

# NPDES Phase II Stormwater Management Plan

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## Introduction

The University of Alabama (University) has been issued a National Pollutant Discharge Elimination System (NPDES) permit for Stormwater discharges from regulated small Municipal Separate Storm Sewer Systems (MS4). The permit number is ALR040031. Environmental Health & Safety (EHS) is The University department responsible for maintaining the Stormwater Management Plan (SWMP). The City of Tuscaloosa is an adjacent MS4, and more information can be found <a href="https://example.com/here-en/blanks-new-management-new

The University originally submitted a Notice of Intent in July 2003. The initial NPDES permit was issued on March 10, 2003. The effective date of the current permit is February 1, 2011 and it will expire in 2021.

## The Stormwater Management Plan

The SWMP has been developed and designed to manage the discharge of pollutants from The University small MS4 to the maximum extent practical. The purpose is to protect the water quality of the Black Warrior River and to satisfy requirements of the Clean Water Act. The University SWMP includes various management practices, control techniques, engineering methods and other provisions, which will be described in detail in the body of this document.

#### **Minimum Control Measures**

There are six minimum control measures outlined in the permit requirements, plus enforcement.

## These are:

- 1. Public Education and Outreach
- 2. Public Involvement and Participation
- 3. Illicit Discharge Detection and Elimination (IDDE)
- 4. Construction Site Stormwater Runoff Control
- 5. Post-Construction Stormwater Management in new Development and Redevelopment
- 6. Pollution Prevention and Good Housekeeping
- 7. Enforcement

Each minimum control measure will be addressed and detailed separately as part of the SWMP.



## I. Public Education and Outreach

## 1) Introduction

EHS is implementing a public education and outreach program that will distribute educational materials and information to the campus community. This education and outreach measure will address the impact of Stormwater discharges into the Black Warrior River and steps taken to reduce pollutants in Stormwater runoff to the maximum extent practical. These efforts are designed to encourage individuals and groups to take active steps to reduce pollutants in Stormwater runoff.

## 2) Rationale

Each best management practice (BMP) within the public education and outreach measure was selected by examining BMP databases and examples, analyzing the effectiveness of previously utilized BMP's and the evaluation of educational methodologies that are already in place at The University.

## 3) Summary

The public education and outreach program will communicate how to reduce Stormwater pollution, explain how the campus community can become involved in the University's SWMP, identify the audience for the specified educational programs, and the planned means to reach the target audience.

The target audience is the University's campus community, which includes faculty, staff, students and visitors. Segments of this audience may be targeted based upon specific goals or regulatory requirements. The goal of the public education and outreach measure is to reach all employees and students at the University within the life of the permitting cycle and to expose a significant segment of the visitor population to information regarding the impact of contaminated Stormwater discharges on local bodies of water and watersheds.

Targeted pollutant sources include sediment from construction sites, illicit discharges of hazardous materials, litter and runoff related to grounds maintenance. Other pollutants may be included as conditions on campus change or other parameters are added. Evaluations of success of specific management practices will be determined by analysis of the goals for each BMP within the public education and outreach measure. EHS will establish a measurable goal for each BMP and will be able to document attainment of that goal.

## 4) BMP Summary

EHS will utilize a variety of BMP's to educate and inform the campus community regarding Stormwater quality issues. This includes development of printed materials for direct distribution, creation of a Stormwater management website, dissemination of electronic and printed public service advertisements, as well as printed materials addressing the impacts of illegal disposal and littering, the importance of water quality, and education of the University and contractor personnel on sediment control on construction sites.

## a. Printed Materials

EHS will develop and distribute brochures, fliers, and posters to educate the campus community on Stormwater quality issues. EHS will edit, update, and modify as needed to ensure that communications conveyed are in concert with the public education and outreach program. EHS will preselect locations and will make available related literature and other materials related to Stormwater quality. EHS will include the number of printed materials



provided in the required Annual Phase II Report that must be submitted by May 31<sup>st</sup> to the Alabama Department of Environmental Management. Information can be found <u>here.</u>

## b. Stormwater Quality Website

EHS will designate a portion of its website (<a href="https://ehs.ua.edu">ehs.ua.edu</a>) to educate the public and the campus community on water quality issues and-provide a mechanism for feedback on Stormwater or water quality issues. EHS will edit, update, and modify the information provided to ensure consistency with the public education and outreach program.

