscape constructions that slow and deter running water allow heavy rains to be absorbed into the soil. This prevents the urban situation where the rains flow into storm drains and cause secondary environmental problems. Or it becomes surface water that causes erosion, water pollution, flooding, and diminished groundwater. Thus, rain gardens are essentially all landscape features that capture, channel, and divert natural rain that falls on a property. This designed landscape is now a plant rain garden. In 2018, the City of Lake Charles Recreation and Parks Department entered into a contract with a local landscaper to clear blackberry vines and a willow tree that had regrown in the rain garden and to maintain it during the 2019 year. It has been mulched with pine straw. In this way, the rain garden is both green infrastructure and a method for conservation of a vulnerable species.

The City of Lake Charles was awarded Bayer’s Feed a Bee Pollinator Habitat Grant at the end of 2018 to construct and improve nearly 1 acre of native prairie habitat. That habitat will be planted with coastal prairie seed and four species of native, fast-growing wildflowers with the goal of promoting native plants, their impact on stormwater runoff, and providing pollinator habitat.

### **Attachment LC2**

The City has just completed construction of a pavilion (late 2017) and, with the help of the Natural Resource Conservation Service, a quarter acre excavated pond (mid-2016). The pavilion will be used for environmental education classes and events. The pond was constructed primarily for water quality and aquatic biology education. Within weeks of construction, numerous aquatic insects such as water boatmen, giant water bugs, whirligig beetles, water striders, dragonflies, and water scorpions had colonized the pond. Within months, several species of fish had colonized the pond, including bluegill, bullhead catfish, mosquito fish, least killifish, and sailfin mollies. Cattails and sedges have grown along the pond edges. Louisiana irises and other native plants were transplanted in the pond area during 2017. The area around the pond has been seeded with grasses and wildflowers to filter runoff of sediment and pollutants prior to entering the pond. Numerous water-loving bird species have been sighted in the pond since it’s been colonized by plants, fish, and insects, including Wood Duck, Mallard, Black-bellied Whistling-Duck, Green Heron, Great Blue Heron, and Great Egret.

Four thousand feet of 6–8 feet wide crushed limestone trails have been constructed to connect the education building, pavilion, and pond. Five bridges were constructed along the trails so as to not impede water flow into the pond from the surrounding forest. These trails will be able to be used in all weather for classes, nature walks, and events.

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

**Measurable Goal: Prepare or acquire a variety of informative products that are tailored to reach the various audiences found in the urbanized area.**

The City of Lake Charles Wastewater Division, with financial assistance from the area Citgo Refinery, has developed a mercury outreach program and established a drop off site for mercury waste recycling. The city's wastewater personnel created an informational flyers regarding mercury containing devices and other sources of mercury and the options available to the public on disposal of such items. The flyers have been placed at area locations throughout the city where mercury drop-off sites are located, including Wal-Mart, Target, Sam's Club, Lowes, K-Mart, and Stine Lumber Company, a locally owned store. Mercury informational flyers combined were also handed out at the city's Trash Bash in April. **Attachment LC1, LC4**

The City of Lake Charles continues to install new storm sewer covers and catch basins embossed with a storm water discharge message "Do Not Dump Waste" or "Drains to Lake" in areas of new development. The City of Lake Charles also continues to install "No Dumping" and "Do Not Litter" signs around the area.

### **BMP 1-3 Disseminate information using local media**

**Measurable Goal: Prepare public notices and work with local radio and television stations to prepare notices and stories for presentation on news or public information programs. Investigate and utilize other media outlets and resources throughout the term of the permit. Work with the city and parish internet site coordinators to develop and implement a link to a storm water pollution advisory site that will contain narrative and images relating to pollution control, as well as links to other web sites and information resources.**

Team Green of Southwest Louisiana is an organization whose mission is to develop and sponsor projects which will enhance the appearance and quality of the environment in Southwest Louisiana. Team Green of SWLA is an affiliate of Keep America Beautiful and Keep Louisiana Beautiful and participates in the annual Great American Clean-Up. The organization is funded through grants, the City of Lake Charles, the Lake Area Industry Alliance, and other area sponsors. The group is made up of citizens appointed by the City of Lake Charles Mayor to serve on a voluntary basis. Information on Team Green is made available to the public on the City of Lake Charles website). Team Green SWLA activities during the year include Adopt a Spot, Clean Campus, Leaders Against Litter, Trash Bash, Beach Sweep, and E-Recycle Day Trash Bash activities. Team Green also sponsored Litter Law Luncheon and litter reduction awareness, and storm drain marking programs. **Attachment LC5, LC6, LC7, LC8, LC9, LC10, LC12, LC13**

In 2018, Team Green released began revising the Southwest Louisiana Green Guide which contains information tailored to litter prevention and proper disposal of waste. Sections were added in this version to include stormwater regulations and monofilament fishing line recycling methods. The new version of the Green Guide will be released in the first quarter of 2019. The 2014 version of the Green Guide continues to be available on the City of Lake Charles website until it is replaced with the 2019 version. **Attachment LC5**



The annual Trash Bash event hosted by Team Green and the City of Lake Charles took place in April 2018. The event has been held annually in the spring near Arbor/Earth Day since 1987. **Attachment LC10**

