

2017 ANNUAL REPORT

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

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Executive Summary:

The Calcasieu River Basin is located in southwestern Louisiana. It is bordered by the Mermentau River to the east and the Sabine River to the west. Its headwaters arise in the hills west of Alexandria and flow in a north-to-south direction 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. 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) 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 2017 reporting year. All urbanized areas are covered either under the cities' sMS4 jurisdictions or that of Calcasieu Parish.

Annual reporting period: January 1, 2017 through December 31, 2017

sMS4 Coordinator:

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

Chief Elected Official:

Kevin Guidry 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 2017 Calcasieu Parish coordinated a field trip for an area High School Environmental class. During this field trip, 15 students visited Public Works East Dumpsite, two Parish Wastewater Plants and one Parish Water Plant. During the field trip students learned the process in which water and wastewaters are collected, treated and distributed throughout the Parish. Students also learned the importance of recycling and what items can be brought to the Parish Convenience Sites. Calcasieu Parish team of employees consisting of an Environmental Coordinator, Public Works Assistant Director, Engineer, Utility Supervisor, Utility Specialist, and Utility Technician all played different roles in educating students during this field trip. (Attachment #3)

Calcasieu Parish continues to participate with the Environmental Affairs Committee of the Chamber Southwest Louisiana in a poster contest in which “Litter”, “Ground Level Ozone”, and “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 27, 2017 in sequence with Regional Science Fair. Information on this contest has been circulating since October 2016. <http://lasciencefair.org/2017winners.htm> (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 2017 Region 5 Science Fair. Topics for the commercial contest include “Stormwater Pollution” and “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://lasciencefair.org/2017winners.htm> (Attachment #5)

Calcasieu Parish made anti-littering presentations to ten 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, 1,000 litterbags were given out between the ten Calcasieu Parish middle schools. <http://www.cppj.net/residents/fighting-litter-in-calcasieu-parish/education>

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. (Attachment #6)

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 2017, 1,988 inspection cards and flyers were mailed and the remainder was made available to the public at the parish government building and included with the other handouts available at events. <http://new.dhh.louisiana.gov/assets/oph/Center-EH/sanitarian/onsitewastewater/HomeATUBrochure.pdf> (Attachment #7)

Calcasieu Parish was once again, provided a booth at the area Home Builders Association Home Show in March of 2017 and featured information on Stormwater, litter, and post-hurricane home construction information. Parish Planning Department employees participated in the two-day event. Flyers and other related information on home construction, litter abatement, pollution prevention, and Stormwater compliance at construction sites was made available to the public. The parish also purchased pet waste dispensers with Stormwater pollution information on them to give away as part of outreach. <http://www.hbaswla.org/> (Attachments #8)

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 2017 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. In February of 2017 KPLC TV a local news station interviewed and aired a story on the sewer inspection program. <http://www.cppj.net/services/planning-development/sewage-inspection-program> <https://youtu.be/pZtTD2DmEYs> (Attachment #9)

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 2017 included 870 spots on local T.V. stations. The commercial that played on these viewed spots was entitled "CPPJ Litter Task Force". Social Media hits for 2017 were as followed: 121,331 impressions, and 6,427 clicks, 3,328 likes/comments/shares. There are 11 Digital Outdoor advertising locations that was estimated to receive 122,409 views and 1 full time billboard that received an estimated 52,416 views for 2017. The running slogan during 2017 was "You Can't Afford to be Trashy". 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. (Attachment #10)

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 #11)

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. <http://www.cppj.net/services/engineering-and-public-works/public-works/solid-waste/locations> (Attachment #12)

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 a number of presentations entitled “Drainage Design That Makes Sense” 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. In 2017 this department was set in place and eight out of thirteen positions have been filled. <http://www.cppj.net/services/engineering-and-public-works/public-works/storm-water-master-planning> (Attachment # 13)

