THE UNIVERSITY OF ALABAMA® | Division of Finance and Operations
Environmental Health and Safety

May 5, 2022

Cammie Ashmore
Stormwater Management Branch
Water Division
P.O. Box 301463
Montgomery, Al 36130-1463

Dear Ms. Ashmore:

Attached is the annual Stormwater report for The University of Alabama for the 2021 reporting period. If you need further information, feel free to contact me at 205-348-5905 or by email at jwthomas1@ua.edu.

Sincerely,

Darren Moss
Director, Environmental Health & Safety

Jay Thomas
Environmental Hazard Technician I

THE UNIVERSITY OF ALABAMA® | Division of Finance and Operations
Environmental Health and Safety

Stormwater Annual Report

Reporting Period

April 1, 2021 – March 31, 2022

DATE: May 05, 2022

PREPARED BY: Jay Thomas, Environmental Hazard Technician I

The Stormwater Management Plan provides steps to reduce pollutants which are detailed in the Best Management Practices (BMPs). BMPs are used to educate and inform the public regarding: Public Education and Outreach Measures, Public Involvement, Illicit Discharge Detection and Elimination, Construction Site Run Off Control, Post Construction Site Run Off and Pollutant Prevention.

I. Public Education and Outreach

Environmental Health & Safety (EHS) developed a public education and outreach program designed to inform and educate the campus and the community at large. The pollution impact of storm water discharges on local bodies of water can be significant if the public is not aware of the importance of protecting nature's most valuable resource.

1) Multi-Media Platforms

   a. Public service advertisements are utilized. Notices and educational information are printed in regular intervals and included in the Crimson White newspaper, transit buses and Digital Media platforms.

   b. EHS maintains a website which provides information, educational opportunities and the written Storm Water Management Program at http://ehs.ua.edu/operations/environmental-programs/stormwater-management-program/

   c. Twitter (https://twitter.com/EHS_UA) is a platform for social media posts used to provide information to the community.

2) Training: Impacts and Prevention of Illegal Dumping, Water Quality Importance, Construction Regulations

   a. Educating the campus community on the impact of illegal dumping and littering is an aspect of educational and public service materials.

   b. Training modules and information related to construction on campus are included on the EHS website. *Stormwater Pollution Prevention* is one course available online through SkillPort Academy at http://ehs.ua.edu/training/list-of-training-courses/ for employees of the University. Additionally, instructor led training regarding stormwater is scheduled and offered routinely.

   c. Campus community education regarding the importance of storm water runoff is a priority of the public service and information provided by EHS.

3) Education of University and Construction Project Managers

   a. All construction project supervisors are required to complete training modules developed to detail elements of sediment, erosion control and other construction aspects related to stormwater management. This program is managed by Richard Powell P.E., Staff Civil Engineer with Construction Administration.

4) Utilization of BMPs

   A chart is maintained summarizing goal attainment for each of the BMPs referenced below. Documentation to support such attainment will be maintained by EHS.

BMP's

- Printed Materials: Hard copy media material has been prepared for distribution throughout the University of Alabama campus. EHS has established an annual distribution goal of over 50 brochures, fliers, posters, etc. Actual number of disseminated documents will continue to be recorded in the chart labeled as public education and outreach.

- Stormwater Social Media (Twitter-@EHS_UA): EHS continues to update as needed and track the followers in the chart.

- Public Service Advertisements: EHS continues to utilize The University of Alabama Crimson White newspaper, campus transit buses and digital media to inform the campus of the Stormwater Program. This is notated as Yes/No in the chart, as well as the public service advertisement schedule of distribution.

- Impacts of Illegal Dumping and Littering: EHS continues to document training efforts in the chart, the number of individuals trained are noted as a number indicating those having received training in the chart labeled *Public Education and Outreach.*

- Education Concerning Construction Activities: EHS, in conjunction with Construction Administration, documents the number of individuals that have received training in the chart.