Jr. Team Green is a youth advisory committee to Team Green SWLA, ages ranging 9-18, and adult leaders who have committed themselves to educating and encouraging young people to be more environmentally responsible. Jr. Team Green also participates with Team Green and also conducts; Prien Lake Mall's All About Kids Expo, Community Gardens, CITGO's E- Recycle Day, Beach Sweep, Tuten Park's Arbor/Earth Day Event, and City of Lake Charles Santa's Workshop. **Attachment LC2, LC9, LC10, LC11, LC12**

#### **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.**

As noted earlier, the City of Lake Charles continues to collect mercury for recycling at one of the city's wastewater treatment facilities. Residents may dispose of the mercury containing waste products such as thermometers, mercury switches, thermostats, fluorescent light bulbs, and elemental mercury listed in the flyer received with their water bill or as noted in the city's Green Guide available at City Hall. The mercury containing waste is disposed of through a contracted recycling company. **Attachment LC1, LC4, LC9, LC10**

The annual City of Lake Charles Residential Trash Bash was held at the Chennault International Airport on April 21, 2018. Conducted by the city of Lake Charles and Team Green of SWLA, the cleanup effort encourages citizens to bring in recyclable items such as waste paint, used oil, scrap metal, batteries, mercury containing items, appliances, tires, wood, clothing and household items to be disposed of or recycled. A total of 500 lbs. of recyclables which included paper, plastic, aluminum & cardboard, 2739 lbs. of lead, alkaline, and NiCad batteries, 650 linear feet of 1 to 8 feet fluorescent lamps, 97 compact fluorescent and other mercury lamps, 4 thermometer, 3 thermostat, 4 switches, and 1.5 lbs. of liquid mercury. 3.43 tons of paper was shredded, 330 gallons of used motor oil, 60 gallons of antifreeze, and 1415 gallons of paint products were collected for disposal. A total of 10.75 tons of household trash was collected for disposal. Re-usable items such as TVs, toasters, computer monitors, printers, furniture, coffee pots, books, clothes, lamps, and a variety of other household items were collected to be donated to Habitat for Humanity. There were 359 community participants, 100+ volunteers, and 17 sponsors for the event. The local television station aired a Public Service Announcement the day before the event. **Attachment LC10**

The City of Lake Charles and Team Green held an "E-Recycle Day held at McNeese Cowboy Stadium parking lot in Lake Charles on March 3, 2018. Conducted by the City of Lake Charles,

Team Green of SWLA, McNeese State University, and Waste Management, the cleanup effort encourages citizens to bring in recyclable items such as computers, monitors, peripherals, printers, fax machines, keyboards, photocopiers, televisions, VCRs, stereos, home and office phones, cell phones, consumer electronics and thermometers to be disposed of or recycled. Participants collected electronic recyclables from 355 vehicles. Two (200) hundred cubic yards of electronics, 4 thermostats, 4 thermometers, 2,698 linear feet of fluorescent lamps, 256 Compact fluorescent and other mercury lamps, and 1 oz. liquid mercury were collected. The local television station aired a Public Service Announcement the day before the event.

### **Attachment LC9**

## **2. Public Involvement/Participation**

### **BMP 2-1 Make presentations to stakeholders**

**Measurable Goal: Stock presentations will be developed and be made available on an average of twice each year.**

The SWP3 goal of developing stock presentations and using them at least twice a year has been continued during the 2018 calendar year. The City of Lake Charles will continue to develop presentations for the six minimum control measures and other related storm water topics, and the information will be shared with the other three Co-permittee.

The City of Lake Charles has recognized that urban/storm water run-off presents present and future environmental concerns and requires hard engineering solutions. City of Lake Charles' owned Tuten Park plays a leading role in supporting and developing a sustainable solution using a plant-based technology that mimics nature's wetlands and ponds. Additionally, since being awarded the Great Urban Parks Campaign grant for Green Stormwater Infrastructure, Hillcrest Park will soon be Lake Charles' focal green stormwater infrastructure demonstration site. Local students, community organizations can observe, study, and maintain the green initiatives for future implementation in their neighborhoods. **Attachment LC3**

### **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 Lake Charles continues to work with local area developers to install new drains that are embossed with a message of "Dump No Waste – Drains To Waterways". Also brochures are mailed out in water bills and also handed out to the public and contractors when attaining a construction permit.

### **BMP 2-3 Litter Reduction/Recycling**

**Measurable Goal: Establish programs for reducing litter throughout the area and develop method for determining success of programs. Provide information to and resources for the public to recycle through presentations, activities, and events.**

The City of Lake Charles and Team Green, once again hosted the annual Litter Awareness and Prevention Luncheon event at Lake Charles Civic Center on October 11, 2018. The Luncheon had 150 attendees included representation from the law enforcement community, environmental and safety professionals, area governmental agencies, consulting firms, businesses, and industry. A follow up article in the local newspaper highlighted the event. **Attachment LC11**

The City of Lake Charles and Team Green hosted the annual Clean Campus Contest in April 2018 with eleven schools participating (2 private schools, 4 elementary schools, 1 middle school, and 4 high schools). Four of the schools are within Lake Charles. Clean Campus schools are judged on a scrapbook chronicling their progress with before/after comparisons of litter on campus, beautification of campus, parent/community involvement, and student involvement. The winners were recognized at the Litter Awareness and Prevention Luncheon in October. **Attachment LC8**