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 that is planned to be shown in 2017. This presentation will be shown during future meetings with area entities in the parish as well as municipalities’ parish wide. 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 hosted a storm drain marking event with 48 St. Louis High School students which dedicated 2 hours of their time to participate. They marked 29 drains within Calcasieu Parish. Each drain was marked with markers, one stating “No Grass Clipping Down the Drain” and the other “No Dumping Drains to Waterways”. During this event, as students walked the neighborhood the distance between each drain, residential Stormwater pollution prevention door hangers were placed at each home. These door hangers were repurposed from EPA rack card “10 Things You Can Do to Prevent Stormwater Runoff Pollution”. (Attachment #14)

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 2017. 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 2017 Calcasieu Parish produced a video entitled “CPPJ Litter Task Force” that featured CPPJ employees with the voices of area children expressing their thoughts on litter. Calcasieu Parish also participated with Keep Greater Lake Charles Beautiful in the 2017 Beach Sweep and Inland Waterway Clean Up and Leaders Against Litter. (Attachment #15) <http://www.cppj.net/residents/fighting-litter-in-calcasieu-parish>
<https://cppjvideo.viebit.com/player.php?hash=2UffBGVlcS91>

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 60,340 yards of non-recyclable trash had been collected in 2017 between the two dumpsites. (Attachment #16) <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 1,570.47 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 18.212 tons of batteries and 8,862 yards of general recycled materials in 2017 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 9,470 total number of tires collected between both sites in 2017. (Attachment #17)

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 241 Stormwater permits had been reviewed in 2017. <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. 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.cppi.net/residents/fighting-litter-in-calcasieu-parish> (Attachment #18)

Calcasieu Parish participated in the 2017 Artsfest, the theme for the year was “Recycling”. Fetch the Litter Dog and Trashesquatch were featured to represent why people should recycle. Litter bags with information on the parish dumpsites and “Help Trashesquatch & Fetch Make Calcasieu Parish Litter-Free” activity coloring books were given away. (Attachment #19)

Calcasieu Parishes Animal Services and Adoption Department holds two rabies clinics each year. In 2017 Calcasieu Parish did 100 surveys and gave away promotional pet waste dispensers with Stormwater pollution information on them to each person who filled out this survey as part of outreach to pet owners in the parish. From this survey we learned that most people are unaware of the harm the pet waste can cause if it is not cleaned up. (Attachment #20)

Calcasieu Parish Human Services Housing Department invited rental property owners and tenants to a housing workshop in March 2017. Calcasieu Parish Environmental Coordinator spoke on residential runoff pollution, sewer regulations and litter abatement. Several brochures were provided covering each topic discussed. (Attachment #21)

Healthier Southwest Louisiana held a “Better Block” event as an advocacy tool to educate, equip and empower the surrounding communities and their leaders to reshape and reactivate built environments to promote the growth of healthy and vibrant neighborhoods. Calcasieu Parish provided residential runoff education through the introduction of the “Poop Fairy” and the “Scoop the Poop” game. As children play the game, adults were asked to complete surveys on pet waste management, in return they received pet waste dispensers as an incentive. (Attachment #22) <https://www.youtube.com/watch?v=UDAG9NS-6qM>

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, 45 connections. Waterworks District 2 of Ward 4, 240 connections. Waterworks District 5 of Wards 3 & 8, 1667 connections. Sewer District 11 of Ward 3, 784 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 six systems that CPPJ has agreed to maintain after construction. Oak Grove, 30 connections and Highland Hill 15 connections 128 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.

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.

