

JEFFERSON COUNTY COMMISSION

MUNICIPAL SEPARATE STORM SEWER SYSTEM

PERMIT NUMBER: ALS000001

ANNUAL REPORT FOR REPORTING PERIOD OCTOBER 1, 2011 TO SEPTEMBER 30, 2012

Jefferson County Commission

Commissioner David Carrington-President
Commissioner Sandra Little Brown-President Pro Tempore
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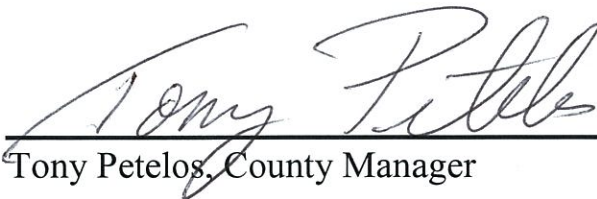
Tony Petelos, County Manager

Zhaleh M. McCullers, Director
Storm Water Management Department





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 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 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 (NPDES PERMIT ALS000001, Section VI (B)(4)(H) dated October 12, 2001).


Tony Petelos, County Manager

12-26-12

Date


Zhaleh M. McCullers, Director

12-26-2012

Date

ANNUAL REPORT - Year Ten
October 1, 2011 to September 30, 2012

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I. General Information

A. CONTACTS

The staff of the Jefferson County Commission, under the supervision of Tony Petelos, County Manager, responsible for all the County Department functions and responsibilities, and Zhaleh M. McCullers, Director of the Storm Water Management Department (SWMD) prepared this 2011-2012 Annual Report. The staff of SWMD collected and coordinated information from the various Jefferson County Departments for inclusion in this report.

Any question in reference to this report should be directed to person(s) listed below:

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II. Program Evaluation

A. PROGRAM OBJECTIVES

The requirements of the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit ALS000001 issued by the Alabama Department of Environmental Management (ADEM), listed specific responsibilities for Permittee/Co-Permittees. Effective September 28, 2009, the Jefferson County Commission began implementing its own Stormwater Program. Since then, Jefferson County has submitted a Stormwater Management Plan (SWMP) to ADEM. In May 2012, Jefferson County Commission created a new department to be responsible for the Stormwater Program for Jefferson County MS4 NPDES Permit AL000001. Please see Appendix I. The Storm Water Management Department is also collecting information from other County Departments that are fulfilling parts of the requirements of MS4 NPDES Permit. A revised Stormwater Management Plan is attached as Appendix A. The Stormwater Program stipulates certain obligations in order for the Permittee to meet the requirements of the Permit. The following is a list of the specific responsibilities according to the Permit:

1. Compliance with Permit conditions relating to discharges from portions of the MS4 where the Permittee(s) is the operator;
2. Stormwater Management Plan (SWMP) implementation on portions of the MS4 where the Permittee(s) is the operator;
3. Compliance with annual reporting requirements.

B. MAJOR FINDINGS

During the Permit year October 1, 2011, through September 30, 2012, the following information was collected and evaluated as major findings that have impacted water quality:

- The continuing downturn in the economy has stalled a recovery in the construction industry. Many of the abandoned sites have been stabilized by the natural growth of native vegetation. While initiation of new sites is minimal, the inventory of previous housing starts is shrinking as mortgage companies work through their foreclosure process. The combination of these factors is minimizing the impact on the environment due to land disturbance.
- According to the draft 2012 water quality 303(d) list of ADEM and the EPA, 17 stream segments of waterways within, or flowing through, the Jefferson County jurisdiction are designated as impaired by not fully meeting their usage classification. This is a determination reached by ADEM in a federally required biennial evaluation of the status of water bodies within the state. The evaluation is conducted from best available data and a determination of the waterway's ability to support its designated usage classification.

The five impaired stream segments within the Cahaba River watershed are generally included on the 303(d) list because of excessive pathogens, siltation, and habitat alterations due to urbanization runoff components and storm sewers. The twelve segments on the 303(d) list in the Black Warrior River basin are typically designated as impaired for some of the above mentioned reasons but also include such chemical impairments as pesticides (Dieldrin), mercury, nutrients, organic enrichment, ammonia, pH, and metals from atmospheric deposition, surface and subsurface mining operations.

A stream segment of a waterway on the 303(d) list is removed only when it has either: (1) a Total Maximum Daily Load (TMDL) approved by the EPA that allocates the pollutant reductions to the responsible parties, or (2) has improved in water quality as determined by further data. The original stream segments have been reduced to EPA-approved TMDLs within the MS4 area. The finalized, EPA-approved TMDLs* are:

- Cahaba River for nutrients,
- Shades Creek (including Mud, Mill and Cooley Creeks) for pathogens,
- Shades Creek for siltation, and habitat alterations,
- Village Creek for metals, siltation, and habitat alteration,
- Village Creek (Bayview Lake) for siltation,
- Camp Branch for pH, siltation, and habitat alteration,
- Patton Creek for organic enrichments and dissolved oxygen problems.

At the time of this report, the draft TMDL on the Cahaba River for total suspended solids is in the final stages of development. Jefferson County anticipates there will be stipulations in the new permit and/or the finalized TMDL report regarding future implementation.

*Due to the complexity of the documented impairments for the above mentioned stream segments, *many have more than a single TMDL for that particular stretch*. In addition, at this time there is no implementation legislation in place for the designated reductions which are allocated to the MS4 in a TMDL. However, the *intent* of the EPA is to have the MS4 with jurisdiction over the impaired water body to assume the responsibility for

the nonpoint source allocations of the TMDLs in the re-issued Phase I NPDES Permits to be completed by ADEM. That intent has not been finalized by EPA through ADEM at this time.

- Through the County's Storm Water Management Department's Quality Assurance Quality Control (QAQC) process for laboratory analyses, two contracted labs were found to have supplied faulty water quality test results. This led to the cancellation of contracts with the labs, and another contract with a third was acquired to provide reliable testing data. Unfortunately, the delay in getting a capable lab left Jefferson County behind in collecting the necessary samples; however, the County can confidently stand behind the sample results returned.
- The Forestry Commission published a Timber Damage Report as a result from the April 2011 tornados. The report revealed Jefferson County had 20,534 acres of timber land along with 8,815 forested acres being damaged. The MS4 and receiving streams may have been negatively impacted due to the loss of timber and vegetation that controls polluted runoff. Please see Appendix I.

C. MAJOR ACCOMPLISHMENTS

The following list outlines major accomplishments during the Permit Year October 1, 2011, through September 30, 2012 in accordance with the 11 requirements as outlined in Jefferson County MS4 NPDES Permit:

1. Structural Controls

- a. The County's Roads and Transportation Department maintains the storm sewer system within the unincorporated Jefferson County rights-of-way. During the reporting period, Camp Ketona removed 5213 cubic yards while Camp Bessemer removed 5250 cubic yards of material from the storm sewer system. Please see Appendix B.
- b. Through the County's Roads and Transportation Department, storm debris was removed from drainage ditches within the rights-of-way. During the reporting period, Camp Ketona removed 2255.22 cubic yards while Camp Bessemer removed 4230.37 tons of material. Please refer to Major Accomplishments, Roadways (II.C.3) and see Appendix B.
- c. Stormwater Program staff, along with other agencies, developed, promoted and implemented numerous workshops to promote structural controls on individual home sites. Jefferson County Commission formalized several Memorandums of Understanding with local, state and national agencies with similar goals. Please refer to Major Accomplishments, Education and Public Outreach (II.C.10) and see Appendix I.
- d. The Stormwater Program staff created materials and posters within the Jefferson County Clean Water Awareness Campaign to educate the public regarding this Permit requirement. Please refer to Major Accomplishments, Education and Public Outreach (II.C.10).

2. Areas of New Development and Significant Redevelopment

- a. The County's Land Planning and Development Services Department created a draft SmartCode Ordinance as part of its Comprehensive Planning Program. The SmartCode is intended to be used as a voluntary overlay zone to encourage low-impact development (LID) and to concentrate development in more dense clusters that will limit impervious surfaces, reduce the need for automobile travel, and make the use of transit possible. The Ordinance is intended to address both new development and the re-development of older areas, to increase density in target areas and to reduce the discharge of pollutants into the storm sewer system. This Ordinance was adopted by the County Commission on October 19, 2010. Please see Appendix C.
- b. The County's Land Planning and Development Services Department began working on the comprehensive plan element for the Gurley Creek, Turkey Creek, and Canoe Creek watersheds during the 2010-2011 Permit Year. A preliminary plan has been prepared that emphasizes conservation of the unique natural resources of the area. It also encourages the recreational use of a portion of the Turkey Creek basin as a means to promote economic development and to preserve this unique resource. The

first meeting of the hearing and public input process was held in February 2011, and work on this plan was to resume in early 2012.

The County has shifted its resources to develop the Comprehensive Plan for the areas affected by the tornados. These areas were not scheduled to become a part of the Comprehensive Plan for several years, but the scope of the disaster required a rethinking of a large portion of the County. A number of planning meetings and charrettes have been held and are continuing. Plans have been developed which incorporate SmartGrowth principles for rebuilding and are intended to result in a better-built environment that provides for improved water quality in addition to providing for the renewal of these communities. Part of the plans for one of the communities is exploring the use of extensive planting and replanting as a means of reducing and filtering runoff as well as dealing with particulate pollution in an area where an active coal mine is adjacent to a largely residential community. In other areas, Jefferson County is looking at the creation of preserved green spaces where in the past there were many decayed nuisance properties. Thousands, of acres of woodland were destroyed by the tornados; and, efforts at replanting will be a major priority for some time. Please see Appendix B.