The annual City of Lake Charles Residential Trash Bash was held at the Chennault International Airport on April 21, 2018. Conducted by the city of Lake Charles and Team Green of SWLA, the cleanup effort encourages citizens to bring in recyclable items such as waste paint, used oil, scrap metal, batteries, mercury containing items, appliances, tires, wood, clothing and household items to be disposed of or recycled. A total of 500 lbs. of recyclables which included paper, plastic, aluminum & cardboard, 2739 lbs. of lead, alkaline, and NiCad batteries, 650 linear feet of 1 to 8 feet fluorescent lamps, 97 compact fluorescent and other mercury lamps, 4 thermometer, 3 thermostat, 4 switches, and 1.5 lbs. of liquid mercury. 3.43 tons of paper was shredded, 330 gallons of used motor oil, 60 gallons of antifreeze, and 1415 gallons of paint products were collected for disposal. A total of 10.75 tons of household trash was collected for disposal. Re-usable items such as TVs, toasters, computer monitors, printers, furniture, coffee pots, books, clothes, lamps, and a variety of other household items were collected to be donated to Habitat for Humanity. There were 359 community participants, 100+ volunteers, and 17 sponsors for the event. The local television station aired a Public Service Announcement the day before the event. **Attachment LC10**

The City of Lake Charles and Team Green conducted an annual Beach Sweep and Inland Waterway Cleanup on September 15, 2018 from 7am to 12pm. The event was advertised through the area newspaper, radio and television media. Letters are also sent to area schools and other organizations informing them of the event and requesting volunteer assistance. The cleanup was attended by 346 volunteers of 22 groups who picked up 327 bags of trash, 2,796 recycled items, and 5,079 cigarette butts. **Attachment LC12**

The City of Lake Charles and Team Green's Adopt a Spot was held March 24, 2018. One hundred twenty-three (123) participants comprised of individuals, groups, organizations, and 87 participants under the age of 18. "Adopt a Spot" is where individuals and groups "adopt" a spot or roadway in Lake Charles, committing to picking up litter in the area at least twice a



year. Designated areas are marked with a roadway sign recognizing the group as the Adopt-A-Spot sponsor of that area. These are on city streets or parks. **Attachment LC7**

The City of Lake Charles and Team Green held an E-Recycle Day held at McNeese Cowboy Stadium parking lot in Lake Charles on March 3, 2018. Conducted by the City of Lake Charles, Team Green of SWLA, McNeese State University, and Waste Management, the cleanup effort encourages citizens to bring in recyclable items such as computers, monitors, peripherals, printers, fax machines, keyboards, photocopiers, televisions, VCRs, stereos, home and office phones, cell phones, consumer electronics and thermometers to be disposed of or recycled. Participants collected electronic recyclables from 355 vehicles. Two (200) hundred cubic yards of electronics, 4 thermostats, 4 thermometers, 2,698 linear feet of fluorescent lamps, 256 Compact fluorescent and other mercury lamps, and 1 oz. liquid mercury were collected. The local television station aired a Public Service Announcement the day before the event.

**Attachment LC1, LC4, LC9**

The Team Green organization continues to provide a method for recycling household items through the city's public works "Green Truck", a specially painted trash truck from the City of Lake Charles Solid Waste Division. The truck is parked at scheduled locations and times throughout the city five days a week. Residents may dispose of newspapers, junk mail, computer paper, aluminum, plain cardboard, paper bags, and telephone books. The telephone books may be designated for specific schools as a contribution to the phone book recycling contest conducted in area schools.

The City of Lake Charles Solid Waste Department hands out Customer Service Cards at all city recycling centers. The cards are used to compile a database so that recycling information or changes can be mailed out to the citizens that regularly recycle.

The City of Lake Charles Litter Abatement Program was initiated in April 2009. The Calcasieu Parish Sheriff's Office continues to provides inmates for litter abatement.

**3. Illicit Discharge Detection and Elimination**

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

**Measurable Goal: Provide public information on proper management of individual sewer systems through public education and outreach. Develop and enhance an individual sewer system inspection program to include a goal of inspecting all systems in the area within a given time frame. Address grass cuttings and foreign debris being introduced into the City storm drains thru public education and outreach.**

The City continues to install new sewer lines in newly annexed properties which afford residents with individual sewer systems to abandon their units and tap into the City's sewer system. Properties already annexed into the City that are not serviced by City sewer still fall under the Department of Health and Hospitals regulatory requirements.

The City will assist the Calcasieu Parish stormwater representatives in conducting classroom and field exercise when made available. Generally these projects included a short presentation of the importance of monitoring what goes down our storm drains, the dangers of dumping grass clippings, paint, soap, and other waste products in the storm drains. In the past we have used these events to place “No Dumping” labels on storm drain inlets surrounding the local schools. **Attachment LC5**

### **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 Lake Charles updated the city’s solid waste ordinance to include addressing “illegal piles” of trash and debris. The Solid Waste and Property Standards enforcement personnel have been working together to successfully implement the requirements. A total of 2435 violation letters were sent to property owners to correct the violation. A total of 51 Administrative Hearings were held for property owners which did not comply or respond to Notice of Violations. **Attachment LC14**