#### c. Public Service Advertisements

EHS utilizes electronic and printed public service type advertisements. Printed media is utilized on the University's Crimson Ride bus service. Printed ads appear periodically in the University's student newspaper, The Crimson White. These advertisements will focus on the impact of Stormwater runoff on local bodies of water and steps that can be taken to reduce Stormwater pollution. EHS will review, edit, update, and modify the advertisements to ensure relevancy to current water quality issues. EHS will maintain records regarding the advertisements and will report the type and frequency in the annual report. Attached are the current ads <a href="https://example.com/here-editation-newspaper">https://example.com/here-editation-newspaper</a>, and modify the advertisements to ensure relevancy to current water quality issues. EHS will maintain records regarding the advertisements and will report the type and frequency in the annual report. Attached are the current ads <a href="https://example.com/here-editation-newspaper">https://example.com/here-editation-newspaper</a>, and modify the advertisements to ensure relevancy to current water quality issues. EHS will maintain records regarding the advertisements and will report the type and frequency in the annual report. Attached are the current ads <a href="https://example.com/here-editation-newspaper">https://example.com/here-editation-newspaper</a>, and here-editation-newspaper.

## d. Impacts of Illegal Dumping and Littering

Educating the campus community on the impacts of illegal dumping and littering is vital to the cleanliness and beauty of the University campus. EHS has developed educational materials and trainings that discuss the harmful impact of illegal dumping and littering and will provide a mechanism for reporting such incidents. EHS will provide information regarding distribution of these educational materials/trainings as part of its annual report.

## e. Education Concerning Construction Activities

The University maintains continuous construction and redevelopment activities. Because of these activities, it is important that there is a mechanism in place to inform the campus community on steps that can be taken to report potential construction site runoff problems. EHS will provide information regarding dissemination of construction activity communications as part of the annual report.

## f. Education on Importance of Water Quality

The education of the campus community on the importance of water quality is a vital priority for EHS. Obviously, students are a major focus group. This group is likely to have a significant future impact on national, state, and local attitudes toward water quality issues. EHS will review, edit, and modify materials and programs to ensure relevancy to the University student population and current issues. EHS will provide information regarding education of the importance of water quality to our students as part of the annual report.

## g. Education of the University and Contractor Personnel

To ensure that the University construction project supervisors and contractor supervisors are informed on the most current policies and procedures related to sediment and erosion control on construction sites, EHS, in conjunction with Construction Administration, has developed educational programs and trainings to communicate related guidelines on these issues. EHS will review, edit, and modify educational and training programs regarding the proper design, selection, implementation, and maintenance of erosion and sediment control on construction sites. EHS will provide information regarding education of construction supervisors as part of the annual report.



## 5) Utilization of BMPs

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

Printed Materials: Will be distributed throughout The University of Alabama Campus. EHS has established an annual goal of 50 brochures, fliers, posters, etc. Actual number of disseminated documents will be recorded in the chart.

The Stormwater Quality Social Media (Twitter-EHS\_UA): Will be updated as needed and EHS will track the followers in the chart.

Public Service Advertisements: EHS will utilize The University of Alabama Crimson White newspaper, digital media and campus transit buses to inform the campus of the Stormwater quality, this will be notated as Yes/No in the chart.

Impacts of Illegal Dumping and Littering: EHS will document in the chart how many individuals throughout campus have received training.

Education Concerning Construction Activities: EHS, in conjunction with Construction Administration, will document how many individuals throughout campus have received training in the chart.

Education on Importance of Water Quality: EHS will document how many individuals throughout campus have received training and the number of materials/advertisements, etc. distributed to students.

Education of University and Contractor Personnel: EHS, in conjunction with Construction Administration, will document how many contractors have received said training in the chart.

	FY-18	FY-19	FY-20	FY-21	FY-22
Printed Materials	N/A Goal of 50 set	50	50		
Stormwater Quality Social Media	for 2019 629 Followers	640 Followers	628 Followers		
Public Service Advertisements	Yes Quarterly	Yes Quarterly	Yes Quarterly		
Illegal Dumping and Littering	105	93	19 Covid		
Education of Construction Activities	112	93	19 Covid		
Education on Importance of Water Quality	N/A Goal of 50 set for 2019	50	50		
Education of University and Contractor Personnel	8	7	7		



# II. Public Involvement

#### 1) Introduction

EHS is implementing a public involvement program, which will create opportunities for the campus community to get involved in the SWMP. Opportunities for involvement will be activities that directly benefit the environment and lead to improvements in overall water quality. EHS will notify the campus community of these opportunities by public notice of SWMP meetings. Notice of SWMP meetings will be published on Twitter and on other University electronic media.

