UNIVERSITY OF
SOUTH ALABAMA

ANNUAL MS4 REPORT
2024 Reporting Period

Prepared on: 05/13/2025

Prepared by:

Driven Engineering, Inc.,

8005 Morris Hills Road

Semmes, AL 36575

251-649-4011

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UNIVERSITY OF SOUTH ALABAMA

1. Certification and Introduction

Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

The implementation of the University's Storm Water Management Program Plan is dependent upon several departments and individuals at the University. I serve as the University's responsible official and authorized representative as set forth in ADEM Admin. Code r. 335-6-6-.09. In addition, I serve to initiate programs intended to promote and ensure the Plan's objectives and as ADEM's primary point of contact for the referenced permit. Should you have any questions or require further documentation, please do not hesitate to contact me.

Signature: William L. Guess

Printed Name: William L. Guess

Title: Director-Safety and Environmental Compliance, University of South Alabama

Date: May 15, 2025

Contact Information

Contact Person: William L. Guess

Title: Director-Safety and Environmental Compliance (SEC), University of South Alabama

Telephone: 251-460-7070

Email: wguess@southalabama.edu

Mailing Address: University of South Alabama
EOB 220 / 600 Clinic Drive
Mobile, AL 36688-0002

MS4 Advisory Committee:

William L. Guess, Director Safety and
Environmental Compliance, 251-460-7070
EOB 220 / 600 Clinic Dr.
Mobile, AL 36688
wguess@southalabama.edu

Jonah Taylor, P.E, Project Engineer
Krebs Engineering, Inc.
Office No. 334.271.0986
jonah.taylor@krebseng.com

Scott Crow, Assis. Dir. Grounds/Landscape,
251-460-6101
EOB 220 / 600 Clinic Dr.
Mobile, AL 36688
scrow@southalabama.edu

Dr. Donald Beebe, Prof. Geology
251-460-6381
LSCB 344
Mobile, AL 36688
dbeebe@southalabama.edu

Savannah Wallace, Industrial Hygiene Specialist,
Safety and Environmental Compliance,
251-460-6971
EOB 250 / 600 Clinic Dr.
Mobile, AL 36688
savannahwallace@southalabama.edu

Dr. Carol Sawyer, Assoc. Prof. Geology
Geology Program Coordinator
251-460-6169
5871 USA Dr. N Rm 136
Mobile, AL 36688
Sawyer@southalabama.edu

Avalisha Fisher, P.E., Driven Engineering, Inc.,
MS4 Phase II IDDE Outfall Monitoring and Floodplain Manager
251-649-4011
8005 Morris Hill Road
Semmes, AL 36575
lisha@drivenengineering.com

Introduction

The purpose of this annual report is to describe the University of South Alabama's (University) compliance efforts in support of the Storm Water Management Program Plan (SWMPP), and how the University is operating its SWMPP along with how it records and documents measurable success.

This report will provide an assessment of the program, describe public education and outreach initiatives, list planned storm water controls for the next reporting cycle and current construction site details. In addition, this report will provide an overall picture of efforts taken by the University to reduce the discharge of pollutants from the main campus to the maximum extent practicable (MEP) to protect water quality and to satisfy the appropriate water quality requirements of the Clean Water Act (CWA). Reports, ADEM permits, and relevant information on the University's MS4 initiatives can be found on the Department of Safety and Environmental Compliance website https://www.southalabama.edu/departments/environmental/.

The report has been prepared by Driven Engineering, Inc. (DEI) to provide for transparency in the self-assessment process. This document reports the on-going achievements of the University's reporting year and continues upon required work. Specific references for attainment of SWMPP goals and permit compliance have been verified through documentation provided by the University and observations and confirmation by DEI.

Site Description

The main campus of the University spreads across 1,200 acres, with a landscape that includes cultivated flower gardens, walking paths and groves of pine trees, more than ten miles of bike trails, indoor and outdoor pools, and a disc golf course. The Glenn Sebastian Nature Trail contains more than three miles of trails that wind through ninety-five acres of native pine and oak woodlands. The campus is bisected by Three Mile Creek (303(d) watercourse) and Twelve Mile Creek (off Hillcrest Property).

History of Plan

The University filed a Notice of Intent for the Small Municipal Separate Storm Sewer System (MS4) General Permit in June 2017. Each year the University has submitted an annual report to ADEM describing actions taken in that year. In 2018, the University submitted the first Storm Water Management Program Plan (SWMPP).

The purpose of this SWMPP is to describe the University and its operation and identify the Best Management Practices (BMPs) to be utilized to reduce the discharge of pollutants from the main campus to the maximum extent practicable (MEP) to protect water quality and satisfy the appropriate water quality requirements of the Clean Water Act (CWA).

The SWMPP includes:

- Best Management Practices (BMP).
- Control techniques and system design, and engineering methods.
- Coordination among entities.
- Measurable goals for each of the BMPs.
- Person or persons responsible for implementing and coordinating BMPs.
- Minimum Control Methods.

2. Stormwater Management Self-Assessment

Assessments were conducted to report on the effectiveness of the goals and objectives set forth in the SWMPP related to the measurable goals and requirements of the MS4 permit pertaining to requirements not specifically listed in the SWMPP. This section discusses relevant achievements and on-going permit compliance matters not considered a measurable BMP in the SWMPP, as well as clarification on permit requirements not specifically indicated in the BMP goal(s) attainment of this report. The Subsequent section discusses measurable BMPs identified in the SWMPP.

The report is set out in a logical manner that identifies each measurable BMP indicated in the SWMPP by category, intent of the BMPs, goals the BMPs are committed to achieve, measure of the achievement of the goals, and anticipated future initiatives for the subsequent reporting year. This will help guide the University in its overall goal of being a good steward for the health of its direct and indirect impacts to Three Mile Creek and Twelve Mile Creek.

Core to the achievements and compliance with the MS4 permit is the Safety and Environmental Compliance (SEC) department, which oversees ADEM permitting and activities that may or may not reveal impact upon the requirements of the permit. This allows for a single point of contact and monitoring of not only the MS4 permit requirements, but any overlap with other permit responsibilities to ensure consistency with the University's goal to promote environmental stewardship.

The University has completed the marking of 95% of the stormwater inlets within the MS4 area. These markings, which were referenced in the 2023-2024 report, have been an effective educational tool that reminds the public, staff, and students where the inlets discharge to, as well as the importance of being a good steward to the environment. Stormwater inlet medallions are replaced and/or added as needed.

The University has continued to expand its development of infrastructure and building facilities. Recognizing that runoff from construction sites could adversely impact receiving waters, the University has taken an initiative-taking approach to limiting pollutant laden stormwater from leaving construction sites. Reviews are conducted for all sites, regardless of size, for permit compliance.

For sites greater than 1-acre, the University uses the ADEM NOI process, inclusive of individual CBMPP manuals and erosion control plans, through the NOI system. This allows for a consistent approach for the mitigation of runoff from construction sites and ensures that the University is current with ADEM's requirements. The University is in contract with a consulting firm to perform the inspections required as a result of rainfall threshold exceedance, or in the event of no rainfall 30-day inspections in conjunction with daily inspections by the contractor. Reports are generated by the consulting engineer indicating any deficiencies in the BMPs and actions required to remedy the issues identified. Additionally, the University conducts its own inspections via staff. When observations indicate that repairs to BMPs are required, the issues are communicated to the University project manager for immediate rectification. For sites less than 1-acre, the University conducts internal reviews with the assistance of an outside consulting firm to ensure construction stormwater impacts are minimized.

SEC has implemented additional controls for construction and development activities on campus with the creation of a land disturbance checklist. The checklist provides the manager of a construction project the means of assuring compliance with the University's environmental compliance regulations to minimize construction stormwater runoff.

Much of the success and accomplishments of the program along with its partners in 2024-2025 include:

- USA Green Jags hosted various campus cleanups on campus, primarily after football and basketball games at Hancock Whitney Field and the Mitchell Center. In total, they collected 88 bags of recyclable material, equating to 798 pounds.

Figure 1: Multiple students posing for a picture after the Green Jags campus cleanup on August 31, 2024

- Students from the University of South Alabama participated in the SGA & AED Campus Cleanup, held on April 6, 2024, around campus housing areas. A total of twelve bags were filled with trash by seven student participants.

Figure 2: Individual grabbing trash at the SGA & AED Campus Cleanup

The USA Green Jags were founded in 2009 and are the University's primary student environmental club. The Green Jags promote sustainability and green movements by ways of campus and local clean-ups. They host a variety of events such as campus clean-up days, adopt-a-stream clean-up days, and garden workdays.

Figure 3: Green Jags Logo

In June 2019, an additional humanity “parking lot bio-infiltration swales" project (funded by ADEM) was installed. The project incorporated similar bio-infiltration features that captured runoff from parking areas before it enters a highly eroding gully just upstream of its confluence with Three Mile Creek. This parking lot bio-infiltration project reduces sediment loading to Three Mile Creek, thus improving both habitat and water quality. Going forward into 2025, Krebs Engineering will incorporate annual assessments of biofiltration systems as part of its routine post-construction evaluations in designated areas, such as the one pictured below. This integrated approach ensures that biofiltration systems are consistently monitored and maintained in accordance with regulatory requirements and project standards. By aligning these assessments with existing post-construction review schedules, Krebs Engineering aims to promote efficiency, environmental compliance, and the continued performance of stormwater management infrastructure.

Figure 4: Dr. White and a student discussing bio-infiltration swales beside a flower bed

Formation of the new Garden Committee at the University of South Alabama has proven to be a valuable addition to our sustainability and community engagement efforts. By promoting environmental stewardship, the committee has facilitated the development and maintenance of vibrant garden spaces across campus. These gardens not only enhance the aesthetic appeal of the University but also contribute to the campus's ecological health by supporting local biodiversity, reducing carbon footprints, and managing stormwater through natural filtration. Moreover, the committee serves as an educational platform, offering students and faculty hands-on experience with sustainable gardening practices. This initiative aligns with the University's commitment to sustainability, fostering a sense of pride and responsibility among the campus community while contributing to the broader environmental goals outlined in the MS4 program. The committee's efforts have significantly improved campus green spaces, provided opportunities for collaboration, and furthered the University's environmental objectives. To promote involvement, the committee created a flyer that includes a QR code linking to its GroupMe, making it easy for individuals to join and stay connected. This initiative has increased community engagement and furthered the University's environmental goals outlined in the MS4 program.

Figure 5: "Join the Garden Committee" Flyer

Three flyers were created that emphasize the importance of limiting unwanted constituents into the natural water systems that surround the USA campus. The flyers have been made available to the public in all elevators throughout the Campus. The flyers can be seen below:

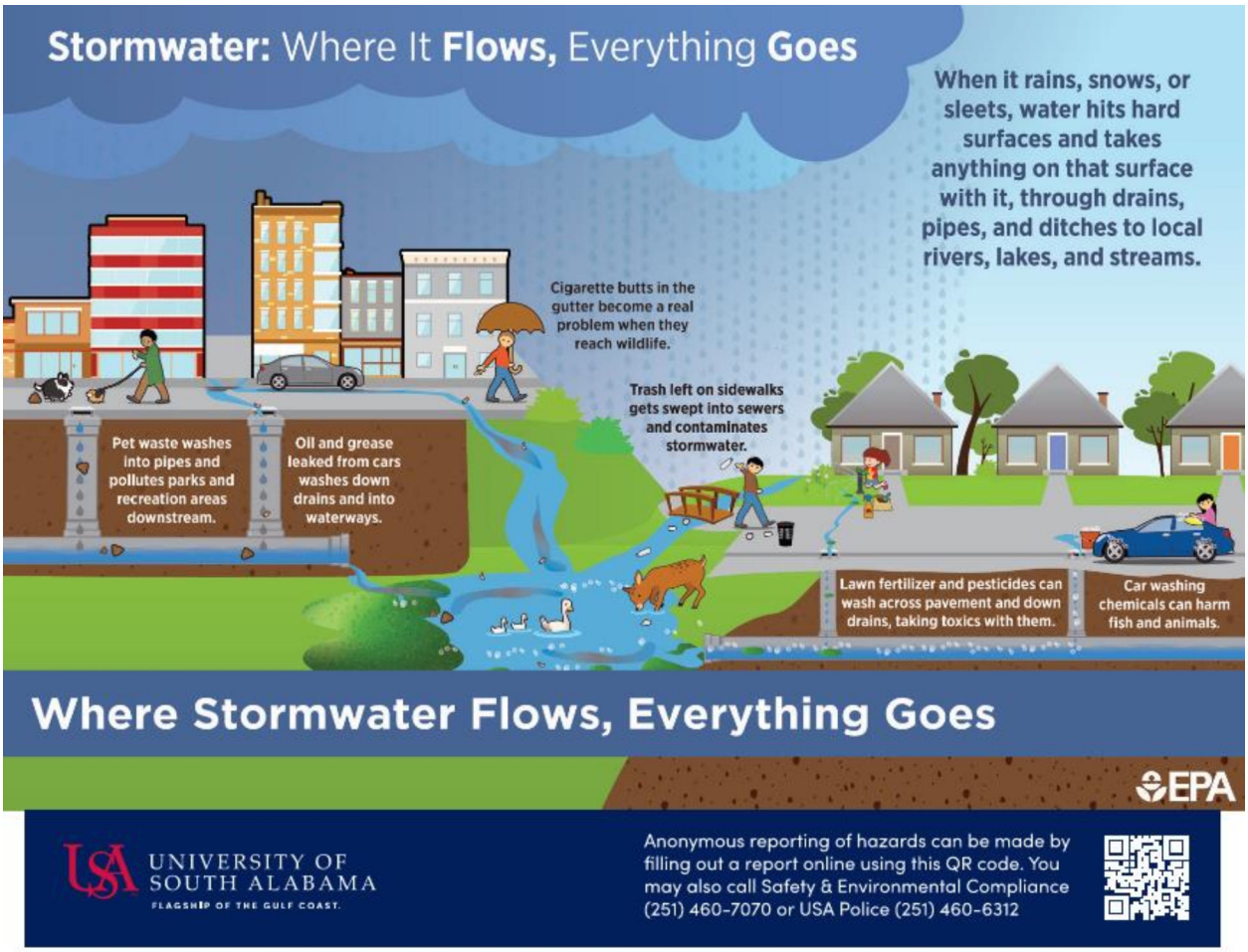


Figure 6: Flyer 1 – Where it Flows, Everything Goes

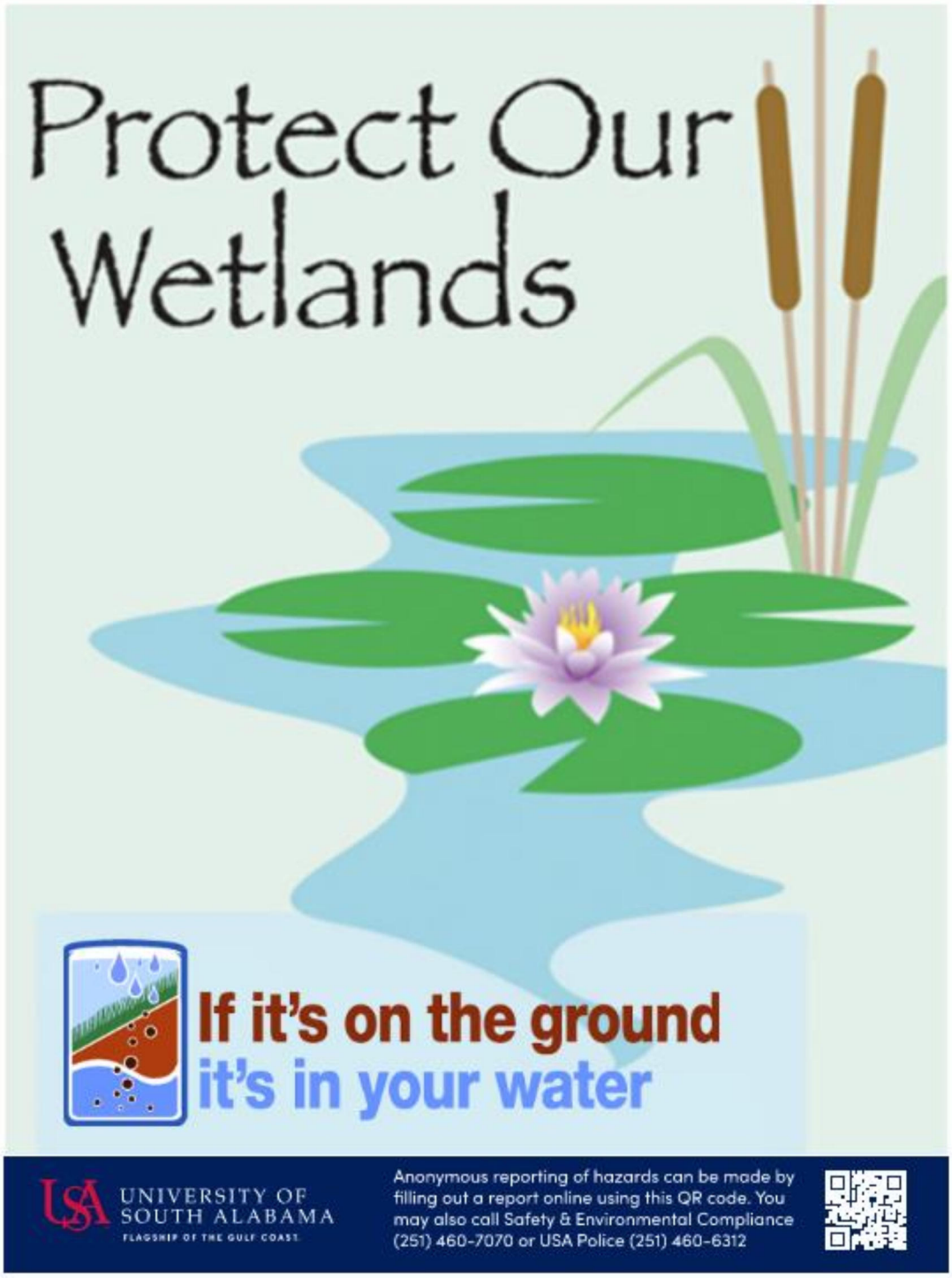


Figure 7: Flyer 2 – Protect Our Wetlands

Figure 8: Flyer 3 - Preventing Stormwater Pollution

The University recognizes specific requirements of the permit that are not SWMPP measured BMPs, which are also important. This report represents all additional commentary towards specific requirements of the permit that are not SWMPP measured, regardless of if it is accomplished or not yet met. They are listed below to help ensure transparency in the University's efforts of continuing to comply with the permit requirements. The items are numbered in a manner consistent with the ADEM permit for clarity and are as follows:

Part III.B.2.a.i.1 Requirement-Achieved -The latitude/longitude of all known outfalls on map: The map is being updated quarterly as IDDE inspections occur (See Appendix D).

Part III.B.2.a.i.3 Requirement-Achieved-Structural BMPs owned, operated, or maintained by the Permittee, if applicable: The map has been updated as of 04/21/2025 (See Appendix D). Currently there are no applicable BMPs to show on the map.

Part III.B.3.a.i Requirement-Achieved-Specific procedures for construction site plan (including erosion prevention and sediment controls) review and approval: The MS4 procedures must include an evaluation of plan completeness and overall BMP effectiveness: The Land Disturbance Checklist provides procedures for the review and approval of construction site plans, See Appendix H. An outside consultant reviews all construction plans.

