

2016 ANNUAL REPORT

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

TABLE OF CONTENTS

I.	Identification	
	A. Executive Summary.....	Page 2
	B. Background.....	Page 3
	C. Name of SMS4.....	Page 3
	D. Contact Information.....	Pages 3
	E. Impaired Water Bodies.....	Page 4
II.	Minimum Control Measures	
	A. Public Education and Outreach.....	Page 5
	B. Public Involvement and Participation.....	Page 8
	C. Illicit Discharge Detection and Elimination....	Page 10
	D. Construction Site Runoff.....	Page 12
	E. Post-Construction Site Runoff.....	Page 13
	F. Pollution Prevention / Good Housekeeping....	Page 14
	G. Certification Page.....	Page 16
III.	Appendix	
	A. Attachment #1	303(d) Impaired Water Bodies List for Calcasieu
	B. Attachment #2	Letter to Superintendent
	C. Attachment #3	Environmental Poster Contest
	D. Attachment #4	Environmental Commercial Contest
	E. Attachment #5	Litter Bag Contest
	F. Attachment #6	Permit Office Pamphlet & Book Display
	G. Attachment #7	Individual Sewer Handout
	H. Attachment #8	Home Show Event
	I. Attachment #9	CPPJ Website – Sewer Problems
	J. Attachment #10	Paid Litter Advertising
	K. Attachment #11	Anti-litter Campaign
	L. Attachment #12	CPPJ Website – Stormwater
	M. Attachment #13	Waste and Recycling Locations
	N. Attachment #14	Drainage Study Stakeholders Presentation
	O. Attachment #15	“Hello” & Beach Sweep
	P. Attachment #16	Solid Waste Convenience Information
	Q. Attachment #17	Dumpsite Annual Usage and Recycling
	R. Attachment #18	Sewer Violation Letter
	S. Attachment #19	Report Litter
	T. Attachment #20	Solid Waste Information and Guidelines
	U. Attachment #21	Stormwater Violation and Complaint Form
	V. Attachment #22	Culvert Permit
	W. Attachment #23	Stormwater Permitting Information and Checklist

X. Attachment #24	BMPs Rack Cards
Y. Attachment #25	Stormwater Application
Z. Attachment #26	Stormwater Continuing Education
AA. Attachment #27	Public Awareness on Website
BB. Attachment #28	Spill or Incident Report Form
CC. Attachment #29	Employee Training Video E-mail
DD. Attachment #30	Water Fountain Upgrades in Facilities

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 76,000. 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 2016 reporting year. All urbanized areas are covered either under the cities' sMS4 jurisdictions or that of Calcasieu Parish.

Annual reporting period: January 1, 2016 through December 31, 2016

sMS4 Coordinator:

Tara Ross
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:

Chris Landry 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, 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 contaminates is located in <http://www.deq.louisiana.gov/portal/DIVISIONS/WaterPermits/WaterQualityStandardsAssessment/WaterQualityInventorySection305b/2016IntegratedReport.aspx> (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. The Parish was granted approval and the information was then forwarded to the area schools. (Attachment # 2)

Calcasieu Parish continues to participate with the Environmental Affairs Committee of the Chamber Southwest Louisiana in a poster contest in which “Wastewaters from Homes” was one of 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 February 12, 2016 in sequence with Regional Science Fair. Information on this contest has been circulating since November 2015. <http://lasciencefair.org/2016winners.htm> (Attachment #3)

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 #4)

In the summer of 2016, Calcasieu Parish held a litterbag art contest and received 23 entries. The winning artwork was printed on 5,000 litterbags that were handed out at conventions, conferences and classrooms. (Attachment #5)