## 2) Rationale

Each BMP within the public involvement measure was selected by analyzing techniques utilized by other permitted areas, analyzing the effectiveness of previously utilized BMP's and consideration of selected BMP's applicability to permit provisions.

## 3) Summary

EHS will utilize a variety of BMP's to encourage public involvement in the SWMP. EHS' goals are to identify activities that are relevant to the SWMP and that provide opportunities for the campus community to participate in activities leading to water quality improvement. Targeted participants are selected based on permit requirements and the impact on water quality at the local level. The public involvement program, in conjunction with other best management practices, is expected to reach most members of the University campus community during the life of the permit cycle. The success of public involvement BMP's will be evaluated through analysis of each BMP goal within the public involvement measure. EHS will establish a measurable goal for each BMP and will be able to document attainment of that goal.

## 4) BMP Summary

EHS will utilize a Stormwater Management Committee and a Storm Sewer Marking Campaign to garner public involvement in the SWMP.

## a. Stormwater Management Committee

To oversee the implementation of the SWMP and provide advice and consultation, EHS created the Stormwater Management Committee. The Stormwater Management Committee is made up of various members of the campus community who have a stake in the SWMP and have expertise that will benefit the program. The SWMP Committee will meet on an as need basis, but at a minimum, once per year.

During this permit cycle, EHS will request committee review of any education materials, inspection procedures, guidance information, and investigation methods detailed in the BMP's specified in the six minimum control measures. EHS will provide notifications of committee meetings to the campus community through regular notice procedures. Public notices will be published on Twitter and will appear on the University electronic signage system. EHS will maintain records for committee meetings including attendance, minutes and the agenda. The annual report will include information concerning SWMP committee meetings, including the number of meetings and a summary of discussions.

## b. Storm Sewer Marking Campaign

The storm sewer marking campaign provides a way for civic organizations and individuals to make a positive, hands on, impact on local water quality. EHS will provide storm sewer inlet discs which state, "No Dumping Drains to River" and adhesive to attach discs. To ensure continued success through the permit cycle, EHS will seek to identify groups that may be interested in program participation, provide support to individuals or groups who volunteer



for storm sewer marking and update procedures as needed. EHS will include information regarding the Storm Sewer Marking Campaign as part of the annual report.

## 5) Utilization of BMPs

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

Stormwater Management Committee: EHS will hold one Committee meeting annually.

Storm Sewer Marking Campaign: EHS will collaborate with Construction Administration on how many discs and/or Storm-Sewer covers will be installed and will document actuals within the chart.

	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		
Storm-Sewer Marking Campaign	30%	+3%	+10%		

# III. Illicit Discharge Detection and Elimination

## 1) Introduction

The Illicit Discharge Detection and Elimination (IDDE) measure consists of BMPs that focus on the detection and elimination of illicit discharges into the MS4. An illicit discharge is defined as any discharge to an MS4 that is not composed entirely of Stormwater except those specified in the NPDES permit and exempt non-Stormwater discharges.

## 2) Rationale

Each BMP within the IDDE measure was selected by evaluating techniques utilized by other permitted entities, analyzing the effectiveness of previously utilized BMP's, consideration of the economic impact of new practices and consideration of selected BMP's applicability to permit provisions.

## 3) Summary

The IDDE measure is designed to identify methods for conducting and documenting dry weather screening inspections, mitigating illegal dumping, and educating personnel on the proper methods for successful BMP implementation. The success of illicit discharge detection and elimination BMP's will be evaluated through analysis of each BMP goal within the IDDE measure. EHS will establish a measurable goal for each BMP and will be able to document attainment of that goal.

## 4) BMP Summary

EHS will utilize several BMPs to detect and eliminate illicit discharges. Among these are maintenance of the University storm sewer map, dry weather screening inspections, employee training and illegal dumping detection and elimination.



