Permittee: Louisiana Department of Transportation and Development

Permit Number: LAR043001

Agency Interest No: 108424

Reporting Period: January 1, 2014 - December 31, 2014

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, 2015

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.

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List of Acronyms

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 Plan
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. 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 five major topics to address each of the five annual report requirements as stated in the permit. The LADOTD's annual report details the pollution prevention activities undertaken by the permittee during the 2014 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 municpal 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 Lousiana 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 March 1, 2013. As the permittee entered this third 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 2013 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 2013 general permit, the annual report must address the following requirements:

1. The status of compliance with permit conditions, an assessment of the appropriateness of your identified best management practices, progress towards achieving the statutory goal of reducing the discharge of pollutants to the maximum extent practicable (MEP), and the measurable goals for each of the MCMs;
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 during the next reporting cycle (including an implementation schedule);

4. Proposed changes to your Storm Water Management Program, including changes to any BMPs or any identified measureable goals that apply to the program elements; and
5. Notice that you are relying on another government entity to satisfy some of your permit obligations (if applicable).

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 2013 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 2013 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. H	Possible MS4 Discharges to the LDEQ Section 303(d) List of Impaired Waters.

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 2014 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 2013 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 2014 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 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 2014 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	20
Lake Charles, LA	I-10 Eastbound Welcome Center	20
Houma, LA	LADOTD Customer Service for Toll	20
Choudrant, LA	Tremont East Bound Rest Area	20
Choudrant, LA	Tremont West Bound Rest Area	20

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, LADEQ 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 5,235 visitors. Of the 5,235 total views, 626 occurred in 2014. This represents a slight decrease in visits in comparison to previous reporting years. The website can be found at the following address: http://www.dotd.la.gov/highways/construction/lab/ms4/home.asp?page=home$.

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 more than 56,000 pounds of trash, litter, and other contaminants from Louisiana's highways end up in our lakes, streams and scenic waterways. You can help prevent water pollution by keeping our roads clean, repair all fluid leaks in your vehicle, bag your trash and place it in designated trash bins, and report illegal dumping. Clean highways today, mean cleaner water 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 with LPB midyear annually, two separate contracts cover the 2014 calendar year. The first having a contract term from April 26, 2013 to May 29, 2014 and the second and current contract term is from June 26, 2014 to June 29, 2015. The contract stipulates that the PSA will be aired a minimum of 40 times during each contract term. The

PSA had 85 broadcasts on the LPB station between 01/01/2014 to 12/31/2014. A copy of both contracts and the broadcast schedule are provided in Appendix E.

Additionally, the contract between the permittee and LPB provides the LADOTD an opportunity to be featured in the LPB *Visions* magazine. The LADOTD published a 215 word article titled, We Are the Solution. The article appeared in the September 2014 *Visions* publication, Volume 38, Issue 9, page 30. A copy of the article can be found in Appendix E.

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. Print, TV, as well as electronic media is 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 F 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 D 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.

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 total 72 in 2014. This accounts for a total of 109.23 miles of adopted highway and 78 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 reports prepared annually for submission to the LDEQ are available for review and comment on the permittee's website. 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 2014, 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://www.dotd.la.gov/downloads/publicrecords.pdf. The permittee received no public records requests in 2014. Refer to Appendix H, 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 in 2014.

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 2015, the ECU will continue to improve maps on 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 10% of all MS4 outfalls be inspected annually. This would assure that every outfall was screened once at a minimum during each permit term. Screenings are done to identify outfalls with illicit discharges and investigate the source of those discharges. In 2014, 32 outfalls were inspected. A MS4 outfall survey and an Illicit Discharge Visual Screening form were developed to assist us in this effort. Refer to Appendix P, to view both documents and inspection reports. Finally, no illicit discharge was reported through the LADOTD public website, LADOTD personnel, or the LDEQ.

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 video titled, "IDDE: A Grate Concern, employee quiz, a trainer's guide, and pocket references. The ECU completed a refresher on illicit discharges. The material has since been distributed to each LADOTD District Environmental Impact Specialist for internal review and train-the trainee sessions. Future plans will include educating targeted sections in LADOTD. Refer to Appendix G, for an example of the Acknowledgement of Training Form and Quiz.

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 permits, LAR100000 and LAR200000 respectively. 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 I.

A written field guide is currently in development. The purpose of the manual will be to provide written procedures for conducting a storm water inspection at linear construction sites. It will also provide the reader with guidance on BMP selection, installation, and maintenance and how to conduct a file review of storm water related documents. Once completed, the document will be distributed to appropriate personnel within the DOTD.

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

Contractors are required to develop a SWPPP with the initial review and approval being done by the project engineer (PE) assigned to the construction site. Additionally, 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 2014, a total of 40 SWPPPs were reviewed statewide.

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 2014, the permittee identified 46 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:

As part of the permittee's continuing education program, in-house educational opportunities are held at the LADOTD-Louisiana Transportation Research Center (LTRC) on a variety of subjects for departmental personnel. The LADOTD-LTRC hosted one (1) course relative to storm water during 2014. The course was conducted by Local Technical Assistance Program. The date and course taught is listed below.

- Storm Water Workshop for Construction Sites
  January 15, 2014

If available, the course description of the above classes is in Appendix J.

In addition, permittee representatives attended the Louisiana Solid Waste Association (LSWA) 34th Annual Environmental Conference held in Lafayette, LA on March 19-21st, 2014. Conference attendees included persons from federal, state, local, and private sectors. The Water/Waste Water Track included informational topics on Turbidity Reduction in Landfill Stormwater Runoff Case Study and Turbidity Removal in Stormwater at Landfills. The agenda for the conference can be found in Appendix K.

BMP: Construction Related Public Reporting

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

Summary of Results:

As reported previously, the permittee has a feedback mechanism on its storm water website for public use. No comments were received by the permittee during the 2014 calendar year.

In maintaining compliance with LDEQ storm water construction permits, LAR 100000 and LAR200000, 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 regulations, 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 five BMPs with a corresponding measureable goal to achieve compliance with the above MCM, post construction storm water management in new development and 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://www.dotd.louisiana.gov/highways/project_devel/design/road_design/Hydraulics%20Manual/01%20La%20DOTD%20Hydraulics%20Manual%20(full%20text).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 L. A complete copy of the manual can be found on the permittee's website at http://www.dotd.louisiana.gov/highways/project_devel/design/road_design/Erosion%20Control%20Guidelines/00%20La%20DOTD%20Erosion%20Control%20Guidelines%20(Full%20Text).pdf.

To ensure proper installation of erosion control devices, the Hydraulics section has developed standard plan, EC-01, Temporary Erosion Control Details. EC-01 provide 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 M. The standard plan, EC-01 is also available at http://www.dotd.la.gov/highways/standardplans/DirListing.aspx?txtPath=/highways/standardplans/Standard Plans/Erosion Control and Bedding Material.

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

EPA United States Environmental Protection Agency

Water: Coastal Zone Act Reauthorization Amendments

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Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters

EPA 840-B-92-002 January 1993

You will need Adobe Reader to view some of the files on this page. See EPA's PDF page to learn more.

- Cover, Foreword, Table of Contents (PDF) (32 pp, 1.1MB)
- Chapter 1: Introduction (PDF) (14 pp, 987K)
- Chapter 2: Management Measures for Agricultural Sources (PDF) (158 pp, 10.2MB)
- Agriculture Chapter Factsheet
- Chapter 3: Management Measures for Forestry (PDF) (130 pp, 8.8MB)
- Forestry Chapter Factsheet
- Chapter 4: Management Measures for Urban Areas (PDF) (182 pp, 12MB)
- Urban Chapter Factsheet
- Chapter 5: Management Measures for Marinas and Recreational Boating (PDF) (82 pp, 5.3MB)
- Marinas Chapter Factsheet
- Chapter 6: Management Measures for Hydromodification: Channelization and Channel Modification, Dams, and Steambank and Shoreline Erosion (PDF) (110 pp, 8.2MB)
- Hydromodification Chapter Factsheet
- Chapter 7: Management Measures for Wetlands, Riparian Areas, and Vegetated Treatment Systems (PDF) (66 pp, 4.4MB)
- Wetlands Chapter Factsheet
- Chapter 8: Monitoring and Tracking Techniques to Accompany Management Measures (PDF) (54 pp, 3.8MB)

Last updated on Thursday, November 29, 2012

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 N, as well on the permittee's website at the address provided below: http://www.dotd.la.gov/highways/project_devel/design/road_design/Standard%20Forms/Plan%20In-Hand%20Review.pdf.

BMP: Development of Project Inspection Procedures

BMP Description: Develop inspection procedures and forms to determine compliance with post construction guidelines.

Summary of Results:

The post construction storm water inspection form has been developed; see Appendix T. Formal procedures for post construction inspections will be developed during the 2015 calendar year.

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 Standard Operating Procedure* of the *Project Delivery Manual* are provided in Appendix O for review. A copy of the *Project Delivery Manual* in its entirety is available on the permittee's website at the following address: http://www.dotd.la.gov/doclist.asp?ID=6.

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 has once again teamed with the department's GIS section and has identified outfalls within each 303 (d) Impaired Water Body. We are currently in discussion with the LDEQ to determine the extent of information to be provided in text of each mapped outfall location.

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* and *Chapter 7* of the *Bridge Design Manual*, both detail the environmental considerations to take in account while developing the construction plan with regard to post construction operation. Both manuals are available at the permittee's website at the following addresses:

Road Design Manual
http://www.dotd.louisiana.gov/highways/project_devel/design/road_design/documents.aspx

Chapter 7 of Bridge Design Manual
http://www.dotd.louisiana.gov/highways/project_devel/design/bridge_design/Bridge%20Design%20English%20Manual/10%20Chapter%207%20-%20Environmental%20Considerations%20and%20Permits.pdf

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:

No watershed meetings were attended in 2014

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 fourteen 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 2014, 20,755.08 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 five maintenance activities are used to obtain the measurable goals for the litter collection BMP:

- Litter Cleaning of Roadside, 440-02
- Servicing of Litter Barrels, 440-03
- 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 1,294.25 cubic yards of liter was collected from permitted areas and 712 litter barrels were serviced. For area specifics, refer to Appendix A.

BMP: Pesticide Application

BMP Description: Ensure the application of pesticides 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 69 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 four maintenance activities are used to obtain the measurable goals for the pesticide application BMP:

- Fertilizer Application, 440-10
- Lime Application, 440-11
- Herbicide Application-Hand Method, 440-12
- Herbicide Application-Machine Method, 440-13

Herbicide application staff manually applied 37,118 gallons of herbicides and mechanically sprayed 61,530.05 acres in the LADOTD urbanized and regulated areas. In addition, staff also manually applied herbicides to 557 locations .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 2014, maintenance of drainage structures occurred at 8,477.28 locations, 156.1 drainage structures were repaired, 256 new drainage culverts were installed and 3 inlets & catch basins were installed/ replaced. 302,574.1 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 screen shots of the databases have been made available in Appendix Q.

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 30 facilities that would necessitate the development of a SPC plan. As of May 2013, 30 SPC plans were developed for facilities statewide. Four (4) SPC plans were revised in 2014. No new facilities have been identified as needing an SPC plan. Refer to Appendix R 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 numerous trainings held in 2014, in the permittee's regulated areas.

Date	Course	Course Title	Regulated Area

	Number		
Monthly	M5011C	Preventative Maintenance of DOTD Vehicles	Statewide
Monthly	M3009A	Cleaning of Bridges	Statewide
January-September 2014		Storm Water Training	District 62
September 25,2014		MS4 Audit Webinar	Statewide
September 25, 2014		Geodatabase 3	Statewide
September 11,2014		2014 National Stormwater Practitioners Meeting Webinar	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 2014, 322.2 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 Control Preparations, 540-08
- Snow & Ice Inspection/Reconnaissance, 540-09

A total of 7,247.34 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 2014, the permittee applied 1,117.4 cubic yards of lightweight aggregate and 4,380,839.5 pounds of salt statewide. For area specifics, refer to Appendix S. 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 3,418 hours to the loading, hauling, unloading, and inventory of bulk materials during the 2014 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

48,498 linear feet of drainage structures were cleaned by removing waste from deck drains and lines. The removal of debris from girders, caps, etc. so as to prevent corrosion was completed at 303 locations and trash was removed from 23,180 locations near bridge drainage structures and culverts in 2014. 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.

- Debris Removal and Disposal, 440-08
- Clearing Roadways Travel Lane, 440-19
- Cleaning Roadways, 540-04
- Disposal of Roadway Debris, 630-09
- Pick Up of Roadway Debris by Road Runner, 630-10

18,119.96 cubic yards of accident or storm related waste was collected on Louisiana roadways and roadsides in 2014. Routine debris was removed and properly disposed of from 157.86 miles of highway and shoulder in 2014. 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. Erosion and sediment control practices were implemented at 187 locations and 23 square yards 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 2015

This section will fulfill the below annual report requirement from the 2013 general permit.

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

Although the LADOTD's Environmental Compliance Unit (ECU) and the GIS Section had discussions on appropriate text to be included on the outfall maps in the areas of 303 (d) Impaired Water Bodies during this past year, we did not achieve all of which were planned. Consequently, we will continue our discussions and efforts on this subject matter during the 2015 calendar year.

The LADOTD continues to identify training opportunities within the Department to aid in addressing Illicit Discharge. This year, we plan to incorporate training on this subject into our annual statewide Water and Wastewater Recertification class. This is a DHH approved class and will likely be taught in the month of August, 2015.

The LADOTD looks forward to its continued work efforts with the LDEQ in pursuit of a statewide general permit for its qualified construction projects. The permit is in "draft" status and is currently being reviewed by the US EPA. The LADOTD will be meeting with its construction personnel over the next several months to discuss implementation of the permit once issued.

Storm Water Management Program Changes

The *Storm Water Management Program Changes* section will fulfill the below annual report requirement from the 2013 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 LADOD has no management plan changes for this year.

Sharing Responsibility

The section entitled *Sharing Responsibility* will fulfill the below annual report requirement from the 2013 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	2
Drainage Maintenance	Erosion Control & Repair	440-00	Each	0
Litter Collection	Litter Cleaning of Roadside	440-02	Cubic Yards	0
	Servicing of Litter Barrels	440-03	Each	0
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Pick Up of Inmate Litter	440-05	Cubic Yards	0
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Pesticide Application	Fertilizer Application	440-10	Ton	0
	Lime Application	440-11	Ton	0
	Herbicide Application-Hand Method	440-12	Gallon	0
	Herbicide Application-Machine Method	440-13	Acre	128
	Number of Licensed Applicators		Each	1
	Number of Training Hours		Hours	12
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	31
	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	8,602
	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	1
Street Sweeping	Sweeper Cleaning	540-03	Miles	0
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	48
	Snow & Ice Control Preparations	540-08	Hours	0
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	0
Bulk Materials Management	Material Hauling	630-03	Hours	0
Debris Management	Debris Removal & Disposal	440-08	Cubic Yards	0
	Clearing Roadways Travel Lanes	440-19	Miles	0
	Manual Cleaning of Roads	540-04	Miles	0
	Disposal of Debris/Litter	630-09	Cubic Yards	0
	Pick Up of Debris/Litter	630-10	Cubic Yards	0

Table II

UA: **Alexandria**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	14
Drainage Maintenance	Erosion Control & Repair	440-00	Each	10
Litter Collection	Litter Cleaning of Roadside	440-02	Cubic Yards	1
	Servicing of Litter Barrels	440-03	Each	0
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	69
	Pick Up of Inmate Litter	440-05	Cubic Yards	29
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	10
Pesticide Application	Fertilizer Application	440-10	Ton	0
	Lime Application	440-11	Ton	0
	Herbicide Application-Hand Method	440-12	Gallon	3,570
	Herbicide Application-Machine Method	440-13	Acre	1,902.80
	Number of Licensed Applicators		Each	3
	Number of Training Hours		Hours/Each	12
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	290
	Drainage Structure Repair	450-02	Each	8
	Install Drainage Culverts	450-03	Each	226
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	50
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	14,145
	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	0
	Remove Drift	465-17	Each	26
Street Sweeping	Sweeper Cleaning	540-03	Miles	132.15
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	2,214
	Snow & Ice Control Preparations	540-08	Hours	0
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	144
Bulk Materials Management	Material Hauling	630-03	Hours	104.5
Debris Management	Debris Monitoring	440-07	Hours	0
	Debris Removal & Disposal	440-08	Cubic Yards	89
	Clearing Roadways Travel Lanes	440-19	Miles	.10
	Manual Cleaning of Roads	540-04	Miles	0
	Disposal of Debris/Litter	630-09	Cubic Yards	7
	Pick Up of Debris/Litter	630-10	Cubic Yards	174.34

Table III

LDEQ- designated regulated area: **Bastrop**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	4
Drainage Maintenance	Erosion Control & Repair	440-00	Each	100
Litter Collection	Litter Cleaning of Roadside	440-02	Cubic Yards	0
	Servicing of Litter Barrels	440-03	Each	0
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Pick Up of Inmate Litter	440-05	Cubic Yards	0
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Pesticide Application	Fertilizer Application	440-10	Ton	0
	Lime Application	440-11	Ton	0
	Herbicide Application-Hand Method	440-12	Gallon	0
	Herbicide Application-Machine Method	440-13	Acre	0
	Number of Licensed Applicators		Each	1
	Number of Training Hours		Hours	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	52
	Drainage Structure Repair	450-02	Each	1
	Install Drainage Culverts	450-03	Each	2
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	508
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	13,618
	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	11
Street Sweeping	Sweeper Cleaning	540-03	Miles	8
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	213
	Snow & Ice Control Preparations	540-08	Hours	0
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	40
Bulk Materials Management	Material Hauling	630-03	Hours	38
Debris Management	Debris Removal & Disposal	440-08	Cubic Yards	23
	Clearing Roadways Travel Lanes	440-19	Miles	0
	Manual Cleaning of Roads	540-04	Miles	0
	Disposal of Debris/Litter	630-09	Cubic Yards	0
	Pick Up of Debris/Litter	630-10	Cubic Yards	1

