

JACKSONVILLE STATE UNIVERSITY

ANNUAL STORMWATER REPORT

April 1, 2023 - March 31, 2024

FOR

**ALABAMA DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT**

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Prepared by:

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Certification

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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 to the best of my knowledge and belief, the information submitted is 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.



Arlitha Harmon
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5/17/2024

Date

I. Overall evaluation of the Stormwater Management Program (SWMP) developments and progress

1. Accomplishments

- a. Public involvement and participation through sponsorship of "Take Pride In Jacksonville Day" and "Arbor Day" as well as other civic events noted in this report.
- b. Rebuilding from the tornado disaster persists.
- c. Links to additional informative documents and events associated with water quality were added to the webpage.
- d. Public participation in recycling is occurring.
- e. Public participation in voluntary clean up and tree planting occurred.
- f. More students are being informed of the importance of water quality and how they can make a difference.
- g. JSU staff and students have become involved in various events to comply with the MS4 program.
- h. Drainage inlet structures marking campaign is continuing.
- i. Additional stormwater detention was implemented.
- j. JSU was recertified as a Tree Campus.
- k. 200 trees were given away.
- l. Two (2) postings were distributed through the JSU website/social media.
- m. Twenty-three (23) laminated posters were hung in various residence halls.
- n. Information on biosolid recycling of food waste including how to apply for USDA funding for a food to fertilizer program was circulated.
- o. Storm water detention was reviewed and implemented as deemed necessary by the design engineers and the MS4 reviewer on three new projects to meet or exceed the JSU limit of the post development runoff volume to not exceed the predevelopment runoff for a 25-year storm event.

2. Program Strengths

- a. JSU regularly interacts with the local community on a variety of public involvement and participation in housekeeping improvement initiatives.
- b. A coordination agreement with the City of Jacksonville for street sweeping has been created and is on file.
- c. JSU has a trained and certified applicator who conducts the application of pesticides and herbicides.
- d. JSU has and/or participates in numerous recycling programs for materials including batteries, light bulbs, mercury containing devices, U-shaped lamps,

fluorescent bulbs, cardboard, paper, plastic, electronics, aluminum, steel, oil and grease from food preparation and oil from vehicles.

- e. JSU collects limbs, leaves, and grass clippings from all over campus. The vegetative materials are collected and brought to a central location within the campus regularly. The vegetative material is then hauled out by a contractor for further decomposition.
- f. JSU inspects and cleans debris and litter from their stormwater inlets before significant rain events to reduce floatable debris and litter in surface waters.
- g. JSU has developed numerous standard operating procedures (SOP's) to assist consultants, contractors, and employees with ways to preserve water quality.
- h. JSU was involved in a natural disaster in March 2018. JSU staff, community, campus, alumni and friends, consultants, and contractors, pulled together to accomplish a near impossible task to clean up the campus and repair the infrastructure damaged by the tornados. It has been estimated that over 60% of all campus buildings were damaged with an estimated expenditure for repairs exceeding \$100 million dollars. Campus clean-up and rebuilding is still ongoing.
- i. Educational literature was distributed at numerous sites throughout campus.
- j. The student government association, sports teams and other organizations regularly participate in clean up and tree planting events. An Arbor Day event was held on campus.
- k. The construction BMP inspection forms and construction related SOP's have been created and distributed to contractors, engineers, architects, and project managers. Completed forms are on file.
- l. Inspections of construction sites is being performed by JSU staff and consultants.
- m. Post construction inspections are being performed by JSU staff and consultants.
- n. Student organizations plan and participate in campus clean-up days throughout the year. Additionally, campus groups participate in the City of Jacksonville's Take Pride in Jacksonville Day.
- o. An article titled "Threatened Waters – Turning the Tide on Pesticide Contamination" was posted on the JSU MS4-website.
- p. A notice of "Earth Day", "Imagine A Day Without Water", and "World Water Day" was posted to social media and/or the JSU MS4 website.
- q. The first annual JSU MS4 Stormwater Advisory Committee Meeting was held.
- r. JSU staff and volunteers were exposed to the Alabama NEMO Partnership.

