LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

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John Bel Edwards, Governor
Shawn D. Wilson, Ph.D., Secretary

February 28, 2020

Ms. Celena Cage, Administrator
Permit Compliance Unit
Water Enforcement Division
Office of Environmental Compliance
Louisiana Department of Environmental Quality
Post Office Box 4312
Baton Rouge, LA 70821-4312

RE: MS4 Annual Report
Permit Number: LAR043001
Agency Interest No: 108424

Dear Ms. Cage:

Enclosed, please find the 2019 MS4 Annual Report prepared by the Louisiana Department of Transportation and Development.

If you have any questions, please do not hesitate to contact myself or Mr. Joubert Harris at 225.248.4131 or 225.248.4141, respectively.

Sincerely,

Brian Owens, P.E.
Materials Engineer Administrator

Attachment
BO:JH:dt

c: Mr. C. Knotts
Mr. M. Vosburg
Mr. V. Latino
ECU files

Permittee: Louisiana Department of Transportation and Development

Permit Number: LAR043001

Agency Interest No: 108424

Reporting Period: January 1, 2019 - December 31, 2019

Annual Report
for the
Louisiana Pollutant Discharge Elimination System (LPDES)
General Permit for Discharges from
Regulated Small Municipal Separate Storm Sewer Systems (MS4s)

Date: March 10, 2020

Certification:

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

Signature: _____

Printed Name: Christopher Knotts, P.E.

Title: DOTD Chief Engineer Administrator

Date: 3/10/2020

Contact Information

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List of Acronyms

AASHTO	American Association of State Highways and Transportation Officials
AST	Aboveground Storage Tank
BMP	Best Management Practice
CSI	Certified Storm Water Inspector
EA	Environmental Assessment
ECU	Environmental Compliance Unit
EPA	Environmental Protection Agency
GIS	Geographic Information Systems
LADOTD	Louisiana Department of Transportation and Development
LDAF	Louisiana Department of Agriculture and Forestry
LDEQ	Louisiana Department of Environmental Quality
LPB	Louisiana Public Broadcasting
LPDES	Louisiana Pollutant Discharge Elimination System
LSWA	Louisiana Solid Waste Association
LTRC	Louisiana Transportation Research Center
LUSC	Louisiana Urban Stormwater Coalition
MCM	Minimum Control Measure
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System
NHI	National Highway Institute
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
O&M	Operation and Maintenance

PE	Project Engineer
PSA	Public Service Announcement
SPC	Spill Prevention and Control
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
UA	Urbanized Area

Executive Summary

It has been estimated that over 56,000 pounds of contaminants enter Louisiana waters from its highway drainage system per year. As the steward of Louisiana roads and bridges and therefore its drainage system, the Louisiana Department of Transportation and Development (LADOTD) has been proactive in combating the above alarming statistic to prevent the further deterioration of the state's surface waters. This is being accomplished through the implementation of a broad storm water management program to address discharges from its drainage system, construction sites, and facilities as mandated by the Louisiana Pollutant Discharge Elimination System General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s), master general permit number LAR040000.

The permit challenges the permittee to develop best management practices (BMPs) or water pollution controls for each of the six minimum control measures listed below.

- Public Education and Outreach on Storm Water Impacts
- Public Involvement/Participation
- Illicit Discharge Detection and Elimination
- Construction Site Storm Water Runoff Control
- Post-Construction Storm Water Management in New Development and Re-development
- Pollution Prevention/Good Housekeeping for Municipal Operations

Typically, the BMPs whether structurally engineered devices or procedural policies, are put into practice in areas designated by the permitting authority, however the LADOTD has chosen to apply its BMPs statewide.

To remain in permit compliance, the report presented here includes major topics to address each of the six annual report requirements as stated in the permit. The LADOTD's annual report details the pollution prevention activities undertaken by the permittee during the 2019 calendar year to reduce the pollutants entering its MS4 as well as limiting the polluted discharge from its MS4 to area water bodies.

Introduction:

In 1972, polluted point source discharges to the waters of the United States were prohibited unless authorized by the National Pollutant Discharge Elimination System (NPDES) permitting system. Originally, improvements to water quality focused on limiting industrial wastewater discharges and sanitary sewerage overages. However, it became evident that poor water quality was caused by more than these two processes alone. It was later recognized that polluted storm water runoff was a major contributor to impaired surface waters.

Polluted storm water runoff is collected, transported, and ultimately discharged to nearby surface waters without treatment. Common contaminants found in runoff include litter, sediment, and oil. In response to increasing runoff concerns, the Environmental Protection Agency (EPA) and state permitting authorities were tasked with implementing a two phased approach to address storm water discharges.

Phase I of the storm water program regulated discharges from medium and large municipal separate storm sewer systems (MS4s), construction activity that disturbs 5 or more acres of land, and ten categories of industrial activity. With the addition of the Phase II Rule, the reach of the storm water program was strengthened by authorizing the discharge of storm water from small MS4s and construction sites that disturb at least 1 acre of land.

Though the storm water program was implemented in two stages, Phase I and II, the program is typically divided into three basic components, municipal, industrial, and construction. Because of the Louisiana Department of Transportation and Development (LADOTD) massive operations, it functions in all three of these areas. The LADOTD holds several storm water permits for its construction projects, facilities, and highway drainage systems.

As required by the Louisiana Department of Environmental Quality (LDEQ), the state's permitting authority; the LADOTD submitted a notice of intent (NOI) in March 2003 requesting coverage for discharges from its MS4. The LDEQ granted the LADOTD statewide permit coverage under its Louisiana Permit Discharge Elimination System (LPDES) which was modeled after the NPDES in May 2003. The LPDES permitting mechanism charged the permittee to develop a comprehensive storm water management program that was designed to reduce the amount of runoff discharged to surface waters as well as the amount of pollutants within the discharge itself to the maximum extent practicable (MEP) in each of its urbanized areas (UAs) and the regulated areas designated by the LDEQ. This was to be achieved through developing best management practices (BMPs) for each of the six required minimum control measures (MCMs). Through evaluation of measurable goals, the effectiveness of the BMPs in meeting water quality requirements can be determined.

As a small MS4 operator in fifteen areas throughout the state, the LADOTD has chosen to write its storm water management plan (SWMP) in a manner that all BMPs are implemented statewide and not just in the permitted MS4s. However, for the purpose of this report, the cities listed below will be addressed as required by the permit:

- Alexandria urbanized area
- Baton Rouge urbanized area
- Houma urbanized area
- Lafayette urbanized area
- Lake Charles urbanized area
- Mandeville-Covington urbanized area
- Monroe urbanized area
- New Orleans urbanized area
- Shreveport urbanized area
- Slidell urbanized area
- LDEQ-designated regulated area of Abbeville
- LDEQ-designated regulated area of Bastrop
- LDEQ-designated regulated area of Hammond
- LDEQ-designated regulated area of Morgan City
- LDEQ-designated regulated area of Natchitoches

The activities undertaken during the first four years following the initial authorization under the 2002 general permit include, but are not limited to, developing a construction inspection program, educating the public via TV, print, and internet, and locating outfalls within the regulated areas to create a storm sewer system map. At the permit's expiration, the permittee had not completed all of the activities scheduled during the permit term; however, it had fulfilled the primary requirement of having adopted and executed a SWMP.

The LDEQ renewed the LADOTD's MS4 permit to the permittee on September 1, 2018. As the permittee entered this fourth permit term, the LADOTD modified its original implementation schedule to include new goals and to reflect progress made from the previous permit term. Per the 2018 permit, the LADOTD is required to conduct at a minimum, a yearly review of the storm water management program in preparation for the annual report. During the review period, the efficacy of all BMPs is evaluated using the established measurable goals. The results of the review and any changes made to the SWMP are then presented in the annual report.

Per Part V.C. of the 2018 general permit, the annual report must address the following requirements:

1. The status of compliance with permit conditions;
2. Results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP;
3. A summary of the storm water activities you plan to undertake to comply with the permit during the next reporting cycle (including an implementation schedule);
4. Any changes made during the reporting period to your SWMP, including control measures initiated in response to a new wasteload allocation;
5. Notice that you are relying on another government entity to satisfy some of your permit obligations (if applicable) consistent with LAC 33:IX.2525; and

6. Any other information requested by the state administrative authority.

This annual report has been prepared to comply with the above conditions.

Program Evaluation

The section entitled *Program Evaluation* will fulfill the below annual report requirement from the 2018 general permit.

> *The status of compliance with permit conditions, an assessment of the appropriateness of your identified best management practices (BMPs), progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, and the measurable goals for the MCMs.*

Because the above requirement addresses several elements, the permittee has chosen to separate the requirement so that each component may be fully addressed.

Status of Compliance

The LADOTD's storm water management program was reviewed in its entirety and then compared to the mandates set forth in the 2018 general permit. After completing the required self-assessment, the LADOTD has determined that additional attention is needed in the following areas to sufficiently achieve permit compliance;

Part IV. D. 3 Illicit Discharge Detection and Elimination

BMP Assessment

During the annual evaluation of the SWMP, data is collected and analyzed to yield performance indicators. A performance indicator is a measurement of the effectiveness of the BMP relative to the MCM. It is used to determine if MCM improvements are needed. MCM improvements are achieved through the elimination and addition of BMPs. As a result of the self-assessment for the 2019 calendar year, the permittee has determined the BMPs developed satisfactorily address the required MCMs.

Progress towards Achieving the Statutory Goal

Per permit requirements, the LADOTD is mandated to reduce pollutants in storm water runoff to the MEP through the use of various BMPs. BMP efficacy is determined through data collection and evaluation. Additionally, the permittee conducts research on emerging technologies to determine the usefulness of new products and to ascertain if its value will be beneficial for future use. Because of continuous research efforts, the LADOTD remains current in its approach to handling polluted runoff. The permittee will continue to make significant strides in reducing polluted discharge to the MEP.

Measurable Goals for each of the MCMs

Measurable goals are quantifiable measurements that indicate effort, i.e. website traffic, miles swept, etc. This data tracked over time used in conjunction with performance indicators will quantitatively indicate the effectiveness of each BMP. Identification of productive versus non-productive BMPs allows the permittee to make necessary changes to strengthen its storm water management program. The measurable goals developed for each MCM are detailed in the section entitled Summary of Minimum Control Measures.

Summary of Minimum Control Measures

The section entitled *Summary of Minimum Control Measures* will fulfill the below annual report requirement from the 2018 general permit.

> *Results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.*

The results presented here represent the cumulative efforts of the permittee in all fifteen permitted areas, however to obtain area specific information refer to Appendix A. A measurable goals output table has been created for each urbanized and regulated area listing the data collected for each BMP for the 2019 calendar year. The activities for each minimum control measure are summarized below.

MCM: Public Education and Outreach on Storm Water Impacts

The permittee has developed six BMPs with a corresponding measureable goal to achieve compliance with the above MCM, public education and outreach of storm water impacts. The targeted audiences for the following BMPs are traveling motorists on Louisiana highways, homeowners, schools, and businesses. Sources for stormwater pollution include, but are not limited to, paper, cigarette butts, trash, pet waste, used oil, paint/petroleum products, fertilizers, pesticides, and yard debris. The results, if any, of each BMP are presented below.

BMP: Flyers and Brochures

BMP Description: Design and publish flyers and/or brochures for the purpose of educating the public on various storm water related topics.

Summary of Results:

The permittee reproduced the brochure developed by the EPA entitled, *After the Storm*. The brochure provides an overview of the various sources of storm water pollution, the effect of contaminants on water bodies, and suggestions to the reader on how to prevent polluted runoff. An example of the brochure used by the LADOTD is provided in Appendix B. During 2019, the brochures were distributed statewide at various LADOTD properties and at the Louisiana Department of Culture, Recreation and Tourism Welcome Centers. The location and number of brochures disseminated in each permitted area is provided below.

Regulated Area	Location	Quantity
Lafayette, LA	Atchafalaya Rest Area	30
Lake Charles, LA	I-10 Eastbound Welcome Center	30
Houma, LA	LADOTD Customer Service for Toll	30
Choudrant, LA	Tremont West Bound Rest Area	30
Choudrant, LA	Tremont East Bound Rest Area	30

A second brochure, *Understanding Stormwater* was developed for distribution. The brochure provides a general overview of what storm water pollution is, its sources, and the problems associated with it. The brochure further details pollution prevention tips while traveling, and ways to get involved such as volunteering in our "Adopt-A Road Program" and LADOTD contact information to report any illegal activities. An example of the brochure is provided in Appendix B.

In addition to the brochures, the LDEQ designed poster titled *Make Changes, Be the Solution!* was displayed at 3 LADOTD maintenance facilities within the Baton Rouge urbanized area. The poster communicates to the reader, simple tasks that can assist in limiting contaminants in storm water discharges. The use of these locations was two-fold in that it provided an educational opportunity to local

residents and the permittee's employees as well. An example of the poster in use is provided in Appendix C.

BMP: Storm Water Quality Website

BMP Description: Design and maintain a website to educate individuals on the impact of storm water runoff.

Summary of Results:

The permittee has developed a website completely dedicated to the topic of storm water. The topics covered on the website include the following:

- An MS4 Defined
- Examples of BMPs
- Previously submitted Annual Reports
- Examples of Illicit Discharges
- A Mechanism to Report an Illicit Discharge
- Urbanized Area Maps
- External Links to LADOTD Adopt-a-Road program, LDEQ website, and EPA website
- Contact LADOTD/Feedback Mechanism

As of November 14, 2006, the traffic to the website has been continuously monitored and to date has had 7,153 visitors. Of the 7,153 total views, 250 occurred in 2019. This represents a 29% decrease in visits in comparison to the previous reporting year. The website can be found at the following address: http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Materials_Lab/MS4/Pages/default.aspx

BMP: Public Service Announcements

BMP Description: Develop and broadcast a storm water related public service announcement (PSA).

Summary of Results:

The permittee has produced a 30-second PSA for television focusing on the impact of runoff from Louisiana's highway system. The PSA also provides tips to the listener on how to prevent storm water related pollution. The verbiage of the PSA is given below:

> *Each year, DOTD's litter pick up programs remove more than 231 thousand 55-gallon drums of trash from our roadways. Litter is an eye sore and a major pollutant to our waterways. You can make a difference by repairing fluid leaks in your vehicle, cleaning out truck beds, and bagging and disposing of trash in designated containers. Clean highways today, mean better highways tomorrow.*

The permittee has contracted with the Louisiana Public Broadcasting (LPB) station to broadcast the above LADOTD developed PSA. Because the permittee renews its contract annually with LPB during midyear,

two separate contracts cover the 2019 calendar year. The first having a contract term June 30, 2018 to June 29, 2019 and the second and current contract term is from June 30, 2019 to June 29, 2020. The contract stipulates that the PSA will be aired a minimum of 40 times during each contract term. The PSA had 90 broadcasts on the LPB station between 01/01/2019 to 12/31/2019. A copy of both contracts and the broadcast schedule are provided in Appendix D.

Additionally, the contract between the permittee and LPB provides the LADOTD an opportunity to be featured in the LPB *Visions* magazine. The LADOTD ran a 243-word article titled, Minimizing the Problem, One Pollutant at a Time The article appeared in the August 2019 *Visions* publication, Volume 43, Issue 8, page 30. A copy of the article can be found in Appendix D.

BMP: Impacts of Illegal Dumping and Littering

BMP Description: Develop and distribute various public education materials that focus on illegal dumping.

Summary of Results:

The permittee uses a variety of methods to publicize the impact of illegal dumping and littering. Prints, television ads, as well as electronic media are used by the LADOTD to inform the public of the sources and effects of dumping and littering on area surface waters. The statewide circulation of the *After the Storm* brochure, the display of the Make Changes, Be the Solution! poster, the PSA developed for television broadcast, which also has been made available for online viewing, and the LADOTD developed website, all include verbiage on both subjects. In addition, the permittee has taken the added step to have its catch basin covers cast with the following phrase:

Dump No Waste *Drains to Waterways*

Please refer to Appendix E to view a photograph of a catch basin cover currently in use by the department.

BMP: Public Education on Construction Activities and New Development Activities

BMP Description: Develop and distribute various public education materials that inform the public of the impact of construction on area waters.

Summary of Results:

The impact of construction activity on water quality and the steps an individual can take during construction to limit erosion and sedimentation is included in the *After the Storm* brochure. Refer to Appendix B for an example brochure used by the department.

BMP: Education of School Children on the Importance of Water Quality

BMP Description: Develop and distribute educational materials related to storm water at LADOTD rest areas.

Summary of Results:

In order to educate small children of the importance of keeping our water clean, the LADOTD has received permission from the Metropolitan North Georgia Water Planning District to print and distribute an activity booklet titled, "Be a Solution to Water Pollution". The activity booklet was distributed in a packet including crayons, stickers, and a book marker, Clean Water, Everybody's business. Packets were distributed at LADOTD rest areas and tourist centers statewide. Refer to Appendix F for an example of packet contents.

MCM: Public Involvement/Participation

The permittee has developed four BMPs with a corresponding measurable goal to ensure compliance with the above MCM, public involvement/participation. The results, if any, of each BMP are presented below. The targeted audiences for the following BMPs are traveling motorists on Louisiana highways, homeowners, schools, businesses, groups and organizations.

BMP: Adopt-a-Road Program

BMP Description: Inform the public of volunteer opportunities available through the LADOTD sponsored Adopt-a-Road Program.

Summary of Results:

Various organizations contract with the LADOTD to voluntarily collect litter and other debris from state and federal right-of-ways (ROWs). The permittee has established a website dedicated to the recruitment of volunteer organizations by providing general information as well as contact information for the Adopt-a-Road Program. A link to the Adopt-a-Road website has also been established on the permittee's storm water website. The Adopt-a-Road website can be found at the following address: http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Operations/adopt-a-road/Pages/default.aspx

The number of active groups that adopted highway segments within the permittee's urbanized areas or LDEQ-designated areas totaled 102 in 2019. This accounts for a total of 134.6 miles of adopted highway and 47.25 cubic yards of litter collected. Refer to the Measurable Goals Output table in Appendix A, 440-04, for area specifics.

BMP: Storm Water Management Program Document Review

BMP Description: Documents associated with the LADOTD's storm water management program will be made available on the department's storm water website for public review and comment.

Summary of Results:

The report prepared annually for submission to the LDEQ is available for review and comment on the permittee's website. The most recent and previous annual reports can be found at the following address: http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Materials_Lab/MS4/Pages/AnnualReports.aspx . In 2019, the permittee did not receive any comments on the annual reports submitted to the LDEQ.

BMP: Public Information Requests

BMP Description: Respond and provide the necessary documents when appropriate, for information requests from the public.

Summary of Results:

A pdf copy of the *Public Records Request* form is available on the LADOTD website. The form along with instructions for its completion is available at the following address: http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Administration/Documents/Public%20Records%20Request%20Form.pdf. Refer to Appendix G, to view a *Public Records Request* form.

BMP: Reporting System for Public

BMP Description: Establish a system to foster communication between the LADOTD and the public.

Summary of Results:

The permittee has provided the public with a feedback mechanism via the LADOTD storm water website. Using the *Contact Us/Report an Illicit Discharge* page, an individual can ask questions, report suspected illicit discharges, inform the permittee of illegal dump sites, or provide comments on the storm water program to the permittee. Any questions or comments received are answered and if necessary investigated by the LADOTD-Environmental Compliance Unit (ECU) personnel and then referred to the proper authority for action. The *Contact Us* page can be found at the following web address: http://wwwsp.dotd.la.gov/Inside_LaDOTD/Pages/Contact_Us.aspx. No comments were received on the website. However, the LDEQ received complaints from citizens in the Fountain Hills Subdivision about the I-10-Highland Road to LA 73 project. Personnel from LADOTD's environmental unit conducted a visual inspection of the project and pond referenced in the complaints, in addition to, setting up a meeting with the contactors in charge. See Appendix S for the contractor's response to the sedimentation complaint.

MCM: Illicit Discharge Detection and Elimination

The permittee has developed three BMP's with a corresponding measureable goal to achieve compliance with the above MCM, illicit discharge detection and elimination. The results, if any, of each BMP are presented below.

BMP: Maintain the MS4 and Outfall Inventory

BMP Description: Update the MS4 outfall map as needed.

Summary of Results:

The permittee has completed a storm sewer map using GIS technology for LDEQ designated areas and urbanized areas showing outfall locations and receiving waters. During 2020, the ECU will continue to improve maps on an as needed basis.

BMP: MS4 Outfall Screening

BMP Description: Conduct a visual inspection of MS4 outfalls annually to identify the presence of dry weather discharges.

Summary of Results:

Because the permittee has responsibilities in fifteen areas in the state, the implementation schedule developed by the LADOTD mandated that 25% of all MS4 outfalls be inspected annually. During 2019, 40 outfalls were inspected. Screenings are done to identify outfalls with illicit discharges and investigate the source of those discharges. A MS4 outfall survey and an Illicit Discharge Visual Screening form were developed to assist us in this effort. Although we continue to strive towards our self-imposed goal, we have not reached the targeted percentage. We are hopeful with the full use of the GPS units and possible re-organizational changes, we will meet our goal. However, considering LADOTD has over 2,000 identified outfalls within its regulated MS4, we may need to reevaluate our goals. Please refer to Appendix H, to view both documents.

BMP: Illicit Discharge Employee Training

BMP Description: Educate personnel using the developed training aids for illicit discharge identification.

Summary of Results:

The LADOTD purchased training material from Excal Visual to assist with training our personnel in identifying illicit discharge. The training material consisted of a video titled, "IDDE: A Grate Concern, employee quiz, a trainer's guide, and pocket references. The video is usually presented in the annual Waste Water Recertification. Due to technical difficulties, we were unable to show it this year. However, an Illicit Discharge presentation was given during the recertification on August 22nd to 37 participants. Future plans will include continuing education of targeted sections in LADOTD. Refer to Appendix I, for

an example of the Acknowledgement of Training Form, Employee Quiz and the Wastewater Recertification Agenda.

MCM: Construction Site Storm Water Runoff Control

The permittee has developed five BMPs with a corresponding measureable goal to achieve compliance with the above MCM, construction site storm water runoff control. The results, if any, of each BMP are presented below.

BMP: Construction Inspection Procedures

BMP Description: Develop written construction inspection procedures and forms.

Summary of Results:

Two inspection forms are in use by the permittee. The first is a one page LADOTD document, entitled *Inspection and Maintenance Report Form*. This form is used by the contractor during construction to satisfy the mandatory inspection schedule as required in the general storm water construction permit, LAR 600000. Used primarily to document structural BMP deficiencies, the form identifies the station number of areas of concern.

The second form, entitled *LADOTD Storm Water Construction Site Inspection Report*, is a three-page document used by the certified storm water inspectors (CSIs) of the LADOTD-ECU. This form mirrors the forms used by regulatory agencies by documenting not only structural BMP deficiencies but also procedural insufficiencies, corrective action log errors, storm water pollution prevention plan (SWPPP) deficiencies, etc. Examples of both forms are provided in Appendix J.

Instead of developing a field guide, the ECU will use the Construction Stormwater Field Guide by AASHTO. This guide provides information on pollution prevention/housekeeping, sediment control, erosion control and temporary drainage management. It also exhibits pictures of BMPs that are properly installed and maintained along with others that are not adequately maintained. An example of the field guide is provided in Appendix J.

BMP: Construction Storm Water Pollution Prevention Plan (SWPPP) Review

BMP Description: Develop procedures to require contractors to submit a site specific storm water pollution prevention plan for permittee review and approval.

Summary of Results

One storm water pollution prevention plan(SWPPP) has been developed that serves as a master template for all construction projects or sites covered by the permit. The purpose of the master template SWPPP is to have uniform, standardized structure for all DOTD construction projects. Site specific SWPPPs, however, are subsequently developed for each project to ensure adequacy and permit compliance. SWPPPs are reviewed for permit compliance during the inspections conducted by the CSIs. During a SWPPP review, deficiencies are noted and recommendations provided to strengthen the document and therefore improve the permittee's ability to reduce sediment laden runoff from its construction sites. In

2019, a total of 17 SWPPPs were reviewed statewide. A portion of the master SWPPP template is provided in Appendix R.

BMP: Construction Site Inspection

BMP Description: Inspect LADOTD construction sites that disturb at a minimum of one acre of soil and can potentially discharge runoff to an MS4.

Summary of Results:

In 2019, the permittee identified 53 construction projects within the boundaries of the fifteen permitted areas that disturbed at a minimum of 1 acre of soil. A records review determined that each project was inspected pursuant to the requirements set forth in the LDEQ storm water construction permits. Inspection forms along with other pertinent construction documents are housed at the office of the assigned project engineer.