During 2017, 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 2,375 sewer inspections were completed in 2017 with an estimate of over 567 violations being cited. Letters were sent to the locations to inform the owners of the need to repair their systems. (Attachment #23)

Calcasieu Parish was asked to do a presentation on Sewer Illicit Discharge and Elimination at the 2017 Annual Louisiana Urban Stormwater Coalition Meeting. Calcasieu Parish presented the format on how the Residential Mechanical Sewer System Inspection Program is ran. (Attachment #24) <https://louisianastormwater.org/2016/10/26/2016-annual-meeting-registration/>

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 2017. 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 2017, 38 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 2017, 34 Intentional Littering, 8 Gross Littering and 16 Simple Littering. (Attachment #25) <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 #26)

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. 9,470 tires were collected in 2017 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 241 construction areas for illicit discharge within the urbanized area in 2017. 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 Stormwater](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 #27)

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 434 culvert permits issued in Calcasieu Parish for 2017. <http://www.cppj.net/services/planning-development/building-permits/culvert-permits> (Attachment #28)

During 2017 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 #29)

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 #30)

As stated previously, during 2017 the Calcasieu Parish Stormwater personnel reviewed approximately 241 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 #31)

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. These request have increase within Calcasieu Parish during 2017. A total of eleven request for these written acknowledgements had been completed in 2017 by Calcasieu Parish. (Attachment #32)

Calcasieu Parish maintains a minimum of two Certified Stormwater Inspectors (CSI). In 2017, 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

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 staff responsible for particular 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 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 #33)

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 will be put in place in June 2018. (Attachment #34)

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 2017 716 gallons of oil was recycled from Public Works East and 665 gallons of oil was recycled from Public Works West. In addition 136 gallons of anti-freeze was also recycled from Public Works in 2017. 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 #35)

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 #36)

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 original video training was presented at the annual training day for Public Works Maintenance Facilities. For the Pollution Prevention/Good Housekeeping training video presentation, there were total of 157 employees in attendance from both Public Works East and Public Works West. (Attachment #37)

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 counts the quantity of 16oz bottles saved from the landfill. In 2017, it is estimated that between the five installed EZH2O Bottle Filling Stations, 6,583 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: March 7, 2018

PARISH OF  CALCASIEU
State of Louisiana
RESOLUTION

BE IT RESOLVED BY THE POLICE JURY OF CALCASIEU PARISH, LOUISIANA, convened in Regular Session on the 21st day of December, 2017, that it does hereby authorize the Parish Administrator, or his designee, to execute any documents related to day-to-day operating activities conducted by the Parish, or the following entities for which the Police Jury serves as the governing board – Waterworks District No. Two of Ward Four, Waterworks District No. Five of Wards Three and Eight, Sewer District No. Eleven of Wards Three and Eight, Sewer District No. Eight of Ward Four, and Ward Three Fire Protection District No. Two – including, but not limited to, office space leasing activities for recurring rental revenues, environmental or similar reporting activities (i.e. monitoring reports, etc.), community rating system or similar program certifications, grant-related periodic reporting and reimbursement requests, Parish park keeper agreements or other park recreational activity and/or any other similar operating activity documents, for the calendar year 2018.

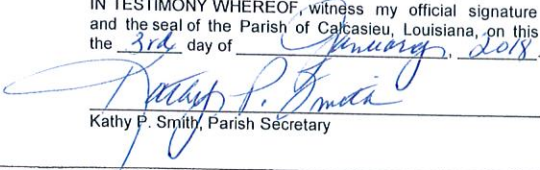
THUS DONE AND PASSED on the date above inscribed.

* * * * *

STATE OF LOUISIANA
PARISH OF CALCASIEU

I HEREBY CERTIFY that the foregoing is a true and correct copy of the original resolution as adopted by the Calcasieu Parish Police Jury in Regular Session convened on the 21st day of December, 2017.

IN TESTIMONY WHEREOF, witness my official signature and the seal of the Parish of Calcasieu, Louisiana, on this the 3rd day of January, 2018.


Kathy P. Smith, Parish Secretary

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

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Executive Summary:

The Calcasieu River Basin is located in southwestern Louisiana. It is bordered by the Mermentau River to the east and the Sabine River to the west. Its headwaters arise in the hills west of Alexandria and flow in a north-to-south direction 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 2014 reporting year. All urbanized areas are covered either under the cities' sMS4 jurisdictions or that of Calcasieu Parish.

