

The University of Northern Iowa

Stormwater

Management Plan

Documentation and Annual Reporting for the MS4 Program
07/01/2022- 06/30/2023 reporting year

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Organizational structure

Committee Member	Title/Department Contact
Michael W Zwanziger	Assistant Vice President & Director, Facilities Management Michael.Zwanziger@uni.edu
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The University of Northern Iowa MS4 Program

Permit Area

This permit covers all areas within the boundaries of the University of Northern Iowa totaling approximately 808 acres which is drained by the University's Municipal Separate Storm Sewer System (MS4) and any other areas added while this permit is in effect.

Authorized Discharge

This permit authorizes all existing or new stormwater point source discharges to water of the State from the MS4. This permit also authorizes the discharge of stormwater commingling with flows contributed by process wastewater, non-process wastewater, or stormwater associated with industrial activity provided such discharges are authorized under the NPDES permit, as required by law. This permit does not authorize discharges to the MS4.

Partnerships

The University of Northern Iowa has worked with Blackhawk Soil and Water Conservation District to implement Stormwater Best Management Practices (BMP)s during infrastructure improvements on campus. These efforts have been initiated with grant funding provided through the efforts of the Dry Run Creek Watershed project (DRCWP).

Other partnerships created with local and national organizations for various aspects of this permit include:

- ❖ The City of Cedar Falls
- ❖ The Nature conservancy
- ❖ Hawkeye community college
- ❖ Americorps
- ❖ Green RU
- ❖ SAS (formerly Midland GIS)
- ❖ Re:wild

2022-2023

DRCWP continues to partner with the UNI to provide technical support and grant funding options for BMP installation.

Numerous efforts over the past year have focused on maintenance and upkeep of stormwater BMP's on campus. An example of this taking place is the reestablishment of the Applied Engineering Building biocells. To accomplish this project, UNI Grounds worked with the Green Iowa Americorps program to plant more than one thousand native plants that were both visually appealing and highly functional for this application.

UNI is currently migrating GIS applications that include stormwater coverages to a new system. That is anticipated to be completed in the upcoming fiscal year.

Funding

The University of Northern Iowa MS4 program is funded through the state of Iowa General Education Fund. Budget numbers and actual expenses are taken from Facilities 0011.

Funding is broken down by program components. These consist of:

- ❖ Design & Construction
- ❖ BMP Maintenance
- ❖ Storm Sewer Maintenance
- ❖ Stream Bank Restoration

Additional funding sources include grants and partnerships which vary from year to year.

2022-2023

Maintenance costs expended for the maintenance of stormwater projects and initiatives included approximately \$125,000 for labor and contracted services. This funding went towards two new Applied Engineering Building biocells, additional practice field work, repairing stormwater in-takes, intake labeling, and reestablishing existing AEB biocells.

Goals & Program Implementation

The long-term goals of this program are to reduce the potential contaminants suspended in stormwater from reaching the receiving creeks and rivers in our watershed. This will be achieved through the implementation of the components listed below.

The implementation of Stormwater Best Management Practices through infrastructure improvement projects on campus shall be the driving factors in achieving these goals. Partnering with DRCWP for

continual monitoring shall keep the program up to date to achieve positive and lasting impact to Dry Run Creek Watershed Project.

Short term goals are outlined by the MS4 program minimum control measures (MCM) listed in the next section.

Some overall pollutant and quality reductions to the DRC branches include the following:

1. Infiltrate a 1.25" rainfall in urban areas
2. Reduce sediment delivery by 30%
3. Improve streambank habitat along 25% of the stream
4. Conduct an extensive I&E program

Program Components & Management

STORM WATER POLLUTION PREVENTION & MANAGEMENT

A. Public Education & Outreach on Stormwater Impacts

The permittee shall implement a public education and outreach program about the impacts of stormwater discharges and measures which the residents of the permittee can implement to reduce pollutants in stormwater runoff that includes the following:

Informational web board – Inside UNI

Informational announcements shall continue to be submitted to “Inside UNI” a daily public announcement platform that reaches University-wide to faculty, staff and students. Through this platform significant topics can be shared with the University community in a timely manner.

