

# **JEFFERSON COUNTY COMMISSION**

***MUNICIPAL SEPARATE STORM SEWER SYSTEM***

***PERMIT NUMBER: ALS000001***

**ANNUAL REPORT FOR REPORTING PERIOD**

**OCTOBER 1, 2013 TO SEPTEMBER 30, 2014**

## **Jefferson County Commission**

Commissioner Jimmie Stephens-President  
Commissioner Sandra Little Brown-President Pro Tempore  
Commissioner George Bowman  
Commissioner David Carrington  
Commissioner T. Joe Knight

Tony Petelos, Chief Executive Officer

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 a fine and/or imprisonment for knowing violations (NPDES PERMIT ALS000001, Section VI (B)(4)(H) dated October 12, 2001).

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Tony Petelos, Chief Executive Officer

12/22/14

Date

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Zhaleh M. McCullers, Director

Dec. 19, 2014

Date

**ANNUAL REPORT - Year Eleven  
October 1, 2013 to September 30, 2014**

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# **I. General Information**

## **A. CONTACTS**

The staff of the Jefferson County Commission, under the supervision of Tony Petelos, Chief Executive Officer, responsible for all the County Department functions and responsibilities, and Zhaleh M. McCullers, Director of the Storm Water Management Department (SWMD) prepared this 2013-2014 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 (Permit), issued by the Alabama Department of Environmental Management (ADEM), list specific responsibilities for the Permittee/Co-Permittees. The Storm Water Management Department (SWMD) is responsible for implementing the Storm Water Management Plan (SWMP) within unincorporated Jefferson County, Alabama. The SWMP stipulates certain obligations that must be met in order for the Permittee to comply with the requirements of the Permit. The SWMD continued its work in accordance with the latest SWMP that was submitted to ADEM in the 2011-2012 Annual Report. Work implemented by other County departments which fulfills parts of the MS4 NPDES Permit requirements is reported by the SWMD in its Annual Report. Please refer to Appendix A for the latest version of the SWMP.

## **B. MAJOR FINDINGS**

During the Permit Year October 1, 2013, through September 30, 2014, the following information was collected and evaluated as major findings that have impacted water quality:

- As of January 2014, Alabama law requires that a private pesticide applicator must obtain a certification permit and become recertified after three years. Private pesticide applicators are people who apply any restricted-use pesticide for the production of an agricultural commodity on their own property or on the property of another person with whom they trade services. Employees of a permitted private applicator may apply a restricted-use pesticides as long as they are bring supervised by the permitted employer. Now, anyone who applies restricted-use pesticides in the State of Alabama on his or her own property or anyone who applies pesticides for hire must be certified as either a private or commercial pesticide applicator. This change will impact about 5,000 individuals across the state to include farmers, nursery owners, pond owners, and forest land owners. Please see Appendix B.
- The Alabama Water Agencies Working group (AWAWG) published a report on December 1, 2013. The report proposes the Alabama Water MAP Process as the State's mechanism for developing and implementing an initial comprehensive statewide water management plan that includes policy options for 12 water issue areas identified by the AWAWG. The AWAWG is comprised of the Alabama Office of Water Resources, the Alabama Department of Environmental Management, the Geological Survey of Alabama, the Alabama Department of Conservation and Natural Resources, and the Alabama Department of Agriculture and Industries. Please see Appendix I.
- As the economy improves, housing starts are increasing, although minimally. Many of the new houses are being built in subdivisions that were dormant during the recession. Although these subdivisions tended to stabilize by natural vegetation, the completed housing sites further stabilized these properties. This minimal development combined with maturing natural vegetation is minimizing the impact on the environment from these previously disturbed areas.
- According to the final 2014 water quality 303(d) list of ADEM and the EPA, 15 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 15 segments on the 303(d) list in the Black Warrior River basin are typically designated as impaired for chemical impairments as pesticides (Dieldrin), nutrients, organic enrichment, pH, pathogens, and siltation. Sources of this pollution range from agriculture, industrial sites, urban runoff, and municipal sites to abandoned surface mining operations and collection system failure.

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, siltation, and habitat alterations,



- 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.

The EPA has approved the finalized Cahaba River TMDL for siltation. The total reduction in total suspended solids was revised from 53% to 48%. As an MS4 entity, Jefferson County will continue to address pollutant loading through proper BMPs, monitoring, stormwater management plans, and other mechanisms included in the Permit.

\*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 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.

## **C. MAJOR ACCOMPLISHMENTS**

The following list outlines major accomplishments during the Permit Year October 1, 2013, through September 30, 2014 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, **11,665 cubic yards** of material were removed from the storm sewer system. Please see Appendix B.
- b. 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 ongoing 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.
- c. 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. Jefferson County continued using its SmartCode Ordinance as part of its Comprehensive Planning Program during this reporting period. 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. During Permit Year 2013-2014, **37 subdivision cases were approved**. Please see Appendix C.
- c. Jefferson County is located in a region which experiences the impacts of severe weather conditions including tornados, hurricanes, and heavy rainfall. Several areas of the County which were impacted by the 2011 and 2012 tornado outbreaks suffered extensive loss of trees and vegetative cover, leaving them vulnerable to the associated impacts of stormwater runoff. In order to minimize the discharge of pollutants from these areas, the Stormwater Program staff has identified resources, coordinated efforts, and implemented projects to assist affected communities in replanting trees and other plants to restore the benefits that such vegetation brings, including reducing stormwater runoff, capturing and filtering pollutants, increasing stormwater infiltration, and reducing soil erosion.
  - i. 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. There were **9 seedling giveaway events** held in various locations throughout the County during this Permit reporting period and an estimated **15,000 seedlings** were distributed and planted. Please see Appendix C.

- ii. The Stormwater Program staff spearheaded a tree planting project held in the North Smithfield Manor Greenleaf Heights Community on November 11, 2013. This planting was the first of three phases to restore trees that we lost in and around the community during the 2011 tornado outbreak. This project was coordinated by several organizations (Friends of Birmingham Botanical Gardens (FBBG), Alabama Forestry Commission, Alabama Cooperative Extension System, Jefferson County Soil and water Conservation District), and County departments (Roads and Transportation Community Development, and Land Planning and Development Services). FBBG donated **160 trees** of native oak species, grown from seed collect in the Birmingham area as part of its Centennial Tree Planting Program; 48 were planted in and around the park and fire station area. The remaining trees were distributed to residents to be planted at their homes. One six foot southern magnolia was donated and planted at the community entrance to commemorate this event. There were **30 volunteers** from the community that participated in the planting. Please see Appendix C.
- iii. The Plant Dig, hosted by Keep Birmingham Beautiful Commission, the Birmingham Department of Public Works, and Alabama Forestry Commission, was held on February 22, 2014. This event was free to the public allowing citizens to dig up trees and shrubs at a Birmingham facility and replant them in their own yards. Prior to the event, a free orientation workshop was held on February 15, 2014 at the Birmingham Botanical Gardens by local Master Gardeners. Information on species identification, the proper harvesting of plants and re-planting procedures were discussed. Please see Appendix C.
- 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).