## a. Storm Sewer Map

The University maintains a storm sewer map, which details inlets, outlets and lines on the University campus. To continue this process, the University will develop a consistent method for updating the storm sewer map. Outfalls will be identified, and new data will be included as available. New outfall locations identified through this process will be included in the EHS annual report. EHS will collaborate with Construction Administration to ensure the map is up to date annually. The current Storm Sewer Map and locations of The University's 14 Outfalls and inlets from the City of Tuscaloosa. The map can be found <a href="https://example.com/here.">https://example.com/here.</a>

## b. Dry Weather Inspections

EHS has developed and implemented a dry weather screening process. Each outfall will be inspected at least annually. EHS will create and conduct a training program, which will target Construction Administration and Facility personnel. Training will specifically address the identification, reporting, documentation and mitigation of illicit discharges. EHS will develop a system for tracking and reporting non-Stormwater discharges. This system shall include incident specific activities including identification, reporting and mitigation actions. EHS will document the number of outfalls screened and the number of non-Stormwater discharges identified and reported as part of the annual report. The Standard Operating Procedures (SOPs) for the Dry Weather inspections can be found here.

## c. Employee Training

EHS will conduct annual dry weather screening. The successful implementation of the dry weather screening BMP will rely on properly trained personnel. EHS will develop a training program that focuses specifically on the dry weather screening process, identification, and reporting of illicit discharges. EHS will report the number of personnel trained in the annual report.

## d. Illegal Dumping Detection and Reporting

One of the major goals of the SWMP is to minimize incidents of illegal dumping and increasing the ability of the University to respond to and mitigate incidents of illegal dumping. Toward this end, EHS will include illegal dumping in the dry weather screening process, implement a system to track illegal dumping occurrences, include illegal dumping identification and reporting in the training for illicit discharges and dry weather screening, and include the number of illegal dumping incidents in the annual report. In the event of an Illicit Discharge, The University has SOPs in place which can be found <a href="https://example.com/here.">here.</a>. The University will trace the contaminates back to its original inlet source and sample all outfalls in the chain until it has determined there are no contaminates and then will make the determination whether the Illicit Discharge is The University's or if it has come from an adjacent MS4. The University will provide sampling and testing analysis for all pathogens as deemed necessary. If further sampling is needed The University will utilize an accredited laboratory to perform the sampling and analysis.

## 5) Utilization of BMPs

A chart will be maintained documenting the annual review and update of the Storm Sewer Map, Dry Weather Inspections, and Employee Training.

Storm Sewer Map: EHS will collaborate with Construction Administration to determine if the Storm-Sewer Map has been updated and make any changes deemed appropriate, this will be notated as Yes/No on the chart.



Dry Weather Inspections: EHS will perform the screenings for all outfall locations once a year in the dry season, this will be notated as Yes/No on the chart.

Employee Training: EHS will document on the chart how many individuals throughout campus that have received training.

Illegal Dumping Detection and Reporting: EHS will document on the chart if there was an Illicit Discharge.

	FY-18	FY-19	FY-20	FY-21	FY-22
Storm	Yes	Yes	Yes		
Sewer Map					
Dry	Yes	Yes	Yes		
Weather					
Inspections					
Employee	112	93	19		
Training			Covid		
Illegal	None	1 Mechanical	None		
Dumping	Reported/	Failure	Reported/		
Detection	Detected	NRC # on file	Detected		
and		at EHS			
Reporting					

## IV. Construction Site Runoff Control

## 1) Introduction

The construction site runoff control measure consists of BMP's that focus on the reduction of pollutants in Stormwater runoff that originates from construction activities involving land disturbances of one acre of greater. The pollutant of greatest concern is sediments from land disturbance activities. The selected BMP's are designed to minimize erosion and the transfer of sediments from construction to adjacent areas and outfalls.

## 2) Rationale

Each BMP within the construction site runoff control measure was selected by analyzing techniques utilized by other permitted entities, analyzing the effectiveness of previously utilized BMP's and consideration of selected BMP's applicability to permit provisions.

## 3) Summary

The construction site runoff control measure is designed to identify mechanisms which will be used to require sediment and erosion controls on construction sites; establish enforcement procedures; create requirements for construction site supervisors to implement erosion and sediment control BMP's and waste control on construction sites; develop procedures for site plan reviews that consider water quality impacts, site inspection and enforcement; and create education and training for construction site supervisors and the University personnel overseeing construction projects.



The success of the construction site runoff control measure BMP's will be evaluated through analysis of each BMP goal. EHS will establish a measurable goal for each BMP and will be able to document attainment of that goal.

## 4) BMP Summary

The University will utilize several BMPs to control runoff from construction sites. Methods will include education of the University project supervisors, construction plan review, inspection procedures, and reporting of problems related to construction projects.