The City of Lake Charles continues to address the issue of grass being blown into the storm drains. The street crews continue to sweep the streets, clear the drains, clean catch basins and blow the culverts out to remove potential for blockages affecting the drainage ways. Letters and/or violation notices were sent to area companies and residents by the City of Lake Charles in response to violation of the storm water ordinance. A section dedicated to information about stormwater, including illegal dumping into storm drains, was included in the 2019 version of the Lake Charles Green Guide. **Attachment LC5, LC13**

### **BMP 3-3 Response to illicit discharges from construction sites**

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

The City’s Planning and Development Department has implemented new Storm Water Pollution Prevention forms to be used in the construction/development permitting process. These forms inform developers of the city, state, and parish requirements. The forms include the Contractor/Developer/Builder Environmental Permit Requirements, Storm Water BMP Inspection Report Requirements, Storm Water Permitting Requirements, Storm Water Erosion & Sediment Control Checklist, and the Storm Water BMP Site Inspection Report. Other information provided includes grading plans and permits as well as information on construction site BMPs and the Louisiana Department of Environmental Quality permit requirements for medium and large sites. **Attachment LC18, LC19, LC20**

The City Inspectors conduct construction site inspection of storm water runoff on new construction sites on an “as needed basis” and report the findings. For 2018 provisions were in

place and more frequent site inspections conducted which resulted in violation letters being forwarded to the contractors resulting in compliance. **Attachment LC14**

#### **4. Construction site storm water runoff control**

**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 result 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 the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more.**

During 2018 the City of Lake Charles storm water personnel reviewed plans for proposed construction sites within the city limits. During the site plans review, applicants for construction permits for sites greater than 40 thousand square feet of impervious surface are informed of the storm water and drainage requirements.

Also, all construction projects that have the potential to disturb soil that could affect adjacent property owners, storm drains, roadways or water bodies are required to submit a Construction Stormwater Grading Plan during their initial permit review and supply pictures of the installed erosion controls prior to the permit application being accepted for permit issuance. **Attachment LC20**

The City of Lake Charles has three Certified Storm Water Inspectors (CSI). Once again in 2018, responses were made to a number of sites by storm water inspectors to address illicit discharges of sediment from construction sites into drainage ways or onto roadways throughout the city. The City also continues to work with the parish in resolving issues related to adjoining boundaries or where conditions require knowledge of handling specific situations.

The City of Lake Charles continues to enforce Ordinance #13259 for large development site drainage. The ordinance requires that proposed construction site plans involving impervious areas larger than 40,000 square feet include submittal of a drainage plan to the City for approval. Also, small developments, any site with significant soil disturbance, are being inspected for stormwater management best practices to limit silt, trash, and construction debris into the storm drain system.

Construction Storm Water Management Brochure is included in each building permit. Started on November 1, 2017, contractors have to submit photographs of their in-place erosion controls prior to submitting any projects for plan reviews. The City's Grading Permit Fees have also been changed to penalize any dirt work on a site prior to attaining a Grading Permit or Building Permit. Enforcing the penalty section of the Storm Water Ordinance, the 1<sup>st</sup> Violation Notice, the contractor has 10 days (if not an immediate environmental hazard) to correct the violation



and forward pictures to the Stormwater Inspector for verification. The 2<sup>nd</sup> Notice penalty is \$500 per site violation, up to six per site, and a summons is also issued to appear to an Administrative Hearing where the violation is discussed and fines levied. The 3<sup>rd</sup> Notice of Violation is \$1,000 per violation per day and a “Stop Work” order is issued until site is in compliance.

**Attachment LC18**

**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 BMP’s and an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects.**

Existing City of Lake Charles zoning and floodplain ordinances already authorize the requirement of post-construction storm water management plans for large projects. These ordinances are routinely enforced. Also, small developments, any site with significant soil disturbance, are being inspected for stormwater management best practices to limit silt, trash, and construction debris into the storm drain system. The storm water ordinances for the City of Lake Charles, includes language that addresses long-term post-construction storm water pollution process maintenance. Smaller sites on whose development has a potential to negatively impact adjacent property are continuously being addressed for possible recommendations to consider post-construction storm water controls. **Attachment LC18, LC19**

**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 from municipal operations. Conduct employee training to prevent and reduce storm water pollution during routine maintenance activities.**

The City of Lake Charles Wastewater Division, under the SMS4, is required to have storm water management plans for their four wastewater facilities. Those plans have been developed with the assistance of an outside consulting firm and will be adopted in February 2019. These plans include monthly inspections. The city’s maintenance garage is also required to comply with a storm water management plan, which is also being implemented and includes monthly inspections. **Attachment LC15, LC17**

The City of Lake Charles Water Treatment Plants have a Spill Prevention and Control Plan that includes monthly visual inspections conducted by an outside firm. This plan was revised in November 2018 by the same outside firm. Each of the six water treatment plants was inspected in October, November, and December. **Attachment LC16**

During 2018 the City of Lake Charles Streets crew worked in Zones 1 through 10 to clean ditches and rights-of-way that do not accommodate machinery. Included with these activities is maintenance of the areas in front of catch basins and culverts. Preventive maintenance work is conducted by the Drainage Division Grad-All and Vac-Con crews on cleaning ditches, blowing out culverts and catch basins, and keeping gutter lines free of debris in each zone. Quarterly Reports are provided with this document. **Attachment LC13**

The design of Tuten Park’s parking lot was to gather storm water run-off into a Bioswale prior to flow into the City’s storm drains. This Bioswale was designed to capture pollutant runoff and prevent it from entering the storm drain and then Lake Charles. The bioswale, acts as a bio-filter, and the design of parking areas flows toward the bioswale. As the runoff enters the bioswale, it is cleaned before entering a watershed or storm sewer.