Table IV

UA: **Baton Rouge**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	54
Drainage Maintenance	Erosion Control & Repair	440-00	Each	10
	Erosion Control & Repair	440-00	Square Yards	23
Litter Collection	Litter Cleaning of Roadside	440-02	Cubic Yards	17.25
	Servicing of Litter Barrels	440-03	Each	0
	Servicing of Litter Barrels	440-03	Cubic Yards	0
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	12
	Pick Up of Inmate Litter	440-05	Cubic Yards	168
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	332
Pesticide Application	Fertilizer Application	440-10	Ton	0
	Fertilizer Application	440-10	Acre	0
	Lime Application	440-11	Ton	0
	Lime Application	440-11	Acre	0
	Herbicide Application-Hand Method	440-12	Gallon	631.50
	Herbicide Application-Hand Method	440-12	Each	557
	Herbicide Application-Machine Method	440-13	Acre	4160.25
	Number of Licensed Applicators		Each	5
	Number of Training Hours		Hours	8-16
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	902.28
	Drainage Structure Repair	450-02	Each	43
	Install Drainage Culverts	450-03	Each	9
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	1,732
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	57,752.10
	Install/Replace Inlets & Catch Basins	450-06	Each	3
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	5
	Clean Deck & Drain	465-01	Linear Feet	2,535
	Remove Drift	465-17	Each	202
Street Sweeping	Sweeper Cleaning	540-03	Miles	2,165.04
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	442.50
	Snow & Ice Control Preparations	540-08	Hours	0
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	166.25
Bulk Materials Management	Material Hauling	630-03	Hours	2,108.50
Debris Management	Debris Monitoring	440-07	Hours	3.5
	Debris Removal & Disposal	440-08	Cubic Yards	839.40

	Clearing Roadways Travel Lanes	440-19	Miles	1.89
	Manual Cleaning of Roads	540-04	Miles	0
	Disposal of Debris/Litter	630-09	Cubic Yards	1,483.62
	Pick Up of Debris/Litter	630-10	Cubic Yards	830.70

Table V

LDEQ- designated regulated area : **Hammond**

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	Each	0
Litter Collection	Litter Cleaning of Roadside	440-02	Cubic Yards	0
	Servicing of Litter Barrels	440-03	Each	230
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Pick Up of Inmate Litter	440-05	Cubic Yards	173
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Pesticide Application	Fertilizer Application	440-10	Ton	0
	Lime Application	440-11	Ton	0
	Herbicide Application-Hand Method	440-12	Gallon	1,150
	Herbicide Application-Machine Method	440-13	Acre	2,872.50
	Number of Licensed Applicators		Each	10
	Number of Training Hours		Hours/Each	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	24
	Drainage Structure Repair	450-02	Each	6
	Install Drainage Culverts	450-03	Each	5
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	1,500
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	16,010
	Install/Replace Inlets & Catch Basins	450-06	Each	1
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	0
	Remove Drift	465-17	Each	25
Street Sweeping	Sweeper Cleaning	540-03	Miles	6
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	462
	Snow & Ice Control Preparations	540-08	Hours	0
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	112
Bulk Materials Management	Material Hauling	630-03	Hours	45
Debris Management	Debris Removal & Disposal	440-08	Cubic Yards	122.25
	Clearing Roadways Travel Lanes	440-19	Miles	0.03
	Manual Cleaning of Roads	540-04	Miles	0
	Disposal of Debris/Litter	630-09	Cubic Yards	72
	Pick Up of Debris/Litter	630-10	Cubic Yards	617

Table VI

UA: **Houma**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	16
Drainage Maintenance	Erosion Control & Repair	440-00	Each	2
Litter Collection	Litter Cleaning of Roadside	440-02	Cubic Yards	0
	Servicing of Litter Barrels	440-03	Each	0
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Pick Up of Inmate Litter	440-05	Cubic Yards	0
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	15
Pesticide Application	Fertilizer Application	440-10	Ton	0
	Lime Application	440-11	Ton	0
	Herbicide Application-Hand Method	440-12	Gallon	0
	Herbicide Application-Machine Method	440-13	Acre	10,437
	Number of Licensed Applicators		Each	4
	Number of Training Hours		Hours/Each	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	799
	Drainage Structure Repair	450-02	Each	14
	Install Drainage Culverts	450-03	Each	2
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	4,045.40
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	27,231.60
	Install/Replace Inlets & Catch Basins	450-06	Each	4
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	4
	Clean Deck & Drain	465-01	Linear Feet	0
	Remove Drift	465-17	Each	0
Street Sweeping	Sweeper Cleaning	540-03	Miles	70.03
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	23.50
	Snow & Ice Control Preparations	540-08	Hours	0
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	33
Bulk Materials Management	Material Hauling	630-03	Hours	300
Debris Management	Debris Removal & Disposal	440-08	Cubic Yards	508.50
	Clearing Roadways Travel Lanes	440-19	Miles	6.25
	Manual Cleaning of Roads	540-04	Miles	0
	Disposal of Debris/Litter	630-09	Cubic Yards	0
	Pick Up of Debris/Litter	630-10	Cubic Yards	2

Table VII

UA: **Lafayette**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	24.1
Drainage Maintenance	Erosion Control & Repair	440-00	Each	11
Litter Collection	Litter Cleaning of Roadside	440-02	Cubic Yards	0
	Servicing of Litter Barrels	440-03	Each	0
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Pick Up of Inmate Litter	440-05	Cubic Yards	0
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Pesticide Application	Fertilizer Application	440-10	Ton	0
	Lime Application	440-11	Ton	0
	Herbicide Application-Hand Method	440-12	Gallon	640
	Herbicide Application-Machine Method	440-13	Acre	2,119
	Number of Licensed Applicators		Each	2
	Number of Training Hours		Hours/Each	12
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	256
	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	27,767
	Install/Replace Inlets & Catch Basins	450-06	Each	10
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	8,821
	Remove Drift	465-17	Each	7
Street Sweeping	Sweeper Cleaning	540-03	Miles	28.51
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	428.5
	Snow & Ice Control Preparations	540-08	Hours	0
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	94.25
Bulk Materials Management	Material Hauling	630-03	Hours	218
Debris Management	Debris Monitoring	440-07	Hours	2
	Debris Removal & Disposal	440-08	Cubic Yards	481.86
	Clearing Roadways Travel Lanes	440-19	Miles	20.40
	Manual Cleaning of Roads	540-04	Miles	0
	Disposal of Debris/Litter	630-09	Cubic Yards	9.25
	Pick Up of Debris/Litter	630-10	Cubic Yards	390.63

Table VIII

UA: **Lake Charles**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	22
Drainage Maintenance	Erosion Control & Repair	440-00	Each	3
Litter Collection	Litter Cleaning of Roadside	440-02	Cubic Yards	0
	Servicing of Litter Barrels	440-03	Each	0
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Pick Up of Inmate Litter	440-05	Cubic Yards	70
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Pesticide Application	Fertilizer Application	440-10	Ton	0
	Lime Application	440-11	Ton	0
	Herbicide Application-Hand Method	440-12	Gallon	50
	Herbicide Application-Machine Method	440-13	Acre	1,028
	Number of Licensed Applicators		Each	4
	Number of Training Hours		Hours/Each	12
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	108
	Drainage Structure Repair	450-02	Each	12
	Install Drainage Culverts	450-03	Each	2
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	0
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	36,638
	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	13,454
	Remove Drift	465-17	Each	1
Street Sweeping	Sweeper Cleaning	540-03	Miles	239.40
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	254.74
	Snow & Ice Control Preparations	540-08	Hours	0
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	2
Bulk Materials Management	Material Hauling	630-03	Hours	121
Debris Management	Debris Monitoring	440-07	Hours	0.5
	Debris Removal & Disposal	440-08	Cubic Yards	232.75
	Clearing Roadways Travel Lanes	440-19	Miles	2
	Manual Cleaning of Roads	540-04	Miles	0
	Disposal of Debris/Litter	630-09	Cubic Yards	0
	Pick Up of Debris/Litter	630-10	Cubic Yards	1,423.30

Table IX

UA: **Mandeville-Covington**

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	Each	1
Litter Collection	Litter Cleaning of Roadside	440-02	Cubic Yards	0
	Servicing of Litter Barrels	440-03	Each	0
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Pick Up of Inmate Litter	440-05	Cubic Yards	66
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Pesticide Application	Fertilizer Application	440-10	Ton	0
	Lime Application	440-11	Ton	0
	Herbicide Application-Hand Method	440-12	Gallon	600
	Herbicide Application-Machine Method	440-13	Acre	1,978
	Number of Licensed Applicators		Each	10
	Number of Training Hours		Hours/Each	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	60
	Drainage Structure Repair	450-02	Each	5
	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	16,424
	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	14,302
	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	101
	Snow & Ice Control Preparations	540-08	Hours	0
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	43.50
Bulk Materials Management	Material Hauling	630-03	Hours	0
Debris Management	Debris Removal & Disposal	440-08	Cubic Yards	50
	Clearing Roadways Travel Lanes	440-19	Miles	0.74
	Manual Cleaning of Roads	540-04	Miles	0
	Disposal of Debris/Litter	630-09	Cubic Yards	0
	Pick Up of Debris/Litter	630-10	Cubic Yards	0

Table X

UA: **Monroe**

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	Each	0
Litter Collection	Litter Cleaning of Roadside	440-02	Cubic Yards	0
	Servicing of Litter Barrels	440-03	Each	0
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Pick Up of Inmate Litter	440-05	Cubic Yards	0
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Pesticide Application	Fertilizer Application	440-10	Ton	0
	Lime Application	440-11	Ton	0
	Herbicide Application-Hand Method	440-12	Gallon	0
	Herbicide Application-Machine Method	440-13	Acre	0
	Number of Licensed Applicators		Each	1
	Number of Training Hours		Hours	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	474
	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	16,431
	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	2,718
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	680
	Snow & Ice Control Preparations	540-08	Hours	0
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	0
Bulk Materials Management	Material Hauling	630-03	Hours	0
Debris Management	Debris Removal & Disposal	440-08	Cubic Yards	60
	Clearing Roadways Travel Lanes	440-19	Miles	0
	Manual Cleaning of Roads	540-04	Miles	0
	Disposal of Debris/Litter	630-09	Cubic Yards	0
	Pick Up of Debris/Litter	630-10	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	4
Drainage Maintenance	Erosion Control & Repair	440-00	Each	10
Litter Collection	Litter Cleaning of Roadside	440-02	Cubic Yards	0
	Servicing of Litter Barrels	440-03	Each	0
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Pick Up of Inmate Litter	440-05	Cubic Yards	0
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Pesticide Application	Fertilizer Application	440-10	Ton	0
	Lime Application	440-11	Ton	0
	Herbicide Application-Hand Method	440-12	Gallon	0
	Herbicide Application-Machine Method	440-13	Acre	345
	Number of Licensed Applicators		Each	1
	Number of Training Hours		Hours	12
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	162
	Drainage Structure Repair	450-02	Each	20
	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	4,540
	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	2,000
	Remove Drift	465-17	Each	0
Street Sweeping	Sweeper Cleaning	540-03	Miles	4.01
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	365.5
	Snow & Ice Control Preparations	540-08	Hours	0
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	33
Bulk Materials Management	Material Hauling	630-03	Hours	4.5
Debris Management	Debris Removal & Disposal	440-08	Cubic Yards	366.11
	Clearing Roadways Travel Lanes	440-19	Miles	0
	Manual Cleaning of Roads	540-04	Miles	0
	Disposal of Debris/Litter	630-09	Cubic Yards	0
	Pick Up of Debris/Litter	630-10	Cubic Yards	241

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	Each	0
Litter Collection	Litter Cleaning of Roadside	440-02	Cubic Yards	0
	Servicing of Litter Barrels	440-03	Each	0
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Pick Up of Inmate Litter	440-05	Cubic Yards	0
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Pesticide Application	Fertilizer Application	440-10	Ton	0
	Lime Application	440-11	Ton	0
	Herbicide Application-Hand Method	440-12	Gallon	0
	Herbicide Application-Machine Method	440-13	Acre	333
	Number of Licensed Applicators		Each	1
	Number of Training Hours		Hours	12
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	
	Drainage Structure Repair	450-02	Each	8
	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	976
	Install/Replace Inlets & Catch Basins	450-06	Each	1
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	0
	Clean Deck & Drain	465-01	Linear Feet	560
	Remove Drift	465-17	Each	0
Street Sweeping	Sweeper Cleaning	540-03	Miles	
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	13
	Snow & Ice Control Preparations	540-08	Hours	0
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	21.5
Bulk Materials Management	Material Hauling	630-03	Hours	2
Debris Management	Debris Monitoring	440-07	Hours	2
	Debris Removal & Disposal	440-08	Cubic Yards	0
	Clearing Roadways Travel Lanes	440-19	Miles	.25
	Manual Cleaning of Roads	540-04	Miles	0
	Disposal of Debris/Litter	630-09	Cubic Yards	0
	Pick Up of Debris/Litter	630-10	Cubic Yards	1

Table XIII

UA: **New Orleans**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	104.10
Drainage Maintenance	Erosion Control & Repair	440-00	Each	1
Litter Collection	Litter Cleaning of Roadside	440-02	Cubic Yards	0
	Servicing of Litter Barrels	440-03	Each	482
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Pick Up of Inmate Litter	440-05	Cubic Yards	0
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Pesticide Application	Fertilizer Application	440-10	Ton	0
	Lime Application	440-11	Ton	0
	Herbicide Application-Hand Method	440-12	Gallon	26,619.50
	Herbicide Application-Machine Method	440-13	Acre	34,319.50
	Number of Licensed Applicators		Each	15
	Number of Training Hours		Hours/Each	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	3,994
	Drainage Structure Repair	450-02	Each	25.10
	Install Drainage Culverts	450-03	Each	9
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	26,174
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	16,158
	Install/Replace Inlets & Catch Basins	450-06	Each	6
Bridge & Structure Maintainence	Clean Structural Members	465-00	Each	23,171
	Clean Deck & Drain	465-01	Linear Feet	2,748
	Storm Water Pump Station Repair, Mechanical	465-14	Each	239
	Storm Water Pump Station Repair, Electrical	465-15	Each	136
	Remove Drift	465-17	Each	0
Street Sweeping	Sweeper Cleaning	540-03	Miles	15,307.93
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	636
	Snow & Ice Control Preparations	540-08	Hours	0
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	0
Bulk Materials Management	Material Hauling	630-03	Hours	59
Debris Management	Debris Removal & Disposal	440-08	Cubic Yards	2,222.13
	Clearing Roadways Travel Lanes	440-19	Miles	107.57

	Manual Cleaning of Roads	540-04	Miles	
	Disposal of Debris/Litter	630-09	Cubic Yards	300.50
	Pick Up of Debris/Litter	630-10	Cubic Yards	5,923.5230

Table XIV

UA: **Shreveport**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	28
Drainage Maintenance	Erosion Control & Repair	440-00	Each	33
Litter Collection	Litter Cleaning of Roadside	440-02	Cubic Yards	0
	Servicing of Litter Barrels	440-03	Each	0
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Pick Up of Inmate Litter	440-05	Cubic Yards	14
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	260
Pesticide Application	Fertilizer Application	440-10	Ton	
	Lime Application	440-11	Ton	
	Herbicide Application-Hand Method	440-12	Gallon	3,750
	Herbicide Application-Machine Method	440-13	Acre	776
	Number of Licensed Applicators		Each	1
	Number of Training Hours		Hours/Each	16
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	1,312
	Drainage Structure Repair	450-02	Each	2
	Install Drainage Culverts	450-03	Each	0
	Clean & Reshape Ditches-Hand Method	450-04	Linear Feet	5,365
	Clean & Reshape Ditches-Machine Method	450-05	Linear Feet	0
	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	503
	Remove Drift	465-17	Each	30
Street Sweeping	Sweeper Cleaning	540-03	Miles	25
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	131.5
	Snow & Ice Control Preparations	540-08	Hours	80
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	41
Bulk Materials Management	Material Hauling	630-03	Hours	366.5
Debris Management	Debris Monitoring	440-07	Hours	6
	Debris Removal & Disposal	440-08	Cubic Yards	14
	Roadway Clearing	440-19	Miles	0
	Manual Cleaning of Roads	540-04	Miles	0
	Disposal of Debris/Litter	630-09	Cubic Yards	908
	Pick Up of Debris/Litter	630-10	Cubic Yards	482

Table XV

UA: **Slidell**

BMP	Measurable Goal	Function Code	Unit of Measurement	Quantity
Illegal Dumping	Spill Clean-Up	425-01	Each	2
Drainage Maintenance	Erosion Control & Repair	440-00	Each	0
Litter Collection	Litter Cleaning of Roadside	440-02	Cubic Yards	0
	Servicing of Litter Barrels	440-03	Each	0
	Pick Up of Litter(Adopt-A-Road)	440-04	Cubic Yards	0
	Pick Up of Inmate Litter	440-05	Cubic Yards	59
	Pick Up of Sheriff's Litter	440-06	Cubic Yards	0
Pesticide Application	Fertilizer Application	440-10	Ton	0
	Lime Application	440-11	Ton	0
	Herbicide Application-Hand Method	440-12	Gallon	100
	Herbicide Application-Machine Method	440-13	Acre	1,121
	Number of Licensed Applicators		Each	10
	Number of Training Hours		Hours/Each	8
Roadside Drainage Maintainence	Clean and Maintain Drainage Structures	450-01	Each	6
	Drainage Structure Repair	450-02	Each	5
	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	6,900
	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	3,574
	Storm Water Pump Repair, Mechanical	465-14	Each	2
	Remove Drift	465-17	Each	0
Street Sweeping	Sweeper Cleaning	540-03	Miles	45
De-Icing/Anti-Icing Materials Management	Snow & Ice Control	540-07	Hours	95
	Snow & Ice Control Preparations	540-08	Hours	0
	Snow & Ice Inspection/Reconnaissance	540-09	Hours	81.50
Bulk Materials Management	Material Hauling	630-03	Hours	30
Debris Management	Debris Removal & Disposal	440-08	Cubic Yards	6
	Clearing Roadways Travel Lanes	440-19	Miles	18.63
	Manual Cleaning of Roads	540-04	Miles	0
	Disposal of Debris/Litter	630-09	Cubic Yards	15
	Pick Up of Debris/Litter	630-10	Cubic Yards	126.10

Appendix B

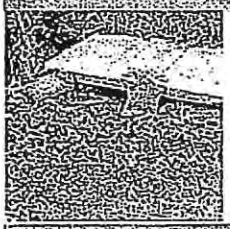
After the Storm Brochure

&

Understanding Water Brochure

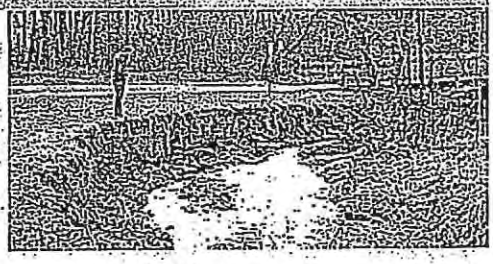
After the Storm

What is stormwater runoff?



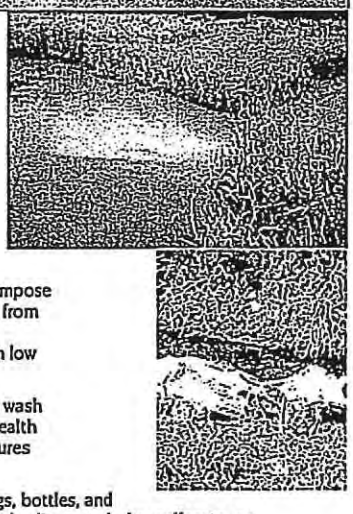
Stormwater runoff occurs when precipitation from rain or snowmelt flows over the ground. Impervious surfaces like driveways, sidewalks, and streets prevent stormwater from naturally soaking into the ground.