- c. The Alabama Green Industry Training Center (AGITC) coordinated industry members and partners to provide grant funds, labor and materials to help community projects pertaining to growing, distributing and/or installing over 13,000 young trees across Alabama to help “re-leaf” the state in the past few years. On May 5, 2012 with the help of 200 volunteers, AGITC planted more trees, prepared and installed more vegetable gardens and cleaned up many parks and schools. Please see Appendix B.
- d. The Alabama Power Foundation awarded more than \$21,000 in Good Roots grants to fund planting of trees across central and southern Alabama. Good Roots is coordinated with the Alabama Urban Forestry Association and awards grants for the purchase of trees for planting in cities, town, communities, and by non-profit organizations. Communities in Jefferson County received grants. Please see Appendix C.
- e. Alabama Forestry Commission/Arbor Day Foundation’s Tornado Recovery was created to assist 58 communities throughout north Alabama over a three year period. The campaign aims to speed recovery of the area’s trees and forests. Areas damaged by the April 2011 tornados applied for assistance in the Alabama Tree Recovery Campaign. Since trees are nature’s water filters, capable of cleaning up the most toxic wastes, including solvents and organic wastes, it was important to promote the replanting of trees lost by the tornados both in April 2011 and January 2012. By the end of 2011, 19,000 trees were donated. Seedling give-a-ways were held in various locations throughout the County during this permit reporting period and an estimated 1,200 were distributed. Please see Appendix C.
- f. The Stormwater Program staff created materials and posters within the Jefferson County Clean Water Awareness Campaign to educate the public regarding this Permit requirement. Please refer to Major Accomplishments, Education and Public Outreach (II.C.10).

3. Roadways

- a. The County's Roads and Transportation Department deicing program was implemented by Camp Bessemer and Camp Ketona. No sand was applied during this reporting period. Please see Appendix B.
- b. A clean-up was held on May 19, 2012, along the Five Mile Creek Greenway in Tarrant and was coordinated by the Five Mile Creek Greenway Partnership. Please see Appendix B.
- c. The Turkey Creek Nature Preserve, a partner of Jefferson County Commission as the result of a formalized Memorandum of Understanding, led six clean-ups on the Preserve property and along Narrows Road, which leads to the Preserve, removing over three tons of debris. There were 144 local school, church, and service organization volunteers participating in the cleanups. Please see Appendix B and I.
- d. Two *Renew Our Rivers Cleanups* were scheduled during Permit Year 2011-2012. The Bankhead Lake Black Warrior River Clean-up, originally scheduled for June 2, 2012, was postponed until 2013.

Volunteers with the Birmingham Fire and Rescue Service and Vulcan Materials Company participated in a cleanup in Village Creek conducted by the Village Creek Society and the Alabama Power Company on September 12 – 15, 2012. Since 2006, volunteers have removed more than 54 tons of trash and debris from the creek. An additional clean-up on Village Creek was held on April 20, 2012. Please see Appendix B.

- e. The Valley Creek Cleanup was held on August 18 with two prior work days to remove the heavier items on August 16 and 17, 2012. This clean-up focused on public awareness and trash removal throughout the Valley Creek Watershed. The Clean-up was coordinated by the municipalities throughout the watershed and various agencies and a coalition of local citizens and businesses. A total of 244 volunteers removed 10.4 tons of debris. Please see Appendix B.
- f. The North Smithfield neighborhood had a community clean-up day on Saturday, February 25, 2012. In addition to the residents that participated, 40 volunteers from Christian Miniseries picked up trash and debris along the roadways. The County's Roads & Transportation Department (R&TD) picked up and properly disposed of the material collected. The amount of material collected is contained in the County's R&TD yearly tonnage report under material debris removed from ditches. Please see Appendix B.
- g. The Shades Creek Cleanup was held on September 29, 2012. Over 100 came to remove tires and trash out of the watershed. Please see Appendix B.
- h. Storm damage from the January 23, 2012, tornados left behind tons of debris. The County's Roads & Transportation Department utilized outside contractors to haul away some of the material. Jefferson County passed a resolution to help assist with the debris cleanup. Please see Appendix B.
- i. The Stormwater Program staff created materials and posters within the Jefferson County Clean Water Awareness Campaign to educate the public regarding this Permit

requirement. Please refer to Major Accomplishments, Education and Public Outreach (II.C.10).

4. Flood Control Projects

- a. During this Permit year, 35 Flood Plain Development Permits were approved. Please see Appendix B.
- b. Stormwater Program staff created materials and posters within the Jefferson County Clean Water Awareness Campaign to educate the public regarding this Permit requirement. Please refer to Major Accomplishments, Education and Public Outreach (II.C.10).

5. Pesticides, Herbicides and Fertilizer Application

- a. Camp Ketona of the County's Roads and Transportation Department applied herbicides on 6498.75 acres of land by using 757 gallons of Hard Ball, 1211 gallons of Target, 43 pounds of Landmark XP, and 20.4 gallons of Ground Zero. Please see Appendix B.
- b. Camp Bessemer of the County's Roads & Transportation Department applied herbicides on 4402.46 acres of land by using 550 gallons of RoundUp, 50 gallons of Oust, 900 gallons of MSMA, 900 gallons of 2-4-D, and 250 gallons of Hardball. Please see Appendix B.
- c. The County's Roads & Transportation Department utilized 10 staff members for Pesticide, Herbicide and Fertilizer (PHF) application. These employees are certified PHF applicators: Wesley Kilgore (10992), Robert Carroll (10722), Robert A. Ryan (10992), Christopher Hayes (11037), Jeremy Lee McAlpine (10637), Terry Lee Baldwin II (10542), Charles Bartlett (04686), Gary M. Mayfield (11462), Robert Eaton (15286) and Gary Ross Cochran (11229). Please see Appendix B.
- d. Camp Ketona of the County's Roads & Transportation Department has two secure locations for the storage of pesticides, herbicides and fertilizers. The first storage area is a 40' x 20' structure attached to the warehouse which has a concrete floor and walls, heating and air conditioning, a ventilation fan, and both a walk-in door and bay door that are locked at all times with a 24 hour guard. The second storage location is a 10' x 10' area in the downstairs of the Bridge Division which is kept locked and secured.
- e. Local governments are prohibited from passing ordinances regulating pesticides in the State Code of Alabama, Section 2-27-5.1. The Alabama Department of Agriculture and Industries is the state agency charged with enforcing laws relating to landscaping and pest management. Anyone dealing with pesticides, herbicides, and/or fertilizers must be licensed by the State of Alabama Department of Agriculture and Industries Pesticide Management Section. Anyone applying pesticides, installing plants or designing landscapes for a fee must pass a certification exam and maintain the license to legally operate in Alabama. Please refer to Major Accomplishments, Industrial High Risk Runoff (II.C.8) and see Appendix B.

During the 2011-2012 Permit Year, Jefferson County Commission formalized a Memorandum of Understanding with the Alabama Green Industry Training Center (AGITC) through the Alabama Cooperative Extension System (ACES). This year

AGITC promoted and held 93 events regarding proper use of pesticides, herbicides and fertilizers as well as runoff reduction. The AGITC is a local agency that has been recognized by the Alabama Department of Agriculture and Industries and the ACES as a provider of workshops, training and testing to fulfill state regulations which identify individuals who are required to obtain state certification and permits.

The AGITC web site has links to some free safety videos for both English and Hispanic work crews. The web address is <http://ugaurbanag.com/safety/general-guidelines-landscape-equipment-safety>. Please see Appendix B and I.

- f. During Permit Year 2011-2012, the County's General Services Department Standard Operating Procedures (SOPs) were enhanced for pesticides, herbicides and fertilizers, including: disposal, hygiene, symptoms of poisoning, mixing and loading, and recognition and management. Please see Appendix B.
- g. The Operation Center in the Grounds Area of General Services stores its chemicals in a secure location inside an OSHA approved storage cabinet. For a list of materials and amounts, please see Appendix B.
- h. The County's General Services Department applied only herbicide products to control weeds and a pesticide to control Fire Ants for different County facilities. No fungicide or fertilizer was applied for the 2011-2012 reporting period. For product names and amounts, please see Appendix B.
- i. The County's General Services Department has two staff members who are certified PHF applicators which hold a certified PHF license: Rhonda Cashatt (11946), and Keith Kelley (12036). Please see Appendix B.
- j. Initiatives were implemented in order to have a positive effect on the amount of pesticides and fertilizers being applied. Workshops and presentations about the proper use of and alternatives to chemicals were held locally and articles were published in local newspapers. Please refer to Major Accomplishments, Education and Public Outreach (II.C.10).
- k. Alabama Department of Environmental Management (ADEM) developed and adopted a new Pesticide General Permit which became effective October 31, 2011. Please see Appendix B.
- l. The Stormwater Program staff created materials and posters within the Jefferson County Clean Water Awareness Campaign to educate the public regarding this Permit requirement. Please refer to Major Accomplishments, Education and Public Outreach (II.C.10).

6. Illicit Discharges and Improper Disposal

- a. The County's Environmental Services Department (ESD) administers a county-wide household cooking oil and grease recycling program to reduce the amount of cooking oil that enters the sanitary sewer system, thereby reducing sewer overflows. This is a free service to all of the citizens of Jefferson County. Collection bins are located at several sites around the county with plastic containers for residents to take home. Once a container is filled, it can be returned to the collection bin and exchanged for a clean container. The containers are collected weekly by the Grease Control Program inspectors and the oil is picked up at the Shades Valley Wastewater Treatment Plant

by local rendering companies. Grease and oil accumulate in the sewer system and require diligent maintenance to prevent sanitary sewer overflows. ESD developed this program in the ongoing effort to prevent overflows and protect the water resources as well as the people and animals that depend on them. The bins were constructed by the County's General Services shop and are 4' wide by 4' tall and 2' deep and sit on legs 6" off the ground. The bins sit in a hard, durable plastic tray which provides a liquid retention barrier should a container leak or spill. There are currently 17 drop-off points that accept filled containers for recycling, which is an increase of three new sites from last year. A total of 1,578 gallons was collected between October 1, 2011, and September 30, 2012.

The Stormwater Program staff promotes this program and distributes materials, containers and scrapers at various events. Please refer to Major Accomplishments, Education and Public Outreach (II.C.10) and see Appendix D.