### **3. Roadways**

- a. The County's Roads and Transportation Department deicing program was implemented by Camp Bessemer and Camp Ketona. A total of **1,138 tons** of sand was applied during this reporting period for ice control on County roadways. Please see Appendix B.
- b. The County's Roads and Transportation Department maintains the County's roadways. During this reporting period, **979 bags** of trash was collected from along Jefferson County roadways. Please see Appendix B.

- c. Stormwater Program staff developed a partnership with People Against a Littered State (PALS) promoting and coordinating the 2014 “Don’t Drop it On Alabama” statewide Spring Cleanup for Jefferson County held on various dates from February through August. PALS reports that 61 counties and over 125 groups participated statewide with over 340 tons of litter collected. In Jefferson County, **45 cleanups** were held resulting in **1,659 volunteers** spending over **6,636 hours** picking up **85 tons** of litter along roadways and out of ditches. Of those totals, **31 cleanups** were held in unincorporated areas of Jefferson County resulting in **904 volunteers** spending **3,616 hours** picking up **66.7 tons** of litter which was disposed of by the County’s Roads & Transportation Department (R&TD). 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.
- d. The Turkey Creek Nature Preserve (TCNP) led **13 cleanups** resulting in **274 volunteers** picking up and removing **5.75 tons** of debris. The Jefferson County Commission and the TCNP work together under an ongoing formalized Memorandum of Understanding to reduce water quality pollution along roadways. There also were several local school and service organization volunteers participating in the events. Please see Appendix B and I.
- e. Three *Renew Our Rivers Cleanups* were scheduled during Permit Year 2013-2014. Reports show that **67 volunteers** removed trash and debris from the Warrior River Bankhead Lake Cleanup held on May 31, 2014. As part of this event, a community wide cleanup was also promoted to have local residents pick up trash and debris along roadsides and in sloughs from May 29 until June 1, 2013. A total of **4.5 tons** was collected during all these events.

The Valley Creek Cleanup was held on August 23 with two prior work days to remove the heavier items on August 21 and 22, 2014. This cleanup focused on public awareness and trash removal throughout the Valley Creek Watershed. The cleanup was coordinated by the municipalities throughout the watershed and various agencies and a coalition of local citizens and businesses. More than **120 volunteers** removed **8.38 tons** of debris. Please see Appendix B.

Volunteers along with the Birmingham Fire and Rescue Service, Vulcan Materials Company, City of Birmingham and Jefferson County Commission participated in a cleanup in Village Creek conducted by the Village Creek Society and the Alabama Power Company on September 20, 2014. An additional cleanup on Village Creek was held on April 26, 2014. A total of **43 volunteers** from local schools removed **0.85 tons** of debris during the spring cleanup. Please see Appendix B.

- f. The Shades Creek Cleanup was held on September 27, 2014. Over **130 volunteers** came to remove tires and trash out of the watershed. Please see Appendix B.
- g. 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, **19 Floodplain Development Permits were completed** and **0 flood control projects** were permitted. 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 (I.C.10).

## 5. Pesticides, Herbicides and Fertilizer Application

- a. Camp Ketona of the County's Roads and Transportation Department applied herbicides on **5,779.00 acres** of land by using **673 gallons of Hard Ball, 46 pounds of Milestone, 1,076 gallons of Target, and 45 gallons of Ground Zero**. Please see Appendix B.
- b. Camp Bessemer of the County's Roads and Transportation Department applied herbicides using **121 gallons of Hard Ball, 87 gallons of RoundUp, 24 gallons of Milestone, 437 gallons of MSMA, and 436 gallons of 2-4-D**. Please see Appendix B.
- c. Camp Ketona of the County's Roads and Transportation Department applied **Hydroseed to 21.5 acres** of land using **86 pounds of Tackifier** and **8,600 pounds of 13/13/13 fertilizer**. Please see Appendix B.
- d. The County's Roads & Transportation Department has **10 staff** members who are **certified PHF applicators** and hold a certified PHF license: Robert Carroll (10722), Robert A. Ryan (10992), Christopher Hayes (11037), Adam Laney (10723), 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.
- e. Camp Ketona of the County's Roads & Transportation Department has **2 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.
- f. The County's General Services Department followed their Standard Operating Procedures (SOPs) which were enhanced in the 2011-2012 reporting Period 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 chemical storage room and OSHA approved containers. For a list of materials and amounts, please see Appendix B.
- h. The County's General Services Department applied **53 gallons of RoundUp** and **6 gallons of Demon**. No fungicide or fertilizer was applied for the 2013-2014 reporting period. Please see Appendix B.

- i. The County's General Services Department has **2 staff** members who are **certified PHF applicators** and hold a certified PHF license: Rhonda Cashatt (11946), and Keith Kelley (12036). Please see Appendix B.
- j. 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 continually 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 or those applying restricted use pesticides for the production of an agricultural commodity on their own property or on the property of another person with whom they trade services 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 an ongoing Memorandum of Understanding with the Alabama Green Industry Training Center (AGITC) through the Alabama Cooperative Extension System (ACES). This year AGITC promoted and held **44 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 free safety videos for both English and Spanish speaking work crews. The web address is <http://ugaurbanag.com/safety/general-guidelines-landscape-equipment-safety>. Please see Appendix B and I.

- k. The **Green Industry Web (GIW) Portal**, hosted by Auburn University at Montgomery (<http://www.giwportal.org>) is a free web based service for the Green Industry 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. This year GIW Portal promoted and held **50 events** regarding proper use of pesticides, herbicides and fertilizers as well as runoff reduction. There are currently **48 training videos** posted with future plans to develop live classes and virtual office hours. The GIW Portal is a partnership with funding from the Appalachian Regional Commission, Alabama State Department of Education, the Daniel Foundation of Alabama, the Alabama Nursery and Landscape Association, the Alabama Cooperative Extension System, the Alabama Department of Agriculture and Industries, the Alabama Green Industry Training Center and many more. During the 2011-2012 Permit Year, Jefferson County Commission formalized an ongoing Memorandum of Understanding with the Alabama Green Industry Training Center (AGITC) through the Alabama Cooperative Extension System (ACES), both partners of the GIW. Please see Appendix B and I.
- l. The Alabama Cooperative Extension System held **6 Certified Horticultural Retailer (CHR) training programs** during this Permit year. The CHR program targets

agricultural retailers and managers who sell pesticides, fertilizers and seeds. This statewide educational initiative is a fee-based training program that provides basic and advanced horticultural training to employees working at home garden, landscape and retail centers directly from qualified professionals. The CHR program delivers multi-track training on nutrient management, pesticide stewardship, conventional production systems, organic cropping systems, landscape horticulture and fire ant management. Participants received relevant Extension publications, a training certificate and badge and lawn displays upon program completion. They were also linked to the CHR website that recognized businesses that have successfully completed the training program. It was reported that 9 people attended the Fall 2013 workshops held on October 8, November 7 and December 5, 2013. The Spring 2014 workshops were held on May 13, May 14 and May 15, 2014. During the 2011-2012 Permit Year, Jefferson County Commission formalized an ongoing Memorandum of Understanding with the Alabama Cooperative Extension System. Please see Appendix B and I.