BMP: Construction Community Education

BMP Description: Provide educational opportunities for departmental construction personnel.

Summary of Results:

The permittee in conjunction with Louisiana Transportation Research Center (LTRC) planned the implementation of a training course. The goal was to offer the course to construction personnel and contractors. Unfortunately, due to the inability to reach an agreement with the consultant, we were unable to do so. Future plans will be to continue this effort and incorporate an educational course beneficial to construction personnel and contractors.

BMP: Construction Related Public Reporting

BMP Description: Provide the public with a mechanism to report concerns regarding the LADOTD construction sites.

Summary of Results:

The permittee has a feedback mechanism on its storm water website for public use. No comments were received by the permittee during the 2019 calendar year.

In maintaining compliance with LDEQ storm water construction permit, LAR 600000, a notice is posted near the entrance of each of the LADOTD's construction sites. The notice provides interested parties with the information needed to comment on the construction project. Per permit requirements, the notices contain the permit number, a brief project description, and the point of contact for the project.

MCM: Post-Construction Storm Water Management in New Development and Re-development

The permittee has developed four BMPs with a corresponding measureable goal to achieve compliance with the above MCM, post construction storm water management in new development and re-development. The results, if any, of each BMP are presented below.

BMP: New Development and Re-development Plans Review

BMP Description: Review construction plans to assess post-construction runoff.

Summary of Results:

All construction projects are subject to a formal review by several sections at various stages of the plan development process. Phase reviews are held at the 30%, 60%, 90% and plan in hand (95%) completion stages for preliminary plans. Final plans are reviewed at the 60% and 95% completion stages.

Among its many responsibilities, the LADOTD-Hydraulics section has been charged with the task of drainage design and erosion/sediment control plan development and review. In response, the permittee's Hydraulics section has developed manuals to address these functions. The *Hydraulics Manual* provides information on design criteria and procedures in various area types. Specifically, urban drainage design considerations are addressed in Chapter II *Urban Drainage Design* of the *Hydraulics Manual.* A copy of the manual is available on the permittee's website at the following address: http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Public_Works/Hydraulics/Documents/Hydraulics%20Manual.pdf

Additionally, the LADOTD-Hydraulics section has developed a supplement to the *Hydraulics Manual* entitled *Plan Checking and Design Procedures for Erosion and Sediment Control.* This document provides guidance with regards to both preliminary and final design plan checks. A copy of the narrative portion of the *Hydraulics Manual* supplement, *Plan Checking and Design Procedures for Erosion and Sediment Control* has been provided in Appendix M. A complete copy of the manual can be found on the permittee's website at the following address:
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Road_Design/Erosion%20Control%20Guidelines/05%20Plan%20Checking%20Guidelines%20Document%20(6%20Pages).pdf

To ensure proper installation of erosion control devices, the Hydraulics section has developed standard plan, EC-01, Temporary Erosion Control Details. EC-01 provides installation information on the erosion control devices approved for use on LADOTD construction projects and is attached to all construction plans. EC-01 and an example of the erosion and sediment control symbology used on the permittee's construction plans is provided in Appendix N. The standard plan, EC-01 is also available at http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Road_Design/Erosion%20Control%20Guidelines/00%20La%20DOTD%20Erosion%20Control%20Guidelines%20(Full%20Text).pdf.

Construction plans are developed to indicate where specified erosion controls will be placed, how they are to be installed, and during which phase of construction. Because the permittee's construction plans are designed with the intent of future modification during subsequent reviews, plans may be altered

several times to minimize environmental impacts from erosion and sedimentation. During the plan in hand review, the LADOTD-Hydraulics section compares the plans with field conditions to assess existing or potential erosion problems and verify the future location of temporary and permanent erosion/sediment controls. A copy of the *Plan in Hand Memorandum Review* form can be found in Appendix O.

BMP: New Development and Re-development Project Inspection

BMP Description: Implement inspection program of projects using procedures developed to ensure conformance with post construction guidelines.

Summary of Results:

The *Project Delivery Manual* addresses operational performance post construction. The manual details the six stages of a project and assigns responsibility for each stage. The final stage, Systems Operation and Performance, is put into action once the project has been completed. Project system performance is measured through data collection and evaluation to determine if design procedures need to be modified to improve maintenance and operation of future projects. Of the many tasks completed during this stage, one is to ensure post construction environmental commitments are in compliance. Examples of post construction environmental commitments include post construction erosion controls and water quality monitoring. The responsibility matrix and section entitled, Compliance with Post Construction Environmental Commitments from Chapter 10: Stage 6 Systems Operating and Performance of the *Project Delivery Manual* are provided in Appendix Q for review. A copy of the *Project Delivery Manual* in its entirety is available on the permittee's website at the following address: http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Project_Management/Project%20Delivery%20Manual/LA%20DOTD%20Project%20Delivery%20Manual%202013%20-%20FINAL.pdf.

BMP: Protection of Sensitive and/or Impaired Water Bodies

BMP Description: Implement appropriate post construction pollution control strategies for MS4 areas that discharge to LDEQ Section 303(d) List of Impaired Waters.

Summary of Results:

The ECU teamed with the department's GIS section and identified outfalls within each 303 (d) Impaired Water Body.

Prior to plan development, an environmental assessment (EA) is done for the proposed area of development. The EA provides the permittee with information regarding the topography, area structures, etc. If clearance is granted, the results of the EA are considered during plan development. As such, all required environmental permits are obtained and strict adherence to permit regulations is followed. *Section 3.6* of *Chapter 3 Design Controls* of the *Road Design Manual* detail the environmental considerations to take in account while developing the construction plan with regard to post construction operation. The manual is available at the permittee's website at the following address:

considerations to take in account while developing the construction plan with regard to post construction operation. The manual is available at the permittee's website at the following address:

Road Design Manual
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Road_Design/Pages/Road-Design-Manual.aspx

BMP: Participation in Local Watershed Planning and Modeling

BMP Description: Participate in watershed meetings to stay abreast of current surface water quality issues and regulatory policy changes.

Summary of Results:

In an effort to stay abreast with water quality issues, the LADOTD participated in a meeting with LDEQ to discuss regulatory policy changes. Although no watershed meetings were attended in 2019, plans are to develop a survey to facilitate our interaction with the owners/operators of smaller MS4s and to meet with various watersheds across the state.

MCM: Pollution Prevention/Good Housekeeping for Municipal Operations

The Louisiana Department of Transportation and Development has created an *Activity Guide* for the Maintenance Division. The purpose of the manual is to provide personnel with a standard set of procedures for common practices used in the maintenance and preservation of highway surfaces, roadsides, structures, and traffic control devices. Each maintenance activity is assigned a five-digit activity code. This code is then used to track the type of maintenance activity performed at specific locations to yield numerical accomplishments. The permittee uses the accomplishments from this system as the measureable goals for a number of the BMPs addressed in this section.

The permittee has developed thirteen BMPs with a corresponding measurable goal to achieve compliance with the above MCM, prevention/good housekeeping for municipal operations. The results, if any, of each BMP are presented below.

BMP: Street Sweeping

BMP Description: Removal of sediment and other debris from MS4 roadways to reduce contaminant levels in street runoff to MS4s.

Summary of Results:

The mechanical cleaning of highway surfaces is listed in the LADOTD's Activity Guide as Sweeper Cleaning, 540-03. In 2019, 2,825.23 miles were swept within the regulated areas. For area specifics, refer to Appendix A.

BMP: Litter Collection

BMP Description: Removal of litter and debris from MS4 right-of ways to reduce floatables in runoff discharge, improve aesthetics, and create safe mowing conditions for departmental personnel.

Summary of Results:

The accomplishments from the following four maintenance activities are used to obtain the measurable goals for the litter collection BMP:

- Litter Cleaning of Roadside, 630-10
- Pick Up of Litter (Adopt-A-Road), 440-04
- Pick Up of Inmate Litter, 440-05
- Pick Up of Sheriff's Litter, 440-06

A total of 12,504.40 cubic yards of liter was collected from permitted areas. For area specifics, refer to Appendix A.

BMP: Herbicide Application

BMP Description: Ensure the application of herbicides is done in accordance to manufacturer specification by licensed applicators.

Summary of Results:

The spraying of undesirable vegetation that can cause damage to structures or obstruct drainage is performed by the 64 licensed herbicide applicators the permittee has on staff. Each herbicide applicator is licensed through the Louisiana Department of Agriculture and Forestry (LDAF). In addition to the LADF requirements, the LADOTD necessitates that each licensed applicator obtain continuing education hours through the department annually.

The accomplishments from the following two maintenance activities are used to obtain the measurable goals for the herbicide application BMP:

- Herbicide Application-Hand Method, 440-12
- Herbicide Application-Machine Method, 440-13

Herbicide application staff manually applied herbicides to 1,336.5 locations and mechanically sprayed 18,812.76 acres in the LADOTD urbanized and regulated areas. For, area specifics refer to Appendix A.

BMP: Roadside Drainage Maintenance

BMP Description: Non-functioning drainage structures are cleaned, repaired or replaced to improve drainage thereby reducing sediment and floatable discharges and providing safe travel on roadways.

Summary of Results:

The accomplishments from the following six maintenance activities are used to obtain the measurable goals for the roadside drainage maintenance BMP:

- Clean and Maintain Drainage Structures, 450-01
- Drainage Structure Repair, 450-02
- Install Drainage Culverts, 450-03
- Clean & Reshape Ditches-Hand Method, 450-04
- Clean & Reshape Ditches-Machine Method, 450-05
- Install/Replace Inlets & Catch Basins, 450-06

In 2019, maintenance of drainage structures occurred at 13,775 locations; 102 drainage structures were repaired; 38 new drainage culverts were installed; 13 inlets & catch basins were installed/replaced. 492,153 linear feet of ditches were cleaned and reshaped to improve drainage. For area specifics, refer to Appendix A.

BMP: Fleet Maintenance

BMP Description: All equipment and vehicles will adhere to the maintenance schedule provided by the manufacturer to reduce fluid leaks.

Summary of Results:

The permittee assigns all equipment a number according to its class code for tracking purposes. To ensure that the required routine maintenance on all vehicles and equipment is done as prescribed by the manufacturer, the LADOTD-Maintenance Systems Management Section uses Agile Assets System Database to track equipment use. The Agile Assets System Database is used not only to track usage rates, fuel transactions, and repairs made, but notify the permittee when scheduled maintenance is required. This database is for internal use only and is not made available on the permittee's website; however, the user's guide cover, table of contents, introduction and log in instructions have been made available in Appendix L.

BMP: Spill Prevention Plans

BMP Description: To comply with federal and state regulations, the permittee will develop spill prevention and control (SPC) plans at its facilities with aboveground storage tanks (ASTs).

Summary of Results:

In 2010, the permittee drafted a questionnaire to survey its facilities statewide. The purpose being to identify facilities with ASTs, the contents of the AST, and the volume typically kept on hand. Using the information gathered from the questionnaire, the LADOTD recognized facilities that would necessitate the development of a SPC plan. Fifty-five (55) SPC plans were developed for facilities statewide. Twenty-One (21) SPC plans were revised in 2019. No new facilities have been identified as needing an SPC plan. Refer to Appendix P for example of SPC Questionnaire.

BMP: Employee Training

BMP Description: Develop and conduct employee training programs to educate maintenance personnel on a variety of storm water related topics. Training topics will include operation and maintenance (O&M) procedures for highways, structures, right-of-ways (ROW), equipment, recognizing illicit discharges, materials handling and storage, vegetation management, and pollution prevention BMPs.

Summary of Results:

Most trainings for maintenance personnel is provided in-house through the permittee's LTRC section or the employee's host district training office. Training topics and the number of trainings annually held vary greatly due to the permittee's diverse operations and large workforce. For illustration purposes, listed below are a few of the trainings held in 2019, in the permittee's regulated areas.

Date	Course Number	Course Title	Regulated Area
Continuous		Equipment Training	District 61
March 15-16,2019		Arc GIS	Statewide
April 15, 2019		DOTD Maintenance Training	Statewide
June 17, 2019		Lightweight Agg. Presentation	Statewide
August 22, 2019		Project Delivery Manual	Statewide

Training records are maintained by the training coordinator assigned to the host district.

BMP: Illegal Dumping

BMP Description: Investigate illegal dumping activities at LADOTD properties to determine the source of materials, report results of investigation to proper authorities and to coordinate remediation efforts.

Summary of Results:

The accomplishment from the maintenance activity, Spill Clean Up, 425-01, is used to obtain the measureable goal for the illegal dumping BMP. In 2019, 350 locations were identified within the permitted UAs and LDEQ designated areas as containing illegally dumped materials. The responsible parties were not known nor could be determined; however, the discarded materials were removed and properly disposed of by the permittee. For area specifics, refer to Appendix A.

BMP: De-icing/Anti-icing Materials Management

BMP Description: Ensure proper storage and if necessary installation of secondary containment for icing/anti-icing agents. Materials used for ice and snow control will be applied at the prescribed rates to prevent excess from entering neighboring waters.

Summary of Results:

The accomplishments from the following maintenance activities are used to obtain the measureable goals for de-icing/anti-icing materials management BMP.

- Snow & Ice Control, 540-07
- Snow & Ice Inspection/Reconnaissance, 540-09

A total of 375.65 hours were dedicated to the monitoring of road conditions, staging of materials and equipment, and the application of agents to improve travel conditions. For area specifics, refer to Appendix A.

To comply with WE-AO-10-01940, an Administrative Order issued by the LDEQ to the Louisiana Department of Transportation on December 8, 2010, and permit number LA0125563, the permittee presents the amount of de-icing/agents used throughout the state. During 2019, the permittee applied

190.3 cubic yards of lightweight aggregate and 919,900 pounds of salt statewide. For area specifics, refer to Appendix K. specific areas.

BMP: Bulk Materials Management

BMP Description: Stockpiles are to be stored in designated areas and inventoried regularly to determine loss of materials due to erosion.

Summary of Results:

The proper management of stockpiles can minimize environmental impacts and reduce replacement costs. This is accomplished through the use of designated areas for each type of material. Erosion controls are implemented near stockpiles that are prone to precipitation and wind erosion.

The accomplishment from the maintenance activity, Material Hauling, 630-03, is used to obtain the measureable goal for bulk materials management BMP. Maintenance personnel dedicated 2,038.5 hours to the loading, hauling, unloading, and inventory of bulk materials during the 2019 calendar year. For area specifics, refer to Appendix A.

BMP: Bridge and Structure Maintenance

BMP Description: The removal of debris from bridge structures to improve drainage and appearance.

Summary of Results:

The accomplishments from the following maintenance activities are used to obtain the measureable goals for the bridge and structure maintenance BMP.

- Clean Structural Members, 465-00
- Clean Deck & Drain, 465-01
- Remove Drift, 465-17

141,719 linear feet of drainage structures were cleaned by removing waste from deck drains and lines. Trash was removed from 127 locations near bridge drainage structures and culverts in 2019. Refer to Appendix A to obtain area specifics.

BMP: Debris Management

BMP Description: To clear the highway or roadside of potential hazards and ensure the proper disposal of collected waste.

Summary of Results:

The accomplishments from the following maintenance activities are used to obtain the measurable goals for the debris management BMP.

- Vegetative Debris Removal and Disposal, 440-08
- Clearing Roadways Travel Lane, 440-19

- Disposal of Roadway Debris, 630-09

3,043.61 cubic yards of accident or storm related waste was collected on Louisiana roadways and roadsides in 2019. Routine debris was removed and properly disposed of from 15,965.65 miles of highway and shoulder in 2019. Refer to Appendix A to obtain area specifics.

BMP: Erosion and Sediment Control

BMP Description: To repair and control erosion in the permittee's ROW.

Summary of Results:

The accomplishments from the maintenance activity, Erosion Control and Repair, 440-00, is used to obtain the measureable goal for the erosion and sediment control BMP. 4,644 square yards of erosion and sediment control materials were implemented within the LADOTD permitted areas. These practices include the backfilling of minor washouts or cuts and the repair of slopes. Refer to Appendix A for area specifics.

Looking Ahead: Storm Water Activities for 2020

This section will fulfill the below annual report requirement from the 2018 general permit.

> *A summary of the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule).*

Once again, the LADOTD Environmental Compliance Unit (ECU) will continue its work efforts in 2020 with internal stakeholders and the LDEQ to further address new and previously identified initiatives. By the end of the 2nd quarter of 2020, we will have developed a survey to facilitate our interaction with the owners/operators of smaller MS4s which may be contiguous with or impacted by the operation of LADOTD's infrastructures. Information gathered via this survey will, hopefully, serve as the foundation and springboard to a more effective stormwater management of the various watersheds across the state.

In addition to the use of our GPS units, we will also employ the use of "I-Vision" and "Street View" technology in our outfall mapping and assessment efforts. We feel the combined use of these various technologies will increase our coverages of the many identified outfalls across the state. Realization of the effectiveness of this approach will be evaluated and determined by the end of the 3rd quarter of 2020.

In 2020, LADOTD will also further its efforts towards our MCM for Public Outreach. In addition to the stormwater coloring kits we usually place at rest areas and other locations, we will identify a number of elementary schools across the state and will attempt to place those same coloring kits placed in the kindergarten class(s) along with a "kid-friendly" fact sheet. The details and logistics for the implementation of this initiative will, hopefully, be completed by the end of the 3rd quarter.

This year, the ECU will continue to include stormwater related topics as part of the Department's Annual Water and Wastewater Re-certification training class. As previously stated, the class is LDH approved and will be scheduled to take place during the month of August. This training will be in addition to planned training initiatives via our training Section (LTRC) who develops ideas and assess proposals from outside vendors for the identification and presentation of related stormwater training. Additionally, the ECU will be making a presentation at the Department's upcoming Bi-annual Louisiana Transportation Conference (LTC). The presentation will include updates and highlights from the most recently LADOTD issued Statewide Stormwater Permit (LAR600000). Many users of this permit are expected to be in attendance to this conference and will have the opportunity to gain additional information regarding the requirements under this permit. The last LTC attendance exceeded 1,500 individuals.

As always, the LADOTD appreciates the existing work relationship with the LDEQ and looks forward to such continued work efforts in addressing the various environmental obligations of the State.

Storm Water Management Program Changes

The *Storm Water Management Program Changes* section will fulfill the below annual report requirement from the 2018 general permit.

> *Proposed changes to your Storm Water Management Program, including changes to any BMPs or any identified measureable goals that apply to the program elements.*

The LADOTD has no management plan changes for this year.

Sharing Responsibility

The section entitled *Sharing Responsibility* will fulfill the below annual report requirement from the 2018 general permit.

> *Notice that you are relying on another government entity to satisfy some of your permit obligations (if applicable).*

Although, the LADOTD does not rely on any other government entity and wholly accepts the responsibility to satisfy its permit obligations entirely, we enjoy our work relationship with the LDEQ in changing, specific benchmarks and etc. This relationship better enables the LADOTD to achieve its permit requirements.

Appendix A

Measurable Goals Output Tables I-XV

Table I

LDEQ- designated regulated area: **Abbeville**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	0
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	2
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Number of Active Groups	N/A	Each	0
	Number of Miles Adopted	N/A	Miles	0
	Pick Up of Inmate Litter	440-05	Cubic Yards	0
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	0
	Herbicide Application-Machine Method	440-13	Acres	0
	Number of Licensed Applicators		Each	1
	Number of Training Hours		Hours	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	291
	Drainage Structure Repair	450-02	Each	0
	Install Drainage Culverts	450-03	Each	0
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	0
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	15,942
	Install/Replace Inlets & Catch Basins	450-06	Each	0
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	0
	Remove Drift	465-17	Each	0
Street Sweeping	Sweeper Cleaning	540-03	Miles	0
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	0
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	0
Bulk Materials Management	Material Hauling	630-03	Hours	2
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	125.5
	Clearing Roadways Travel Lanes	440-19	Miles	0
	Disposal of Debris/Litter	630-09	Cubic Yards	80

Table II

UA: **Alexandria**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	53.5
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	223.95
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	12
	Number of Active Groups	N/A	Each	11
	Number of Miles Adopted	N/A	Miles	25.13
	Pick Up of Inmate Litter	440-05	Cubic Yards	195
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	75
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	0
	Herbicide Application-Machine Method	440-13	Acres	1,983
	Number of Licensed Applicators		Each	5
	Number of Training Hours		Hours/Each	12
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	119
	Drainage Structure Repair	450-02	Each	8
	Install Drainage Culverts	450-03	Each	14
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	10
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	13,720
	Install/Replace Inlets & Catch Basins	450-06	Each	0
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	0
	Remove Drift	465-17	Each	0
Street Sweeping	Sweeper Cleaning	540-03	Miles	112.36
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	76.5
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	49
Bulk Materials Management	Material Hauling	630-03	Hours	108
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	0
	Clearing Roadways Travel Lanes	440-19	Miles	31.4
	Disposal of Debris/Litter	630-09	Cubic Yards	14

Table III

LDEQ- designated regulated area: **Bastrop**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	1
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	0
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Number of Active Groups	N/A	Each	0
	Number of Miles Adopted	N/A	Miles	0
	Pick Up of Inmate Litter	440-05	Cubic Yards	0
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	310
	Herbicide Application-Machine Method	440-13	Acres	0
	Number of Licensed Applicators		Each	0
	Number of Training Hours		Hours	N/A
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	35
	Drainage Structure Repair	450-02	Each	0
	Install Drainage Culverts	450-03	Each	0
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	0
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	500
	Install/Replace Inlets & Catch Basins	450-06	Each	0
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	0
	Remove Drift	465-17	Each	12
Street Sweeping	Sweeper Cleaning	540-03	Miles	0
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	0
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	40.75
Bulk Materials Management	Material Hauling	630-03	Hours	0
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	159
	Clearing Roadways Travel Lanes	440-19	Miles	0
	Disposal of Debris/Litter	630-09	Cubic Yards	0

Table IV

UA: **Baton Rouge**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	59.80
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	2,334
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	2,664.10
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	9.25
	Number of Active Groups	N/A	Each	7
	Number of Miles Adopted	N/A	Miles	7.7
	Pick Up of Inmate Litter	440-05	Cubic Yards	206.38
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	36
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	437.50
	Herbicide Application-Machine Method	440-13	Acres	874.50
	Number of Licensed Applicators		Each	6
	Number of Training Hours		Hours	8-16
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	5,024
	Drainage Structure Repair	450-02	Each	14
	Install Drainage Culverts	450-03	Each	5
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	0
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	98,354
	Install/Replace Inlets & Catch Basins	450-06	Each	10
	Clean Structural Members	465-00	Each	0
Bridge & Structure Maintainence	Clean Deck & Drain	465-01	Linear Feet	6,975
	Remove Drift	465-17	Each	2
Street Sweeping	Sweeper Cleaning	540-03	Miles	975.22
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	1
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	15
Bulk Materials Management	Material Hauling	630-03	Hours	698
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	425.80
	Clearing Roadways Travel Lanes	440-19	Miles	7.52
	Disposal of Debris/Litter	630-09	Cubic Yards	543.67

Table V

LDEQ- designated regulated area: **Hammond**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	11
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	355.31
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	18
	Number of Active Groups	N/A	Each	7
	Number of Miles Adopted	N/A	Miles	7
	Pick Up of Inmate Litter	440-05	Cubic Yards	141
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	0
	Herbicide Application-Machine Method	440-13	Acres	735
	Number of Licensed Applicators		Each	9
	Number of Training Hours		Hours/Each	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	504
	Drainage Structure Repair	450-02	Each	3
	Install Drainage Culverts	450-03	Each	1
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	0
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	35,278
	Install/Replace Inlets & Catch Basins	450-06	Each	0
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	0
	Remove Drift	465-17	Each	80
Street Sweeping	Sweeper Cleaning	540-03	Miles	259.49
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	0
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	0
Bulk Materials Management	Material Hauling	630-03	Hours	143
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	116.50
	Clearing Roadways Travel Lanes	440-19	Miles	1
	Disposal of Debris/Litter	630-09	Cubic Yards	66

Table VI

UA: **Houma**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	33
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	292.50
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Number of Active Groups	N/A	Each	9
	Number of Miles Adopted	N/A	Miles	14.50
	Pick Up of Inmate Litter	440-05	Cubic Yards	0
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	3
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	0
	Herbicide Application-Machine Method	440-13	Acres	5,186
	Number of Licensed Applicators		Each	2
	Number of Training Hours		Hours/Each	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	1,358
	Drainage Structure Repair	450-02	Each	4
	Install Drainage Culverts	450-03	Each	0
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	0
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	15,493
	Install/Replace Inlets & Catch Basins	450-06	Each	0
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	0
	Remove Drift	465-17	Each	0
Street Sweeping	Sweeper Cleaning	540-03	Miles	0
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	0
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	0
Bulk Materials Management	Material Hauling	630-03	Hours	162
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	375
	Clearing Roadways Travel Lanes	440-19	Miles	54
	Disposal of Debris/Litter	630-09	Cubic Yards	0