#### a. Education

Training must be developed and provided to the University project supervisors and construction site operators. This training must include proper site management procedures as well as protocols for reporting discharges and inspection results. To make sure personnel and contractors are properly trained EHS will ensure that training materials take advantage of new technologies for managing Stormwater runoff on construction sites. Educational programs will be updated and modified as needed. EHS will include the number of individuals trained as part of the annual report.

## b. Construction Plan Review

To minimize occurrences of erosion and sediment transfer at construction sites the construction process begins with the development of plans that incorporate BMP's for construction sites that are relevant to site conditions. To accomplish this the University Construction Administration Department requires all designers to incorporate a detailed project sediment and erosion control plan in their design. The University Construction Administration Departments Staff Civil Engineer reviews the construction plans at the following increments of design:

- 30%
- 60%
- 90%
- 100%
- Final Bid Documents

These detailed construction plan reviews are performed to assure conformance with Stormwater guidelines and the ensure the designers are using the proper Best Management Practices (BMP's) for the construction site.

## c. Construction Site Inspections

The University's contract documents for construction requires the contractors to perform daily inspections of the BMP's by a Qualified Credentialed Inspector (QCI) and to maintain a log of the inspection reports, which shall be made available for review to the University. In addition, the University reserves the right to withhold processing of monthly pay requests until these reports have been provided to the University. Also, the University has a procedure in place to make sure that the contractor properly installs and maintains all BMP's. This procedure allows the University to give the contractor a 4-hour notice to make required improvements to the BMP's or at that time the University can have the improvements made at a back charge the contractor Finally, the University's Construction Administration Department requires all field coordinators to be QCI Certified and conducts in house training to the field coordinators on an as needed basis.



## d. Construction Site Problem Reporting

The University will provide a mechanism for the campus community to report Stormwater and water quality concerns related to construction projects. To this end, The University will provide a phone number and webpage for reporting concerns. Internal systems for accepting reported information will be reviewed and modified, as necessary. Those sites reported by the campus community will be investigated. Records regarding the number of public reports received and responded to will be maintained and included in the annual report.

## 5) Utilization of BMPs

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

Education: EHS will document in the chart how many individuals throughout campus that have received training.

Construction Plan Review: EHS will document in the chart if any changes need to be made, will be notated as Yes/No.

Construction Site Inspections: EHS will collaborate with Construction Administration on how many inspections were performed.

Construction Site Problem Reporting: EHS will collaborate with Construction Administration to determine if there were any reporting issues that needed to be investigated, will be notated as Yes/No on the chart.

	FY-18	FY-19 FY-20		FY-21	FY-22
Education	112	93	19		
			Covid		
Construction	No Changes	No Changes	No Changes		
Plan Review					
Construction	190	112	82		
Site	Inspections/	Inspections	Inspections		
Inspections	One		_		
	insufficient				
	BMP Silt				
	Fence				
Construction	None	None	None		
Site Problem					
Reporting					

# V. Post Construction Site Runoff

## 1) Introduction

The post construction Stormwater runoff measure consists of BMP's that are designed to minimize water quality impact from new and redevelopments once construction activities are complete. BMP's selected are designed to ensure that appropriate reviews are conducted, and pre-construction conditions are taken into consideration during the design, construction and post-construction phases.



## 2) Rationale

Each BMP within the post construction site runoff measure was selected by analyzing techniques utilized by other permitted entities, analyzing the effectiveness of previously utilized BMP's and consideration of selected BMP's applicability to permit provisions.

## 3) Summary

The post construction site runoff measure will be used to identify procedures to address post construction runoff from new and redevelopment projects. Procedures for long term inspections and maintenance of post-construction BMPs will also be developed. The success of the BMP's will be evaluated through analysis of each BMP goal. EHS will establish a measurable goal for each BMP and will be able to document attainment of that goal. Environmental Health & Safety is in the process of gathering all appropriate documentation from The University's Facilities and Grounds Department. Once this is gathered the Management Plan will be updated.

## 4) BMP Summary

The University will utilize BMPs to minimize the water quality impact of post construction site runoff. These BMPs will consider plan review, protection of sensitive and/or impaired water bodies and interaction with the City of Tuscaloosa to ensure coordination with their Stormwater runoff efforts.