Annual reporting period: January 1,2017 through December 31, 2017

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 Chris Duncan
City of Sulphur
P.O. Box 1309
Sulphur, LA 70664-1309
Mayor Dan Cupit
City of Westlake
P.O. Box 700
Westlake, LA 70669

Report Preparer:

Tara Ross – CPPJ Environmental Coordinator
Ron Fossett – 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. Copies of the 2016-2017 physical year budget is included with this report. See **Attachment #LC1**.

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 fiscal year begins October 1 for physical year 2017-2018

Street Division Miscellaneous Contractual:

Actual 2017	\$ 326,024.70
Budget 2018	\$ 369,250.00

Street Maintenance Supplies:

Actual 2017	\$ 208,102.69
Budget 2018	\$ 223,800.00

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

PUBLIC EDUCATION AND OUTREACH:

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 1000+ attendants. Attachment #LC2, LC3, LC4, LC6, LC7, LC8, LC10, LC15

The City of Lake Charles has recognized that urban/storm water run-off present and future environmental concerns and requires hard engineering solutions. City of Lake Charles's 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. Local students, community organizations can observe, study, and maintain the green initiatives for future implementation in their neighborhoods. Attachment# LC3

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 and in North Lake Charles approximately 200 acres of marsh wetlands. 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.

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 2017 Earth Day Event over 300 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 2017, the City of Lake Charles Recreation and Parks Department cleared blackberry vines and a willow tree that had grown in the rain garden. It will be mulched with pine straw and planted with the giant blue Louisiana iris (*Iris giganticaerulea*). In this way, the rain garden is both green infrastructure and a method for conservation of a vulnerable species.

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 #LC2, LC4, LC10**

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. **Attachment #LC16**

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#LC4, LC6, LC7, LC8, LC9, LC 10, LC15**

The annual Trash Bash event hosted by Team Green and the City of Lake Charles took place in April 2017. The event has been held annually in the spring near Arbor/Earth Day since 1987. **Attachment #LC4.**

Jr. Team Green is a youth advisory committee to Team Green SWLA, ages ranging 12-18, 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, Family and Youth Counseling Agency's Tuten Park Arbor/Earth Day Event, and City of Lake Charles Santa's Workshop. **Attachment# LC3, LC4, LC6, LC7, LC8, LC9, LC15**

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 #LC2, LC4, LC5, LC6, LC9, LC10, LC15.**

The annual City of Lake Charles Residential Trash Bash was held at the Chennault International Airport on April 22, 2017. Conducted by Team Green SWLA, local industry, and area businesses, 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 1000 lbs. of recyclables which included paper, plastic, aluminum & cardboard, 1700 pounds of lead, alkaline, and NiCad batteries, 1080 linear feet of 1 to 8 feet fluorescent lamps, 195 compact fluorescent lamps, 2 circular fluorescent lamps, 1 mercury vapor lamp, 63 incandescent lamps, 1 thermometer, 1 thermostat, 1.2 lbs. of liquid mercury. 2432 gallons of paper shredding, 465 gallons of petroleum waste products, 1535 gallons of paint products, and 850 electronic devices were collected for disposal. A total of 4.23 tons of household trash was collected for disposal. There were 100+ community participants, 120 volunteers, and 17 sponsors for the event. The local television station aired a Public Service Announcement the day before the event. **Attachment #LC4.**

The City of Lake Charles and Team Green held an "E-Recycle Day held at Stine's in Sulphur on March 11, 2017. Conducted by Team Green SWLA, local industry, and area businesses, 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. Forty-seven (47) participants collected electronic recyclables from 357 vehicles. Two (200) hundred cubic yards of electronics, 2-Thermostats, 1-Thermometers, 1,988 linear feet of fluorescent lamps, 147 feet of Compact fluorescent lamps, five U-Tubes, 1 Projector bulb (with mercury), 10 Broken fluorescents, 76 Incandescent, 102 lbs. batteries (small) and 1 Ballast were collected. A total of 1,988 feet of fluorescent lamps were collected. The local television station aired a Public Service Announcement the day before the event. **Attachment #10.**