- Education on Importance of Stormwater: EHS documents the number of distributed pamphlets throughout campus, and, as such, the chart documents the number of materials/advertisements, provided as *Public Education and Outreach.*

- Education of University and Contractor Personnel: EHS, in conjunction with Construction Administration, will continue to document the number of contractors that have received training in the chart labeled *Public Education and Outreach.*

	FY-18	**FY-19**	**FY-20**	**FY-21**	**FY-22**
Printed Materials	N/A Goal of 50 set for 2019	50	50	50	
Stormwater Social Media	629 followers	640 followers	628 followers	629 Followers	
Public Service Advertisements	Yes Quarterly 2018	Yes Quarterly 2019	Yes Quarterly 2020	Yes Quarterly 2021	
Illegal Dumping and Littering	105	93	19 Covid	79	
Education of Construction Activities	112	93	19 Covid	79	

Education on Importance of Stormwater	N/A Goal of 50 set for 2019	50	50	50	
Education of University and Contractor Personnel	8	7	7	16	

Public Education and Outreach

II. Public Involvement

EHS solicits public involvement in the Stormwater Management Program with the use of the Stormwater Committee and with the Storm Sewer Marking Program.

1) Stormwater Management Committee

EHS is responsible for the oversite of this committee with the chair of the committee being Jay Thomas. The current members include:

Jay Thomas - Environmental Hazard Technician
Joey Howell – Environmental Hazard Technician
Tim Leopard – Senior Associate Vice President for Campus Development
Isaac Falls - Director of Automotive Services
Mike Turner – Plumbing Shop Manager
Steven Mize - Plumbing Shop Assistant Manager
Randy Mathis - HVAC Manager
Collin Sewell - Director of Building Maintenance
Tony Johnson – Executive Director of Fleet Management
Julie Salter - Assistant Director of Student Media
Richard Powell - Staff Civil Engineer of Construction Administration
Lin Hendrix - University Recreation & Grounds
Brandon Sevedge - Director of Athletic Facilities
Joe Cobb - Director of Construction Services
Paul Wuebold - Senior Executive Director of Facilities and Grounds
Additional Representation for EHS (Director, Assistant Director for Environmental & Lab Safety, & Environmental Manager)

2) Storm Sewer Marking

Approximately 48% of the storm sewer covers on campus have been marked with "No Dumping Drains to River" disc or new covers which are marked appropriately when manufactured.

3) Utilization of BMPs

A chart is maintained documenting completion of the Stormwater Management Committee meeting(s) and completion of the Storm Sewer Marking Campaign.

BMP's

- Stormwater Management Committee: EHS holds at a minimum one Committee meeting annually. This will be notated in the chart below as Yes/No in the chart labeled *Public Involvement.*

- Storm Sewer Marking Campaign: EHS will continue to collaborate with Construction Administration on the number of disks and/or storm sewer covers that have been installed and document the percentage installed within the chart labeled *Public Involvement.*

	FY-18	**FY-19**	**FY-20**	**FY-21**	**FY-22**
Stormwater Management Committee	Yes 1-30-2018	Yes 4-11-2019	Yes 5-29-2020	Yes 9-28-2021	
Storm Sewer Marking Campaign	30%	+3%	+10%	+5%	

Public Involvement

III. Illicit Discharge Detection and Elimination
This measure focuses on BMPs concerned with the detection and elimination of illicit discharges.

1) Stormwater Sewer System Map
Significant revisions were made to the system map in 2018. Currently modifications and additions are made as changes occur.

2) Dry Weather Inspections
Dry weather screenings are complete for 2021.

3) Employee Training
The number of UA personnel trained as part of Illicit Discharge Detection and Elimination BMP was 79. Personnel from EHS, Construction Administration, UA Facilities & Grounds were included.

4) Illegal Dumping Detection and Reporting
Dry weather screenings have been developed to identify potential illegal discharges. Training has been provided regarding how to identify and report illicit discharges.

5) Utilization of BMPs
A chart is maintained documenting the annual review and update of the Storm Sewer Map, Dry Weather Inspections, and Employee Training.

BMP's

- Storm Sewer Map: EHS collaborates with Construction Administration to determine if the Storm Sewer Map has been updated and make any changes deemed appropriate. This is notated as Yes/No on the chart labeled *Illicit Discharge Detection andElimination.*

- Dry Weather Inspections: EHS continues to perform the dry weather screenings for all outfall locations at least once a year in the dry season. This is notated as Yes/No in the chart labeled *Illicit Discharge Detection and Elimination.*

- Employee Training: EHS documents in the chart labeled *Illicit Discharge Detection and Elimination* the number of individuals throughout campus that have receivedtraining.