Part III.B.3.a.iv Requirement-Achieved-Within 365 days of the effective date of the permit, develop and implement a construction site inspection form to include at least the items listed in Parts III.B.3.d.i.: Please see the Land Disturbance Checklist in Appendix H.

Part III.B.3.a.v Requirement-Achieved- Within 365 days of the effective date of the permit, maintain an inventory of qualifying construction sites containing relevant contact information for each construction site (i.e., tracking number and construction site contact name, address, phone number, etc.), the size of the construction site, whether the construction site has submitted for permit coverage under ADEM's Construction General Permit ALR100000, and the date the MS4 Permittee approved the site construction plan. The MS4 Permittee must make the inventory available upon the Department's request: The University's Safety and Environmental Compliance Department acquires all said documentation and is available at the Department's request.

Part III.B.3.c.i. Requirement-Achieved-Procedures for site plan reviews as required by Part III.B.3.a.i: The Land Disturbance Checklist provides procedures for the review and approval of construction site plans, See Appendix H.

Part III.B.3.c ii. Requirement Achieved-A copy or link of the ordinance or other regulatory mechanism required by Part III.B.3.a.ii: In Appendix B of the 2024 SWMPP, the Land Disturbance Checklist contains a link to the Alabama Soil & Water Conservation Committee, a regulatory entity for erosion and sediment control.

Part III.B.4.a.i.1 Requirement-Achieved-Develop/revise and outline in the SWMPP procedures for the site plan review and approval process and a required re-approval process when changes to post-construction controls are required: Please see the Land Disturbance Checklist in Appendix B of the 2024 SWMPP.

Part III.B.4.a.i.2 Requirement-Achieved-Develop/revise and outline in the SWMPP procedures for a post-construction process to demonstrate and document that post-construction storm water measures have been installed per design specifications, which includes enforceable procedures for bringing non-compliant projects into compliance. The post-construction procedures can be found on page 26 of the 2024 SWMPP.

Part III.B.4.a.iii Requirement-Achieved-Encourage and Educate landowners and developers to incorporate the use of low impact development (LID)/green infrastructure where feasible. Information on low impact development)LID)/green infrastructure is available on the following websites: http://www.adem.alabama.gov/programs/water/waterforms/LIDHandbook.pdf;http://epa.gov/nps/lid. The Permittee shall include a narrative description in the SWMPP as to the means that will be taken to implement the requirement to encourage landowners and developers to incorporate the use of low impact development (LID)/green infrastructure; The procedures used are through the requirements of the ADEM NOI-Construction Stormwater Permit Process, and the SWMPP submitted on 03/24/2023 to ADEM includes those procedures. Please see page 26 of the 2024 SWMPP for more information.

Part III.B.5.a.iii 1-8 Requirement-Achieved-A Standard Operating Procedures (SOP) detailing good housekeeping practices to be employed at municipal facilities (that have the potential to discharge pollutants via stormwater runoff) and during municipal operations that may include, but not limited to, the following: (1) equipment washing, (2) street sweeping, (3) maintenance of municipal roads including public streets, roads, and highways, including but not limited to unpaved roads, owned, operated, or under the responsibility of the permittee, (4) storage, use, and disposal of chemicals, pesticide, herbicide and fertilizers (PHFs) and waste materials; (5) vegetation control, cutting, removal, and disposal of the cuttings; (6) vehicle fleets/equipment maintenance and repair; (7) external building maintenance; and (8) material storage facilities and storage yards. The University has established good housekeeping practices and made them a part of new employee orientation and works to educate visitors through the use of flyers and posters posted in various locations across the campus. The 2024 SWMPP also includes housekeeping BMPs in section 2.6 (Page 29).

Part III.B.5.a.iv Clarification / Requirement-Achieved-A program for inspecting municipal facilities for good housekeeping practices, including BMPs. The program shall include checklists and procedures for correcting noted deficiencies: Please see the Post-Construction Form in Appendix C of the 2024 SWMPP for the inspection procedure/checklist of storm water run-off.

Part III.B.5.b.iii Requirement-Achieved- Schedule for developing the SOP of good housekeeping practices required by Part III.B.5.a.iii: The following good housekeeping standard operating procedures are being maintained by USA personnel: Trims and fertilizes trees and shrubs, Mows and edges lawns, Polices grounds and picks up trash and debris, Waters plants as needed or directed, Hoes, weeds and otherwise tends flower beds, gardens and lawns, Collects, loads and hauls off trash, May operate a tractor or other groundskeeping equipment, implements and vehicles, Digs and plants flowers, shrubs and trees, May be responsible for performing groundskeeping and custodial duties in maintaining a small group of buildings and grounds, Installs wee fabrics and mulches, Stakes and guys trees, Removes debris, Cleans trash and debris from storm inlets, May apply chemical to lawns, trees, shrubs, flowers and paved surfaces as required, Solid waste collection campus-wide to include pick up of bagged, boxed and loose materials and transport by truck to dumpsters located throughout

campus for unloading, Assist in installation and repair of irrigation systems, Operate power washer to clean sidewalks and other paved surfaces.

Part III.B.5.b.iv Requirement-Not Achieved- An inspection plan and schedule to include inspection frequency, checklists, and any other materials needed to comply with Part III.B.5.a.iv: . For the 2024 reporting year, Grounds crew and office personnel monitored for effectiveness. Going forward, post-Construction assessments will be conducted annually per ADEM requirements. The Post-Construction Inspection Form can be found in Appendix C of the 2024 SWMPP. The post-construction procedures can be found on page 26 of the 2024 SWMPP.

Part IV.A.1 Requirement-Achieved-If the Permittee is relying on another entity to satisfy one or more requirements of this permit, then the Permittee must note that fact in the SWMPP. The permittee remains responsible for compliance with all requirements of this permit, except as provided by part III.B.3.b and reliance on another entity will not be a defense or justification for noncompliance if the entity fails to implement the permit requirements. All pertinent information pertaining to relying on outside consultants has been noted within the 2024 SWMPP.

3. Public Education and Outreach

The University of South Alabama's Safety and Environmental Compliance Office has implemented a public education and outreach program that distributes educational materials and information to the campus community. This education and outreach program is to inform University staff, students, and residents about preventing illicit discharges to Three Mile Creek and Twelve Mile Creek, as well as steps that can be taken to reduce pollutants in storm water runoff to the maximum extent practical. These efforts are also designed to encourage individuals and groups to take active steps to reduce pollutants in storm water runoff. Additionally, the "Adopt-a-Stream" program signage and participation continues to grow and serves as a visual reminder of the importance of keeping our waterways clean and healthy.

The University of South Alabama's public education and outreach efforts during the 2024 reporting year proved effective in raising awareness about stormwater quality and pollution prevention across the campus community. Outreach materials, including three targeted educational flyers, were widely distributed and monitored using QR code analytics to ensure impact. The University's stormwater quality website received over 4,100 visits, demonstrating strong engagement. Additionally, participation in events such as campus cleanups and the implementation of programs like the "Toolbox Talk" and new employee orientation contributed to a measurable increase in environmental literacy and involvement. These combined efforts successfully supported the goals of the MS4 permit by promoting informed and proactive behaviors among students, staff, and visitors.

Rationale

Each Best Management Practice (BMP) within the public education and outreach measure was selected by examining BMP databases and examples. The effectiveness of previously utilized BMPs have been analyzed and the evaluation of educational methodologies are already in place at The University of South Alabama.

Target Audience

The target audience is The University of South Alabama'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 program is to reach all employees and students at the University of South Alabama within the life of the permitting cycle. It is also to expose a significant segment of the visitor population to information regarding the impact of contaminated storm water discharges on local bodies of water and watersheds.

BMP-1: Printed Materials

Materials promoting green spaces, stormwater quality and the importance of the environment with distributions through various locations in addition to education flyers for illegal dumping.

Measurable Goals:

Develop and distribute flyers. The flyers shall include the following: General impacts litter has on water bodies, how trash is delivered to streams via the MS4 and ways to reduce the litter; general impacts of storm water flows into surface

	water from impervious surface; and source control BMPs in areas of pet waste, vehicle maintenance, landscaping, and rainwater reuse.
Progress on Goals 2024-2025:	Due to various flyer creation (stated below) and real time analysis of QR code data analytics represented for associated flyers, throughput efficiency is well above average. The USA SEC Department developed three flyers in 2024. Flyer-1 pertains to source control BMPs in areas of pet waste, vehicle maintenance, and landscaping. Flyer-2 corresponds to protecting our wetland areas. Flyer-3 pertains to preventing stormwater pollution by preventing illicit discharges to downstream storm drain inlets.
Planned Activities for 2025-2026:	1. Modify current flyers as needed. 2. Monitor current operations; diagnose any new environmental risks with topic specific flyers when applicable. 3. Continue with distribution and posting.
Target Audience:	General public, faculty/staff, students.

BMP-2: Stormwater Quality Website

Safety and Environmental Compliance will maintain a section of the University of South Alabama's website, http://www.southalabama.edu/departments/environmental/index.html, to provide a mechanism for the reporting of illicit discharges, educate the public and the campus community on water quality issues and to provide a mechanism for feedback on storm water or water quality issues. SEC will edit, update, and modify the information provided to ensure consistency with the public education and outreach program. Impacts of illicit discharges and how to report them.

Measurable Goals:	Stormwater Quality website.
Progress on Goals 2024-2025:	The 2024 SWMPP has been made available to the public via the USA SEC Department website. USA Storm Water Management Program Plan (southalabama.edu). USA has maintained the website and updated the information being provided to ensure consistency with the public education and outreach program and to track usage. This website was viewed 4,183 times in 2024. http://www.southalabama.edu/departments/environmental/index.html
Planned Activities for 2025-2026:	Continue maintaining the website and update the information being provided to ensure consistency with the public education and outreach program and to track usage. Modify any needed changes to the 2024 SWMPP when applicable.
Target Audience:	General public, faculty/staff, students.

BMP-3: Public Service Advertisements

Public service advertisement BMP focuses on material that relates to the impact of storm water runoff on local bodies of water and steps that can be taken to reduce storm water pollution. SEC will review, edit update, and modify the advertisements to ensure relevancy to current water quality issues. SEC will maintain records regarding the advertisements and will report the type and frequency in the annual report.

Measurable Goals: Maintain records of advertisements.

Progress on Goals 2024-2025: Due to various flyer creation (stated below) and real time analysis of QR code data analytics represented for associated flyers, throughput efficiency is well above average. The USA SEC Department developed three flyers in 2024. Flyer-1 pertains to source control BMPs in areas of pet waste, vehicle maintenance, and landscaping. Flyer-2 corresponds to protecting our wetland areas. Flyer-3 pertains to preventing stormwater pollution by preventing illicit discharges to downstream storm drain inlets.

Planned Activities for 2025-2026: SEC to maintain good records regarding the advertisements and will report the type and frequency of distribution.

Target Audience: General public, faculty/staff, students.

BMP-4: Education Program for Impacts of Illegal Dumping and Littering

Educating the campus community of the impacts of illegal dumping and littering is vital to the cleanliness and beauty of the University of South Alabama campus. SEC, in conjunction with other sources, has developed educational materials and programs that discuss the harmful impact of illegal dumping and littering and will provide the mechanisms for reporting incidents. SEC will review, edit and modify information to ensure relevancy to current issues. SEC will distribute public education materials that describe the harmful impacts of dumping on water bodies.

Measurable Goals: Create and update as needed a program that highlights the harmful impact of illegal dumping.

Progress on Goals 2024-2025: There were no reporting incidents and/or visual confirmation of illegal dumping at the USA campus in 2024, confirming a high level of efficiency. A “Toolbox Talk” program has been created for all facility staff at the University as a 5-year refresher training. The discussion topics can be seen in appendix C. Flyers have also been distributed across campus that describes illegal dumping and littering. New employee orientation educates new University

	employees on the impacts of illegal dumping and littering. See appendix C regarding the new employee orientation PowerPoint.
Planned Activities for 2025-2026:	Continue with education programs to be affiliated with 100% of campus community. SEC to review, edit, and modify programs to ensure relevancy.
Target Audience:	General public, faculty/staff, students.

BMP-5: Education Program for Construction Stormwater Activities

The University of South Alabama has a very aggressive construction and new development schedule, which results in almost continuous construction activity. This activity makes it important for there to be a mechanism in place to inform the campus community on steps that can be taken to report potential construction site runoff problems.

Measurable Goals:	Develop, staff, and maintain a campus wide inspection regime.
Progress on Goals 2024-2025:	A total of 18 BMP stormwater inspections were conducted, eleven of which failed, and were reported as incidents. The eleven failed BMP inspections are either currently being addressed, or already fixed. There were no additional incidents reported on the USA SEC Department website in 2024. William Guess has informed Student Community Groups of reporting procedures. Construction site runoff reporting is included in the "Confidential Environmental/ Hazard Report" on the Safety and Environmental Compliance website. Confidential Environmental/Hazard Report | Department of Safety and Environmental Compliance (southalabama.edu).
Planned Activities for 2025-2026:	Continue with current programs, add more mechanisms to inform the campus community where/when applicable.
Target Audience:	General public, faculty/staff, students, Visitors, and Contractors

BMP-6: Education on Importance of Water Quality

The education of the campus community on the importance of water quality is a vital priority for the Department of Safety and Environmental Compliance. Among the campus community, 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. SEC, in partnership with USA's MS4 Advisory Committee, will review, edit and modify materials and programs to ensure relevancy to the University of South Alabama student population and current issues. SEC will provide information regarding education of the importance of water quality as part of the annual report.

Measurable Goals:	Coordinate with the MS4 Advisory Committee on water quality issues.
Progress on Goals 2024-2025:	There was a total of two MS4 Advisory Committee meetings in 2024.
Planned Activities for 2025-2026:	Continue with meetings in 2025 as needed, and training as part of employee orientation will continue as well.
Target Audience:	General public, Faculty/staff , students.

BMP-7: Education of University Employees and Contractors

In order to ensure that the University of South Alabama construction project and contractor supervisors are informed on the most current policies and procedures related to sediment and erosion control on construction sites, the Safety and Environmental Compliance and the Engineering & Design and Construction Office have developed educational programs to communicate principles of sediment and erosion control as well as targeted pollutant sources. This group 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. SEC will provide information regarding education of construction supervisors as part of the annual report.

Measurable Goals:	Develop communication protocols for contractors and education programs for existing staff and new hires.
Progress on Goals 2024-2025:	A total of 197 employees/contractors/construction supervisors were educated on erosion and sediment control on construction sites, in accordance with the MS4 permit. Training programs such as the "Illicit Discharge Toolbox Talk" for a permit refresher, and the "New Employee Orientation Revision" for new hires, have continued in 2024. There has been no new information, thus no update required at this moment. See Appendix C for the new orientation PowerPoint, as well as the toolbox talk.
Planned Activities for 2025-2026:	Update training program with edited or new information as required.
Target Audience:	Contractors, Staff and Project Managers

BMP-8: Adopt a Stream Signage

The University has installed signage that encourage the general public, staff, and students to protect waterways and to Increase public awareness of the Campus' nonpoint source pollution and water quality issues.

Measurable Goals:	Number of campus and stream clean-up days and amount of trash collected.
Progress on Goals 2024-2025:	Six campus cleanup days took place in 2024, totaling 88 bags of trash collected (798 pounds).
Planned Activities for 2025-2026:	Update training program with edited or new information as required.
Target Audience:	General Public, faculty/staff, students.

4. Public Involvement and Participation

The University of South Alabama is implementing a public involvement program which will create opportunities for the campus community to get involved in the Storm Water Management Program (SWMP). Opportunities for involvement in activities that directly benefit the environment and lead to improvements in overall water quality will be available. SEC will notify the campus community of opportunities to participate in water quality improvement activities and SWMP implementation by public notice of MS4 Advisory meetings. These public notice announcements of meetings will be published in the Vanguard campus newspaper and in the University of South Alabama electronic media; http://www.southalabama.edu/specialprojects/usasustainability/.

SEC will utilize a variety of outreach methods to encourage public involvement in the Storm Water Management Program Plan (SWMPP). The goals are to identify ways to notify individuals of opportunities to participate in activities related to the SWMPP, to provide opportunities for the campus community to participate in activities leading to water quality improvement and identify activities that have relevance to the SWMPP and improved water quality.

The University of South Alabama's public involvement initiatives for the 2024 reporting year were effective in fostering community engagement and advancing stormwater awareness. The MS4 Advisory Committee met as required, and continued efforts such as storm sewer inlet marking achieved approximately 95% coverage, demonstrating substantial progress toward full compliance. Public participation through campus cleanup events was robust, with six events resulting in the collection of 798 pounds of trash. These activities reflect strong collaboration between the University's Safety and Environmental Compliance (SEC) Department and the campus community, reinforcing shared environmental responsibility and commitment to the MS4 program goals.

Rationale

The University's stormwater management program(s) can be greatly improved by involving the community throughout the entire process of developing and implementing the program. Involving the public benefits the University as well as the community. By listening to the public's concerns and coming up with solutions together, the University will gain the public's support and the community will become invested in the program.

BMP-1: MS4 Advisory Committee

To oversee the implementation of the SWMPP and provide advice and consultation, SEC created the MS4 Advisory Committee (previously incorrectly referred to as the Storm Water Management Committee). The MS4 Advisory Committee is made up of various members of the campus community who have a stake in SWMPP; individuals with an expertise which would be of benefit to the program and other representatives of the campus community. The MS4 Advisory Committee will meet on an as need basis but at least once per year. During this permit cycle Safety and Environmental Compliance will request committee review of the education materials, inspection procedures, guidance information and investigation methods detailed in the BMPs specified in the six minimum control measures. SEC will provide notifications of committee meetings to the campus community through regular notice.

Measurable Goals: Post minutes of the MS4 Advisory Committee's meeting on the Safety and Environmental Compliance Website.

Progress on Goals 2024-2025: Due to miscommunication, the Storm Water Management Committee is actually called the MS4 Advisory Committee. The committee conducted two meetings in 2024 .

Planned Activities for 2025-2026: MS4 Advisory Committee to continue meetings in 2025.

Target Audience: Committee Members, Campus Community

BMP-2: Storm Sewer Marking

The storm sewer marking campaign provides a way for civic organizations and individuals to make a positive, hands on, impact on local water quality. SEC will provide storm sewer inlet medallions, which state, "Drains to Three Mile Creek" or "Drains to 12 Mile Creek" and adhesive to attach said medallions. To ensure continued success through the permit cycle SEC 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 the Adopt-A-Stream program and update procedures as needed.

Measurable Goals: Continuation of storm sewer marking campaign and civic group engagement with the ultimate goal of 100% of 683 inlets marked, marking of newly installed inlets, and replacement of missing or damaged inlets.

Progress on Goals 2024-2025: There was a total of 60 medallions marked in 2024, with several being replacements. See Appendix K regarding the inlet medallions. Approximately 95% of all inlets along Three Mile Creek and Twelve Mile Creek are marked with medallions.

Planned Activities for 2025-2026: USA SEC Department plans to place as many medallions as possible on any unmarked inlets along Three Mile Creek. Once all construction is finished at the Hillcrest property (Twelve Mile Creek Outfall), USA SEC Department will identify the number of new inlet medallions needed, and start with placement.