Calcasieu Parish made anti-littering presentations to seven 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, 2,000 litterbags were given out between the seven 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 2016, 2,540 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 February of 2016 and featured information on storm water, 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 storm water compliance at construction sites was made available to the public. The Construction Site BMP poster available through the EPA website was displayed at the show. The parish also purchased rain gauges 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 2016 calendar year related to inspection of individual mechanical sewer systems throughout the parish through the Calcasieu Parish sewer inspection program. Publicity for the program included announcements through the government channel as well as information on the parish website. As previously stated notification letters were sent to selected area residents where the inspections would be taking place. Information regarding the progress of the sewer inspection program as well as proper maintenance continue to be made available on the parish's website. <http://www.cppj.net/services/planning-development/sewage-inspection-program> (Attachment #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 2016 included 443 spots on local T.V. stations, and 39,000 Online Video Pre-roll Impressions. Social Media hits for 2016 were as followed: 204,518 impressions, and 11,653 clicks, 3,521 likes/comments/shares. There are 12 Digital Outdoor advertising locations that was estimated to receive 33,882 views and 1 full time billboard that received an estimated 35,000 views for 2016. The newest running slogan during 2016 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 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.cppj.net/residents/fighting-litter-in-calcasieu-parish> (Attachment #11)

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/index.aspx?page=1389> (Attachment #12)

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 #13)

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, ten total, 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. <http://www.cppj.net/services/engineering-and-public-works/public-works/storm-water-master-planning> (Attachment # 14)

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 continues to work with a local area high school to replace old storm drains and install new drains that are embossed with a message of “No Dumping, Drains to River”. The parish also independently marked several drains in order to raise awareness of Stormwater issues pertaining to storm drains. The parish had storm markers custom made to raise awareness of the issue grass clippings pose.

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 2016. 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 2016 CPPJ teamed up with local band “Young Band Nation” to produce a video with a fun Adele parody of the song “Hello” which emphasized litter issues in Calcasieu Parish and also highlighted the location of CPPJ solid waste convenience centers. Calcasieu Parish also participated with Keep Greater Lake Charles Beautiful in the 2016 Beach Sweep and Inland Waterway Clean Up. <http://www.cppj.net/residents/fighting-litter-in-calcasieu-parish> (Attachment #15)

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 52,480 yards of non-recyclable trash had been collected in 2016 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 1,487.55 tons of trash collected from roadside pickup. The intent of the program is focused on reducing litter and the likelihood of roadside dumping. Calcasieu Parish collected and recycled 14.6 tons of batteries and 8,172 yards of general recycled materials in 2016 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 10,277 total number of tires collected between both sites in 2016. (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 251 Stormwater permits had been reviewed in 2016. <http://www.cppj.net/services/planning-development/building-permits/checklists-fee-schedules>

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. Mossville water, Waterworks District 2 of Ward 4, 253 connections. Mallard Water, Waterworks District 5 of Wards 3 & 8, 1647 connections. Sewer District 11 of Ward 3, 796 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 five systems that CPPJ has agreed to maintain after construction. Oak Grove, 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 2016, 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 2,304 sewer inspections were completed in 2016 with an estimate of over 581 violations being cited. Letters were sent to the locations to inform the owners of the need to repair their systems. (Attachment #18)

BMP 3-2 Implement initiatives to control illegal dumping

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

As noted earlier, the anti-litter campaign introduced in Calcasieu Parish in 2009 was continued during 2016. 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. (Attachment #19)
<http://www.cppj.net/residents/fighting-litter-in-calcasieu-parish/report-litterers-here>

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

The two drop-off sites are located at the Parish's East and West Maintenance Facilities to better accommodate all areas of the Parish. Calcasieu Parish has continued the waste tire-recycling program for the area residents and municipal governmental agencies from within the Parish allowing for five tires per day per person daily to the designated site for recycling. The waste tire disposal sites were integrated into the drop-off locations. 10,277 tires were collected in 2016 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 251 construction areas for illicit discharge within the urbanized area in 2016. 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 page as well as may make a formal complaint to CPPJ Environmental Coordinator. <http://www.cppj.net/services/planning-development/stormwater/storm-water-complaint-form>
(Attachment #21)

Calcasieu Parish issues culvert permits to applicants wishing to install entryways to their property, if not previously existing. Specifications on pipe size and composition details are included in the guidelines. The owners are also informed of their responsibility to install storm water BMPs to minimize erosion of soil around the newly installed culvert. The owner is provided guidance on hay bale and silt fencing installation. Once completed, the culvert installation and BMPs are inspected. There were a total 380 culvert permits issued in Calcasieu Parish for 2016. <http://www.cppj.net/services/planning-development/building-permits/culvert-permits>
(Attachment #22)

During 2016 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.