- m. The Alabama Cooperative Extension System published the Alabama IPM Communicator, a comprehensive statewide pest management newsletter for farmers, foresters, retailers, gardeners, and homeowners. The newsletter contains articles from research and Extension personnel from all educational institutions in Alabama. The main purpose of the newsletter is to provide readers information about critical crop production and pest management information as well as promote upcoming workshops, events, and webinars that pertain to proper use and alternatives to chemicals, such as beneficial insects. All past issues of are available for viewing at the aces.edu website (<https://store.aces.edu/ListItems.aspx?CategoryID=180>). Stormwater Program staff promoted the free publication at events, community based meetings and the lunch and learn seminars. During the 2011-2012 Permit Year, Jefferson County Commission formalized an ongoing Memorandum of Understanding with the Alabama Cooperative Extension System. Please see Appendix B and I.
- n. Initiatives were implemented in order to have a positive effect on the amount of pesticides and fertilizers being applied. EPA launched the new Bee Advisory Box located on pesticide labels in an effort to protect pollinators. Stormwater Program staff promoted this new addition to pesticide labels at various venues. 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) and see Appendix B.
- o. Stormwater Program staff initiated an Integrated Pest Management (IPM) program to responsibly control mosquitos and other bugs called *Step Away From The Spray!* For publicly owned lands, Bacillus thuringiensis israelensis (Bti) tablets and a handout with information about responsible pesticide use as well as information on local resources which offer alternatives to yard chemicals, were provided to County Departments for their management of these pests. A more expansive IPM program was initiated to address the proper use and application of pesticides on privately owned lands. Please refer to Major Accomplishments, Education and Public Outreach (II.C.10) and see Appendix B.

- p. 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 has established a program to address sanitary sewer overflows. To assist in minimizing the occurrence of sanitary sewer overflows, the sewer pipes are cleaned on a routine maintenance schedule. Once the department is aware of a sanitary sewer overflow, the staff is dispatched to investigate and correct the problem as stipulated in the July 2012 Sanitary Sewer Overflow and Response and Reporting Program Standard Operating Procedure. A list of sanitary sewer overflow locations, including actions taken by the staff, is included. Please see Appendix D.
- b. 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. 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 **20 drop-off points** that accept filled containers for recycling, which is an increase of one new site from last year. A total of **2,548 gallons** was collected between October 1, 2013, and September 30, 2014. Please see Appendix D.

The County's Environmental Services Department (ESD) distributed over **4,000 flyers** within apartment complexes, made **12 presentations**, held **one news conference**, provided **bilingual program materials** that were both displayed throughout the complexes and distributed to residents in **34 zip codes**. 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.

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.

- c. A Household Hazardous Waste Collection Day was held on April 26, 2014. This event allowed residents of Jefferson County to safely dispose of electronics, appliances, motor oil, small engines, batteries, CFC container devices, prescription drugs, paint, ammunition and paper for shredding free of charge. This event was



- coordinated by the Jefferson County Household Hazardous Waste Day Committee made up of several local agencies to include the Alabama Environmental Council, CaWaCo Resource Conservation & Development Council, City of Birmingham, City of Bessemer, Jefferson County Commission, Jefferson County Department of Health, Keep Birmingham Beautiful Commission, Storm Water Management Authority, Inc., and the UAB School of Public Health. Stormwater Program staff, along with other Committee members, participated in a WBRC-Fox 6 news segment on April 2, 2014 promoting public participation in the HHWCD. According to the participant intake survey and vendor summary reports, **22,140 pounds** of paint (latex and oil), **7,303 pounds** of electronics, **623 pounds** of white goods, **2,948 pounds** of batteries, and **90 gallons** of used motor oil was brought by the **261 respondents** to the survey. Please see Appendix D.
- d. To promote proper disposal of various household items, the Jefferson County Commission partnered with Alabama Environmental Council (AEC) on its recycling program, Recycle Alabama. The Stormwater Program staff promotes Recycle Alabama through its Jefferson County Clean Water Awareness Campaign posters, newsletters, presentations and events. The AEC runs a nonprofit recycling center in downtown Birmingham which accepts textiles, plastics, glass, metal, cardboard, paper and other items. AEC created and promotes Recycle Alabama through its website ([www.recycleAL.com](http://www.recycleAL.com)) and printed materials. Under the Recycle Alabama campaign, AEC in partnership with Jefferson County Department of Health, the University of Alabama at Birmingham, Jefferson County Commission and several municipalities organized the purchase and distribution of recycling drop-off trailers. There were **10 trailers** distributed to various outlying communities in Jefferson County that do not have recycling opportunities. The recycling trailers have a modified version of the *Trash Blows! Tarp and Tie Your Load* poster prominently displayed to remind those dropping off materials that even recycled materials can become litter that can pollute our waterways. During this reporting period, the AEC collected over **1,957 tons** of glass, paper, cardboard, plastic and metals. Jefferson County Commission has a formal partnership through an ongoing Memorandum of Understanding with the Alabama Environmental Council and its recycling campaign known as Recycle Alabama 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. The Stormwater Program staff promoted and publicized **4 e-waste events** aimed at collecting and properly disposing of electronic waste in the Birmingham Metropolitan Area. These events were held on October 23, 2013, January 18, 2014, April 26, 2014, and May 8, 2014 and collected over **25 tons**. These large-scale events were initiated by the Alabama Environmental Council, Advanced Technology Recycling, City of Birmingham, and the Household Hazardous Waste Day Committee in conjunction with partnerships among local government, non-profits, and businesses. In addition to these events, the Alabama Environmental Council accepted **10 tons** of electronics at its downtown recycling center. Please see Appendix D.
- f. Stormwater Program staff promoted **3 National Prescription Drug Take-Back Events** held in the Jefferson County area on October 26, 2013, April 26, 2014 and September 27,

2014. 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 **713 tons** of medication were collected during these two events according to the Drug Enforcement Administration. Materials to promote this program were available in both English and Spanish and in various formats (posters, handouts, etc.). The Drug Enforcement Administration (DEA) published its Notice of Proposed Rulemaking for the Disposal of Controlled Substances in the Federal Register Dec 21, 2012. The proposed regulations seek to implement the Secure and Responsible Drug Disposal Act of 2010. Please see Appendix D.

- g. As an ongoing effort 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**. Please see Appendix D.
- h. The Stormwater Program has a dedicated Hotline number for the public to report suspected water pollution. Please refer to Major Accomplishments, Education and Public Outreach (II.C.10).
- 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).

## **7. Spill Prevention and Response**

For Permit Year 2013-2014, Jefferson County Emergency Management Agency (EMA) had the responsibility for spill prevention and response, and responded to **88 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 including EMA's Be Ready Day which is held annually in the fall. The spill prevention and response effort is coordinated and implemented in conjunction with fire departments located within Jefferson County. Please refer to Major Accomplishments, Education and Public Outreach (II.C.10) and 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 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 of grease discharged into the sanitary sewer system and thereby reduce the number of dry weather sanitary sewer overflows. For information on the County's household cooking oil and grease collection, please refer to Major Accomplishments, Illicit Discharges and Improper Disposal (II.C.6).