Target Audience: General public, faculty/staff, students.

5. Illicit Discharge Detection and Elimination

The MS4 Permit requires the University to implement an ongoing program to detect and eliminate illicit discharges and improper disposals to the MS4. According to 40 CFR 122.26(b)(2), an Illicit Discharge is defined as follows:

"Illicit Discharge means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from firefighting activities."

Section (p)(3)(B)(ii) of the Clean Water Act specifically requires an effective prohibition of non-storm water in the University's MS4 Permit. According to the MS4 Permit, the following discharges, whether discharged separately or commingled with municipal storm water, are not authorized:

Industrial and Non-Storm Water discharges are not permitted under this program. There shall be no trace of any storm water or non-storm water discharge associated with industrial activity unless the discharges are regulated by a separate NPDES permit.

The University may allow, in accordance with 40 CFR 122.26(d)(2)(iv)(B)(1), certain non-storm water discharges to the MS4. The Storm Water Management Program shall identify any non-storm water discharges allowed under this paragraph:

- Water line flushing.
- Landscape irrigation.
- Diverted stream flows and uncontaminated ground water infiltration.
- Uncontaminated pumped groundwater and infiltration defined as water other than wastewater that enters a sewer system, including foundation drains, from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include and is distinguished from inflow.
- Discharges from portable water sources.
- Foundation and footing drains.
- Air conditioning drains.
- Irrigation water (not consisting of treated or untreated wastewater).
- Rising ground water and springs.
- Water from crawl space pumps and footing drains.
- Lawn watering runoff.
- Individual residential car washing, to include charitable carwashes.
- Residual street wash water.
- Discharge or flows from firefighting activities (including fire hydrant flushing).
- Flows from riparian habitats and wetlands.

- Dechlorinated swimming pool discharges.
- Discharges authorized and in compliance with a separate NPDES permit.

Prohibited Storm Water Discharges

The following discharges are not authorized by this permit:

- Discharges that are mixed with sources of non-storm water unless such non-storm water discharges are in compliance with a separate NPDES permit or determined by the Department not to be a significant contributor of pollutants to waters of the State.
- Storm water discharges associated with industrial activity as defined in 40 CFR Part 122.26(b)(14)(i)-(ix) and (xi).
- Storm water discharges associated with construction activity as defined in 40 CFR Part 122.26(b)(14)(x) or 40 CFR 122.26(b)(15) and subject to Alabama Department of Environmental Management (ADEM) Code r. 335-6-12.
- Storm water discharges currently covered under another NPDES permit.
- Discharges to territorial seas, contiguous zone, and the oceans unless such discharges are in compliance with the ocean discharge criteria of 40 CFR Part 125, Subpart M;
- Discharges that would cause or contribute to instream exceedances of water quality standards.
- Discharges of any pollutant into any water for which a Total Maximum Daily Load (TMDL) has been approved or developed by EPA unless the discharge is consistent with the TMDL.
- Illicit discharges, including spills, of oils or hazardous substances, from responsibilities and liabilities under State and federal law and regulations pertaining to those discharges.
- The discharge of sanitary wastewater through cross connections or other illicit discharges through the MS4 is prohibited.

BMP-1: Develop Improper Disposal of Discharges Policy

Measurable Goals: Review and update policies and SOPs that relate to improper discharges on a yearly basis or more frequent if necessary.

Progress on Goals 2024-2025: After thorough review, no SOP changes were needed.

Planned Activities for 2025-2026: Continue with policy and SOP updates as needed and continue monitoring for successful implementation.

Target Audience: Faculty/staff

BMP-2: Authorization to Control Improper Disposal of Discharges

Measurable Goals:	Identify Department(s) that have authority to direct those causing the illicit discharge to cease discharge activities.
Progress on Goals 2024-2025:	Mr. William Guess (Director, Safety and Environmental Compliance) has been given authority requiring activities to cease if generating improper discharges. See current letter of authority in Appendix F. There has been no change regarding the decrease in reported illicit discharges (0 reported illicit discharges).
Planned Activities for 2025-2026:	SEC to continue exercising authority to cause improper activities to cease.
Target Audience:	Faculty/staff

BMP-3: Dry Weather Screening

Measurable Goals:	Dry weather screening of approximately 15% of major outfalls was to occur annually with all (100%) of major outfalls being screened at least once during the five-year period.
Progress on Goals 2024-2025:	100% Complete for the yearly requirement. Eight inspections were conducted in 2024. The dry weather screening percentage complies with the 15% minimum. The outfall inspections for 2024 can be found in Appendix B.
Planned Activities for 2025-2026:	Continue with screening program as required. The 5-year 100% outfall inspections began in Quarter 2 of 2023. There are a total of 28 outfalls to be inspected every five years. Six IDDE inspections per year is the minimum requirement.
Target Audience:	Staff

BMP-4: Stormwater Network Mapping

Measurable Goals:	Review of storm drain location map for updates on a yearly basis.
Progress on Goals 2024-2025:	The map was reviewed and updated as of 4/21/2025.
Planned Activities for 2025-2026:	Review and update as needed
Target Audience:	Staff

BMP-5: IDDE Reporting

Measurable Goals:	The University will develop and maintain a storm water discharge monitoring policy and systems to report and investigate illicit discharges. This policy will be posted on the University's website.
Progress on Goals 2024-2025:	Illicit discharge reporting can be done through the "Confidential Environmental/ Hazard Report" on USA's website. The website had 4,183 hits in 2024. There were 0 confidential reports for 2024. The confidential reporting system was tested three times by Office Staff, all of which were successful in the notification process. Confidential Environmental/Hazard Report | Department of Safety and Environmental Compliance (southalabama.edu)
Planned Activities for 2025-2026:	Review and update as needed
Target Audience:	General public, faculty/staff, students

BMP-6: IDDE Plan Implementation

Measurable Goals:	Train personnel performing illicit discharge screening on the IDDE Plan at least once per year.
Progress on Goals 2024-2025:	100% of trained staff considered training effective
Planned Activities for 2025-2026:	Review and update screening as needed
Target Audience:	General public, faculty/staff, students

BMP-7: Reporting of Improper Disposal of Discharges

Measurable Goals:	Maintain confidential reporting system webpage to report non-storm water discharges into storm drains.
Progress on Goals 2024-2025:	For 2024, there were zero reported improper discharges. The "Confidential Environmental/Hazard Report" on USA's website is used for all environmental/hazard issues, including the reporting of non-storm water discharges into storm drains. Confidential Environmental/Hazard Report | Department of Safety and Environmental Compliance (southalabama.edu). Functionality of the confidential reporting system has been confirmed.
Planned Activities for 2025-2026:	Update and monitor reporting system as necessary.
Target Audience:	General public, faculty/staff, students

BMP-8: Maintenance

Measurable Goals:	Maintain and update campus storm water conveyance system, including Three Mile Creek outfalls.
Progress on Goals 2024-2025:	Conducted inspections as required and in conjunction with dry weather reporting and kept general campus maintained. Campus groundskeepers monitor conditions and maintain inlets and outfalls as needed. Logs for this work are maintained by the grounds department and are available on request.
Planned Activities for 2025-2026:	Continue with maintenance activities.
Target Audience:	Staff

BMP-9: Education

Measurable Goals:	Educate the campus community (students, staff, faculty, and visitors) on the prohibition of dry weather flows into the University's storm water system.
Progress on Goals 2024-2025:	The prohibition of dry weather flows, along with the rest of the MS4, was presented at a total of four community meetings in 2023 (SEC Annual Education, Universal Waste Presentation, Building and Safety Compliance meeting, and New Student Orientation). 100% of community comments/responses received indicated that they considered the training effective.
Planned Activities for 2025-2026:	Continue with public education and outreach. Review and update dry weather flow education as needed.
Target Audience:	General public, faculty/staff, students

BMP-10: Train Staff

Measurable Goals:	Conducting training of University staff and faculty at least once per permit cycle. Grounds and Project Management departments new team members receive IDDE Awareness training within six months of employment or as determined by the Department to which the employee is assigned. USA SEC Department to repeat training at an interval of every 5-years or less.
Progress on Goals 2024-2025:	IDDE Awareness Training is completed via new employee orientation. Illicit Discharge Toolbox Talk has also been implemented as a permit refresher. See Appendix C for both training materials. 100% of trained staff considered the training

effective for both sets of training. There has been no change in the percentage due to the fact that 100% of trained staff considered training effective in 2023 as well.

Planned Activities for 2025-2026: Provide training to all new hires during department orientation and review/update IDDE Awareness training as needed.

Target Audience: Faculty, staff

BMP-11: Analyze Illicit Discharges

Measurable Goals: Analyze data of illicit discharges.

Progress on Goals 2024-2025: Eight outfalls were analyzed in 2024. No illicit discharges were discovered. There is no change in the percentage of illicit discharges due to the fact there were zero in 2022 and 2023. The 5-year 100% outfall inspections began a new rotation in Quarter 2 of 2023.

Planned Activities for 2025-2026: Continue monitoring outfalls for illicit discharges in order to target education to prevent them.

Target Audience: Staff

BMP-12: Three Mile Creek & Twelve Mile Creek Monitoring

Measurable Goals: Conduct quarterly monitoring of BOD, COD, DO, E. Coli, Fecal coliform at an upstream and downstream location that encompasses the University's MS4 area.

Progress on Goals 2024-2025: 100% compliance with quarterly monitoring program test results in 2024. Quarterly monitoring has been conducted and provided for in this report. Test results have been obtained from Analytical Chemical Testing Lab (ACT Lab).

Planned Activities for 2025-2026: Continue with the BMP.

Target Audience: General public, faculty/staff, students

6. Construction Site Storm Water Runoff Control

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

Rationale

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

The construction site runoff control measures are designed to do the following: identify mechanisms which will be used to require sediment and erosion controls on construction sites, to establish enforcement procedures, to establish requirements for construction site supervisors to implement erosion and sediment control BMPs, to establish requirements for waste control on construction sites, to establish procedures for site plan reviews that consider water quality impacts, to establish procedures for site inspection and enforcement, and to develop education and training for construction site supervisors and the University of South Alabama personnel overseeing construction projects. A Quality Control (QC) consultant performs the associated inspections. The success of the construction site runoff control measure BMPs will be evaluated through analysis of each BMP goal.

BMP-1: Education

Training to be developed and provided to the University of South Alabama project supervisors and managers. This training will include proper site management procedures as well as protocols for reporting discharges and inspection results. To ensure personnel and contractors are properly trained, Safety and Environmental Compliance will ensure that training materials take advantage of new technologies for managing storm water runoff on construction sites. Educational programs will be updated and modified as needed. QCI training shall be in accordance with QCI training in accordance with ADEM Admin Code. R. 335-6-12 or the Alabama Construction Site General Permit). Applicable MS4 site inspection staff shall be trained at least once per year.

Measurable Goals: Provide training to the University of South Alabama applicable personnel.

Progress on Goals 2024-2025: There were a total of 87 supervisors and managers trained in 2024. 100% of trained staff considered the training effective. There is no change due to the fact that 100% of trained staff considered the training effective in 2023.

Planned Activities for 2025-2026: Continue with the BMP.

Target Audience: Staff

BMP-2: Construction Plan Review for Construction Stormwater

In order to effectively minimize occurrences of erosion and sediment transfer at construction sites the construction process must begin with the development of plans that incorporate BMPs for construction sites that are relevant to site conditions. To accomplish this the University of South Alabama will detail requirements for written project sediment and erosion control plans; implement plan review procedures to address conformance to storm water guidelines and the use of erosion controls; and provide an opportunity for the MS4 Advisory Committee to review procedures to evaluate effectiveness.

Measurable Goals: Number of plans reviewed.

Progress on Goals 2024-2025: There were five sets of plans reviewed in 2024, three of which are current projects.

Planned Activities for 2025-2026: Continue with BMP.

Target Audience: Staff

BMP-3: Construction Site Inspections

The University of South Alabama has developed standardized procedures for conducting construction site inspections to ensure compliance with storm water management requirements. The University of South Alabama will review existing procedures for tracking construction activities and revise as needed.

For sites greater that 1-acre, the University uses the ADEM NOI process inclusive of individual CBMPP manuals and erosion control plans through ADEM's AEPACS system. This allows for a consistent approach to the mitigation of runoff from construction sites and ensures that the University is up to date with ADEM's general permit requirements for construction stormwater management. The University contracts with a consulting firm to perform the inspections required as a result of rainfall threshold exceedance or in the event of no rainfall, 30-day inspections in conjunction with daily inspections by the contractor. Reports are generated by the consulting engineer indicating any deficiencies in the BMPs and actions required to remedy the issues identified.

Additionally, the University conducts its own inspections via staff. When observations indicate repairs to BMPs are required, the issues are communicated to the contractor for immediate rectification. For sites less that 1-acre, the University conducts internal reviews with the assistance of an outside consulting firm to ensure construction stormwater impacts are minimized. The University of South Alabama will require contractors to utilize an independent QC to inspect and monitor construction sites. The University of South Alabama will require contractors to take immediate corrective actions when conditions are discovered that are not in compliance with construction site storm water guidelines. The University of South Alabama will maintain copies of QC inspections and corrective

actions and report the number in the annual report. The University has developed and implemented a construction site inspection form to include at least the items listed in Parts III.B.3.d.i.

The University maintains an inventory of qualifying construction sites containing relevant contact information for each construction site (i.e., tracking number and construction site contact name, address, phone number, etc.), the size of the construction site, whether the construction site has submitted for permit coverage under ADEM's Construction General Permit ALR100000, and the date the MS4 Advisory Committee received a copy of the site construction plan. The University will make the inventory available upon the Department's request.

Measurable Goals: Report the number of inspections and corrective actions.

Progress on Goals 2024-2025: From a total of 18 BMP inspections, eleven BMP's contained deficiencies. This is being addressed by the USA SEC Department, and corrective actions are being incorporated. This is an increase in violations from last year, considering there were seven BMP violations in 2023.

Planned Activities for 2025-2026: Continue with BMP.

Target Audience: Staff

BMP-4: Construction Site Problem Reporting

The University of South Alabama will provide a mechanism for the campus community to report storm water and water quality concerns related to construction projects. To this end, the University of South Alabama 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 shall be maintained and included in the annual report.

Measurable Goals: Issues that are encountered with construction activities are currently provided through a consulting firm and in coordination with ADEM and the ADEM NOI process.

Progress on Goals 2024-2025: Eleven issues were reported regarding construction activity problems. 100% of issues were reported. The "Confidential Environmental/Hazard Report" on USA's website is used for all environmental/hazard issues, including the reporting of storm water and storm quality concerns. Confidential Environmental/Hazard Report | Department of Safety and Environmental Compliance (southalabama.edu). Functionality of the confidential reporting system has been confirmed. There has been a total of 4,183 website hits in 2024. The phone number for reporting storm water/storm quality concerns is the main line for the USA SEC Department (8 AM – 5 PM, Monday – Friday):

	(251) 460-7070. For any concerns after hours, please call Mr. William Guess at (251) 709-7783.
Planned Activities for 2025-2026:	Continue with BMP.
Target Audience:	Staff

7. Post Construction Storm Water Management in New Development and Redevelopment

The post construction storm water runoff measures consist of BMPs that are designed to minimize water quality impacts from new and redevelopments once construction activities are complete. BMPs selected are designed to: ensure that appropriate reviews are conducted, preconstruction conditions are taken into consideration during the design, and to take preconstruction conditions into consideration throughout the design, construction, and postconstruction phases.

The University has developed a site-plan review and approval process and a required re-approval process when changes to post-construction controls are required.

The University will develop procedures for a post-construction process to demonstrate and document that post-construction storm water measures have been installed per design specifications, which includes enforceable procedures for bringing noncompliant projects into compliance. These procedures are bound within contract documents, completion bonds, maintenance bonds, and performance bonds. The documents either compel the contractor to rectify non-compliant project issues prior to acceptance by the University or provides for remedies during the warranty period.

Independent contractors hired by the University utilize a standardized Land Disturbance Checklist to ensure, to the maximum extent practicable, that the post construction runoff mimics pre-construction hydrology. The checklist is included in Appendix H.

The University of South Alabama encourages and promotes the incorporation and use of low impact development (LID)/green infrastructure where feasible for all of its development projects.

Rationale

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

BMP-1: Plan Review for Construction Activities

In order 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 storm water guidelines. A more thorough standard operating procedure for plan reviews will be determined in future MS4 advisory meetings.

Measurable Goals: Report on number of plans reviewed.

Progress on Goals 2024-2025: There were five sets of plans reviewed in 2024, three of which are current projects.

Planned Activities for 2025-2026: Continue with BMP.

Target Audience: Staff

BMP-2: Three Mile Creek & Twelve Mile Creek Monitoring of Water Quality

To ensure effective review of post-construction BMPs for new and redevelopment projects on the University of South Alabama campus, potential impacts on sensitive or impaired water bodies with approved TMDLs will be evaluated during the plan review process. The University will consult the most recent 303(d) list of impaired waters to identify any potentially affected water bodies. Approved TMDLs will also be reviewed for relevance to the project. These reports are analyzed annually to identify trends and inform decision-making.

Measurable Goals: Conduct quarterly inspections on the biological health of the creeks for BOD, COD, DO, E. coli, and Fecal coliform.

Progress on Goals 2024-2025: 100% compliance attained regarding quarterly inspections on the biological health of Three Mile Creek and Twelve Mile Creek for BOD, COD, DO, E. coli, and Fecal coliform in 2024.

Planned Activities for 2025-2026: Continue with BMP and hold consultants accountable to ensuring these tests are completed quarterly as required.

Target Audience: General public, faculty/staff, students

BMP-3: LID/Green Infrastructure and Structural BMP Inspections

Measurable Goals: Conduct annual inspections on all LID/Green Infrastructure and structural BMPs.

Progress on Goals 2024-2025: Annual inspections have been made by USA SEC Staff. No maintenance/replacement has been needed.

Planned Activities for 2025-2026: Continue with BMP.

Target Audience: Staff

BMP-4: Record Keeping of Inspections and Maintenance

Measurable Goals:	Maintain records of post-construction inspections, maintenance activities and make them available to the Department upon request and require corrective actions to poorly functioning or inadequately maintained postconstruction BMP's.
Progress on Goals 2024-2025:	Postconstruction BMP information is kept by the USA Engineering, Design, and Construction (ED&C) Department and is available upon request.
Planned Activities for 2025-2026:	Continue with BMP.
Target Audience:	Staff

BMP-5: Stormwater Network Mapping

Measurable Goals:	Review of storm drain location map for updates on a yearly basis.
Progress on Goals 2024-2025:	The map was reviewed and updated as of 4/21/2025.
Planned Activities for 2025-2026:	Continue with BMP.
Target Audience:	Staff

8. Pollution Prevention and Good Housekeeping

The Pollution Prevention and Good Housekeeping measure is made up of BMPs that focus on the reduction of pollutants in the storm water runoff that originated from the University of South Alabama operation and maintenance activities. The operations and maintenance activities include vehicle 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.

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 BMPs and consideration of selected BMPs applicability to permit provisions.