3. Program Weaknesses

- a. Educating and uniting the campus community about the importance of water quality and how to minimize adverse impacts to water quality is important to JSU. Additional literature should be created and distributed to the college and surrounding community. Means and methods of educational literature distribution have been developed and implemented and are being expanded. A way of keeping up with the number of people and/or companies who are informed each year should be developed where feasible.
- b. The group of individuals and responsible parties dedicated to the implementation and success of this program is expanding. Examples of responsibilities include but is not limited to coordinating events, distributing literature, inspecting BMP's, collecting data on measurable goals for inclusion in the annual report, etc. Additional people interested in water quality should be reached and informed.
- c. The recycling program should be expanded to provide easier access by the student population and general populous. Additional receptacles were installed or upgraded. Ways of measuring and quantifying all the annual materials recycled should be established.
- d. Due to the program not having a dedicated income source, we are having a limited reach of the program. A dedicated JSU MS4 budget should be established to allow for the greatest achievement of the JSU MS4 program.

4. Measurable Goals

- a. 360 cubic yards of chipped debris, limbs, leaves, and grass clippings were collected and disposed of.
- b. An immeasurable quantity of steel, aluminum and other metal was recycled.
- c. 275 cubic yards of cardboard was recycled.
- d. 74,000 gallons of oil and grease was recycled from 3 different kitchens.
- e. Waste oil from vehicles was recycled by the service provider.
- f. 9 lbs. of alkaline batteries were recycled.
- g. No mercury containing devices were recycled.
- h. 32 boxes of various lightbulbs were recycled.
- i. 720 tons of household waste was hauled to the landfill.
- j. There were two (2) posting to the website/social media.
- k. More than 26 people were educated on the program and provided with copies of the SOP's, SWMP, and annual report.
- l. Student organizations plan and participate in campus clean-up days throughout the year. Additionally, campus groups participate in the City of Jacksonville's

Take Pride in Jacksonville Day. Eight (8) people participated in Randolph Park cleanup activities to collect and properly dispose of eight (8) full bags of litter.

m. Twenty-three (23) posters were printed, laminated, and hung in residence halls.

5. Overall determination of the effectiveness of the SWMP regarding water quality/watershed improvements.

a. This program has and will continue to grow as a way to educate the JSU faculty, staff, and students on the importance of water quality and how they can help preserve, protect, and enhance our water quality. Historically the JSU campus buildings and grounds are well maintained such that very little erosion occurs and the overall watershed is clean. This program, however, continues to expand the JSU facilities maintenance personnel's knowledge of watershed improvements and preservation to cover other geographical areas in addition to the JSU campus to include auxiliary facilities such as the Little River Field School and all other satellite campuses. Public service activities are required by the Greek Society chapters. Some of these events have a positive impact on surface water quality preservation.

b. Students have been exposed to the various fliers, pamphlets and website information educating them about the importance of litter cleanup, the control of sources of surface and ground water contamination, and revegetation of watersheds which can improve water quality. They have also been exposed to information about volumetric control of stormwater and its importance in relation to flooding and aquifer recharge. The reduction of adverse effects on surface water quality from human activities will continue to grow as the program grows. This program will reduce the negative impacts to our valuable resource, water.

6. Measurable goals that were not performed and the reason why.

a. Some of the quantities of recycled materials were not obtained nor recorded. Methods of consistently and accurately quantifying and recording the recycled materials are being refined. There are some funding and logistical constraints to recording the volume of all materials recycled.

b. The accurate number of all people reached by educational materials and outreach is unknown. Methods of measuring and accurately reporting public education, outreach, involvement, and participation are being expanded to

cover all events. There are some funding and logistical constraints to determining the number of people reached.

- c. Methods of consistently and accurately measuring the audience reached from the distribution of literature associated with this program are being determined and implemented. There are some funding constraints to determining the audience reached.

7. Results of monitoring data evaluation

There are no 303(d) list streams or TMDL streams within the JSU MS4 area.

II. Narrative report and assessment of all minimum control measures referenced in the permit.

1. Public Education and Outreach on Stormwater Impacts

- The first annual JSU MS4 Stormwater Advisory Committee (JSU-SAC) Meeting occurred.
- JSU staff and the JSU-SAC was exposed to the Alabama NEMO Partnership.
- Electronic copies of the SWMP have been made available to the campus community via the JSU MS4 website. A copy was also circulated to the JSU-SAC meeting attendants.
- Posters, website listing, and/or social media posts pertaining to various sources and causes of adverse water quality were created and/or distributed to the campus community.
- Twenty-three (23) posters educating students about water quality were posted at locations throughout the campus.
- The JSU MS4 webpage was expanded to inform staff, students, and the public about the program and how they can help preserve or enhance water quality.
- Literature on “How can you help protect source water”, “beyond pesticides” – water-brochure, “World Water Day”, and “Earth Day” are posted to the website. It was recommended that the SOP’s the JSU-SAC meeting and the NEMO Alabama flyer be added to the website.
- There was one posting to social media about “Imagine a Day Without Water” and “World Water Day”.
- A poster “Imagine a Day Without Water” was distributed.
- Arbor Day 2023 was held on campus. The importance of trees in the water cycle was provided.