#### a. Plan Review

To mitigate post construction site runoff issues construction plans will be reviewed to determine if post construction runoff from new and/or redevelopment will adversely affect water quality. If negative effects occur, the plans, procedures or methods will be revised or modified to ensure compliance with Stormwater guidelines.

## b. Protection of Sensitive Waters

To facilitate the effective review of post construction, BMP's are implemented on new and/or redevelopment projects. A review of the potential impact to sensitive or impaired water bodies with approved Total Maximum Daily Loads (TMDL) is conducted during the plan review process for all new and/or redevelopment projects on The University campus. To ensure an accurate review The University will examine the most current 303(d) of impaired waters to determine if any are potentially affected. The approved TMDL's will also be examined for applicability.

#### c. Local Interaction

The University will continue to interact with the Stormwater quality personnel of the City of Tuscaloosa, which is a permitted MS4. The purpose of this interaction is to make them aware of The University efforts and to coordinate some Stormwater quality issues.

## 5) Utilization of BMPs

A chart will capture the reviews and/or updates of the Plan Review, Protection of Sensitive Waters, and Local Interaction as noted below.

Plan Review: EHS will document if changes need to be made, notated as Yes/No.

Protection of Sensitive Waters: EHS will coincide with Construction Administration to determine if sensitive waters will be affected and make changes if needed, and notate as Yes/No.



Local Interaction: EHS will coordinate with The City of Tuscaloosa if the need arises, and notate as Yes/No.

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

# VI. Pollution Prevention and Good Housekeeping

## 1) Introduction

The pollution prevention and good housekeeping measure is made up of BMPs that focus on the reduction of pollutants in the Stormwater runoff that originates from The University's operation and maintenance activities. The operations and maintenance activities include vehicle and equipment maintenance, materials handling and storage and facility operations. The BMPs selected will focus on the prevention of circumstances that have the potential to create polluted runoff.

## 2) Rationale

Each BMP within the pollution prevention and good housekeeping measure was selected by analyzing techniques utilized by other permitted entities, analyzing the effectiveness of previously utilized BMP's and consideration of selected BMP's applicability to permit provisions.

## 3) Summary

The pollution prevention and good housekeeping measure is designed to identify procedures for transportation system maintenance, develop procedures for vehicle and equipment maintenance, review storage and handling of hazardous materials and develop employee training on proper good housekeeping and pollution prevention procedures. The success of the pollution prevention and good housekeeping will be evaluated by analysis of each BMP goal. EHS will establish a measurable goal for each BMP and will be able to document attainment of that goal.

## 4) BMP Summary

The University will utilize several BMP's which are designed to minimize pollution related to operations and maintenance. Among these are street operations and management, litter control, herbicide application, vehicle maintenance, hazardous material management and employee training.

## a. Roadway Maintenance

The University's Transportation Services as well as Construction Administration are the responsible parties for roadway maintenance throughout campus. Routine street maintenance has significant potential to contribute to pollution runoff. To minimize



potential impact from street maintenance, The University will evaluate existing activities to determine if modifications would benefit Stormwater quality. The University will seek to identify alternative procedures or materials that would reduce the potential of maintenance activities to contribute to polluted runoff. Specifications and SOP's will be revised according to identified alternative practices. The University will maintain records of road maintenance activities, alternative practices and include this information as a part of the annual report.

## b. Street Sweeping

The University's Facilities and Grounds department is the responsible party for the street sweeping throughout campus. Street sweeping is an effective method of reducing sediment and pollutants from roadways. To ensure these activities are conducted in an effective manner, The University will identify roadways that are to be swept. The University will further establish schedules for sweeping of identified roadways. The University will maintain records of street sweeping including man hours involved and roadways, will include information in the annual report.

## c. Litter Collection/Recycling

The University's Facilities and Grounds department is the responsible party for the litter collection throughout campus. The University will continue to promote antilitter on campus. Several procedures will be utilized to reduce the discharge of floatable materials into local bodies of water. The University will periodically evaluate the location of litter and trash receptacles, collect litter on an established schedule, and adjust locations of receptacles and collection schedules, as necessary. In conjunction to litter collection, The University has an in-house recycling facility which recycled approximately 1,086 tons of recyclable materials including paper, cardboard, metal, aluminum, wood, electronics, plastic, cooking oil and ink toner. Logistics and Support Services (within Facilities and Grounds) is the responsible party for recycled goods more information can be obtained <a href="here">here</a>. The University will include information regarding litter collection and recycling on campus as part of the annual report.