Table VII

UA: **Lafayette**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	13
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	423.5
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Number of Active Groups	N/A	Each	8
	Number of Miles Adopted	N/A	Miles	8.2
	Pick Up of Inmate Litter	440-05	Cubic Yards	0
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	0
	Herbicide Application-Machine Method	440-13	Acres	3,066
	Number of Licensed Applicators		Each	4
	Number of Training Hours		Hours/Each	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	1,227
	Drainage Structure Repair	450-02	Each	8
	Install Drainage Culverts	450-03	Each	2
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	250
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	94,249
	Install/Replace Inlets & Catch Basins	450-06	Each	3
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	1
	Remove Drift	465-17	Each	35
Street Sweeping	Sweeper Cleaning	540-03	Miles	257.7
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	1
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	10
Bulk Materials Management	Material Hauling	630-03	Hours	76.5
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	198
	Clearing Roadways Travel Lanes	440-19	Miles	6.68
	Disposal of Debris/Litter	630-09	Cubic Yards	5.25

Table VIII

UA: **Lake Charles**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	56.5
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	232
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Number of Active Groups	N/A	Each	1
	Number of Miles Adopted	N/A	Miles	1
	Pick Up of Inmate Litter	440-05	Cubic Yards	172
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	0
	Herbicide Application-Machine Method	440-13	Acres	1,394.63
	Number of Licensed Applicators		Each	4
	Number of Training Hours		Hours/Each	12
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	708
	Drainage Structure Repair	450-02	Each	6
	Install Drainage Culverts	450-03	Each	0
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	0
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	18,616
	Install/Replace Inlets & Catch Basins	450-06	Each	0
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	2,258
	Remove Drift	465-17	Each	1
Street Sweeping	Sweeper Cleaning	540-03	Miles	31.64
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	29.25
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	7.5
Bulk Materials Management	Material Hauling	630-03	Hours	10
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	0
	Clearing Roadways Travel Lanes	440-19	Miles	2
	Disposal of Debris/Litter	630-09	Cubic Yards	3

Table IX

UA: **Mandeville-Covington**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	8
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	189
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	4
	Number of Active Groups	N/A	Each	1
	Number of Miles Adopted	N/A	Miles	3
	Pick Up of Inmate Litter	440-05	Cubic Yards	116
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	0
	Herbicide Application-Machine Method	440-13	Acres	1,044
	Number of Licensed Applicators		Each	9
	Number of Training Hours		Hours/Each	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	121
	Drainage Structure Repair	450-02	Each	1
	Install Drainage Culverts	450-03	Each	0
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	0
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	31,700
	Install/Replace Inlets & Catch Basins	450-06	Each	0
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	4,564
	Remove Drift	465-17	Each	0
Street Sweeping	Sweeper Cleaning	540-03	Miles	36
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	0
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	0
Bulk Materials Management	Material Hauling	630-03	Hours	81
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	27
	Clearing Roadways Travel Lanes	440-19	Miles	1.30
	Disposal of Debris/Litter	630-09	Cubic Yards	0

Table X

UA: **Monroe**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	8
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	74
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Number of Active Groups	N/A	Each	8
	Number of Miles Adopted	N/A	Miles	8
	Pick Up of Inmate Litter	440-05	Cubic Yards	33
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	226
	Herbicide Application-Machine Method	440-13	Acres	663
	Number of Licensed Applicators		Each	1
	Number of Training Hours		Hours	6
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	747
	Drainage Structure Repair	450-02	Each	1
	Install Drainage Culverts	450-03	Each	2
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	357
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	12,346
	Install/Replace Inlets & Catch Basins	450-06	Each	0
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	228
	Remove Drift	465-17	Each	5
Street Sweeping	Sweeper Cleaning	540-03	Miles	17.70
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	3.9
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	18
Bulk Materials Management	Material Hauling	630-03	Hours	363.50
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	1,218
	Clearing Roadways Travel Lanes	440-19	Miles	.70
	Disposal of Debris/Litter	630-09	Cubic Yards	0

Table XI

LDEQ- designated regulated area: **Morgan City**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	3
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	153.35
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Number of Active Groups	N/A	Each	1
	Number of Miles Adopted	N/A	Miles	1
	Pick Up of Inmate Litter	440-05	Cubic Yards	0
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	0
	Herbicide Application-Machine Method	440-13	Acre	20.1
	Number of Licensed Applicators		Each	1
	Number of Training Hours		Hours	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	14
	Drainage Structure Repair	450-02	Each	0
	Install Drainage Culverts	450-03	Each	0
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	2,200
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	15,940
	Install/Replace Inlets & Catch Basins	450-06	Each	0
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	4,000
	Remove Drift	465-17	Each	2
Street Sweeping	Sweeper Cleaning	540-03	Miles	120
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	0
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	0
Bulk Materials Management	Material Hauling	630-03	Hours	1
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	148.58
	Clearing Roadways Travel Lanes	440-19	Miles	7.51
	Disposal of Debris/Litter	630-09	Cubic Yards	97.5

Table XII

LDEQ- designated regulated area: **Natchitoches**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	0
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	0
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Number of Active Groups	N/A	Each	4
	Number of Miles Adopted	N/A	Miles	7.32
	Pick Up of Inmate Litter	440-05	Cubic Yards	0
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	0
	Herbicide Application-Machine Method	440-13	Acres	425.98
	Number of Licensed Applicators		Each	1
	Number of Training Hours		Hours	12
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	6
	Drainage Structure Repair	450-02	Each	0
	Install Drainage Culverts	450-03	Each	0
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	0
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	1,700
	Install/Replace Inlets & Catch Basins	450-06	Each	0
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	200
	Remove Drift	465-17	Each	0
Street Sweeping	Sweeper Cleaning	540-03	Miles	0
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	0
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	0
Bulk Materials Management	Material Hauling	630-03	Hours	0
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	0
	Clearing Roadways Travel Lanes	440-19	Miles	0
	Disposal of Debris/Litter	630-09	Cubic Yards	0

Table XIII

UA: **New Orleans**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	79
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	5,045.44
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Number of Active Groups	N/A	Each	38
	Number of Miles Adopted	N/A	Miles	40
	Pick Up of Inmate Litter	440-05	Cubic Yards	0
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	0
	Herbicide Application-Machine Method	440-13	Acres	2,048.55
	Number of Licensed Applicators		Each	11
	Number of Training Hours		Hours/Each	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	2,538
	Drainage Structure Repair	450-02	Each	23
	Install Drainage Culverts	450-03	Each	3
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	576
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	91,723
	Install/Replace Inlets & Catch Basins	450-06	Each	0
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	1
	Clean Deck & Drain	465-01	Linear Feet	97,410
	Remove Drift	465-17	Each	0
Street Sweeping	Sweeper Cleaning	540-03	Miles	979.12
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	1
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	0
Bulk Materials Management	Material Hauling	630-03	Hours	92
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	122
	Clearing Roadways Travel Lanes	440-19	Miles	65
	Disposal of Debris/Litter	630-09	Cubic Yards	1,961.88

Table XIV

UA: **Shreveport**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	17
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	1,308.62
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Number of Active Groups	N/A	Each	6
	Number of Miles Adopted	N/A	Miles	6.75
	Pick Up of Inmate Litter	440-05	Cubic Yards	3
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	208
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	673
	Herbicide Application-Machine Method	440-13	Acres	328
	Number of Licensed Applicators		Each	1
	Number of Training Hours		Hours/Each	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	997
	Drainage Structure Repair	450-02	Each	33
	Install Drainage Culverts	450-03	Each	13
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	11
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	1,257
	Install/Replace Inlets & Catch Basins	450-06	Each	0
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	1
	Clean Deck & Drain	465-01	Linear Feet	21,519
	Remove Drift	465-17	Each	1
Street Sweeping	Sweeper Cleaning	540-03	Miles	0
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	114.50
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	49
Bulk Materials Management	Material Hauling	630-03	Hours	220.50
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	0
	Roadway Clearing	440-19	Miles	27.26
	Disposal of Debris/Litter	630-09	Cubic Yards	10.60

Table XV

UA: **Slidell**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	8
Drainage Maintenance	Erosion Control & Repair	440-00	Square Yards	0
Litter Collection	Pick Up of Debris/Litter	630-10	Cubic Yards	189
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	4
	Number of Active Groups	N/A	Each	1
	Number of Miles Adopted	N/A	Miles	5
	Pick Up of Inmate Litter	440-05	Cubic Yards	116
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Herbicide Application	Herbicide Application-Hand Method	440-12	Each	0
	Herbicide Application-Machine Method	440-13	Acres	1,044
	Number of Licensed Applicators		Each	9
	Number of Training Hours		Hours/Each	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	121
	Drainage Structure Repair	450-02	Each	1
	Install Drainage Culverts	450-03	Each	0
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	0
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	31,700
	Install/Replace Inlets & Catch Basins	450-06	Each	0
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	4,564
	Remove Drift	465-17	Each	0
Street Sweeping	Sweeper Cleaning	540-03	Miles	36
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	0
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	0
Bulk Materials Management	Material Hauling	630-03	Hours	81
Debris Management	Vegetative Debris Removal & Disposal	440-08	Cubic Yards	27
	Clearing Roadways Travel Lanes	440-19	Miles	1.30
	Disposal of Debris/Litter	630-09	Cubic Yards	0

Appendix B

After the Storm Brochure

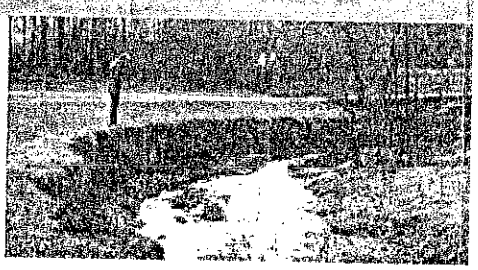
&

Understanding Water Brochure

What is stormwater runoff?

Stormwater runoff occurs when precipitation from rain or snowmelt flows over the ground. Impervious surfaces like driveways, sidewalks, and streets prevent stormwater from naturally soaking into the ground.

Why is stormwater runoff a problem?

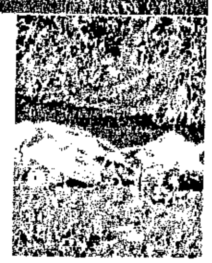


Stormwater can pick up debris, chemicals, dirt, and other pollutants and flow into a storm sewer system or directly to a lake, stream, river, wetland, or coastal water. Anything that enters a storm sewer system is discharged untreated into the waterbodies we use for swimming, fishing, and providing drinking water.

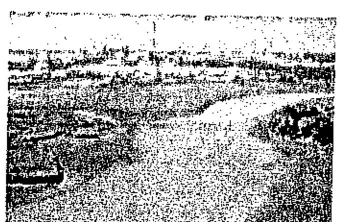
The effects of pollution

Polluted stormwater runoff can have many adverse effects on plants, fish, animals, and people.

- Sediment can cloud the water and make it difficult or impossible for aquatic plants to grow. Sediment also can destroy aquatic habitats.
- Excess nutrients can cause algae blooms. When algae die, they sink to the bottom and decompose in a process that removes oxygen from the water. Fish and other aquatic organisms can't exist in water with low dissolved oxygen levels.



- Bacteria and other pathogens can wash into swimming areas and create health hazards, often making beach closures necessary.
- Debris—plastic bags, six-pack rings, bottles, and cigarette butts—washed into waterbodies can choke, suffocate, or disable aquatic life like ducks, fish, turtles, and birds.
- Household hazardous wastes like insecticides, pesticides, paint, solvents, used motor oil, and other auto fluids can poison aquatic life. Land animals and people can become sick or die from eating diseased fish and shellfish or ingesting polluted water.



- Polluted stormwater often affects drinking water sources. This, in turn, can affect human health and increase drinking water treatment costs.

WHEN IT RAINS IT DRAINS

For more information contact:

Contact name Environmental Evaluation Unit
Contact agency LA DOTD
Address 5080 Florida Blvd
Address Baton Rouge, LA 70806
Phone number 225-248-4141

or visit
www.epa.gov/npdes/stormwater
www.epa.gov/nps

EPA

THE YEAR OF CLEAN WATER

After the Storm

A Citizen's Guide to Understanding Stormwater

WHEN IT RAINS IT DRAINS

Stormwater Pollution Solutions

Residential

Recycle or properly dispose of household products that contain chemicals, such as insecticides, pesticides, paint, solvents, and used motor oil and other auto fluids. Don't pour them onto the ground or into storm drains.

Auto care

Washing your car and degreasing auto parts at home can send detergents and other contaminants through the storm sewer system. Dumping automotive fluids into storm drains has the same result as dumping the materials directly into a waterbody.

- Use a commercial car wash that treats or recycles its wastewater, or wash your car on your yard so the water infiltrates into the ground.
- Repair leaks and dispose of used auto fluids and batteries at designated drop-off or recycling locations.

Lawn care

Excess fertilizers and pesticides applied to lawns and gardens wash off and pollute streams. In addition, yard clippings and leaves can wash into storm drains and contribute nutrients and organic matter to streams.

- Don't overwater your lawn. Consider using a soaker hose instead of a sprinkler.
- Use pesticides and fertilizers sparingly. When use is necessary, use these chemicals in the recommended amounts. Use organic mulch or safer pest control methods whenever possible.
- Compost or mulch yard waste. Don't leave it in the street or sweep it into storm drains or streams.
- Cover piles of dirt or mulch being used in landscaping projects.

Septic systems

Leaking and poorly maintained septic systems release nutrients and pathogens (bacteria and viruses) that can be picked up by stormwater and discharged into nearby waterbodies. Pathogens can cause public health problems and environmental concerns.

- Inspect your system every 3 years and pump your tank as necessary (every 3 to 5 years).
- Don't dispose of household hazardous waste in sinks or toilets.

Pet waste

Pet waste can be a major source of bacteria and excess nutrients in local waters.

- When walking your pet, remember to pick up the waste and dispose of it properly. Flushing pet waste is the best disposal method. Leaving pet waste on the ground increases public health risks by allowing harmful bacteria and nutrients to wash into the storm drain and eventually into local waterbodies.

Education is essential to changing people's behavior. Signs and markers near storm drains warn residents that pollutants entering the drains will be carried untreated into a local waterbody.

Residential landscaping

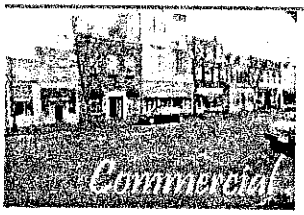
Permeable Pavement—Traditional concrete and asphalt don't allow water to soak into the ground. Instead these surfaces rely on storm drains to divert unwanted water. Permeable pavement systems allow rain and snowmelt to soak through, decreasing stormwater runoff.

Rain Barrels—You can collect rainwater from rooftops in mosquito-proof containers. The water can be used later on lawn or garden areas.

Rain Gardens and Grassy Swales—Specially designed areas planted with native plants can provide natural places for rainwater to collect and soak into the ground. Rain from rooftop areas or paved areas can be diverted into these areas rather than into storm drains.

Vegetated Filter Strips—Filter strips are areas of native grass or plants created along roadways or streams. They trap the pollutants stormwater picks up as it flows across driveways and streets.

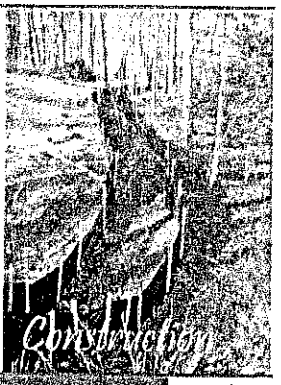
Commercial



Dirt, oil, and debris that collect in parking lots and paved areas can be washed into the storm sewer system and eventually enter local waterbodies.

- Sweep up litter and debris from sidewalks, driveways and parking lots, especially around storm drains.
- Cover grease storage and dumpsters and keep them clean to avoid leaks.
- Report any chemical spill to the local hazardous waste cleanup team. They'll know the best way to keep spills from harming the environment.

Construction



Erosion controls that aren't maintained can cause excessive amounts of sediment and debris to be carried into the stormwater system. Construction vehicles can leak fuel, oil, and other harmful fluids that can be picked up by stormwater and deposited into local waterbodies.

- Divert stormwater away from disturbed or exposed areas of the construction site.
- Install silt fences, vehicle mud removal areas, vegetative cover, and other sediment and erosion controls and properly maintain them, especially after rainstorms.
- Prevent soil erosion by minimizing disturbed areas during construction projects, and seed and mulch bare areas as soon as possible.

Agriculture

Lack of vegetation on streambanks can lead to erosion. Overgrazed pastures can also contribute excessive amounts of sediment to local waterbodies. Excess fertilizers and pesticides can poison aquatic animals and lead to destructive algae blooms. Livestock in streams can contaminate waterways with bacteria, making them unsafe for human contact.

- Keep livestock away from streambanks and provide them a water source away from waterbodies.
- Store and apply manure away from waterbodies and in accordance with a nutrient management plan.
- Vegetate riparian areas along waterways.
- Rotate animal grazing to prevent soil erosion in fields.
- Apply fertilizers and pesticides according to label instructions to save money and minimize pollution.

Automotive Facilities

Uncovered fueling stations allow spills to be washed into storm drains. Cars waiting to be repaired can leak fuel, oil, and other harmful fluids that can be picked up by stormwater.

- Clean up spills immediately and properly dispose of cleanup materials.
- Provide cover over fueling stations and design or retrofit facilities for spill containment.
- Properly maintain fleet vehicles to prevent oil, gas, and other discharges from being washed into local waterbodies.
- Install and maintain oil/water separators.

Improperly managed logging operations can result in erosion and sedimentation.

- Conduct preharvest planning to prevent erosion and lower costs.
- Use logging methods and equipment that minimize soil disturbance.
- Plan and design skid trails, yard areas, and truck access roads to minimize stream crossings and avoid disturbing the forest floor.
- Construct stream crossings so that they minimize erosion and physical changes to streams.
- Expedite revegetation of cleared areas.

Get Involved

Volunteers are encouraged to adopt sections of state or federal highways to keep clean. All supplies are provided by the department. Contact the LA DOTD's customer service to be connected with an Adopt-A Road coordinator in your area.

Call 1-877-4LA-DOTD to contact customer service.

You see someone sweeping yard waste into a storm drain, dumping debris in a vacant lot, or a storm water pipe or ditch discharging during dry weather. What should you do? Report it! These activities are not only harmful to the environment but illegal. Call customer service or report the incident online at www.dotd.la.gov/highways/construction/lab/ms4/home.asp?page=contact$

And finally, educate others of the effect of storm water pollution.

DOTD

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

FOR ADDITIONAL INFO CONTACT

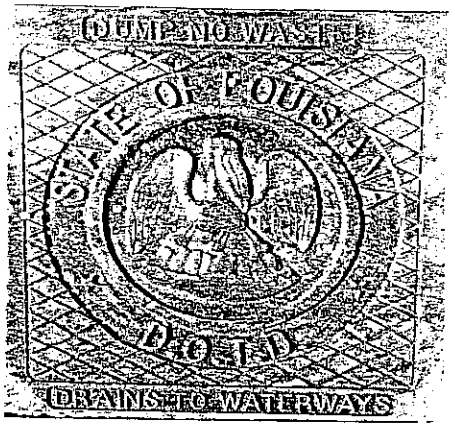
Louisiana Department of Transportation & Development's Materials and Testing Section

5080 Florida Blvd.
Baton Rouge, LA 70806
Phone: 225-248-4141

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Understanding Stormwater

Louisiana's on the move
DOTD builds the way



http://www.dotd.la.gov/highways/construction/lab/ms4/home.asp

So what exactly is stormwater runoff?

Runoff occurs when precipitation does not infiltrate into the ground. As precipitation travels across impervious surfaces numerous pollutants such as oil, sediment , bacteria and paper are accumulated by this runoff. The polluted runoff is then collected and transported via a storm sewer system and discharged into nearby surface waters.

And this is a problem because.....

Stormwater runoff is NOT TREATED! Unlike other process waters such as wastewater, stormwater runoff has no treatment process prior to discharge.

Pollution Prevention Tips

On the road.....

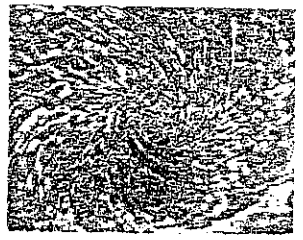
- Paper and cigarette butts are a public nuisance common to the road. Roadside litter is not only unsightly, but lead to drainage problems. Put trash in its place and properly discard it in a garbage can.
- Hitting the open road with your travel trailer in tow is a great way to see the country, however when the trip ends remember to dispose of sewage at an approved dumping site. Improperly discharged sewage contain excess nutrients, harmful bacteria and viruses which are carried into waterways.
- While taking your pet on a drive can be fun, you will eventually stop to let your dog "go." Just remember to scoop the poop! Pet waste should be bagged and properly discarded in the trash.
- Ensure that your vehicle is properly maintained. Leaks should be immediately repaired and all fluids recycled at designated locations.

While at home....

- Hazardous materials such as paint or petroleum products should never be poured into a storm drain or roadside ditch. Items such as these should be disposed of at area collection centers.
- Common household items are often found in stormwater discharges. Chemical yard treatments such as fertilizers and pesticides should be used sparingly and according to manufacturer's specifications.
- Leaves and grass clippings left in the street or discarded into storm drains is a major contributor to polluted runoff. Sweep and collect yard debris for curbside disposable or consider composting.

Salt vs. Fresh?

Both pool types can have a detrimental impact to area water bodies. Often homeowners drain their pools by discharging the water in a nearby storm drain. However, do not underestimate the impact draining your pool can have downstream. Elevated levels of chlorine or the introduction of salt water into a fresh water system can damage plant and wildlife. If draining because necessary, then ensure prior to discharge the concentration levels fall below normal to reduce the risk of impact.



Because when it rains, it drains!

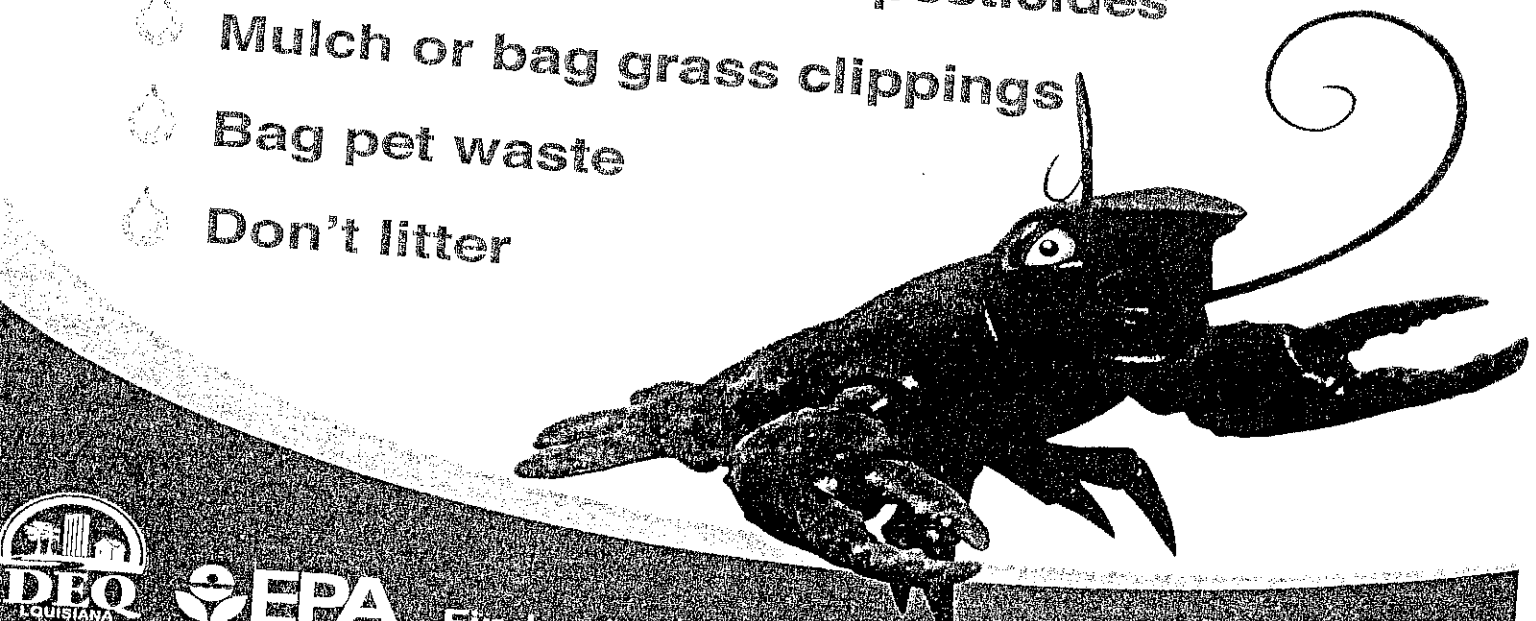
Appendix C

Make Changes, Be the Solution! Poster

MAKE CHANGES! BE THE SOLUTION!