BMP 4-1

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

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

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

As stated previously, during 2016 the Calcasieu Parish's Stormwater personnel reviewed approximately 251 site plans for proposed construction sites within the Urbanized Area of the parish. During the site plans review, applicants for construction permits for sites within the urbanized storm water area of Calcasieu Parish are informed of the requirements to maintain good housekeeping practices regardless of the size of the construction "footprint". Emphasis is placed upon construction site litter and debris as well as waste concrete disposal practices. Footprints larger than 5 acres are required to provide a copy of their LPDES permit and SWPPP. (Attachment #25)

Calcasieu Parish maintains a minimum of two Certified Stormwater Inspectors (CSI). In 2016, responses were made to a number of sites by Calcasieu Parish's 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. (Attachment # 26)

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 #27)

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 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. Both also, maintain Stormwater Pollution Prevention by recycling oil from there fleet maintenance operations, in 2016 1,493 gallons of oil was recycled from Public Works East and 868 gallons of oil was recycled from Public Works West. These facilities also continue to implement the revised spill incident and response form to the parish owned facilities. The parish hopes that this will help current and future parish employees prevent and reduce any pollution from entering storm drains as well as water bodies. (Attachment #28)

Calcasieu Parish Environmental Coordinator along with CPPJ media department produced a new Pollution Prevention/Good Housekeeping training video during the year 2016 to train CPPJ employees. This original video training was presented at both Public Works Maintenance Facilities. For the Pollution Prevention/Good Housekeeping training video presentation, there were 47 employees in attendance at Public Works East and 35 employees at Public Works West. Prior to the video presentation 28 employees completed a general knowledge water quality survey that tested their Stormwater Pollution knowledge. (Attachment #29)

Calcasieu Parish has plans for the Pollution Prevention/Good Housekeeping training video to be presented to the surrounding municipalities in 2017. 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). <http://www.cppj.net/services/planning-development/stormwater/storm-water-management>

Calcasieu Parish has recently made renovations to some of its existing facilities and one addition that was implemented to fulfill the Pollution Prevention/Good Housekeeping measure was the installation of five EZH2O Bottle Filling Stations. The EZH2O Bottle Filling Station is equipped with a green ticker that count the quantity of 16oz bottles saved from the landfill. In 2016, it is estimated that between the five installed EZH2O Bottle Filling Stations, 5,127 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>
(Attachment # 30)

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 8, 2017

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

TABLE OF CONTENTS

I. Identification

- A. Executive Summary.....Page 1-2
- B. Background.....Page 2
- C. Name of sMS4.....Page 2
- D. Contact Information.....Page 3
- E. List of Impaired Water Bodies.....Page 3
- F. MS4 Budge Information.....Page 4
- G. MS4 Responsible Parties.....Page 4

II. Minimum Control Measures

- 1. Public Education and Outreach.....Page 5
- 2. Public Involvement and Participation.....Page 8
- 3. Illicit Discharge Detection and Elimination....Page 11
- 4. Construction Site Runoff..... Page 12
- 5. Post-Construction Site Runoff..... Page 13

III. COLC Appendix

A. Attachment #LC1	COLC Budget Information
B. Attachment #LC2	COLC Mercury Presentations
C. Attachment #LC3	COLC Tuten Park Arbor Day Event
D. Attachment #LC4	COLC/TG Trash Bash flyer
E. Attachment #LC5	COLC Mercury Collection Sites
F. Attachment #LC6	Lake Charles Green Guide
G. Attachment #LC7	COLC/TG Beach Sweep flyer
H. Attachment #LC8	COLC/TG Adopt A Spot
I. Attachment #LC9	COLC /TG Litter Law Enforcement Luncheon
J. Attachment#LC10	COLC/TC Keep Greater LC Clean Event
K. Attachment #LC11	COLC Reserved
L. Attachment #LC12	COLC/TG E-Recycle Day
M. Attachment #LC13	COLC Quarterly Storm Water Reports
N. Attachment#LC14	COLC Property Standards Inspection/Violations
O. Attachment#LC15	COLC Grading & Stormwater Program
P. Attachment#LC16	COLC Stormwater Drain Signage