Additional outreach is performed through campus departments and faculty including:

- ❖ Dry Run Creek Watershed Improvement Project
- ❖ The Reuse, Recycle Technology Transfer Center
- ❖ Americorps
- ❖ Tallgrass Prairie Center
- ❖ Center for Energy and Environmental Education
- ❖ UNI Sustainability Office

2022-2023

This year’s campus announcement displayed the campus Stormwater hotline phone number and encouraged students, faculty and staff to report any improper dumping. Our web page can be accessed here- https://fm.uni.edu/stormwater-management

Storm Drain Labeling

All new and replaced storm-sewer intakes shall be either painted or receive a medallion with a “no dumping, drains to river” proscription. Should a catch basin be installed that has no such proscription, the permittee shall affix a placard indicating. **The program shall continue to be implemented by the permittee to ensure all University storm sewer intakes are labeled for the duration of the permit.**

2022-2023
Stormwater intake stenciling was completed throughout 90% of campus. A total of 67 hours of labor was logged ensuring drains are properly labeled. This equates to \$4,100.40 in labor.

Stormwater Website

The permittee’s website shall contain information regarding stormwater impacts on water quality, measures residents can implement to reduce pollutants in stormwater, regulations, current local topics, information in the brochures and links to other relevant websites. A form for reporting stormwater complaints shall be provided on the website. **The website shall be updated as needed. The stormwater web page shall be maintained by the permittee for the duration of the permit.**

The Stormwater Page can be found at: <https://fm.uni.edu/stormwater-management>

2022-2023
The stormwater web page was updated with the NPDES Permit 2021- 2026. The web page was updated with the current year’s annual report. There were changes to departmental staffing. We have made updates to our stormwater management contact information and stormwater management team.

B. Public Involvement & Participation

The permittee shall continue implementing a public involvement and participation program that includes the following:

Stormwater Management Team

Stormwater Management team meets annually, typically during the Fall semester after students have

returned to school. The Management team is made up of Facilities representatives as well as staff, and students.

Members of the stormwater management team serve on the Dry Run Creek Advisory Board, supporting the watershed improvement program. This committee meets multiple times during the reporting year to advise the coordinated educational outreach of the Dry Run Creek Improvement Project.

2022-2023

The stormwater management team meeting occurred on August 7th, 2023. The DRC advisory board met March 28, 2023 and scheduled to meet in the fall. The discussions included UNI's football practice field bioretention project. The project is now complete and has a drainage area of 143,748 ft ² . The UNI Redeker Bioretention cells were discussed. The project is now complete with a drainage area of 82,764 ft ² .

Stormwater Hotline

The permittee shall provide a telephone number for the reporting of stormwater related problems. **The telephone number shall be made available on the website and included in other stormwater educational materials. The telephone number shall be made available for the duration of the permit.**

The Stormwater Hotline number is: 319-273-4EPA (319-273-4372). Information regarding the hotline is available at: <https://fm.uni.edu/stormwater-management>

2022-2023

The status of this MCM is current and no changes to the hotline are necessary.

Events Cleanup Program

The permittee shall continue to implement cleanup procedures after events located on campus.

Cleanup of campus outdoor events will primarily be completed by the Facilities Management group, specifically Grounds Services. Campus sponsored groups will be encouraged through the event scheduling process to provide garbage cans and labor to police and cleanup after individual events.

Earth Day and stream cleanups are conducted annually through campus through a series of partnerships with academic programs and outreach centers.

Larger campus events sponsored by the Athletics and Performing Arts departments will provide labor either with staff, students or contractors to mitigate waste from associated events.

Public Notice Requirements

When implementing a public involvement and participation program, the permittee must comply with all state and local public notice requirements.

The University will comply with all state and local public notice requirements associated with the management and permitting of the MS4 permit.

2022-2023
There was no required public notice in this reporting cycle.

C. Illicit Discharge Detection and Elimination

The Permittee shall continue implementing and enforcing a discharge detection and elimination program that includes the following.

Illicit Discharge Prohibition Policy Statement

A policy statement will continue to be implemented that prohibits discharges to the University operated MS4 that are not comprised of stormwater, properly permitted stormwater discharges associated with industrial activity or allowable non-stormwater. **The policy statement shall specify penalties for non-compliance.**

<https://fm.uni.edu/illicit-discharge-prohibiton>

2022-2023
No changes to the ordinance was necessary. No illicit discharge violations noted this fiscal year.