Everything you blow, spray, pour or throw on the ground can get washed down the storm drain – polluting Louisiana's waters

- Recycle oil
- Use less fertilizer and pesticides
- Mulch or bag grass clippings
- Bag pet waste
- Don't litter



DEQ LOUISIANA EPA Find out more at: WWW.DEQ.LOUISIANA.GOV

Appendix D

LPB Contracts, Broadcast Schedule and LPB Article

UNDERWRITING AGREEMENT:
Louisiana Public Broadcasting
7733 Perkins Road, Baton Rouge, LA 70810-1199
(225) 767-4466
(225) 767-4421 (FAX)
Jeanne S. Smith, Underwriting Director
jsmith@lpb.org

Louisiana Department of Transportation & Development: FELPB general support during prime time 2018-2019 (Page 1 of 2)

Louisiana Dept. of Transportation and Development **Sponsoring Company Name:**	Dori Turner, Environmental Impact Specialist **Contact Name and Title:**
5080 Florida Boulevard **Address:**	Baton Rouge, LA 70806 **City, State and Zip:**
(225) 248-4178 **Phone Number:**	dori.turner@la.gov **Email:**

This document will serve to verify and specify the conditions relating to an agreement between the Foundation for Excellence in Louisiana Public Broadcasting (FELPB) and the Louisiana Department of Transportation & Development Materials and Testing Section for providing general support to programming broadcast on Louisiana Public Broadcasting, (LPB):

General-support announcements

Schedule timeframe: June 30, 2018-June 29, 2019

Promotional Considerations:

Louisiana Department of Transportation & Development Materials and Testing Section will receive the following promotional considerations:

- Twenty, 20, (:30 second) messages supporting DOTD's Storm Water Campaign. Messages will air Sunday through Saturday during prime-time and How-to programming, June 30, 2018 through June 29, 2019.
- Twenty, 20, (:30 second) BONUS messages supporting DOTD's Storm Water Campaign, also airing Sunday through Saturday during prime-time and How-to programming, June 30, 2018 through June 29, 2019.
- Messages should air, 3-4 per month, over the year-long schedule.
- One (1) "In Good Company" feature article in LPB Visions magazine (August 2018).
- Acknowledgement in the underwriter's section of Visions as a general support underwriter.
- Acknowledgement in the underwriter's section of LPB.org.
- Louisiana Department of Transportation & Development website will be linked to LPB.org.

Preemptions:

Due to LPB's commitment to serve the community, dates and times of programs, repeats and underwriter acknowledgments are subject to change or cancellation without notice. When reasonably possible, LPB will reschedule the underwritten program to include applicable underwriter credits.

Louisiana Department of Transportation & Development/FELPB Agreement 2018-2019 cont'd (Page 2 of 2)

Cancellation Option:

The underwriter has the option to cancel this agreement after a minimum of 90 days from the date of the first airing, by providing a minimum of 30 days prior written notice of cancellation. During the 30 day period, LPB may continue to air the credits and the underwriter will be obligated for the contract amounts through the date of termination.

Contract Amount / Payment:

The Louisiana Department of Transportation & Development Materials and Testing Section agrees to pay the sponsorship rate of $1,500 NET for sponsorship package listed on page one of this agreement. The sponsor agrees to remit invoice(s) within 30 days of invoiced date(s).

TOTAL AMOUNT: $1,500.00 NET-May 2019

Default:

If the underwriter fails to make any payment when due, FELPB may, in addition to other remedies, discontinue airing any or all credits.

No Warranties:

The underwriter is solely responsible for selecting the program(s) it wishes to underwrite, and FELPB makes no warranties, implied or express, regarding such program(s).

By the signatures below, the sponsor and FELPB agree to perform the mutual obligations as outlined above in accordance with all terms and conditions of this sponsorship agreement.

Effective Date: June 30, 2018

End Date: June 29, 2019

Sponsor approval by:

_____ Date: 6/19/18

Witness:

_____ Date: _____

Foundation for Excellence in LPB approval by:

_____ Date: 06-20-18

Witness:

_____ Date: 6-20-18

UNDERWRITING AGREEMENT:
Louisiana Public Broadcasting
7733 Perkins Road, Baton Rouge, LA 70810-1199
(225) 767-4466
(225) 767-4421 (FAX)
Jeanne S. Smith, Underwriting Director
jsmith@lpb.org

Louisiana Department of Transportation & Development: FELPB general support during prime time 2019-2020 (Page 1 of 2)

Louisiana Dept. of Transportation and Development — Dori Turner, Environmental Impact Specialist
Sponsoring Company Name: — **Contact Name and Title:**

5080 Florida Boulevard — Baton Rouge, LA 70806
Address: — **City, State and Zip:**

(225) 248-4178 — dori.turner@la.gov
Phone Number: — **Email:**

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- Louisiana Department of Transportation & Development website will be linked to LPB.org.

Preemptions:

Due to LPB's commitment to serve the community, dates and times of programs, repeats and underwriter acknowledgments are subject to change or cancellation without notice. When reasonably possible, LPB will reschedule the underwritten program to include applicable underwriter credits.

Louisiana Department of Transportation & Development/FELPB Agreement 2019-2020 cont'd (Page 2 of 2)

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TOTAL AMOUNT: $1,500.00 NET-May 2020

Default:

If the underwriter fails to make any payment when due, FELPB may, in addition to other remedies, discontinue airing any or all credits.

No Warranties:

The underwriter is solely responsible for selecting the program(s) it wishes to underwrite, and FELPB makes no warranties, implied or express, regarding such program(s).

By the signatures below, the sponsor and FELPB agree to perform the mutual obligations as outlined above in accordance with all terms and conditions of this sponsorship agreement.

Effective Date: June 30, 2019

End Date: June 29, 2020

Sponsor approval by:

_____ **Date:** 6/19/19

Witness:

_____ **Date:** _____

Foundation for Excellence in LPB approval by:

_____ **Date:** 07-16-19

Witness:

_____ **Date:** 7-15-19

Video Source / Audio Source	CART Tape/Cut	Type	Title / Sub-Title	Length	Available From/To	DAYS	Notes
LGS12-15		GS	GSA: DOTD-LA DEPT OF TRANSP & DEV	00:30:04	07/16/18	SMTWTFS	LUC DV 2006-2007
LGS12-15	0012/15		DOTD MATERIALS & TESTING SECTION		06/29/19	YYYYYYY	UPDATED 6/30/201

Fri	01/04/2019	at 19:59:29	for 00:00:30:04	LPB
Sat	01/05/2019	at 14:59:29	for 00:00:30:04	LPB
Sun	01/06/2019	at 18:59:29	for 00:00:30:04	LPB
Sat	01/12/2019	at 10:29:29	for 00:00:30:04	LPB
Wed	01/16/2019	at 19:59:29	for 00:00:30:04	LPB
Sat	01/19/2019	at 13:29:29	for 00:00:30:04	LPB
Sun	01/20/2019	at 18:59:29	for 00:00:30:04	LPB
Sat	01/26/2019	at 12:59:29	for 00:00:30:04	LPB
Mon	01/28/2019	at 21:59:29	for 00:00:30:04	LPB
Sat	02/02/2019	at 15:29:29	for 00:00:30:04	LPB
Thu	02/07/2019	at 21:59:29	for 00:00:30:04	LPB
Sat	02/09/2019	at 10:29:29	for 00:00:30:04	LPB
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Sat	02/16/2019	at 13:29:29	for 00:00:30:04	LPB
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Wed	05/22/2019	at 21:59:29	for 00:00:30:04	LPB

Video Source / Audio Source	CART Tape/Cut	Type	Title / Sub-Title	Length	Available From/To	DAYS	Notes
LGS12-15		GS	GSA: DOTD-LA DEPT OF TRANSP & DEV	00:30:04	07/16/18	SMTWTFS	LUC DV 2006-2007
LGS12-15	0012/15		DOTD MATERIALS & TESTING SECTION		06/29/19	YYYYYYY	UPDATED 6/30/201

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Sat	06/22/2019	at 10:59:29	for 00:00:30:04	LPB
Thu	06/27/2019	at 20:59:29	for 00:00:30:04	LPB

This item appeared 49 times between 01/01/2019 and 06/27/2019.

Report date: 01/14/2020
Report time: 15:37:22

LPB Digital

From: 07/01/2019 To: 12/31/2019

Log Performance Report
Page: 1

Video Source / Audio Source	CART / Tape/Cut	Type	Title / Sub-Title	Length	Available From/To	DAYS	Notes
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LUC11-124	0011/**	UC	UC: DOTD: LA DEPT OF TRANSP & DEV	00:31:02	08/01/19 06/29/20	SMTWTFS YYYYYYY	

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Sat	08/17/2019	at 08:59:28	for 00:00:31:02	LPB
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Mon	09/09/2019	at 19:59:28	for 00:00:31:02	LPB
Sat	09/14/2019	at 12:59:28	for 00:00:31:02	LPB
Sat	09/21/2019	at 12:59:28	for 00:00:31:02	LPB
Sat	09/21/2019	at 21:59:28	for 00:00:31:02	LPB
Fri	09/27/2019	at 21:59:28	for 00:00:31:02	LPB
Sat	09/28/2019	at 12:29:28	for 00:00:31:02	LPB
Mon	09/30/2019	at 19:59:28	for 00:00:31:02	LPB
Sat	10/05/2019	at 10:29:28	for 00:00:31:02	LPB
Sun	10/06/2019	at 18:59:28	for 00:00:31:02	LPB
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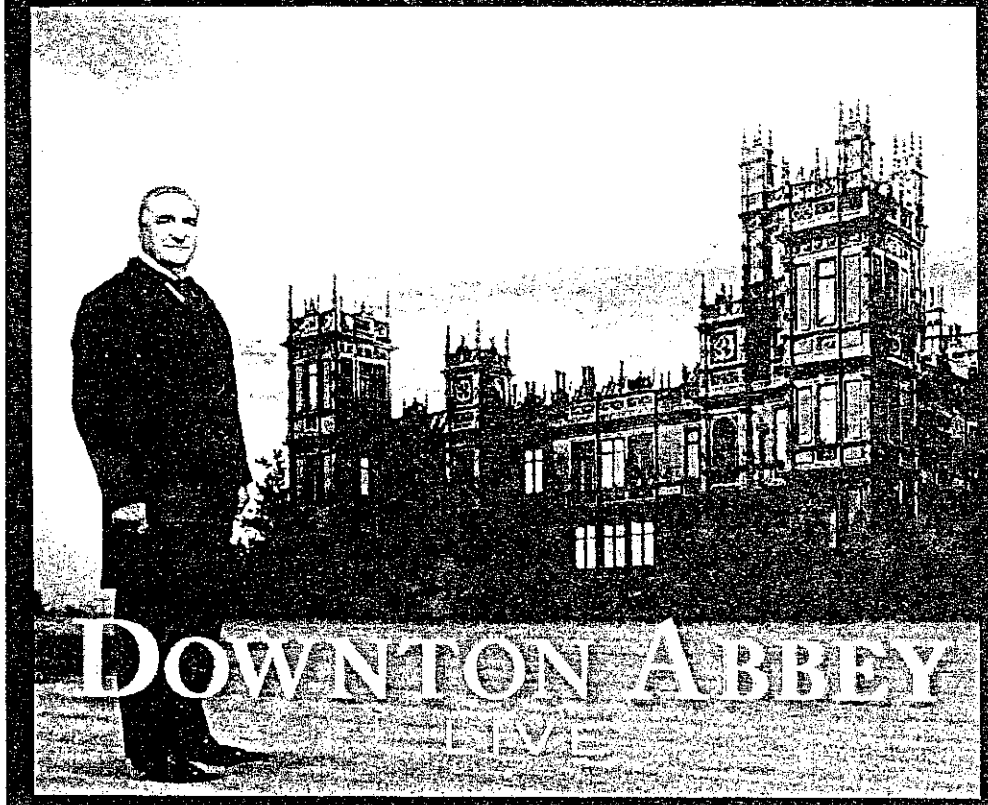
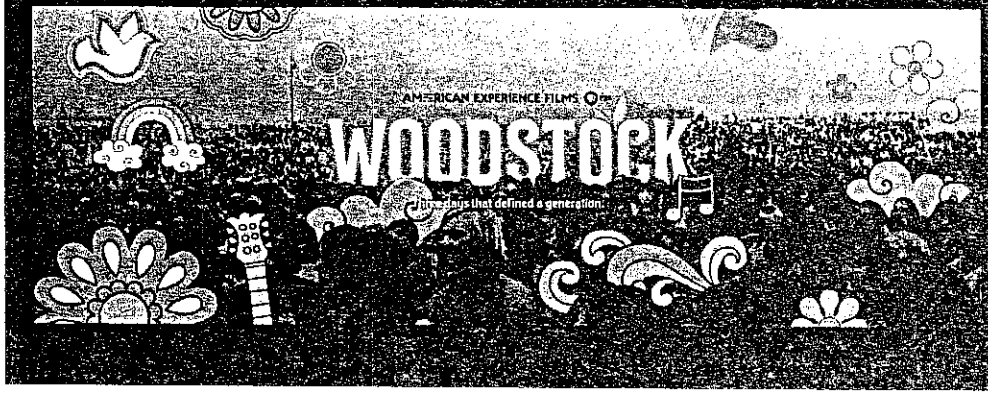
VISIONS

FOR FRIENDS OF LPB • AUGUST 2019
VOLUME 43, ISSUE 8





IN GOOD COMPANY

MINIMIZING THE PROBLEM, ONE POLLUTANT AT A TIME

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Stormwater pollutants are an ongoing problem plaguing our waterways and natural environment. The dictionary defines a pollutant as a substance, especially a waste material that contaminates air, water, or soil. Stormwater runoff introduces these pollutants into our systems. In a perfect world, the solution could be eliminating all pollutants; but in the real world that is impossible. For that reason, more emphasis is placed on reducing and minimizing the quantity of pollutants entering our waterways.

A common source of water pollution is human activities, or things we do every day. In many instances, people are unaware that what they are doing can pollute the water. So how can the community help? Target a pollutant! Common pollutants are trash, debris, detergents, and chemicals. All of these items are frequently used and upon entering into our waterways can create a negative impact. It is important to become educated about the proper use and disposal of detergents and chemicals, as well as taking the initiative to inform others whenever the opportunity presents itself. If you observe someone doing something that has the potential to contaminate or pollute stormwater, bring it to his or her attention and suggest an effective solution.

The Louisiana Department of Transportation and Development has a public program in place that specifically targets litter called Adopt-a-Road.

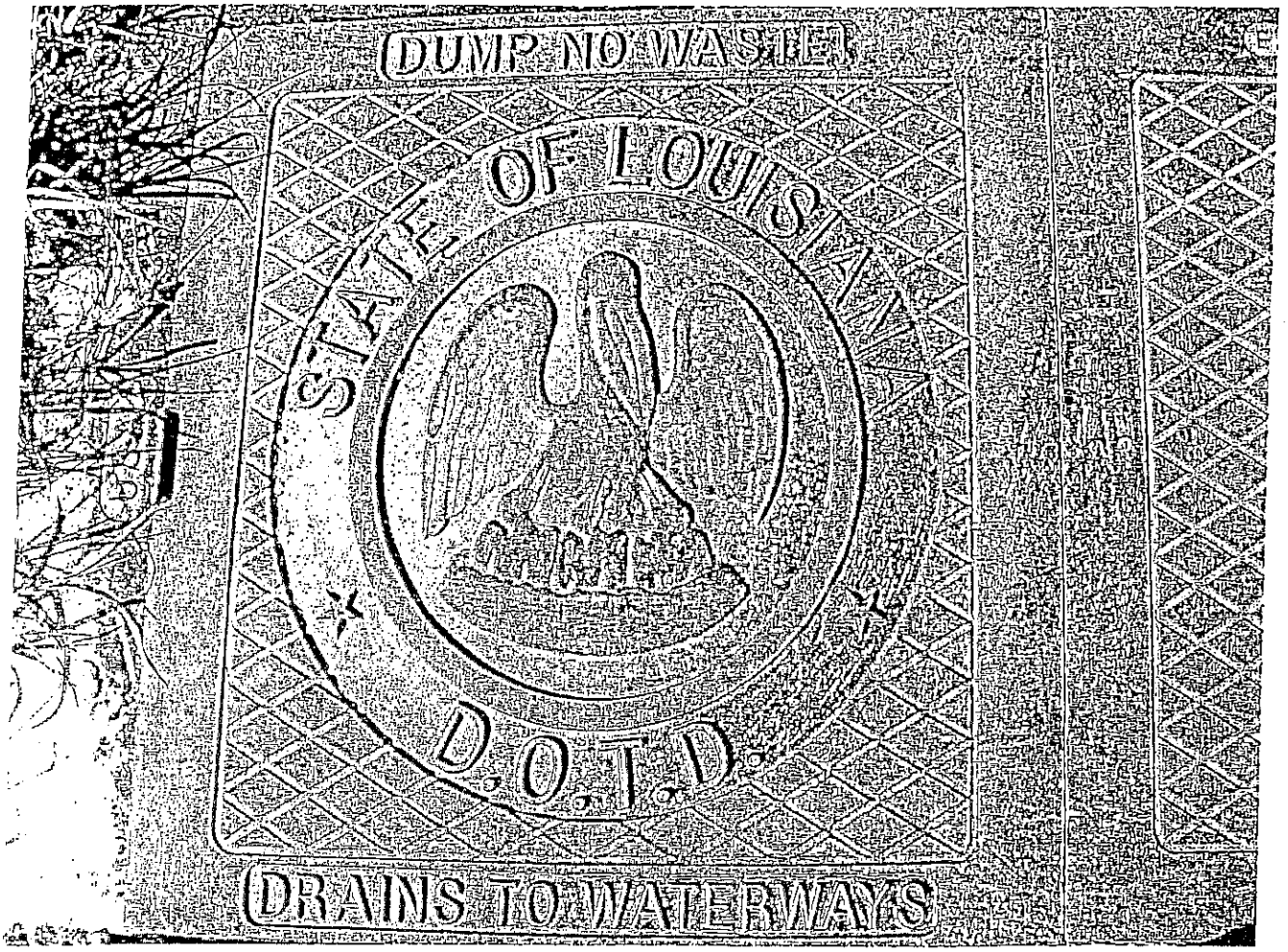
Volunteers adopt segments of state and federal routes to remove litter, and debris from the roadside. For more information about participating in the Adopt-a-Road program, visit **www.dotd.la.gov.**

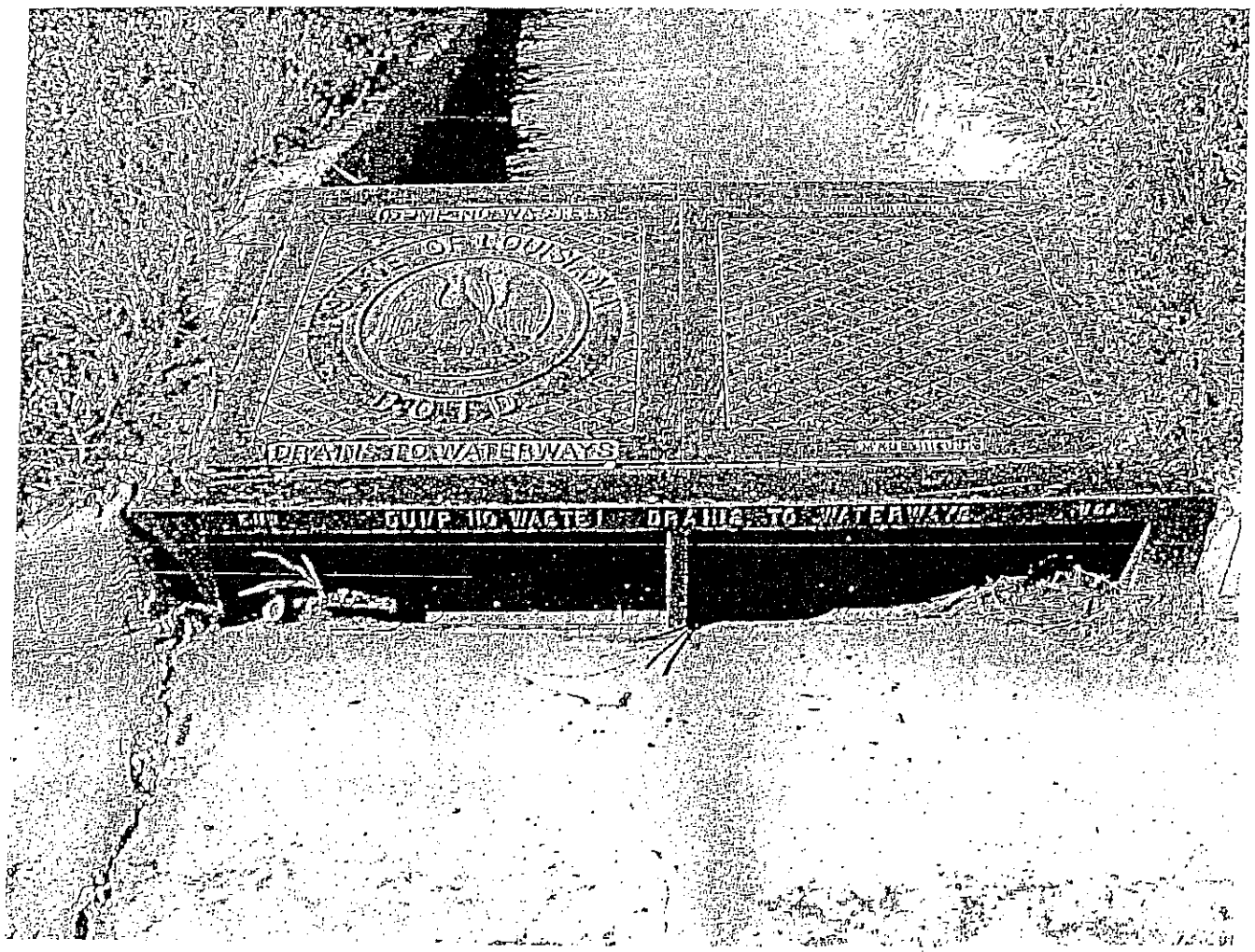
MEETINGS

LEPA: FULL BOARD, THURSDAY, AUGUST 8 AT NOON
FRIENDS: TUESDAY, AUGUST 6 AT 11:30AM

Appendix E

Catch Basin Cover Photograph


DUMP NO WASTE
STATE OF LOUISIANA
D.O.T.D.
DRAINS TO WATERWAYS


DRAINS TO WATERWAYS
DUMP NO WASTE

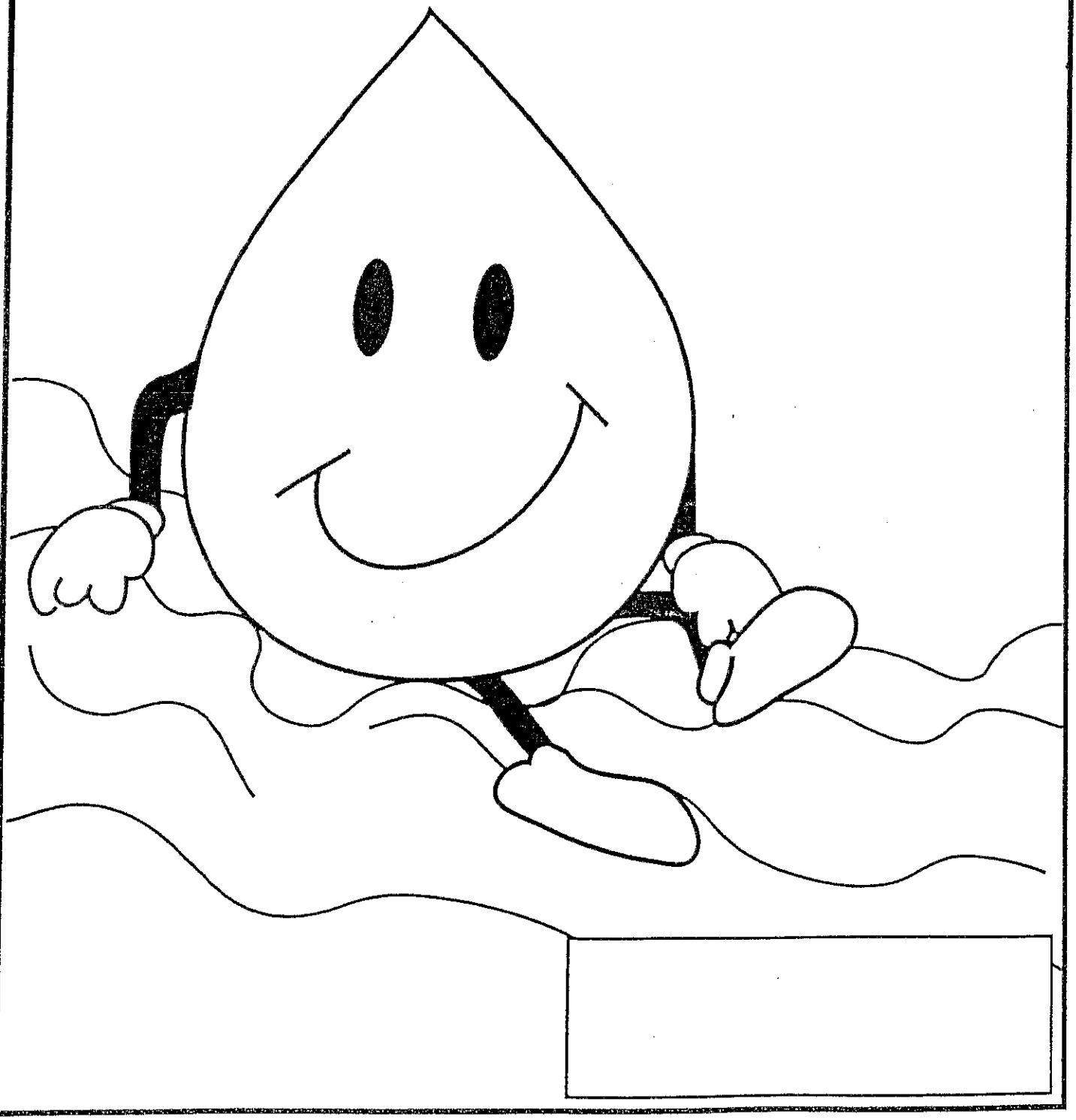
Appendix F

Educational Materials Packets

ACTIVITY BOOKLET

Be a Solution to Water Pollution

ACTIVITY BOOK

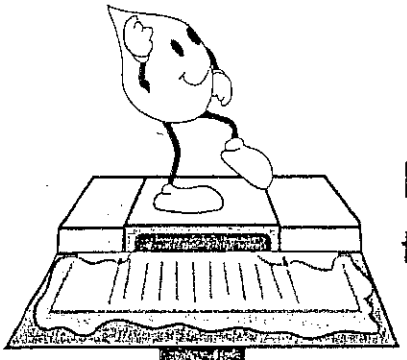


Have you ever walked next to a stream and seen trash floating in the water? Do you know how it gets there? Every time it rains, the water runs off the land and picks up pollutants such as dirt, oil, pet waste, litter, trash, pesticides and fertilizers. This polluted water flows into street drains and ditches that eventually drain to waterways. Never dump anything that you would not want to drink or swim in on the ground, in the street or down a storm drain. It will go into a river, lake or stream.