Why is stormwater runoff a problem?



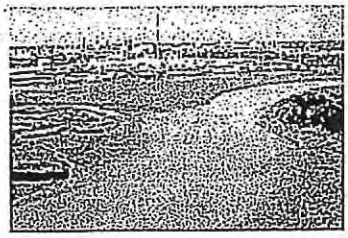
Stormwater can pick up debris, chemicals, dirt, and other pollutants and flow into a storm sewer system or directly to a lake, stream, river, wetland, or coastal water. Anything that enters a storm sewer system is discharged untreated into the waterbodies we use for swimming, fishing, and providing drinking 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 833-B-03-002

A Citizen's Guide to Understanding Stormwater

WHEN IT RAINS IT DRAINS

Stormwater Pollution Solutions

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.

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.

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.

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

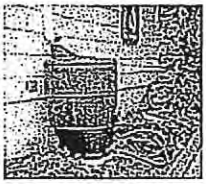
Pet waste can be a major source of bacteria and excess nutrients in local waters.

- 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.

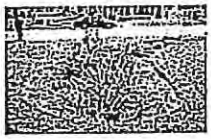
Education is essential to changing people's behavior. Signs and markers near storm drains warn residents that pollutants entering the drains will be carried untreated into a local waterbody.

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.

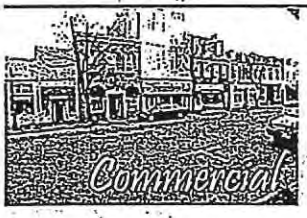


Rain Barrels—You can collect rainwater from rooftops in mosquito-proof containers. The water can be used later on lawn or garden areas.



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.

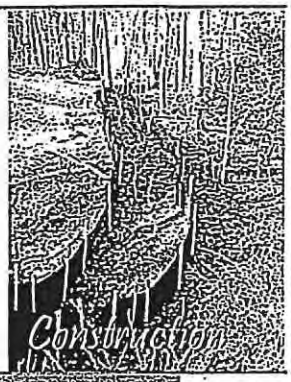


Dirt, oil, and debris that collect in parking lots and paved areas can be washed into the storm sewer system and eventually enter local waterbodies.

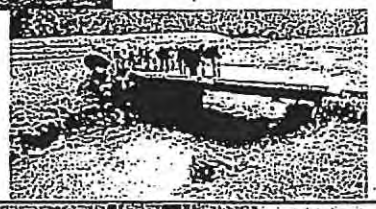
- Sweep up litter and debris from sidewalks, driveways and parking lots, especially around storm drains.
- Cover grease storage and dumpsters and keep them clean to avoid leaks.
- Report any chemical spill to the local hazardous waste cleanup team. They'll know the best way to keep spills from harming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

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.



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.

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.....

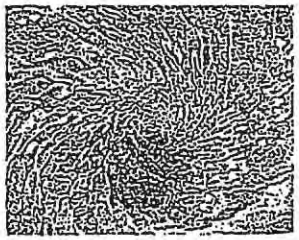
- Paper and cigarette butts are a public nuisance common to the road. Roadside litter is not only unsightly, but lead to drainage problems. Put trash in its place and properly discard it in a garbage can.
- Hitting the open road with your travel trailer in tow is a great way to see the country, however 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 SOLUHON!

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

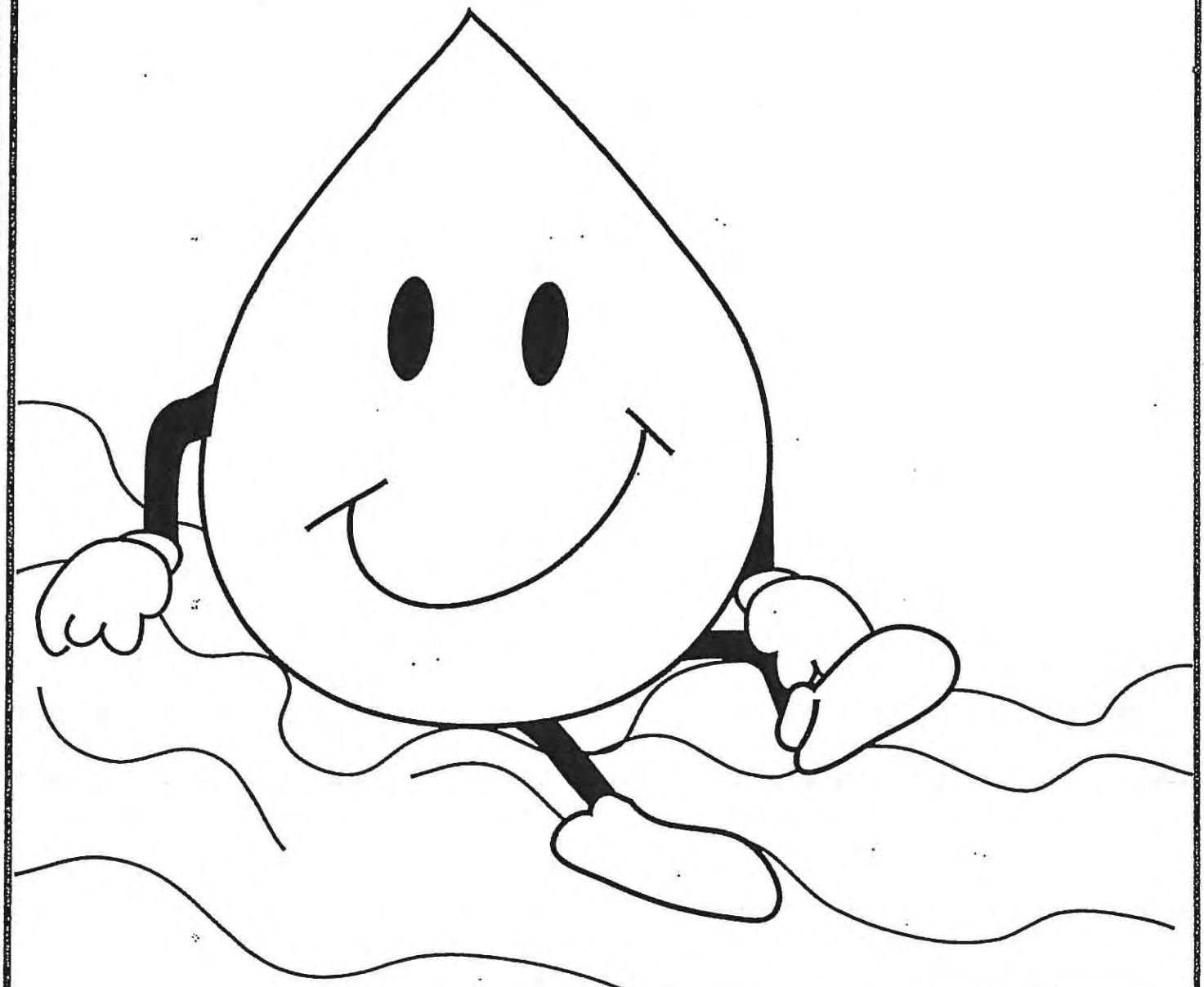
Appendix D

Educational Materials Packets

ACTIVITY BOOKLET

Be a Solution to Water Pollution

ACTIVITY BOOK



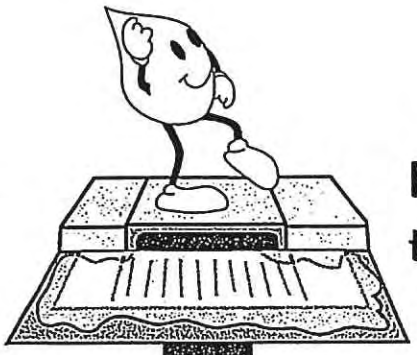
Have you ever walked next to a stream and seen trash floating in the water? Do you know how it gets there? Every time it rains, the water runs off the land and picks up pollutants such as dirt, oil, pet waste, litter, trash, pesticides and fertilizers. This polluted water flows into street drains and 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...

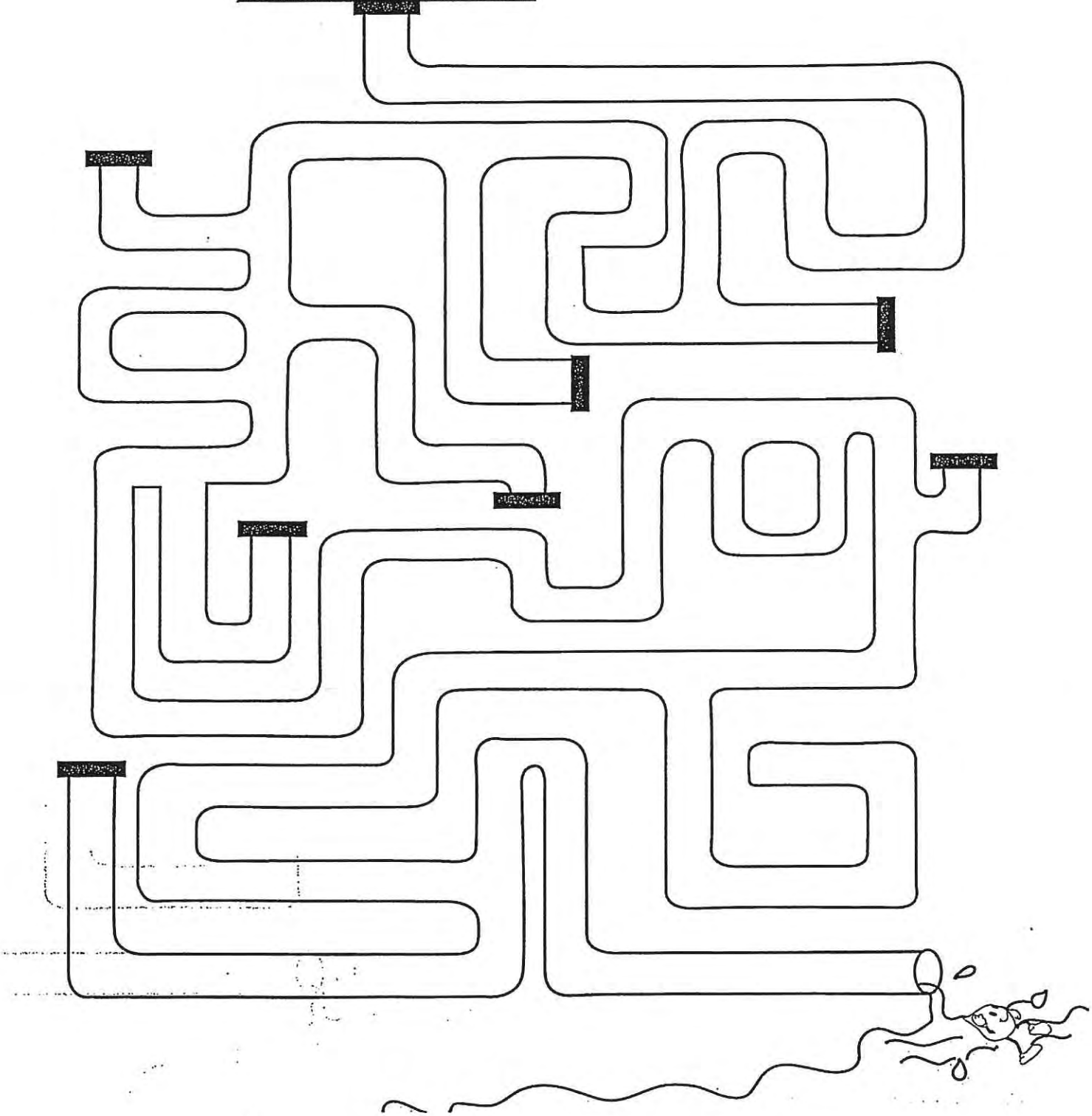
"Be a Solution to Water Pollution"

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

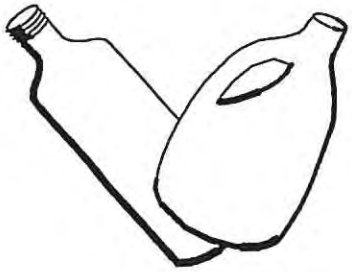
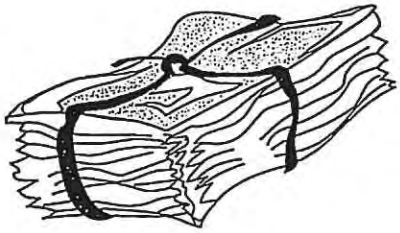
Waterdrops go through an amazing journey to get to streams and creeks.



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



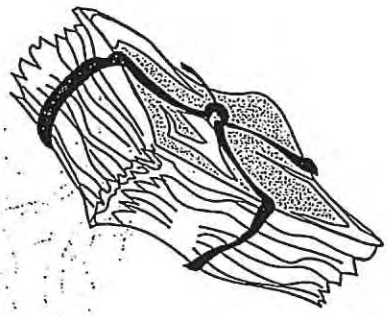
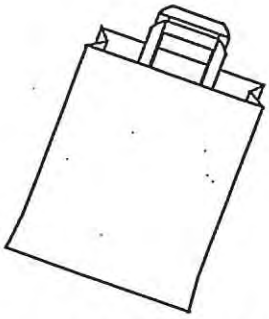
It is important to cleanup after your dog. Every time it rains, "poop" is collected by rainwater and dumped into a nearby storm drain or into a river, lake or stream. Carry a plastic or paper bag with you to pick-up after dogs and throw it in the trash.

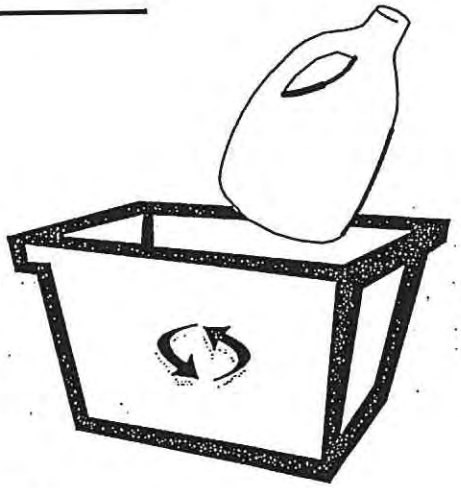



We can "**Be a Solution to Water Pollution**" by recycling cans, bottles, milk jugs, plastic bags and newspapers at home or in school.

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 _____

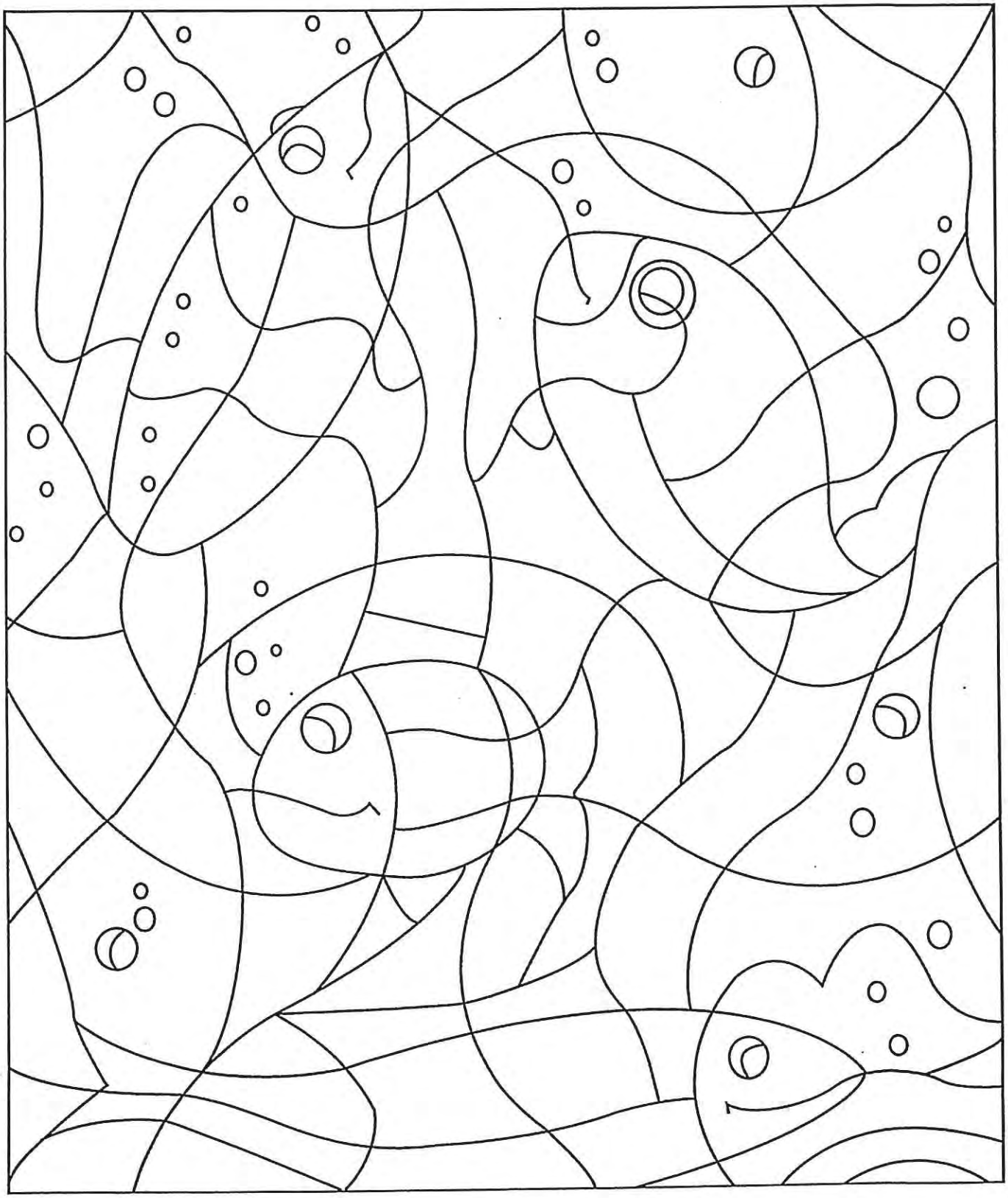





Answers: 1. newspaper, 2. glass, 3. bottles, 4. plastic, 5. milk jugs, 6. aluminum cans