\*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 the right to discharge 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://www.jeffcoes.org/Default.asp?ID=26&pg=Customer+Care>) including how to apply for a permit. Some of the materials are available in Spanish.

During this reporting period, **1,970 food service facilities** were **permitted**, and **2,288 annual site inspections** to food service facilities were made. The annual site inspection includes training food service facility employees on best management practices, supplying these employees with a training DVD, and ensuring the facility has the current best management practice (BMP) poster displayed in the sink area. Replacement BMP posters are made available if needed. A total of **253** 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 **8 employees** (4 program staff and 4 program inspectors) and offer training classes for food service facility employees to attend on a quarterly basis. 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 as described in the Agriculture and Industries Chapter 28, Title 2, Code of Alabama, 1975, and the Agricultural Chemistry Administrative Codes 80-1-13, 80-1-14, 80-5-1 and 80-10-9. 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 an ongoing partnership with agencies through a Memorandum of Understanding to comply with this Permit requirement. Please see Appendix B, Appendix E and I.

- There were **2 Alabama Certified Landscape Professional Programs (ALCLP)** held during this Permit year: January 2014, and February 2014. 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 BMPs, 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 an ongoing partnership with these agencies through a Memorandum of Understanding. Please see Appendix B, Appendix E and I.

- The Fleet Management Division (FMD) of the County's Roads and Transportation Department implements a recycling program. For the Permit Year 2013-2014, the FMD properly disposed of **637 batteries** and recycled **22,703 gallons of oil**. Please see Appendix E.
- Jefferson County owns two landfills and one transfer station that are operated by Santek Waste Services. During the 2012-2013 Permit Year, the Turkey Creek Landfill (ALG160139) closed the active cell and the facility operates as a drop-off location, similar to the Johns Transfer Station. The former Turkey Creek Landfill is open to the public three days a week during certain times of the day. Post closure operations and monitoring procedures are in place. To date, there is only one active landfill site within unincorporated Jefferson County which is in Mount Olive located at 101 Mary Buckalew Parkway, Gardendale, AL 35071 (ALG 890326). Storm Water program staff conducted inspections of the facilities to identify and control pollutants from industrial and high risk runoff sites. The Mount Olive landfill was undergoing a managerial transition. At the time of inspection, the landfill was in compliance physically, although lacked permitting documentation on-site. Another site inspection is scheduled to confirm compliance. The completed inspection forms are included in Appendix E.
- 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. Jefferson County's Subdivision and Construction Regulations, Article 13 Erosion and Sedimentation Ordinance requires all land disturbing activities to obtain permits or an exclusion as part of the zoning process. The County's Storm Water Management Department reviews plans and issues Land Disturbing Activity Permits (or exclusions) for both commercial and residential sites. The County's Inspection Services Department is in charge of building permits and has been assigned to inspect the Land Disturbing Activity Permitted sites for compliance. Once the Department staff determines the site to be stable, as specified in the plans, a Certificate of Occupancy is issued and the permit is closed. During this reporting period, established SOPs were followed for the permitting, reviewing and inspection components of the Ordinance. Please see Appendix F.
- b. Staff distributed materials to inform applicants of the process and requirements of Jefferson County's Subdivision and Construction Regulations, Article 13 Erosion and Sedimentation Ordinance, Land Disturbing Activity Permit. Please see Appendix F.
- c. During the Permit Year 2013-2014, the County's Inspection Services and Storm Water Management Departments issued Land Disturbance Activity Permits for **221 residential single family homes** as part of its zoning approval process. These Departments also issued **157 exclusions for single family homes** which were exempt from Land Disturbance Permit requirements. In addition, a total of **16 commercial Land Disturbance Permits** and **19 commercial exclusions** were issued. Please see Appendix F.
- d. The County's Inspection Services Department reported **607 construction inspection activities** for the above permitted sites during the Permit Year 2013-2014. Complaints associated with permitted sites are handled through site inspections and will be reflected in the stormwater inspections numbers. Please see Appendix F.
- e. The County's Land Planning and Development Services Department issued **1,046 zoning approvals** and received **467 complaints** related to weed and litter, criminal littering, and zoning violations. During this reporting period, **375 notices of violation** cases have been corrected and resolved. Please see Appendix F.
- f. The County's Inspection Services Department (ISD) had **4 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 13, 2013, 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. The County's Roads and Transportation Department has **14 inspectors, supervisors and staff** that carry a current Qualified Credentialed Inspector certification. Please see Appendix F.
- h. The County's Storm Water Management Department assumes responsibility for hosting and coordinating an Erosion and Sedimentation Control (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 (HBAA) to provide its ESC workshops and maintain a database of attendees. The Alabama Erosion and Sediment Control Partnership provided the 2013 Clear Water Alabama Seminars and Field Day held October 8-10, 2013 in Birmingham. A total of **52 people** attended the Field Day. The HBAA provided the April 30, 2014 ESC workshop for the County's Storm Water Management Department. A total of **29 people** attended the ESC Workshop. 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. 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 *Field Guide for Erosion and Sediment Control on Construction Sites in Alabama* are 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 F.

- i. The County's Roads and Transportation Department currently implements **8 NPDES Permits** issued by ADEM to the County. The following are locations of the sites along with each Permit number: Bessemer Pit (ALR163457), Brooklane Drive (ALR107579), Camp Ketona (ALG140982), Dickey Springs Road (ALR10A410), Linndale Road (ALR16ECAN), Linndale Road Spoils Area (ALR108214), Lowetown (ALR163492), and Lowetown Borrow Pit (ALG890056). Please see Appendix B.
- j. 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 Permit requirements. A summary graph has been created to identify every Permit requirement that the following education initiatives, listed alphabetically, addressed. This summary graph is included in the Education and Public Outreach Appendix G.

- a. **25th Annual Nonpoint Source Conference**  
Stormwater Program staff attended the 25<sup>th</sup> Annual Nonpoint Source Conference offered by ADEM on January 22, 2014, 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 Technology Transfer Center**  
Stormwater Program staff attended the *Evolution of Municipal Separate Storm Sewer System (MS4) Permit and Program Requirements* on November 14, 2013, in Pelham, Alabama, in order to learn the latest information about the State's MS4 NPDES Phase 1 Regulatory Requirements. Please see Appendix G.

c. **Alabama Water Watch Chemical Workshops**

Stormwater Program staff coordinated and conducted Alabama Water Trainings held on May 10, 2014 to certify and recertify **7 volunteer citizen monitors**. 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. **Brochures and Flyers**

The Stormwater Program staff distributed various brochures and flyers to inform and educate the public about stormwater runoff, and to provide helpful tips and resources to improve water quality. These brochures and flyers 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.

The brochures are: **Identifying and Reporting Water Pollution** (illicit connection, illicit discharges, 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); **Vehicle & Equipment Care & Maintenance** (motor oil); **Erosion and Sedimentation Control Permitting Process** (Jefferson County ESC requirements, public reporting); **Trees for Bees** (bee friendly yard care practices); **Erosion and Sedimentation Control Best Management Practices** (outlines BMP requirement for Article 13); **Let's Look at Sediment** (issues resulting from erosion and sedimentation and offers preventative measures); **Rain Rain Come Our Way** (rain barrel project) and **Recycle Alabama's Recycling 101, Downtown Recycling Center, Recycling Drop-Off Trailer, Event Recycling Trailer, Business Recycling Program, and Glass Recycling Program**. 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.