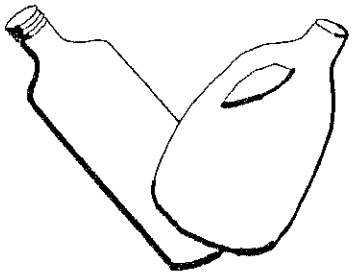
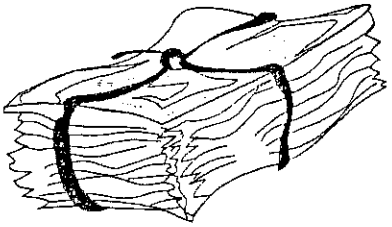
Tell your friends and family how they can...

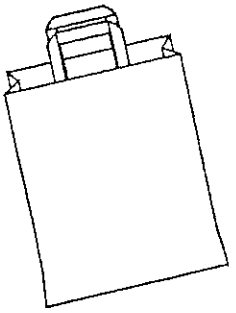
"Be a Solution to Water Pollution"

Waterdrops go through an amazing journey to get to streams and creeks.



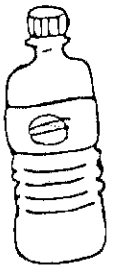
Please help this raindrop to find his way home through the drain and into the nearest river.

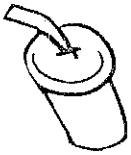


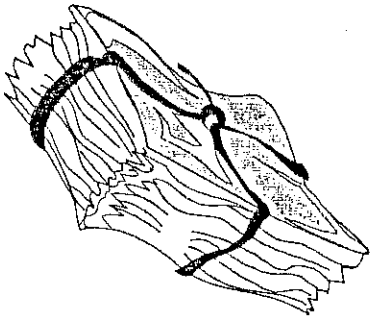
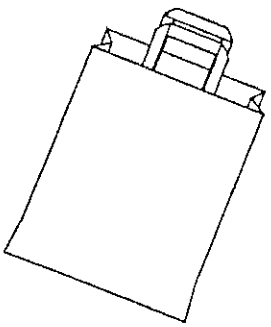
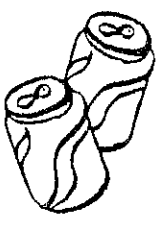
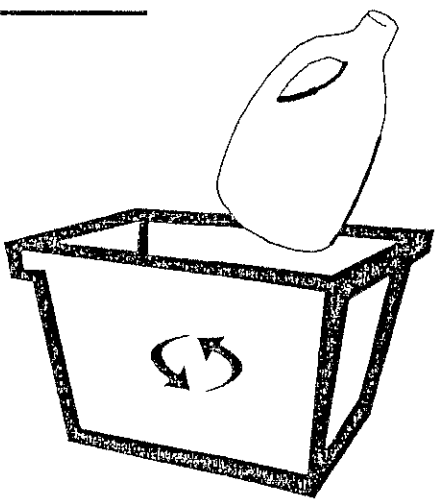

We can "Be a Solution to Water Pollution" by recycling cans, bottles, milk jugs, plastic bags and newspapers at home or in school.

Below is a list of scrambled words, which stands for items that can be recycled.



1. wspeprane _____
2. lsgas _____
3. ttlesob _____
4. slaptic _____
5. likm sugj _____
6. ulamniunm acns _____

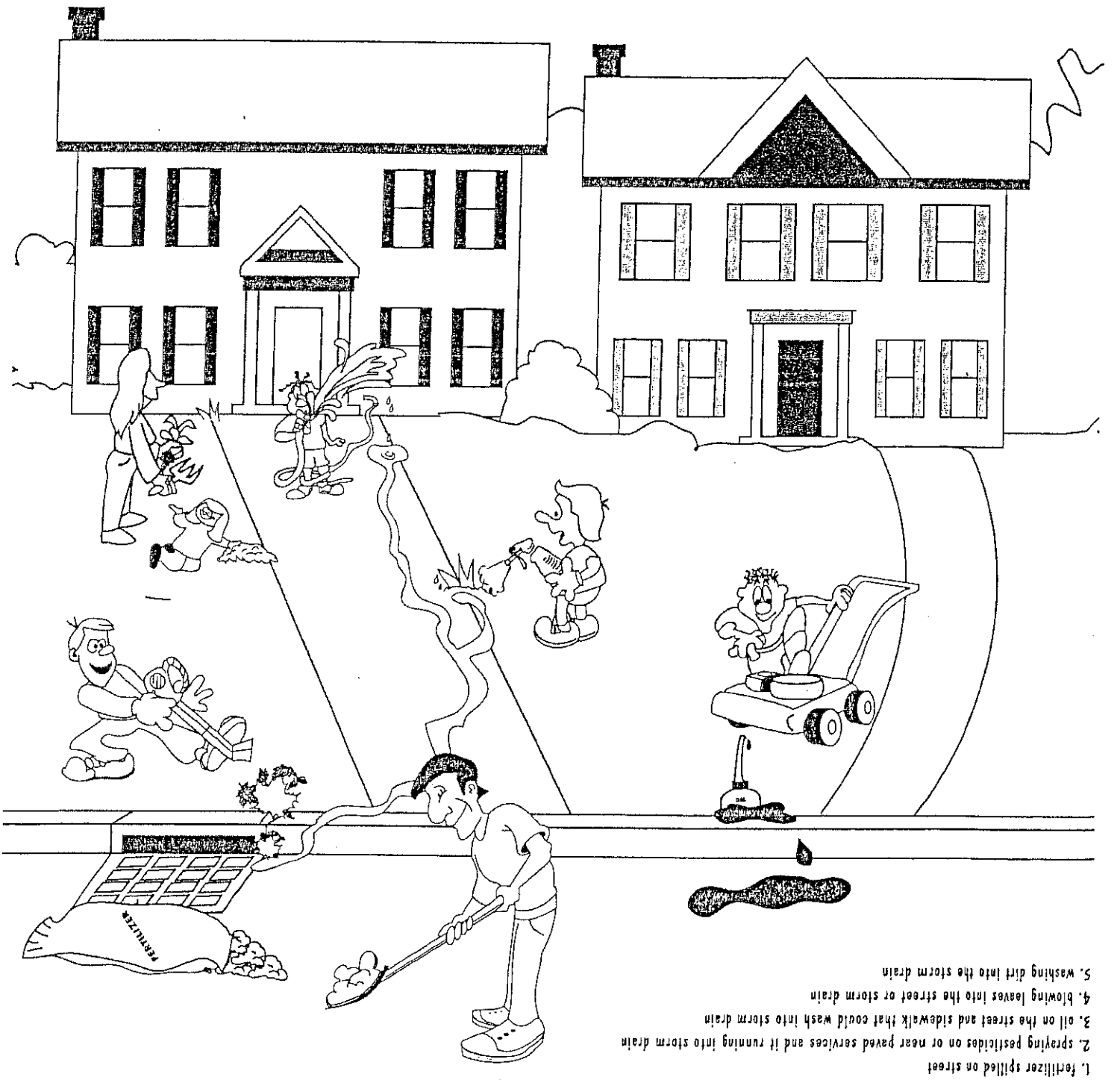


Answers: 1. newspaper, 2. glass, 3. bottles, 4. plastic, 5. milk jugs, 6. aluminum cans

Working in the garden or on a lawn is a fun activity to do with grown-ups. When helping to clean a yard, remember not to dump anything down a storm drain or in the street. Can you find what is wrong with this picture?

Circle the mistakes that the people in this drawing are making.

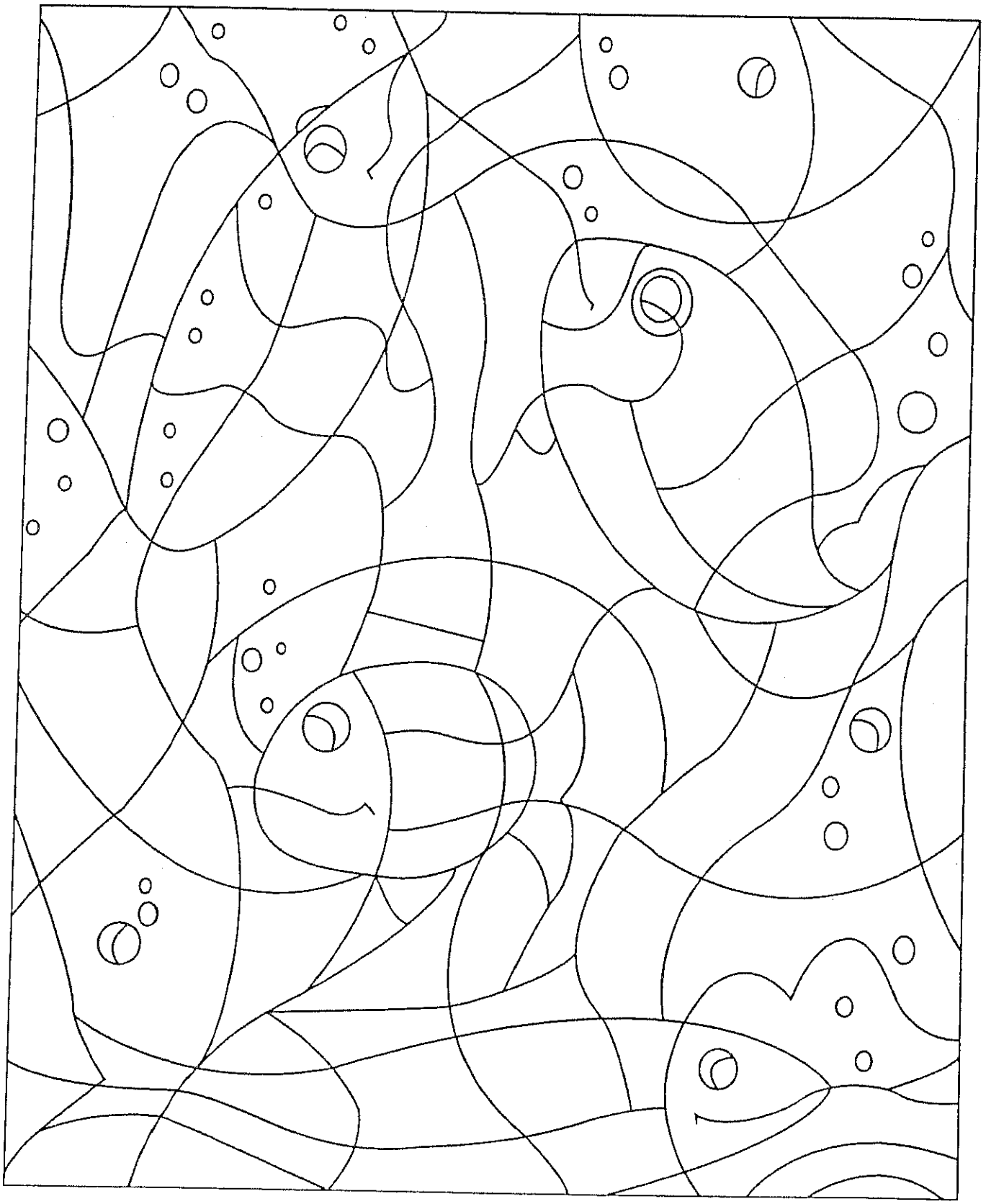


Answers:
1. fertilizer spilled on street
2. spraying pesticides on or near paved services and it running into storm drain
3. oil on the street and sidewalk that could wash into storm drain
4. blowing leaves into the street or storm drain
5. washing dirt into the storm drain

It is important to cleanup after your dog. Every time it rains, "poop" is collected by rainwater and dumped into a nearby storm drain or into a river, lake or stream. Carry a plastic or paper bag with you to pick-up after dogs and throw it in the trash.

Fish and other aquatic life rely on clean water. Plastic bags, oil, other chemicals and other pollutants cause harm to fish.

Find the fish and color them in.



Can you find all of the things in the creek that do not belong?

Good job! Ask your parent, teacher or troup leader to help you cut out your badge.

LOUISIANA DEPARTMENT OF
TRANSPORTATION & DEVELOPMENT

For additional information please visit our website at

http://www.dotd.la.gov/highways/construction/lab/ms4/home.asp

or contact

Louisiana Department of Transportation & Development

Materials and Testing Section

5080 Florida Blvd.

Baton Rouge, LA 70806

Phone: 225-248-4141

You too can help! Please visit

DOTD Adopt-A-Road Program:
http://www.dotd.la.gov/programs_grants/adopt/home.aspx

Keep Louisiana Beautiful:
http://keeplouisianabeautiful.org/

The Be a Solution to Water Pollution Activity Book was reproduced with permission from the

Clean Water Campaign

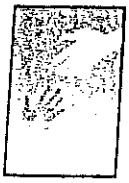
40 Courtland Street, NE

Atlanta, GA 30303

Email: info@cleanwatercampaign.com

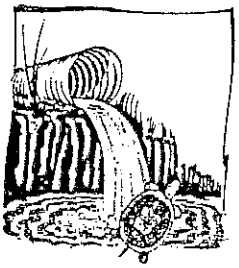
Website: http://www.cleanwatercampaign.com/html/index.htm

STICKERS



GIVE WATER A HAND

DIRT IN THE DRAIN

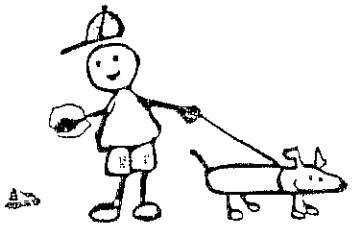


TURTLES COMPLAIN

Wave of the future!

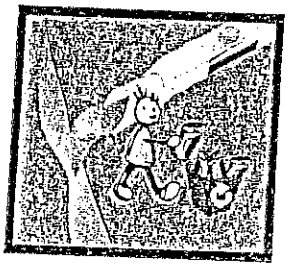
Will We Swim In It?

Clean Water



I Can Help!

MAKE A SPLASH

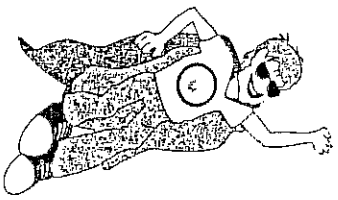


CLEAN UP YOUR TRASH!

WHEN IT RAINS

Muck! Yuck!

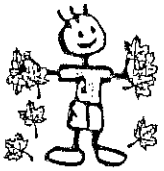
Sad Duck



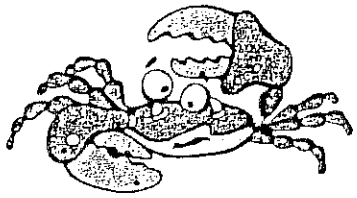
I'm a

CLEAN WATER ACTION HERO

Leaves don't belong in the stormdrain

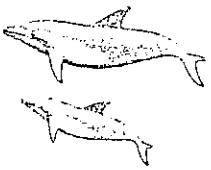


Junk from the Gutter



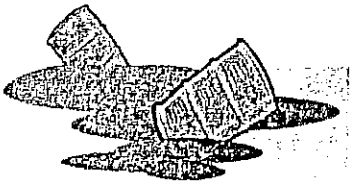
Makes us Sputter

Please Don't Pour



That's Our Front Door

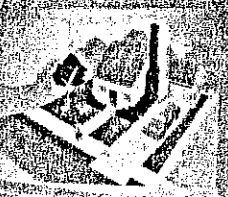
Oil & Water

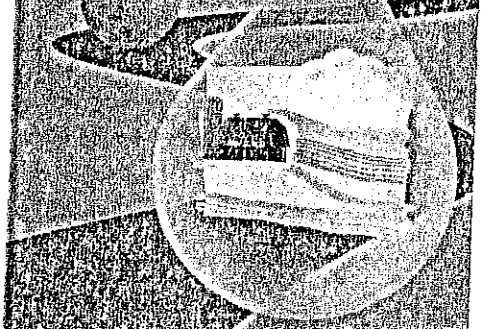


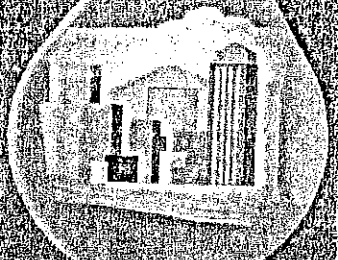
Please Don't Mix!

BOOKMARK

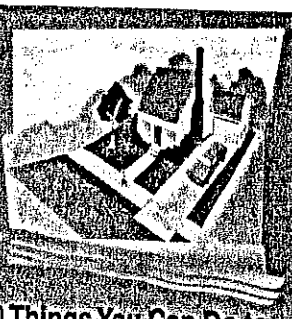
Clean Water







Everybody's Business!



10 Things You Can Do to Prevent Stormwater Runoff Pollution

- Use fertilizers sparingly and sweep up driveways, sidewalks, and gutters.
- Never dump anything down storm drains or in streams.
- Vegetate bare spots in your yard.
- Compost your yard waste.
- Use least-toxic pesticides, follow labels, and learn how to prevent pest problems.
- Direct downspouts away from paved surfaces; consider a rain garden to capture runoff.
- Take your car to the car wash instead of washing it in the driveway.
- Check your car for leaks and recycle your motor oil.
- Pick up after your pet.
- Have your septic tank pumped and system inspected regularly.

EPA United States Environmental Protection Agency

For more information, visit www.epa.gov/nps or www.epa.gov/npdes/stormwater

Appendix G

Public Records Request Form

Louisiana Department of Transportation and Development
PUBLIC RECORDS REQUEST FORM

http://www.dotd.la.gov

Date:___/___/___

STEP 1: **COMPLETE** all information in the fields provided. **Please TYPE** or **PRINT**. If you have questions, please call the Customer Information Line, at (225) 242-4609.

STEP 2: **SUBMIT** completed form by either U.S. First Class Mail to DOTD Custodian of Records, HQ – EW 3rd Floor, P.O. BOX 94245, Baton Rouge, LA 70804-9245, by fax to (225) 242-4690 or by emailing your request to: dotdpublicrecords@la.gov. **DO NOT ATTACH PAYMENT WITH THIS FORM.**

STEP 3: **WAIT** to receive a notice of estimated costs. Once received, send payment (Check or money order ONLY). Copies will be mailed upon receipt of payment or copies can be picked-up with payment. If 10 (ten) working days pass after notice is sent and payment is not received, it will be necessary to initiate a new request.

NAME: _____

COMPANY/FIRM: _____

MAILING ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

TELEPHONE NO.: (____) _____ - _____ FX.: (____) _____ - _____

EMAIL ADDRESS: _____

ROUTE/HWY (No street names): _____

PROJECT- LEGACY- R/O/W NO.: _____

DOTD CONTACT NAME: _____

Payment Method & Authorization

CHECK OR MONEY ORDER ONLY

Duplication Fees

Regular rate:	$0.25 per page (8½X11 & 8½X14)
Spec Sheets:	$0.50 per page (11X17)
Plan sheets:	$1.10 per page (24X36)
CDs or Disks:	$5 per disk + $25 per Hr. data processing fee

***Research may require additional fees**

Requestor Information (Please Type or Print)

To expedite your request, be as specific as possible. Attach additional pages to the form as necessary. Include street address of the facility, the document dates, and other details about the type of record of interest to you. Official R/O/W maps are located at the Parish District Court. ** Due to the large volume of some state project records, it may be necessary for the custodian to take additional time to accumulate the info from all sections. In this case, it is required that the requestor review the records to be duplicated .

Appendix H

MS4 Outfall Survey & Illicit Discharge Visual Screening Form

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

Illicit Discharge Visual Screening

Date: _____ Investigator: _____

Municipality: _____ Outfall ID: _____

Location: _____

Discharge at time of inspection: ☐Yes ☐No Photo taken: ☐Yes ☐No Photo #: _____

If YES, complete section A. If NO, skip section A and complete section B.

Section A-Discharge Present

Odor	☐Yes ☐No	
Foam	☐Yes ☐No	
Color	☐Yes ☐No	
Sheen	☐Yes ☐No	
Turbid	☐Yes ☐No	
Floatables	☐Yes ☐No	
Vegetation	☐Yes ☐No	
Smoke/Vapor	☐Yes ☐No	

Source of Illicit Discharge: _____

Address: _____

Section B-No Discharge Present

Is there any evidence of previous illicit discharge? ☐Yes ☐No

If YES, please describe below.

Potential Source of Illicit Discharge: _____

Address: _____

Section C

Comments

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: _____ Investigator: _____

Parish: _____ Municipality: _____

Route: _____

FIELD DATA

Outfall ID: _____

Location/Address: _____

_____

Latitude: _____ Longitude: _____

Receiving Water: _____ Impaired: ☐Yes ☐No

Land Use:

☐Industrial ☐Residential ☐Commercial ☐Open Space ☐Other: _____

OUTFALL DESCRIPTION

Pipe		Ditch	
Material Type		Material Type	
Pipe Height		Depth	
Pipe Width		Width	
NOTES			

Photo: ☐Yes ☐No Photo number: _____

Appendix I

Illicit Discharge Detection and Elimination Training Form, Employee Quiz & Wastewater Recertification Agenda

IDDE
a grate concern

Acknowledgment of Training

(This top section should be filled in by the trainer)

Signature(s) below are acknowledgment that on (date)_____,
these individuals participated in a training session at the:

Location Name: _____

Address: _____

Given by: (trainer's name) _____

(title) _____

This training session presented information on illicit discharge detection and elimination. During this session, the individuals listed below viewed the training video:

IDDE: a grate concern

The participants' signatures below affirm they were given adequate time to ask questions about their particular job activities and how they could best conduct these activities.