BMP-1 Road Maintenance

Routine street maintenance has significant potential to contribute to pollution runoff. In order to minimize potential impact from street maintenance the University of South Alabama will evaluate existing activities to determine if modifications would benefit storm water quality. The University of South Alabama will seek to identify alternative procedures or materials that would reduce the potential of maintenance activities contributing to polluted runoff. Specifications and SOP's will be revised according to identified alternative practices. The University of South Alabama will maintain records of road maintenance activities, alternate practices and include this information as a part of the annual report.

Measurable Goals (a): Conduct Road maintenance activities through the reporting year.

Progress on Goals 2024-2025: Maintained roads as problems occurred. There were six work orders for individual road defects in 2024, all of which are either completed or in the planning stages.

Planned Activities for 2025-2026: Continue with BMP.

Target Audience: General Public, faculty/staff, students

Measurable Goals (b): Number of alternate procedures created through the reporting year.

Progress on Goals 2024-2025: After thorough review, no SOP changes and/or additions were needed.

Planned Activities for 2025-2026: Continue with BMP.

Target Audience: General Public, faculty/staff, students

BMP-2: Litter Collection

The University of South Alabama will continue to promote anti-litter on campus. Several procedures will be utilized in an effort to reduce the discharge of floatable materials into local bodies of water. The University of South Alabama 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. Currently a sixty five person Grounds Department crew are dedicated full time to patrolling the campus and internal roadways to police areas for litter. Litter was collected on a daily basis. The University of South Alabama will include information regarding litter collection on campus as part of the annual report.

Measurable Goals: Establishment of schedule of litter collection / maintain schedule of litter collection.

Progress on Goals 2024-2025: The Grounds Department crew consists of 65 individuals that are dedicated full time to patrolling the campus and internal roadways to police areas for litter. See Appendix J regarding the groundskeeper essential job functions. All litter was deposited into 1-20 yard and 3-30 yard roll offs on-site. The roll offs were dumped a total of 64 times in 2024 for a total of 1,880 yards removed from campus and prevented from entering downstream storm systems. There were no reports of litter received by the SEC Department.

Planned Activities for 2025-2026: Continue with scheduled activities.

Target Audience: Staff

BMP-3: Vehicle Maintenance

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

Measurable Goals: Retention of existing program

Progress on Goals 2024-2025: There were no vehicle leaks reported for University vehicles in 2024. This is significantly less than last year (25). Continuous monitoring is in place.

Planned Activities for 2025-2026: Continue with BMP.

Target Audience: Staff

BMP-4: Hazardous Material Management

Safety and Environmental Compliance has operated a hazardous material management program for many years. This program along with campus facilities are periodically inspected by regulatory agencies for compliance with standards. SEC has an active material inventory system that tracks and accounts for hazardous materials and chemicals on campus. SEC will continue to operate the hazardous material program and will continue to perform environmental audits in laboratories and facilities on campus.

Measurable Goals: Retention of existing program.

Progress on Goals 2024-2025: No hazardous materials were measured. The University has an existing protocol for the management of hazardous materials and is incorporated into the overall MS4 requirements. The protocol complies with the RCRA permit. Department functions involving hazardous waste and materials management are shown in Appendix G.

Planned Activities for 2025-2026: Continue with BMP.

Target Audience: Staff

BMP-5: Training

Safety and Environmental Compliance will prepare training that focuses on pollution prevention and good housekeeping measures. SEC will identify the University of South Alabama personnel who will be required to attend training and will maintain records to this training. Training materials will focus on vehicle and building maintenance, herbicides, and hazardous material management.

Measurable Goals: Number of Employees Trained.

Progress on Goals 2024-2025: 197 employees have been trained. 100 percent considered the training effective. Thus, being the same percentage as 2023, no change has been noted.

Planned Activities for 2025-2026: Continue with BMP.

Target Audience: Staff

Appendix A - Three Mile Creek & Twelve Mile Creek TMDL Data Collection, Results, and Commentary

This appendix includes reports from ACT Lab for water sample testing on Three Mile Creek and Twelve Mile Creek.

Driven Engineering, Inc.
ADDING VALUE, BUILDING RELATIONSHIPS

8005 Morris Hill Road
Semmes, AL 36575
Phone (251) 649-4011
Fax (251) 645-0971

April 24, 2025

William Guess
University of South Alabama
Department of Safety & Environmental Compliance
600 Clinic Drive
Mobile, Alabama 36688

Subject: MS4 Phase II TMDL Sampling, and Testing, Three Mile and Twelve Mile Creek
2024 Yearly Report
Driven Engineering, Inc. Project no: 24078

Dear Mr. Guess,

Analytical Chemical Testing Laboratory was contracted by Driven Engineering, Inc. on behalf of the University to obtain and test water samples upstream and downstream of the USA campus on a quarterly basis since 2023 at sites known as TMDL-1, TMDL-2, TMDL-3, and TMDL-4.

This Report will include four quarterly testing reports on Three mile Creek and Twelve Mile Creek. There will be two dry reports and two wet reports for both Three mile and Twelve mile Creek, with quarters one and two being reported as the wet quarters.

The TMDL-1 site is located near the western boundary of the University. The TMDL-2 site is located near the eastern boundary of the University and downstream of the TMDL-1 site. The TMDL-3 site is located near Hillcrest Rd, on the southernmost west portion of South's property. The TMDL-4 site is located on the southernmost east boundary of South's property, downstream of TMDL-3. The results of the testing throughout the year indicate a healthy water course. The most recent results from 2024 are shown in the tables below. Lab results are presented in Appendix B.

Quarter 1 2024 Test Cycle

Site	DO	BOD	COD	E.coli	Fecal Coliform
TMDL-1 (Three Mile Creek)	21 mg/L	2.7 mg/L	2.0 mg/L	301.0 Colonies / 100mL	0.0 Colonies / 100mL
TMDL-2 (Three Mile Creek)	21 mg/L	2.0 mg/L	2.0 mg/L	301.0 Colonies / 100mL	25.0 Colonies / 100mL
TMDL-3 (Twelve Mile Creek)	8.4 mg/L	1.0 mg/L	6.8 mg/L	301.0 Colonies / 100mL	301.0 Colonies / 100mL
TMDL-4 (Twelve Mile Creek)	21 mg/L	1.0 mg/L	4.6 mg/L	0.0 Colonies / 100mL	301.0 Colonies / 100mL
Acceptable Limits	>3 mg/L	<5.0 mg/L	n/a	200-2000 Colonies / 100mL	200-2000 Colonies / 100mL

Quarter 2 2024 Test Cycle

Site	DO	BOD	COD	E.coli	Fecal Coliform
TMDL-1 (Three Mile Creek)	21.0 mg/L	1.0 mg/L	2.0 mg/L	301.0 Colonies / 100mL	0.0 Colonies / 100mL
TMDL-2 (Three Mile Creek)	21.0 mg/L	1.0 mg/L	2.0 mg/L	301.0 Colonies / 100mL	0.0 Colonies / 100mL
TMDL-3 (Twelve Mile Creek)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
TMDL-4 (Twelve Mile Creek)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
Acceptable Limits	>3 mg/L	<5.0 mg/L	n/a	200-2000 Colonies / 100mL	200-2000 Colonies / 100mL

Quarter 3 2024 Test Cycle

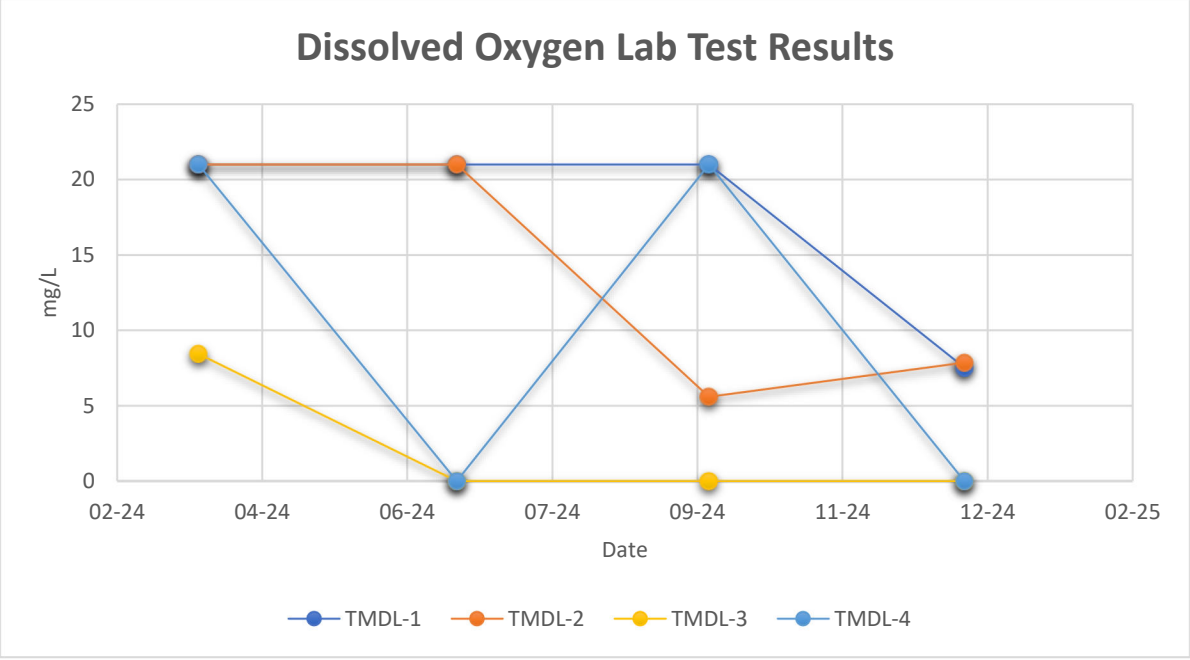
Site	DO	BOD	COD	E.coli	Fecal Coliform
TMDL-1 (Three Mile Creek)	21.0 mg/L	1.0 mg/L	22.0 mg/L	301.0 Colonies / 100mL	0.0 Colonies / 100mL
TMDL-2 (Three Mile Creek)	5.6 mg/L	1.0 mg/L	2.0 mg/L	301.0 Colonies / 100mL	0.0 Colonies / 100mL
TMDL-3 (Twelve Mile Creek)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
TMDL-4 (Twelve Mile Creek)	21.0 mg/L	1.0 mg/L	2.0 mg/L	301.0 Colonies / 100mL	35.0 Colonies / 100mL
Acceptable Limits	>3 mg/L	<5.0 mg/L	n/a	200-2000 Colonies / 100mL	200-2000 Colonies / 100mL

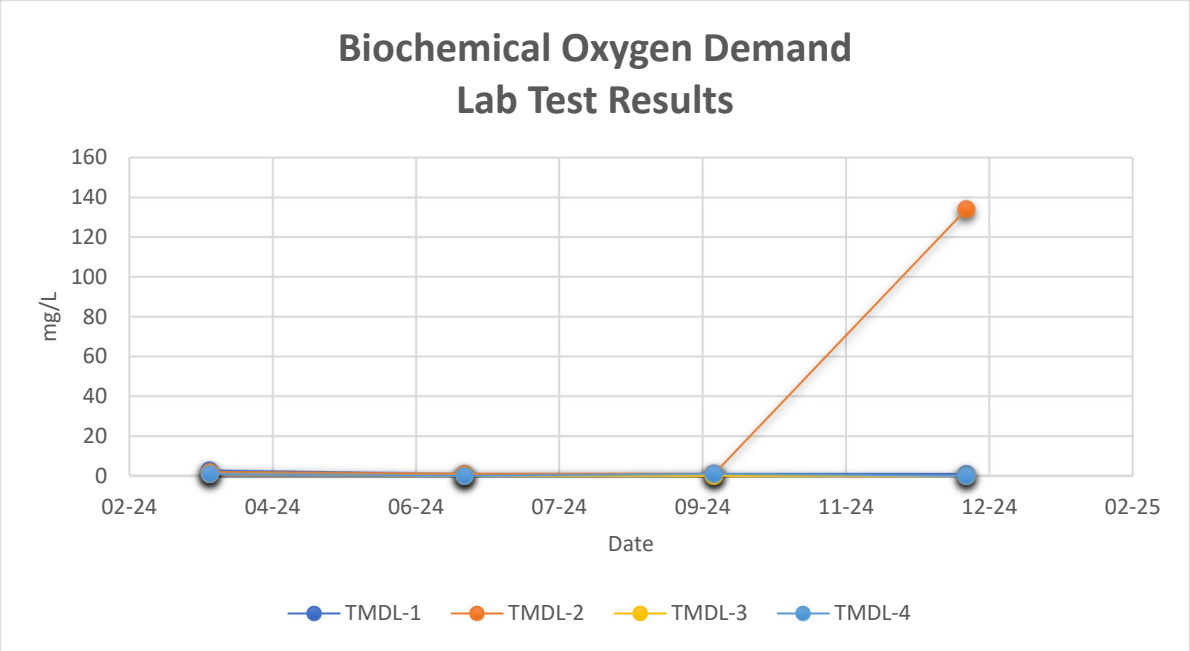
Quarter 4 2024 Test Cycle

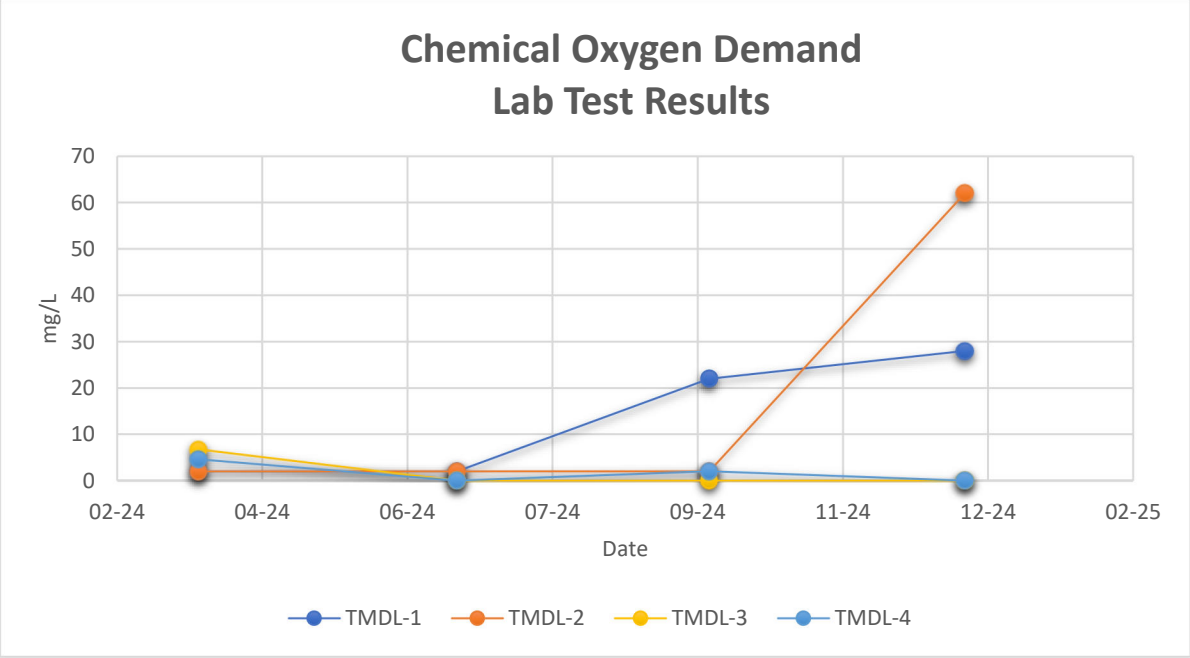
Site	DO	BOD	COD	E.coli	Fecal Coliform
TMDL-1 (Three Mile Creek)	7.5 mg/L	1.0 mg/L	28.0 mg/L	160.0 Colonies / 100mL	0.0 Colonies / 100mL
TMDL-2 (Three Mile Creek)	7.9 mg/L	134.0 mg/L	62.0 mg/L	301.0 Colonies / 100mL	0.0 Colonies / 100mL
TMDL-3 (Twelve Mile Creek)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
TMDL-4 (Twelve Mile Creek)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected

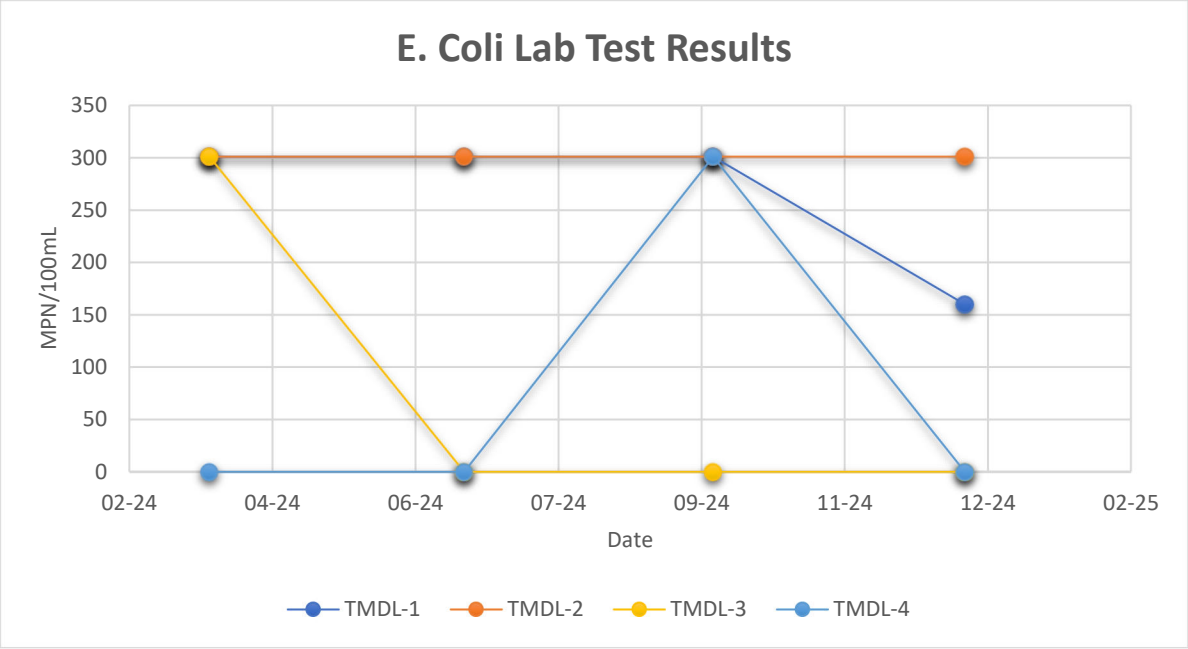
Acceptable Limits	>3 mg/L	<5.0 mg/L	n/a	200-2000 Colonies / 100mL	200-2000 Colonies / 100mL

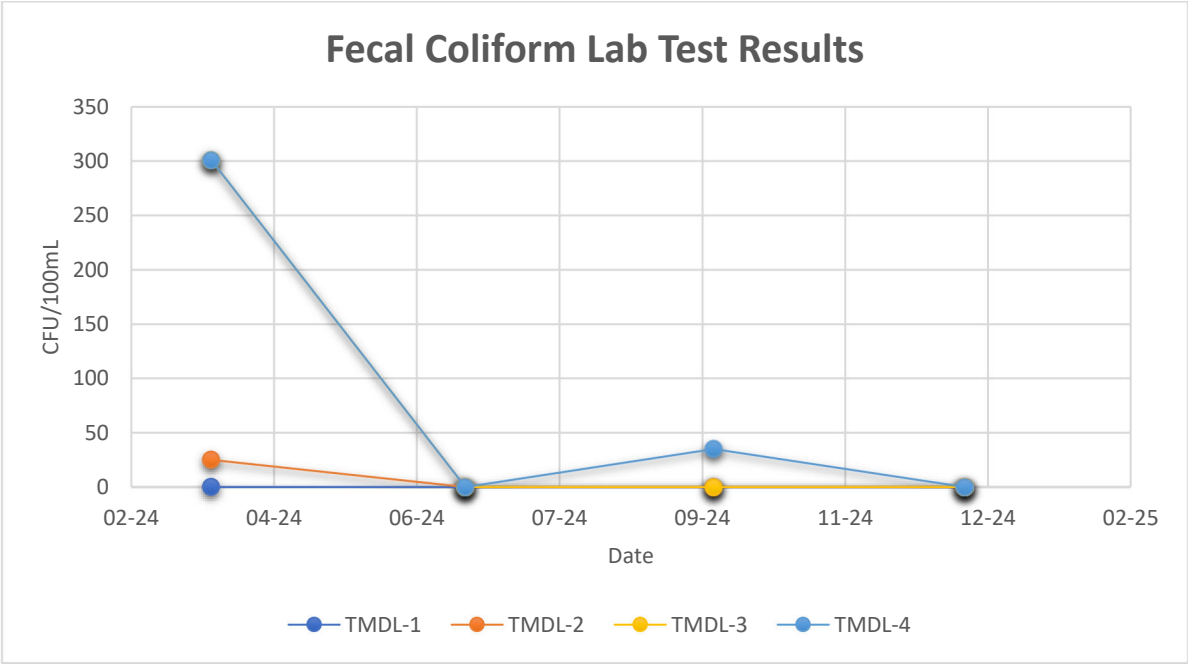
Based on all the data, there seems to only be a few observed increases. Due to having no flow at the Twelve Mile Creek upstream location in quarter 3 (TMDL-3), the graphs indicate a false increase of Dissolved Oxygen and E. Coli at the Twelve Mile Creek downstream location (TMDL-4). The only true increases observed are from the Three Mile Creek downstream location (TMDL-2) during quarter 4 for everything except fecal coliform (fecal coliform stays consistent at 0 Colonies/100mL). The following increases at the Three Mile Creek downstream location (TMDL-2) during quarter 4 consist of: Dissolved Oxygen (+0.33 mg/L), E. Coliform (+>300 colonies/100 mL), Chemical Oxygen Demand (+34 mg/L.), and Biochemical Oxygen Demand (+133 mg/L).