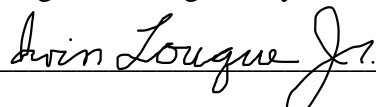
This prevents the urban situation where the rains flow into storm drains and cause secondary environmental problems. Or it becomes surface water that causes erosion, water pollution, flooding, and diminished groundwater. Some studies claim this can reduce the pollution reaching creeks and streams by up to 30 percent. **Attachment LC2**

### **Certification**

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

Name: Irvin Louque

Title: Parks Program Manager, City of Lake Charles

Signature:  Date: 02/14/2019

# **2018 ANNUAL REPORT**

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

## TABLE OF CONTENTS

### IDENTIFICATION

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A. EXECUTIVE SUMMARY	2
B. BACKGROUND	2
C. NAME OF SMS4	3
D. CONTACT INFORMATION	3

### MINIMUM CONTROL MEASURES

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A. PUBLIC EDUCATION AND OUTREACH	4
B. PUBLIC INVOLVEMENT AND PARTICIPATION	5
C. ILLICIT DISCHARGE DETECTION AND ELIMINATION	6
D. CONSTRUCTION SITE RUN OFF	7
E. POST-CONSTRUCTION SITE RUNOFF	8
F. POLLUTION CONTROL AND GOOD HOUSEKEEPING	8
G. CERTIFICATION PAGE	9

### APPENDIX

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A. ATTACHMENT A	SOLID WASTE INFORMATION
B. ATTACHMENT B	E-RECYCLING
C. ATTACHMENT C	DRAIN STICKERS
D. ATTACHMENT D	RECYCLING
E. ATTACHMENT E	CLEAN WATER HANDOUT
F. ATTACHMENT F	LITTER ORDINANCE
G. ATTACHMENT G	SAMPLE BUILDING PERMIT
H. ATTACHMENT H	ORDINANCE 18 AND 24



## **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 toward 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, fish and 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:**

Lake Charles Urbanized Area  
Permit # LAR041019  
AI# 108485

**sMS4 Address:**

Calcasieu Parish Police Jury  
1015 Pithon Street  
P.O. Drawer 3287  
Lake Charles, LA 70602

No area has been added to the Lake Charles Urbanized area during the 2018 reporting year. All urbanized areas are covered either under the cities' sMS4 jurisdictions or that of Calcasieu Parish.

**Annual reporting period: January 1, 2018 through December 31, 2018**

**sMS4 Coordinator:**

Tara Ross  
Division of Planning and Development  
Calcasieu Parish Police Jury  
1015 Pithon Street  
P.O. Drawer 3287  
Lake Charles, LA 70602

**Chief Elected Official:**

Kevin White, President, Calcasieu Parish Police Jury  
1015 Pithon Street  
P.O. Drawer 3287  
Lake Charles, LA 70602

**Co-Permittees:**

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

Mayor Mike Danahay  
City of Sulphur  
P.O. Box 1309

Sulphur, LA 70664-1309

Mayor Bob Hardy  
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 than 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:** City of Sulphur's goal will be to offer educational material concerning stormwater to local schools as well as organizations and provide presentations upon request.

*New Measurable Goal: The City of Sulphur will budget for biannual educational materials for local schools.*

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

**Measurable Goal:** Prepare or acquire a variety of informative products that are tailored to reach the various audiences found in the urbanized area.

The City of Sulphur, through its solid waste collection service provider, distributes informational material concerning solid waste collection and disposal of hazardous waste.

The City of Sulphur also continues to install “Do Not Litter” and “No Dumping” signs around the area, on request.

*New Measurable Goal: In 2019, The City of Sulphur will be implementing quarterly videos or PowerPoints to place on the City’s webpage and on the City’s YouTube page. This will allow the City of Sulphur to reach a broader audience to teach what helps and hurts drainage.*

### **BMP 1-3 Disseminate information using local media**

**Measurable Goal: Prepare public notices and work with local radio and television stations to prepare notices and stories for presentation on news or public information programs. Investigate and utilize other media outlets and resources throughout the term of the permit. Work with the city and parish internet site coordinators to develop and implement a link to a storm water pollution advisory site that will contain narrative and images relating to pollution control, as well as links to other web sites and information resources.**

**City of Sulphur would like to better define this measurable goal as follows:**

**Develop and maintain a Web-page which includes issues affecting the City’s storm water. Emphasize recycling opportunities and available resources for the collection of solid waste.**

City of Sulphur has information on its web site promoting available solid waste collection sites, including the West Maintenance Facility located immediately south of the city. Additional information is available on recycling resources placed throughout the city. (Attachment A)

*New Measurable Goal: The City of Sulphur would like to utilize the local paper to get stormwater material to the citizens. These will be similar to the items produced in BMP 1-2.*

### **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 of Sulphur, through its solid waste collection service provider, distributes informational material concerning solid waste collection and disposal of hazardous waste. Additionally, the City provides drop-off locations for recyclable items. (Attachment B)

## **2. Public Involvement/Participation**



## **BMP 2-1 Make presentations to stakeholders**

**Measurable Goal:** Stock presentations will be developed and be made available on an average of twice each year.

*The City of Sulphur would like to update this goal to a more effective goal.*

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

The City of Sulphur continues to partner in the annual E-Recycling Program (Attachment B)

## **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. (Attachment C)

Storm drain covers, when replaced, will be replaced with covers that say, “Storm Drain”, “Storm Sewer” or “Dump No Waste, Drains to River”.