Please read the above paragraph before signing below.

PRINT NAME HERE	SIGNATURE HERE

IDDE
a grate concern

Employee Quiz

Name _____

Dept. _____ Date _____

The following questions all have multiple choice answers. Please circle the best answer for each question.

1. Pure stormwater run-off...
   a. is cloudy.
   b. is foamy.
   c. is clear and bright.
   d. has a rainbow sheen.
   e. all of the above

2. What information about a suspected illicit discharge would not be useful to collect and report?
   a. weather conditions
   b. date and time
   c. location
   d. description of the discharge

3. How long after the last significant rainfall should flow in a stormwater outfall make you suspicious?
   a. 1 hour
   b. 8 hours
   c. 1 day
   d. 2-3 days

4. Municipal separate storm sewer systems are designed to perform only the following function:
   a. clean-up stormwater run-off
   b. control and divert stormwater run-off
   c. treat stormwater run-off
   d. treat sanitary wastes

5. Which of the following materials are common illicit discharges?
   a. pet wastes
   b. grass clippings
   c. paint wastes
   d. trash
   e. all of the above

6. Which of the following materials should never be disposed in a non-leak tight outdoor dumpster or trash can?
   a. paper and plastic
   b. any liquids
   c. floatables
   d. broken concrete

7. Which of the following would be suspicious if observed at a stormwater outfall?
   a. vapors or fumes
   b. dead or dying vegetation
   c. discolored water
   d. all of the above

8. What does a 'rainbow sheen' on stormwater indicate?
   a. a recent rain storm
   b. waste paint
   c. gasoline
   d. sewage contamination

9. Which of the following types of operations can be a source of illicit discharges?
   a. private homes
   b. industrial facilities
   c. restaurants
   d. municipal facilities
   e. all of the above

10. A stained storm drain inlet is probably a sign of...
   a. recent MS4 maintenance work.
   b. a marking to indicate it needs repair.
   c. past illicit discharges.
   d. dye testing.

11. Everything that enters an MS4 eventually winds up in...
   a. a sanitary sewer treatment works.
   b. an underground aquifer.
   c. a drinking water treatment plant.
   d. a stream, river, lake or bay.

12. Which of the following are allowed in municipal separate storm sewer systems (MS4s)?
   a. rainwater run-off
   b. sanitary wastes from hospitals and long-term care facilities
   c. milk
   d. floor mat rinse water

13. What is the most likely illicit discharge from a construction site?
   a. silt and sediments
   b. waste oil
   c. floatables
   d. pet wastes
   e. waste pesticides

14. A suspected illicit discharge from which of the following types of operations would not need to be reported?
   a. apartment complex
   b. retail shopping center
   c. service station
   d. public park
   e. report all of them

15. What could cause a strong odor at a stormwater outfall?
   a. sanitary sewage
   b. garbage
   c. gasoline
   d. any of the above

Wastewater Recertification

Topics for Discussion
Thursday, August 22, 2019

Topic	Time
Introduction, Agenda *Mr. Joubert Harris*	8:00 - 8:15 a.m.
Program Update *Ms. Janaye Tate*	8:15 - 8:30 a.m.
High Risk Bloodborne Pathogens Exposure Control Plan *Mr. Nicholas Larks*	8:30 - 9:15 a.m.
Wastewater Lab Techniques *Ms. Kenya Lewis*	9:15 - 10:00 a.m.
Stormwater Video *Stormwater Pollution & Green Infrastructure Solutions*	10:00 - 10:30 a.m.
Cleaning Up A Chemical Spill *Ms. Abby Thibodeaux*	10:30 - 11:15 a.m.
Water Video *Maryland Drinking Water: From Source to Tap*	11:15 - 12:00 p.m.
Lunch Break	***12:00 - 1:00 p.m.***
2018 Municipal Separate Storm Sewer System Report *Ms. Dori Turner*	1:00 - 1:45 p.m.
Illict Discharges *Ms. Nikita Simon*	1:45 - 2:30 p.m.
Wastewater Video *Overview of Septic Systems*	2:30 - 3:00 p.m.
Hazard Mitigation, Grant Funding, and Flood Mitigation *Ms. Kellie McGaha, Assistant Director EBR MOHSEP* *Mr. Harry St. Pierre, Emergency Preparedness Coordinator EBR MOHSEP*	3:00 - 3:30 p.m.
StormWater Master Plan *Mr. Fred Raiford, Director of Transportation and Drainage*	3:30 - 4:00 p.m.
Health Effects Associated With Wastewater Treatment, Disposal, and Reuse *Mr. Mark Wallace*	4:00 - 4:30 p.m.
Quiz	4:30 - 4:45 p.m.
Recap, Closing Remarks	4:45 - 5:00 p.m.

Appendix J

Construction Inspection Forms

&

Construction Stormwater Field Guide

Louisiana Department of Transportation and Development
Storm water Construction Site Inspection Report

General Information			
Project Name			
Permit Number		Location	
Date of Inspection		Start/End Time	
Inspector's Name			
Inspector's Title			
Inspector's Contact Information			
Describe present phase of construction			
Type of Inspection ❑ Regular ❑ Pre-storm event ❑ During storm event ❑ Post-storm event ❑ Other			
Weather at time of inspection?			

Records			
NOI available, if applicable? ❑Yes ❑No	Permit available? ❑Yes ❑No	Current SWPPP? ❑Yes ❑No	Current site map? ❑Yes ❑No
Are the self inspections current? ❑Yes ❑No	Date of last self inspection:		
Corrective action log available? ❑Yes ❑No			

Site Specific BMPs				
	BMP Description	BMP Installed & Operating Properly?	Corrective Action Needed	Proposed date for corrective action & responsible person
1		❑Yes ❑No		
2		❑Yes ❑No		
3		❑Yes ❑No		
4		❑Yes ❑No		
5		❑Yes ❑No		
6		❑Yes ❑No		
7		❑Yes ❑No		
8		❑Yes ❑No		
9		❑Yes ❑No		
10		❑Yes ❑No		
11		❑Yes ❑No		
12		❑Yes ❑No		
13		❑Yes ❑No		

Overall Site Features					
	BMP/activity	Implemented?	Maintained?	Corrective action Needed	Proposed date for corrective action & responsible person
1	Are all slopes & disturbed				

	areas not actively being worked properly stabilized?	❑Yes ❑No	❑Yes ❑No		
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	❑Yes ❑No	❑Yes ❑No		
3	Are perimeter controls & sediment barriers adequately installed and maintained?	❑Yes ❑No	❑Yes ❑No		
4	Are discharge points and receiving waters free of sediment deposits?	❑Yes ❑No	❑Yes ❑No		
5	Are storm drain inlets properly protected?	❑Yes ❑No	❑Yes ❑No		
6	Is there evidence of sediment being tracked into the street?	❑Yes ❑No	❑Yes ❑No		
7	Is trash/litter from work areas collected and placed in covered dumpsters?	❑Yes ❑No	❑Yes ❑No		
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	❑Yes ❑No	❑Yes ❑No		
9	Are vehicle & equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	❑Yes ❑No	❑Yes ❑No		
10	Are materials that are potential stormwater contaminants stored inside or under cover?	❑Yes ❑No	❑Yes ❑No		
11	Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	❑Yes ❑No	❑Yes ❑No		
12	Are there any discharges at time of inspection?	❑Yes ❑No	❑Yes ❑No		
13		❑Yes ❑No	❑Yes ❑No		
14		❑Yes ❑No	❑Yes ❑No		
15		❑Yes ❑No	❑Yes ❑No		

Notes

Inspector Certification	
Print Name:	
Signature:	
Date:	

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
STORM WATER POLLUTION PREVENTION PLAN
Inspection and Maintenance Report Form

Erosion Control Measures

To be completed every 7 days and within 24 hours of a rainfall event of 0.5 inches or more

nspector _____ Date _____

S.P. No. _____ FAP No. _____

Contractor _____ Route _____

Days Since Last Rainfall _____ Amount of Last Rainfall _____ inches

Station No.	Lt./Rt.	Type	Does Silt Need Removal ?	Is Erosion Item Stable ?	Is There Evidence Of Washout or Over-Topping ?	Condition & Comments on Effectiveness

intenance required for Erosion Control Measures:

e performed by: _____ On or Before: _____

s of Measures:

lt Fence
ay/Straw Bales
y Check Dam
E - Sediment Basin
F - Slope Drain
G- TemporarySeeding
I - Matting
J - Other

Table of Contents

Appendix K

De-icing/Anti-icing Agents-Statewide

MAINTENANCE UNIT MONTHLY USAGE:
AGGREGATE, LIGHTWEIGHT
(YD3 - Cubic Yard)

2019												
Location Conducting Operations	January	February	March	April	May	June	July	August	September	October	November	December
D03/G510 - MAINTENANCE/RD MAINT		1.0	0.3									
D03/G520 - MAINTENANCE/RD MAINT				0.0	0.0			0.0		0.5	0.7	0.0
D03/G560 - MAINTENANCE/RD MAINT						2.0				2.3		
D03/G570 - MAINTENANCE/RD MAINT		8.0		6.0			1.0					
D03/G580 - MAINTENANCE/RD MAINT			1.0	0.8	1.5		0.1			8.0		
D07/G510 - ROADWAY MAINT	13.0	5.0	23.0	3.0	4.5	1.0	10.0	6.0		7.0		1.0
D07/G540 - JENNINGS/MAINT					1.0		1.0	0.3				
D07/G570 - CREOLE/MAINT			1.5									
D07/G710 - DISTRICTWIDE ROAD/MAINT	0.5											
Grand Total	13.5	14.0	25.8	9.8	7.0	3.0	12.1	6.3		17.8	0.7	1.0

Date Range: January 1, 2019 to December 31, 2019

URBAN AREA MONTHLY USAGE:
AGGREGATE, LIGHTWEIGHT
(YD3 - Cubic Yard)

2019													
Urban Area	January	February	March	April	May	June	July	August	September	October	November	December	2019 Total
Abbeville Regulated Area						2.0				2.3			**4.3**
Lafayette Urbanized Area				0.0	0.0			0.0		0.5	0.7	0.0	**1.2**
Lake Charles Urbanized Area	13.5	5.0	23.0	3.0	4.5	1.0	10.0	6.0		7.0		1.0	**74.0**
Grand Total	**13.5**	**5.0**	**23.0**	**3.0**	**4.5**	**3.0**	**10.0**	**6.0**	**0.0**	**9.8**	**0.7**	**1.0**	**79.5**

Date Range: January 1, 2019 to December 31, 2019

URBAN AREA MONTHLY USAGE:
SALT, GRADE 1, 50 LB/SACK

2019				
	January	February	March	2019 Total
Alexandria Urbanized Area	214	28		242
Bastrop Regulated Area	74	34		108
Baton Rouge Urbanized Area	37		175	212
Monroe Urbanized Area	552	1310	72	1934
Natchitoches Regulated Area	345	400		745
Shreveport Urbanized Area	1536	2180		3716
Grand Total	2758	3952	247	6957

Date Range: January 1, 2019 to December 31, 2019

MAINTENANCE UNIT MONTHLY USAGE:
SALT, GRADE 1, 50 LB/SACK

2019						
	January	February	March	November	December	2019 Total
D03/G550 - MAINTENANCE/RD MAINT				3.0		3.0
D04/G510 - ARCADIA/CASTOR UNITS	294.0	152.0			20.0	466.0
D04/G520 - HOMER UNIT/MAINT	127.0	47.0				174.0
D04/G530 - MINDEN/LETON UNITS	160.0	237.0				397.0
D04/G540 - BOSSIER/PLAIN DEALING	551.0	976.0				1527.0
D04/G550 - SHREVEPORT/VIVIAN UNIT	985.0	1206.0				2191.0
D04/G560 - MANSFIELD UNIT/MAINT	165.0	269.0				434.0
D04/G570 - COUSHATTA UNIT/MAINT	252.0	482.0				734.0
D05/G510 - MAINTENANCE/MONROE		70.0				70.0
D05/G520 - MAINTENANCE/MONROE		86.0				86.0
D05/G530 - MAINTENANCE/MONROE	65.0	174.0				239.0
D05/G540 - MAINTENANCE/MONROE	74.0	34.0				108.0
D05/G550 - MAINTENANCE/MONROE	24.0	866.0	72.0			962.0
D05/G560 - MAINTENANCE/MONROE	147.0	147.0				294.0
D05/G570 - MAINTENANCE/MONROE	245.0	490.0		98.0	98.0	931.0
D05/G580 - MAINTENANCE/MONROE	53.0	10.0				63.0
D05/G590 - MAINTENANCE/MONROE	45.0	5.0				50.0
D05/G710 - MAINTENANCE/MONROE	500.0	444.0				944.0
D07/G520 - DERIDDER/MAINT	75.0					75.0
D07/G540 - JENNINGS/MAINT	48.0					48.0
D07/G580 - OBERLIN/MAINT	40.0					40.0
D08/G510 - MAINTENANCE/ALEX	94.0	28.0				122.0
D08/G520 - MAINTENANCE/MARKSVILLE	72.0	19.0	22.0		15.0	128.0
D08/G530 - MAINTENANCE/MANY		12.0				12.0
D08/G550 - MAINTENANCE/NATCHITOCHES	345.0	400.0				745.0
D08/G560 - MAINTENANCE/WINNFIELD		133.0				133.0
D08/G710 - DISTRICTWIDE ROAD MAINTENANCE	30.0					30.0
D08/G720 - BRIDGE MAINTENANCE/ALEX	49.0					49.0
D08/G750 - DISTRICTWIDE SIGN CREW	29.0					29.0
D08/G751 - DISTRICTWIDE ELECTRICIANS	12.0					12.0
D08/G771 - STRIPING CREW/TRAF OPS & PLAN	28.0					28.0
D58/G520 - FRANKLIN PRH/MAINT	20.0	5.0				25.0
D58/G540 - CATAHOULA PRH/MAINT	35.0					35.0
D58/G580 - LASALLE PRH/MAINT	30.0					30.0
D61/G510 - PRH MAINT CREW/UNIT 2			95.0			95.0
D61/G560 - PRH MAINT CREW/UNIT 2					15.0	15.0
D61/G590 - PRH MAINT CREW/BR	37.0		80.0			117.0
Grand Total	**4631.0**	**6292.0**	**269.0**	**101.0**	**148.0**	**11441.0**

Date Range: January 1, 2019 to December 31, 2019

Appendix L

Agile Assets System

LaGov Linear Assets (Agile) Users Guide

LaDOTD
Maintenance System Management
Section 42

August 2019

TABLE OF CONTENTS

INTRODUCTION

This guide provides step by step processes on using the menus and windows to access, manage and retrieve the asset data. This system comprises of 4 main modules and contains an extensive collection of asset data that can be retrieved easily.

The Linear Asset Management System is a versatile system that can be used from any computer with a browser and an internet connection.

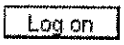
However, for a better experience, it is recommended to have the following settings. These settings are only recommendations and do not imply that your experience will not be satisfactory if you use different settings.

Agile Software Requirements:
Internet Explorer Browser 9, 10 or 11 (not in Compatibility Mode) OR Google Chrome (Recommended) OR Mozilla Firefox

Specifications	Minimum	Recommended
System RAM	4 GB	8 GB
Processor Speed	Single Core 2 Ghz	Dual Core 3 GHz
Processor Type	64 bit	64 bit
Screen Resolution	1024 X 768	1920 X 1080
Operating System	Agnostic	Agnostic

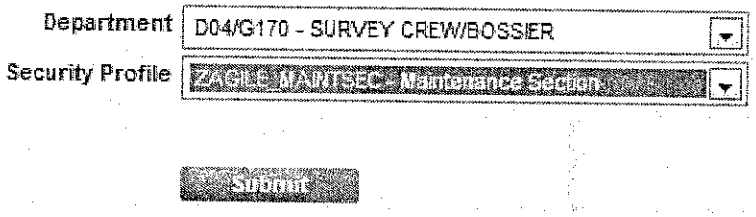
LOGGING IN TO AGILE

To Access the LEO Portal directly

1. Connect to the Internet
2. http://www.louisiana.gov/ under "For State Employees" **LaGov ERP**
3. Enter your **User ID** (e.g. P00123456).
4. Enter current **Password.**
5. Click 

6. **LaGov ERP ERP / LEO Home page** is displayed.
7. Click 

located at the top of the screen.
8. This will bring you to the Department and Security Profile



9. If you over see more than one Administration Unit, select the one you want to log in under the "Department" field. Check your Security Profile is correct and click submit.
10. You have successfully logged in.

Appendix M

Hydraulics Manual Supplement

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

INTRADEPARTMENTAL CORRESPONDENCE

IN REPLY REFER TO FILE NO.

REFERRED TO

____ REFERRED FOR ACTION
____ ANSWER FOR MY SIGNATURE
____ FOR FILE
____ FOR YOUR INFORMATION
____ FOR SIGNATURE
____ RETURN TO ME
____ PLEASE SEE ME
____ PLEASE TELEPHONE ME
____ FOR APPROVAL
____ PLEASE ADVISE ME

BY ____ DATE ____
BY ____ DATE ____
BY ____ DATE ____

HYDRAULICS OFFICE
(225)379-1306

MEMORANDUM

TO: ROAD DESIGN SECTION
BRIDGE DESIGN SECTION
CONSTRUCTION SECTION
DISTRICT ADMINISTRATORS
DISTRICT DESIGN OFFICES
ENVIRONMENTAL SECTION
PROJECT MANAGEMENT SECTION

FROM: Steve Lee, P. E.
Hydraulics Engineer Administrator

DATE: November 1, 2007

SUBJECT: DESIGN POLICY ON EROSION CONTROL

The attached documents are a re-issuance of LADOTD's Design Policy on Erosion Control with minor changes. An additional example has been added to the documentation. Also, the section entitled "Plan Checking & Design Procedures for Erosion and Sediment Control on LADOTD N/LPDES Permitted Project" was to be included in the Hydraulics Manual, and it is labeled as such; however, this information will not be included in the Hydraulics Manual as the Design Policy on Erosion Control is being updated periodically to correspond with changes in EPA and DEQ policy.

Further information can be obtained by contacting Sarah Golz in the Hydraulics Section at (225) 379-1430.

RECOMMENDED FOR APPROVAL ____ DATE

RECOMMENDED FOR APPROVAL ____ DATE

APPROVED ____ DATE

ROAD DESIGN

EROSION CONTROL GUIDELINES

HYDRAULICS UNIT

PLAN CHECKING AND DESIGN PROCEDURES FOR EROSION & SEDIMENT CONTROL

SUPPLEMENT TO HYDRAULICS MANUAL

NOVEMBER 20(

PLAN CHECKING & DESIGN PROCEDURES FOR EROSION & SEDIMENT CONTROL ON LA DOTD N/LPDES PERMITTED PROJECTS

This document pertains to those projects which fall under Phase I and Phase II of Louisiana's Pollutant Discharge Elimination System permitting program. The program applies to all construction projects disturbing one acre or greater of land as of March 2003.

Plan checking and design procedures on the use of erosion and sediment controls are to be followed according to the *Roadway Design Procedures and Details Manual (RDM)* with few exceptions as shown herein. A reference is made to section 4.5.2 of this manual and Standard Plan EC-01. Temporary erosion controls should be shown on the plan and construction sequence sheets, or on separate sheets altogether. This is a revision to section 8.2.5(h) of the RDM. Where many controls are required such that they would clutter the plans, the controls should instead, be listed in tables on summary sheets. Temporary erosion control symbols should be included as part of a plan symbol legend. Structural controls should have details for their installation included within the plans. Examples of structural (i. e., sediment) controls are silt fencing, sediment basins, check dams, etc. See Standard Plan EC-01. New products are continuously being developed to aid in erosion and sediment control. Products equivalent to the traditional ones mentioned in this document are acceptable as approved by the LADOTD.

Plan preparation procedures for separate, temporary erosion control sheets are also included. They should follow similar procedures to those discussed below for showing controls within the traditional plan set. The guidelines and procedures listed below are used to supplement, and may supersede, the RDM and Standard Plan EC-01.

PRELIMINARY DESIGN/PLAN CHECK

Roadside, median, and temporary ditches should have hay/straw or stone (or equivalent material) check dams placed in them. There are many options for the temporary stabilization of ditches. Construction personnel are allowed to make adjustments for field conditions. As a guideline, check dams should only be used in channels with a contributing drainage area of 10 acres or less. Additionally, they should only be placed in channels having a 10% grade or less, and where the depth of flow is not expected to exceed one (1) foot. Use hay or straw baled check dams where the maximum contributing drainage area is 2 acres. Use stone check dams where the drainage area is between 2 and 10 acres. (It will not be necessary to show such drainage areas on the Design Drainage Map.) The maximum spacing between dams should be such that the toe of the upstream dam is at the same elevation as the top of the downstream dam.

Check dams range from 1½ ft. to 3 ft. in height, depending on the channel cross-section or depth of flow. The height should be equal to the top of the lower channel bank or to the depth of anticipated flow, whichever is lower, with a minimum of 1½ ft. The center of the dam should be at least 6 inches lower than the height (outer edges). The bottom length should be three times the height (3 x h).

On bridge construction and replacement jobs, silt fencing (or an equivalent product) should be specified near the toe of the banks, parallel to the waterway and between the right-of-way limits on either side of the bridge. Roadside channels on either side of the bridge should have either check dams or bridge/erosion drain pipes (*ditch blocks*) to help slow channel velocity from any runoff during the time of construction, when the bridge embankment is vulnerable to erosion. Silt fencing and check dams used here can be shown on either the plan or bridge general plan sheets. (Refer to section 5.2.4 of the RDM and Chapter I of the Hydraulics Manual for design details pertaining to ditch blocks.)

Existing catch basins (both curb & open-top inlet types) that are to remain on a project should have some form of silt protection. Traditionally, this has been accomplished with either silt fence or hay/straw bales and thus, accounted for in a (204) pay item. Rock or stone barriers are also acceptable as long as they are properly installed. Because drainage work is performed early in the construction period, proposed catch basins should also have inlet protection.

Permanent erosion control at the outlets of cross drain structures should be noted on the preliminary plans (section 8.2.5(5.b) of the RDM).

(This paragraph reserved for future design guidelines pertaining to detention/sediment basins.)

FINAL DESIGN/PLAN CHECK

Standard Plan EC-01 should be included in the final plan set.

Silt fencing is used to minimize the amount of sediment leaving the construction site and/or entering water ways. It is also used to decrease the velocity of sheet flows. Silt fencing should be shown on the plans along areas of disturbance sloping away from the project site or towards adjacent, naturally existing water ways. It should not cross entrance and drainage ways. Disturbed areas typically extend fifteen (15) feet outside the limits of construction or to the limits of right-of-way, whichever is less. A look at the existing cross-sections will indicate slopes during clearing and grubbing operations. On urban projects where fore slopes are toward the roadway and inlet protection is specified, silt fence will likely not be necessary. The estimated quantity for silt fencing should take these and other situations into consideration. Silt fencing that coincides with the right-of-way should be indicated with an arrow and note at least once per plan sheet. At other locations, silt fencing should be indicated with the appropriate symbol at least once per plan sheet. Summary tables are now not required for silt fencing, since the plans can better indicate locations.

Show temporary slope (embankment) drains on the plans to carry storm water from the work area down unprotected long (greater than 100 ft.) and/or steep (greater than 2:1) slopes. Slope drains are typically only necessary on large, embankment moving projects. Earthen berms directing water into the pipe inlets should also be shown on the plans (see Std. Plan EC-01) unless the slope drains are included in a summary table(s).

Permanent erosion controls (i. e., seeding, mulching, rip-rap, erosion control systems, etc.), if not indicated on plan or profile sheets, should be tabulated in summary tables. This is a slight modification of Section 8.2.5(h) of the RDM. Locations (i. e., to and from stationing, and Lt., Rt., or Med. of roadway) and type (i. e., vegetative mulch, Type A covering, 30-lb rip-rap class, etc.) should be clearly indicated. (Refer to the Hydraulics office for design procedures pertaining to channel protection and rip-rap sizing/placement.) Erosion control coverings should be shown on either the profile sheets or listed in a summary table(s). They are used for either slope or channel protection, and should be labeled as such. Temporary check dams should still be placed in channels requiring covering until vegetation is established and the dams can be removed. The quantity for temporary seeding in these areas will be computed as specified in the appendix of the Road Design Manual under Miscellaneous Design Aids, *Rules Associated with Pay Items.* Rip-rap used at bridge abutments should be indicated on the bridge general plan sheets.