Biochemical Oxygen Demand
Lab Test Results
160
140
120
100
80
60
40
20
0
mg/L
02-24
04-24
06-24
07-24
09-24
11-24
12-24
02-25
Date
TMDL-1
TMDL-2
TMDL-3
TMDL-4


Chemical Oxygen Demand
Lab Test Results
70
60
50
40
30
20
10
0
mg/L
02-24
04-24
06-24
07-24
09-24
11-24
12-24
02-25
Date
TMDL-1
TMDL-2
TMDL-3
TMDL-4


E. Coli Lab Test Results
MPN/100mL
350
300
250
200
150
100
50
0
02-24
04-24
06-24
07-24
09-24
11-24
12-24
02-25
Date
TMDL-1
TMDL-2
TMDL-3
TMDL-4


Fecal Coliform Lab Test Results
CFU/100mL
350
300
250
200
150
100
50
0
02-24
04-24
06-24
07-24
09-24
11-24
12-24
02-25
Date
TMDL-1
TMDL-2
TMDL-3
TMDL-4

Three Mile Creek's water level at the downstream testing location (TMDL-2) has been significantly low for the past 6+ months, possibly explaining some of the observed changes in water quality parameters. Lower water levels often lead to higher concentrations of pollutants, as the same amount of contaminants is concentrated into a smaller volume of water. This could result in increased E. Coliform and other microbial indicators, as well as higher COD and BOD levels due to a more concentrated organic load. The increase in DO could still be a temporary result of factors like algal growth or water aeration, but lower water levels might also reduce the natural mixing and aeration that helps maintain oxygen balance. Additionally, reduced water volume could lead to decreased dilution of pollutants, contributing to oxygen depletion and a more noticeable impact from the organic contamination, ultimately affecting the health of aquatic life.

The University of South Alabama is currently working towards removing undesirable vegetation (infestation by exotic invasive plants such as Cuban bulrush) at the Three Mile Creek downstream location (TMDL-2) to reestablish an open-water habitat and raise the creeks pool level. Once complete, the environmental parameters at this location (as shown in quarter 4) should transition back to normal parameters.

Based on the totality of the data and structural BMPs reported in the annual MS4 report, we have determined that the testing results indicate a healthy creek within the University's reporting area. Please contact our office if you have any questions.

Sincerely,
Driven Engineering, Inc.

Andrew Watley

Andrew Watley, E.I.T.

Avalisha Fisher, P.E.

ANALYTICAL CHEMICAL TESTING
LABORATORY, INC.
Consulting Chemists, Scientists, & Engineers

April 3, 2024

Report To: Driven Engineering, Inc.
8005 Morris Hill Road
Semmes, AL 36575

Report Of: USA MS4 - Twelve-Mile Creek Locations Upstream/Downstream
Proposal #1: 1-1, 1-2, 1-3, 1-4 Locations -Sampling, Testing 1st Quarter 2024
Purchase Order #: 17005

Job #: 24-3793

Attention: Mr. Andrew Watley, E.I.T.

Analytical Chemical Testing Laboratory, Inc. has completed the analysis of water samples taken from the above listed locations. The samples were analyzed as directed, and the following is reported:

SAMPLED: 03/27/24 by S. Lindqvist
ANALYZED: 03/27/24-04/02/24 by SWL, SRC
REVIEWED: 04/03/24 by R. Naman

SAMPLE/DATA/INFO	TESTS	RESULTS	DATE/TIME/ANALYST
ACT ID 24-3793-0327-4 **Grab Sample Upstream Location 1-1 USA MS4** Sampled: 03/27/24 @ 1146	**Dissolved Oxygen**	**>20.0 p.p.m.**	**0327-1146-SWL**
	Escherichia Coliform	**>300 CFU/100mL**	**0327-1430-SWL**
	Fecal Coliform	**0 CFU/100mL**	**0327-1430-SWL**
	Biochemical Oxygen Demand (B.O.D.)	**2.7 p.p.m.**	**0328-1028-SRC**
	Chemical Oxygen Demand (C.O.D.)	**<3 p.p.m.**	**0402-1105-SWL**

CFU=Colony-Forming Units
p.p.m. = parts per million = milligrams per Liter

P.O. Box 161198 · Mobile, Alabama 36616 · 251.479.9205 · Fax 251.478.8181

SAMPLE/DATA/INFO	TESTS	RESULTS	DATE/TIME/ANALYST
ACT ID 24-3793-0327-5 **Grab Sample Downstream Location 1-2 USA MS4** Sampled: 03/27/24 @ 1200	**Dissolved Oxygen**	**>20.0 p.p.m.**	**0327-1207-SWL**
	Escherichia Coliform	**>300 CFU/100mL**	**0327-1435-SWL**
	Fecal Coliform	**25 CFU/100mL**	**0327-1435-SWL**
	Biochemical Oxygen Demand (B.O.D.)	**2.0 p.p.m.**	**0328-1027-SRC**
	Chemical Oxygen Demand (C.O.D.)	**<3 p.p.m.**	**0402-1106-SWL**

SAMPLE/DATA/INFO	TESTS	RESULTS	DATE/TIME/ANALYST
ACT ID 24-3793-0327-6 **Grab Sample Upstream Location 1-3 USA MS4** Sampled: 03/27/24 @ 1220	**Dissolved Oxygen**	**8.44 p.p.m.**	**0327-1235-SWL**
	Escherichia Coliform	**>300 CFU/100mL**	**0327-1440-SWL**
	Fecal Coliform	**>300 CFU/100mL**	**0327-1440-SWL**
	Biochemical Oxygen Demand (B.O.D.)	**<2.0 p.p.m.**	**0327-1732-SWL**
	Chemical Oxygen Demand (C.O.D.)	**6.75 p.p.m.**	**0402-1102-SWL**

SAMPLE/DATA/INFO	TESTS	RESULTS	DATE/TIME/ANALYST
ACT ID 24-3793-0327-7 **Grab Sample Downstream Location 1-4 USA MS4** Sampled: 03/27/24 @ 1230	**Dissolved Oxygen**	**>20.0 p.p.m.**	**0327-1235-SWL**
	Escherichia Coliform	**0 CFU/100mL**	**0327-1445-SWL**
	Fecal Coliform	**>300 CFU/100mL**	**0327-1445-SWL**
	Biochemical Oxygen Demand (B.O.D.)	**<2.0 p.p.m.**	**0328-1730-SRC**
	Chemical Oxygen Demand (C.O.D.)	**4.61 p.p.m.**	**0402-1108-SWL**

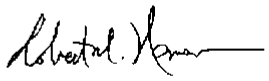
CFU=Colony-Forming Units
p.p.m. = parts per million = milligrams per liter = mg/L

METHODS: Standard Methods for the Examination of Water and Wastewater, 21st Edition.
SW-846, Portable D.O. Meter-HACH.

We appreciate this opportunity to be of service. If there are any questions, please feel free to call.

Very truly yours,

ANALYTICAL CHEMICAL TESTING LABORATORY, INC.



Robert M. Naman, President
Analytical Chemist
AL Inspector Certification# AIN0222694867
Qualified Credentialed Inspector #T6112
Fellow, American Institute
of Chemists, Reg. 15488

RMN/SWL
Attachment: Custody Form

Company Name/Address:

Driven Engineering
8005 Morris Hill Rd
Semmes, AL 36575

Billing Information:

Report to: **Andrew Watley**

Email To:

Project Description: USA - MS4 Three- and Twelve- Mile Creek

City/State Collected:

Please Circle: PT MT CT ET

Phone:

Client Project #

Lab Project # **24-3793**

Collected by (print): **Spangler Lindqvist**

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ____ Y ____

Rush? (Lab MUST Be Notified)
____ Same Day ____ Five Day
____ Next Day ____ 5 Day (Rad Only)
____ Two Day ____ 10 Day (Rad Only)
____ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Pres Chk

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Dissolved Oxygen	E. Coli	Fecal Coliform	Biochemical Oxygen Demand	Chemical Oxygen Demand						Remarks	Sample # (lab only)
1-1	Grab	GW		03/27/24	1146	4	X	X	X	X	X							
1-2	Grab	GW		03/27/24	1200	4	X	X	X	X	X							
1-3	Grab	GW		03/27/24	1220	4	X	X	X	X	X						no sample	
1-4	Grab	GW		03/27/24	1230	4	X	X	X	X	X							

Chain of Custody Page ___ of ___

Analytical Chemical Testing Laboratory Inc.

(251)479-9205

P.O. Box 161198
Mobile, AL 36616
bobnaman@gmail.com

SDG #

Table #

Acctnum:

Template:

Prelogin:

PM:

PB:

Shipped Via:

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking #

Sample Receipt Checklist

COC Seal Present/Intact:	__NP __Y __N
COC Signed/Accurate:	__Y __N
Bottles arrive intact:	__Y __N
Correct bottles used:	__Y __N
Sufficient volume sent:	__Y __N
If Applicable	
VOA Zero Headspace:	__Y __N
Preservation Correct/Checked:	__Y __N
RAD Screen <0.5 mR/hr:	__Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	
Spangler Lindqvist	03/27/24	1400			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:	Hold: Condition: NCF / OK

ANALYTICAL CHEMICAL TESTING
LABORATORY, INC.
Consulting Chemists, Scientists, & Engineers

July 3, 2024

Report To: Driven Engineering, Inc.
8005 Morris Hill Road
Semmes, AL 36575

Report Of: USA MS4 – Three and Twelve-Mile Creek Locations Upstream/Downstream
Proposal #1: 1-1, 1-2, 1-3, 1-4 Locations - Sampling, Testing 2nd Quarter 2024
Purchase Order #: 17005

Job #: 24-3793

Attention: Mr. Andrew Watley, E.I.T.

Analytical Chemical Testing Laboratory, Inc. has completed the analysis of water samples taken from the above listed locations. The samples were analyzed as directed, and the following is reported:

SAMPLED: 06/24/24 by S. Lindqvist
ANALYZED: 06/24-30/24 by SWL, AT
REVIEWED: 07/03/24 by R. Naman

SAMPLE/DATA/INFO	TESTS	RESULTS	DATE/TIME/ANALYST
ACT ID: 24-3793-0624-1 Grab Sample **Upstream** **Location 1-1, USA M4** Sampled: 06/24/24 @ 1029 Sampled by: S. Lindqvist	Dissolved Oxygen	>20 p.p.m.	0624-1030-SWL
	E. coliform	>300colonies/100mL T.N.T.C.	0624-1330-SWL
	Fecal coliform	0 colonies/100mL	0624-1330-SWL
	Chemical Oxygen Demand (COD)	<3 p.p.m.	0624-1110-SWL
	Biochemical Oxygen Demand (BOD_5)	<2 p.p.m.	0625-1709-AT

T.N.T.C. = Too numerous to count
p.p.m. = parts per million = mg/L = milligrams per liter

SAMPLE/DATA/INFO	TESTS	RESULTS	DATE/TIME/ANALYST
ACT ID: 24-3793-0624-2 Grab Sample **Downstream** **Location 1-2, USA M4** Sampled: 06/24/24 @ 1039 Sampled by: S. Lindqvist	Dissolved Oxygen	>20 p.p.m.	0624-1042-SWL
	E. coliform	>300colonies/100mL T.N.T.C.	0624-1335-SWL
	Fecal coliform	0 colonies/100mL	0624-1335-SWL
	Chemical Oxygen Demand (COD)	<3 p.p.m.	0624-1111-SWL
	Biochemical Oxygen Demand (BOD_5)	<2 p.p.m.	0625-1718-AT

SAMPLE/DATA/INFO	TESTS	RESULTS	DATE/TIME/ANALYST
ACT ID: 24-3793-0624-3 Grab Sample **Upstream** **Location 1-3, USA M4** Sampled: 06/24/24 @ 1050 Sampled by: S. Lindqvist	Dissolved Oxygen	No Flow	0624-1050-SWL
	E. coliform	No Flow	0624-1050-SWL
	Fecal coliform	No Flow	0624-1050-SWL
	Chemical Oxygen Demand (COD)	No Flow	0624-1050-SWL
	Biochemical Oxygen Demand (BOD_5)	No Flow	0624-1050-SWL

T.N.T.C. = Too numerous to count
p.p.m. = parts per million = mg/L = milligrams per liter

SAMPLE/DATA/INFO	TESTS	RESULTS	DATE/TIME/ANALYST
ACT ID: 24-3793-0624-4 Grab Sample **Downstream** **Location 1-4, USA M4** Sampled: 06/24/24 @ 1100 Sampled by: S. Lindqvist	Dissolved Oxygen	No Flow	0624-1100-SWL
	E. coliform	No Flow	0624-1100-SWL
	Fecal coliform	No Flow	0624-1100-SWL
	Chemical Oxygen Demand (COD)	No Flow	0624-1100-SWL
	Biochemical Oxygen Demand (BOD_5)	No Flow	0624-1100-SWL

T.N.T.C. = Too numerous to count
p.p.m. = parts per million = mg/L = milligrams per liter

METHODS: Standard Methods for the Examination of Water and Wastewater, 21st Edition.
SW-846, Hach HQD40 Portable D.O. Meter (Calibrated: 06/24/24)

We appreciate this opportunity to be of service. If there are any questions, please feel free to call.

Very truly yours,

ANALYTICAL CHEMICAL TESTING LABORATORY, INC.

Robert M. Naman, President
Analytical Chemist
AL Inspector Certification# AIN0222694867
Qualified Credentialed Inspector #T6112
Fellow, American Institute
of Chemists, Reg. 15488

RMN/SWL
Attachments: Custody Form, Invoice

Company Name/Address:
Driven Engineering
8005 Morris Hill Rd
Semmes, AL 36575

Billing Information:

Report to: **Andrew Watley**

Email To:

Project Description: USA - MS4 Three- and Twelve- Mile Creek

City/State Collected: **Mobile, AL**

Please Circle: PT MT CT ET

Phone:

Client Project #

Lab Project # **24-3793**

Collected by (print): **Spangler Lindqvist**

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ____ Y ____

Rush? (Lab MUST Be Notified)
____ Same Day ____ Five Day
____ Next Day ____ 5 Day (Rad Only)
____ Two Day ____ 10 Day (Rad Only)
____ Three Day

Quote #

Date Results Needed

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Dissolved Oxygen	E. Coli	Fecal Coliform	Biochemical Oxygen Demand	Chemical Oxygen Demand						Remarks	Sample # (lab only)
1-1	Grab	GW		03/27/24	1146	4	X	X	X	X	X							
1-2	Grab	GW		03/27/24	1200	4	X	X	X	X	X							
1-3	Grab	GW		03/27/24	1220	4	X	X	X	X	X						no sample	
1-4	Grab	GW		03/27/24	1230	4	X	X	X	X	X							

Chain of Custody Page ___ of ___

Analytical Chemical Testing Laboratory Inc.

(251)479-9205

P.O. Box 161198
Mobile, AL 36616
bobnaman@gmail.com

SDG #

Table #

Acctnum:

Template:

Prelogin:

PM:

PB:

Shipped Via:

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

SwL

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
Spangler Lindqvist	03/27/24	1400			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:	Hold: Condition: NCF / OK

ANALYTICAL CHEMICAL TESTING LABORATORY, INC.

Consulting Chemists, Scientists, & Engineers

September 30, 2024

Report To: Driven Engineering, Inc.
8005 Morris Hill Road
Semmes, AL 36575

Report Of: USA MS4 – Three and Twelve-Mile Creek Locations Upstream/Downstream
Proposal #1: 1-1, 1-2, 1-3, 1-4 Locations - Sampling, Testing 3rd Quarter 2024
Purchase Order #: 17005

Job #: 24-3793

Attention: Mr. Andrew Watley, E.I.T.