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 1,2016 through December 31, 2016

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:

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

Co-Permittees:

Mayor Randy Roach
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 2015-2016 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 2016-2017

Street Division Miscellaneous Contractual

\$248,125.61	Actual 2016
\$350,000.00	Budget 2017

Street Maintenance Supplies

\$204,289.40	Actual 2016
\$260,000.00	Budget 2017

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. Attachment# LC3 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.

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 2015 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.

Tuten Park is now the home for "Naturelab". Naturelab began in 1995 as an idea generated by the Wildlife Habitat Committee at the Axiall (formerly PPG) Lake Charles Complex. This group of dedicated Axiall employees, McNeese State University, and volunteers dedicated their time and expertise to protect natural habitat areas and wildlife species at the Axiall Complex and will now do the same at Tuten Park. Dozens of volunteer educators and nature experts have helped design and produce an outdoor classes, nature trails and learning curricula for all age groups. The primary focus of Naturelab is to help the people of Southwest Louisiana, especially youngsters, learn more about the ecosystems and environment in which we all much live, work, and learn.

The City has just constructed with the help of the Natural Resources Conservation Services and Naturelab, a quarter acre pond to be used for outdoor education. At first, a pond will appear to be lifeless, microscopic plankton will form drifting masses; water boatmen and winged whirligig beetles will alight on the surface to swim; and plants will colonize the pond and provide food and shelter to a wide variety of animals. Educators will utilize the importance of preventing contaminated stormwater runoff that could destroy the natural beauty as well as the aquatic life in the pond or pond supported wildlife.

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, LC10, LC15**

The annual Trash Bash event hosted by Team Green and the City of Lake Charles took place in April 2016. 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 23, 2016. 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 500 lbs of paper, 26 auto batteries, 672 mercury filled lighting fixtures, 75 gallons of petroleum waste products, and 300 electronic devices were collected for disposal. There were 50+ community participants, 57 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 McNeese State University Stadium parking lot in Lake Charles on March 5, 2016. 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. Seventy-one (71) participants collected electronic recyclables from 536 vehicles. Nine (9) roll-off boxes and one (1) 18-wheeler trailer of electronics, 3-Thermostats, 4-Thermometers, 8 ft. fluorescent lamps – 36 (288 feet), 4 ft. fluorescent lamps – 328 (1,312 feet), 3 ft. fluorescent lamps- 7 (21 feet), 2 ft. fluorescent lamps – 20 (40 feet), 1 ½ fluorescent lamps – 6 (9 feet), 1 ft. fluorescent lamps- 2 (2 feet), Compact fluorescent lamps – 360, U-Tube (2 feet) – 240, 20 Projector bulbs (with mercury), 9 Circular, 3 HID, 4 Mercury vapor (large), 10 Broken fluorescents, 102 Incandescent, 192.2 lbs Batteries (small) and 1 Ballast were collected. A total of 1672 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 2016 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. The Arbor/Earth Day event had an estimated 300-400 visitors. **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**

SWP3 Best Management Practices seminars were given on September 29 for contractors under the Southwest Louisiana Builders Association and on October 19, 2016, to City of Lake Charles contractors with projects within the City. Our local Louisiana Department of Environmental Quality representative attended and answered questions specific to field inspections and enforcement. **Attachment#LC14**

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, 2016. 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**

City of Lake Charles and Team Green of Southwest Louisiana conducted the Great American Cleanup Annual Residential Trash Bash on April 23, 2016. A total of 500 lbs of paper, 26 auto batteries, 672 mercury filled lighting fixtures, 75 gallons of petroleum waste products, and 300 electronic devices were collected for disposal. There were 50+ community participants, 57 volunteers, and 17 sponsors for the event. **Attachment #LC4.**