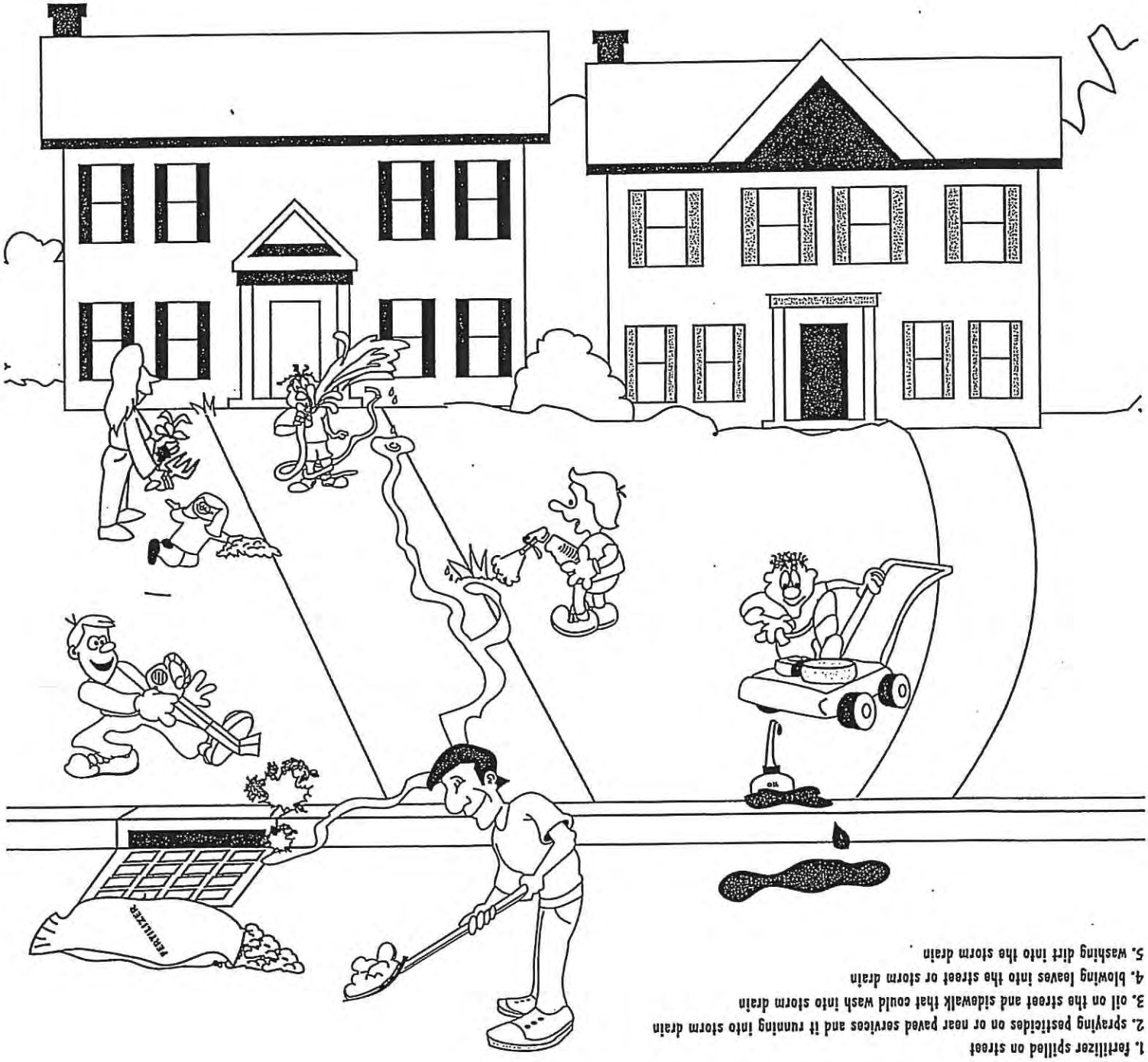
Fish and other aquatic life rely on clean water. Plastic bags, oil, other chemicals and other pollutants cause harm to fish.

Find the fish and color them in.



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

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

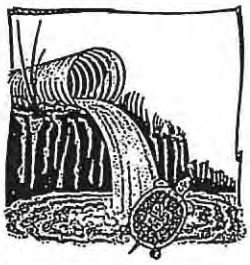
Email: info@cleanwatercampaign.com

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

STICKERS

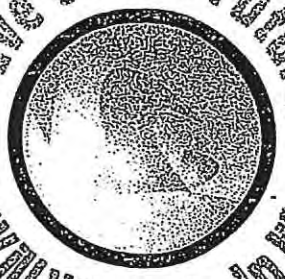
GIVE
WATER
A HAND

DIRT IN THE DRAIN



TURTLES COMPLAIN

Waves of the Future!

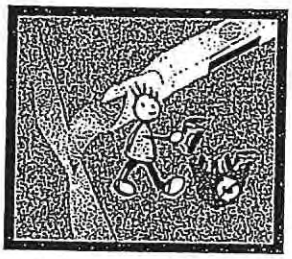


Will We Swim in It?

Clean Water

I Can Help!

MAKE A SPLASH



CLEAN UP YOUR TRASH

WHEN IT RAINS
IT DRAINS

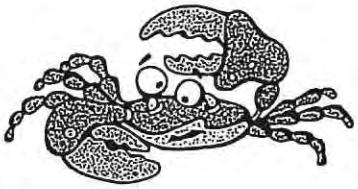
Muck! Yuck!

Sad Duck

I'm a
CLEAN WATER
ACTION HERO

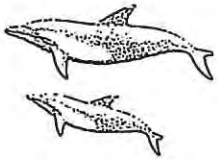
Leaves don't
belong in the
stormdrain

Junk from the Gutter



Makes us Sputter

Please Don't Pour



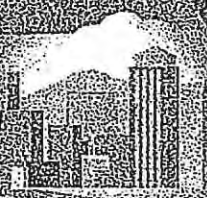
That's Our
Front Door

Oil & Water

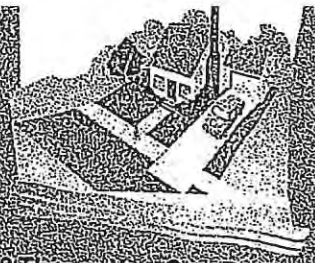
Please Don't Mix!

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 E

LPB Contracts, Broadcast Schedule and LPB Article

LPB2

Report date: 01/07/2015
Report time: 11:13:55

From: 01/01/2014 To: 12/31/2014

Log Performance Report
Page: 1

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	06/22/08	SMTWTFS	LUC DV 2006-2007
LGS12-15	0012/15				05/23/10	YYYYYYY	UPDATED 6/30/201

Thu 01/02/2014 at 18:59:29 for 00:00:30:04 LPB
Sat 01/04/2014 at 08:59:29 for 00:00:30:04 LPB
Thu 01/09/2014 at 18:59:29 for 00:00:30:04 LPB
Sat 01/11/2014 at 16:29:29 for 00:00:30:04 LPB
Thu 01/16/2014 at 19:29:29 for 00:00:30:04 LPB
Sat 01/18/2014 at 11:59:29 for 00:00:30:04 LPB
Thu 01/23/2014 at 18:59:29 for 00:00:30:04 LPB
Sat 01/25/2014 at 12:59:29 for 00:00:30:04 LPB
Thu 01/30/2014 at 21:59:29 for 00:00:30:04 LPB
Sat 02/01/2014 at 15:29:29 for 00:00:30:04 LPB
Sat 02/08/2014 at 14:59:29 for 00:00:30:04 LPB
Sun 02/09/2014 at 20:59:29 for 00:00:30:04 LPB
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Tue 02/18/2014 at 21:59:29 for 00:00:30:04 LPB
Sat 02/22/2014 at 14:29:29 for 00:00:30:04 LPB
Sat 03/01/2014 at 15:59:29 for 00:00:30:04 LPB
Tue 03/04/2014 at 18:59:29 for 00:00:30:04 LPB
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Tue 03/25/2014 at 19:59:29 for 00:00:30:04 LPB
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Thu 04/03/2014 at 19:59:29 for 00:00:30:04 LPB
Sat 04/05/2014 at 12:29:29 for 00:00:30:04 LPB
Tue 04/08/2014 at 21:59:29 for 00:00:30:04 LPB
Sat 04/12/2014 at 15:59:14 for 00:00:30:04 LPB
Thu 04/17/2014 at 20:59:29 for 00:00:30:04 LPB
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Sun 04/20/2014 at 21:59:29 for 00:00:30:04 LPB
Sat 04/26/2014 at 11:59:29 for 00:00:30:04 LPB
Thu 05/01/2014 at 21:56:29 for 00:00:30:04 LPB
Sat 05/03/2014 at 16:29:29 for 00:00:30:04 LPB
Sun 05/04/2014 at 20:59:29 for 00:00:30:04 LPB
Sat 05/10/2014 at 14:29:14 for 00:00:30:04 LPB
Thu 05/15/2014 at 19:59:29 for 00:00:30:04 LPB
Sat 05/17/2014 at 15:29:29 for 00:00:30:04 LPB
Thu 05/22/2014 at 20:59:29 for 00:00:30:04 LPB
Sat 05/24/2014 at 12:29:29 for 00:00:30:04 LPB
Sun 05/25/2014 at 21:59:29 for 00:00:30:04 LPB
Fri 07/04/2014 at 18:59:14 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	06/22/08	SMTWTFS	LUC DV 2006-2007
LGS12-15	0012/15				05/23/10	YYYYYYY	UPDATED 6/30/201

Sat	07/05/2014	at 10:29:29	for 00:00:30:04	LPB
Wed	07/09/2014	at 18:59:29	for 00:00:30:04	LPB
Sat	07/12/2014	at 15:29:29	for 00:00:30:04	LPB
Wed	07/16/2014	at 18:59:29	for 00:00:30:04	LPB
Sat	07/19/2014	at 11:59:29	for 00:00:30:04	LPB
Fri	07/25/2014	at 18:59:29	for 00:00:30:04	LPB
Sat	07/26/2014	at 10:29:29	for 00:00:30:04	LPB
Wed	07/30/2014	at 19:59:29	for 00:00:30:04	LPB
Sat	08/02/2014	at 10:29:29	for 00:00:30:04	LPB
Mon	08/04/2014	at 21:59:29	for 00:00:30:04	LPB
Sat	08/09/2014	at 10:59:29	for 00:00:30:04	LPB
Mon	08/11/2014	at 18:58:57	for 00:00:30:04	LPB
Sat	08/16/2014	at 10:29:29	for 00:00:30:04	LPB
Mon	08/18/2014	at 18:59:29	for 00:00:30:04	LPB
Fri	08/29/2014	at 18:59:29	for 00:00:30:04	LPB
Sat	08/30/2014	at 15:29:29	for 00:00:30:04	LPB
Fri	09/05/2014	at 19:59:29	for 00:00:30:04	LPB
Sat	09/06/2014	at 11:59:29	for 00:00:30:04	LPB
Mon	09/08/2014	at 21:59:29	for 00:00:30:04	LPB
Sat	09/13/2014	at 10:29:29	for 00:00:30:04	LPB
Sat	09/20/2014	at 09:59:29	for 00:00:30:04	LPB
Mon	09/22/2014	at 21:59:29	for 00:00:30:04	LPB
Sat	09/27/2014	at 09:58:45	for 00:00:30:04	LPB
Wed	10/01/2014	at 19:59:29	for 00:00:30:04	LPB
Sat	10/04/2014	at 15:29:29	for 00:00:30:04	LPB
Fri	10/10/2014	at 19:59:29	for 00:00:30:04	LPB
Sat	10/11/2014	at 11:59:29	for 00:00:30:04	LPB
Wed	10/15/2014	at 18:59:29	for 00:00:30:04	LPB
Sat	10/18/2014	at 14:59:29	for 00:00:30:04	LPB
Fri	10/24/2014	at 20:29:29	for 00:00:30:04	LPB
Sat	10/25/2014	at 09:59:29	for 00:00:30:04	LPB
Fri	10/31/2014	at 18:59:29	for 00:00:30:04	LPB
Sat	11/01/2014	at 15:29:29	for 00:00:30:04	LPB
Mon	11/03/2014	at 20:59:29	for 00:00:30:04	LPB
Sat	11/08/2014	at 11:59:29	for 00:00:30:04	LPB
Fri	11/14/2014	at 19:59:29	for 00:00:30:04	LPB
Sat	11/15/2014	at 15:29:29	for 00:00:30:04	LPB
Sat	11/22/2014	at 14:59:29	for 00:00:30:04	LPB
Wed	11/26/2014	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
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LGS12-15	0012/15				05/23/10	YYYYYYY	UPDATED 6/30/201

Sat	11/29/2014	at 08:59:29	for 00:00:30:04	LPB
Fri	12/05/2014	at 19:29:29	for 00:00:30:04	LPB
Sat	12/06/2014	at 08:59:29	for 00:00:30:04	LPB
Sat	12/20/2014	at 11:59:29	for 00:00:30:04	LPB
Wed	12/24/2014	at 20:59:29	for 00:00:30:04	LPB
Sat	12/27/2014	at 14:59:29	for 00:00:30:04	LPB
Wed	12/31/2014	at 20:59:29	for 00:00:30:04	LPB

This item appeared 85 times between 01/01/2014 and 12/31/2014.

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 2013-2014 (Page 1 of 2)

Louisiana Dept. of Transportation and Development	Janaye Tate, Materials & Testing Section
Sponsoring Company Name:	**Contact Name and Title:**
5080 Florida Boulevard	Baton Rouge, LA 70806
Address:	**City, State and Zip:**
(225) 248-4156	janaye.tate@la.gov
Phone Number:	**Fax Number/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: May 30, 2013-May 29, 2014

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, May 30, 2013 through May 29, 2014.
- Twenty, 20, (:30 second) BONUS messages supporting DOTD's Storm Water Campaign, also airing Sunday through Saturday during prime-time and How-to programming, May 30, 2013 through May 29, 2014.
- Messages should air, four 3-4 per month, over the year-long schedule.
- One (1) "In Good Company" feature article in LPB Visions magazine.
- 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 2013-2014 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. Sponsorship will be billed in one payment as follows: $1,500.00 NET in May 2014.The sponsor agrees to remit invoice(s) within 30 days of invoiced date(s).

TOTAL AMOUNT: $1,500.00 NET-May 2014

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: April 26, 2013 | **End Date: May 29, 2014**

Sponsor approval by: | **Foundation for Excellence in LPB approval by:**

Date: 4/29/13 | Date: 06-03-13

Witness: | **Witness:**

Abigail Marston Date: 4/29/13 | Date: 6-3-13

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 2014-2015 (Page 1 of 2)

Louisiana Dept. of Transportation and Development **Sponsoring Company Name:**	Janaye Tate, Materials & Testing Section **Contact Name and Title:**
5080 Florida Boulevard **Address:**	Baton Rouge, LA 70806 **City, State and Zip:**
(225) 248-4156 **Phone Number:**	janaye.tate@la.gov **Fax Number/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, 2014-June 29, 2015

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, 2014 through June 29, 2015.
- 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, 2014 through June 29, 2015.
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Louisiana Department of Transportation & Development/FELPB Agreement 2014-2015 cont'd (Page 2 of 2)

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TOTAL AMOUNT: $1,500.00 NET-May 2015

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 26, 2014

End Date: June 29, 2015

Sponsor approval by:

Date: 6/30/14

Witness:

Date: 6/30/14

Foundation for Excellence in LPB approval by:

Date: 07-02-14

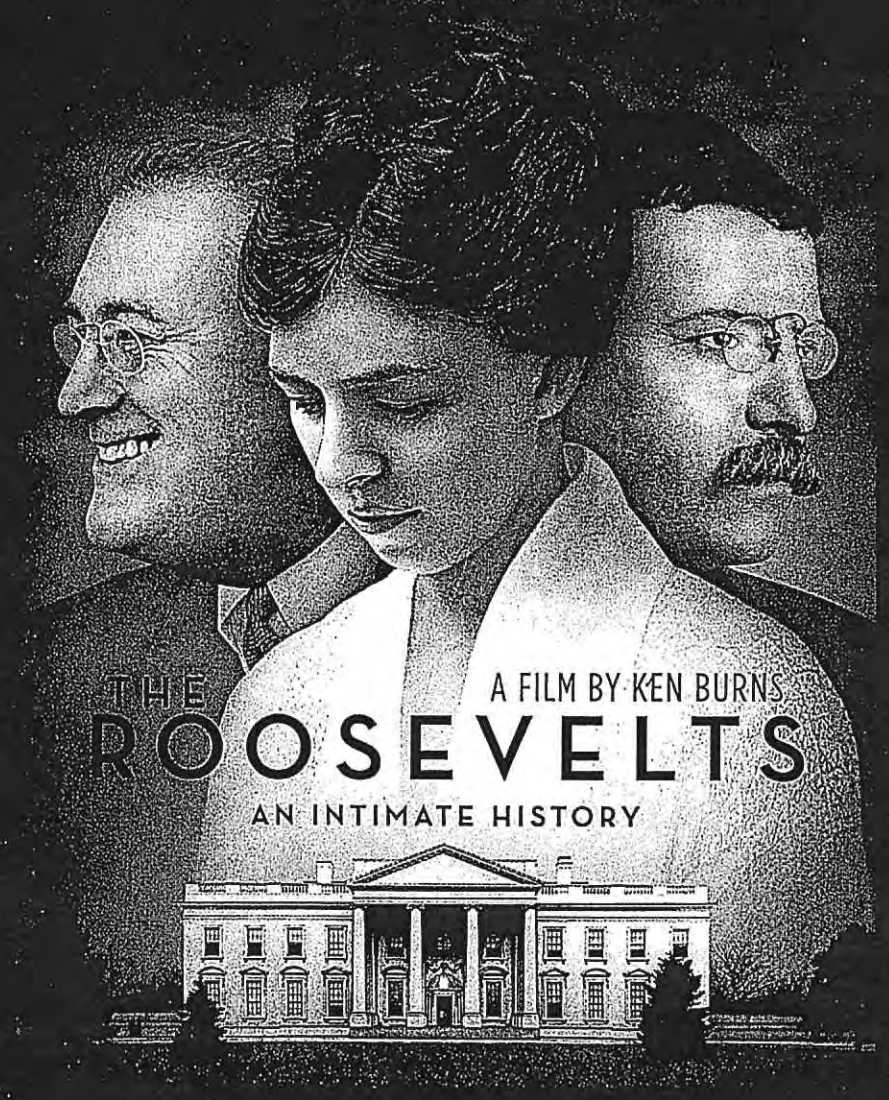
Witness:

Date: 7-2-14

VISIONS

FOR FRIENDS OF LPB SEPT. 2014
VOLUME 38, ISSUE 9

THEIR TRIUMPHS MADE HISTORY.
THEIR TRAGEDIES MADE THEM HUMAN.