- b. The County's Environmental Services Department has established a program to address sanitary sewer overflows. Once the department is aware of a sanitary sewer overflow, the staff is dispatched to investigate and correct the problem. A list of sanitary sewer overflow locations, including actions taken by the staff, is included. Please see Appendix D.
- c. The Birmingham Water Works, provider of drinking water for most of Jefferson County, published and distributed bill inserts to residential customers and have developed information posted on their web site. The materials discuss the impact that pet waste, lawn chemicals, vehicle fluids, septic systems and hazardous household materials can have on water quality, as well as the need to reduce runoff by watering appropriately. Approximately 600,000 residential customers are served by the Birmingham Water Works. Please see Appendix D.
- d. To promote proper disposal of electronics, trash, floatables and Christmas trees, the Stormwater Program partnered with Alabama Environmental Council (AEC) on its recycling program, Recycle Alabama, during Permit Year 2011-2012. The AEC runs a nonprofit recycling center downtown. During this reporting period, the AEC collected over 2,000 tons of glass, paper and cardboard, plastic and metals. Jefferson County Commission formalized this partnership with a Memorandum of Understanding in an effort to reduce expenses by sharing knowledge and resources, minimizing duplication of effort, and enhancing the efficiency of stormwater pollution prevention outreach efforts. Please refer to Major Accomplishments, Education and Public Outreach (II.C.10) and see Appendix D and I.
- e. Stormwater Program staff promoted two National Prescription Drug Take-Back Events (October 29, 2011 and September 29, 2012) held in the Jefferson County area. These events are designed to promote safe and proper disposal of unwanted or expired medications, and to prevent drugs from being flushed down toilets, and ending up in waterways. Over 774 tons of medication have been collected in the past two years according to the Drug Enforcement Administration. Please see Appendix D.
- f. To promote the proper disposal of cigarette butts, the Stormwater Program in partnership with Keep Birmingham Beautiful Commission (KBBC) and City Action Partnership (CAP) created a sticker which was placed on 59 cigarette receptacles during Permit Year 2011-2012. Please see Appendix D.

- g. The Stormwater Program reviewed and commented on a new illicit detection and elimination (IDDE) training video designed to help train municipal employees on IDDE. This video targets both Phase 1 and Phase II municipal separate storm sewer systems. Please see Appendix D.
- h. The Stormwater Program staff created materials and posters within the Jefferson County Clean Water Awareness Campaign to educate the public regarding this Permit requirement. Please refer to Major Accomplishments, Education and Public Outreach (II.C.10).
- i. The Stormwater Program staff promoted various events aimed at collecting and properly disposing of electronic waste. Please refer to Major Accomplishments, Education and Public Outreach (II.C.10).

7. Spill Prevention and Response

For Permit Year 2011-2012, Jefferson County Emergency Management Agency (EMA) had the responsibility for spill prevention and response, and responded to 87 events. EMA distributes an informational *Kids Wheel on ... Common Household Products* that lists the proper care, usage and disposal of many common household chemical products that include: paint, arts and craft products, pest products, cleaners, and batteries. These wheels are distributed at various public education events throughout the year. The spill prevention and response effort is coordinated and implemented in conjunction with fire departments located within Jefferson County. Please see Appendix D.

8. Industrial and High Risk Runoff

- a. Jefferson County has implemented programs to address the food service and the pesticide, herbicide, and fertilizer vendors.
 - Jefferson County Environmental Services Department (ESD) implements a Grease Control Program in an effort to eliminate sanitary sewer overflows caused as a direct result of fats, oils and grease from food service facilities*. The purpose of this program is to decrease the amount discharged into the sanitary sewer system and thereby reduce the number of dry weather sanitary sewer overflows.

*A food service facility means restaurants, coffee shops, cafeterias, short order cafes, luncheonettes, taverns, lunchrooms, places which manufacture retail sandwiches, soda fountains, institutional cafeterias, catering establishments, and similar facilities by whatever name called.

A Grease Control Ordinance, adopted in 2006, requires every food service facility to obtain a Food Service Facility Grease Control Program Permit. Permits, which are not transferable, are written authorization to discharge to the County's wastewater collection system and are assigned to the owner of the food service facility. All facilities are subject to inspection and monitoring. Other permit conditions include annual renewals, maintenance and compliance, retention of records, implementation of best management practices, training for employees, and proper disposal. Training DVDs and BMP posters are provided to each permitted food service facility. The Grease Control Ordinance also requires all grease haulers to be licensed by the Jefferson County Department of Health and hold a Septic Tank Haulers Permit. Failure to comply with the Grease Control

Ordinance will result in fines and/or termination of all discharges to the Jefferson County sanitary sewer system.

Information about the Grease Control Program can be obtained from the County's Environmental Services Department or downloaded from Jefferson County's website

(http://jeffco.jccal.org/portal/page?_pageid=314,53664,314_53666:314_107091:314_107167,314_53666:314_54929&_dad=portal&_schema=PORTAL) including how to apply for a permit. Some of the materials are available in Spanish.

During this reporting period, 1,198 food service facilities were permitted, and 1,950 annual site inspections to food service facilities were made. A total of 218 food service facilities were found to be non-compliant with their permits. The violations include expired or no permit, failure of the 25% rule (exceeding discharge limit), no paperwork on file for training or manifesting, failure to pay permits costs and/or fees, and failure to execute an action plan to address a non-compliant issue. Jefferson County trained three employees, and 25 food service facilities trained their staff. Please see Appendix D and E.

- As set forth in the Alabama Pesticides Act, Title 2, Chapter 27, the Commissioner of Agriculture and Industries of the State of Alabama administers and enforces all pesticide regulations. The Pesticide Management Section regulates individuals or companies that sell, use, or supervise the use of restricted-use pesticides, engage in the commercial application of pesticides, and structural pest control or horticultural activities. Under Section 2-27-5.1 of the Alabama Code, local governments are prohibited from passing ordinances regulating pesticides. To comply with the County's MS4 NPDES permit and Alabama Law, the Jefferson County Commission formalized a partnership with agencies through a Memorandum of Understanding to comply with this Permit Requirement. Please see Appendix B, Appendix E and Appendix I.
- There were three Alabama Certified Landscape Professional Programs (ALCLP) held during this Permit year: November 3, 2011, January 27 and February 3, 2012. The ALCLP's teaching and certifying partners include the Alabama Cooperative Extension System, the Alabama Nursery and Landscape Association and the Alabama Green Industry Training Center. This program was established to offer a comprehensive teaching, testing and continuing education program to develop and recognize excellence among the landscape professionals of Alabama.

ALCLP applicants are required to know over 250 plant materials, including weeds, annuals, perennials, trees and shrubs along with a defined list of plant pests and landscape problems. Other areas of expertise include landscape plan take-off knowledge, construction materials and standards, grading, landscape equipment safety, operation and maintenance, irrigation basics and trouble shooting, pruning, sod selection and installation, grounds maintenance BMP's, pesticide application and safety requirements, Alabama state landscape regulatory requirements, soil and fertility management and other areas necessary to be recognized as an ALCLP.

Even though ALCLP Certifications are voluntary, at the conclusion of the four session classes, students are required to pass a 100 question written exam and a 50

question plant and pest identification quiz to obtain the ALCLP designation. Jefferson County Commission formalized a partnership with these agencies through a Memorandum of Understanding. Please see Appendix B, Appendix E and Appendix I.

- b. The Fleet Management Division (FMD) of the County's Roads and Transportation Department implements a recycling program. For the Permit Year 2011-2012, the FMD properly disposed of 824 batteries. Please see Appendix E.
- c. Jefferson County owns three landfills that are operated by SanteK Environmental. Stormwater Program staff conducted inspections of the facilities to identify and control pollutants from industrial and high risk runoff sites. The sites were in compliance at the time of inspection, and the completed inspection forms are included in Appendix E.
- d. The Stormwater Program staff created materials and posters within the Jefferson County Clean Water Awareness Campaign to educate the public regarding this Permit requirement. Please refer to Major Accomplishments, Education and Public Outreach (II.C.10).

9. Construction Site Runoff

- a. During the Permit Year 2011-2012, the County's Inspection Services and Storm Water Management Departments issued land disturbance activity permits for 233 residential single family homes as part of its zoning approval process. These Departments also issued 217 exclusions for single family homes which were exempt from land disturbance permit requirements. In addition a total of 15 commercial land disturbance permits and 21 commercial exclusions were issued. Please see Appendix F.
- b. The County's Inspection Services Department reports 783 construction inspection activities for the above permitted sites during the Permit Year 2011-2012. Please see Appendix F.
- c. The County's Land Planning and Development Services Department received 885 complaints related to litter, flood plain, zoning violation, and erosion and sedimentation control. A total of 550 notices of violation cases have been corrected and resolved. Please see Appendix F.
- d. The County's Roads and Transportation Department held eight Industrial NPDES Permits associated with its construction activity during the 2011-2012 Permit Year. These sites have been authorized through the ADEM under the State's General Construction Permit. The following are locations of the sites along with each Permit number: Bessemer Storage Facility (ALR107440), Bridge Replacement on Alliance Road (ALR107441), Brooklane Drive (ALR107579), Camp Ketona (ALR164097), Linndale Road (ALR16ECAN), Linndale Road Spoils Area (ALR108214), Lowetown Borrow Pit (ALR16ECVR), Patton Chapel Road (ALR109069). Please see Appendix B and F.
- e. Camp Ketona of the County's Roads and Transportation Department applied 464 pounds of Tackifier and 11,600 pounds of fertilizer 13/13/13 on 14.5 acres during the 2011-2012 Permit Year as a part of controlling soil erosion by using hydro seeding. Please see Appendix B.