## **BMP 2-3 Litter Reduction/Recycling**

**Measurable Goal:** Establish programs for reducing litter throughout the area and develop method for determining success of programs. Provide information to and resources for the public to recycle through presentations, activities, and events.

City of Sulphur has information on its web site promoting available solid waste collection sites, including the West Maintenance Facility located immediately south of the city. Additionally, the City has provided resources at two area fire stations and at City Hall for public recycling use. Multiple recycling collection bins are placed at the strategic locations and are available 24/7 for the public to use for depositing materials for collection. (Attachment D)

*New 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 be issued to encourage recycling.*

## **3. Illicit Discharge Detection and Elimination**

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

*New Measurable Goal: The City of Sulphur will utilize informational handouts given during the permit process for any developments utilizing a private sewage treatment system. (Attachment E)*

### **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) (Attachment F). 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 street crews continue to sweep the streets, clear the drains, clean catch basins and blow the culverts out to remove potential for blockages affecting the drainage ways.

### **BMP 3-3 Response to illicit discharges from construction sites**

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

The City's Building Inspection Department reviews construction plans. That review includes applicable storm water management provisions. The Department also conducts field inspections of the permitted construction sites. (Attachment G)

## **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 result 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 the 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 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.

*New Measurable Goal: Utilize an additional permit process for different size developments to include an application for only stormwater management.*

**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's Building Inspection Department 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 No. 5 are provided in the City's Subdivision Ordinance and its Storm Water Ordinance (Chapters 18 and 24, respectively – Attachment H).

*New Measurable Goal: The City will develop a post construction stabilization plan in addition to previous goals.*

**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 from 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 personnel responsible for periodic site visits to the work site.

Yearly, the City of Sulphur Streets crew works to clean ditches and rights-of-way. Included with these activities is maintenance of the areas in front of catch basins and culverts.

**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: Stacy Dowden

Title: Director of Public Works

Signature: 

Date: January 29, 2019



# 2018 ANNUAL REPORT

Phase II  
Storm Water Pollution Management Plan

For

Lake Charles Urbanized Area  
Westlake, Louisiana  
Calcasieu Parish, Louisiana

# TABLE OF CONTENTS

<b>I. IDENTIFICATION</b>	
A. EXECUTIVE SUMMARY .....	1
B. BACKGROUND .....	1
C. PERMIT NAME .....	2
D. CONTACT INFORMATION.....	2
E. IMPAIRED WATER BODIES.....	2
<b>II. MINIMUM CONTROL MEASURES</b>	
A. PUBLIC EDUCATION AND OUTREACH.....	3
B. PUBLIC INVOLVEMENT AND PARTICIPATION .....	4
C. ILLICIT DISCHARGE DETECTION AND ELIMINATION .....	5
D. CONSTRUCTION SITE RUNOFF .....	6
E. POST CONSTRUCTION SITE RUNOFF.....	7
F. POLLUTION CONTROL AND GOOD HOUSEKEEPING.....	8
G. CERTIFICATION PAGE.....	9
<b>III. ATTACHMENTS</b>	
STORM DRAIN/STREET MAINTENANCE REPORTS .....	A
LITTER ORDINANCE EXCERPT .....	B
BUILDING PERMIT ORDINANCE .....	C
STORMWATER ORDINANCE .....	D

## **I. IDENTIFICATION**

### **A 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 toward 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 had a population of approximately 77,000 in 2016. The population for the City of Sulphur was approximately 20,000 in 2016. Westlake had a population of just fewer than 5,000 in 2016. The urbanized areas surrounding the three cities include the unincorporated locations of Carlyss which lies south of Sulphur, areas located 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 the 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, fish and 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.

### **B. BACKGROUND**

The Louisiana Department of Environmental Quality (LDEQ) issued a small Municipal Separate Storm Sewer System (sMS4) to the Lake Charles Urbanized Area in 2003. The sMS4 is presently operating under its third five-year permit with the permit having been renewed in December 2012. The permit and related program is administered by Calcasieu Parish. Calcasieu Parish issues the Storm Water Annual Report, but each co-permittee is responsible for the activities and related ordinances for their respective jurisdictions. All co-permittees continue to work together to meet compliance with the permit conditions and conduct quarterly meetings for information sharing and problem solving purposes.

C. PERMIT NAME

Lake Charles Urbanized Area Permit LAR041019 AI#108485

**Permit Address:**

Calcasieu Parish Police Jury  
1015 Pithon Street  
P.O. Drawer 3287  
Lake Charles, LA 70602

No area has been added to the Lake Charles Urbanized area during the 2018 reporting year. All urbanized areas are covered either under the cities' sMS4 jurisdictions or that of Calcasieu Parish.