The flyers are: **Trash Blows!** (litter abatement), **1 Drop Does Matter!** (household oil and grease recycling), **It's Your "Doody"** (dog waste), **What's Bugging You? and Fight The Bite!** (integrated pest management).

Please refer to Major Accomplishments, Pesticides, Illicit Discharges and Improper Disposal (II.C.6), Major Accomplishments, Construction (II.C.9) and see Appendix G.

e. **Brown Bag Lunch and Learn Seminars**

Stormwater Program staff, in partnership with the Friends of the Birmingham

Botanical Garden, created a series of **9 free informational seminars** called *The Brown Bag Series*. The seminars were held at the Birmingham Botanical Gardens and were open to all residents of Jefferson County and promoted in the JeffCo H2O Newsletters, blogs and partner's websites and flyers were distributed out at community events and meetings. Instructors were chosen for each topic from varying organizations. The topics, intended to be of practical application to homeowners, included the stormwater benefits to low impact landscape designs, proper planting and gardening techniques, and prudent use of fertilizers and pesticides. There were **275 participants** in the 2014 series which consisted of Trees and Shrubs, March 26; Eat Your Yard, April 2; Medicinal Gardening, April 9; 411 to 911 Rescues, June 11; The Dirt on Soil, June 25; A Change of Scenery, July 9; Grandscape: Playful Gardening, July 23; The Buzz on Pollinators, August 6; and Porous, Permeable and Pervious, August 13. Please see Appendix G.

f. **Clean Water Awareness Campaign**

Stormwater Program staff created the Clean Water Awareness Campaign to inform and educate the public as well as affect behavioral change in order to reduce polluted stormwater runoff caused by the impacts of vehicle fluids, yard chemicals, pet waste, and litter. The campaign was designed to transcend the County's limited funds, noncontiguous geography and diverse population.

The Stormwater Program staff identified the need to create a system that would improve its ability to deliver the Clean Water Awareness Campaign messages to the public. The staff developed a collaborative network of agencies and organizations whose missions intersect with stormwater pollution prevention in some manner. This collaborative network has resulted in a message delivery system which has expanded the reach of the Clean Water Awareness Campaign by opening access to new audiences, reducing message fragmentation, and enhancing credibility through message uniformity. These partnerships have assisted us in identifying key community contacts to potentially serve as change agents in regard to stormwater pollution prevention. The community contacts have assisted us in targeting programs, tailoring events and encouraging community participation.

A series of posters was created to serve as the flagship component and an e-newsletter was launched to provide a cost effective way to support the posters and related components of the Clean Water Awareness Campaign. Please see Appendix G.

g. **Complaint Reporting**

A phone hotline was 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 web site which is located at the County's website <http://jeffconline.jccal.org/Default.asp?ID=1112&pg=StormWater>.

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.

h. **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. Community Awareness Day. On October 17, 2013, 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. An estimated **1,100 people** attended this event. Approximately **711 students**, from eight area schools, attended this event as a field day trip.
- ii. Do Dah Day. On May 16, 2014, Stormwater Program staff discussed the importance of picking up pet waste and displayed two pet waste posters on a WBRC Fox6 live news segment aimed at promoting Do Dah Day. On May 17, 2014, the Clean Water Awareness Campaign posters were displayed on over **40 port-a-potties and at a booth**. A series of announcements were made in between music sets throughout the day that counted down the top ten reasons why pet waste should be picked up and properly disposed. The *It's Your "Doody"* flyer was distributed along with free pet waste bags to attendees. The purpose of Stormwater Program staff participation in this event was to bring about awareness of the impacts of pet waste on local water quality and the benefits of pet friendly landscaping to reduce PHF as well as erosion and sedimentation. In addition a fun and interactive poo toss game was offered to teach people the proper behavior for pet waste disposal. Approximately **250 pet waste bags** and flyers were distributed. The Do Dah Day Board estimated **20,000 people** attended this event.
- iii. Friends of Birmingham Botanical Gardens Plant Sales. The Friends of Birmingham Botanical Gardens held its Fall Plant Sale on October 19-20, 2013, and it's Spring Plant Sale on April 11-13, 2014. They report having over **7,700 customers** between the two events. The Clean Water Awareness Campaign posters were displayed at various locations throughout the venue.
- iv. National Neighborhood Night Out. On August 5, 2014, the Clean Water Awareness Campaign posters were displayed at a booth. It was reported that over **500 people** attended this free event in Center Point. Cooking oil and grease recycling containers, mosquito prevention kits, and tarp tie downs were distributed as well as other stormwater educational materials.
- v. Urban Forestry Fair. Stormwater Program staff provided an educational game for **203 5<sup>th</sup> grade students** from various schools within Jefferson County at the annual Urban Forestry Fair held on February 18, 2014. The interactive and engaging game is designed to reinforce the idea of conserving natural resources and improving water quality.
- vi. Get Into The Gardens. On September 27, 2014, Stormwater Program staff, in partnership with the Birmingham Audubon Society, provided an informal educational program titled "Step Away From The Spray" at the Birmingham Botanical Gardens. Weekend visitors were taught how to manage mosquitos and other backyard pests using birds, bats and other natural methods. Mosquito prevention kits and other items such as seeds from native plants known to attract birds and other natural predators, were distributed free of charge. The Clean Water Awareness Campaign Posters were displayed at a booth and various

handouts pertaining to integrated pest management, building and installing bird and bat houses, and beneficial bugs were available.

i. **Friends of Birmingham Botanical Gardens**

A Stormwater Program 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 2014. FBBG reports **14,427 children and 10,748 adults** attended its structured education programs and over **1,400 gardens' visitors** participated in the newly launched free educational programming on the weekends called *Get Into The Gardens*. 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. The Jefferson County Commission formalized an ongoing Memorandum of Understanding which enhances the efforts of the Storm Water Management Department and FBBC. Please see Appendix G and I.

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

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

k. **Jefferson County Water Festival**

Stormwater Program staff planned and implemented the eleventh Annual Jefferson County Water Festival held on October 15, 2013, at Samford University. The Water Festivals educated **602 4<sup>th</sup> 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. 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. Leigh Anne Precise was the logo contest winner. The winning logo design was placed on T-Shirts distributed to all students and volunteers. Please see Appendix G.

l. **Media**

Various strategies have been implemented to utilize both traditional and new media. Please see Appendix G.