Illicit Discharge Detection and Elimination program

A program shall continue to be implemented to identify and eliminate illicit discharge for the MS4. The program shall include annual dry weather flow inspections of all outfalls not already inspected since flows from newly developed or re-developed areas have been discharged from the outfalls, sampling and analysis of these dry weather flows and procedures for disconnecting illicit connections. Records shall be kept of when inspections are performed, the results of the inspections and measures taken to identify and, when appropriate, eliminate the sources of any dry weather flows. The plan shall be

evaluated annually to assess the effectiveness of the program and any necessary changes made. **All illicit discharges found must be eliminated no more than 21 days after the discovery.** If it is not possible to eliminate an illicit discharge within 21 days of discovery, the permittee shall submit to the Department the reasons why the discharge cannot be eliminated within 21 days of discovery and a plan which contains a timeline of activities which will result in the elimination of the discharge. This statement and plan shall be submitted within 21 days of discovery of the illicit discharge. If the Department does not approve the plan, the permittee will then be required to eliminate the discharge no later than a date specified by the Department. **All illicit discharges shall be reported to the Department no later than the end of the first business day after the day of the discovery. The plan shall be implemented by the permittee for the duration of the permit.**

<https://fm.uni.edu/illicit-discharge-detection-and-elimination-program> - **UNI illicit detection and elimination program**

2022-2023
No illicit discharge was reported during this reporting cycle.

Storm Sewer System Map

All intakes and outfalls of the MS4 shall continue to be mapped for the duration of the permit. New intakes and outfalls added during the term of the permit shall be mapped as they are constructed. The UNI Storm sewer map shall be maintained in the Campus ArcGIS mapping software. (For access contact UNI dispatch 319 273-4400) <https://fmgis.uni.edu/fmgis/>

2022-2023
UNI continues to maintain the ArcGIS map for the campus Storm sewer system. UNI's GIS system is currently migrating to a new platform. This process is expected to be completed in Fiscal Year 2024.

D. Construction Site Stormwater Runoff & Control

Construction Site Runoff Control Policy Statement

A policy statement shall continue to be implemented on all sites for which NPDES permits are required that requires proper soil erosion and sediment control. This policy statement shall also address waste at construction sites that may cause adverse impacts to water quality such as building materials, concrete truck washout, chemicals, solid waste and sanitary waste. Authority to issue an order to terminate activities due to failure to implement or maintain pollution control BMPs shall be included. The

statement shall require site plan and pollution prevention plan review and shall reference the Iowa Construction Site Erosion Control Manual and the Iowa Department of Transportation Erosion Control Standards.

The policy shall require compliance with the Department’s Stormwater General Permit no. 2. **The ordinance shall be enforced by the permittee for the duration of the permit. The policy statement shall specify penalties for non-compliance.**

<https://fm.uni.edu/illicit-discharge-prohibitor> - **Illicit Discharge procedure**

2022 -2023
The status of the Construction Site Runoff Control is current and no changes to the policy are necessary.

Standard Operating Procedures for NPDES Construction Permits

A Standard Operating Procedure (SOP) for the handling of areas of soil disturbance for which NPDES permits are required shall continue to be implemented. The SOP shall be compatible with all relevant requirements of the Iowa Administrative Code and the stormwater NPDES General permit no. 2 The SOP shall outline the responsibilities of University personnel and shall include the minimum requirements for preparing stormwater pollution prevention plans, relevant contract information and required information for inspection logs.

<https://fm.uni.edu/stormwater-management> - **Site Plan Review Procedures**

Construction Site Review and Inspection Program

A construction site inspection program shall continue to be implemented for areas of soil disturbance for which NPDES permits are required. The inspection program shall be used to ensure that contractors are correctly implementing BMP’s which have been approved in the pollution prevention plan and any additional necessary measures. The program shall require inspection by the permittee at least every 7 days and include any other provisions necessary to ensure compliance by contractors with the stormwater General Permit no. 2. Inspections conducted by the permittee that meet the requirements of General Permit no. 2 may be used to satisfy these requirements. University personnel shall ensure that all topsoil preservation requirements stipulated by General Permit no. 2 are implemented on those sites for which they are required.

<https://fm.uni.edu/stormwater-management> - **Site Plan Review Procedures**

Pollution Prevention Plan (PPP) Review Procedures

A PPP review procedure shall continue to be implemented for areas of soil disturbance for which NPDES permits are required. The procedure shall indicate who is responsible for reviewing PPP’s, outline submittal requirements and reviewer response time. The criteria for acceptance shall be, at a minimum that which is required in the stormwater General Permit no. 2.