Analytical Chemical Testing Laboratory, Inc. has completed the analysis of water samples taken from the above listed locations. The samples were analyzed as directed, and the following is reported:

SAMPLED: 09/19/24 by S. Lindqvist
ANALYZED: 09/19-25/24 by SWL, AT
REVIEWED: 09/30/24 by R. Naman

SAMPLE/DATA/INFO	TESTS	RESULTS	DATE/TIME/ANALYST
ACT ID: 24-3793-0919-1 Grab Sample **Upstream** **Location 1-1, USA M4** Sampled: 09/19/24 @ 1120 Sampled by: S. Lindqvist	Dissolved Oxygen	>20 p.p.m.	0919-1121-SWL
	E. coliform	>300colonies/100mL T.N.T.C.	0919-1600-SWL
	Fecal coliform	0 colonies/100mL	0919-1604-SWL
	Chemical Oxygen Demand (COD)	22 p.p.m.	0923-0930-SWL
	Biochemical Oxygen Demand (BOD_5)	<2 p.p.m.	0920-1808-AT

T.N.T.C. = Too numerous to count
p.p.m. = parts per million = mg/L = milligrams per liter

SAMPLE/DATA/INFO	TESTS	RESULTS	DATE/TIME/ANALYST
ACT ID: 24-3793-1919-2 Grab Sample **Downstream** **Location 1-2, USA M4** Sampled: 09/19/24 @ 1130 Sampled by: S. Lindqvist	Dissolved Oxygen	5.59 p.p.m.	0919-1144-SWL
	E. coliform	>300colonies/100mL T.N.T.C.	0919-1608-SWL
	Fecal coliform	0 colonies/100mL	0919-1612-SWL
	Chemical Oxygen Demand (COD)	<3 p.p.m.	0923-0931-SWL
	Biochemical Oxygen Demand (BOD_5)	<2 p.p.m.	0920-1813-AT

SAMPLE/DATA/INFO	TESTS	RESULTS	DATE/TIME/ANALYST
ACT ID: 24-3793-0919-3 Grab Sample **Upstream** **Location 1-3, USA M4** Sampled: 09/19/24 @ 1145 Sampled by: S. Lindqvist	Dissolved Oxygen	No Flow	0919-1145-SWL
	E. coliform	No Flow	0919-1145-SWL
	Fecal coliform	No Flow	0919-1145-SWL
	Chemical Oxygen Demand (COD)	No Flow	0919-1145-SWL
	Biochemical Oxygen Demand (BOD_5)	No Flow	0919-1145-SWL

T.N.T.C. = Too numerous to count
p.p.m. = parts per million = mg/L = milligrams per liter

SAMPLE/DATA/INFO	TESTS	RESULTS	DATE/TIME/ANALYST
ACT ID: 24-3793-0919-4 Grab Sample **Downstream** **Location 1-4, USA M4** Sampled: 09/19/24 @ 1200 Sampled by: S. Lindqvist	Dissolved Oxygen	>20 p.p.m.	0919-1210-SWL
	E. coliform	>300colonies/100mL T.N.T.C.	0919-1616-SWL
	Fecal coliform	35 colonies/100mL	0919-1620-SWL
	Chemical Oxygen Demand (COD)	<3 p.p.m.	0923-0932-SWL
	Biochemical Oxygen Demand (BOD_5)	<2 p.p.m.	0920-1820-AT

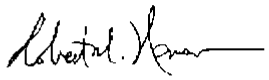
T.N.T.C. = Too numerous to count
p.p.m. = parts per million = mg/L = milligrams per liter

METHODS: Standard Methods for the Examination of Water and Wastewater, 21st Edition.
SW-846, Hach HQD40 Portable D.O. Meter (Calibrated: 09/19/24 @ 1000)

We appreciate this opportunity to be of service. If there are any questions, please feel free to call.

Very truly yours,

ANALYTICAL CHEMICAL TESTING LABORATORY, INC.



Robert M. Naman, President
Analytical Chemist
AL Inspector Certification# AIN0222694867
Qualified Credentialed Inspector #T6112
Fellow, American Institute
of Chemists, Reg. 15488

RMN/SWL
Attachments: Custody Form, Invoice

Company Name/Address:
Driven Engineering
8005 Morris Hill Rd
Semmes, AL 36575

Billing Information:

Report to: **Andrew Watley**

Email To:

Project Description: USA - MS4 Three- and Twelve- Mile Creek

City/State Collected: **Mobile, AL**

Please Circle: PT MT CT ET

Phone:

Client Project #

Lab Project # **24-3793**

Collected by (print): **Spangler Lindqvist**

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ____ Y ____

Rush? (Lab MUST Be Notified)
____ Same Day ____ Five Day
____ Next Day ____ 5 Day (Rad Only)
____ Two Day ____ 10 Day (Rad Only)
____ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Pres Chk

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Dissolved Oxygen	E. Coli	Fecal Coliform	Biochemical Oxygen Demand	Chemical Oxygen Demand						Remarks	Sample # (lab only)
1-1	Grab	GW		03/27/24	1146	4	X	X	X	X	X							
1-2	Grab	GW		03/27/24	1200	4	X	X	X	X	X							
1-3	Grab	GW		03/27/24	1220	4	X	X	X	X	X						no sample	
1-4	Grab	GW		03/27/24	1230	4	X	X	X	X	X							

Chain of Custody Page ___ of ___

Analytical Chemical Testing Laboratory Inc.

(251)479-9205

P.O. Box 161198
Mobile, AL 36616
bobnaman@gmail.com

SDG #

Table #

Acctnum:

Template:

Prelogin:

PM:

PB:

Shipped Via:

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
Spangler Lindqvist	03/27/24	1400			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:	Hold: Condition: NCF / OK

ANALYTICAL CHEMICAL TESTING
LABORATORY, INC.
Consulting Chemists, Scientists, & Engineers

September 30, 2024

Report To: Driven Engineering, Inc.
8005 Morris Hill Road
Semmes, AL 36575

Report Of: USA MS4 – Three and Twelve-Mile Creek Locations Upstream/Downstream
Proposal #1: 1-1, 1-2, 1-3, 1-4 Locations - Sampling, Testing 4TH Quarter 2024
Purchase Order #: 17005

Job #: 24-3793

Attention: Mr. Andrew Watley, E.I.T.

Analytical Chemical Testing Laboratory, Inc. has completed the analysis of water samples taken from the above listed locations. The samples were analyzed as directed, and the following is reported:

SAMPLED: 12/16/24 by S. Lindqvist
ANALYZED: 12/16-26/24 by SWL, HMR
REVIEWED: 12/27/24 by R. Naman

SAMPLE/DATA/INFO	TESTS	RESULTS	DATE/TIME/ANALYST
ACT ID: 24-3793-1216-1 Grab Sample **Upstream** **Location 1-1, USA M4** Sampled: 12/16/24 @ 1145 Sampled by: S. Lindqvist	Dissolved Oxygen	7.53 p.p.m.	1216-1145-SWL
	E. coliform	160 colonies/100mL	1216-1400-SWL
	Fecal coliform	0 colonies/100mL	1216-1400-SWL
	Chemical Oxygen Demand (COD)	28 p.p.m.	1216-1400-SWL
	Biochemical Oxygen Demand (BOD_5)	<2 p.p.m.	1217-1130-HMR

T.N.T.C. = Too numerous to count
p.p.m. = parts per million = mg/L = milligrams per liter

SAMPLE/DATA/INFO	TESTS	RESULTS	DATE/TIME/ANALYST
ACT ID: 24-3793-1919-2 Grab Sample **Downstream** **Location 1-2, USA M4** Sampled: 12/16/24 @ 1120 Sampled by: S. Lindqvist	Dissolved Oxygen	7.86 p.p.m.	1216-1144-SWL
	E. coliform	>300colonies/100mL T.N.T.C.	1216-1404-SWL
	Fecal coliform	0 colonies/100mL	1216-1404-SWL
	Chemical Oxygen Demand (COD)	62 p.p.m.	1226-1400-SWL
	Biochemical Oxygen Demand (BOD_5)	134 p.p.m.	1217-1130-HMR

SAMPLE/DATA/INFO	TESTS	RESULTS	DATE/TIME/ANALYST
ACT ID: 24-3793-1216-3 Grab Sample **Upstream** **Location 1-3, USA M4** Sampled: 12/16/24 @ 1145 Sampled by: S. Lindqvist	Dissolved Oxygen	No Flow	1216-1145-SWL
	E. coliform	No Flow	1216-1145-SWL
	Fecal coliform	No Flow	1216-1145-SWL
	Chemical Oxygen Demand (COD)	No Flow	1216-1145-SWL
	Biochemical Oxygen Demand (BOD_5)	No Flow	1216-1145-SWL

T.N.T.C. = Too numerous to count
p.p.m. = parts per million = mg/L = milligrams per liter

SAMPLE/DATA/INFO	TESTS	RESULTS	DATE/TIME/ANALYST
ACT ID: 24-3793-1216-4 Grab Sample **Downstream** **Location 1-4, USA M4** Sampled: 12/16/24 @ 1200 Sampled by: S. Lindqvist	Dissolved Oxygen	No Flow	1216-1200-SWL
	E. coliform	No Flow	1216-1200-SWL
	Fecal coliform	No Flow	1216-1200-SWL
	Chemical Oxygen Demand (COD)	No Flow	1216-1200-SWL
	Biochemical Oxygen Demand (BOD_5)	No Flow	1216-1200-SWL

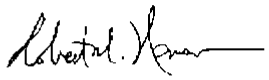
T.N.T.C. = Too numerous to count
p.p.m. = parts per million = mg/L = milligrams per liter

METHODS: Standard Methods for the Examination of Water and Wastewater, 21st Edition.
SW-846, Hach HQD40 Portable D.O. Meter (Calibrated: 12/16/24 @ 1000)

We appreciate this opportunity to be of service. If there are any questions, please feel free to call.

Very truly yours,

ANALYTICAL CHEMICAL TESTING LABORATORY, INC.



Robert M. Naman, President
Analytical Chemist
AL Inspector Certification# AIN0222694867
Qualified Credentialed Inspector #T6112
Fellow, American Institute
of Chemists, Reg. 15488

RMN/SWL
Attachments: Custody Form, Invoice

Company Name/Address:
Driven Engineering
8005 Morris Hill Rd
Semmes, AL 36575

Billing Information:

Report to: **Andrew Watley**

Email To:

Project Description: USA - MS4 Three- and Twelve- Mile Creek

City/State Collected: **Mobile, AL**

Please Circle: PT MT CT ET

Phone: SwL

Client Project #

Lab Project # **24-3793**

Collected by (print): **Spangler Lindqvist**

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ____ Y ____

Rush? (Lab MUST Be Notified)
____ Same Day ____ Five Day
____ Next Day ____ 5 Day (Rad Only)
____ Two Day ____ 10 Day (Rad Only)
____ Three Day

Quote #

Date Results Needed

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Dissolved Oxygen	E. Coli	Fecal Coliform	Biochemical Oxygen Demand	Chemical Oxygen Demand						Remarks	Sample # (lab only)
1-1	Grab	GW		03/27/24	1146	4	X	X	X	X	X							
1-2	Grab	GW		03/27/24	1200	4	X	X	X	X	X							
1-3	Grab	GW		03/27/24	1220	4	X	X	X	X	X						no sample	
1-4	Grab	GW		03/27/24	1230	4	X	X	X	X	X							

Chain of Custody Page ___ of ___

Analytical Chemical Testing Laboratory Inc.

(251)479-9205

P.O. Box 161198
Mobile, AL 36616
bobnaman@gmail.com

SDG #

Table #

Acctnum:

Template:

Prelogin:

PM:

PB:

Shipped Via:

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
Spangler Lindqvist	03/27/24	1400			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:	Hold: Condition: NCF / OK

Appendix B - Three Mile Creek & Twelve Mile Creek Outfall Inspections, Data Collected, and Commentary

Driven Engineering, Inc.
ADDING VALUE, BUILDING RELATIONSHIPS

8005 Morris Hill Road
Semmes, AL 36575
Phone (251) 649-4011
Fax (251) 645-0971

April 24, 2025

William Guess
University of South Alabama
Department of Safety & Environmental Compliance
EOB 220 / 600 Clinic Drive
Mobile, Alabama 36688

Subject: MS4 Phase IV IDDE Outfall Monitoring Report
Driven Engineering, Inc. Project no: 24078

Dear Mr. Guess:

This letter report presents the results of the observation(s) conducted from January 2024 to December 2024 at outfall(s) OF-6, OF-8, OF-26, OF-9, OF-10, OF-27, OF-28, and OF-25 as required by the Phase II MS4 Permit as shown on the Three Mile Creek & Twelve Mile Creek Outfall Map by Driven Engineering, Inc. dated 04/21/2025.

Minimal amounts of sheen observed at outfalls OF-6, and OF-25, possibly due to the high organic matter within the soil. No IDDE's were found at the outfall locations indicated above.

Inspection checklists for the outfalls are presented in Appendix B.

Please contact our office if you have any questions.

Sincerely,
Driven Engineering, Inc.

Andrew Watley

Andrew Watley, E.I.T.

Avalisha Fisher, P.E.

Danville, NH - Stormwater Outfall Inspection Checklist

Outfall ID# OF-06 **Location Aid** _____

Date: 2-20-24 **Time:** 12:00 pm **Weather Today:** Sunny 65°

Surveyor/Observer: Jake Burroughs **Weather over past 72 hours:** Sunny 60°

Flow Observed (circle): YES (NO)

					Field Monitoring Data (note: fill in units for each parameter)				
1. Flow Observations (fill out this section only if flow is observed)	**Pipe Flow Depth (Inches) Note: measure from pipe invert**	**Channel, Ditch or Swale Flow Depth (Inches) Note: measure from center of conveyance**	**Flow Appearance / Color**	**Flow Odor**	**Turbidity**	**Temperature**	**pH**	**Conductivity**	**Comments and Notes**
	◯ 0 Depth	⌣ 0 Depth	__ Clear __ Cloudy/Milky __ Dark (Tea) __ Sheen __ Suspended sediment (opaque) X Other *	__ None __ Chemical __ Petroleum __ Sewage __ Other *	—	—	—	—	No flow

2. Structure Details (pipe or other conveyance info.)	**Pipe Material**	**Pipe Condition**	**Channel, Ditch or Swale Condition**	**Diameter or Width (specify distance units)**	**Slope (degrees)**	**Outlet Structure**	**GPS Coordinates**	**Discharge directly to surface water?****	**Comments and Notes**
	__ Clay X Concrete __ Corrugated Steel __ PVC __ Cast Iron __ HDPE __ Steel (DI)	__ Good X Cracked flange __ Exposed Steel __ Corroded __ Other*	X Good __ Clogged __ Debris __ Scoured or Eroded __ Other*	18"	__ Flat X Moderate __ Steep	__ Headwall __ Riprap __ Flared End __ No Outlet Protection X Other* Concrete flume	30.699816 Lat -88.193905 Lon	__ Yes X No If Yes, Provide Receiving Water Name	N/A

3. Outfall Observations (general conditions at outfall)	**Deposits**	**Surrounding Vegetation**	**Erodibility**	**Land Use at Outfall**	**Land Use Upstream of Outfall**	**Appearance / Color**	**Odor**	**Sediment Depth (inches) (if present)**	**Comments and Notes**
	__ None __ Grease/Oil __ Paper/Trash __ Foam __ Heavy sediment deposits X Other *	X Little or No Distress __ Moderate Distress __ High Distress	X Little or No Erosion __ Small Areas of Erosion __ Many Eroded Areas	X Forest __ Agriculture __ Residential __ Commercial __ Industrial __ Waterbody __ Detention Pond/Basin	X Forest __ Agriculture __ Residential __ Commercial __ Industrial	__ Clear __ Cloudy/Milky __ Dark (Tea) X Sheen __ Suspended sediment (opaque) __ Other *	X None __ Chemical __ Petroleum __ Sewage __ Other *	N/A	observed sheen in ditch 12' upstream from pipe

4. Laboratory Analysis (check if submitted)	**Surfactant**	**Ammonia Concentration**	**E. coli**	**Oil & Grease (if oil or sheen is observed)**	**VOCs (if solvent odor is present)**	**Additional Field Comments and Notes**
	N/A					

Notes:

* Provide additional comments to describe the observations made for the category.

** Discharges directly to surface waters are defined as: any conveyance or discernable concentrated flow (i.e., pipe, swale, ditch) other than overland sheet flow that enters a body of water.

Danville, NH - Stormwater Outfall Inspection Checklist

Outfall ID# OF-8 **Location Aid** _____

Date: 2/20/19 **Time:** 12:10

Surveyor/Observer: Jake Burrell

Weather Today: Sunny 65°

Weather over past 72 hours: 11

Flow Observed (circle): (YES) NO

					Field Monitoring Data (note: fill in units for each parameter)				
1. Flow Observations (fill out this section only if flow is observed)	**Pipe Flow Depth (inches) Note: measure from pipe invert**	**Channel, Ditch or Swale Flow Depth (inches) Note: measure from center of conveyance**	**Flow Appearance / Color**	**Flow Odor**	**Turbidity**	**Temperature**	**pH**	**Conductivity**	**Comments and Notes**
	18" Depth	N/A Depth direct discharge	X Clear __ Cloudy/Milky __ Dark (Tea) __ Sheen __ Suspended sediment (opaque) __ Other *	X None __ Chemical __ Petroleum __ Sewage __ Other *	—	—	—	—	Complete Submerge

2. Structure Details (pipe or other conveyance info.)	**Pipe Material**	**Pipe Condition**	**Channel, Ditch or Swale Condition**	**Diameter or Width (specify distance units)**	**Slope (degrees)**	**Outlet Structure**	**GPS Coordinates**	**Discharge directly to surface water?****	**Comments and Notes**
	__ Clay X Concrete __ Corrugated Steel __ PVC __ Cast Iron __ HDPE __ Steel (DI)	X Good __ Cracked __ Exposed Steel __ Corroded __ Other*	X Good __ Clogged __ Debris __ Scoured or Eroded __ Other*	18"	__ Flat X Moderate __ Steep	__ Headwall __ Riprap __ Flared End X No Outlet Protection __ Other*	30 70063.03 Lat -71 19 03.57 Lon	X Yes __ No If Yes, Provide Receiving Water Name 3 mile Creek	N/A

3. Outfall Observations (general conditions at outfall)	**Deposits**	**Surrounding Vegetation**	**Erodibility**	**Land Use at Outfall**	**Land Use Upstream of Outfall**	**Appearance / Color**	**Odor**	**Sediment Depth (inches) (if present)**	**Comments and Notes**
	X None __ Grease/Oil __ Paper/Trash __ Foam __ Heavy sediment deposits __ Other *	X Little or No Distress __ Moderate Distress __ High Distress	X Little or No Erosion __ Small Areas of Erosion __ Many Eroded Areas	X Forest __ Agriculture __ Residential __ Commercial __ Industrial __ Waterbody __ Detention Pond/Basin	X Forest __ Agriculture __ Residential __ Commercial __ Industrial	X Clear __ Cloudy/Milky __ Dark (Tea) __ Sheen __ Suspended sediment (opaque) __ Other *	X None __ Chemical __ Petroleum __ Sewage __ Other *	2"	N/A

4. Laboratory Analysis (check if submitted)	**Surfactant**	**Ammonia Concentration**	**E. coli**	**Oil & Grease (if oil or sheen is observed)**	**VOCs (if solvent odor is present)**	**Additional Field Comments and Notes**
	N/A					

Notes:

* Provide additional comments to describe the observations made for the category.

** Discharges directly to surface waters are defined as: any conveyance or discernable concentrated flow (i.e., pipe, swale, ditch) other than overland sheet flow that enters a body of water.