Pay items for temporary erosion controls should be included on the *Summary of Estimated Quantities* sheets. These include such items as temporary silt fencing and temporary slope drains (204-). Though not necessarily shown within the plans, at least two (2) items for temporary stone construction entrances should also be included on the *Summary of Estimated Quantities* sheets. Design aids for estimating temporary erosion control quantities are provided in the appendix of the Road Design Manual under Miscellaneous Design Aids, *Rules Associated with Pay Items.*

Pay items for permanent erosion controls should be included on the *Summary of Estimated Quantities* sheets. These include such items as fertilizing (718-01) and seeding (717-01), landscaping (719-), erosion control systems (720-), riprap used as outlet protection for cross drains and at bridge abutments (711), and others in the 700-no. category. Fertilizing and seeding limits are usually indicated on the typical section sheets (section 8.2.3(6) of the RDM). Permanent erosion controls can be used in place of temporary controls if placed early enough, and may share pay item numbers. Design aids for estimating permanent erosion control quantities are provided in the appendix of the Road Design Manual under Miscellaneous Design Aids, *Rules Associated with Pay Items.*

SEQUENCE OF CONSTRUCTION

Temporary erosion and sediment controls are usually installed during the first phase of construction, before the land is disturbed. In fact, storm water permit coverage starts from the commencement of construction activities until final project stabilization. Temporary structural controls must be removed whenever they are no longer necessary in serving their purpose, or when the protected area has been stabilized through the use of seeding and mulching, erosion control blankets, rip-rap, or other means. The installation and removal of controls and practices used to control erosion (BMPs) should be indicated on construction sequencing sheets. Below are guidelines for the sequencing of erosion controls and BMPs on LA DOTD state projects:

Silt fencing should be installed before clearing and grubbing operations begin, except when clearing involves installing the fence. Typically, this would be performed in the first stage of phase one of construction. It should be removed once the upslope area being protected has been stabilized. On bridge construction jobs over water ways, silt fencing should be installed before ground-breaking activities begin. On bridge replacement jobs over water ways, it should be installed prior to existing bridge removal and detour bridge construction (if applicable). In the case of both bridge construction and replacement jobs, it can be removed once the bridges and abutment protection are in place.

Slope drains and their temporary earth berms should be installed after clearing and grubbing and grading of the embankment slope has occurred. It should be removed only when the disturbed slope upon which it rests has been stabilized. This should be before roadway base work begins.

Check dams should be installed immediately after the channel is brought to grade, and should be removed only after the upslope channel for which they serve has been stabilized. Check dams in roadside channels near bridges should be placed before ground-breaking activities begin, or after ditch grading (if applicable). They should be removed after the installation of any bridge/erosion drain pipes (*ditch blocks*), or after the upslope channel for which they serve has been stabilized. Check dams should be tabulated in summary sheets indicating their locations by stationing. Where only a few dams are required, they can instead, be indicated on the sequence of construction sheets with a symbol, at a minimum scale of 1:1000 or 1" = 80'.

Protection for existing drainage inlets remaining onsite should be fully installed before clearing and grubbing operations begin in the area. Protection for proposed drainage inlets should be installed immediately after the new inlets are in place. In both cases, they should not be removed until the upslope area for which they serve has been stabilized. Inlet protections should typically be the last erosion controls removed from a site. They can be indicated on the sequence of construction sheets with a symbol, at a minimum scale of 1:1000 or 1" = 80'. Protection for many catch basins as part of subsurface drainage systems should instead, be listed in a summary table(s).

Temporary seeding, if necessary prior to permanent seeding, occurs after clearing, grubbing and grading operations. The limits are the same as that indicated on the typical section sheets for permanent seeding, and need not be shown elsewhere. A note on the sequence of construction sheets will suffice.

Erosion controls shown on the plan sheets reflect their initial placement. During construction, some controls may need to change location based upon grade changes required to form the typical sections and based upon the location of detour roads. No additional payment will be made for the moving of erosion control devices at different sequences of construction. The former statement should be included in the notes of the construction sequence sheets.

Below is a reference table summarizing where erosion and sediment controls should be incorporated into the plan set.

E & S Control	Location in plan set	Include in summary tables?
Silt fence	plan, bridge general plan sheets	Not required
Slope drains	plan sheets	Yes, if not on plan sheets
Check dams	construction sequence sheets	Yes, if not on construction sequence sheets
Inlet protection	construction sequence sheets	Yes, if not on construction sequence sheets
Stone construction entrances	construction sequence sheets, if location known	No
Seeding, fertilizing, mulching & sodding (temporary & permanent)	typical section sheets	No
Erosion control systems	profile sheets	Yes, if not on profile sheets
Rip-rap (permanent)	plan, bridge general plan sheets	Yes, if used for channel lining

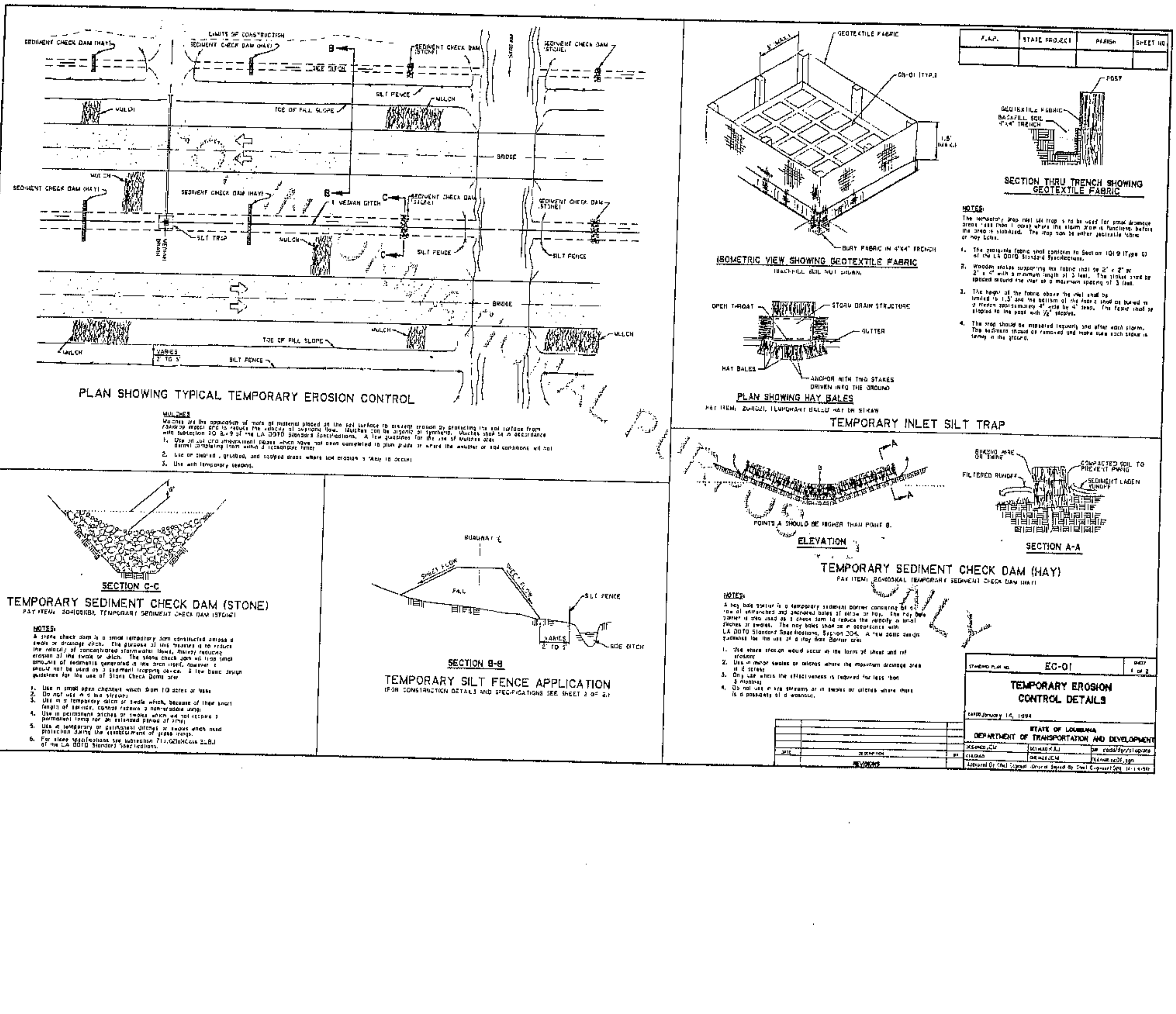
TEMPORARY EROSION AND SEDIMENT CONTROL SHEETS

The designer has the option of placing temporary erosion and sediment control measures on separate sheets. These should consist of layout sheets (similar to a construction sequence sheet) at a minimum scale of 1:000 or 1"= 80'. Layout sheets should indicate drainage patterns and, like the construction sequence sheets, a description of the phasing in of practices and controls. Temporary erosion control symbols should be included as part of a plan symbol legend on these sheets, and may include part or all of the construction legend to illustrate sequencing with roadway construction.

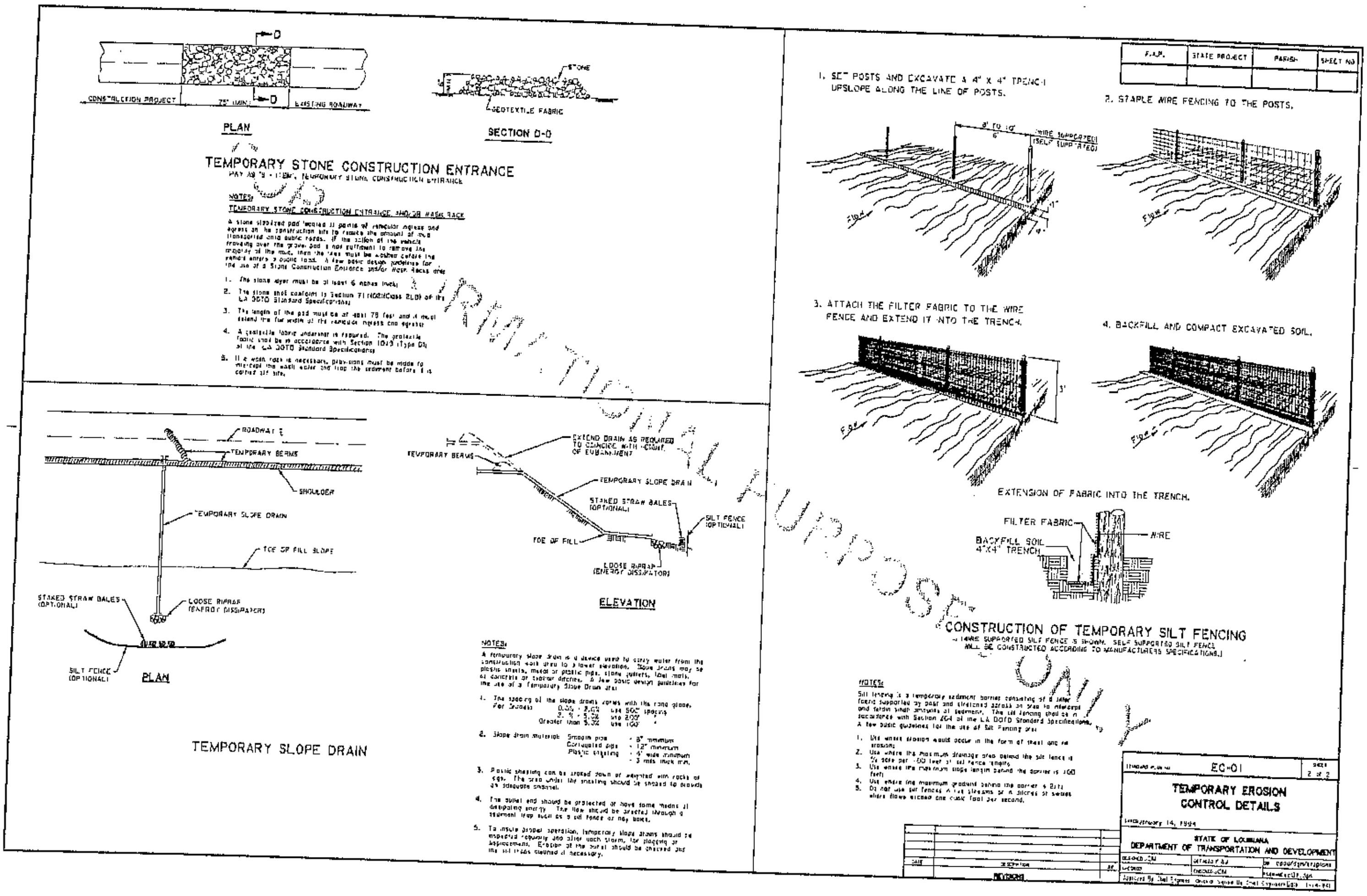
Where many controls are required such that may clutter these sheets, the controls should instead, be listed in tables on summary sheets, as mentioned previously. Permanent erosion controls should be shown on the appropriate sheets within the traditional plan set. They should be placed as soon as practical after clearing, grubbing, grading operations and if appropriate, after drainage installations.

Appendix N

Standard Plan EC-O1, Temporary Erosion Control Details



PLAN SHOWING TYPICAL TEMPORARY EROSION CONTROL
SEDIMENT CHECK DAM (HAY)
LIMITS OF CONSTRUCTION
SEDIMENT CHECK DAM (STONE)
MULCH
SILT FENCE
TOE OF FILL SLOPE
BRIDGE
MEDIAN DITCH
SILT TRAP
SECTION C-C
TEMPORARY SEDIMENT CHECK DAM (STONE)
SECTION B-B
TEMPORARY SILT FENCE APPLICATION
SIDE DITCH
ISOMETRIC VIEW SHOWING GEOTEXTILE FABRIC
GEOTEXTILE FABRIC
BURY FABRIC IN 4"X4" TRENCH
SECTION THRU TRENCH SHOWING GEOTEXTILE FABRIC
PLAN SHOWING HAY BALES
OPEN THROAT
STORM DRAIN STRUCTURE
GUTTER
HAY BALES
ANCHOR WITH TWO STAKES DRIVEN INTO THE GROUND
TEMPORARY INLET SILT TRAP
ELEVATION
POINTS A SHOULD BE HIGHER THAN POINT B.
SECTION A-A
FILTERED RUNOFF
COMPACTED SOIL TO PREVENT PIPING
SEDIMENT LADEN RUNOFF
TEMPORARY SEDIMENT CHECK DAM (HAY)
EC-01
TEMPORARY EROSION CONTROL DETAILS
STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
REVISIONS



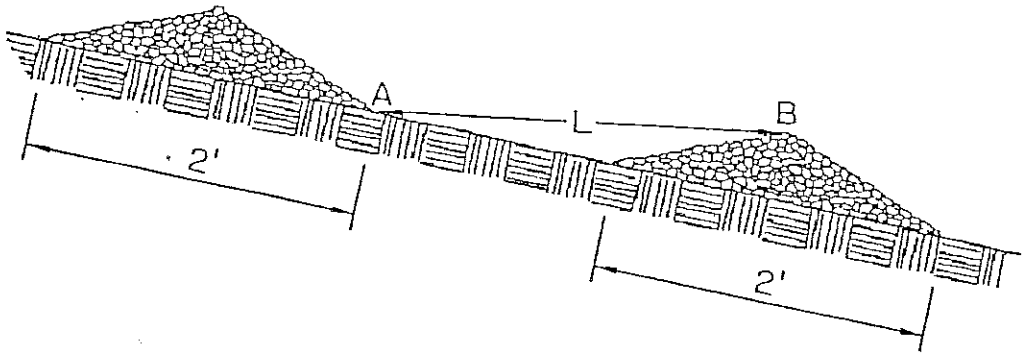
CONSTRUCTION PROJECT
75' (MIN.)
EXISTING ROADWAY
PLAN
STONE
GEOTEXTILE FABRIC
SECTION D-D
TEMPORARY STONE CONSTRUCTION ENTRANCE
NOTES:
ROADWAY ℄
TEMPORARY BERMS
SHOULDER
TEMPORARY SLOPE DRAIN
TOE OF FILL SLOPE
STAKED STRAW BALES (OPTIONAL)
LOOSE RIPRAP (ENERGY DISSIPATOR)
SILT FENCE (OPTIONAL)
PLAN
TEMPORARY SLOPE DRAIN
TEMPORARY BERMS
TEMPORARY SLOPE DRAIN
STAKED STRAW BALES (OPTIONAL)
SILT FENCE (OPTIONAL)
TOE OF FILL
LOOSE RIPRAP (ENERGY DISSIPATOR)
ELEVATION
NOTES:
1. SET POSTS AND EXCAVATE A 4" X 4" TRENCH UPSLOPE ALONG THE LINE OF POSTS.
2. STAPLE WIRE FENCING TO THE POSTS.
3. ATTACH THE FILTER FABRIC TO THE WIRE FENCE AND EXTEND IT INTO THE TRENCH.
4. BACKFILL AND COMPACT EXCAVATED SOIL.
EXTENSION OF FABRIC INTO THE TRENCH.
FILTER FABRIC
WIRE
BACKFILL SOIL
4"X4" TRENCH
CONSTRUCTION OF TEMPORARY SILT FENCING
(WIRE SUPPORTED SILT FENCE IS SHOWN. SELF SUPPORTED SILT FENCE WILL BE CONSTRUCTED ACCORDING TO MANUFACTURERS SPECIFICATIONS.)
NOTES:
F.A.P.
STATE PROJECT
PARISH
SHEET NO.
EC-01
2 of 2
TEMPORARY EROSION CONTROL DETAILS
STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
DATE
DESCRIPTION
REVISIONS

TEMPORARY EROSION & SEDIMENT CONTROL SYMBOLOGY

SILT FENCE	SF SF
TEMPORARY BERM	
SEDIMENT CHECK DAM (STONE)	
STABILIZED CONSTRUCTION ENTRANCE	
HAY BALES OR SEDIMENT CHECK DAM (HAY)	
INLET PROTECTION	
TEMPORARY SLOPE DRAIN	

SPACING BETWEEN CHECK DAMS

L = THE DISTANCE SUCH THAT POINTS
A AND B ARE OF EQUAL ELEVATION



Appendix O

Plan in Hand Memorandum Review Form

PLAN-IN-HAND
MEMORANDUM REVIEW

DISTRICT NO.:_____ P/H INSPECTION MADE ON:_____

S.P. NO.:_____ ROUTE NO.:_____

F.A.P. NO.:_____ PARISH:_____

NAME:_____

PLAN-IN-HAND PARTY

NAME	TITLE	AGENCY	SECTION

PLAN-IN-HAND
INSPECTION REPORT

	YES	NO	COMMENTS
TYPICAL SECTION SHEETS:			
1. Is the District in agreement with the proposed pavement types?			
SUMMARY SHEET:			
1. Will an item for cleaning of existing ditches be required?			
2. What types of temporary erosion control items will be required?			
3. How many construction entrances will be required?			
4. Is the method of payment for removal of pavement satisfactory?			
5. Will temporary maintenance aggregate be required? If so, how much?			
6. Will granular material be required for backfill?			
7. Is the method of payment for earthwork satisfactory?			
8. Are special erosion control items necessary?			
9. Will an item for muck excavation be required?			

PLAN PROFILE SHEETS:	YES	NO	COMMENTS
1. Is adequate right-of-way provided for relocation of utilities?			
2. Will any right-of-entry agreements be required? Is this satisfactory? Who will secure it?			
3. Will construction be impacted by existing horizontal or vertical clearance?			
4. Is adequate outfall information shown?			
5. Has sufficient drainage excavation and/or cleaning of outfall laterals necessary for adequate drainage been shown?			
6. Will cleaning be required for existing drainage structures?			
7. Will special ditch protection items be required?			
8. Will any underdrains be required?			
9. If retaining walls are necessary, will they be cast in place or mechanically stabilized?			
10. Are there any oil or gas wells on the project that do not show up on the plans?			

		YES	NO	COMMENTS
11.	Are there any noticeable encroachments on the right-of-way? Are existing improvements within 50' of required right-of-way shown on the plans?			
12.	Any potential hazardous waste site/ust?			
13.	Will construction or drainage servitude be required?			
GEOMETRIC DETAILS:				
1.	Are there any areas where improvements can be made to the alignment?			
SEQUENCE OF CONSTRUCTION:				
1.	Is through traffic to be maintained?			
2.	For local traffic only, will school buses, mail carriers, or other local traffic require special maintenance of traffic provisions?			
3.	If temporary sheeting is required to maintain traffic, is the method of payment satisfactory?			
4.	Does the detour limits exceed the limits of roadway improvements?			
5.	Can detours be built due to grade difference between new and existing roadways?			

		YES	NO	COMMENTS
6.	Check for conflicts between new roadway and existing roadway being used to maintain traffic.			
7.	Method of payment for detour (if required).			
8.	Can drainage be maintained during construction?			

GENERAL:

1.	If sub-surface drainage is being used, is there any evidence of effluent sewerage entering existing roadside ditches?			
2.	Are all utilities shown? Pipelines shown in profiles, if applicable?			
3.	Have 60% comments been received from the District?			
4.	Are there any major utility conflicts?			
5.	Are there any major right-of-way conflicts?			
6.	Will sawed joints be required for limits of pavement removals (including walks, drives, cross-overs etc.)? If yes, is the method of payment satisfactory?			
7.	Will any materials be salvaged? If so, where should this material be hauled?			

		YES	NO	COMENTS
8.	Is there any extra-ordinary maintenance problems or procedures anticipated as a result of the proposed project?			
9.	Is a clearing and grubbing project recommended?			
10.	Will surcharging the embankment be required?			
11.	Are there any proposed permit requests that will affect this project? (404, NW,)			
12.	Are the drainage and construction servitude large enough for equipment mobilization?			
13.	If this project creates any additional mileage for our system has Planning been notified for potential exchange with cooperating agency?			
14.	Do any recommended changes exceed the original scope of the project?			
15.	Does the limit/scope of the project match those in the environmental document?			
16.	Are there any mitigation items that need to be addressed in plan development?			

17. List below any comments or recommendations concerning the roadway.

BRIDGE PLANS	YES	NO	COMMENTS
1. Is stationing of beginning and end of existing bridge shown?			
2. Is description of existing bridge shown?			
3. Is high water elevation shown?			
4. Is drainage area shown?			
5. Is required area of opening shown?			
6. Is stream navigable either by law or local usage?			
7. Is a U.S.G.S. report recommended?			
8. Have recommended channel changes been shown?			
9. Is the stream meander shown within right of way and/or beyond where necessary?			
10. Is sufficient right of way shown at each structure?			
11. Is detour required? If yes, (A) has the location, type, length, width, area of opening, surfacing, and other details been shown?			

	YES	NO	COMMENTS
12. Is stream subject to drift?			
13. Is stream subject to scour?			
14. Will revetments be required? If yes, has the type, location and other details been shown?			
15. Is drainage excavation required?			
16. Are pile design loads and type shown?			
17. Have the borings been reviewed and approved?			
18. Have location of test pile(s) been marked on the P/H prints?			
19. Is the use of drilled shafts indicated?			
20. Are there any utility lines that will interfere with pile driving operations and have they been shown on the P/H prints?			
21. Are all utilities that may affect the construction accurately located and details on the P/H prints?			
22. Is there a need for vibration monitoring and site surveys?			

		YES	NO	COMMENTS
23.	Are the location of expansion and fixed ends shown and are they satisfactory?			
24.	Are controlling vertical and horizontal dimensions shown?			
25.	Is the superstructure cross section satisfactory?			

26. The length of permanent piles is to be determined by:

Borings: _____

Test Piles: _____

Record of Existing Structure: _____

27. List below any comments or recommendations concerning this structure.

28. List below any special considerations or agreements recommended for negotiations by the Right-of-Way Section:

List below any additional or special information.

List general remarks, comments and/or recommendations below:

SHEET NO.	COMMENTS

The following special problems need to be resolved.