IN GOOD COMPANY

WE ARE THE SOLUTION

Water pollution is very common today. Storm water runoff as a result of precipitation events is one of the sources. Since storm water is not treated prior to entering storm drains and/or waterways, it carries pollutants and contaminants directly into them. Not only does this affect our water ways, it also affects drinking water quality, wildlife, their habitats and much more. Storm water pollutants are not 100% preventable but there are definitely ways that WE can help minimize them. Illicit discharges play a major role in the pollution of storm water runoff. Illicit discharges are defined by EPA as any discharge that is not composed of entirely stormwater. The appearance of the stormwater should typically be clear. The presence of chemicals, debris, oil, grease, etc., causes water to have a discoloration. Discoloration in water is evidence of illicit discharges.

The Department of Transportation and Development, other agencies and the public can work to keep our waterways clean. Together we can and will make a difference. We control what goes into our storm drains. Abnormalities in water should be reported immediately. To report an illicit discharge within the state highway system, please go to http://wwwapps.dotd.la.gov/engineering/public_works/dam_safety/reportdischarge.aspx. We are the solution to water pollution. The Louisiana Department of Transportation and Development's Materials and Testing Section is a long-time supporter of programming on LPB.

LOUISIANA'S ON THE MOVE
DOTD
BUILDS THE WAY

MEETINGS

FRIENDS OF LPB ANNUAL MEETING
September 9 at 5:30 P.M.

LOUISIANA EDUCATIONAL TELEVISION AUTHORITY
Executive & Finance Committee
Thursday, September 11 at Noon

FOUNDATION FOR EXCELLENCE
IN LOUISIANA PUBLIC BROADCASTING
Thursday, September 18 at Noon

shop LPB

Having a Stay-cation?
Enjoy the beautiful sites of Louisiana
from the comfort of your home with these DVDs.

ALIVE! IN AMERICA'S DELTA

-Black Bear Comeback

-Delta Guardians

-Endangered in the Gulf

-Life on the Edge

-The Whooping Crane's Majestic Return

-Alligator: King of the Bayou

Atchafalaya Houseboat

Castle on the Hill

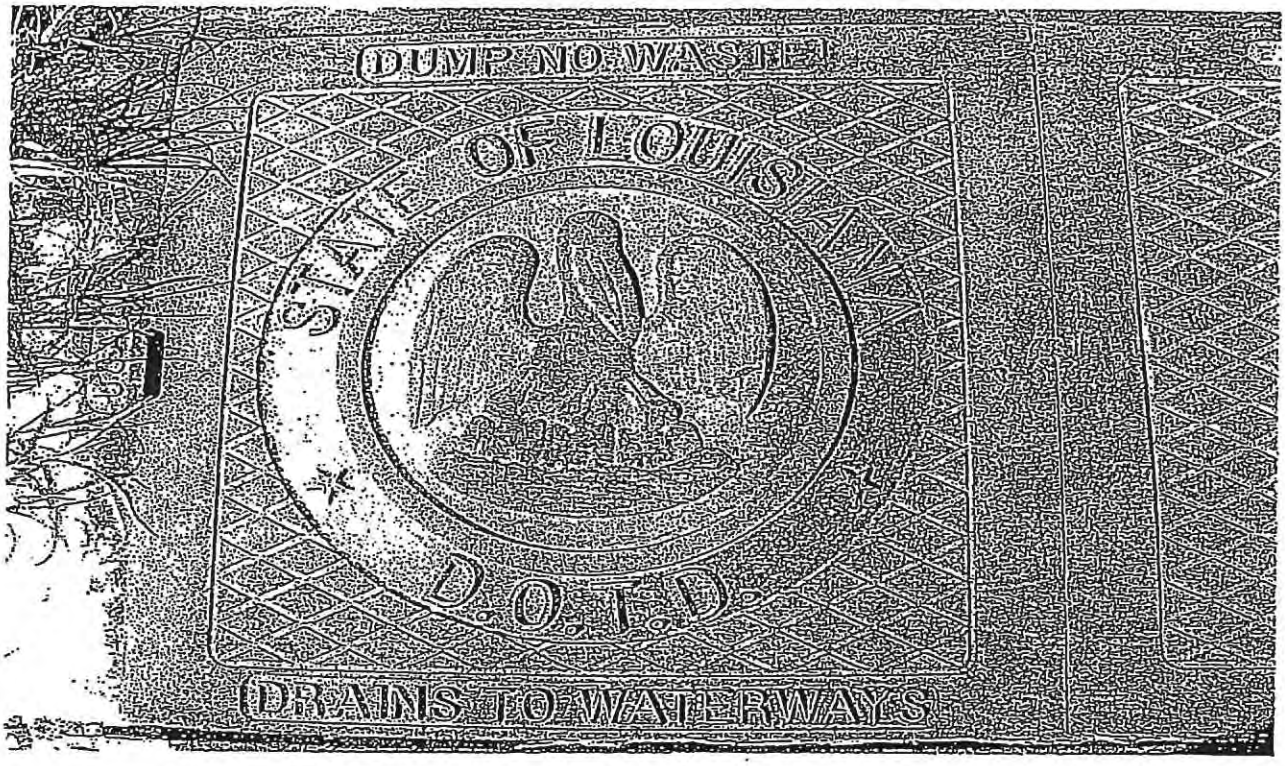
Lost Louisiana - $25 per episode or $275 for the complete set of 13 DVDs + S&H

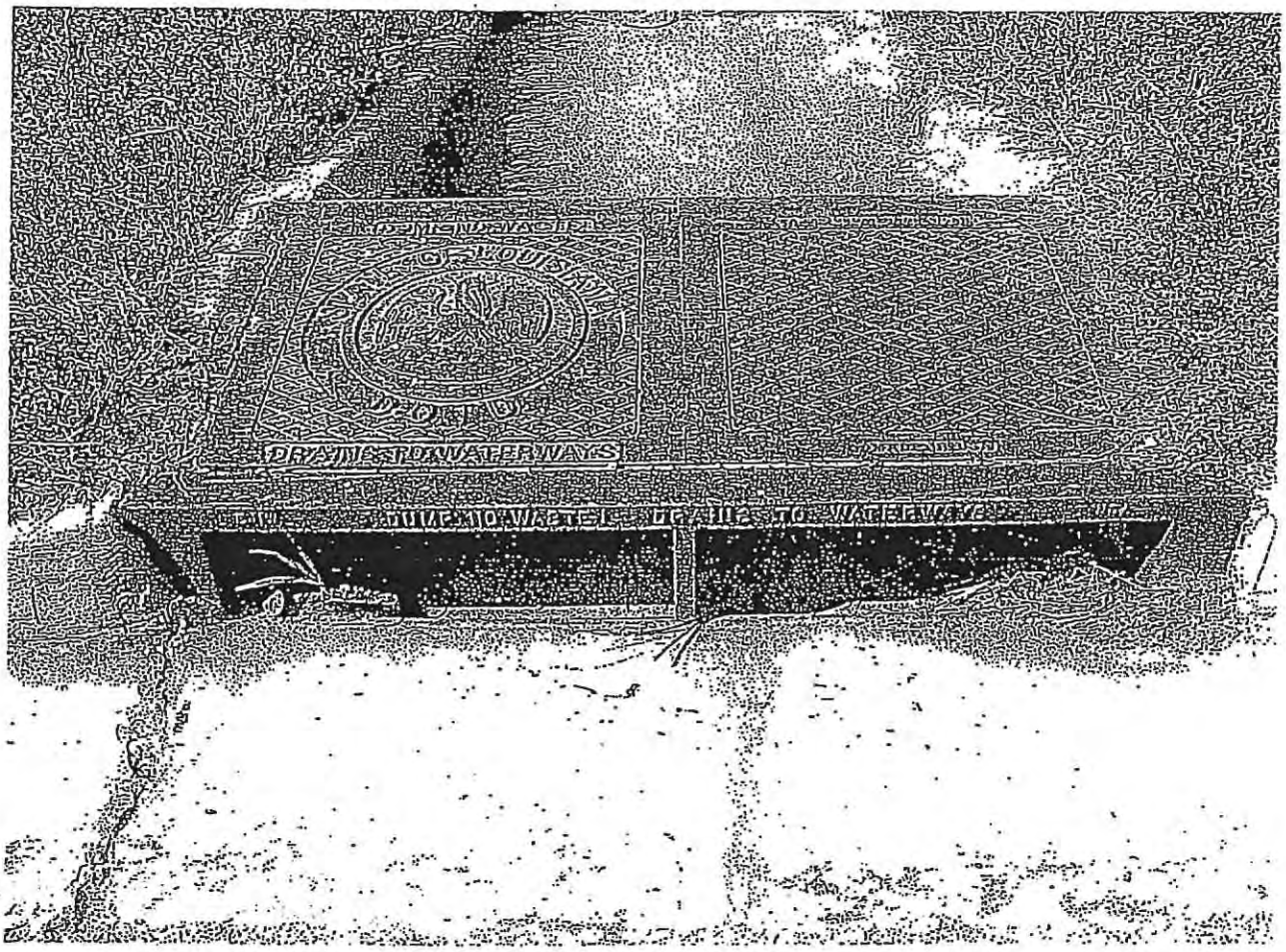
Any Ms. Lucy Cookbook $16.95 + S&H
Use the code "LPBMEMS" for a 15% member discount.

Visit lpb.org/shop or call 1 800 973 7246

Appendix F

Catch Basin Cover Photograph


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


DRAINS TO WATERWAYS

Appendix G

IDDE Training Form & Employee Quiz

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

EXCALVISUAL
www.excalvisual.com

MAY BE COPIED AS NEEDED

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

Appendix H

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, toll-free at (866) 590-0065 or locally 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 I

Construction Inspection Forms

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

Maintenance required for Erosion Control Measures:

To be performed by: _____ On or Before: _____

Types of Measures:

- Silt Fence
- Hay/Straw Bales
- Hay Check Dam
- Stone Check Dam

E - Sediment Basin
F - Slope Drain
G- TemporarySeeding
H - None, But Stabilization Measure Required

I - Matting
J - Other

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?	Permit available?	Current SWPPP?	Current site map?
❑Yes ❑No	❑Yes ❑No	❑Yes ❑No	❑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:	

Appendix J

Course Descriptions

Appendix K

LSWA Conference Agenda

Louisiana Solid Waste Association's
ENVIRONMENTAL PARTNERSHIP OF BUSINESS, INDUSTRY & GOVERNMENT

"Working to Preserve Louisiana's Environmental Paradise"

March 19-21, 2014

Cajundome
onvention Center
Lafayette, LA

Wednesday, March 19, 2014

Golf Tournament	Golf Tournament: 9:30am Registration, 11:00am Tee Off (Venue to be Announced)
9:30 AM	Solid Waste Operator Certification Test (Cajundome Convention Center)
2:00-5:30 PM	Exhibitor Set-Up and Early Registration (Pre-Registered Attendees)
6:00-9:00 PM	Hospitality Room (Hilton Garden Inn) Luau on the Terrace

Thursday, March 20, 2014

7:30-8:30	Registration, Breakfast & Exhibitor Visitation
8:30-9:00	Peggy Hatch, Secretary, LDEQ
9:00-9:30	Dr. Alex Appeaning, Deputy Secretary, LDEQ
9:30-10:30	Ethics Training, Kim Chatelain, Jefferson Parish Government
10:30-11:00	Stephen Chustz, Secretary, LDNR
11:00-11:30	Exhibitor Visitation
11:30-1:00	Guest Speaker, Steven Gilrein, EPA, Awards Presentation & Luncheon

Breakout Sessions

Track Titles	Solid Waste	Industrial/Energy	Regulatory Compliance	UST	Water/Waste Water
1:00-1:30	Waste Characterization and Profiling at Landfills Paul Bouchereau Waste Management Tim Poche Taylor, Porter, Brooks, and Phillips	EPA Method TO-17 for Vapor Intrusion: Method Overview and Case Study Review Nathan Eklund Pace Analytical	DEQ Compliance/Enforcement Update Cheryl Nolan LDEQ	Pay for Performance-Durwood Franklin LDEQ	Sub-lethal Effects in Whole Effluent Toxicity Tests Erin "Ginger" Briggs Bio-Analytical Laboratories
1:30-2:00		Gassified Biomass as an Alternative Energy Source Dr. Mark Zappi ULL	Competency-Based Environmental Certification Noah West Stratagraph-HESTQ	Trust Fund Update Jeff Baker & Jason Efferson LDEQ	Enforcement Action and Expedited Penalties Assessed to your Solid Waste Facility Wayne Slater LDEQ
2:00-2:30	Odor Control in the Solid Waste Industry Donald G. Adams Environmental Services	Legacy Clean-Up Sites George Cramer ARCADIS	Industry-Wide Technical Competencies Noah West, Stratagraph-HESTQ	Criminal Investigation Program Ryan Brignac LDEQ	Improving Solid Management at Your Wastewater Treatment Plant David Maxwell HACH
2:30-3:00	C&D Recycling Rodney Schamerhorn Schamerhorn C&D	Legacy Sites-An Update Tim Poche Taylor, Porter, Brooks & Phillips, LLP	LDEQ Compliance Assistance, Are You A Regulated Facility? Jeff Jackson, LDEQ	Understanding the Abandoned Tank & Removal Program Isaac Rickets LDEQ	Activating the Sludge in Wastewater Lagoons-Adding Years to Your Lagoon's Life Jim Dartez Reliant Water Technologies
3:00-4:00	Exhibitor Visitation				

Track Titles	Solid Waste	Industrial/Energy	Regulatory Compliance	UST	Water/Waste Water
4:00-4:30	Closure Turf System in Landfills Ricardo de Abreu Solo Environmental Consultants Juene Franklin Franklin Engineers and Consultants	Case Study for Fracking Operations (Pros and Cons) Kesavalu "Dr. Doss" M. Bagawandoss Accutest Gulf Coast	Environmental Compliance, Understanding Acronyms Gregory Langley, LDEQ	Innovative Remediation Technologies: Phytoremediation Dr. Mark Killen	Turbidity Reduction in Landfill Stormwater Runoff Case Study Aimee' Killeen Providence
4:30-5:00		What Have the Feds Been Up To? Federal Legal Developments John King Breazeale, Sache & Wilson, LLP	Watershed Academy Gregory Waldron, LDEQ	Technical Standards & Corrective Action Requirements for Owners & Operators of USTs Todd Perry	Turbidity Removal in Stormwater at Landfills Bill Travis Thornton, Musso and Bellemin
6:00 - 9:00 pm	Hospitality Event-Acadian Village				

Friday, March 21, 2014

Track Titles	Solid Waste	Industrial/Energy	Regulatory Compliance	UST	Water/Waste Water
8:00-8:30	EXHIBITOR VISITATION				
8:30-9:00	Boiling Down the RICE Rules Mindi Faubion Providence	Air Quality Update Michael Vince LDEQ	Principles of Investigation: Forensic Science Noah West Stratgagraph-HESTQ Northwestern State University	LDEQ Enforcement Richie Coleman LDEQ	EPA Method Update Rule 2012 Nathan Levy A&E Testing
9:00-9:30	Triad Approach Site Investigation-Fredeman Pit Site Ray Sturdivant & Mike Kyle, Eagle Environmental Bill Schramm, LDEQ	Green (NSPS) Oil & Gas Closure John King Breazeale, Sache & Wilson, LLP	Competency-Based Environmental Certification Noah West Stratagraph-HESTQ	UST Regulations Update Sam Broussard LDEQ	Water Permits for Solid Waste Facilities Todd Franklin LDEQ
9:30-10:00	EXHIBITOR VISITATION				
10:00-10:30	Universal Waste Will Steele LDEQ	Environmental Legislative Update Henry Graham LCA	Industry-Wide Technical Competencies Noah West Stratagraph-HESTQ	RECAP-An Update Tom Harris LDNR	How to Survive a Water Inspection at Your Solid Waste Facility Jeff Jackson LDEQ
10:30-11:00	Certification of Compliance Results for Solid Waste Facilities Mike Hahn LDEQ	Info Exchange Update Hal Leggett PPM Consultants	Building Industry-Wide Technical Competencies with Interstate Technology & Regulatory Council Training Annette Sharp LDEQ	VRP UST Case Study Keith Horn LDEQ	Water Management Strategies for Solid Waste Facilities Dana Nunez Brown Dana Brown & Associates, Inc.
11:00-11:30	Phytoremendiation for Leachate Treatment at Solid Waste Landfills-Brad Granley, Leachate Management Specialists	Oil & Gas Preemption Kai Midboe McGlinchey Stafford	National Enforcement Training Institute (e-Learning) Annette Sharp LDEQ	LDEQ Panel Discussion LDEQ Panel	LDEQ Panel Discussion Todd Franklin, Wayne Slater, Shane Miller, Jeff Jackson
11:30-12:00		LDNR Energy Program Paul Miller LDNR			
12:00	PRIZE DRAWINGS-MUST BE PRESENT TO WIN!!!				

The LDEQ Satellite Office - LDEQ Staff will have an "Office" established in the Lobby of the Cajundome Convention Center from 1:30pm to 3:30pm on Thursday and from 8:30am to 10:30am on Friday. Stop by the "Office" and have questions answered regarding geology, engineering, permitting, and other topics.

Appendix L

Hydraulics Manual Supplement

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

INTRADEPARTMENTAL CORRESPONDENCE

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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 ____

AN EQUAL OPPORTUNITY EMPLOYER
A DRUG FREE WORKPLACE

ROAD DESIGN

EROSION CONTROL GUIDELINES

HYDRAULICS UNIT

PLAN CHECKING AND DESIGN PROCEDURES FOR EROSION & SEDIMENT CONTROL

SUPPLEMENT TO HYDRAULICS MANUAL

NOVEMBER 2007

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

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HYDRAULICS OFFICE
(225)379-1306

MEMORANDUM

TO: ROAD DESIGN SECTION
BRIDGE DESIGN SECTION
CONSTRUCTION SECTION
CONTRACTS & SPECIFICATIONS SECTION
DISTRICT DESIGN OFFICES

FROM: Jack Manno, P. E.
Hydraulics Engineer Administrator

DATE: June 1, 2005

SUBJECT: **DESIGN POLICY ON EROSION CONTROL**

With the issuance of Phase II (March 2003) and recent renewal of Phase I (October 2004) of Louisiana Pollutant Discharge Elimination System (LPDES) Storm Water General Permits for Construction Activities, the Department is paying closer attention to how it addresses the control of storm water runoff from its construction sites. To facilitate this effort, DOTD has in part, developed policies for designers such that controlling erosion and sediment on the job site becomes part of the overall design process. The development of guidelines, or plan review procedures, to address storm water runoff and consequential erosion problems is required as part of our state's overall Storm Water Management Program. Consultants and in-house designers alike must now prepare project specific plans for controlling erosion and sediment loss on state projects for which these permits pertain.