- f. The County's Inspection Services Department (ISD) had twelve inspectors, supervisors and staff, complete the Qualified Credentialed Inspector (QCI) training for erosion and sedimentation control offered by the Home Builders Association of Alabama (HBAA). The course is a collaborative effort between the HBAA and ADEM and is offered several times throughout the year. ISD staff attended the QCI training on November 9, 2011, which included tools and strategies to help achieve and maintain compliance with the Storm Water Permit on all construction sites, including linear and roadway construction. Please see Appendix F.
- g. Jefferson County and its partners provided three Erosion and Sedimentation Control Workshops for single family homebuilders. Please refer to Major Accomplishments, Education and Public Outreach (II.C.10).
- h. During this reporting period, the construction inspection Standard Operating Procedures were revised for the staff of the County's Inspection Services Department that inspects construction sites for the County. Please see Appendix F.
- i. Stormwater Program staff prepared Application and Exclusions forms for Land Disturbing Activity Permits during this reporting period. An overview of Jefferson County's Subdivision and Construction Regulations, Article 13 Erosion and Sedimentation Ordinance as it pertains to the plans requirements for commercial sites was created to provide applicants technical assistance. SOPs were written for the staff who issue permits and exclusions. Please see Appendix F.
- j. Staff created printed materials to inform applicants of the requirements of Jefferson County's Subdivision and Construction Regulations, Article 13 Erosion and Sedimentation Ordinance, Land Disturbing Activity Permit and process. Please see Appendix F.
- k. Stormwater Program staff was a member of the Erosion and Sediment Control Steering Committee during this reporting period and assisted with the 2012 Clear Water Alabama Seminar and Fields Days held on September 26-27, 2012. The Clear Water Alabama Seminar and Field Days are offered by the Alabama Erosion and Sediment Control Partnership to help planners, designers, contractors, inspectors, and others learn more about erosion and sediment control practices, new technologies, examples of stormwater and sediment control practices and products. Please see Appendix F.
- l. The Stormwater Program staff created materials and posters within the Jefferson County Clean Water Awareness Campaign to educate the public regarding this Permit requirement. Please refer to Major Accomplishments, Education and Public Outreach (II.C.10).

10. Education and Public Outreach

Education and public outreach is a Permit requirement and also is used as a delivery tool that aids in implementing the other 10 Permit Requirements. A summary graph has been created to identify every permit requirement that the following education initiatives addressed. This summary graph is included in the Education and Public Outreach Appendix G.

a. 23rd Annual Nonpoint Source Conference

Staff members attended the 23rd Annual Nonpoint Source Conference offered by

ADEM on January 24, 2012, in Montgomery, Alabama, in order to learn the latest information about the State's MS4 NPDES Storm Water Program. Please see Appendix G.

b. Alabama Water Resources Symposium and Conference

On August 2, 2012, staff attended this event hosted by the Alabama Rivers Alliance and the Southern Environmental Law Center. The purpose of the symposium was to inform citizen stakeholders about the state's effort to develop a Water Management Plan by December 2013, a directive given to five state agencies by Governor Robert Bentley. Specific focus was placed upon protecting environmental flows in our rivers and waterways and the State's plans to involve stakeholders in the process. The Jefferson County Clean Water Awareness Campaign posters were displayed along with other materials from the County's Storm Water Management Department at this event. Please see Appendix G.

c. Alabama Water Watch Chemical Workshops

Staff conducted Alabama Water Watch trainings on June 16, 2012 to certify and re-certify 18 volunteer citizen monitors. This ongoing monitoring activity assists the County's Storm Water Management Department by providing additional water quality data. These community volunteers become stewards of the watershed and act as liaisons who will teach their friends, neighbors and community leaders the importance of reducing stormwater pollution. This program trains volunteers to use standardized equipment and techniques to gather credible water information using quality assurance protocols and to use that data for environmental education, waterbody restoration and protection and watershed stewardship. Volunteers may also identify problems by analyzing data and taking action steps to resolve water quality problems. Please see Appendix G.

d. Birmingham-Jefferson Food Policy Council

A staff member serves on the committee aimed at identifying opportunities to improve urban food production, distribution and land use policies, while stimulating the local food economy. Please see Appendix G.

e. Brochures and Flyers

The Stormwater Program staff distributed various brochures to inform and educate the public about stormwater runoff, and to provide helpful tips and resources to improve water quality. Those brochures are: Vehicle & Equipment Care & Maintenance (motor oil); Identifying and Reporting Water Pollution (illicit connection, illicit discharge, illegal dumping, public reporting); Lawn & Garden Products, Yard Waste (fertilizer, pesticide, herbicide, illegal dumping); Preventing Stormwater Polluted Runoff (used oil, fertilizer, pesticide, herbicide, illegal dumping, household hazardous waste, public reporting); Erosion and Sedimentation Control Permitting Process (Jefferson County ESC requirements, public reporting); Trees for Bees (bee friendly yard care practices); Trash Blows (litter abatement); Erosion and Sedimentation Control Best Management Practices (outlines BMP requirement for Article 13), and Let's Look at Sediment (issues resulting from erosion and sedimentation and offers preventative measures). These brochures are displayed at the County's Land Planning and Development Services and Storm Water Management Department's front counters, in brochure holders attached to the clean water awareness poster stands, and also in the Master Gardener area of the

Birmingham Botanical Gardens. Four of the brochures (Vehicle & Equipment Care & Maintenance; Identifying and Reporting Water Pollution; Lawn & Garden Products, Yard Waste; and Preventing Stormwater Polluted Runoff) include the education website address and the hotline number for public reporting as well as a “what you can do” list of behaviors to reduce polluted runoff. Please refer to Major Accomplishments, Construction (II.C.9) and see Appendix G.

f. **Clean Water Awareness Campaign**

Staff developed the Jefferson County Clean Water Awareness Campaign posters to educate, teach and inform the public about the harm to water quality caused by vehicle fluids, yard chemicals, pet waste, litter and excess runoff. A series of posters was created to support the campaign and deliver the information in a highly visual manner. The Clean Water Awareness Campaign was launched in the Turkey Creek Watershed in response to the U.S. Fish and Wildlife Service increasing the critical habitat for the federally endangered vermilion darter.

Each poster lists a phone number where citizens can call to report suspected pollution. A total of 23 posters have been created and are on display in several locations throughout Jefferson County, including the downtown Jefferson County Courthouse by the main jury waiting room, and in the hallway on the 2nd floor public entrance and in the windows of the County’s Storm Water Management Department office. Posters were also displayed at public locations such as the Birmingham Botanical Gardens lobby and in kiosks at the Turkey Creek Nature Preserve. Additionally, posters were displayed at ACE Hardware in Chalkville as a reminder about water quality at point-of-sale and at various events throughout the year. Please see Appendix G.

i. *Trash Blows! Trash Floats!*

This floatable/litter abatement program contains four posters that focus on people transporting trash, debris and other waste to landfills. Intentional or not, items that blow out of vehicles becomes litter that pollutes waterways. Flyers, posters and demonstrations were used to help teach people to “tarp and tie” the load and to utilize a “brick and bucket” in the back of the pickup to hold trash. ACE Hardware in Chalkville has displayed the Trash Blows! posters and flyer in the store where tarps and tie-downs are sold.

At the downtown recycling center, run by the Alabama Environmental Council (AEC), a variation of the Trash Blows! posters are on display. These posters were customized to reflect recyclable materials. These customized posters were also part of the graphics placed on the recycling trailers which are located throughout the County.

ii. *‘Spread’ the Word*

This pesticide, herbicide, and fertilizer program contains five posters that focus on people who apply lawn and garden chemicals. These posters were created to educate the public on the importance of applying the appropriate product in the correct amounts. The following is emphasized: test the soil before purchasing products, calibrate equipment to prevent applying too much, fertilize correctly by not over spraying the product on paved surfaces, and clean up any excess products or yard waste when finishing the job. The last poster in this series pertained to bees and the impact pesticides have on the pollinators. This poster reminds

citizens that insecticides are not choosy; hence, they kill a wide range of insects, not just the pesky ones. ACE Hardware has these posters on display in the area of the store where lawn and garden chemicals and equipment are sold and the Birmingham Botanical Gardens has them displayed in its main lobby.

iii. *Bag It and Trash It!*

This pet waste/nutrient program contains two posters that focus on pet owners. These posters were created to inform pet owners on the importance of picking up and properly disposing of pet waste both at home and on public lands. ACE Hardware has the posters on display in the area of the store where trash bags are sold. Preliminary discussions were held with the Alabama Veterinary Medicine Association, Greater Birmingham Humane Society, and DooDah Day to establish partnerships that would assist the Stormwater Program with its pet waste management education efforts.

iv. *1 Drop Matters!*

This oil and grease/vehicle fluid program contains two posters that focus on proper maintenance, cleanup and disposal of fluids from all types of vehicles. The posters were created to educate vehicle owners that one drop of oil leaked on the ground really does matter. One drop of oil dripping from each of the 740,000 vehicles registered in Jefferson County adds up to more than 64 quarts of oil, which is capable of polluting 16 million gallons of water a day. These posters also include the following information:

1 drop of oil dripping per car X 740,000 cars in Jefferson County = 740,000 drops of oil
740,000 drops ÷ 11,520 drops per quart = 64 quarts of oil
4 quarts are capable of polluting 1 million gallons

ACE Hardware has this poster on display in the area of the store where vehicle and equipment items are sold and the Birmingham Botanical Gardens has it displayed in its main lobby.

v. *Reduce Runoff!*

This program contains one poster that focuses on stormwater polluted runoff. It informs people that water, either by rain or irrigation, carries lawn chemicals, pet waste and vehicle fluids directly to creeks. It reminds people to direct downspouts and sprinklers to water only vegetation and not impervious surfaces. ACE Hardware has this poster on display in the area of the store where sprinklers and irrigation system parts are sold and the Birmingham Botanical Gardens has it displayed in its main lobby.

vi. *It's 'Mulch' Better!*

This runoff reduction and erosion prevention program contains eight posters which address the benefits of mulching, such as moisture retention, weed reduction, managing yard debris, and nutrient delivery. The posters also focus on the ways in which utilizing mulch reduces storm water runoff, reduces the need for fertilizers and herbicides and helps replenish ground water.

vii. *From Roof to Stream*

This stormwater pollution prevention poster was developed to serve as an umbrella under which all other Clean Water Awareness Campaign posters and programs will reside. The poster informs people how their everyday activities can

have a negative effect on water quality, but stresses that these effects can be prevented.

g. Complaint Reporting

A phone hotline and an email feature were established so that citizens can report suspected water pollution. The hotline number (205.325.5792) is publicized on all printed materials (Clean Water Awareness Campaign posters, brochures and flyers) and at the Stormwater Program education pages which are located at the County's Land Planning and Development Services Department website.