**Annual reporting period: January 1, 2018 to December 31, 2018**

D. CONTACT INFORMATION

**sMS4 Coordinator:**

Tara Ross  
Division of Planning and Development Calcasieu Parish Police Jury  
1015 Pithon Street  
P.O. Drawer 3287  
Lake Charles, LA 70602

**Chief Elected Official:**

Calcasieu Parish Police Jury - President,  
Judd Bares  
1015 Pithon Street  
P.O. Drawer 3287  
Lake Charles. LA 70602

**Co-Permittees:**

City of Lake Charles – Mayor Nicholas Hunter 326 Pujo Street Lake Charles. LA 70601	City of Sulphur – Mayor Mike Danahay 101 N. Huntington Street Sulphur, LA 70663	City of Westlake – Mayor Robert Hardey 1001 Mulberry Street Westlake. LA 70669
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E. IMPAIRED WATER BODIES

According to the information from the 2016 Louisiana Water Quality Integrated Report, 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 areas with no sewers, unpermitted discharge (domestic waste), on-site treatment systems (septic systems and similar decentralized systems), and wildlife other than waterfowl. The area 303D listed water bodies are rated as Low on the Total Daily Maximum Load (TDML) priority list for all water quality indicators.

## **II. MINIMUM CONTROL MEASURES**

### **A. PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS**

#### **BMP 1-1 Classroom education on storm water pollution**

**Measurable Goal: To offer educational material concerning stormwater to local schools as well as organizations and provide presentations upon request.**

At this time, the City of Westlake has not begun to implement a classroom educational outreach program. The City of Westlake has the intention to create and distribute educational information pertaining to storm water pollution. The City will need to reach out to the Calcasieu Parish School Board (CPSB) to discuss the possibility of the City performing presentations to Westlake schools. The City will discuss this with the CPSB in 2019.

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

**Measurable Goal: Prepare or acquire a variety of informative products that are tailored to reach the various audiences found in the urbanized area,**

The City of Westlake has placed pamphlets at City Hall with storm water pollution prevention information provided by LDEQ. The City of Westlake will continue to place educational material that pertains to storm water pollution at City Hall. The City of Westlake has the intention to create and distribute storm water pollution prevention flyers to its citizens through the mail in 2019. The City will provide the storm water pamphlet and the City's storm water ordinance with any construction permit issued by the City.

#### **BMP 1-3 Disseminate information using local media**

**Measurable Goal: Develop and maintain a web-page which includes issues affecting the City's storm water. Emphasize recycling opportunities and available resources for the collection of solid waste.**

City of Westlake has information on its web site promoting available solid waste collection. It is the goal of the City of Westlake to include information about storm water pollution prevention on their website in 2019. The new developed webpage will inform the public about storm water related facts, ways to eliminate or decrease storm water runoff, and pollution prevention control

measures. The City will also provide links to the Calcasieu Parish Police Jury's (CPPJ) storm water webpage. The goal with the website would be to get information pertaining to storm water pollution prevention to the citizens of Westlake. The success of these BMPs will be determined by inspections performed by Public Works personnel, Westlake Police, and the CPPJ inspectors. It is the goal of the City of Westlake to ensure the Public Works personnel and Westlake Police know what to observe and report as it pertains to BMPs.

City of Westlake also promotes the use of the City of Lake Charles Trash Bash and the Calcasieu Parish Police Jury residential solid waste convenience centers.

#### **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 of Westlake, through its solid waste collection service provider, provides information concerning solid waste collection. The City of Westlake will distribute updated information from the solid waste provider in 2019. City of Westlake also promotes the use of the City of Lake Charles Trash Bash and the Calcasieu Parish Police Jury residential solid waste convenience centers.

### **B. PUBLIC INVOLVEMENT AND PARTICIPATION**

#### **BMP 2-1 Make presentations to stakeholders**

**Measurable Goal: Promote emphasis on maintaining a clean environment and best storm water management practices.**

The City of Westlake will attempt to work with other local authorities, contractors, local business, and associations to promote awareness of storm water pollution prevention and best management practices. The City will conduct at least four meetings per year starting in 2019. These meetings can be a part of their regular city council meetings. These meetings will have a focus on the storm water management plan and the public's role in helping the City implement this plan. The public will be encouraged to attend the meetings and have input on the City's plan. The meeting topics and minutes from each meeting will be included in the annual report submittal. The City will coordinate with the CPPJ and other co-permittees to participate in home shows/workshops and aide in providing information about the storm water program. The City will begin performing this duty in 2019.

#### **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 Westlake has worked with local Boy Scouts in the past to install stickers of "Do Not Litter" and "No Dumping" on storm sewer covers. The City will explore options to get local schools in aiding the City with labeling and inspecting existing storm drains throughout the City. The City will need to reach out to the CPSB to discuss this possibility. The City will discuss this with the CPSB in 2019.

### **BMP 2-3 Litter Reduction/Recycling**

**Measurable Goal: Establish programs for reducing litter throughout the area and develop a method for determining success of programs. Provide information to and resources for the public to recycle through presentations, activities, and events.**

City of Westlake has information on its web site promoting litter prevention in the City. A copy of the City's Litter Ordinance is included as Attachment B. The City will develop an anti-littering campaign to be used for presentations to present to City meetings and schools. The City plans on developing and implementing a campaign by 2020. City of Westlake also promotes the use of the City of Lake Charles Trash Bash and the Calcasieu Parish Police Jury (CPPJ) residential solid waste convenience centers.