2. Public Involvement/Participation

JSU sponsors and promotes events such as the annual "Take Pride in Jacksonville Day" and "Arbor Day". JSU has also been designated as a "Tree Campus USA" for the past 12 years and participates in the annual tree give away. Additional means and methods of public involvement and participation have been implemented with additional ones being developed. JSU regularly participates in community housekeeping improvements and community service events.

- 200 trees were given away.
- Student organizations plan and participate in multiple clean-up days throughout the year. Additionally, campus groups participate in the Take Pride in Jacksonville Day. Participants removed and properly dispose of an unmeasured number of bags of litter on and near the JSU campus.
- Advertisements were run on social media and on the news wire to educate readers about the importance of water quality and how they can help to preserve water quality via the "Imagine a Day Without Water", "World Water Day" and "Earth Day" as well as other postings.
- The webpage was enhanced with additional postings to inform staff, students, and the public about the MS4 program and ways to preserve water quality.

3. Illicit Discharge Detection and Elimination

- JSU conducted inspections of storm inlets before most every substantial rain event. All pollutants that are detected from the inspections were removed.
- Dry weather screening was performed on all outfalls. A small amount of foam was observed at 0-6 during an initial flow of stormwater but the source could not be found. No other indication of pollution was observed at any of the other outfalls.
- The infiltration trenches/level spreader has been removed and other stormwater detention implemented by a new café construction project.
- There was one illicit discharge discovered this year. The source could not be determined.
- Employee training for MS4 monthly site inspections was continued with the distribution of SOP's to JSU personnel. If an illicit discharge entering the JSU MS4 is discovered, the adjacent, upstream MS4 coordinator is notified. A follow up inspection is then performed within 10 days of the

initial finding. If the illicit discharge continues, ADEM is notified of the event.

- 360 C.Y. of debris, limbs and leaves were collected and properly disposed.
- 720 tons of household waste was collected and properly disposed of.
- A poster “Imagine A Day Without Water” was distributed.
- A 28-page document “Threatened Waters -Turning the tide on pesticide contamination” was posted to the JSU MS4 website.

4. Construction Site Stormwater Runoff Control

- The regulatory document for stormwater control design guidance, site plan review procedures, financial consequences for contractor noncompliance, construction BMP inspection procedures, etc. consists of requiring the use of designers who have been informed of the JSU and MS4 requirements to perform inspections on sites greater than one acre.
- JSU utilizes consultants and general contractors with staff who are knowledgeable and trained in construction stormwater Best Management Practices (BMP's). Plans are submitted for internal and state building commission review and comments before advertising for bids. Projects that disturb more than one (1) acre are required to obtain an ADEM NPDES permit and provide all supporting inspection documents to JSU.
- Permitting of construction site was in compliance with state and federal law.
- There were no NOV's received during this permit time frame.
- One (1) complaint was received during this report period. The remediation work required to remove the sediment from downstream was performed immediately after the rain event.
- Construction BMP inspection reports for sites over one (1) acre are provided by the contractor and/or their QCP to JSU for review and retention.
- There were two (2) active construction sites within the JSU MS4 area that were permitted through the ADEM NPDES program.
- Internal BMP site inspection checklist for construction site stormwater control was completed by JSU staff as required for all active construction sites with ground disturbance. Each construction site is inspected by JSU staff multiple times throughout the year. It was estimated that construction sites were inspected more than 48 times during this reporting time. One JSU employee was assigned to perform monthly BMP site inspections and that employee was trained on the inspection and reporting requirements.

5. Post-Construction Stormwater Management

Locations with structural BMP's were identified as follows:

<u>Location</u>	<u>Structural BMP</u>
School of Business (Old Kitty Stone School)	Detention Pond
Baseball Complex	Infiltration Trench/Level Spreader
Parking Lot Along Forney Ave.	Detention Pond
Fitness Center	Detention Pond
Meehan Hall	Detention Pond
Roebuck Waters/Library Parking	Detention Pond

All locations listed above were inspected during this permit cycle.