The pollution reporting hotline contains a recorded message for those citizens calling after normal business hours. The message instructs the caller to leave enough detailed information so staff can investigate the complaint.

The website (<http://jeffconline.jccal.org/dept>) includes an email feature to report suspected water pollution. An email complaint reporting feature is also available at the enforcement page of the County's Land Planning and Development Services Department website. This website is promoted and publicized through printed brochures created by the Stormwater Program staff.

h. Cooking Oil and Grease Recycling

The County's Environmental Services Department (ESD) staff visited over 150 apartment complexes, made presentations, provided bilingual program materials that were both displayed throughout the complex and distributed to residents. In addition, a form letter which can be sent to the residents as a reminder of the cooking Oil and Grease Recycling Program was made available to the apartment complex management. Please refer to Major Accomplishments, Illicit Discharges and Improper Disposal (II.C.6).

i. Erosion & Sedimentation Control Trainings

Three Erosion and Sedimentation Control (ESC) Workshops were held to teach single family home builders, contractors, municipal employees and others involved in land disturbance activities about the requirements of the MS4 NPDES Permit, their responsibilities under Article 13 of the Jefferson County Subdivision and Construction Regulations and the proper usage of Best Management Practices (BMPs) on construction sites within Jefferson County. A total of 131 people attended the ESC Workshops held on October 12, 2011, and May 17 and September 19, 2012. The purpose of these workshops was to provide appropriate education and training measures for construction site operators and municipal staff as required in ALS000001 and to reduce the impact of erosion and sedimentation in waterways. Educational materials were distributed at the workshops, and a survey of attendees was conducted to assess the workshop's effectiveness. The survey results indicated that the classes provided helpful information about keeping construction sites in compliance with Jefferson County and other municipal Ordinances. Completion of the workshop allows an individual building a single family home to use this certification in lieu of posting the \$3,000.00 per acre surety required to ensure site stabilization. The County's Storm Water Management Department assumes responsibility for hosting and coordinating an ESC workshop on an alternating basis with the Jefferson County Department of Health, the City of Birmingham, and the City of Bessemer. The County's Storm Water Management Department staff entered

into a preliminary partnership with the Homebuilders Association of Alabama to provide its ESC workshops and maintain a database of attendees. The Homebuilders Association of Alabama provided the May 17, 2012 ESC workshop for the County's Storm Water Management Department. Please see Appendix G.

j. **Exploring Alabama Living Streams (EALS) Workshop for Teachers**

On June 20-21, 2012, Alabama Water Watch provided a two-day workshop for 50 teachers. The EALS curriculum is designed to aid students and teachers in understanding their local water ecosystems through water quality testing and biology. Continuing Education Credits were offered through Auburn University. Please see Appendix G.

k. **E-Waste Collection Recycle Days**

Five E-Waste Collection Recycle Days were held for the Birmingham Metropolitan Area and were publicized in order to reach all residents of Jefferson County. These events were held on October 26, 2011, October 31, 2011, March 31, 2012, May 10, 2012, and June 23, 2012. These large-scale events were initiated by Recycle USA, the City of Birmingham and the Green Resource Center of Alabama in conjunction with partnerships among local government, non-profits, and businesses. For most electronic products, the Alabama Environmental Council in partnership with Technical Knockout, a responsible electronics recycler in Birmingham, accepts all electronics at its downtown recycling center. Collection totals are included in the Summary Table. Please see Appendix G.

l. **Events**

The County's Stormwater Program information is generally displayed at a table or booth where the public can acquire information about the program, upcoming events and/or educational campaigns. Please see Appendix G unless noted otherwise.

- i. Alabama Market Place. On June 14 and July 14, 2012, the Clean Water Awareness Campaign posters were displayed. In addition, the cooking oil and grease recycling containers were distributed at a booth that was open to the public.
- ii. Community Awareness Day. On October 6, 2011, the Clean Water Awareness Campaign posters were displayed and the cooking oil and grease recycling containers were distributed at a booth that was open to the public. Over 750 students from seven area schools attended this event as a field day trip.
- iii. Earth Day at the Gardens. On May 5, 2012 the Clean Water Awareness Campaign posters were displayed and informational materials were distributed at the Birmingham Botanical Gardens. It was reported that over 600 people attended this event. Cooking oil and grease recycling containers were also distributed.
- iv. Friends of Birmingham Botanical Gardens Plant Sales. The Friends of Birmingham Botanical Gardens held its Fall Plant Sale on October 22-23, 2011, and its Spring Plant Sale on April 12-15, 2012. The Clean Water Awareness Campaign posters were displayed at various locations throughout the venue.
- v. Go Green Family Fair Day at N.E. Miles Jewish Day School. On November 6, 2012 the Clean Water Awareness Campaign posters were displayed at a booth

during a festival held at the Levite Jewish Community Center. Cooking oil and grease recycling containers were also distributed along with brochures.

- vi. National Night Out. On August 7, 2012, the Clean Water Awareness Campaign posters were displayed at a booth. It was reported that over 700 people attended this free event in Center Point. Cooking oil and grease recycling containers were distributed as well as other stormwater educational materials.
 - vii. North Smithfield Green Leaf Heights Community Awareness Day. On August 18, 2012 the Clean Water Awareness Campaign posters were displayed and the cooking oil and grease recycling containers were distributed at a neighborhood event. Over 200 people attended from the surrounding neighborhood.
 - viii. Take Pride Statewide Conference. The Clean Water Awareness Campaign posters were on display at the two-day conference held on October 11-12, 2012, at Samford University.
 - ix. Urban Forestry Fair. Staff provided an educational game for 564 5th grade students from various schools within Jefferson County at the annual Urban Forestry Fair held on February 15, 2012. The interactive and engaging game is designed to reinforce the idea of conserving natural resources and improving water quality.
 - x. Wild and Scenic Film Festival. On September 13, 2012, over 130 people attended the film festival which was hosted by the Alabama Rivers Alliance and Alabama Environmental Council. Clean Water Awareness Campaign posters were displayed in the lobby.
- m. **Field Guide: Erosion/Sediment Control on Construction Sites**
The *Field Guide for Erosion and Sediment Control on Construction Sites in Alabama* was distributed to attendees of the Erosion and Sediment Control Workshops for single family homebuilders. A total of 20 *Field Guides* ordered are in Spanish which will be distributed to Spanish speaking attendees as needed. Please see Appendix G.
- n. **Friends of Birmingham Botanical Gardens**
A staff member serves on the education committee of the Friends of Birmingham Botanical Gardens (FBBG). This committee directs all educational programs, including those related to water quality. FBBG coordinated and administered various children's programs and adult classes during its past fiscal year ending in June 2012. FBBG reports 15,390 children and 9,685 adults attended its education programs. The FBBG promotes knowledge and appreciation of plants and the environment with educational offerings to over 350,000 visitors annually. The FBBG Strategic Plan emphasizes and implements practices that reduce stormwater runoff. Please see Appendix G.
- o. **Green Resource Center of Alabama (GRCA)**
A staff member serves on the Board of Directors. In this capacity, the staff member created a Brown Bag Lunch and Learn series called Sustainable Landscape Design 101 that consisted of six free sessions open to all residents of Jefferson County. Each session was structured in a seminar format that taught homeowners how to create an attractive environmentally friendly landscape design. Staff also assisted with the annual Clover Crawl, a free home and garden expo held outside Vulcan Park and

Museum. This annual event is designed to educate the public on the latest trends in green products and services that can be used throughout the home, garden or office. A total of 5,100 pounds of electronics were recycled at this event. During this Permit period, the GRCA released the fourth annual Green Progress Report aimed at tracking and highlighting some of the most important and positive environmental developments that occurred in the past 12 months. Please see Appendix G.

p. **Health Action Partnership Environmental Quality Committee**

In an effort to coordinate environmental initiatives, a staff member serves on this Committee. Please see Appendix G.

q. **Jefferson County Water Festival**

Staff planned and implemented the Ninth Annual Jefferson County Water Festival held on October 11, 2011, at Samford University. A small Water Festival also was held on November 30, 2011, at W.J. Christian Elementary School in Birmingham. The Water Festivals educated 721 fourth grade students, teachers and parents from around Jefferson County. The purpose of the Water Festival is to educate students about where drinking water comes from and how to protect and keep it clean for themselves and future generations. At the Water Festival, the students participate in three hands-on activities and experiments. All the hands-on activities directly correlate with the Alabama Course of Study Science and SAT Objectives for fourth grade. Please see Appendix G.

r. **Media**

Various strategies have been created to include a multi-faceted media plan. Please see Appendix G.

- i. Contact has been initiated with local print and electronic media to provide content on a regular basis. (Green Register at AL.com, North Jefferson News, Center Point Chamber of Commerce, BEN)
- ii. Research has been conducted and preliminary plans have been made to implement a social media presence to further the reach of the Stormwater Education Program. (Facebook and ABC 33/40)
- iii. Research has been conducted and preliminary plans have been made to create an electronic newsletter which will be distributed to all Jefferson County employees. The purpose of the publication is to provide an efficient way in which to educate County staff about stormwater pollution prevention.

s. **Pesticide, Herbicide Fertilizer/Landscape (articles, publications and workshops)**

During this reporting period, several workshops were held, various articles written and a free documentary film series was shown in order to provide information specific to homeowners regarding the proper use and application of pesticides, herbicides and fertilizers. These activities were implemented and promoted by various partnering organizations including Alabama Cooperative Extension System, Friends of Birmingham Botanical Gardens and Alabama Green Industry Training Center. Please see Appendix G.

t. **Presentations**

Presentations directly related to the County's Storm Water Management Department, water quality and the Alabama MS4 NPDES requirements were given in various

formats. Presentations were made at neighborhood meetings, schools, Erosion and Sedimentation Control workshops, and community forums. Please see Appendix G.