E. Post-Construction Stormwater Management

Post-Construction Runoff Control Policy Statement

A design and implementation policy statement shall be developed that will address the control of runoff from building activities after construction has been completed. The policy statement shall require water quality and quantity components be considered in the design of new construction and implementation when practical. The statement shall promote the use of stormwater detention, retention, infiltration, other Best Management Practices specific to each site which address water quality and quantity issues and proper operation and maintenance of these facilities. Written documentation of the analyses determining the practicality of implementing measures to reduce increased in water quantity and decreases in water quality shall be retained as required elsewhere in this permit.

<https://fm.uni.edu/illicit-discharge-prohibitor> - **Post-Construction Site Runoff Control**

Site Plan Review Procedures of Post-Construction Runoff Controls

Site plan review procedures shall continue to be implemented which address sites for which stormwater coverage is required. The procedure will designate who is responsible for reviewing site plans submittal requirements, reviewer response time and plan approval criteria and the purpose shall be to ensure that construction site and post-construction runoff BMP's are incorporated into site planning when possible and designed properly. The review procedures shall be implemented for the duration of the permit.

<https://fm.uni.edu/post-construction-re-pavement-site-plan-review-program-statement> - **Post construction & site plan review program statement**

Re-pavement and StormWater Repair retrofit Evaluation Program

Re-pavement projects shall be evaluated to determine if post-construction BMPs to minimize and/or treat runoff are feasible and shall be implemented when possible. The feasibility of installing post-construction runoff controls to minimize and/or treat runoff from existing streets and parking lots shall be considered and implemented when possible.

<https://fm.uni.edu/repavement-stormwater-repair-retrofit-evaluation-policy-statement> - **Repavement, Stormwater Repair Retrofit Evaluation Policy Statement**

Construction from AEB disturbed our existing bio retentions. The bioentions were reestablished with over 1,600 native plants.

Over the last year, \$97,000 stormwater intake repairs were completed.

F. Pollution Prevention / Good housekeeping

Educational Program for Staff

An educational program shall continue to be implemented that provides training on proper waste disposal and maintenance for staff members and students working on operations that may discharge to the MS4.

The following University departments are trained:

- ❖ Construction services Carpentry
- ❖ Custodial services Electrical
- ❖ Energy management HVAC
- ❖ Grounds Plumbing
- ❖ Mail Center Painting
- ❖ Utilities Transportation

2022-2023

UNI Facilities Management employees receive spill containment training every 2 years. The most recent training was April of 2023 and the next training is scheduled for April of 2025.

UNI Facilities Management employees receive hazardous waste training every 3 years. The most recent training was August of 2021 and the next training is scheduled for August of 2024.

Operations and Maintenance of MS4

A program for inspecting, maintaining and cleaning components of the MS4 shall continue to be implemented. The MS4 shall be inspected at least once every five years and maintenance performed as appropriate.

2022-2023

UNI's Construction Project Management team is actively developing a storm sewer and parking lot intake inspection protocol and plan for routine inspections.

Spill Response and Prevention Plan

A program to identify material handling procedures and storage requirements to reduce spill potential and impacts on stormwater quality shall continue to be implemented. Individuals to be notified when spills occur shall be included.

<https://fm.uni.edu/stormwater-management> - **Spill Prevention Control & Countermeasures Plan (SPCC)**

2022-2023

The SPCC is reviewed and evaluated once every five years. Completed in April 2021

University Facilities BMPs

A program shall continue to be implemented to assess BMPs on campus facilities owned by the permittee. These BMPs shall be designed to reduce pollutants in the stormwater from these facilities. The BMPs shall be implemented whenever practical. These facilities shall be inspected and BMPs assessed and modified as necessary during the duration of the permit. A campus map of existing BMPs can be found at: <https://fm.uni.edu/stormwater-management>

2022-2023

Inspections of all UNI's BMP were inspected through this year. Inspections of the Bioretention cell located near the artificial practice field showed soil erosion. The university contracted to reestablish the bank and add rip-rap. One BMP in the West Dome parking lot was removed this past year due to construction of a new steam tunnel. Construction of UNI's Applied Engineering Building biocells are still under construction. One on the NW side of the building and the other on the SE side of the building.