The designer should understand that the erosion and sediment control plan must be viewed as only a "first appraisal" to what must be implemented. Drawings are to be designed, reviewed, and implemented with the intent that they will be modified as construction activities progress. Including controls on the plans and checking them in the field will provide us with better estimates of quantities for pay items. This in turn, will assist the contractor in preparing an erosion control plan to submit to the Department. During the plan-in-hand visit, designers should look for the locations where, and the nature of, any existing or potential erosion problems, locations where temporary controls could or could not be placed, and locations where permanent, post-construction controls may need to be placed. A final estimate of erosion control items should be made after the plan-in-hand visit.

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APPROVED ____ DATE ____

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SUBJECT: **DESIGN POLICY ON EROSION CONTROL**

Attached is a document entitled "Plan Checking and Design Procedures for Erosion and Sediment Control on LA DOTD N/LPDES Permitted Projects". These procedures were developed based upon a conglomeration of current DOTD policies, specifications, and the AASHTO Highway Drainage Guidelines Manual, Volume III – AASHTO Guidelines for Erosion and Sediment Control in Highway Construction.

Some changes were made to DOTD policies based upon current permitting requirements. The most noteworthy changes are:

- ✓ Most temporary erosion controls will now be included on the plan or construction sequencing sheets.
- ✓ The installation and removal of erosion controls are now included in the phasing notes on the construction sequencing sheets.
- ✓ A new symbol legend for temporary erosion controls has been developed.
- ✓ The locations of erosion controls are more clearly specified. This should aid in better quantity estimates and hopefully, fewer plan changes.

Also attached are four examples for incorporating erosion and sediment controls into the plans, as well as a symbology sheet. The first example is a portion of a set of plans showing specific locations, as well as quantities for erosion controls. This project was commended by the FHWA for its effort in identifying the need for and handling of erosion control items.

The attached guidelines have been approved by the Chief Engineer (see attached memo dated 3/10/05). They are to be included as an addendum to the LA DOTD Hydraulics Manual. This letter should serve as a notice to your employees and our consultants. Further information can be obtained by contacting Julie Taylor, Hydraulic Design Engineer at (225) 379-1931.

c: N. Kent Israel, Road Design Administrator
c: Hossein Ghara, Bridge Design Administrator
c: Rick Holm, Chief of Construction Division
c: Neal Thibodeaux, Contracts & Specifications Administrator
c: Ronnie Robinson, Jesse McClendon, Nicholas Verrett, Jr., Patrick Landry, Paul Colquette, Don Maddox, Teddy Babin, Michael Stack, District Design, Water Resources, and Development Engineers
c: Ken Mason, District Design and Traffic Engineer
c: Roy Dupuy, Chief Landscape Engineer
c: Ed Bodker, Environmental Impact Manager

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

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HYDRAULICS OFFICE
(225)379-1306

MEMORANDUM

TO: OFFICE OF THE CHIEF ENGINEER
Mr. William H. Temple, P. E.
DOTD Chief Engineer Administrator

FROM: Julie Taylor, P. E.
Hydraulic Design Engineer
Road Design/Hydraulics Unit

DATE: March 10, 2005

SUBJECT: **PROPOSED DESIGN POLICY ON EROSION CONTROL**

For reasons specified herein the attached documents, a draft set of plan checking and design guidelines has been developed for use on DOTD NPDES permitted projects. These guidelines could result in noticeable changes to the current plan preparation methods. The intent is to satisfy federal regulators while at the same time, providing a more definitive erosion control plan with better quantity estimates and fewer plan changes. In order for designers to develop an effective erosion and sediment control plan, they must understand what is required for effective sediment and erosion control, as well as what is required to complete inspections in the field. This means producing clear and practical drawings such that the contractor understands how to install and maintain specified erosion controls, including Best Management Practices (BMPs). Ideally, plans should indicate where erosion controls (or BMPs) are to be installed, and when, or at what phase of construction, to install them.

The attached package was circulated to each of the major design sections and to construction personnel at headquarters as well as to the district design offices. A copy of the cover letter is attached. Feedback has been incorporated into the latest draft of the guidelines as attached here. These guidelines have been developed with the intention of including them as an addendum to our Hydraulics Manual. I am asking your office to review this package, and provide any comments or suggestions and/or approval for the proposal.

Should there be any questions, please contact Mr. Jack Manno (3-1306) or myself (3-1931).

c: Jack Manno, Hydraulic Engineer Administrator

RECOMMENDED FOR APPROVAL _____ DATE _____

RECOMMENDED FOR APPROVAL _____ DATE _____

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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 **L**ouisiana's **P**ollutant **D**ischarge **E**limination **S**ystem 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

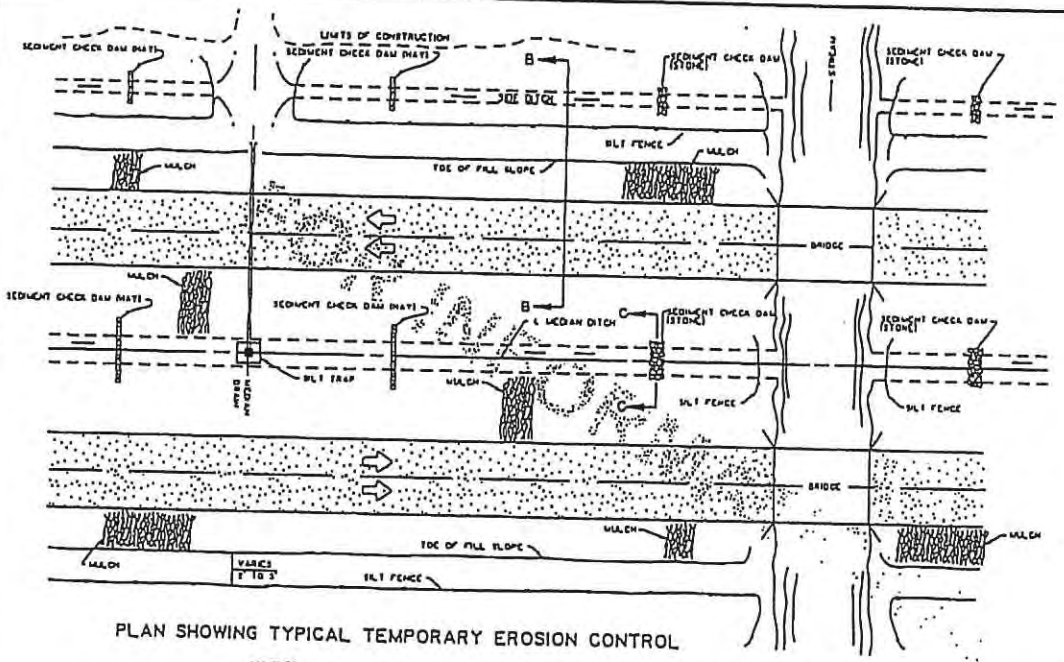
TEMPORARY EROSION AND SEDIMENT CONTROL SHEETS

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 M

Standard Plan EC-O1, Temporary Erosion Control Details

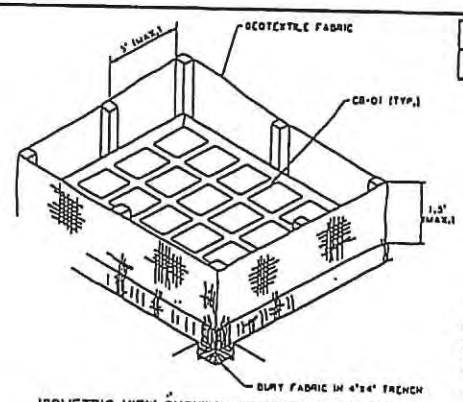


PLAN SHOWING TYPICAL TEMPORARY EROSION CONTROL

MULCHES

Mulches are the application of mats of material placed on the soil surface to prevent erosion by protecting the soil surface from raindrop impact and to reduce the velocity of overland flow. Mulches can be organic or synthetic. Mulches shall be in accordance with subsection 1018.19 of the LA DOTD Standard Specifications. A few guidelines for the use of mulches are:

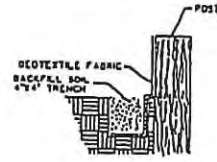
1. Use on soil and embankment slopes which have not been completed to slope grade or where the weather or soil conditions will not permit completing them within a reasonable time.
2. Use on cleared, grubbed, and seeded areas where soil erosion is likely to occur.
3. Use with temporary seeding.



ISOMETRIC VIEW SHOWING GEOTEXTILE FABRIC

(BACKFILL SOIL NOT SHOWN)

F.A.P.	STATE PROJECT	PARISH	SHEET NO.

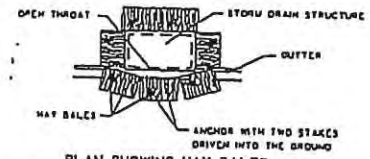


SECTION THRU TRENCH SHOWING GEOTEXTILE FABRIC

NOTES:

The temporary stone inlet silt trap is to be used for small drainage areas less than 1 acre/ where the storm drain is functional before the area is stabilized. The trap can be either geotextile fabric or hay bales.

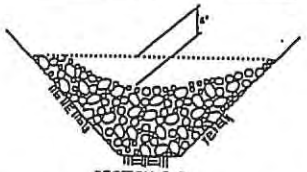
1. The geotextile fabric shall conform to Section 1019 (Type C) of the LA DOTD Standard Specifications.
2. Wooden stakes supporting the fabric shall be 2" x 2" or 2" x 4" with a minimum length of 3 feet. The stakes shall be spaced around the inlet at a maximum spacing of 3 feet.
3. The height of the fabric above the inlet shall be limited to 1.5' and the bottom of the fabric shall be buried in a trench approximately 4" wide by 4" deep. The fabric shall be stapled to the post with 1½" staples.
4. The trap should be inspected regularly and after each storm. The sediment should be removed and make sure each stake is firmly in the ground.



PLAN SHOWING HAY BALES

PAY ITEM: 204(02), TEMPORARY BALED HAY OR STRAW

TEMPORARY INLET SILT TRAP



SECTION C-C

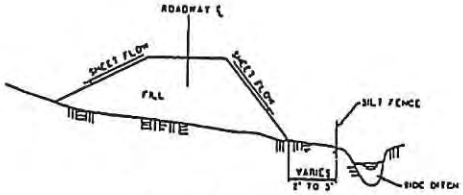
TEMPORARY SEDIMENT CHECK DAM (STONE)

PAY ITEM: 204(00)(B), TEMPORARY SEDIMENT CHECK DAM (STONE)

NOTES:

A stone check dam is a small temporary dam constructed across a swale or drainage ditch. The purpose of the measure is to reduce the velocity of concentrated stormwater flows, thereby reducing erosion of the swale or ditch. The stone check dam will trap small amounts of sediments generated in the ditch itself, however it should not be used as a sediment trapping device. A few basic design guidelines for the use of Stone Check Dams are:

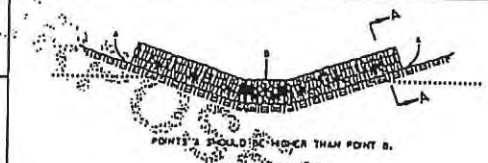
1. Use in small open channels which drain 10 acres or less.
2. Do not use in a live stream.
3. Use in a temporary ditch or swale which, because of their short length of service, cannot receive a maintenable lining.
4. Use in permanent ditches or swales which will not receive a permanent lining for an extended period of time.
5. Use in temporary or permanent grassy or swales which need protection during the establishment of grass linings.
6. For stone specifications see subsection 711.02(b)(Class 2L&M) of the LA DOTD Standard Specifications.



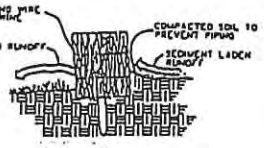
SECTION B-B

TEMPORARY SILT FENCE APPLICATION

(FOR CONSTRUCTION DETAILS AND SPECIFICATIONS SEE SHEET 2 OF 2.)



ELEVATION



SECTION A-A

TEMPORARY SEDIMENT CHECK DAM (HAY)

PAY ITEM: 204(00)(A), TEMPORARY SEDIMENT CHECK DAM (HAY)

NOTES:

A hay bale barrier is a temporary sediment barrier consisting of a row of anchored and anchored bales of straw or hay. The hay bale barrier is also used as a check dam to reduce the velocity in small ditches or swales. The hay bales shall be in accordance with LA DOTD Standard Specifications, Section 804. A few basic design guidelines for the use of a Hay Bale Barrier are:

1. Use where erosion would occur in the form of sheet and rill erosion.
2. Use in small swales or ditches where the maximum drainage area is 2 acres.
3. Only use where the effectiveness is required for less than 3 months.
4. Do not use in live streams or in swales or ditches where there is a possibility of a washout.

DATE	DESCRIPTION	BY
	REVISIONS	

STANDARD PLAN NO. EC-01 SHEET 1 of 2

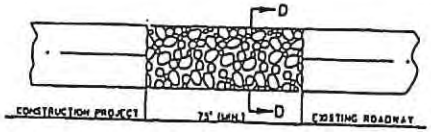
TEMPORARY EROSION CONTROL DETAILS

DATED January 14, 1994

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

DESIGNED JCM | DETAILED KAJ | CHK. DATE/SIGN/STAMP
DRAWN | BUILDING JCM | FILENAME EC01.dgn

Approved By Chief Engineer (Original Signed By Chief Engineer) Date (Initial)



PLAN

SECTION D-D

TEMPORARY STONE CONSTRUCTION ENTRANCE

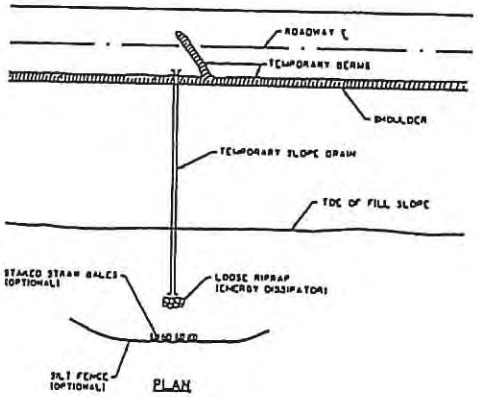
PAY ARE'S - ITEM, TEMPORARY STONE CONSTRUCTION ENTRANCE

NOTES:

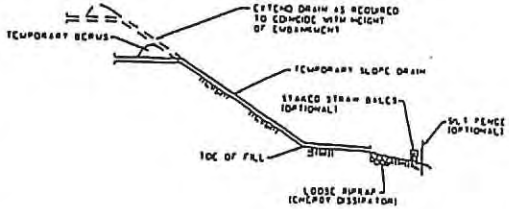
TEMPORARY STONE CONSTRUCTION ENTRANCE AND/OR WASH RACK

A stone stabilized pad located at points of vehicular ingress and egress on the construction site to reduce the amount of mud transported onto public roads. If the portion of the vehicle traveling over the gravel pad is insufficient to remove the majority of the mud, then the tires must be washed before the vehicle enters a public road. A few basic design guidelines for the use of a Stone Construction Entrance and/or Wash Racks are:

1. The stone layer must be at least 6 inches (15cm).
2. The stone shall conform to Section 711.02(Class 2L,B) of the LA DOTD Standard Specifications.
3. The length of the pad must be at least 75 feet and it must extend the full width of the vehicular ingress and egress.
4. A geotextile fabric underlayer is required. The geotextile fabric shall be in accordance with Section 1019 (Type DN of the LA DOTD Standard Specifications.
5. If a wash rack is necessary, provisions must be made to intercept the wash water and trap the sediment before it is carried off-site.



PLAN



ELEVATION

TEMPORARY SLOPE DRAIN

NOTES:

A temporary slope drain is a device used to carry water from the construction work area to a lower elevation. Slope drains may be plastic sheets, metal or plastic pipe, stone gutters, flexible mats, or concrete or asphalt ditches. A few basic design guidelines for the use of a Temporary Slope Drain are:

1. The spacing of the slope drains varies with the road grade.

For Grades:		
	0.0% - 2.0%	use 300' spacing
	2.1% - 3.0%	use 200' "
	Greater than 3.0%	use 100' "

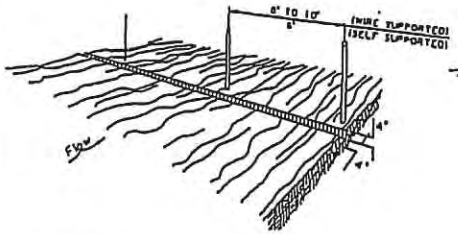
2. Slope drain material:

Smooth pipe	= 8" minimum
Corrugated pipe	= 12" minimum
Plastic sheeting	= 4' wide minimum = 3 mils thick min.

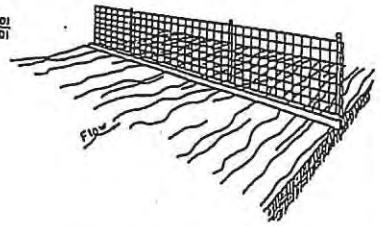
3. Plastic sheeting can be staked down or weighted with rocks or bags. The area under the sheeting should be shaped to provide an adequate channel.
4. The outlet end should be protected or have some means of dissipating energy. The flow should be directed through a sediment trap such as a silt fence or hay bales.
5. To insure proper operation, temporary slope drains should be inspected regularly and after each storm, for sloughing or displacement. Erosion at the outlet should be checked and the silt traps cleaned if necessary.

F.A.P.	STATE PROJECT	PARISH	SHEET NO.

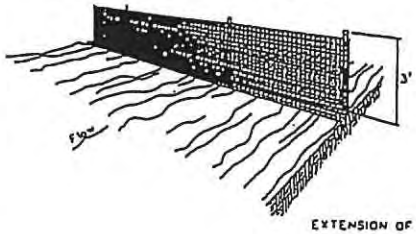
1. SET POSTS AND EXCAVATE A 4" X 4" TRENCH UPSLOPE ALONG THE LINE OF POSTS.



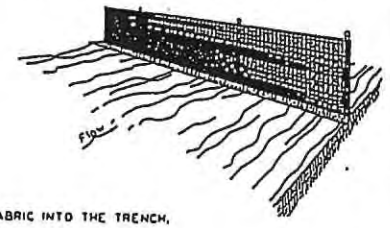
2. STAPLE WIRE FENCING TO THE POSTS.



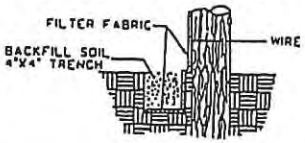
3. ATTACH THE FILTER FABRIC TO THE WIRE FENCE AND EXTEND IT INTO THE TRENCH.



4. BACKFILL AND COMPACT EXCAVATED SOIL.



EXTENSION OF FABRIC INTO THE TRENCH.



CONSTRUCTION OF TEMPORARY SILT FENCING

(WIRE SUPPORTED SILT FENCE IS SHOWN. SELF SUPPORTED SILT FENCE WILL BE CONSTRUCTED ACCORDING TO MANUFACTURERS SPECIFICATIONS.)