## **C. ILLICIT DISCHARGE DETECTION AND ELIMINATION**

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

**Measurable Goal: Provide information on proper management of individual sewer systems. Provide informational handouts and public notifications addressing introducing grass cuttings and debris entering the storm drains and future effects on the environments.**

The City of Westlake Public Works division continues to install and maintain sewer lines for the City's municipal sewer system. The majority of households and business inside the city limits are connected to the City's sewer system. Properties not serviced by the City sewer still fall under the Department of Health and Hospitals regulatory requirements. CPPJ does perform inspections of individual sewer systems and issues violations for failing systems.

The City of Westlake provides informational links to the ordinances of the City to provide information to prevent littering. A copy of the City's Litter Ordinance is included as Attachment B.

### **BMP 3-2 Implement initiatives to control illicit discharges and illegal dumping**

**Measurable Goal: 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 Westlake has previously adopted an anti-littering and storm water ordinance. A copy of the City's Litter Ordinance is included as Attachment B and Storm Water Ordinance as Attachment D. These ordinances can be used to issue violations and fine individuals for illicit discharges or illegal dumping. The City Public Works Department and Westlake Police monitor for illicit discharges and illegal dumping while performing their daily duties. The City does receive illicit discharge complaints through a telephone line at City Hall. The City plans on promoting the use of this line or creating a new complaint line for reporting illicit discharges. The City will begin tracking the number of complaints received and actions taken in 2019.

City of Westlake does perform some non-storm water discharges that should not be a significant source of pollution. These discharges are routine street sweeping activities, fire hydrant flushing, and flushing of storm sewers to remove debris. The City will address additional non-storm water related discharges and the effect they have on the City storm sewer system. These non-storm water discharges the City will evaluate are as follows: water line flushing, irrigation, potable water discharges, air conditioning condensate, residential lawn watering, residential car washing by individuals, swimming pool discharges, and street wash water.

The City of Westlake continues to address the issue of grass being blown into the storm drains. The street crews continue to sweep the streets, clear the drains, clean catch basins, and blow the culverts out to remove the potential for blockages affecting the drainage ways. The City is working with their engineering partner to update storm sewer system map. This map will show locations of all outfalls and locations of receiving waters. The updated map will include potential problem areas. The completion for the updated map will be in 2019.

The City of Westlake's Fire Department has developed an emergency response plan for spills and emergency releases of hazardous materials. In the event of an emergency release, the Westlake Fire Chief will implement this plan to contain and remediate the release of material.

### **BMP 3-3 Response to illicit discharges from construction sites**

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

The City of Westlake utilizes the CPPJ building inspector to review construction plans and perform inspections of the construction sites. That review includes applicable storm water management provisions. If violations are discovered by the inspector, the inspector informs the City of Westlake and the City will issue a violation for the site. The City will work alongside the CPPJ to obtain documented inspection reports for construction site inspections performed in the City. The City personnel or subcontractor will begin performing inspections of construction sites in 2019.

## **D. CONSTRUCTION SITE RUNOFF**

### **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 result 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 the 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 will continue the Joint Service Agreement with CPPJ to aide in conducting construction site inspections. The City will work alongside the CPPJ to obtain documented inspection reports for construction site inspections performed in the City. The City personnel or subcontractor will begin performing inspections of construction sites in 2019.

The City will begin performing a review of Storm Water Pollution Prevention Plan (SWPPP) for individual construction projects in 2019. The City's planning department or subcontractor will perform these reviews to determine if the SWPPP meets the requirements of the Louisiana Pollutant Discharge Elimination System (LPDES) construction storm water general permits.

The City will provide the storm water ordinance with every construction permit issued. In the City's ordinance (Article IV) there is specific detail descriptions of storm water pollution prevention controls that construction sites shall utilize. The City will ensure each permittee is aware of these controls during the application process.

#### E. POST CONSTRUCTION SITE RUNOFF

##### **BMP 5-1**

**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 of Westlake utilizes the CPPJ building inspector to review construction plans and perform inspections of the construction sites. That review includes applicable storm water management provisions. 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. No. 5 are provided in the City's Storm Water Ordinance (Attachment D).

The City does promote the use of best management practices for construction sites as stated by the storm water ordinance. The existing parish zoning and floodplain ordinances authorize the requirements of post-construction management plans for large projects. The parish routinely enforces these ordinances. The ordinances for the parish include language that addresses



long-term post construction storm water management. The City will work with the CPPJ to ensure the parish ordinances are followed and construction of new developments align with long-term post construction storm water management goals.

## F. POLLUTION CONTROL AND GOOD HOUSEKEEPING

### **BMP 6-1**

**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 from 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 Professional of Record or his representative inspects the site during construction. Additionally, the City has assigned personnel responsible for periodic site visits to the work site.

During 2018, the City of Westlake street crews worked to clean ditches and rights-of-ways. Included with these activities is maintenance of the areas in front of catch basins and culverts. (See Attachment A). In 2019 the City will begin to include inspection of storm drains on the street cleaning forms.

The City of Westlake does conduct safety meetings for Public Works employees once per week. Storm water pollution prevention is a source discussed during these meetings. The City will provide pollution prevention and good housekeeping training to employees. The City will utilize the resources available such as the CPPJ training video. The City will provide this training in 2019.

**REPORT CERTIFICATION PAGE**

**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 knowingly submitting false information, including the possibility of fine and imprisonment for knowing violations.

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Title: \_\_\_\_\_