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 2017 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 is now playing 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#LC3**

Representative of the City of Lake Charles Public Works Department provided educational outreach regarding recycling to local schools, churches, and groups totaling approximately 700+ attendants. **Attachment #LC2**

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 a 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. **Attachment #LC16**

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 Law Enforcement Luncheon event at Lake Charles Civic Center on October 26, 2017. The Luncheon had 110 attendees included representation from the law enforcement community, environmental and safety professionals, area governmental agencies, consulting firms, businesses, and industry. Susan Russell, Executive Director for Keep Louisiana Beautiful was the guest speaker for the event. A follow up article in the local newspaper highlighted the event. **Attachment #LC9**

The annual City of Lake Charles Residential Trash Bash was held at the Chennault International Airport on April 22, 2017. Conducted by Team Green SWLA, local industry, and area businesses, 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 1000 lbs of recyclables which included paper, plastic, aluminum & cardboard, 1700 pounds of lead, alkaline, and NiCad batteries, 1080 linear feet of 1 to 8 feet fluorescent lamps, 195 compact fluorescent lamps, 2 circular fluorescent lamps, 1 mercury vapor lamp, 63 incandescent lamps, 1 thermometer, 1

thermostat, 1.2 lbs. of liquid mercury. 2432 gallons of paper shredding, 465 gallons of petroleum waste products, 1535 gallons of paint products, and 850 electronic devices were collected for disposal. A total of 4.23 tons of household trash was collected for disposal. There were 100+ community participants, 120 volunteers, and 17 sponsors for the event. The local television station aired a Public Service Announcement the day before the event. **Attachment #LC4.**

The City of Lake Charles and Team Green conducted an annual Beach Sweep on September 16th 2017 from 7am to 12pm in 2017. The event encompassed cleanup of the waterways of a five-parish area and is 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. **Attachment #LC7.**

The City of Lake Charles and Team Green's "Adopt a Spot" was held March 25, 2017. 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. The state has a similar program entitled Adopt a Road, which is on state highways and throughways. The participants collected 1,440 pounds of litter (72 bags) during this event. **Attachment #LC 8.**

The City of Lake Charles and Team Green held an "E-Recycle Day" held at Stine's in Sulphur on March 11, 2017. Conducted by Team Green SWLA, local industry, and area businesses, 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. Forty-seven (47) participants collected electronic recyclables from 357 vehicles. Two (200) hundred cubic yards of electronics, 2-Thermostats, 1-Thermometers, 1,988 linear feet of fluorescent lamps, 147 feet of Compact fluorescent lamps, five U-Tubes, 1 Projector bulb (with mercury), 10 Broken fluorescents, 76 Incandescent, 102 lbs. batteries (small) and 1 Ballast were collected. A total of 1,988 feet of fluorescent lamps were collected. The local television station aired a Public Service Announcement the day before the event. **Attachment #10.**

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 #LC6, LC16

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 1686 violation letters were sent to property owners to correct the violation. A total of 71 Administrative Hearings were held for property owners which did not comply or respond to Notice of Violations
Attachment #LC13

The City of Lake Charles continue 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. **Attachment #LC12**

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#LC14**

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 2017 provisions were in place and an increase 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 2017 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 LC# 14**

The City of Lake Charles has three (3) Certified Storm Water Inspectors (CSI). Once again in 2015, 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 1st 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 2nd 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 3rd Notice of Violation is \$1,000 per violation per day and a "Stop Work" order is issued until site is in compliance.

Attachment LC# 14

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#LC14**

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 are in place. The city's maintenance garage is also required to comply with a storm water management plan, which is also being implemented.