NOTES:

Silt fencing is a temporary sediment barrier consisting of a filter fabric supported by posts and stretched across an area to intercept and retain small amounts of sediment. The silt fencing shall be in accordance with Section 204 of the LA DOTD Standard Specifications. A few basic guidelines for the use of Silt Fencing are:

1. Use where erosion would occur in the form of sheet and rill erosion.
2. Use where the maximum drainage area behind the silt fence is 1/4 acre per 100 feet of silt fence length.
3. Use where the maximum slope length behind the barrier is 100 feet.
4. Use where the maximum gradient behind the barrier is 2:1.
5. Do not use silt fences in live streams or in ditches or swales where flows exceed one cubic foot per second.

STANDARD PLAN NO.	EC-01
SHEET	2 of 2

TEMPORARY EROSION CONTROL DETAILS

MTD January 14, 1994

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

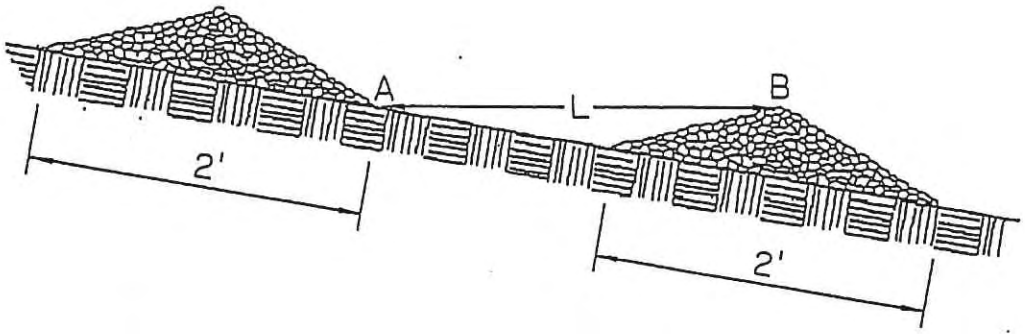
REVISED JCU	DETAILED KAJ	DR. 1993/Sep/Filtefence
DATE	REVISION	BY
CHECKED JCU		Approved By Chief Engineer (Original Signed By Chief Engineer) Date 11-1-94

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 N

Plan in Hand Memorandum Review Form

November 1, 2001

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?			

		YES	NO	COMMENTS
PLAN PROFILE SHEETS:				
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.

		YES	NO	COMMENTS
BRIDGE PLANS				
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 O

Project Delivery Manual Excerpts

On occasion, a permit will be issued for a section of highway for which an improvement project is planned. In such cases, the Project Manager should be consulted and kept fully informed to ensure proper coordination. The process for documenting the addition of utilities within state highway right-of-way is illustrated in figure 10.2. Reference is made to EDSM Number IV.2.1.3: "Policy for District Issuance of Right-of-Way Permits and Requiring Guarantee Deposit."

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 District Maintenance 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.

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."

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10.3 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 additional utilities permitted on the right-of-way	District Utilities Unit
Compliance with post-construction environmental commitments	District Maintenance Section, District Traffic Engineering Section, Environmental Section (depends on nature of commitment)
Materials durability and performance monitoring	District Maintenance Section, District Traffic Engineering Section
Identification of design features that complicate maintenance activities	District Maintenance Section
Identification of design features that impede efficient traffic operations	District Traffic Engineering Section

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Appendix P

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: Nikita Simon, Kenya Thomas, Dori Turner

Parish: Tangipahoa

Municipality: Hammond, Louisiana

Route: Ronald Reagan Hwy

FIELD DATA

Outfall ID: 1081 Ronald Reagan Hwy

Location/Address: outfall by 1081 Hwy 190 (Ronald Reagan Hwy)

Latitude: N 30°30.033'

Longitude: W 090°28.319'

Receiving Water: Ponchatoula Creek

Impaired: ☐Yes ☐No

Land Use:

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

OUTFALL DESCRIPTION

Pipe		Ditch	
Material Type	Concrete	Material Type	
Pipe Height	About 10 feet tall	Depth	
Pipe Width	About 8-10 feet wide	Width	

NOTES

Unable to get an accurate measurement of pipe due to location.
3 Box culvert

Photo: ☐Yes ☒No Photo number: _____

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: _____

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: 11/18/14

Investigator: Nikita Simon, Kenya Thomas, Dori Turner

Parish: St. Mary

Municipality: Morgan City, Louisiana

Route: Highway 90

FIELD DATA

Outfall ID: Hwy 90 East (1st set left)

Location/Address: outfall on Hwy 90 East on left side (1st Set)

Latitude: N 29°41.396'

Longitude: W 091°13.897'

Receiving Water: Atchafalaya River

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

Bridge Outfall
Unable to get accurate measurements due to location.

Photo: ☐Yes ☒No Photo number:

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: 11/18/14

Investigator: Nikita Simon, Kenya Thomas, Dori Turner

Parish: St. Mary

Municipality: Morgan City, Louisiana

Route: Highway 90

FIELD DATA

Outfall ID: Hwy 90 East (2nd set left)

Location/Address: outfall on Hwy 90 East on left side (2nd Set)

Latitude: N 29°41.305'

Longitude: W 091°14.360'

Receiving Water: Atchafalaya River

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

1963 Box Culvert
Unable to get accurate measurements due to location.

Photo: ☐Yes ☒No Photo number:

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: 11/18/14

Investigator: Nikita Simon, Kenya Thomas, Dori Turner

Parish: St. Mary

Municipality: Morgan City, Louisiana

Route: Highway 90

FIELD DATA

Outfall ID: Hwy 90 East (3rd set left)

Location/Address: outfall on Hwy 90 East on left side (3rd Set)

Latitude: N 29°41.221'

Longitude: W 091°14.774'

Receiving Water: Atchafalaya River

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

1963 Box Culvert
Unable to get accurate measurements due to location.

Photo: ☐Yes ☒No Photo number:

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: 11/18/14

Investigator: Nikita Simon, Kenya Thomas, Dori Turner

Parish: St. Mary

Municipality: Morgan City, Louisiana

Route: Highway 90

FIELD DATA

Outfall ID: Hwy 90 West (1st set right)

Location/Address: outfall on Hwy 90 West on right side (1st Set)

Latitude: N 29°41.427'

Longitude: W 091°13.908'

Receiving Water: Atchafalaya River

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

Bridge Outfall
Unable to get accurate measurements due to location.

Photo: ☐Yes ☒No Photo number:

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: 11/18/14

Investigator: Nikita Simon, Kenya Thomas, Dori Turner

Parish: St. Mary

Municipality: Morgan City, Louisiana

Route: Highway 90

FIELD DATA

Outfall ID: Hwy 90 West (2nd set right)

Location/Address: outfall on Hwy 90 East on right side (2nd Set)

Latitude: N 29°41.333'

Longitude: W 091°14.363'

Receiving Water: Atchafalaya River

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

1963 Box Culvert
Unable to get accurate measurements due to location.

Photo: ☐Yes ☒No Photo number:

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: 11/18/14

Investigator: Nikita Simon, Kenya Thomas, Dori Turner

Parish: St. Mary

Municipality: Morgan City, Louisiana

Route: Highway 90

FIELD DATA

Outfall ID: Hwy 90 West (3rd set right)

Location/Address: outfall on Hwy 90 East on right side (3rd Set)

Latitude: N 29°41.246'

Longitude: W 091°14.779'

Receiving Water: Atchafalaya River

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

1965 Box Culvert
Unable to get accurate measurements due to location.

Photo: ☐Yes ☒No Photo number:

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: 11/18/14

Investigator: Nikita Simon, Kenya Thomas, Dori Turner

Parish: St. Mary

Municipality: Morgan City, Louisiana

Route: Marguerite Street

FIELD DATA

Outfall ID: Marguerite Street #1 (left)

Location/Address: outfall on Marguerite Street by 1428 Marguerite Street

Latitude: N 29°42.665'

Longitude: W 091°11.937'

Receiving Water: Atchafalaya River

Impaired: ☐Yes ☐No

Land Use:

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

OUTFALL DESCRIPTION

Pipe		Ditch	
Material Type	Concrete	Material Type	
Pipe Height		Depth	
Pipe Width		Width	

NOTES

Unable to get accurate measurement of pipe due to location
Box Culvert

Photo: ☐Yes ☒No Photo number:

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: 11/18/14

Investigator: Nikita Simon, Kenya Thomas, Dori Turner

Parish: St. Mary

Municipality: Morgan City, Louisiana

Route: Marguerite Street

FIELD DATA

Outfall ID: Marguerite Street #2 (right)

Location/Address: outfall #2 on Marguerite Street right side

Latitude: N 29°42.651'

Longitude: W 091°11.919'

Receiving Water: Atchafalaya River

Impaired: ☐Yes ☐No

Land Use:

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

OUTFALL DESCRIPTION

Pipe		Ditch	
Material Type	Concrete	Material Type	
Pipe Height		Depth	
Pipe Width		Width	

NOTES

Unable to get accurate measurement of pipe due to location
4 Round concrete pipes

Photo: ☐Yes ☒No Photo number:

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: 11/18/14

Investigator: Nikita Simon, Kenya Thomas, Dori Turner

Parish: St. Mary

Municipality: Morgan City, Louisiana

Route: Marguerite Street

FIELD DATA

Outfall ID: Marguerite Street #3

Location/Address: outfall #3 on Marguerite Street

Latitude: N 29°43.059'

Longitude: W 091°11.533'

Receiving Water: Atchafalaya River

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

Not an outfall, water is flowing from outfall #2 on Marguerite Street

Photo: ☐Yes ☒No Photo number:

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: _____

Investigator: Nikita Simon, Kenya Thomas, Dori Turner

Parish: Tangipahoa

Municipality: Hammond, Louisiana

Route: Wardline Road (University Ave.)

FIELD DATA

Outfall ID: Wardline #1

Location/Address: Wardline Road

Latitude: N 30°31.157'

Longitude: W 090°30.032'

Receiving Water: Yellow Water River

Impaired: ☐Yes ☐No

Land Use:

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

OUTFALL DESCRIPTION

Pipe		Ditch	
Material Type	Concrete	Material Type	
Pipe Height	About 5-7 feet tall	Depth	
Pipe Width	About 5 feet wide	Width	

NOTES

Unable to get an accurate measurement of pipe due to location.

Photo: ☐Yes ☒No Photo number: _____

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date:

Investigator: Nikita Simon, Kenya Thomas, Dori Turner

Parish: Tangipahoa

Municipality: Hammond, Louisiana

Route: Wardline Road (University Ave.)

FIELD DATA

Outfall ID: Wardline #2

Location/Address: Wardline Road

Latitude: N 30°31.173'

Longitude: W 090°30.007'

Receiving Water: Yellow Water River

Impaired: ❑Yes ❑No

Land Use:

❑Industrial ❑Residential ✠Commercial ❑Open Space ❑Other:

OUTFALL DESCRIPTION

Pipe		Ditch	
Material Type	Tin	Material Type	
Pipe Height	About 5-7 feet tall	Depth	
Pipe Width	About 4 feet wide	Width	

NOTES

Unable to get an accurate measurement of pipe due to location.
Two outfalls in same location

Photo: ❑Yes ✠No Photo number:

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: _____

Investigator: Nikita Simon, Kenya Thomas, Dori Turner

Parish: Tangipahoa

Municipality: Hammond, Louisiana

Route: Wardline Road (University Ave.)

FIELD DATA

Outfall ID: Wardline #3

Location/Address: Wardline Road

Latitude: N 30°31.162'

Longitude: W 090°27.848'

Receiving Water: Yellow Water River

Impaired: ☐Yes ☐No

Land Use:

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

OUTFALL DESCRIPTION

Pipe		Ditch	
Material Type	Tin	Material Type	
Pipe Height	About 10 feet tall	Depth	
Pipe Width	About 5 feet wide	Width	

NOTES

Unable to get an accurate measurement of pipe due to location.

Photo: ☐Yes ☒No Photo number: _____

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: _____

Investigator: Nikita Simon, Kenya Thomas, Dori Turner

Parish: Tangipahoa

Municipality: Hammond, Louisiana

Route: Ronald Reagan Hwy

FIELD DATA

Outfall ID: Ronald Reagan Hwy

Location/Address: outfall by 1229 Ronald Reagan Hwy

Latitude: N 30°30.448'

Longitude: W 090°26.852'

Receiving Water: Ponchatoula Creek

Impaired: ☐Yes ☐No

Land Use:

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

OUTFALL DESCRIPTION

Pipe		Ditch	
Material Type	Tin	Material Type	
Pipe Height	About 2 feet tall	Depth	
Pipe Width	About 2 feet wide	Width	

NOTES

Unable to get an accurate measurement of pipe due to location.

Photo: ☐Yes ☒No Photo number: _____

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: _____

Investigator: Nikita Simon, Kenya Thomas, Dori Turner

Parish: Tangipahoa

Municipality: Hammond, Louisiana

Route: Ronald Reagan Hwy

FIELD DATA

Outfall ID: Ronald Reagan Hwy #4

Location/Address: on one-way going toward Robert, Louisiana

Latitude: N 30°30.420'

Longitude: W 090°26.827'

Receiving Water: Ponchatoula Creek

Impaired: ☐Yes ☐No

Land Use:

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

OUTFALL DESCRIPTION

Pipe		Ditch	
Material Type	Tin	Material Type	
Pipe Height	About 2 feet tall	Depth	
Pipe Width	About 2 feet wide	Width	

NOTES

Unable to get an accurate measurement of pipe due to location.
2 Culverts: small one about 2 feet wide and 2 feet tall
Large one about 7 feet wide and 7 feet tall

Photo: ☐Yes ☒No Photo number: _____

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: _____

Investigator: Nikita Simon, Kenya Thomas, Dori Turner

Parish: Tangipahoa

Municipality: Hammond, Louisiana

Route: Ronald Reagan Hwy

FIELD DATA

Outfall ID: Ronald Reagan Hwy #5

Location/Address: Highway 190 between 4206 and 5512 Hwy 190 (Ronald Reagan Hwy)

Latitude: N 30°30.736'

Longitude: W 090°25.036'

Receiving Water: Ponchatoula Creek

Impaired: ☐Yes ☐No

Land Use:

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

OUTFALL DESCRIPTION

Pipe		Ditch	
Material Type	concrete	Material Type	
Pipe Height	About 5-7 feet tall	Depth	
Pipe Width	About 5-7 feet wide	Width	

NOTES

Unable to get an accurate measurement of pipe due to location.
Box culvert

Photo: ☐Yes ☒No Photo number: _____

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: _____

Investigator: Nikita Simon, Kenya Thomas, Dori Turner

Parish: Tangipahoa

Municipality: Hammond, Louisiana

Route: Hwy 51 (Morrison Blvd)

FIELD DATA

Outfall ID: 2969 Hwy 51

Location/Address: outfall on Hwy 51 (Morrison Blvd.) by 2969 Hwy 51

Latitude: N 30°31.810'

Longitude: W 090°28.960'

Receiving Water: Ponchatoula Creek

Impaired: ☐Yes ☐No

Land Use:

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

OUTFALL DESCRIPTION

Pipe		Ditch	
Material Type	Concrete	Material Type	
Pipe Height	About 5-7 feet tall	Depth	
Pipe Width	About 5-7 feet wide	Width	

NOTES

Unable to get an accurate measurement of pipe due to location.
4 Box Culvert

Photo: ☐Yes ☒No Photo number: _____

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: _____

Investigator: Nikita Simon, Kenya Thomas, Dori Turner

Parish: Tangipahoa

Municipality: Hammond, Louisiana

Route: Highway 1064

FIELD DATA

Outfall ID: 14550 Hwy 1064

Location/Address: by 14550 Hwy 1064

Latitude: N 30°32.688'

Longitude: W 090°29.481'

Receiving Water: East Ponchatoula Creek

Impaired: ☐Yes ☐No

Land Use:

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

OUTFALL DESCRIPTION

Pipe		Ditch	
Material Type	tin	Material Type	
Pipe Height	About 5 feet tall	Depth	
Pipe Width	About 6-7 feet wide	Width	

NOTES

Unable to get an accurate measurement of pipe due to location.
3 culverts

Photo: ☐Yes ☒No Photo number: _____

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: _____

Investigator: Nikita Simon, Kenya Thomas, Dori Turner

Parish: Tangipahoa

Municipality: Hammond, Louisiana

Route: Highway 1064

FIELD DATA

Outfall ID: 15194 Hwy 1064

Location/Address: by 15194 Hwy 1064

Latitude: N 30°32.755'

Longitude: W 090°28.589'

Receiving Water: East Ponchatoula Creek

Impaired: ☐Yes ☐No

Land Use:

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

OUTFALL DESCRIPTION

Pipe		Ditch	
Material Type	tin	Material Type	
Pipe Height	About 5 feet tall	Depth	
Pipe Width	About 3 feet wide	Width	

NOTES

Unable to get an accurate measurement of pipe due to location.
Culverts

Photo: ☐Yes ☒No Photo number: _____

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: _____

Investigator: Nikita Simon, Kenya Thomas, Dori Turner

Parish: Tangipahoa

Municipality: Hammond, Louisiana

Route: Ronald Reagan Hwy

FIELD DATA

Outfall ID: Ronald Reagan Hwy

Location/Address: outfall in front of house located at 20384 Hwy 190 (Ronald Reagan Hwy)

Latitude: N 30°30.736'

Longitude: W 090°23.133'

Receiving Water: Ponchatoula Creek

Impaired: ☐Yes ☐No

Land Use:

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

OUTFALL DESCRIPTION

Pipe		Ditch	
Material Type	Tin	Material Type	
Pipe Height	About 2 feet tall	Depth	
Pipe Width	About 2 feet wide	Width	

NOTES

Unable to get an accurate measurement of pipe due to location.

Photo: ☐Yes ☒No Photo number: _____

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: _____

Investigator: Nikita Simon, Kenya Thomas, Dori Turner

Parish: Tangipahoa

Municipality: Hammond, Louisiana

Route: Ronald Reagan Hwy

FIELD DATA

Outfall ID: Ronald Reagan Hwy

Location/Address: outfall by 25178 Hwy 190 (Ronald Reagan Hwy)

Latitude: N 30°30.716'

Longitude: W 090°25.337'

Receiving Water: Ponchatoula Creek

Impaired: ☐Yes ☐No

Land Use:

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

OUTFALL DESCRIPTION

Pipe		Ditch	
Material Type	Tin	Material Type	
Pipe Height	About 2 feet tall	Depth	
Pipe Width	About 2 feet wide	Width	

NOTES

Unable to get an accurate measurement of pipe due to location.
Culvert on each side

Photo: ☐Yes ☒No Photo number: _____

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: _____

Investigator: Nikita Simon, Kenya Thomas, Dori Turner

Parish: Tangipahoa

Municipality: Tickfaw, Louisiana

Route: Hwy 51 (Morrison Blvd)

FIELD DATA

Outfall ID: 48584 Hwy 51

Location/Address: outfall on Hwy 51 (Morrison Blvd.) by 48584 Hwy 51, Tickfaw, Louisiana

Latitude: N 30°33.679'

Longitude: W 090°28.952'

Receiving Water: Ponchatoula Creek

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

Did not see any culverts, just bridge. Verified right location through ArcGIS street view of outfall on map.