Stormwater Outfall Inspection Checklist

Outfall ID# DE-2in **Location Aid** 48" CMP (-2)

Date: 6/28/24 **Time:** 4:20 PM **Weather Today:** Scattered Storms, 89°F

Surveyor/Observer: Andrew Watley **Weather over past 72 hours:** Scattered Storms

Flow Observed (circle): YES NO

					Field Monitoring Data (note: fill in units for each parameter)				
1. Flow Observations (fill out this section only if flow is observed)	**Pipe Flow Depth (inches) Note: measure from pipe invert**	**Channel, Ditch or Swale Flow Depth (inches) Note: measure from center of conveyance**	**Flow Appearance / Color**	**Flow Odor**	**Turbidity**	**Temperature**	**pH**	**Conductivity**	**Comments and Notes**
	≤2" Depth	≤2" Depth	☐ Clear ☐ Cloudy/Milky ☑ Dark (Tea) ☐ Sheen ☐ Suspended sediment (opaque) ☐ Other *	☑ None ☐ Chemical ☐ Petroleum ☐ Sewage ☐ Other *	—	—	—	—	N/A Good
2. Structure Details (pipe or other conveyance info.)	**Pipe Material**	**Pipe Condition**	**Channel, Ditch or Swale Condition**	**Diameter or Width (specify distance units)**	**Slope (degrees)**	**Outlet Structure**	**GPS Coordinates**	**Discharge directly to surface water?****	**Comments and Notes**
	☐ Clay ☐ Concrete ☑ Corrugated Steel ☐ PVC ☐ Cast Iron ☐ HDPE ☐ Steel (DI)	☑ Good ☐ Cracked ☐ Exposed Steel ☐ Corroded ☐ Other*	☑ Good ☐ Clogged ☐ Debris ☐ Scoured or Eroded ☐ Other*	Channel width = +/- 15'	☑ Flat ☐ Moderate ☐ Steep	☐ Headwall ☐ Riprap ☑ Flared End ☐ No Outlet Protection ☐ Other*	30.16923 Lat -88.1868 Lon	☑ Yes ☐ No If Yes, Provide Receiving Water Name 3 mile Creek	N/A Good
3. Outfall Observations (general conditions at outfall)	**Deposits**	**Surrounding Vegetation**	**Erodibility**	**Land Use at Outfall**	**Land Use Upstream of Outfall**	**Appearance / Color**	**Odor**	**Sediment Depth (inches) (if present)**	**Comments and Notes**
	☑ None ☐ Grease/Oil ☐ Paper/Trash ☐ Foam ☐ Heavy sediment deposits ☐ Other *	☑ Little or No Distress ☐ Moderate Distress ☐ High Distress	☑ Little or No Erosion ☐ Small Areas of Erosion ☐ Many Eroded Areas	☑ Forest ☐ Agriculture ☐ Residential ☐ Commercial ☐ Industrial ☐ Waterbody ☐ Detention Pond/Basin	☐ Forest ☐ Agriculture ☐ Residential ☑ Commercial ☐ Industrial	☐ Clear ☑ Cloudy/Milky ☑ Dark (Tea) ☐ Sheen ☐ Suspended sediment (opaque) ☐ Other *	☑ None ☐ Chemical ☐ Petroleum ☐ Sewage ☐ Other *	—	N/A Good
4. Laboratory Analysis (check if submitted)	**Surfactant**	**Ammonia Concentration**	**E. coli**	**Oil & Grease (if oil or sheen is observed)**	**VOCs (if solvent odor is present)**	**Additional Field Comments and Notes**			
	—	—	—	—	—	N/A Good			

Notes:

* Provide additional comments to describe the observations made for the category.

** Discharges directly to surface waters are defined as: any conveyance or discernable concentrated flow (i.e., pipe, swale, ditch) other than overland sheet flow that enters a body of water.

Stormwater Outfall Inspection Checklist

Outfall ID# OF-9 **Location Aid** _____

Date: 8/5/24 **Time:** 11:14 AM **Weather Today:** Sunny, 89° F

Surveyor/Observer: Andrew Watley **Weather over past 72 hours:** Sunny, 85°-95° F

Flow Observed (circle): YES (NO)

					Field Monitoring Data (note: fill in units for each parameter)				
1. Flow Observations (fill out this section only if flow is observed)	**Pipe Flow Depth (inches) Note: measure from pipe invert**	**Channel, Ditch or Swale Flow Depth (inches) Note: measure from center of conveyance**	**Flow Appearance / Color**	**Flow Odor**	**Turbidity**	**Temperature**	**pH**	**Conductivity**	**Comments and Notes**
	◯ 0 ____ Depth	⌣ 0 ____ Depth	__ Clear __ Cloudy/Milky __ Dark (Tea) __ Sheen __ Suspended sediment (opaque) ✓ Other * N/A	__ None __ Chemical __ Petroleum __ Sewage ✓ Other * N/A	—	—	—	—	No Flow

2. Structure Details (pipe or other conveyance info.)	**Pipe Material**	**Pipe Condition**	**Channel, Ditch or Swale Condition**	**Diameter or Width (specify distance units)**	**Slope (degrees)**	**Outlet Structure**	**GPS Coordinates**	**Discharge directly to surface water?** **	**Comments and Notes**
	__ Clay ✓ Concrete __ Corrugated Steel __ PVC __ Cast Iron __ HDPE __ Steel (DI)	✓ Good __ Cracked __ Exposed Steel __ Corroded __ Other*	__ Good ✓ Clogged ✓ Debris __ Scoured or Eroded __ Other*	24"	✓ Flat ✓ Moderate __ Steep	✓ Headwall __ Riprap __ Flared End __ No Outlet Protection __ Other*	30.7085515 Lat -88.1871320 Lon	✓ Yes ✓ No If Yes, Provide Receiving Water Name	See below

3. Outfall Observations (general conditions at outfall)	**Deposits**	**Surrounding Vegetation**	**Erodibility**	**Land Use at Outfall**	**Land Use Upstream of Outfall**	**Appearance / Color**	**Odor**	**Sediment Depth (inches) (if present)**	**Comments and Notes**
	__ None __ Grease/Oil __ Paper/Trash __ Foam ✓ Heavy sediment deposits __ Other *	__ Little or No Distress ✓ Moderate Distress __ High Distress	✓ Little or No Erosion __ Small Areas of Erosion __ Many Eroded Areas	__ Forest __ Agriculture __ Residential ✓ Commercial __ Industrial __ Waterbody __ Detention Pond/Basin	✓ Forest __ Agriculture __ Residential __ Commercial __ Industrial	__ Clear __ Cloudy/Milky __ Dark (Tea) __ Sheen __ Suspended sediment (opaque) ✓ Other * No flow	✓ None __ Chemical __ Petroleum __ Sewage __ Other *	12" in Pipe >2-3" outfall	See below

4. Laboratory Analysis (check if submitted)	**Surfactant**	**Ammonia Concentration**	**E. coli**	**Oil & Grease (if oil or sheen is observed)**	**VOCs (if solvent odor is present)**	**Additional Field Comments and Notes**
	—	—	—	—	—	excessive sediment buildup @ outfall, visible slope increase. Stormwater looks to accumulate/sit against the right edge of the headwall during stormwater events.

Notes:

* Provide additional comments to describe the observations made for the category.

** Discharges directly to surface waters are defined as: any conveyance or discernable concentrated flow (i.e., pipe, swale, ditch) other than overland sheet flow that enters a body of water

Stormwater Outfall Inspection Checklist

Outfall ID# OF-1D **Location Aid** _____

Date: 8/5/24 **Time:** 11:34 AM **Weather Today:** Sunny; 89° F

Surveyor/Observer: Andrew Wortley **Weather over past 72 hours:** Sunny 85-95° F

Flow Observed (circle): YES (NO)

					Field Monitoring Data (note: fill in units for each parameter)				
1. Flow Observations (fill out this section only if flow is observed)	**Pipe Flow Depth (inches) Note: measure from pipe invert**	**Channel, Ditch or Swale Flow Depth (inches) Note: measure from center of conveyance**	**Flow Appearance / Color**	**Flow Odor**	**Turbidity**	**Temperature**	**pH**	**Conductivity**	**Comments and Notes**
	○ 0 Depth	⌒ 0 Depth	__ Clear __ Cloudy/Milky __ Dark (Tea) __ Sheen __ Suspended sediment (opaque) ✓ Other * N/A	__ None __ Chemical __ Petroleum __ Sewage ✓ Other * N/A	—	—	—	—	—

	Pipe Material	**Pipe Condition**	**Channel, Ditch or Swale Condition**	**Diameter or Width (specify distance units)**	**Slope (degrees)**	**Outlet Structure**	**GPS Coordinates**	**Discharge directly to surface water?****	**Comments and Notes**
2. Structure Details (pipe or other conveyance info.)	__ Clay ✓ Concrete __ Corrugated Steel __ PVC __ Cast Iron __ HDPE __ Steel (DI)	✓ Good __ Cracked __ Exposed Steel __ Corroded __ Other*	__ Good __ Clogged ✓ Debris __ Scoured or Eroded __ Other*	24"	✓ Flat __ Moderate __ Steep	✓ Headwall __ Riprap __ Flared End __ No Outlet Protection __ Other*	30.700527 Lat -88.122673 Lon	__ Yes ✓ No If Yes, Provide Receiving Water Name	See below

	Deposits	**Surrounding Vegetation**	**Erodibility**	**Land Use at Outfall**	**Land Use Upstream of Outfall**	**Appearance / Color**	**Odor**	**Sediment Depth (inches) (if present)**	**Comments and Notes**
3. Outfall Observations (general conditions at outfall)	✓ None __ Grease/Oil __ Paper/Trash __ Foam __ Heavy sediment deposits __ Other *	✓ Little or No Distress __ Moderate Distress __ High Distress	✓ Little or No Erosion __ Small Areas of Erosion __ Many Eroded Areas	__ Forest __ Agriculture __ Residential ✓ Commercial __ Industrial __ Waterbody __ Detention Pond/Basin	✓ Forest __ Agriculture __ Residential __ Commercial __ Industrial	__ Clear __ Cloudy/Milky __ Dark (Tea) __ Sheen __ Suspended sediment (opaque) ✓ Other * No flow	✓ None __ Chemical __ Petroleum __ Sewage __ Other *	3-4" in pipe 12"+/- @ outfall	See below

	Surfactant	**Ammonia Concentration**	**E. coli**	**Oil & Grease (if oil or sheen is observed)**	**VOCs (if solvent odor is present)**	**Additional Field Comments and Notes**
4. Laboratory Analysis (check if submitted)	—	—	—	—	—	① Visible flow route observed, although still distressed from vegetation immediately downstream. ② Visible cracks in concrete channel

Notes:

* Provide additional comments to describe the observations made for the category

** Discharges directly to surface waters are defined as: any conveyance or discernable concentrated flow (i.e., pipe, swale, ditch) other than overland sheet flow that enters a body of water

Stormwater Outfall Inspection Checklist

Outfall ID# OF-27 **Location Aid** _____

Date: 8/5/24 **Time:** _____ **Weather Today:** Sunny, 89° F

Surveyor/Observer: Andrew Watley **Weather over past 72 hours:** Sunny, 85°-95° F

Flow Observed (circle): YES (NO)

					Field Monitoring Data (note: fill in units for each parameter)				
1. Flow Observations (fill out this section only if flow is observed)	**Pipe Flow Depth (inches) Note: measure from pipe invert**	**Channel, Ditch or Swale Flow Depth (inches) Note: measure from center of conveyance**	**Flow Appearance / Color**	**Flow Odor**	**Turbidity**	**Temperature**	**pH**	**Conductivity**	**Comments and Notes**
	○ 0 Depth	⌣ 0 Depth	__ Clear __ Cloudy/Milky __ Dark (Tea) __ Sheen __ Suspended sediment (opaque) ✓ Other * N/A	__ None __ Chemical __ Petroleum __ Sewage ✓ Other * N/A	—	—	—	—	—

	Pipe Material	**Pipe Condition**	**Channel, Ditch or Swale Condition**	**Diameter or Width (specify distance units)**	**Slope (degrees)**	**Outlet Structure**	**GPS Coordinates**	**Discharge directly to surface water?****	**Comments and Notes**
2. Structure Details (pipe or other conveyance info.)	__ Clay ✓ Concrete __ Corrugated Steel __ PVC __ Cast Iron __ HDPE __ Steel (DI)	✓ Good __ Cracked __ Exposed Steel __ Corroded __ Other*	✓ Good __ Clogged __ Debris __ Scoured or Eroded __ Other*	36"	✓ Flat __ Moderate __ Steep	__ Headwall __ Riprap __ Flared End __ No Outlet Protection ✓ Other*	30.6843 Lat -88.1868 Lon.	__ Yes __ No If Yes, Provide Receiving Water Name	N/A

	Deposits	**Surrounding Vegetation**	**Erodibility**	**Land Use at Outfall**	**Land Use Upstream of Outfall**	**Appearance / Color**	**Odor**	**Sediment Depth (inches) (if present)**	**Comments and Notes**
3. Outfall Observations (general conditions at outfall)	✓ None __ Grease/Oil __ Paper/Trash __ Foam __ Heavy sediment deposits __ Other *	✓ Little or No Distress __ Moderate Distress __ High Distress	✓ Little or No Erosion __ Small Areas of Erosion __ Many Eroded Areas	__ Forest __ Agriculture __ Residential __ Commercial __ Industrial ✓ Waterbody __ Detention Pond/Basin	__ Forest __ Agriculture ✓ Residential ✓ Commercial __ Industrial	__ Clear __ Cloudy/Milky __ Dark (Tea) __ Sheen __ Suspended sediment (opaque) ✓ Other * N/A	✓ None __ Chemical __ Petroleum __ Sewage __ Other *	0"	N/A

	Surfactant	**Ammonia Concentration**	**E. coli**	**Oil & Grease (if oil or sheen is observed)**	**VOCs (if solvent odor is present)**	**Additional Field Comments and Notes**
4. Laboratory Analysis (check if submitted)	—	—	—	—	—	Good working condition. no visible concerns.

Notes:

* Provide additional comments to describe the observations made for the category.

** Discharges directly to surface waters are defined as: any conveyance or discernable concentrated flow (i.e., pipe, swale, ditch) other than overland sheet flow that enters a body of water

Stormwater Outfall Inspection Checklist

Outfall ID# OF-28 **Location Aid** _____

Date: 8/13/24 **Time:** _____ **Weather Today:** Sunny 89°F

Surveyor/Observer: Andrew Wattley **Weather over past 72 hours:** Sunny 85-95° F

Flow Observed (circle): YES (NO)

					Field Monitoring Data (note: fill in units for each parameter)				
1. Flow Observations (fill out this section only if flow is observed)	**Pipe Flow Depth (inches) Note: measure from pipe invert**	**Channel, Ditch or Swale Flow Depth (inches) Note: measure from center of conveyance**	**Flow Appearance / Color**	**Flow Odor**	**Turbidity**	**Temperature**	**pH**	**Conductivity**	**Comments and Notes**
	◯ 0 Depth	⌒ 0 Depth	__ Clear __ Cloudy/Milky __ Dark (Tea) __ Sheen __ Suspended sediment (opaque) ✓ Other * N/A	__ None __ Chemical __ Petroleum __ Sewage ✓ Other * N/A	—	—	—	—	—

2. Structure Details (pipe or other conveyance info.)	**Pipe Material**	**Pipe Condition**	**Channel, Ditch or Swale Condition**	**Diameter or Width (specify distance units)**	**Slope (degrees)**	**Outlet Structure**	**GPS Coordinates**	**Discharge directly to surface water?****	**Comments and Notes**
	__ Clay ✓ Concrete __ Corrugated Steel __ PVC __ Cast Iron __ HDPE __ Steel (DI)	__ Good __ Cracked __ Exposed Steel __ Corroded ✓ Other*	__ Good __ Clogged __ Debris __ Scoured or Eroded ✓ Other*	36"	✓ Flat __ Moderate __ Steep	__ Headwall __ Riprap __ Flared End __ No Outlet Protection ✓ Other*	30.6847 Lat -88.1892 Lon	✓ Yes __ No If Yes, Provide Receiving Water Name 12 mile Creek	See below

3. Outfall Observations (general conditions at outfall)	**Deposits**	**Surrounding Vegetation**	**Erodibility**	**Land Use at Outfall**	**Land Use Upstream of Outfall**	**Appearance / Color**	**Odor**	**Sediment Depth (inches) (if present)**	**Comments and Notes**
	__ None __ Grease/Oil __ Paper/Trash __ Foam __ Heavy sediment deposits ✓ Other *	__ Little or No Distress __ Moderate Distress ✓ High Distress	✓ Little or No Erosion __ Small Areas of Erosion __ Many Eroded Areas	__ Forest __ Agriculture __ Residential __ Commercial __ Industrial ✓ Waterbody __ Detention Pond/Basin	__ Forest __ Agriculture ✓ Residential ✓ Commercial __ Industrial	__ Clear __ Cloudy/Milky __ Dark (Tea) __ Sheen __ Suspended sediment (opaque) ✓ Other *	✓ None __ Chemical __ Petroleum __ Sewage __ Other *	Undetermined	See below

4. Laboratory Analysis (check if submitted)	**Surfactant**	**Ammonia Concentration**	**E. coli**	**Oil & Grease (if oil or sheen is observed)**	**VOCs (if solvent odor is present)**	**Additional Field Comments and Notes**
	—	—	—	—	—	Could not locate pipe due to very high amounts of vegetation

Notes:

* Provide additional comments to describe the observations made for the category

** Discharges directly to surface waters are defined as: any conveyance or discernable concentrated flow (i.e., pipe, swale, ditch) other than overland sheet flow that enters a body of water

Danville, NH - Stormwater Outfall Inspection Checklist

Outfall ID# DF-25 **Location Aid** 30.6985, -88.1821

Date: 10/15/24 **Time:** 9:05 AM **Weather Today:** Cloudy, 64° F

Surveyor/Observer: _____ **Weather over past 72 hours:** Sunny, 65-85° F

Flow Observed (circle): YES (NO)

					Field Monitoring Data (note: fill in units for each parameter)				
1. Flow Observations (fill out this section only if flow is observed)	**Pipe Flow Depth (inches) Note: measure from pipe invert**	**Channel, Ditch or Swale Flow Depth (inches) Note: measure from center of conveyance**	**Flow Appearance / Color**	**Flow Odor**	**Turbidity**	**Temperature**	**pH**	**Conductivity**	**Comments and Notes**
	 10-12" Depth	 >12" Depth	☐ Clear ☐ Cloudy/Milky ☑ Dark (Tea) ☐ Sheen ☐ Suspended sediment (opaque) ☐ Other *	☑ None ☐ Chemical ☐ Petroleum ☐ Sewage ☐ Other *	—	—	—	—	Channel depth hard to determine due to dark water appearance

2. Structure Details (pipe or other conveyance info.)	**Pipe Material**	**Pipe Condition**	**Channel, Ditch or Swale Condition**	**Diameter or Width (specify distance units)**	**Slope (degrees)**	**Outlet Structure**	**GPS Coordinates**	**Discharge directly to surface water?****	**Comments and Notes**
	☐ Clay ☑ Concrete ☐ Corrugated Steel ☐ PVC ☐ Cast Iron ☐ HDPE ☐ Steel (DI)	☑ Good ☐ Cracked ☐ Exposed Steel ☐ Corroded ☐ Other*	☑ Good ☐ Clogged ☐ Debris ☐ Scoured or Eroded ☐ Other*	72"	☑ Flat ☐ Moderate ☐ Steep	☑ Headwall ☐ Riprap ☐ Flared End ☐ No Outlet Protection ☐ Other*	30.6985 Lat -88.1821 Lon	☑ Yes ☐ No If Yes, Provide Receiving Water Name 3-mile Creek	N/A

3. Outfall Observations (general conditions at outfall)	**Deposits**	**Surrounding Vegetation**	**Erodibility**	**Land Use at Outfall**	**Land Use Upstream of Outfall**	**Appearance / Color**	**Odor**	**Sediment Depth (inches) (if present)**	**Comments and Notes**
	☑ None ☐ Grease/Oil ☐ Paper/Trash ☐ Foam ☐ Heavy sediment deposits ☐ Other *	☑ Little or No Distress ☐ Moderate Distress ☐ High Distress	☐ Little or No Erosion ☑ Small Areas of Erosion ☐ Many Eroded Areas	☑ Forest ☐ Agriculture ☐ Residential ☐ Commercial ☐ Industrial ☐ Waterbody ☐ Detention Pond/Basin	☐ Forest ☐ Agriculture ☐ Residential ☑ Commercial ☐ Industrial	☐ Clear ☐ Cloudy/Milky ☐ Dark (Tea) ☑ Sheen ☐ Suspended sediment (opaque) ☐ Other *	☑ None ☐ Chemical ☐ Petroleum ☐ Sewage ☐ Other *	—	See below

4. Laboratory Analysis (check if submitted)	**Surfactant**	**Ammonia Concentration**	**E. coli**	**Oil & Grease (if oil or sheen is observed)**	**VOCs (if solvent odor is present)**	**Additional Field Comments and Notes**
	—	—	—	—	—	-very minimal amounts of sheen observed -8-10" Void @ northeastern edge of headwall due to erosion. ↳ Issue seems to be Stormwater flowing from the top of the hill, going alongside eastern edge of headwall, washing away sediment. - Fill and minimal amount of Riprap recommended for eroded spots.