During 2017 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 #LC12.

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 #LC3

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: RON FOSSETT

Title: PLANNING & DEVELOPMENT / PROJECT SPECIALIST
CITY OF LAKE CHARLES

Signature: 

Date: February 16, 2018

2017 ANNUAL REPORT

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

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Executive Summary:

The Calcasieu River Basin is located in southwestern Louisiana. It is bordered by the Mermentau River to the east and the Sabine River to the west. Its headwaters arise in the hills west of Alexandria and flow in a north-to-south direction 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 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 2017 reporting year. All urbanized areas are covered either under the cities' sMS4 jurisdictions or that of Calcasieu Parish.

Annual reporting period: January 1, 2017 through December 31, 2017

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:

Shannon Spell, 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 Chris Duncan
City of Sulphur
P.O. Box 1309
Sulphur, LA 70664-1309

Mayor Robert 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 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 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: To offer educational material concerning stormwater to local schools as well as organizations and provide presentations upon request.

City of Sulphur and area middle schools continue to install Storm Drain Labeling throughout the City in 2017. (Attachment A)

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 contracted with Progressive Waste Solutions / Republic Services for solid waste collection and Single Stream Recycling. The City of Sulphur, through its solid waste collection service provider, distributes informational material concerning solid waste collection and disposal of hazardous waste. (Attachment B)

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

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 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 C)

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. (Attachments B and C)

2. Public Involvement/Participation

BMP 2-1 Make presentations to stakeholders

Measurable Goal: Promote emphasis on maintaining a clean environment.

The City of Sulphur, along with the Citgo, continues to partner in the annual E-Recycle program. (Attachment D)

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 A)

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 C)

3. Illicit Discharge Detection and Elimination

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

Measurable Goal: 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 Sulphur provides informational handouts, available to the public at City Hall. The handouts provide a guide to the homeowner for promoting healthy habits contributing to clean water. (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. 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.

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).

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. (Attachment I)

During 2017 the City of Sulphur Streets crew worked 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: Michael J. Daigle

Title: Director of Public Works

Signature:



Date: February 20, 2018

2017 ANNUAL REPORT

Phase II
Storm Water Pollution Management Plan

For

Lake Charles Urbanized Area
Westlake, Louisiana
Calcasieu Parish, Louisiana

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1.0 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.

2.0 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. The 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.

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 2017 reporting year. All urbanized areas are covered either under the cities' sMS4 jurisdictions or that of Calcasieu Parish.

Annual reporting period: January 1, 2017 to December 31, 2017

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
Nic Hunter
P.O. Box 900
Lake Charles. LA 70602

City of Sulphur – Mayor
Chris Duncan
P.O. Box 1309
Sulphur, LA 70664-1309

City of Westlake – Mayor
Bob Hardy
P.O. Box 700
Westlake. LA 70669

3.0 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 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 TMDL priority list for all water quality indicators.

4.0 CONTROL MEASURES

4.1 Public Involvement/Participation

BMP Litter Reduction

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.

BMP Address illicit discharge from failing private sewage treatment systems

Measurable Goal: 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 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 Implement initiatives to control 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 ordinance. A copy of the City's Litter Ordinance is included as Attachment B. The City 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,

BMP 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 sub-contracts the building inspection reviews for construction plans. That review includes applicable storm water management provisions. The sub-contractor also conducts field inspections of the permitted construction sites.

4.2 Construction Site Storm Water Runoff Control

BMP

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 sub-contracts building inspection reviews for plans of 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.

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

BMP

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 sub-contracts building inspection reviews for plans of 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 Storm Water Ordinance (Attachment D).

4.4 Pollution prevention/good housekeeping for municipal operations.

BMP

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 2017, 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)

REPORT CERTIFICATION

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

Andrea Mahfouz
Print Name

Andrea Mahfouz 3/7/18
Signature Date:

Title: City Clerk