- i. Alabama Rural Water Association. On March 13, 2012, a PowerPoint presentation about the Jefferson County Stormwater Program was made at the 34th Annual Technical Conference.
- ii. Alabama Water Resources Conference. On September 6, 2012, staff gave a PowerPoint presentation titled 'Beyond the Brochure ... Using partnerships to grow a public education campaign'. The presentation contained information about the creation of the Clean Water Awareness Campaign and its goals. The Clean Water Awareness Campaign posters and other various program materials were displayed at a booth during the three day conference.
- iii. Center Point Civitan International. On April 16, 2012 a PowerPoint presentation on the Clean Water Awareness Campaign was given to over 20 members.
- iv. Documentary Film Series. Seven films were shown at the Birmingham Botanical Gardens during this reporting period. After the viewing of each film, a panel discussion was held. A Storm Water Management staff member served as a panelist to answer questions on impacts to water quality from gardening and agriculture practices. The films included: *Weight of the Nation* (June 24), *Fresh* (July 8) *Dive* (July 15), *Queen of the Sun* (July 22), *Farmageddon* (July 29), *Urban Roots* (August 12) and *Dirt! The Movie* (August 19). The films were free to the public and approximately 75-100 people attended each film.
- v. Greater Steeple Chase Home Owners Association. On August 23, 2012 a brief presentation was given to 55 people at the Clay Community Center. The presentation included an overview of the Stormwater Program, preventing stormwater polluted runoff, The Clean Water Awareness Campaign posters, and the Cooking Oil Recycling program. Various items were distributed to the members.
- vi. Lions Clubs International. A total of three PowerPoint presentations were given during this reporting period. Two presentations were given during club meetings (Adamsville Lions Club, October 25, 2011, and the Birmingham Downtown Lions Club, June 13, 2012) and one presentation was given at the statewide annual Chapter meeting on March 14, 2012. The Clean Water Awareness Campaign posters were displayed and brochures were distributed.
- vii. Philanthropic Education Organization (P.E.O.). On March 15, 2012 a PowerPoint presentation called Beyond the Roof... Stormwater Runoff was given to over 50 members of the P.E.O. Chapter F.
- viii. Sustainable Landscape Design 101 Brown Bag Lunch and Learn Summer 2012. Six free informational seminars were given that taught how to create an attractive landscape design that is functional, cost efficient, visually pleasing and environmentally friendly. The seminars were held at the Birmingham Botanical Gardens and were hosted by the Green Resource Center of Alabama. Instructors were chosen for each topic from varying organizations. Over 200 people attended the summer series. Topics included: Creating a sustainable

landscape plan for lawns and gardens (June 13), Using native plants in your landscape garden design (June 27), Collecting rainwater for reuse in your landscape and inside your home (July 25), Learn the correct way and the right time or year to feed and prune your plants (August 8), and Learn how to choose the proper location, variety, planting and care of trees (August 22). Please refer to Major Accomplishments, Education and Public Outreach, Green Resource Center of Alabama.

- ix. Trussville Rotary Club. On January 18, 2012, a PowerPoint presentation on the Clean Water Awareness Campaign was given to over 40 members.
- x. Warrior River Basin Clean Water Partnership Steering Committee. On April 26, 2012, a presentation was made to over 25 people on the Clean Water Awareness Campaign.
- xi. UAB Community OutReach Development (CORD) Summer Program. Staff provided six educational presentations (June 14, June 21, June 28, July 12, July 19 and July 26) for the CORD Summer Camp, a partnership between the University of Alabama at Birmingham and the Turkey Creek Nature Preserve. A total of 126 students attended the CORD Summer Camps.

u. **Rain Barrel Workshop**

The Stormwater Program promotes the use of rain harvesting systems as a way to help collect, contain and reuse rain water in an effort to reduce the cumulative effect of stormwater runoff as well as the volume and velocity of water in the Municipal Separate Storm Sewer System.

The Alabama Cooperative Extension System (ACES), in partnership with many local, state and regional agencies, conducted several workshops that taught how homeowners can reduce stormwater runoff. The workshops demonstrated how to build and install rain barrels as well as how to create rain gardens to enhance landscape, filter, and capture excess amounts of rain water. Stormwater Program staff created a presentation that was given at these workshops called *Beyond Rain Barrels... Harvesting Stormwater*. Staff gave the presentation to 33 people at the workshop held on June 13, 2012, and ACES staff presented this at the other workshops. The presentation discussed the positive impact that homeowners have on local water quality by using rain barrels. Cooking oil and grease recycling containers were given out as door prizes. According to ACES, Alabamians saved 1.3 million gallons of water by the use of collecting and using rainwater for irrigation and other outdoor activities as well as reducing runoff, resulting in 150 fewer pounds of nitrogen entering lakes and streams in 2010. The Jefferson County Commission formalized this partnership with a Memorandum of Understanding to enhance the efforts of both agencies. Please see Appendix G and Appendix I.

Alabama Environmental Council (AEC) also held various rain barrel workshops (December 15, March 17, April 14, July 28, and September 15). The Jefferson County Commission formalized a Memorandum of Understanding which enhances the efforts of the Storm Water Management Department and AEC. Please see Appendix G and Appendix I.

v. **Recycling Trailers**

Jefferson County, partnering with the Jefferson County Department of Health, the University of Alabama at Birmingham, the Alabama Environmental Council (AEC), and several municipalities were awarded grants from ADEM. The grant monies were used to purchase 10 recycling trailers for various outlying communities that don't currently have recycling opportunities and to offset the cost of building a new drop-off recycling center located in south unincorporated Jefferson County. The County's Stormwater Program staff assisted AEC with identifying site locations for the trailers and coordinating the resolutions outlining the conditions of use for these trailers. It is expected that the recycling trailers will reduce the amount of litter and floatables within the County's waterways.

During this current reporting period, Jefferson County Commission formalized its partnership through a Memorandum of Understanding with the Alabama Environmental Council and its recycling campaign known as Recycle Alabama. Please see Appendix G and I.

w. **Trees for Bees**

A staff member serves on the Trees for Bees committee whose goals are to conserve and increase the numbers of honey bees in Alabama. The objectives of this committee are to reduce the impact of pesticides and insecticides used on honey bees; improve environmental conditions for honey bees; promote planting of bee friendly plants; and to reduce people's fear of bees. Through various educational outreach methods, homeowners are taught the prudent use of lawn and garden chemicals, with emphasis on pesticides and insecticides.

Plant tags were purchased and will be distributed to local garden centers so that homeowners can easily spot bee friendly plants. Car decals were purchased and will be distributed to the public as a way to brand this program. During Permit Year 2011-2012 draft web pages were created. Several committee members have retired, so this project has been delayed until spring of 2013 to give time for the committee to obtain more members.

Several bee workshops/seminars were held by the Trees for Bees Partners and the Clean Water Awareness Campaign *Bee Responsible* Poster was on display during these events. Please see Appendix G.

x. **Surveys**

A survey was developed by the staff as a way to measure Jefferson County residents' awareness level and identify their daily behaviors as they pertain to stormwater and stormwater related issues. The information gathered will be utilized to make appropriate changes in stormwater educational efforts and more efficiently direct resources. University of Alabama at Birmingham's (UAB) Communication Studies Department agreed to assist in reviewing the survey content for bias, determining the confidence level of the surveys collected, and analyzing and interpreting the data. Jefferson County's Department of Revenue has agreed to assist with distributing and collecting the surveys to local citizens who are waiting in line for car tags and drivers licenses. The purpose of this survey is to evaluate and measure stormwater educational programs and to adjust and target education to facilitate and enhance public awareness. Please see Appendix G.

y. **Website**

Stormwater educational information is available at the Jefferson County website: <http://jeffconline.jccal.org/depts>. The website offers the public another opportunity to receive information about stormwater runoff, to learn helpful tips to improve water quality, to learn how to report water pollution, to find links to other resources and to access materials that can be downloaded for reference and further information. The website also includes an email feature to report water pollution. The website is promoted and publicized through various printed materials. Please see Appendix G.

11. Monitoring Programs

Jefferson County began its own Stormwater Management Program at the beginning of Permit Year 2009-2010. Initially, staff reviewed the unincorporated area of Jefferson County in order to set up the monitoring plan. The County's Stormwater Program staff identified two locations for representative outfall monitoring (characterizations) that depict single- family and commercial land use. It was requested in the 2010-2011 Annual Report to discontinue characterizations. The staff also established six instream monitoring locations to be sampled each season during wet and dry weather periods. A total of 48 sites, classified as screening points, were located near outfalls of tributaries into the major receiving waters. The Permit requires permittees to screen the entire MS4 during the permit cycle. Since Jefferson County is a Co-Permittee which is responsible for its own Permit compliance, the staff is in the process of confirming the location of MS4 outfalls within unincorporated Jefferson County for dry weather screening. Dry weather screening of the MS4 will resume when the new MS4 Permit is issued, should the same requirements be included therein. In March 2010, Jefferson County submitted a revised SWMP to ADEM that included an Interim Monitoring Plan. The revised monitoring plan has been accepted by ADEM with no further comments. Please see Appendix A.

During Permit Year 2010-2011, Stormwater Program staff collected instream and investigation samples during wet and dry weather. This information is summarized and quantified in the Summary Tables. Please see Appendix H.

D. PROGRAM STRENGTH AND WEAKNESS

The strength of the Jefferson County Stormwater Program was outlined in detail within the Major Accomplishments Section. Please refer to Section II.C.