Notes:

* Provide additional comments to describe the observations made for the category.

** Discharges directly to surface waters are defined as: any conveyance or discernable concentrated flow (i.e., pipe, swale, ditch) other than overland sheet flow that enters a body of water.

Appendix C – University of South Alabama Education and Training Material

IF CONTACTED REGARDING A POTENTIAL ILLICIT DISCHARGE ON CAMPUS

Please get the following information:

Specific location of the discharge (landmark or method to identify location}
Characteristics of the discharge (odor, color, etc.}
Date & time of the observation
General weather conditions at the time of observation

(this is *a* requirement *for* our MS-4 permit)

UNIVERSITY OF
SOUTH ALABAMA

ILLICIT DISCHARGE TOOLBOX TALK

What is an Illicit Discharge?

An Illicit Discharge (Improper Disposal) is any kind of emission to a Municipal Separate Storm Sewer Systems (MS4) that is not entirely composed of storm water. The MS4 consists of storm drains, ditches, man-made channels, and municipal streets. Eliminating illicit discharges into storm water can reduce pollution of our waterways.

Allowable Storm Water Discharges

- Water Line Flushing
- Landscape irrigation
- Diverted stream flows
- Rising ground water
- Uncontaminated ground water infiltration
- Uncontaminated pumped ground water
- Discharges from water sources
- Foundation and footing drains
- Air conditioning condensation
- Springs
- Water from crawl space pumps
- Lawn watering runoff
- Individual residential car washing and charitable car washes
- Flows from wetlands
- De-chlorinated swimming pool discharges
- Residual street wash water
- Discharges from firefighting activities
- Flows from riparian habitats and wetlands
- Non-storm water discharges which are in compliance with a separate National Pollutant Discharge Elimination System (NPDES) permit

Prohibited Storm Water Discharges

- Oil sheen in a body of water
- Leaves or grass clippings deposited in storm drains
- Spills or dumping of oil, paint, household cleaners, antifreeze, pesticides, or fertilizers
- Discharge of chlorinated swimming pool water to a storm drain
- Sediment tracking from construction sites into streets
- Illegal dumping (at sites where regular garbage and trash is not picked up)
- Someone dropping litter
- Anything being disposed of into a storm drain

Procedure for Reporting a Suspected Illicit Discharge

To report a suspected illicit discharge on campus you may either:

- Call the Safety & Environmental Compliance office at (251) 460-7070
- Go to the Safety & Environmental Compliance webpage and fill outthe"Confidential Environmental/Hazard Report" listed under the MS4 Information header. The link is as listed below...
  https://www.southalabama.edu/departments/environmental/confidentialreport.html .

  Reports can be made anonymously.

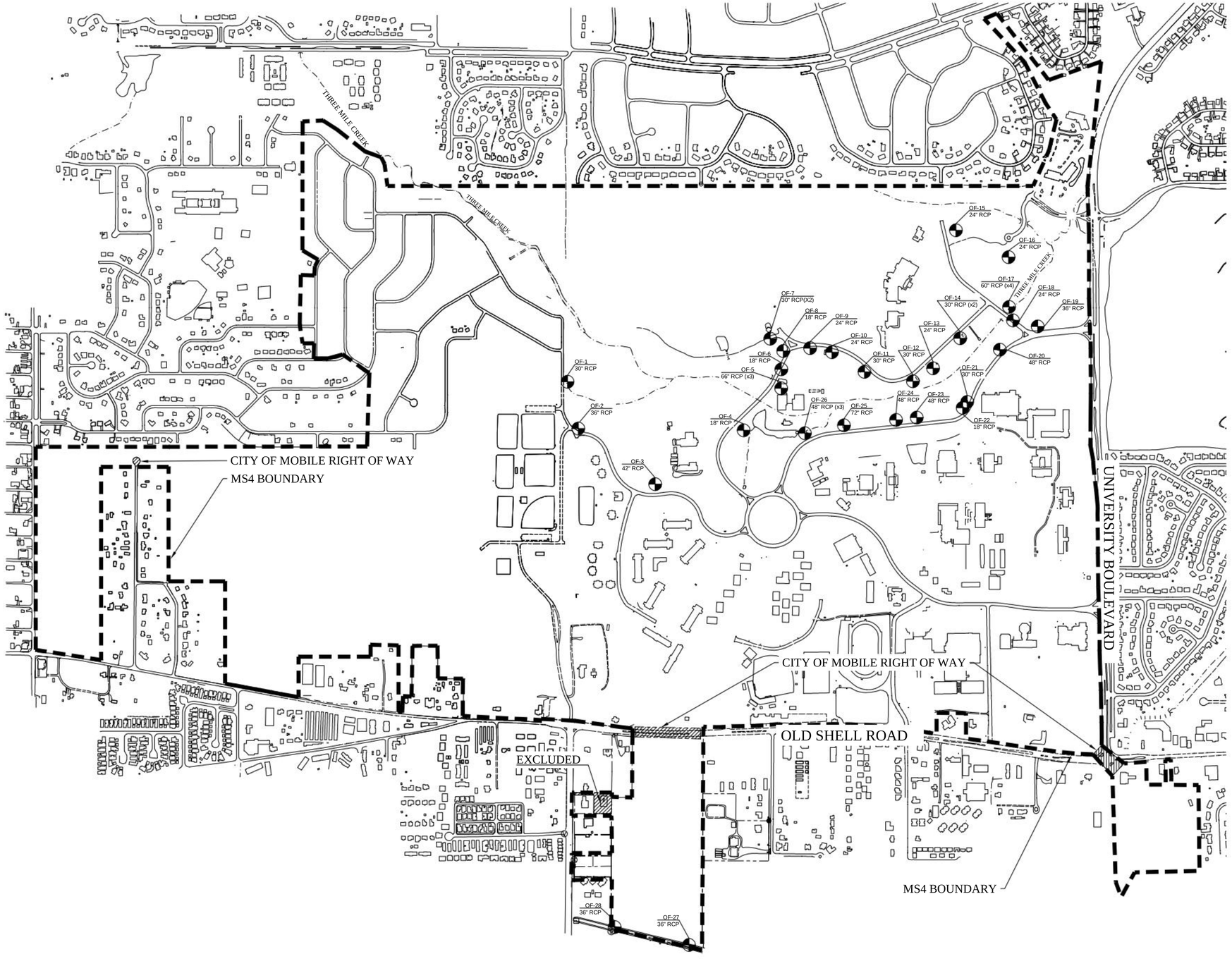
Procedure for the Corrective Action of Suspect Illicit Discharge

If a suspected illicit discharge is reported on campus, the following procedure for corrective action shall be as follows:

1. Give reference points/landmarks to the observed location of the discharge.
2. Document the characteristics of the discharge (odor, color, etc..).
3. Document the date and time of observation.
4. Document the general weather conditions.

UNIVERSITY OF SOUTH ALABAMA

Appendix D – Updated Outfall Inspection Map (04/21/2025)



N

500 0 500 1000

SCALE: 1"=500'

Outfall	Size	Latitude	Longitude	Inspection Date	Notes
OF-1	30" RCP	30.699584	-88.190830	2023-Q2	Inspected 7/7/2023
OF-2	36" RCP	30.698390	-88.190384	2023-Q2	Inspected 7/7/2023
OF-3	36" RCP	30.696870	-88.188020	2023-Q3	Inspected 8/15/2023
OF-4	18" RCP	30.698286	-88.185054	2023-Q3	Inspected 8/15/2023
OF-5	66" RCP (x3)	30.699500	-88.184100	2023-Q4	Inspected 12/22/2023
OF-7	30" RCP (x2)	30.700800	-88.184400	2023-Q4	Inspected 12/22/2023
OF-8	18" RCP	30.700630	-88.184086	2024-Q1	Inspected 2/20/2024
OF-6	18" RCP	30.699962	-88.183907	2024-Q1	Inspected 2/20/2024
OF-26	48" CMP (x3)	30.698300	-88.183300	2024-Q2	Inspected 6/28/2024
OF-27	36" RCP	30.684300	-88.186800	2024-Q3	Inspected 8/05/2024
OF-9	24" RCP	30.700600	-88.183100	2024-Q3	Inspected 8/05/2024
OF-28	36" RCP	30.684700	-88.189200	2024-Q3	Not Found
OF-10	24" RCP	30.700500	-88.182500	2024-Q3	Inspected 8/05/2024
OF-25	72" RCP	30.698500	-88.182100	2024-Q4	Inspected 10/15/2024
OF-11	30" RCP	30.699722	-88.181389	2025-Q1	Inspected 03/13/2025
OF-24	48" RCP	30.698611	-88.180278	2025-Q2	Inspected 03/13/2025
OF-23	48" RCP	30.699722	-88.179722	2025-Q1	Inspected 04/21/2025
OF-12	30" RCP	30.699700	-88.179772	2025-Q2	Inspected 04/21/2025
OF-13	24" RCP	30.700100	-88.179300	2025-Q3	
OF-15	24" RCP	30.703800	-88.178600	2025-Q3	
OF-14	30" RCP (x2)	30.700900	-88.178400	2025-Q4	
OF-21	30" RCP	30.699200	-88.178200	2025-Q4	
OF-22	18" RCP	30.699000	-88.178300	2026-Q1	
OF-20	48" RCP	30.700600	-88.177200	2026-Q1	
OF-17	60" RCP (x4)	30.701700	-88.176900	2026-Q2	
OF-16	24" RCP	30.703100	-88.176900	2026-Q2	
OF-18	24" RCP	30.701400	-88.176700	2026-Q3	
OF-19	36" RCP	30.701200	-88.176000	2026-Q3	

PRELIMINARY

A 04/21/2025 AMW MS4 OUTFALL INSPECTION MAP

WE UTILIZE SCREENING TECHNIQUES IN OUR DESIGN AND THESE SOMETIMES ARE NOT VISIBLE IF OUR DESIGN HAS BEEN COPIED OR PRINTED WITH A LOW QUALITY SETTING. YOU CAN BE SURE THAT YOU HAVE A HIGH QUALITY PRINT OR COPY IF YOU CAN SEE THE DRIVEN ENGINEERING, INC. LOGO BEHIND THE TEXT IN THIS BOX.

CLIENT: UNIVERSITY OF SOUTH ALABAMA
307 N UNIVERSITY BLVD
MOBILE, AL 36608

Driven Engineering, Inc.
8005 Morris Hill Road, Semmes, AL 36575
(251) 649-4011 Office
(251) 645-0971 Fax
www.drivenengineering.com

TITLE: UNIVERSITY OF SOUTH ALABAMA
MS4 OUTFALL INSPECTION MAP

DATE	SCALE
04/21/2025	1"=500'
DRAWN BY: AMW	CHECKED BY:
APPROVED BY:	
PROJECT NUMBER: 25002	
DRAWING NUMBER C01	TOTAL SHEETS 1
REVISION A	

Xref ..\MODEL\24002 XR TB MS4 AREA MAP.dwg

Appendix E – Authorization Letter

UNIVERSITY OF SOUTH ALABAMA

March 16, 2021

Alabama Department of Environmental Management
1400 Coliseum Boulevard
Montgomery, AL 36110

To whom it may concern:

As the Executive Vice President at the University of South Alabama, I hereby grant to Mr. William Guess, Director of Safety and Environmental Compliance, the authority to act as a responsible official for permit application and reporting to the Alabama Department of Environmental Management.

Sincerely,

John W. Smith
Executive Vice President

JWS/sed

OFFICE OF EXECUTIVE VICE PRESIDENT
AD 130 | 307 University Boulevard, N. | Mobile, Alabama 36688-0002

Appendix F – Safety and Environmental Compliance

Appendix G – University of South Alabama Sustainability Committee Meetings

Appendix H – Land Disturbance Checklist

UNIVERSITY OF SOUTH ALABAMA

Land Disturbance Checklist

Project: _____ Date: _____

Location: _____

Printed Name of Engineer: _____

Signature of Engineer: _____

Professional License No.: _____

The following items must be submitted to the USA Safety and Environmental Compliance Office.

____ Vicinity Map

____ Plans drawn to scale, stamped and signed by an Alabama licensed P.E.

____ Topographical details for existing conditions and proposed development.

____ If an existing detention facility is utilized, documentation that the detention facility has been field- surveyed to verify the capacity and functionality of the existing detention facility. If is found to be deficient, the pond will be brought up to the required capacity and functionality.

____ Engineering calculations showing that the receiving storm drainage system can handle the additional flow due to the proposed development are provided.

Confirm the following:

____ Sedimentation and erosion control plan in accordance with the latest version of Alabama Handbook for Erosion Control, Sediment Control, and Storm Water Management on Construction Sites and Urban Areas, stamped by a professional engineer licensed in the state of Alabama.
https://alconservationdistricts.gov/wp-content/uploads/2019/03/2018-Field-Guide-combined- with-covers.pdf

____ That the grading and drainage plans comply with existing federal, state, University standards and guidelines.

____ That if an existing detention facility is utilized, the detention facility has been field-surveyed to verify the capacity and functionality of the existing detention facility. Deficient, the pond will be brought up to the required capacity and functionality.

____ That the receiving storm drainage system(s) can handle the additional flow due to the proposed development. Based on one of the following being met under condition A or B:

A. Flood Plain Management Plan, "An adequate channel shall be defined as a natural or man-made channel or pipe which is capable of conveying the fun-off from a 25-year storm without overtopping its banks or eroding after development of the site in question, or without causing the flooding of structures from the 25-year storm event."

B. If the outfall is into a natural watercourse, the 25-year peak flow from the development within the watershed must be at a flow rate and velocity, which allows the watercourse to handle without erosion or over bank flooding.

____ The existing outfall system does not meet the required 25-year design capacity; therefore, the post development peak flow has been reduced by an amount large enough to avoid making improvements to the outfall system.

____ Analysis of the existing outfall system is provided. I have verified that there is no historical flooding in the area, based on examination for evidence of prior flooding. I certify that there is no flooding problem created with this development for a 25-year storm.

____ Analysis of the existing outfall system is provided. I have verified that there is historical flooding in the area, based on examination for evidence of prior flooding. A storm water detention system providing 100-year volume with a pre-development two-year release (volume and velocity) has been designed.

____ There is no existing outfall. A drainage system is being constructed to tie to the nearest storm drainage system (within 300 feet of the project). The design and calculations for the proposed drainage system are provided. The receiving system has been analyzed and meets condition A or B:

A. Flood Plain Management Plan, "An adequate channel shall be defined as a natural or man-made channel or pipe which is capable of conveying the run-off from a 25-year storm without overtopping its banks or eroding after development of the site in question, or without causing the flooding of structures from the 25-year storm event."

B. The existing outfall system does not meet the required 25-year design capacity; therefore, the post development peak flow has been reduced by an amount large enough to avoid making improvements to the outfall system.

____ That site drainage is tied to the City of Mobile's storm water system.

____ That wetlands are not show on-site or on the GIS system.

____ That if wetlands exist on-site or shown on GIS system, they have been delineated by a certified professional, and the delineation is depicted on the plans and the following is confirmed.

- ____ wetlands are not disturbed.
- ____ wetlands are disturbed and a Corps of Engineers permit has been submitted with this application.
- ____ wetlands are disturbed and a Corps of Engineers permit will be submitted at a later submittal. I understand that the submission of the Corps of Engineers permit is required before a land disturbance permit will be issued.

____ That wetlands are show on GIS system, but are not present on-site, and the attached letter from a licensed environmental professional has disproved their existence.

____ That if the site is in an OWR Flood Plain, all requirements of ADECA Floodplain Management are in compliance.

1/2/20

Appendix I – Groundskeeper Essential Job Functions

Groundskeeper I - Essential Job Functions

1. Trims and fertilizes trees and shrubs.
2. Mows and edges lawns.
3. Polices grounds and picks up trash and debris.
4. Waters plants as needed or directed.
5. Hoes, weeds and otherwise tends flower beds, gardens and lawns.
6. Collects, loads and hauls off trash.
7. May operate a tractor or other groundskeeping equipment, implements and vehicles.
8. Digs and plants flowers, shrubs and trees.
9. May be responsible for performing groundskeeping and custodial duties in maintaining a small group of buildings and grounds.
10. Installs wee fabrics and mulches.
11. Stakes and guys trees.
12. Removes debris.
13. Cleans trash and debris from storm inlets.
14. May apply chemical to lawns, trees, shrubs, flowers and paved surfaces as required.
15. Solid waste collection campus-wide to include pick up of bagged, boxed and loose materials and transport by truck to dumpsters located throughout campus for unloading.
16. Assist in installation and repair of irrigation systems.
17. Operate power washer to clean sidewalks and other paved surfaces.

Groundskeeper II - Essential Job Functions

1. Mows and edges lawns.
2. Removes grass clippings, leaves, pine needles, trash and debris from lawns and landscape areas.
3. Prunes shrubbery and trees.
4. Plants and mulches shrubs, trees and flowers.
5. Installs stakes and guys on tress as required.
6. Applies irrigation water to trees, shrubs and flowers.
7. Applies chemical and fertilizers to lawns, trees, shrubs and flowers.
8. Operates tools and equipment such as pruner, line trimmer, blower, rake, shovel push mower, edger, sod cutter, riding mower, tractor mounted flail/bush hog, hydraulic tree spade, tractor mounted spreader/sprayer and high-speed chipper grinder.
9. Loads and unloads bags of fertilizer, peat moss and other materials up to 60 lbs. in weight.
10. Sweeps streets, driveways and parking lots.
11. Operates a variety of pickup trucks and other trucks, including water tanker.
12. Maintains and calibrates equipment as required.
13. Installs and repairs irrigation systems.

Appendix J – Inlet Medallions


DRAINS TO
THREE MILE CREEK


DRAINS TO
12 MILE CREEK

Appendix K – Bio-infiltration Assessment