The City of Lake Charles and Team Green conducted an annual Beach Sweep on October 29th from 8am to 12pm in 2016. 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 12, 2016. Three hundred and ninety-six (368) participants comprised of individuals, groups, organizations, and 183 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 2,850 pounds of litter (190 bags) during this event. **Attachment #LC 8.**

The City of Lake Charles and Team Green held an "E-Recycle Day" held at McNeese State University Stadium parking lot in Lake Charles on March 5, 2016. 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. Seventy-one (71) participants collected electronic recyclables from 536 vehicles. Nine (9) roll-off boxes and one (1) 18-wheeler trailer of electronics, 3-Thermostats, 4-Thermometers, 8 ft. fluorescent lamps – 36 (288 feet), 4 ft. fluorescent lamps – 328 (1,312 feet), 3 ft. fluorescent lamps- 7 (21 feet), 2 ft. fluorescent lamps – 20 (40 feet), 1 ½ fluorescent lamps – 6 (9 feet), 1 ft. fluorescent lamps- 2 (2 feet), Compact fluorescent lamps – 360, U-Tube (2 feet) – 240, 20 Projector bulbs (with mercury), 9 Circular, 3 HID, 4 Mercury vapor (large), 10 Broken fluorescents, 102 Incandescent, 192.2 lbs Batteries (small) and 1 Ballast were collected. A total of 1672 feet of fluorescent lamps were collected. The local television station aired a Public Service Announcement the day before the event. **Attachment #12.**

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 provide 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 3408 violation letters were sent to property owners to correct the violation. **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 2016 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 2016 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, 2016, 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 2015 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.**

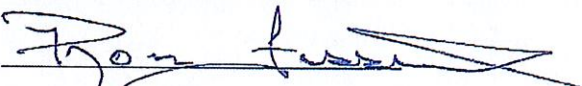
The design of Tuten Park's parking lot was to gather storm water run-off into a Bioswale prior to flow into the City's storm drains. This Bioswale was designed to capture pollutant runoff and prevent it from entering the storm drain and then Lake Charles. The bioswale, acts as a bio-filter, and the design 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 19, 2017

2016 ANNUAL REPORT

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

TABLE OF CONTENTS

I.	Identification	
	A. Executive Summary.....	Page 1
	B. Background.....	Page 2
	C. Name of sMS4.....	Page 3
	D. Contact Information.....	Page 3
II.	Minimum Control Measures	
	A. Public Education and Outreach.....	Page 4
	B. Public Involvement and Participation.....	Page 5
	C. Illicit Discharge Detection and Elimination....	Page 6
	D. Construction Site Runoff.....	Page 7
	E. Post-Construction Site Runoff.....	Page 8
	F. Pollution Control and Good Housekeeping....	Page 8
	G. Certification Page.....	Page 9
III.	Appendix	
	A. Attachment A	Storm Drain Labeling Program
	B. Attachment B	Solid Waste Information & Brochure
	C. Attachment C	City Web Page Emphasis on Recycling
	D. Attachment D	E-Recycle Partnership
	E. Attachment E	Clean Water Handout
	F. Attachment F	Litter Ordinance Excerpt
	G. Attachment G	Sample Building Permit Excerpt
	H. Attachment H	Ordinance Excerpts Chapters 18 and 24
	I. Attachment I	Storm Water Management – Capital Projects

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 2016 reporting year. All urbanized areas are covered either under the cities' sMS4 jurisdictions or that of Calcasieu Parish.

Annual reporting period: January 1, 2016 through December 31, 2016

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 Randy Roach
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 Bob Hardy
City of Westlake
P.O. Box 700
Westlake, LA 70669

Impaired Water Bodies:

According to the information from the 2006 Total Maximum Daily Load measurements, a number of the area waterways are impacted by one or more of several physical, chemical and/or biological water quality indicators including dissolved oxygen, total suspended solids, total dissolved solids, turbidity, low pH, chloride, sulfates, lead, mercury, and fecal coliform. The indicated or suspected sources of the impairments include irrigated crop production, non-irrigated crop production, sediment re-suspension, silviculture plantation management, changes in tidal circulation/flushing, flow regulation/modification, impacts from 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 2015. (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 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 2014 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 13, 2017