Photo: ☐Yes ☒No Photo number: _____

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: _____

Investigator: Nikita Simon, Kenya Thomas, Dori Turner

Parish: Tangipahoa

Municipality: Hammond, Louisiana

Route: Cherry Street

FIELD DATA

Outfall ID: Cherry Street #1 (left)

Location/Address: Cherry Street #1 to the left of Wardline Road (University Ave.)

Latitude: N 30°31.349'

Longitude: W 090°27.697'

Receiving Water: Ponchatoula Creek

Impaired: ☐Yes ☐No

Land Use:

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

OUTFALL DESCRIPTION

Pipe		Ditch	
Material Type	Concrete	Material Type	
Pipe Height	About 5-7 feet tall	Depth	
Pipe Width	About 5-7 feet wide	Width	

NOTES

Unable to get an accurate measurement of pipe due to location.
3 Chamber box culvert

Photo: ☐Yes ☒No Photo number: _____

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: _____

Investigator: Nikita Simon, Kenya Thomas, Dori Turner

Parish: Tangipahoa

Municipality: Hammond, Louisiana

Route: Cherry Street

FIELD DATA

Outfall ID: Cherry Street #1 (right)

Location/Address: Cherry Street #1 to the right of Wardline Road (University Ave.)

Latitude: N 30°31.064'

Longitude: W 090°27.692'

Receiving Water: Ponchatoula Creek

Impaired: ☐Yes ☐No

Land Use:

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

OUTFALL DESCRIPTION

Pipe		Ditch	
Material Type	Black Tin	Material Type	
Pipe Height	About 3 feet tall	Depth	
Pipe Width	About 3 feet wide	Width	

NOTES

Unable to get an accurate measurement of pipe due to location.
Black tin Culvert

Photo: ☐Yes ☒No Photo number: _____

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: _____

Investigator: Nikita Simon, Kenya Thomas, Dori Turner

Parish: Tangipahoa

Municipality: Hammond, Louisiana

Route: Cherry Street

FIELD DATA

Outfall ID: Cherry Street #2 (right)

Location/Address: Cherry Street #2 to the right of Wardline Road (University Ave.) next to 902 Cherry Street

Latitude: N 30°30.810'

Longitude: W 090°27.656'

Receiving Water: Ponchatoula Creek

Impaired: ☐Yes ☐No

Land Use:

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

OUTFALL DESCRIPTION

Pipe		Ditch	
Material Type	Black Tin	Material Type	
Pipe Height	About 3-4 feet tall	Depth	
Pipe Width	About 3 feet wide	Width	

NOTES

Unable to get an accurate measurement of pipe due to location.
Black tin Culvert

Photo: ☐Yes ☒No Photo number: _____

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: _____

Investigator: Nikita Simon, Kenya Thomas, Dori Turner

Parish: Tangipahoa

Municipality: Hammond, Louisiana

Route: Hwy 51 (Morrison Blvd)

FIELD DATA

Outfall ID: Hwy 51 by Exxon

Location/Address: outfall on Hwy 51 (Morrison Blvd.) by Exxon gas station

Latitude: N 30°31.413'

Longitude: W 090°28.972'

Receiving Water: Ponchatoula Creek

Impaired: ☐Yes ☐No

Land Use:

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

OUTFALL DESCRIPTION

Pipe		Ditch	
Material Type	Tin	Material Type	
Pipe Height	About 4-5 feet tall	Depth	
Pipe Width	About 3 feet wide	Width	

NOTES

Unable to get an accurate measurement of pipe due to location.
Tin culvert on each side

Photo: ☐Yes ☒No Photo number: _____

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: 11/3/2014

Investigator: Roy Glen Lowery

Parish: Morehouse

Municipality: Bastrop,LA

Route: LA 139

FIELD DATA

Outfall ID:

Location/Address: Hwy 139 South Bastrop,LA

Between "Faith Foundation Ministries" and RAM Storage, LLC

Latitude: 32° 40' 04.20'' N

Longitude: 91° 54' 49.61'' W

Receiving Water: Staulking Head Creek

Impaired: ☐Yes ☐No

Land Use:

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

OUTFALL DESCRIPTION

Pipe		Ditch	
Material Type	Metal Culvert	Material Type	
Pipe Height	48 inches	Depth	
Pipe Width	48 inches	Width	

NOTES

Both outfalls are located on West Side of LA 139, enter into Staulking Head Creek by way of metal culverts, can be seen from bridge.

Use Virtual LA to locate position

Photo: ☐Yes ☒No Photo number:

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: 11/3/2014

Investigator: Roy Glen Lowery

Parish: Morehouse

Municipality: Bastrop,LA

Route: LA 830-5

FIELD DATA

Outfall ID:

Location/Address: 1002 Elm Street

Latitude: 32° 46' 09.55'' N

Longitude: 91° 54' 10.16'' W

Receiving Water: Staulking Head Creek (LA830-5)

Impaired: ☐Yes ☐No

Land Use:

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

OUTFALL DESCRIPTION

Pipe		Ditch	
Material Type	Concrete	Material Type	Dirt
Pipe Height	30 inches	Depth	24 inches
Pipe Width	30 inches	Width	24 inches

NOTES

Concrete pipe on SE side enters stream under bridge.
Concrete pipe on NW side enters stream under bridge.
Ditch enters stream from NE side.
Ditch enters stream from SW side.

Photo: ☐Yes ☒No Photo number:

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: 11/19/2014

Investigator: Roy Glen Lowery

Parish: Morehouse

Municipality: Bastrop,LA

Route: LA 830-4

FIELD DATA

Outfall ID:

Location/Address: LA 830-4 (coopper Lake Rd.) near intersection Cooper Lake Rd.and Boswell St.

Near "the Prep Center" 1906 Cooper Lake Rd.

Latitude: 32° 47' 01.80'' N

Longitude: 91° 53' 31.85'' W

Receiving Water: Un-named Stream (Horse Bayou)

Impaired: ☐Yes ☐No

Land Use:

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

OUTFALL DESCRIPTION

Pipe		Ditch	
Material Type	Plastic (3)	Material Type	
Pipe Height	18 inches	Depth	
Pipe Width	18 inches	Width	

NOTES

Two outfalls on south side, one outfall on north side. All pipes enter stream under bridge and come out the inside walls of the concrete bridge.

Photo: ☐Yes ☒No Photo number:

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: 11/19/2014

Investigator: Roy Glen Lowery

Parish: Morehouse

Municipality: Bastrop,LA

Route: LA 830-3

FIELD DATA

Outfall ID:

Location/Address: Near 1819 McCreight St. (LA 830-6) at junction of LA 830-6 and LA 830-3 near Jan's Art Studio

Latitude: 32° 47' 47.48'' N

Longitude: 91° 54' 09.72'' W

Receiving Water: Horse Bayou

Impaired: ☐Yes ☐No

Land Use:

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

OUTFALL DESCRIPTION

Pipe		Ditch	
Material Type	Concrete	Material Type	Concrete
Pipe Height	1-24" , 1-18"	Depth	2'
Pipe Width	1-24" , 1-18"	Width	2'

NOTES

Two concrete culverts enter from northeast side.
One ditch enters from southeast side.

Photo: ☐Yes ✠No Photo number:

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: 11/19/2014

Investigator: Roy Glen Lowery

Parish: Morehouse

Municipality: Bastrop,LA

Route: LA 830-6

FIELD DATA

Outfall ID:

Location/Address: On LA 830-6 just south of junction with 425 North

Latitude: 32° 47' 57.27'' N

Longitude: 91° 54' 10.21'' W

Receiving Water: Horse Bayou

Impaired: ☐Yes ☐No

Land Use:

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

OUTFALL DESCRIPTION

Pipe		Ditch	
Material Type		Material Type	Dirt (2)
Pipe Height		Depth	1-3', 1-6'
Pipe Width		Width	1-3', 1-6'

NOTES

3'x3' ditch enters from northeast side.
6'x6' ditch enters from southwest side.

Photo: ☐Yes ☒No Photo number:

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Louisiana Department of Transportation and Development

MS4 Outfall Survey

GENERAL DATA

Date: 11/19/2014

Investigator: Roy Glen Lowery

Parish: Morehouse

Municipality: Bastrop,LA

Route: U.S. Hwy 165

FIELD DATA

Outfall ID:

Location/Address: US 165 Bastrop, Located between "Gospel Opry" house and "R and S Supplies" 204 North Franklin

Latitude: 32° 46' 32.93'' N

Longitude: 91° 56' 50.75'' W

Receiving Water: Canal

Impaired: ☐Yes ☐No

Land Use:

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

OUTFALL DESCRIPTION

Pipe		Ditch	
Material Type	Metal (2)	Material Type	Concrete (2)
Pipe Height	18"	Depth	12"
Pipe Width	18"	Width	4 ft.

NOTES

There appears to be a pip (1") coming from the "R & S Supple" business and coming through a culvert into a ditch; has sprinkler head on it

Photo: ☐Yes ☒No Photo number:

Appendix Q

Agile Assets System

LaGov Linear Assets (Agile) Users Guide

LaDOTD
Maintenance System Management
Section 42

June 2014

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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.

Settings	Description
Browser	Internet Explorer 6 or above Firefox 3.0 or above Safari 3 or above
Screen Resolution	1024 x 768
Operating System	Windows XP SP2 or better
Memory	Windows 7: 1GB minimum Windows XP: 512MB minimum Windows Vista: 1GB minimum

This Guide was produced to assist you with your day to day work functions, if you would like to use the LaGov help scripts they are available from the DOTD's Intranet. Use the menu path below to begin:

DOTD Intranet / DOTD's LaGov Information Site / LaGov Help (Self-service) / LaGov ERP / LINEAR ASSETS

LOGGING IN TO AGILE

To Access the LEO Portal directly

1. Connect to the Internet

2. Type **https://leo.doa.louisiana.gov/irj/portal** and press **Enter**.
   OR
   From ***louisiana.gov*** (http://www.louisiana.gov/) under **LEO: Louisiana State Employees Online** Online Services click the link

3. Enter your **User ID** (e.g. P00123456).

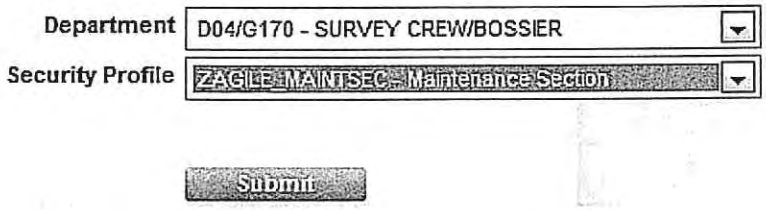
4. Enter current **Password.**

5. Click [Log on]

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

7. Click [Linear Assets (Agile)] 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 R

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 S

De-icing/Anti-icing Agents-Statewide

MONTHLY USAGE: AGGREGATE,LIGHTWEIGHT,F/DEICING

(YD3 - Cubic Yard)

2014													
Location Conducting Operations	January	February	March	April	May	June	July	August	September	October	November	December	2014Tot
D03/G510 - New Iberia MU	0.35	0.15	1.1	1.5									3.
D03/G520 - Dist Road Mat	3		0.1		2	0.5	1	2	2	1.5	4.5	1	17.
D03/G570 - Franklin MU				2.5		1.6				0.4		0.5	
D03/G580 - StMartinville MU	0.09							0.77			2		2.8
D07/G510 - Calcasieu MU	101.08	17.85	44.5		2	11	7	14	7	31	8	12	255.4
D07/G520 - DeRidder MU	57.5	28	12.5										9
D07/G540 - Jennings MU	62.5	2	9		2			2		1		0.25	78.7
D07/G570 - Creole MU	87		5					3					9
D07/G580 - Oberlin MU	12	3	6										2
D07/G710 - Calcasieu MU	97.38												97.3
D62/G530 - Greensburg MU	59												5
D62/G540 - Walker MU	172												17
D62/G570 - AbitaSprings SY	212.02												212.0
Grand Total	**863.92**	**51**	**78.2**	**4**	**6**	**13.1**	**8**	**21.77**	**9**	**33.9**	**14.5**	**13.75**	**1117.1**

Date Range: January 1, 2014 to December 31, 2014

MAINTENANCE UNIT MONTHLY USAGE:
SALT, GRADE 1, 80 LB/SACK

	2010	2011			2012	2013				2014	
Location Conducting Operations	2010 Total	January	February	2011 Total	2012 Total	January	November	December	2013 Total	February	2014 Total
D04/G510 - Arcadia MU		245	900	1145			37	163	200		
D04/G510 - Castor MU		211		211							
D04/G520 - Homer MU		538	119	657							
D04/G530 - Minden MU		962		962							
D04/G530 - Shongaloo MU		287		287							
D04/G540 - Plain Dealing MU		375	345	720							
D04/G550 - Shreveport MU		1350		1350							
D04/G550 - Vivian MU		150	300	450						240	24
D04/G560 - Mansfield MU		583	1050	1633							
D04/G570 - Coushatta MU		240	810	1050							
D08/G510 - Rapides MU			240	240							
D08/G530 - Many MU		74	245	319		89			89		
D08/G550 - Natchitoches MU		12	411	423							
D08/G560 - Winnfield MU		24	275	299							
D58/G510 - Columbia MU			4	4							
D58/G520 - Chase MU		3	34	37							
D58/G530 - LakeBruin MU			3	3							
D58/G550 - Ferriday MU			59	59							
Grand Total	0	5054	4795	9849	0	89			289	240	24

Date Range: November 1, 2010 to December 31, 2014

MAINTENANCE UNIT MONTHLY USAGE:
SALT, GRADE 2, 50 LB/SACK

	2010	2011	2012	2013				2014	
Location Conducting Operations	2010 Total	2011 Total	2012 Total	January	November	December	2013 Total	January	2014 Total
D58/G520 - Chase MU						36	36	62	62
D61/G765 - Dist Herbicides								784	784
D62/G530 - Greensburg MU				27		10	37	453	453
D62/G540 - Walker MU								490	490
D62/G550 - Dist Herbicides								98	98
D62/G550 - Hammond MU								392	392
D62/G555 - Kentwood MU								392	392
D62/G560 - Franklinton MU					1		1	293	293
D62/G570 - Covington MU								490	490
Grand Total	0	0	0	27	1	46	74	3454	3454

Date Range: November 1, 2010 to December 31, 2014

MAINTENANCE UNIT MONTHLY USAGE:

SALT, GRADE 1, 50 LB/SACK

2014					
	January	February	March	December	2014 Total
D03/G530 - Opelousas MU	245				245
D03/G540 - Opelousas MU	3508				3508
D03/G550 - Crowley MU			294		294
D04/G510 - Arcadia MU	1150	751	5		1906
D04/G520 - Homer MU	3	891			894
D04/G530 - Minden MU	437	1905			2342
D04/G530 - Minden Sheppard	98				98
D04/G530 - Shongaloo MU		589			589
D04/G540 - Bossier MU	173	2361	377.79		2911.79
D04/G550 - Shreveport MU	445	2054	317		2816
D04/G560 - Mansfield MU	516	2380	490		3386
D04/G570 - Coushatta MU	396	1114	161		1671
D04/G711 - Bossier MU	28				28
D05/G510 - Farmerville MU		716			716
D05/G520 - Ruston MU		1615			1615
D05/G530 - Jonesboro MU	92	118			210
D05/G540 - Bastrop MU		491			491
D05/G550 - Dist Road Mat		1039			1039
D05/G560 - Rayville MU	98	1190			1288
D05/G570 - Tallulah MU	100	1667	98		1865
D05/G580 - OakGrove MU		204			204
D05/G590 - Lk Providence MU		282			282
D05/G710 - Dist Road Mat	238	1632			1870
D05/G720 - Dist Road Mat		744			744
D05/G760 - Dist Road Mat		832			832
D07/G510 - Dist Back Yard	4399				4399
D07/G710 - Dist Back Yard	2259				2259
D08/G510 - Rapides MU	7227	1330	410		8967
D08/G520 - Marksville MU	2490	14	404		2908
D08/G530 - Mansfield MU		222			222
D08/G530 - Many MU	1836	432			2268
D08/G530 - Opelousas MU	686				686
D08/G540 - Leesville MU	1940	314	226		2480
D08/G550 - Mansfield MU		98			98
D08/G550 - Natchitoches MU	4281	654	10		4945

D08/G560 - Winnfield MU	1068	485			1553
D08/G570 - DryProng MU	600	346	59		1005
D58/G510 - Columbia MU	173	506			679
D58/G510 - Grayson SY	98				98
D58/G520 - Chase MU	182	526			708
D58/G530 - LakeBruin MU	32	65			97
D58/G540 - Harrisonburg MU	646	307	40		993
D58/G550 - Ferriday MU	374	79			453
D58/G580 - Trout MU	563	361	23		947
D58/G710 - Chase MU	8				8
D61/G510 - BatonRouge MU	147				147
D61/G520 - Brittany MU	23		47		70
D61/G540 - NewRoads MU	1632	20	386		2038
D61/G550 - Plaquemine MU	366.5	1613.5	13		1993
D61/G560 - Bains MU	72	260	100	5	437
D61/G580 - Clinton MU	197				197
D61/G590 - PortAllen MU	192	25	261		478
D61/G765 - Dist Herbicides	9305				9305
D62/G540 - Walker MU	441				441
D62/G550 - Hammond MU		147			147
D62/G555 - Kentwood MU	98	21			119
D62/G560 - Franklinton MU	446		49		495
D62/G570 - Covington MU	294				294
Grand Total	**49602.5**	**30400.5**	**3770.79**	**5**	**83778.79**

Date Range: January 1, 2014 to December 31, 2014

Appendix T

Post Construction Storm Water Inspection Form

POST-CONSTRUCTION STORM WATER INSPECTION FORM
LOUISIANA DEPARTMENT OF TRANSPORTATION

Project Name: _____

Project Number _____

Location _____ **Permit Number:** _____

Date of Inspection: _____ **Time Started:** _____ **Time Completed** _____

Weather: _____ **Contractor:** _____

Items/ Observations	Existence (Y/N)	Condition
Erosion		
Erosion Control		
Vegetation		
Water Quality		
Washouts/Cuts		
Drains		
Other damage to surface		

List any comments, concerns and/or recommendations concerning this project:

_____

_____

_____

_____

_____

BMPs taken as corrective actions:

_____

_____

_____

_____

_____

Name of Inspector/Title	Agency/Office	
Signature of Inspector	Telephone Number	Date
Signature of Reviewer/Title	Agency/Office	Date