## d. Herbicide Application

The University's Facilities and Grounds as well as the Athletic Department are the responsible parties for the Herbicide Application throughout campus. The use of herbicides is a very effective tool on controlling the growth of unwanted vegetation. Improper or indiscriminate use can have potentially harmful effects on water quality. To ensure that herbicide application does not contribute to negative water quality, The University will review all areas with herbicidal use and determine alternatives where possible. The University will ensure compliance with herbicide application regulations. The amount of herbicide applied, and locations will be included as part of the Stormwater annual report.

#### e. Vehicle Maintenance

The University's Automotive Services facility is a full-service facility that supports vehicles owned or leased the University. The University owns and operates a variety of vehicles and equipment used in the operation and maintenance of the facilities and services on campus. These vehicles range from passenger cars, trucks and vans to heavy equipment all of which require regular maintenance. Improperly maintained vehicles have a greater potential to contribute to water quality impairment. To ensure that vehicles do not contribute to impaired water quality The University's Automotive Services department will review and update the inventory



of The University owned vehicles and equipment. The University will conduct routine maintenance of owned vehicles and shall inspect vehicles for the presence of fluid leaks during routine maintenance. The University will schedule repairs for vehicles determined to have leaks. Maintenance records shall be available for review as requested.

## f. Hazardous Material Management

EHS is the responsible party for the Hazardous Material Management Program and has operated the program for several years. This Program along with campus facilities are periodically inspected by regulatory agencies for compliance with applicable standards. EHS has an active material inventory system that tracks and accounts for hazardous materials and chemicals on campus. EHS will continue to operate the hazardous material program and will continue to perform environmental audits in laboratories and facilities on campus. More information can be obtained here.

## g. Employee Training

EHS is the responsible party for The University's training that focuses on pollution prevention and good housekeeping measures. EHS will identify The University personnel who will be required to attend training and will maintain records related to this training. Training materials will focus on vehicle and building maintenance, herbicides and hazardous material management. Training information including employee attendance shall be part of the annual report.

## 5) Utilization of BMPs

Documentation of the above-referenced BMPs will be recorded in a chart.

Roadway Maintenance: EHS will collaborate with Construction Administration to list in the chart the total roadway construction/maintenance performed yearly.

Street Sweeping: EHS will collaborate with Facilities and Grounds to document in the chart street sweeping, and notate as Yes/No.

Litter Collection/Recycling: EHS will collaborate with Facilities and Grounds to record litter collection and notate as Yes/No in the chart.

Herbicide Application: EHS will collaborate 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 used.

Vehicle Maintenance: EHS will collaborate with Facilities and Grounds (Automotive Services) and will determine if any corrective actions need to be made to reduce potential Storm Drain pollution, and notate in the chart as Yes/No.

Hazardous Materials Management: EHS will document if any Hazardous Materials have the potential to impact the Storm Sewer system, and will notate in the chart as Yes/No.

Employee Training: EHS will conduct annual and quarterly training on the importance of water quality and Stormwater and will notate within the chart the total number of individuals that received training.



	FY-18	FY-19	FY-20	FY-21	FY-22
Roadway	4-No Issues	8-No Issues	4-No Issues		
Maintenance	Noted	Noted	Noted		
Street Sweeping	40- man hours	40- man hours	40- man hours		
	per week	per week	per week		
	40- man hours	40- man hours	40- man hours		
Collection/Recycling	per week	per week	per week		
Herbicide	Yes/750	Yes/750	Yes/650		
Application	Gallons Dilute	Gallons Dilute	Gallons Dilute		
Vehicle Maintenance	No Action	No Action	No Action		
Hazardous Material	No Action	No Action	No Action		
Management					
Employee Training	112	93	19		
			Covid		

# VII. Enforcement

The University will utilize a variety of enforcement strategies depending upon the nature of any incident and the individuals involved. Enforcement could include financial penalties, civil action, institutional restrictions, police response and other actions. Students involved in activities requiring enforcement face academic actions including suspension up to expulsion. Faculty and staff are subject to supervisory discipline including possible termination. Contractors are subject to financial penalties, termination of contracts and expulsion from work on campus. Any individuals exercising willful violation of Stormwater management guidelines may be subject to police involvement and civil actions.

Should any Enforcement actions be taken, they will be noted in the Chart below with a Yes/No.

	FY-18	FY-19	FY-20	FY-21	FY-22
Enforcement	No Action	No Action	No Action		