- i. An email database of **39 local print and electronic media** contacts was developed and utilized to assist Stormwater Program staff in informing Jefferson County residents about Clean Water Awareness Campaign information as well as announcements regarding workshops, activities, and events.
- ii. Articles with stormwater pollution prevention information and links to resources aimed at reducing stormwater pollution are written for publication and posted monthly at the Turkey Creek Nature Preserve (TCNP) blog site and *The Leaf*, a printed and online monthly publication that serves the southern part of Jefferson County. The articles are targeted to County residents and encourage stormwater friendly behaviors. The interactive nature of the blog site provides metrics for views and allows for staff to respond to reader comments and questions. According to WordPress, this blog was **viewed 385 times** during this reporting

period. In addition, the blogs are posted at the TCNP Facebook page which currently has **4,463 “Likes”**. *The Leaf* reports a **monthly print readership of 24,000**. While no readership estimates are available for the online publication, *The Leaf* Facebook site has **1,550 “Likes”**. The free print publication is placed at businesses and restaurants in the southern and western areas of Jefferson County.

- iii. Press releases and media alerts with stormwater pollution prevention events, initiatives, accomplishments, and information are written and distributed to local media through the email database.
- iv. Research has been conducted and preliminary plans have been made to implement a media presence (social, print and digital) to further the reach of the Stormwater Education Program. At present, Stormwater Program staff utilizes the social media capabilities of other local organizations and agencies with which a signed ongoing Memorandum of Understanding exists in order to assist with distributing Clean Water Awareness Campaign information and informing the public about upcoming workshops, activities, and events.

m. **Newsletters**

An e-newsletter, *JeffCo H2o News*, was launched to provide a cost effective way to support the posters and related components of the Clean Water Awareness Campaign. The e-newsletter content expands upon the poster topics and provides links to resources that can assist positive behavioral change. The e-newsletter is distributed on a quarterly basis to **2,100 Jefferson County employees, 142 local organizations**, businesses and individuals, and **39 print and electronic media**. Recipients are encouraged to redistribute the e-newsletter to their own contacts. Print copies of the e-newsletters are available at events and presentations during the year. A signup sheet is also available for the public to register for future mailings. Please see Appendix G.

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

During this reporting period, several workshops were held, various articles and newsletters written, and programs initiated in order to provide residents, private land owners, and those that lease land from Jefferson County information specific to the proper use and application of yard chemicals, care of landscaping and pest management, and sustainable home lawn and garden practices. These activities and publications were promoted through the Jefferson County Clean Water Awareness Campaign and by various partnering organizations including Alabama Cooperative Extension System, Friends of Birmingham Botanical Gardens, Alabama Green Industry Training Center and Green Industry Web Portal. Please refer to Major Accomplishments, Pesticides, Herbicides, Fertilizers (II.C.5) and see Appendix G and I.

- i. Alabama IPM Communicator. A statewide newsletter filled with articles and publications from various accredited school researchers and Alabama Cooperative Extension personnel, includes seminars and other training events along with helpful homeowner information on various topics pertaining to pest management and sustainable home lawn and garden practices.
- ii. Step Away From The Spray – Fight The Bite! During this reporting period, an Integrated Pest Management Program was created and promoted. The program makes available information that helps residents manage pests in a more

environmentally friendly manner, as well as, provides references to experts who offer homeowners a variety of targeted controls. It advises residents about the harmful effects of indiscriminately using broad spectrum pesticides because of the unintentional consequence these materials have on beneficial insects, natural predators and water quality. The program encourages wildlife habitat that attracts animals known to assist in controlling pests and other unwanted bugs. It provides a biologic tool, *Bacillus thuringiensis israelensis* (Bti) tablets, to assist residents in managing a common Alabama pest that people routinely treat with broad spectrum pesticides. These materials were made available at the Stormwater Program office, community based meetings, seminars, workshops and given to partnering agencies to distribute.

o. **Posters**

A series of posters was created to serve as the flagship component of the Clean Water Awareness Campaign. The posters deliver stormwater pollution prevention information in a highly visual manner in order to attract attention while overcoming language barriers, and utilize catchy headlines and taglines to further engage the public. The posters juxtapose potential stormwater pollution problems with practical solutions that focus on the benefits they bring to residents. A total of **30 posters** have been created.

These posters are printed and displayed at various locations throughout Jefferson County as well as distributed electronically in various newsletters, blogs and articles, including the downtown Jefferson County Courthouse, the Birmingham Botanical Gardens lobby, in kiosks at the Turkey Creek Nature Preserve, at point-of-sale in ACE Hardware - Chalkville, and at various events throughout the year. Please see Appendix G.

i. ***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.

ii. ***1 Drop Matters!***

This oil and grease/vehicle fluid program contains **2 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  
 $740,000 \text{ drops} \div 11,520 \text{ drops per quart} = 64 \text{ quarts of oil}$   
4 quarts are capable of polluting 1 million gallons

iii. ***Bag It and Trash It!***

This pet waste/nutrient program contains **2 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. Preliminary discussions were held with the Alabama Veterinary Medicine Association, Greater Birmingham Humane Society, and Doo Dah Day to establish partnerships that would assist the Stormwater Program with its pet waste management education efforts.

iv. ***Household Oil and Grease Recycling***

This program contains **6 posters** and one flyer that promote proper disposal of used household cooking fats oil and grease (FOG). The posters focus on the correlation between pouring FOG down household drain pipes resulting in clogs, sanitary sewer overflows and stormwater pollution. A companion poster focuses on the correlation between pouring FOG outside on the ground and stormwater pollution. The flyer details the guidelines of the program and promotes the positive results from participating in the recycling program and gives information on how to properly dispose of these items. These materials are a shared resource between Environmental Services Department and Storm Water Management Department. Please refer to Major Accomplishments, Illicit Discharges and Improper Disposal (II.C.6) and see Appendix G.

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

This runoff reduction and erosion prevention program contains **8 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.

vi. ***Reduce Runoff!***

This program contains **1 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.

vii. ***'Spread' the Word***

This pesticide, herbicide, and fertilizer program contains **6 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 two posters in this series pertain to bees and the impact pesticides have on the pollinators. These posters remind citizens that insecticides are not choosy; hence, they kill a wide range of insects, not just the pesky ones.

viii. ***Trash Blows! Trash Floats!***

This floatable/litter abatement program contains **4 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.

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. Please refer to Major Accomplishments, Illicit Discharges and Improper Disposal (II.C.6).

p. **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. Southeast Stormwater Association. Stormwater Program staff made **3 presentations** during this reporting period on how public education and outreach programs can be helpful in improving water quality by changing public behavior. On October 25 a presentation was made at the 2013 Annual SESWA conference, on April 9 a presentation was made at the 2014 SESWA Spring Stormwater Seminar, and on July 31, 2014 a presentation was made in a web based seminar.
  - ii. Oak Grove Student Government Association. Several informational presentations were given to the faculty and students in the Oak Grove High School on the impacts of pollution in waterways. The presentations were given on October 8, October 22, November 12, and December 3, 2013. Stormwater Program staff participated in the Oak Grove High School student assembly held on February 28, 2014. The purpose of the assembly was to encourage students, teachers and administrators to participate in a March 1, 2014 community-wide roadside cleanup spearheaded by the Oak Grove Student Government Association. Please refer to Major Accomplishments, Roadways (II.C.3).
  - iii. Erosion and Sedimentation Control (ESC) Workshops. Stormwater Program staff made presentations at the ESC workshops 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. Please refer to Major Accomplishments, Construction (II.C.9).
  - iv. Integrated Pest Management Presentations. There were **8 presentations** given to Jefferson County communities to promote using a biologic (BTI tablets) which specifically targets mosquito larvae rather than using a pesticide spray formulated to kill all insects. The presentations were held on July 16 (Edgewater B,) July 21 (North Smithfield Greenleaf Heights), July 24 (McDonald Chapel), August 7 (Concord), August 12 (Mulga Mines), August 13 (Edgewater A), August 21 (Jefferson County Bee Keepers), and August 23 (Adger). Other Stormwater pollutants of concern such as litter and debris, pet waste, lawn and garden chemicals, bare soil, vehicle fluids and cooking oil and grease were also discussed. Please refer to Major Accomplishments, Education and Public Outreach, Pesticide, Herbicide Fertilizer/Landscape.