Prepared By: _____
Title: _____
Section: _____

VALUE ENGINEERING

Are there any items that are candidates for value engineering? ___ Yes* ___ No ___N/A

*If yes, please comment below

REMARKS:

Value Engineering Team Members:

Project Coordinator -
FHWA Area Engineer -

Appendix P

SPC Questionnaire

Spill Prevention and Control Plan (SPC) Questionnaire

Facility Information:

Facility Name:_____

Address:_____

Facility Operator:_____

Facility Description (e.g. maintenance unit, storage yard, etc.):_____

(Please mark answers with an (X).)

Did operations at your facility begin before August 16, 2002: YES ☐ NO ☐

Information on Aboveground Storage Containers:

1. Does your facility have any SINGLE aboveground storage containers with a capacity of 660 gallons of oil or other chemicals: YES ☐ NO ☐

2. Does your facility have multiple containers with a TOTAL aboveground storage capacity greater than 1,320 gallons of oil or other chemicals: YES ☐ NO ☐

3. Do the aboveground containers have secondary containment: YES ☐ NO ☐

4. Oils stored in these aboveground containers:
   (Please mark all that apply.)
   a. Petroleum ☐
   b. Fuel Oil ☐
   c. Sludge ☐
   d. Vegetable Oils ☐
   e. Other Oils & Greases ☐
   f. Oil Refuse ☐
   g. Oil with Wastes Other than Dredged Spoil ☐
   h. Fats, Oil or Greases of Animal, Fish, or Marine Mammal Origin (including Synthetic Oils and Mineral Oils) ☐

5. Please list any chemicals, other than oils, stored in aboveground storage tanks at your facility:

_____

6. Considering geographic location, in the event of a release, could your facility discharge oil or other chemicals into any:
(Please mark all that apply.)

a. Streams ☐
b. Ponds and Ditches ☐
c. Storm or Sanitary Sewers ☐
d. Wetlands ☐
e. Mudflats ☐
f. Sandflats ☐
g. Other Navigable Waters ☐

7. Please list the nearest potential receiving waters in case of an oil or other chemical spill:

a._____

b._____

c._____

8. Does your facility have any of the following spill prevention measures already in place:
(Please mark all that apply.)

a. Dikes, Berms, or Retaining Walls Sufficiently Impervious to Contain Oil Spills ☐
b. Curbing, Drip Pans ☐
c. Culverts, Gutters or Other Drainage Systems ☐
d. Weirs, Booms or Other Barriers ☐
e. Spill Diversion Ponds ☐
f. Retention Ponds ☐
g. Sorbent Substances ☐
h. Sumps and Collection Systems ☐
i. Additional Tanks to Automatically Receive Overflow ☐
j. Liquid Level Sensing Devices ☐
k. Other *(Please list)*:_____

Please complete and email form to Nicholas.Larks@la.gov by Monday, November 1, 2010.

Appendix Q

Project Delivery Manual Excerpts

Compliance with Post-Construction Environmental Commitments

In some instances, the Department will agree to post-construction environmental actions or monitoring for a limited period as a condition of a regulatory agency permit or commitment to a community. Examples of such agreements include post-construction erosion control, maintaining vegetation installed for mitigation purposes, monitoring water quality in an adjacent stream, or monitoring traffic following construction to determine if a particular traffic control device, such as a signal, is warranted.

In many instances, the Area Engineer will be the official charged with ensuring compliance with post-construction environmental commitments. However, in some instances, it may be the District Traffic Engineer or the Environmental Section. The Project Engineer is responsible for notifying the appropriate official(s) when construction has been completed and explaining the nature of post-construction environmental commitments, should they exist. The ADA of Operations will be kept informed of any significant related issues and will become involved in the process as needed to ensure conformity with all applicable regulations and commitments.

At the conclusion of the commitment, the official charged with compliance should notify the Environmental Section that the commitment has been fulfilled. The Environmental Section will in turn notify the appropriate regulatory agency or community officials.

Materials Durability and Performance Monitoring

The Department maintains an approved products list from which a contractor may select materials for use on state highway construction projects. Following construction, field monitoring of the durability and performance of these materials would obviously benefit the Department. The Materials and Testing Section should be advised of any materials that do not appear to perform well. The Material and Testing Section may in turn refer the matter to the New Products Evaluation Committee for consideration of removal of the product from the approved products list. Reference is made to EDSM Number V.4.1.1: "New Products Evaluation Committee."

Identification of Design Features that Complicate Maintenance Activities

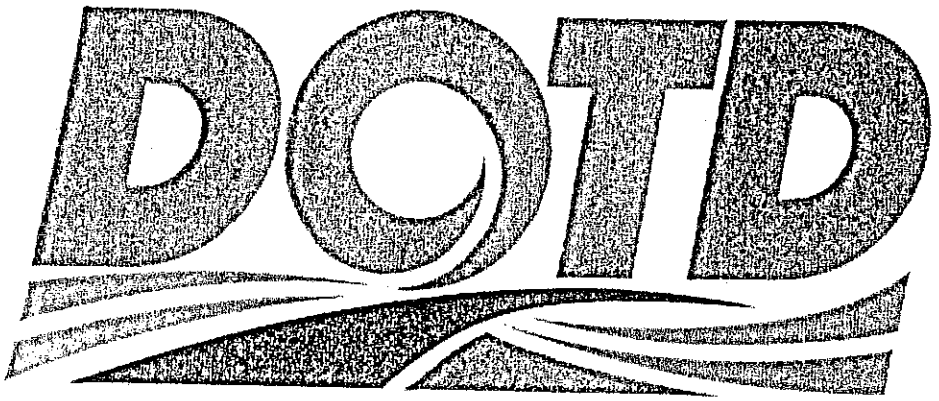
During the design of a project, insufficient consideration of post-construction facility maintenance can result in difficulties and inefficiencies in maintenance operations. Maintenance personnel must identify and document any design features that complicate maintenance activities, and share this information with the appropriate design section(s). Through such a process, standard plans and details can be modified to facilitate maintenance activities and improve the Department's overall performance.

Responsibility Matrix

STAGE 6 – SYSTEM OPERATIONS AND PERFORMANCE RESPONSIBILITY MATRIX	
FUNCTION	**RESPONSIBLE**
Disposal of excess right-of-way	District Maintenance Section, District Design Section, Real Estate Section
Documentation of utilities permitted on the right-of-way	District Utilities Specialist with the District Permits Unit
Compliance with post-construction environmental commitments	District Maintenance Section, District Traffic Engineering Section, Environmental Section (depends on nature of commitment), Area Engineer
Materials durability and performance monitoring	District Maintenance Section, District Traffic Engineering Section, Area Engineer
Identification of design features that complicate maintenance activities	District Maintenance Section, Area Engineer
Project Closeout Meeting	Design Engineer

Appendix R

Master SWPPP Template



LOUISIANA DEPARTMENT OF
TRANSPORTATION & DEVELOPMENT

STORM

WATER

POLLUTION

PREVENTION

PLAN

Storm Water Pollution Prevention Plan (SWPPP)

Permit Number: LAR 600000

Prepared For:

_____

Project Name & Location:

_____

_____

_____

Prepared by:

_____

Date:

_____

CERTIFICATIONS

To Be Completed by Construction Site Operator (Plans and Specifications Operational Control)

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

Name and Title _____ Telephone Number _____

Signature _____ Date _____

To Be Completed by Construction Site Operator (Day-to-Day Operational Control)

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

Name and Title _____ Telephone Number _____

Signature _____ Date _____

SWPPP Revision Documentation Form

This storm water pollution prevention plan (SWPPP) should be revised and updated to address changes in site conditions, new or revised government regulations, and additional on-site storm water pollution controls. The signature of this representative attests that the SWPPP revision information is true and accurate. Previous authors and facility representatives are not responsible for the revisions.

Number	Date	Company Representative's Signature

CONTENTS

11.0 APPROVED LOCAL PLAN

12.0 MAINTENANCE

13.0 INSPECTIONS OF CONTROLS

14.0 CONTRACTORS AND SUBCONTRACTORS RESPONSIBILITIES

15.0 UTILITY COMPANIES

APPENDICES

APPENDIX A, General Location Map and Site Map
APPENDIX B, LPDES Storm Water Construction General Permit
APPENDIX C, Site Information

1. General Description Sheet
2. Schedule Sheet for Soil Disturbing Activities
3. Soil Data Sheet
4. Erosion and Sediment Control Site Map
5. Erosion and Sediment Control Plan
6. Stabilization Practice Schedule
7. Structural Control Sheet
8. Construction Site Inspection Report

APPENDICES

Appendix S

Response to Sedimentation Complaint

SIGMA CONSULTING GROUP, INC.
ENGINEERING CONSULTANTS

10305 Airline Highway
Baton Rouge, LA 70816
Phone (225) 298-0800
Fax (225) 208-1699
www.sigmacg.com

MEMORANDUM TO FILE

Date: December 3, 2019

Writer: Miles B. Williams, P.E.
Designer of Record

Re: SP No H.009250
I-10 - Highland Road to LA 73 Design Build Project
Response to Sedimentation Complaint in Fountain Hill Subdivision Retention Pond of 10/25/2019

The James Construction Group, LLC Design Build Team (JCG DB) has investigated the referenced Complaint that was received by the LA Department of Environmental Quality on October 25, 2019 (see attached). Following is our response to the Complaint based on our investigation.

The Complaint states:

"The Highway drains water into the pond, but the construction over the last year has consistently been filling the pond up with soil and debris from the construction site. We have video of pollution entering the pond and this week we had a piece of a cement form from the construction flow into the pond. The pond is now only a foot deep in parts of the pond. Birds stand in the middle of it. Last year the pond was over 6 foot deep."

The Complaint can be separated into two parts:

Item 1: Long term sedimentation deposits from the JCG DB construction site has caused a reduction of the depth of the pond by up to five feet (reduction from six feet depth to one foot depth).

The JCG DB team previously investigated and reported on a complaint filed by the same complainant regarding a video of sedimentation entering the Fountain Hill Subdivision retention pond. The Report documenting the investigation of that complaint (dated 10/17/19) is also attached to this memo. The conclusions of that report were that all permitted erosion control devices were in place and functioning since the start of construction and that the sedimentation plume observed on June 6th occurred during an extreme rainfall event that exceeded the design capacity of the approved implemented erosion control measures. The amount of sediment generated from this event was minimal and it was unavoidable based on the extreme rainfall event.

There is no indication that sedimentation explicitly from the JCG DB construction site has discharged into the Fountain Hill Subdivision retention pond at any other time. Therefore there is no evidence that the large volume of material alleged to have been deposited in the pond over the last year could have come from the JCG DB construction site. For reference, to fill the approximately 2±-acre Fountain Hill pond 5 feet in depth would require 17,000 cubic yards of material. The total amount of fill material required on the job site for the 2,000 feet of construction that is within the area that drains to the cross drain near Fountain Hill Subdivision was approximately 2,000 cubic yards. JCG DB construction forces did not experience any recognizable material loss during the placement of the fill

material in this area. This confirms that there is no indication that any measurable amount of material was discharged from the construction site to the Fountain Hill pond.

Item 2: Construction debris from the site has flowed into the pond.

The picture provided in the complaint shows a nondescript piece of floating debris that is alleged to be a cement form board. Though it is not clear from the picture the exact size and material make up of the debris it does not appear to be any type of form material that is generally used on the JCG DB construction site. It is important to note that the cross drain under I-10 that drains into the Fountain Hill pond drains a large drainage area to the east of the Interstate. This drainage area contains many subdivisions and other active construction sites. It is possible that the piece of debris shown came from that area or from one of the lots that backs up to the pond.

We have verified the installation of and we rigorously inspect the approved erosion control measures on the JCG DB construction site. These erosion control measures are intended to minimize material from leaving the jobsite. By all indications these measures are functioning properly. The JCG DB Team is committed to implementing this important project safely and in an environmentally friendly way.

Copies to: Mr. Aaron Dupont, JCG Project Manager
Mr. Gordon Nelson, P.E., Volkert
Ms. Dori Turner, LA DOTD Environmental
Mr. Joubert Harris, LA DOTD Environmental
Ms. Maria Bernard Reid, ELOS

f:\02020\161001\01600\rfis\erosion control\191203mbw.sedimentation.memo.docx

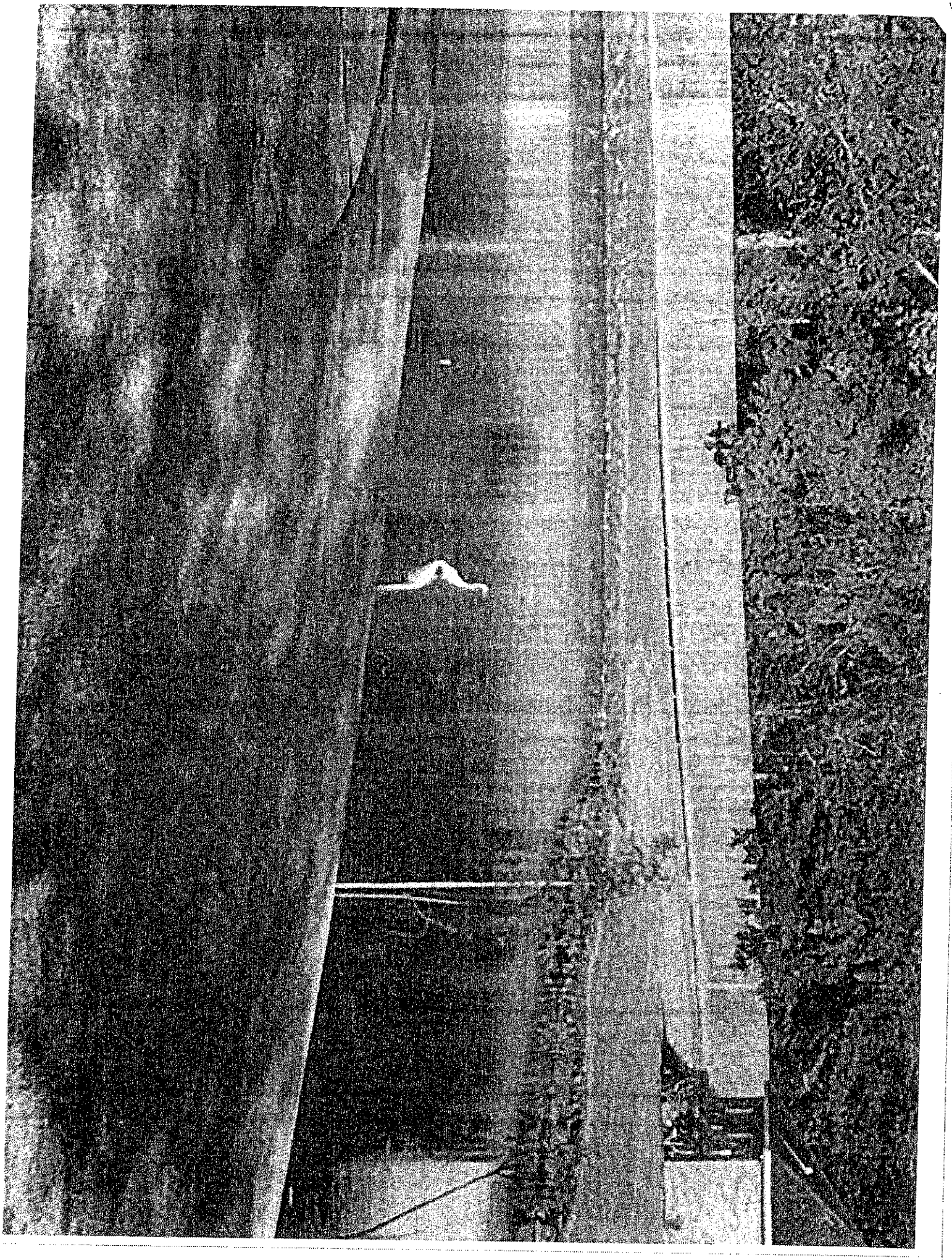
Single Point Of Contact
Phone: (225) 219-3640
Fax: (225) 219-4044

---- Forwarded message from deq_no_reply@la.gov ---

From: deq_no_reply@la.gov
To: spoc@la.gov
Cc: ethomas@brproud.com
Subject: Online Citizen Complaint: Confirmation: OC26 - 10/25/2019 4:41:52 PM
Date: 2019-10-25 16:42:03

Caller Information	
* First Name:	Eric
* Last Name:	Thomas
* Phone Number:	806-790-6752
Mailing Address:	18163, Fountain Hill Blvd
City:	Prairieville
State:	Louisiana
Email:	ethomas@brproud.com
Zip:	70769
I request a follow-up on inspector findings:	Yes
Site Information	
Alleged Violator:	DOTD contractor
* Physical Location/Address:	20020097 Prairieville
* City:	Prairieville
* State:	Louisiana
Zip:	70769
Date of Discharge:	10/25/2019
Noticed Time Began:	
Noticed Time Ended:	
* Parish of Occurrence:	Ascension Parish
Media Affected:	surface water
If water, name the nearest water body:	Back Pond in Fountain Hills Subdivision
Description of complaint:	The Highway drains water into the pond, but the construction over the last year has consentantly been filling the pond up with soil and debrie from the construction site. We have video of polution entering the pond and this week we had a piece of a cement form from the construction flow into the pond. The pond is now only a foot deep in parts of the pond. Birds stand in the middle of it. Last year the pond was over 6 foot deep. This is a major issue and will cause drainage issues for the highway in the future if not dealth with. The Contractor has not maintained proper control of his construction site and it is filling up our pond.
Directions for reaching the site:	enter the Fountain Hills Subdivision and drive straight to the back. you will be able to see the pond.

---- End forwarded message ---



H. 009250

I-10 : HIGHLAND - LA 73 PROJECT

ENVIRONMENTAL MEETING - NOV. 6, 2019

- SEDIMENT DISCHARGE COMPLAINT - FOUNTAIN HILL SUBDIVISION

SIGN IN SHEET

NAME	COMPANY	EMAIL
JACOB BENTON	JCG	JBENTON@PRIM.COM
GORDON NELSON	Volkert	GORDON.NELSON@VOLKERT.CO
MARIA BERNARD REID	ELOS Environmental	mreid@elosenv.com
Henry Salassi	JCG	hsalassi@prim.com
LES FLETCHER	DOTD	LESTER.FLETCHER@LA.GOV
Brian Owens	DOTD	Brian.Owens@LA.GOV
Miles Williams	Sigma Consulting	mwilliams@sigmacg.com
Joubert Harris	DOTD	Joubert-Harris@LA.GOV
Dori Turner	DOTD	dori.turner@la.gov
AARON DUPONT	JCG	ADUPONT@PRIM.COM
MICHAEL SIMONSEN	JCG	MSIMONSEN@PRIM.COM
Andrew Marks	JCG	amarks@prim.com

ELOS®
environmental
a wetland services company

MEMORANDUM

To: Miles Williams, PE
Sigma Consulting Group, Inc.

From: Maria Bernard Reid
ELOS Environmental, LLC

Date: 10/17/2019

RE: Investigation into SWPPP Compliance for 6/06/2019 Sediment Plume
H.009250 I-10 Widening Design Build: Highland Road (LA 42) to La 73
East Baton Rouge and Ascension Parishes, Louisiana

On September 16, 2019, Robbie Lear from Sigma Consulting Group, Inc. (SIGMA) contacted ELOS Environmental LLC (ELOS) via email regarding a complaint from a neighboring homeowner in the Fountain Hill subdivision, Eric Thomas. Mr. Lear asked ELOS to investigate the claim and to determine if requirements of the Stormwater Pollution Prevention Plan (SWPPP) were met. Mr. Thomas submitted a video that he took during a rainstorm. The video focused on a sediment plume in a Fountain Hill subdivision retention pond adjacent to his home (Attachment A, Figure 1).

On October 8, 2019, Maria Bernard Reid [ELOS] met with Tim Mizell, Mike Simonsen, and Jacob Benton with Primoris Services Corporation ([Primoris] formerly James Construction Group), and Miles Williams (SIGMA) on the project site. The purpose of Ms. Reid's site visit was to collect information pertinent to Mr. Thomas' complaint including locating the portion of the project area which may have caused the plume, determining the date and weather conditions during the time of the complaint, and collecting SWPPP inspection reports from Primoris to determine compliance.

LOCATION

The retention pond where the sediment plume occurred is shown on Figure 1. Specifically, it is located at latitude 30.317182, longitude -91.001447 and in Township 8 South, Range 2 East, Section 27, in Ascension Parish, Louisiana. A cross drain under the interstate right-of-way is located directly upstream from the retention pond (Attachment A, Figure 2). The cross drain was established when Interstate 10 was constructed to facilitate south westward connectivity

and continuity of an unnamed natural drainage into Bluff Swamp in the Alligator Bayou watershed (see Figure 2). Figures 3 and 4 show pre-construction and post construction drainage patterns. The overall east-to-west drainage will not be altered by the I-10 construction project.

Construction at the cross drain is limited to work within the median of the existing 4-lane interstate. A subsurface drainage system will be constructed with a center collector culvert which is tied to surface catch basins in the pavement of the future inside shoulder. Stormwater will empty from the center collector culvert into the cross drain. The cross drain then empties into the roadside ditch, continuing westward beyond the interstate right-of-way into the Fountain Hill retention pond.

DATE OF SEDIMENT PLUME AND WEATHER CONDITIONS

The date of the sediment plume could not be determined from Mr. Thomas' complaint. Upon receiving the complaint, Mr. Mizell and Mr. Benton reviewed the video, and visited the cross drain outfall on the construction site. As the inlet to the retention pond is not visible from the interstate right-of-way, the gentlemen drove to the Fountain Hill subdivision. They found the pond to be inaccessible without permission from a homeowner, so they knocked on the door of the most adjacent home. Mr. Thomas was the homeowner, he provided access to the pond, and showed the men from Primoris the video he captured of the sediment plume event. During this meeting, Mr. Benton determined the date of the plume to be June 6, 2019.

Weather conditions for Baton Rouge as reported by U.S. Climate Data reported 1.75 inch of rain on June 5 and 4.09 inches on June 6, 2019.[1] A Weather and Working-day Report is also maintained by the Project Engineer. The Weather and Working-day report for June 2019 recorded rain on both June 5 and 6. The Site Safety Manager, Mr. Simonsen documents precipitation daily using a rain gauge located near the Construction Office. Mr. Simonsen photographs the gauge, prints the photograph, and documents the date with his initials in black ink. The on-site rain gauge shows approximately 1 inch of rain on June 5 and 5 inches of rain on June 6, 2019. The June 2019 data for Baton Rouge weather, the June 2019 Weather and Working-day Report, and SWPPP inspection reports with photographs of the rain gauge collections are provided as Attachment B. Precipitation measured on-site differs from the U.S. Climate Data due to the natural and geographic variability in rainfall amounts between the I-10 Design Build project area and Baton Rouge Metropolitan Airport.

SWPPP COMPLIANCE

The SWPPP for the I-10 Design Build project provides short- and long-term goals including: 1) retain sediment on-site to the extent practicable with consideration for local topography, soil

[1] U.S. Climate Data. 2019. Weather History for Baton Rouge, LA for June 2019. Available online: https://www.usclimatedata.com/climate/baton-rouge/louisiana/united-states/usla0033/2019/6

type and rainfall, and 2) select, install, and maintain control measures according to the manufacturer or designer's specifications. Sediment retention on-site is generally achieved and proven during routine inspections and maintenance of SWPPP control measures. However, it is not practicable to expect the design of control measures to remain in full compliance with these goals during rainfall events which exceed the expected precipitation as presented in Attachment C. The rainfall event on June 6, 2019, was greater than what the project area typically experiences over two days in a normal rainfall year. Approximately 5 inches of rain fell over a period of 2 to 3 hours. A rainfall event of that duration and magnitude is expected to occur once in 25 years. The expectation of design to withstand such a rare event is not practicable.

The Water Quality Certification permit for this project (LAR 100000) states that qualified personnel must inspect the construction site for SWPPP compliance at least once every 14 calendar days, before anticipated storm events and within 24 hours of the end of a storm event of 0.5 inch or greater. For each inspection, there must be an inspection report. SWPPP inspection reports for June 6 and 7 (following the rain events on June 5 and 6) are provided in Attachment B. Repairs to silt fencing was required following the rain event was noted on the inspection report.

CONCLUSION

It is ELOS' opinion that the appropriate response was conducted following the June 6, 2019 rain event according to the requirements of the SWPPP and the Water Quality Certification permit. The expectation of maintaining all sediment on-site (or designing the SWPPP control measures to do so) during an extreme rain event is not practicable or feasible. If a large rain event is forecasted, additional sediment control measures may be deployed at project area locations where there is bare soil to reduce the likelihood of off-site sediment migration. If you would like to discuss this information, please contact me by phone at 985-662-5501, fax at 985-662-5504, or e-mail at mreid@elosenv.com.