- Illegal Dumping Detection and Reporting: EHS documents in the chart labeled *Illicit Discharge Detection and Elimination* if there was an Illicit Discharge.

	FY-18	FY-19	FY-20	FY-21	FY-22
Storm Sewer Map	Yes	Yes	Yes	Yes (No Significant Changes)	
Dry Weather Inspections	Yes	Yes	Yes	Yes	
Employee Training	112	93	19 Covid	79	
Illegal Dumping Detection and Reporting	None Reported/Detected	1 Mechanical Failure NRC # 1274423 & 1274426	None Reported/ Detected	None Reported/ Detected	

Illicit Discharge Detection and Elimination.

IV. Construction Site Runoff Control

This control measure consists of ways to reduce pollutants in runoff from construction sites. Sediments are of the greatest concern.

1) Education

Training includes site management, reporting discharges and evaluation of inspection results. This training is provided to Project Supervisors and construction site operators.

2) Construction Plan Review

All UA construction plans incorporate BMPs. Written sediment and erosion control plans are part of all applicable construction plans. All construction plans have been reviewed and approved for 2021.

3) Construction Site Inspections

Contractors and project managers are required to conduct construction site inspections. Most corrective actions in the past have involved silt fence maintenance.

4) Construction Site Problem Reporting

There have been no public reports related to construction site problems.

5) Utilization of BMPs

A chart is maintained documenting the education/training, construction plan review (if any changes), construction site inspections, and construction site problem reporting, if any.

BMP's

- Education: EHS will continue to document in the chart labeled *Construction Site Runoff Control* the number of individuals throughout campus that have received training.

- Construction Plan Review: EHS will continue to document in the chart labeled *Construction Site Runoff Control* if any changes need to be made. This is notated as Yes/No along with a short description of changes necessary.

- Construction Site Inspections: EHS collaborates with Construction Administration on the number of inspections performed and, as well, provides a short description of any corrective actions taken. This is indicated in the chart labeled *Construction Site Runoff Control* by the number of inspections and corrective actions during 2021.

- Construction Site Problem Reporting: EHS continues to collaborate with Construction Administration to determine if there were any reporting issues that needed to be investigated.

	FY-18	**FY-19**	**FY-20**	**FY-21**	**FY-22**
Education	112	93	19 Covid	79	
Construction Plan Review	No Changes	No Changes	No Changes	No Changes	
Construction Site Inspections	190 Inspections/ One Insufficient BMP Silt Fence	112 Inspections	82 Inspections	47 Inspections	
Construction Site Problem Reporting	None	None	None	2 Contractor Corrected	

Construction Site Runoff Control

V. Post Construction Site Runoff

1) Plan Review
All construction plans are reviewed to determine if post construction runoff will negatively affect stormwater.

2) Protection of Sensitive Waters
The 303(d) listing of impaired waters is routinely reviewed to ensure that local bodies of water which receive stormwater runoff are not listed.

3) Local Interaction
The University interacts with the City of Tuscaloosa which is an adjacent Municipal Separate Storm Sewer System (MS4). Additionally, The University interacts with ALDOT, as well as Alabama Southern Railroad if the need arises.

4) Utilization of BMPs
A chart will capture the reviews and/or updates of the Plan Review, Protection of Sensitive Waters list, and Local Interactions as noted below.

BMP's

- Plan Review: EHS documents if changes need to be made to the plan documents and this is notated as Yes/No in the chart labeled *Post Construction Site Runoff*, as well as a short description of changes made.

- Protection of Sensitive Waters: EHS collaborates with Construction Administration to determine if sensitive waters will be affected. This is notated as Yes/No in the chart labeled *Post Construction Site Runoff*. If yes, a short description will be noted of location affected.

- Local Interaction: EHS will continue to coordinate with The City of Tuscaloosa as needs arise, this is notated as Yes/No in the table labeled *Post Construction Site Runoff*.