- v. Stormwater program staff gave **10 presentations** to local organizations, schools, and neighborhood associations in an effort to obtain community participation in the People Against a Littered State Spring 2013 Cleanup and involvement for future prevention programs. The presentations included information about the effects of many pollutants such as: litter and debris, pet waste, lawn and garden chemicals, bare soil, vehicle fluids and cooking oil and grease to our local waterways and how these pollutants can be prevented. The meetings were held on February 17 (North Smithfield Greenleaf Heights), February 27 (McDonald Chapel), March 18 (Rock Mountain Lake), March 27 (McDonald Chapel), April 8 (Concord), April 21 (North Smithfield Greenleaf Heights), April 24 (McDonald Chapel), June 2 (Jefferson County Association of Firefighters), June 9 (North Birmingham), and July 7 (Boat Alabama). Please refer to Major Accomplishments, Roadways (II.C.3) and see Appendix G.
- vi. Friends of Shades Creek. On September 11, 2014, 22 people attended a presentation that the Stormwater Program staff made at the Friends of Shades Creek monthly meeting. The presentation included information about the effects of many pollutants such as: litter and debris, pet waste, lawn and garden chemicals, bare soil, vehicle fluids and cooking oil and grease to our local waterways and how these pollutants can be prevented. Mosquito prevention kits and handouts with information about responsible pesticide use were distributed.
- q. **Southeast Stormwater Association (SESWA)**  
Stormwater Program staff attended the Annual Conference held on October 24-25, 2013 and the Spring Seminar held on April 8-9, 2014. Staff contributed information in 1 SESWA ForeCast newsletter that was distributed to NPDES Permittees, consultants and private agencies throughout Environmental Protection Agency's (EPA) Region 4 network. Staff gave **3 presentations at various SESWA events**. Please refer to Major Accomplishments, Education and Public Outreach, Presentations.
- r. **Surveys**  
During this reporting period, the results from a survey conducted in 2012 were used to assist the Stormwater Program staff to refine campaign messages, identify and remove obstacles to behavior change, and more efficiently direct resources. The Jefferson County Revenue Department, which assisted in administering the surveys to local residents who came to the Jefferson County courthouse for car tags and drivers licenses, will not be able to perform that function for future surveys. Steps were taken to identify and secure another method to administer future surveys to citizens who visit the courthouse. Please see Appendix G.
- s. **Trees for Bees**  
Stormwater Program staff serve 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.

During this Permit year the committee's efforts focused developing content and a site map for a Trees for Bees website which will provide the general public with information and resources to promote the objectives of the committee. Plant tags were distributed to local garden centers so that homeowners can easily spot bee friendly plants. Car decals were distributed to the public as a way to brand this program.

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 refer to Major Accomplishments, Pesticides, Herbicides, and Fertilizer Application (II.C.5) and see Appendix G and I.

t. **Turkey Creek Nature Preserve (TCNP)**

Through a formal partnership, established by an ongoing Memorandum of Understanding, the TCNP assists the Stormwater Program staff in achieving educational goals by including a stormwater education component to all student curriculums, community events and cleanups. TCNP also provides various opportunities to promote the Clean Water Awareness Campaign messages at their blog site, and in kiosks throughout the park. TCNP houses a recycling trailer for area residents to properly dispose of paper aluminum and plastic. Please see Appendix G and I.

u. **Website**

The Jefferson County website had to undergo a major redevelopment because of a server failure. This resulted in a significant amount of data to be lost causing every County Department's website to be recreated with new software. While Stormwater Program Staff work on creating a new web site, a temporary webpage with limited information has been posted. 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 staff established **6 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 all outfalls to be screened during the permit cycle. As previously reported, 100% of the MS4 outfalls have been screened. 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 2013-2014, Stormwater Program staff collected **18 instream and 4 investigation samples** during wet and dry weather. The investigation samples were performed to assist Camp Ketona's discharge limitations and monitoring requirements for ALG140000. This information is summarized and quantified in the Summary Tables. Please see Appendix H.



## **D. PROGRAM STRENGTH AND WEAKNESSES**

Strengths of the Jefferson County Stormwater Program have been outlined in detail within the Major Accomplishments Section. Please refer to Section II.C.

- The State of Alabama amended the State's Storm Water Law with SB355 in order to include all counties or municipalities in the State which are now or may hereafter be subject to the EPA's MS4 regulations. The amended law established a rate structure to be used by local governments and also exempted certain types of properties from a storm water fee. To comply with the state law, Jefferson County will have to amend its current Ordinance on all parcels of land that are not owner occupied residential properties. Please see Appendix I.
- A limitation of the Jefferson County Stormwater Program continues to be in 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 enough data to support a determination of improvement or degradation in water quality overall. Furthermore, the climate during the year was not conducive for collecting all planned samples, much like that of years past. The Almanac correctly predicted a harsh winter for the Birmingham area, however the spring was rainier than indicated in the long-range weather forecast. Jefferson County and a majority of central Alabama experienced massive flooding along with bitter winter storms which are generally unusual for the south. One after another, meteorologists, statistics, and news reports documented weather extremes statewide. Appendix H includes supporting documentation of the adverse climatic conditions which prohibited the collection of all samples.
- A second limitation of the Jefferson County Stormwater Program is the way in which the County is geographically situated and politically structured. 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 has been removed in incorporated areas and left to individual jurisdictions. 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.

## **E. FUTURE DIRECTION**

- Jefferson County Storm Water Management Department (SWMD) will continue working on previously established programs for the Permit Year October 1, 2014, through September 30, 2015. Jefferson County is aware that ADEM is in the process of issuing new NPDES MS4 Phase I Permits. Until that time, Jefferson County will continue to work toward addressing current Program requirements.
- Jefferson County will amend its current Storm Water fee structure to comply with the current state law in order to provide funding for the County's storm water problems.
- Stormwater Program staff will continue discussions with the County Court Officers to explore using jurors to implement a countywide survey.
- Stormwater Program will continue working on the development of the Storm Water Management Department website.
- The Jefferson County Commission has decided to purchase a multidisciplinary computer permitting system that will provide functions for several departments such as Land Planning & Development Services, IT, Roads & Transportation, Environmental Services, and Storm Water Management. The new system will involve multiple phases in order to become completely established. The Storm Water Management Department is a part of the planning and information gathering stages for the new system. The first phase of this project has begun and will encompass the construction permitting process for the future.
- Jefferson County is planning to participate with the City of Birmingham in the City's Village Creek Watershed study. Currently an inter-local agreement is being drafted which will define responsibilities and expectations. The study is intended to investigate and define solutions to flooding and pollution problems along the length of the creek and throughout the watershed. Please see Appendix I.