6. Pollution Prevention/Good Housekeeping

- a. Recycling bins for paper and plastic bins are located at six (6) places on campus. Scrap steel is collected for recycling at the physical plant. Grease from food preparation is recycled from the cafeteria, food court and Theron Montgomery building. Light bulbs, limbs and yard waste are collected and repurposed accordingly.
- b. The application of pesticides and herbicides is conducted by a certified ornamental & turf pest control supervisor.
- c. Outdoor housekeeping duties are assigned to specific Physical Plant personnel.
- d. JSU does not have a campus wide hazardous materials program. Each individual unit handles, stores and disposes of their own waste according to their own program (i.e. chemistry, art, physical plant, etc.).
- e. Stormwater inlets are inspected and cleaned prior to substantial rain events.
- f. The JSU Housing Guide to Residential Living includes directives for disposal of trash including cooking oil and grease.
- g. SOP's were distributed and reviewed with the building and grounds crews including illicit discharge detection forms and the campus outfall map.
- h. The compilation of the servicing of all university owned vehicles including oil changes and vehicle safety inspection records is being maintained and performed off campus by qualified personnel.
- i. JSU has a total of five (5) municipal type facilities. Those facilities are the Duncan Maintenance Shop, maintenance storage, service storage, university services building, and the university warehouse. Educational SOP's are distributed to new staff at the facilities to inform them of ways to prevent

pollution caused adverse impacts to water quality and identify and report illicit discharges.

- j. JSU staff and students regularly collect all litter and garbage within the campus and other nearby areas to reduce floatable litter and debris from entering streams and waterways. The effectiveness of this campaign was indicated in prior portions of this annual report.
- k. A meeting was held with the building and grounds personnel to discuss the importance of their jobs in relation to surface water quality and how they can help preserve water quality.
- l. Areas where soil erosion is observed are repaired to minimize their potential adverse impacts on surface water quality.

A. Discussion of proposed BMP revision or any identified measurable goals that apply to the minimum water control measures.

JSU's Stormwater Management Plan includes a volumetric control requirement for construction stormwater so that the post construction stormwater runoff from a construction site does not exceed the preconstruction stormwater runoff volume and velocity up to and including the 25-year rain event for any qualifying construction activity. When discharging into an adjacent MS4 area, the design minimum stormwater control measures are designed per the most stringent volumetric requirement.

A document describing the minimum water control measures, site plan BMP requirements, long term operation and maintenance of BMP's, etc. has been prepared, submitted, and was approved during this permit cycle. The minimum stormwater control measure requirements from this document were used for the design of the upcoming capital improvement projects.

B. Summary of the stormwater controls that are planned/scheduled for the next reporting cycle.

- A campus wide evaluation of existing vegetation and highly erodible soils is ongoing. Grassing and other forms of long-term stormwater erosion control are being implemented throughout the year. JSU staff is being continually trained to identify and address any potential sources of surface water pollution.
- Additional JSU personnel will be exposed to SOPs, sources of pollution and how to reduce potentially adverse stormwater impacts, how to perform illicit discharge detection, as well as other components of this program.

- Additional campus community events that focus on tree planting, stormwater pollutants, erosion, litter control, and the importance of water qualities will be held.
- Post cards have been prepared for annual distribution throughout the JSU mailing list to inform the recipients about the importance of water quality and how to help protect surface waters. We will continue to reach as large an audience as possible by implementation of and improvements on the various components of this permit.
- The implementation of the stormwater ordinance will continue by coordinating with all future planners of ground disturbing activities.
- Additional posters have been created and will be displaced during tree give away events.
- Flyers have been created and will be distributed at the litter collection/cleanup events.

C. Results of information collected and analyzed, if any, during the reporting period, including monitoring data used to assess the success of the program at reducing the discharge of pollutants to the maximum extent practical.

Currently, procedures for collecting information from activities that reduce the discharge of pollutants is being refined. Based upon the data received from this permit cycle, we are seeing more participation in this important program. The gathering of data required to measure the success of the SWMP is being refined to better gauge the impacts from the program. Ways of consistently measuring quantifiable results for annual comparison are being implemented. Personal responsibility for obtaining and recording these measurements have been assigned. However, due to staff and/or participant shortages, the loss/replacement of key JSU staff, assigned to this program has resulted in a gap in knowledge of some of the measurable goals. JSU is working towards closing this gap in order to have a better record of quantifiable objectives associated with this program to gauge the effectiveness of the various portions of the program.

D. Notice of reliance on another entity to satisfy some of your permit obligations.

JSU has an agreement with the City of Jacksonville for street sweeping. A copy of the agreement is in the MS4 files. JSU is in the process of developing a

memorandum of understanding (MOU) between the City of Jacksonville and the Alabama Department of Transportation.

- E. Results of monitoring collected during the previous year in accordance with Part V, if applicable.

There are currently no streams on the 303(d) impaired list or the list for total maximum daily loads (TMDL's) within the JSU MS4 area.