- The loss of the Occupational Tax, a major revenue source that accounted for approximately 48% of general fund unrestricted revenues, caused the Jefferson County Commission to eliminate approximately one-third of its staff positions, curtail many programs and services, and close some facilities. These actions have resulted in major reductions in many of the programs that have been previously reported in the County's Stormwater Program. Jefferson County filed a petition for relief under Chapter 9 of the bankruptcy code on November 9, 2011. Please see Appendix I.
- Staff began an evaluation of the operation of County departments during the previous reporting period. A visit was made to the General Services Operational Center where the staff discovered that the Center's activities were conducted under a roof. Procedures were in place to either dispose of waste properly or recycle material as much as possible. Similar procedures were in place where the County's General Services Department activities took place at other County facilities. Since the County filed for bankruptcy, many of those activities have been reduced or eliminated because of budget cuts or employee layoffs. Other departments suffered similar fates, therefore minimizing the potential that County activities would have a negative impact on the MS4.
- The April 27, 2011 tornados in the metro area ushered in numerous construction and redevelopment sites. In addition, January 24, 2012 brought another onslaught of tornados to Jefferson County with reconstruction following. Fortunately, there was less death and destruction associated with the latter storms. Jefferson County staff, although severely reduced in number, was able to assist storm victims in the recovery, removing debris from both the unincorporated area and the city of Clay. Please see Appendix B.
- A limitation of the County's Stormwater Program is its current water quality monitoring data. Establishment of trends in stormwater pollutant concentrations depends on a vast amount of water quality data. The County currently does not have adequate data to support a determination of improvement or degradation in overall water quality. Therefore, such a determination cannot be fulfilled at this time. Furthermore, the climate during the year was not conducive for collecting samples, much like that of years past. In addition to the dry weather, Jefferson County experienced floods, wildfire, and another devastating tornado. In fact, some parts of the County were still recovering from the tornados of April 2011. *The Birmingham News* reported Jefferson County was abnormally dry in June, July, and September, which began the Permit year in the negative range (January 2012). According to *The Birmingham News*, October was the tenth-driest in Birmingham since 1900 (January 2012). One after another, meteorologists, statistics, and news reports documented weather extremes statewide. Moreover, the National Weather Service's Storm Prediction Center warned of a dynamic pattern for the Southeast during tornado season (*The Birmingham News* February 2012). From severe drought to deadly tornados, Jefferson County experienced record-making events during Permit Year 2011-2012 (see Appendix H). For the aforementioned reasons, Jefferson County was unable to collect samples for all wet instreams, and screening points. Moreover, as outlined in the Major Accomplishments section, Appendix H includes supporting documentation of the adverse climatic conditions which prohibited the collection of samples.

- Through the County's Quality Assurance Quality Control (QAQC) process for laboratory analyses, two contracted labs were found to have supplied faulty water quality test results. This led to the cancelation of contracts with the labs, and another contract with a third lab was acquired to provide reliable testing data. Unfortunately, due to established contract bid and approval procedures to which the County must adhere, the delay in getting a capable lab left Jefferson County behind in collecting the necessary samples; however, the County can confidently stand behind the sample results returned.
- The way in which the County is geographically situated and politically structured limits the County's Stormwater Program. The 50 receiving waters specified in the Permit flow in and out of both incorporated and unincorporated areas of the County. While the County has the authority over unincorporated areas of Jefferson County, this authority does not extend to incorporated areas as authority in cities and towns is left to the individual jurisdictions. Consequently, there are no consistent programs, regulations or standards for monitoring that assist the County with its evaluation of water quality improvement. These constraints limit the ability of Jefferson County to both improve and evaluate water quality.
- A strength of the County's Stormwater Program has been its public education program. While the County's Stormwater Program is responsible for unincorporated areas of the County, its educational efforts often extend into incorporated areas of the County, thereby educating people who reside in adjoining areas. The launch of the Clean Water Awareness Campaign and its poster series has provided a method to disseminate information to the public as well as serve as a catalyst for partnering with other entities. Stormwater Program staff has focused on developing and formalizing alliances and partnerships with agencies, organizations and associations which have similar goals in order to expand its educational reach throughout Jefferson County. The staff also implemented a county-wide survey to assess knowledge level and behaviors related to improving water quality. The results of the survey will help focus efforts and allocate resources to more efficiently and effectively deliver public education.

E. FUTURE DIRECTION

Jefferson County will continue to evaluate each of its departments and determine any current functions that apply to the County's Stormwater Program. These functions will be examined, and then protocols and Standard Operating Procedures (SOPs) will be established or enhanced if necessary. These functions will be coordinated and reported based upon each Permit requirement in order for the County to clearly show how it is implementing the Stormwater Program and to clearly document its effort to comply with the Permit.

1. Structural Controls

The County's Roads and Transportation Department will continue the inspection and maintenance of the storm sewer network within the rights-of-way. SOPs will continue to be enhanced as necessary. The County will continue its effort to promote residential use of rain barrels and rain gardens through education and workshops.

2. New Development and Significant Redevelopment

Adoption of the voluntary SmartCode was completed in the spring of 2011 and is part of all rezoning cases. It is anticipated that the County will present the next phase of the Comprehensive Plan in public meetings held in the first quarter of 2013. The plan will include Gurley Creek, Canoe Creek and Turkey Creek watersheds with consideration of any endangered species such as the vermilion darter and its expanded habitat. Please refer to Major Accomplishments, Areas of New Development and Significant Redevelopment (II.C.2) and see Appendix C.

Jefferson County is also exploring the establishment of urban service zones with the intention of discouraging development in new greenfields. This initiative also would encourage redevelopment of already developed areas to increase densities. This would more efficiently use the existing urban infrastructure rather than building additional infrastructure to serve less dense development patterns of the last half-century.

Jefferson County will encourage the use of its SmartCode Ordinance principals in the redevelopment plans for those neighborhoods affected by the April 2011 tornados. These working plans are evolving to address citizen concerns in their future implementation.

In Jefferson County, the Our One Mile/Health Action Partnership started work to create a greenway master plan that would specify routes for more than 100 miles of interconnected walking trails, bike paths, sidewalks and "blueways" linking parks, schools, homes and businesses. The "Our One Mile" campaign, coordinated by the nonprofit Freshwater Land Trust, is part of Jefferson County's \$13.3 million Health Action Partnership, a broad, multi-partner initiative designed to help improve the health of people throughout the County through efforts to reduce obesity and smoking, expand healthy food options, implement "smart growth" design principles, and encourage physical activity such as walking and biking. Please see Appendix I.

3. Roadways

Jefferson County plans to reinstate its Clean Sweep and Community Cleanup Programs in an effort to keep trash and litter out of the waterways.

Stormwater Program staff plans to develop a relationship with People Against a Littered State (PALS) and encourage Jefferson County neighborhoods and communities to participate in the PALS annual Spring Cleanup.

Stormwater Program staff will support and promote community and watershed based cleanups held within the County.

4. Flood Control Projects

Jefferson County will continue to review all new flood control projects for impact on water quality.

Stormwater Program staff will continue to create and distribute materials as well as promote workshops that pertain to flood control.

5. Pesticides Herbicides and Fertilizer (PHF) Application

Jefferson County will continue its efforts to comply with all regulations and manufacturer recommendations regarding the storage and usage of PHFs and continue the training and certification of the appropriate County staff. To ensure all vendors are properly certified, the Stormwater Program staff will expand its relationship with the Alabama Cooperative Extension System and the Alabama Green Industry Training Center (AGITC). The County will work with the Alabama State Department of Agriculture and Industries to determine if these State programs could address the County's Permit responsibilities and enhance its Stormwater Program. If so, the County will investigate utilizing an inter-local agreement to document any partnership.

AGITC will launch the Green Industry Web (GIW) portal which should be ready for use in the Fall of 2012. The GIW is a free web-based portal to help improve the educational and credentialing efforts of the industry by supplying high quality archived videos, vignettes, PowerPoint presentations and hands-on training throughout the state. The project is a partnership with major funding from the Appalachian Regional Commission, Alabama State Department of Education, the Daniel Foundation of Alabama, the Alabama Nursery and Landscape Association and the AGITC.

Partner matching from Auburn University-Montgomery, Alabama Cooperative Extension System, Alabama Urban Forestry Association, Alabama Department of Agriculture and Industries, the Greater Birmingham Association of Landscape Professionals, Advanced Mower, Belgard, Inc., Plant Locator Magazine, the City of Daphne, BookSmart, Blalock Machinery and Equipment Company and others brings the total project to over \$500,000 for Year One. Year One goals include designing and developing web-based support materials for state license exam preparation for existing and future Green Industry employees, providing web-based support and credentialing in Landscape Management and Urban Forestry for 300 agriculture teachers and their 40,000 high school students, and conducting 30 days of hands-on training across the state. Please see Appendix I.

Stormwater Program staff plans to create a flier in collaboration with other local, state and regional agencies and organization in order to promote proper usage, storage and disposal of PHF. This publication will be targeted to homeowners.

6. Illicit Discharge and Improper Disposal

A draft Illicit Discharge, Detection and Elimination Ordinance was developed during previous Permit Years. It is anticipated that the Ordinance will be presented to the County Commission for consideration during permit year 2012-2013.

Stormwater Program staff will develop new relationships with local vendors and promote existing programs that collect and properly dispose of electronic waste.

Jefferson County will assess the feasibility of providing a hazardous waste collection day for residents with regional, state and local organizations.

Stormwater Program staff, in collaboration with the County's Environmental Services Department, will create and distribute materials that will promote and enhance the proper disposal of used cooking oil and grease generated by residents.

7. Spill Prevention and Response

Jefferson County will continue its relationship with the Emergency Management Agency and its network of local fire departments to respond to spills.

8. Industrial and High Risk Runoff

Jefferson County plans to enhance its Industrial Program that encompasses inspection, monitoring and enforcement of stormwater discharges at specific commercial and industrial sites. The County will continue to update its inventory of all regulated facilities and other industrial and commercial sites determined to contribute a substantial pollutant load into the MS4.

Jefferson County's Storm Water Management Department will coordinate with other County Departments in matters that relate to zoning and rezoning of industrial property to ensure compliance with MS4 NPDES permitting.

The Stormwater Program will promote the County's Environmental Services Department's Oil and Grease Program which includes permitting and inspecting facilities as well as a homeowner recycling program.