## **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	●	11,665 cubic yards removed from ditches	See <b>Appendix B</b>
New Development and Significant Redevelopment	Comprehensive master planning process to minimize pollutant discharge	Minimize pollutants after construction is complete	●	15,000 seedlings and 160 trees were distributed for tornado recovering areas	See <b>Appendix C</b>
	Comprehensive master planning process to minimize pollutant discharge	Minimize pollutants after construction is complete	●	37 subdivision cases were approved	See <b>Appendix C</b>
	Comprehensive master planning process to minimize pollutant discharge	Minimize pollutants after construction is complete	●	Redevelopment plans for the 2011 tornado-stricken communities continue	Concord, McDonald's Chapel, & North Smithfield
Roadways	Operate and maintain to minimize pollutants	Refuse, litter, and debris removal	●	Roads and Transportation Department removed 979 bags of trash from roadside	See <b>Appendix B</b>
	Operate and maintain to minimize pollutants	Refuse, litter, and debris removal	●	Over 8 tons of trash and debris removed from Valley Creek	Jefferson County WWTP crew aided 120 volunteers; See <b>Appendix B</b>

<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>
Roadways Continued	Operate and maintain to minimize pollutants	Refuse, litter, and debris removal	●	Warrior River Bankhead Cleanup removed 4.5 tons	67 volunteers participated; See <b>Appendix B</b>
	Operate and maintain to minimize pollutants	Refuse, litter, and debris removal	●	PALS' Spring Cleanup removed over 66 tons of litter	904 volunteers participated; See <b>Appendix B</b>
	Operate and maintain to minimize pollutants	Refuse, litter, and debris removal	●	5.8 tons of litter was removed at Turkey Creek	274 volunteers participated; See <b>Appendix B</b>
	Operate and maintain to minimize pollutants	Refuse, litter, and debris removal	●	0.85 tons of trash and debris removed from Village Creek	43 volunteers participated; See <b>Appendix B</b>
	Operate and maintain to minimize pollutants	Refuse, litter, and debris removal	●	Trash and Tires removed from Shades Creek	130 volunteers participated; See <b>Appendix B</b>
	Operate and maintain to minimize pollutants	Street maintenance and litter control	●	Executed upon public complaint or as-needed basis	
	Operate and maintain to minimize pollutants	De-icing activities	●	Performed on as-needed basis	Jefferson County applied 1,138 tons of sand; See <b>Appendix B</b>

<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>
Flood Control Projects	Assess impacts on water quality	Evaluate structures based on Jefferson County Floodplain Ordinance	●	All flood management projects were reviewed	0 Flood control permits were issued; 19 floodplain applications; See <b>Appendix B</b>
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 <b>Appendix B</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; See <b>Appendix B</b>
Illicit Discharges and Improper Disposal	Detect and eliminate discharges to the MS4	Establish and publicize a hotline for public use	●	Hotline and email notifications were established	See <b>Appendix G</b>
Spill Prevention and Response	Prevent, contain, and respond to spills	Conduct spill response	●	EMA responded to 88 spills	See <b>Appendix D</b>
Industrial & High Risk Runoff	Identify and control pollutants in stormwater discharges	Inspection of industrial and high risk runoff sites	●	1 landfill & 2 transfer station inspections conducted	See <b>Appendix E</b> for Inspection Forms

<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>
Industrial & High Risk Runoff Continued	Identify and control pollutants in stormwater discharges	Jefferson County Fleet Management operates in-house recycling program	●	637 batteries were recycled	See <b>Appendix E</b> for records
	Identify and control pollutants in stormwater discharges	Jefferson County Fleet Management operates in-house recycling program	●	22,703 gallons of motor oil were recycled	See <b>Appendix E</b> for records
	Identify and control pollutants in stormwater discharges	Jefferson County Environmental Services operates oil and grease recycling program	●	2,548 gallons of cooking oil and grease were collected	See <b>Appendix D</b> for records
Construction Site Runoff	Reduce pollutant discharge from construction sites	Staff training as Qualified Credentialed Inspector (QCI)	●	18 Jefferson County employees certified	See <b>Appendix F</b>
	Reduce pollutant discharge from construction sites	Inspection of land disturbing activities and BMPs	●	241 Land Disturbing Permits were issued;	16 Commercial permits issued; 225 Residential permits issued; See <b>Appendix F</b>
	Reduce pollutant discharge from construction sites	Inspection of land disturbing activities and BMPs	●	176 Exclusions were issued	19 Commercial exclusions issued; 157 Residential exclusions issued; See <b>Appendix F</b>

<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>
Construction Site Runoff Continued	Reduce pollutant discharge from construction sites	Erosion and Sedimentation Control workshop for developers, contractors, government officials	●	81 people attended	See <b>Appendix F</b>
	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 <b>Appendix B</b>
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 <b>Appendix G</b>
	Promote, publicize, and facilitate public reporting of illicit discharges to the MS4	Complaint reporting application was utilized	●	467 Complaints received and investigated; 375 NOV's were issued	In areas of litter, zoning violations, and floodplain; See <b>Appendix F</b>
	Promote, publicize, and facilitate public reporting of illicit discharges to the MS4	Erosion and Sedimentation Control workshop for developers, contractors, government officials	●	81 people attended	See <b>Appendix F</b>



<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>
Public Education Continued	Promote, publicize, and facilitate improper disposal of materials to the MS4	Eliminate the presence of illicit and improper discharges	●	Recycling center kept 1,967 tons of material out of area landfills	Items such as glass, paper, cardboard, aluminum, & plastic; See <b>Appendix D</b>
	Promote, publicize, and facilitate management and disposal of oil and household hazardous wastes	Jefferson County Fleet Management operates in-house recycling program	●	637 batteries were recycled	See <b>Appendix E</b>
	Promote, publicize, and facilitate management and disposal of oil and household hazardous wastes	Recycling of household electronics containing hazardous materials	●	E-waste disposal events and the recycling center collected over 35 tons	Laptops, PCs, monitors, TVs, and cellphones were e-cycled; See <b>Appendix D</b>
	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; See <b>Appendix B</b>

<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>
Monitoring Program	Detect presence of illicit connections and improper discharges to the MS4	Dry Weather Screening	●	18 Instream sites sampled	See <b>Appendix H</b>
	Detect and eliminate discharges to the MS4	Dry Weather Investigative Monitoring	●	4 Investigation sites sampled	See <b>Appendix H</b>
	Monitor pollutants in stormwater discharges to the MS4	Industrial and High Risk Runoff	●	Collected by industrial facilities	On file at ADEM office (Facilities governed by NPDES Permits submit info to ADEM)
	Dry weather screening	Screen MS4 outfalls	●	100% previously accomplished	

● =Yes

## **IV. Program Modifications**

Jefferson County is not proposing any modifications to its current Stormwater Program.

## **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.