	FY-18	**FY-19**	**FY-20**	**FY-21**	**FY-22**
Plan Review	No Changes	No Changes	No Changes	No Changes	
Protection of Sensitive Waters	N/A	N/A	N/A	N/A	
Local Interaction	N/A	N/A	N/A	N/A	

Post Construction Site Runoff

VI. Pollutant Prevention

This control measure is designed to reduce and eliminate pollutants in stormwater that originates from operation and maintenance activities.

1) Roadway Maintenance
Projects include Western 1/3 of Capstone Drive, Coliseum Street (behind track) from Hackberry Lane to Coliseum Drive, Sections of Peter Bryce Blvd from Campus Drive to Johnny Stallings Drive, Warrior Drive from just north of Ruby Tyler Parkway to just north of Flint River Drive, Hackberry at Old Hackberry, Lakeside Residential Parking Lot, EHS Warehouse Parking Lot and Publix Parking Lot.

2) Street Sweeping
The University dedicates 40-man hours per week to street sweeping roadways. All campus roads are included.

3) Litter Collection
Trash collection is a daily activity on campus. The location of trash receptacles is periodically evaluated. Over 40-man hours per week are dedicated to trash and litter collection.

4) Herbicide Application
Landscaped areas, open spaces, athletic fields, and recreational areas are among the University Grounds which are regularly treated with herbicides. Approximately, 750 gallons of dilute end-product is applied per week during growth seasons.

5) Vehicle Maintenance
The University operates a full-service garage. Maintenance and service records are available for review at the UA garage.

6) Hazardous Material Involvement
EHS continues to operate a hazardous material management program. This includes an inventory system, audits, recycling, and disposal of hazardous materials.

7) Employee Training
University personnel have received training regarding pollution prevention and good housekeeping. These personnel are from EHS, Facilities & Grounds and other areas on campus.

8) Utilization of BMPs
Documentation of the above-referenced BMPs will be recorded in a chart labeled *Pollutant Prevention*.

BMP's

- Roadway Maintenance: EHS collaborates with Construction Administration to list in the chart labeled *Pollutant Prevention* the total roadway construction/maintenance performed yearly.

- Street Sweeping: EHS collaborates with Facilities and Grounds to document in the chart labeled *Pollutant Prevention* street sweeping, and document hours spent weekly.

- Litter Collection/Recycling: EHS collaborates with Facilities and Grounds to record litter collection and document hours spent weekly.

- Herbicide Application: EHS collaborates with Facilities and Grounds to be certain all necessary precautions are utilized to ensure no chemicals enter the storm drain, and notate in the chart as Yes/No, and gallons of dilute product used in the chart labeled *Pollutant Prevention*.

- Vehicle Maintenance: EHS collaborates with Facilities and Grounds (Automotive Services) and will determine if any corrective actions need to be made to reduce potential Storm Drain pollution from scheduled vehicle maintenance and notate in the chart labeled *Pollutant Prevention* as Yes/No.

- Hazardous Materials Management: EHS documents any Hazardous Materials that could have potentially impacted the Storm Sewer system and will notate in the chart as Yes/No in the chart labeled *Pollutant Prevention*.

- Employee Training: EHS conducts annual and quarterly training on the importance of water quality and Stormwater. EHS will notate within the chart labeled *Pollutant Prevention* the total number of individuals that received training.

	FY-18	**FY-19**	**FY-20**	**FY-21**	**FY-22**
Roadway Maintenance	4 - No Issues Noted	8 - No Issues Noted	4 - No Issues Noted	9- No Issues Noted	
Street Sweeping	40, man hours per week	40, man hours per week	40, man hours per week	40, man hours per week	
Litter Collection/Recycling	40, man hours per week	40, man hours per week	40, man hours per week	40, man hours per week	

Herbicide Application	Yes/750 Gallons Dilute	Yes/750 Gallons Dilute	Yes/650 Gallons Dilute	Yes/750 Gallons Dilute	
Vehicle Maintenance	No Action	No Action	No Action	No Action	
Hazardous Material Management	No Action	No Action	No Action	No Action	
Employee Training	112	93	19 Covid	79	

Pollutant Prevention.