Jefferson County's Storm Water Management Department will continue to partner with state and local agencies responsible for the training, certification, and licensing of the PHF industry.

9. Construction Site Runoff

Jefferson County will continue to permit and inspect all land disturbance activity within its jurisdiction. Enforcement measures will be pursued as necessary, and training of staff will continue.

Jefferson County's Storm Water Management Department will strive to make the Erosion and Sediment Control Single family workshops more consistent and uniform among the various Co-Permittees which administer stormwater programs in Jefferson County. This will be accomplished by promoting the utilization of the Home Builders Association of Alabama to coordinate and deliver these trainings as well as manage and maintain the certification data.

10. Public Education

Jefferson County Stormwater Program staff plans to implement the following:

Develop relationships with local retailers and service providers in the lawn care, automotive and home improvement industries in an effort to display the Clean Water Awareness Campaign materials at point-of-sale.

Develop relationships with the local agencies and Master Gardener groups in order to increase homeowner awareness regarding the proper use, storage and disposal of pesticides, herbicides and fertilizers.

Develop a website for the Trees for Bees program to promote the use of Integrated Pest Management practices.

Memorialize the partnership between Jefferson County and Friends of Birmingham Botanical Gardens as well as assist and support the organization's existing and proposed educational programs.

Utilize the partnership developed with Jefferson County's Revenue and General Services Departments during Permit year 2012-2013 to place poster display and brochure holders on top of stanchions in car tag renewal lines in all Jefferson County Courthouses.

Create and distribute a quarterly electronic employee newsletter which will be distributed to all Jefferson County employees with email access.

Expand and enhance the Storm Water Management Department website pages.

Implement the current survey and evaluate the data collected to assess the knowledge level and practices of Jefferson County residents regarding stormwater pollution prevention, and assist in measuring the success of program efforts.

Formalize agreements with those agencies, organizations and association that promote proper pet care or provide pet related series and products to assist the Stormwater Program staff in promoting the proper disposal of pet waste.

Continue to implement and enhance existing educational programs.

11. Monitoring

Under the existing NPDES Permit ALS000001, Jefferson County plans to continue collecting water quality samples to achieve the monitoring requirements therein. This effort will be performed with consideration given to the unpredictability of weather patterns. In addition, Jefferson County plans to gain additional water quality data in order to make and support a determination of improvement or degradation within the jurisdiction's waterways. Should additional requirements for water quality monitoring be included in the reissued permit, modifications to the Interim Monitoring Plan will be necessary.

III. Summary Table

| <i>Element of Program</i> | <i>Requirement</i> | <i>Activities Required</i> | <i>Complied With</i> | <i>Activities Accomplished During Calendar Year</i> | <i>Comments</i> |
|---|---|--|----------------------|--|--|
| Structural Controls | Operate the MS4 and structural controls to reduce pollutant discharge | Maintenance and inspection performed | ● | 10,463 cubic yards removed from ditches | See Appendix B |
| New Development and Significant Redevelopment | Comprehensive master planning process to minimize pollutant discharge | Minimize pollutants after construction is complete | ● | Redevelopment plan developed for 3 tornado-stricken communities | Concord, McDonald's Chapel, and North Smithfield |
| Roadways | Operate and maintain to minimize pollutants | Refuse, litter, and debris removal | ● | Declared storm debris removal from January 2012 tornados | Approximately 6,202 tons of debris were removed |
| | Operate and maintain to minimize pollutants | Refuse, litter, and debris removal | ● | Roads and Transportation Department removed 10,463 cubic yards from roadside ditches | See Appendix B |
| | Operate and maintain to minimize pollutants | Refuse, litter, and debris removal | ● | 10.4 tons of trash and debris removed from Valley Creek | Jefferson County WWTP crew aided 240 volunteers |
| | Operate and maintain to minimize pollutants | Street maintenance and litter control | ● | Executed upon public compliant or as-needed basis | |

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| Roadways Continued | Operate and maintain to minimize pollutants | De-icing activities | ● | Performed on as-needed basis | ALDOT changed operations and uses brine instead of sand; Jefferson County applied no sand |
| Flood Control Projects | Assess impacts on water quality | Evaluate structures based on Jefferson County Floodplain Ordinance | ● | All flood management projects were reviewed | 35 Flood control permits were issued |
| Pesticide, Herbicide, and Fertilizer Application | Reduce pollutant discharge related to storage and application | Implement controls for discharge and storage | ● | Chemicals are stored in secure, climate controlled warehouses | See Appendix B |
| | Reduce pollutant discharge related to storage and application | Implement controls for application | ● | Chemicals minimally applied to right of way and County owned properties. | 12 Licensed Applicators' Permit numbers in Appendix B |
| Illicit Discharges and Improper Disposal | Detect and eliminate discharges to the MS4 | Dry Weather Investigative Monitoring | ● | 2 Investigation sites sampled | See Appendix H |
| | Detect and eliminate discharges to the MS4 | Identify and prevent pollution from entering the MS4 | ● | 4 Investigations resolved | See Appendix H |
| | Detect and eliminate discharges to the MS4 | Establish and publicize a hotline for public use | ● | Hotline and email notifications were established | |

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| Spill Prevention and Response | Prevent, contain, and respond to spills | Conduct spill response | ● | EMA responded to 88 spills | See Appendix D |
| Industrial & High Risk Runoff | Identify and control pollutants in stormwater discharges | Inspection of industrial and high risk runoff sites | ● | 3 Landfill inspections conducted | See Appendix E for Inspection Forms |
| | Identify and control pollutants in stormwater discharges | Jefferson County Fleet Management operates in-house recycling program | ● | 824 batteries were recycled | See Appendix E for records |
| | Identify and control pollutants in stormwater discharges | Jefferson County Environmental Services operates oil and grease recycling program | ● | 1578 gallons of cooking oil and grease were collected | See Appendix D for records |
| Construction Site Runoff | Reduce pollutant discharge from construction sites | Staff training as Qualified Credentialed Inspector (QCI) | ● | 12 Jefferson County employees certified | See Appendix F |
| | Reduce pollutant discharge from construction sites | Inspection of land disturbing activities and BMPs | ● | 783 Land Disturbing Permits were issued | 15 Commercial permits issued; 233 Residential permits issued |
| | Reduce pollutant discharge from construction sites | Inspection of land disturbing activities and BMPs | ● | 238 Exclusions were issued | |
| | Reduce pollutant discharge from construction sites | Erosion and Sedimentation Control workshop for developers, contractors, government officials | ● | 131 people attended | See Appendix G |

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| Construction Site Runoff Continued | Reduce pollutant discharge from construction sites | Inspection of Jefferson County NPDES construction sites | ● | 8 NPDES permitted sites within calendar year | Bridge installation, spoils area, road work, borrow pit; see Appendix F |
| Public Education | Promote, publicize, and facilitate public reporting of illicit discharges to the MS4 | Program includes hotline, websites, posters, brochures, presentations, water festivals, and event booths | ● | Performed by Jefferson County staff | See Appendix G |
| | Promote, publicize, and facilitate public reporting of illicit discharges to the MS4 | Complaint reporting application was developed | ● | 885 Complaints received and investigated; 550 NOV's were issued | In areas of construction, litter, zoning violations, and floodplain |
| | Promote, publicize, and facilitate public reporting of illicit discharges to the MS4 | Erosion and Sedimentation Control workshop for developers, contractors, government officials | ● | 131 people attended | See Appendix G |
| | Promote, publicize, and facilitate management and disposal of oil and household hazardous wastes | Jefferson County Fleet Management operates in-house recycling program | ● | Recycling center prevented 2,017 tons of material out of area landfills | Items such as glass, paper, cardboard, aluminum, and plastic; See Appendix D |
| | Promote, publicize, and facilitate management and disposal of oil and household hazardous wastes | Jefferson County Fleet Management operates in-house recycling program | ● | Recycling batteries | |
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| Public Education Continued | Promote, publicize, and facilitate management and disposal of oil and household hazardous wastes | Recycling of household electronics containing hazardous materials | ● | 5 E-waste disposal events were held, collecting 38 tons | Items such as laptops, PCs, monitors, TVs, and cellphones were recycled |
| | Promote, publicize, and facilitate use, application, and disposal of pesticides, herbicides, and fertilizers | Implement controls for use, application, and disposal | ● | Chemicals minimally applied to right of way and County owned properties | 12 Licensed Applicators; Permit numbers in Appendix B |
| | Promote, publicize, and facilitate use, application, and disposal of pesticides, herbicides, and fertilizers | Implement controls for use, application, and disposal | ● | 96 training events held | See Appendix B and E |
| Monitoring Program | Detect presence of illicit connections and improper discharges to the MS4 | Dry Weather Screening | ● | 11 Instream sites sampled | See Appendix H |
| | Identify, investigate, and address areas contributing pollutants to the MS4 | Wet Weather Screening | ● | 5 Instream sites sampled | See Appendix H |
| | Monitor pollutants in stormwater discharges to the MS4 | Industrial and High Risk Runoff | ● | Collected by industrial facilities | Facilities governed by NPDES permits submit info to ADEM |

● =Yes

IV. Program Modifications

Due to the amount of data already collected by agencies in the Jefferson County area, as well as nationwide, and the current financial situation, County Commission requested the requirement for monitoring representative outfalls be discontinued in the 2010-2011 Annual Report. Historically, representative outfall monitoring was used to calculate pollutant loading. Information is available nationwide for various landuses; therefore, pollutant load calculations can be accomplished using this data. Jefferson County previously requested these monitoring activities be eliminated and no objection was made by ADEM within 30 days after the request. For this reason, Jefferson County understands the request was accepted per the rules and regulation governed by ADEM

Please see Stormwater Management Plan and the revised language in each section. Other than the program modification that are noted in the Stormwater Management Plan, Jefferson County's Storm Water Management Department will continue with its work as outline in the Annual Report under Major Accomplishments.

V. Fiscal Analysis of Permittees' Program

The budgets from the Jefferson County Departments that have requirements that pertain to the MS4 NPDES permit have been included. Please see Appendix I.