

# ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY



1110 West Washington Street Phoenix, Arizona 85007 (602) 771-2300 www.azdeq.gov

# **Small MS4 Annual Report**

ID #: AZSM65746

MS4 Name: NORTHERN ARIZONA UNIVERSITY MS4

Reporting Period: 01-Jul-2020 To 30-Jun-2021

## **Annual Report Summary**

#### **Company Information**

Name: ARIZONA BOARD OF REGENTS, NORTHERN ARIZONA UNIVERSITY

PO BOX 4137

**FLAGSTAFF** 

AZ, 86011

Question: During this reporting period, was additional land annexed into the regulated MS4 area?

Answer: No

Question: Is stormwater sewer mapping 100 percent complete?

Answer: Yes

Provide the description of the measurable goal:

Stormwater utility map completed and available in the NAU GIS database.

Question: Is outfall mapping 100 percent complete?

Answer: Yes

Number of outfalls mapped: 5

Provide the description of the measurable goal:

All outfalls mapped. Two discharge outfalls on north campus and three on south campus at various discharge locations to the Sinclair Wash.

Question: Is identification of receiving waters information 100 percent complete?

Answer: Yes

Provide the description of the measurable goal:

One receiving water on north campus, the Rio de Flag, and an ephemeral wash on south campus, Sinclair.

Question: Has an Illicit Discharge Detection and Elimination (IDDE) enforcement authority or other regulatory mechanism been established?

Answer: Yes

Name Title/Code/Citation Effective Date Inactive D	ite
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NAU EHS, NAU	Internal NAU Policy	07/06/2018	
Police, NAU Grounds			
Department			

# Question: Has a Construction Site Stormwater Runoff enforcement authority or other regulatory mechanism been established?

Answer: Yes

Name	Title/Code/Citation	Effective Date	Inactive Date
NAU EHS & Planning Design and Construction	NAU Project Design Guidelines (Section 5.2.2.); NAU Technical Standards in		
	Contractual Form		

# Question: Has a Post-Construction Stormwater Management enforcement authority or other regulatory mechanism been established?

Answer: Yes

Name	Title/Code/Citation	Effective Date	Inactive Date
NAU EHS, NAU	NAU Design Guidelines,	07/14/2018	
Planning Design and	Low Impact Development		
Construction	standard (Section 5.2.1.)		

Question: For each BMP in the Minimum Control Measure 1: Public Education and Outreach, what was completed during this reporting period?

Answer:

**BMP Name:** NAU Web Page

Category: Webpage

Personnel Position/Department: Environmental, Health & Safety (EHS)

BMP Description:

Storm water information regarding programs, policies, and pertinent contact information and ensuring the availability of the written storm water management program.

Is another government entity responsible for this BMP?

**Measurable Goals:** 

**Start Date:** 06/15/2017

Targeted End Date: 06/15/2021

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Targeted Audience: Faculty, Staff, Frequency: 1 Annually

Students, General

**Public** 

#### Milestone Description:

Ensure all MS4 policies, procedures, SWMP, and pertinent contact information are kept current and website is operational.

Were milestones/measurable goals achieved for this reporting Yes period?

**Actual BMP Start** 09/13/2018

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

MS4 information had been retained throughout the last reporting period the entire time with no discrepancies. In addition, the subject matter was reviewed and revised as necessary. It remains on the NAU EH&S web page and is active.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

Web material up to date and remains active.

Question: Minimum Control Measure 1: Public Education and Outreach, Did the program implement any additional BMPs during this reporting period?

Answer:

Did the program implement any additional BMPs during this reporting period? No Provide a summary of compliance with the requirements for Minimum Control Measure1.

Requirements met.

Question: For each BMP in the Minimum Control Measure 2: Public Involvement and Participation, what was completed during this reporting period?

Answer:

**BMP Name:** Environmental Caucus

Category: Public Involvement

**Personnel Position/Department:** NAU Office of Sustainability

BMP Description :

The Environmental Caucus, a group representing individuals comprised of faculty, staff, students, and the general public, meet regularly to discuss various environmental issues that may arise in or from an NAU entity/structure or immediate surrounding geographic area that poses, or could pose harm or degradation to the environment to some degree. Issues are solicited for cognitive input and corrective action, if warranted, is proposed.

Is another government entity responsible for this BMP?

Measurable Goals:

**Start Date:** 09/30/2016

Targeted End Date: 08/11/2021

Frequency: 1 Monthly

Milestone Description:

The caucus meets monthly during the Spring and Fall academic semesters. Meetings are advertised and posted on an NAU web page and meeting discussions are documented/recorded.

Were milestones/measurable goals achieved for this reporting No period?

ADEQ Directed No

Change:

Provide a description of the reason(s) why milestones were not met and include measures that will be implemented to get back on schedule.

The covid-19 pandemic put a halt to all in-person meetings on campus but the environmental caucus still published monthly information newsletters with contact information in the event an MS4 question is submitted.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

The Fall 2021 semester on NAU campus is back to in-person instruction as well as all faculty, staff, and students on site. Environmental Caucus meetings will commence again.

**BMP Name:** SWMP Review/Comment

**Category:** Public Participation

Personnel Position/Department: NAU EH&S

BMP Description :

Provide SWMP outreach to Environmental Caucus group that is attended by Faculty, Staff, Students, and the general public. This in the form of training presentation outlining the components of the NAU SWMP. Comments, questions, and concerns addressed at that time.

Is another government entity responsible for this BMP?

**Main Office** 

Measurable Goals:

**Start Date:** 10/09/2019

**Targeted End Date:** 09/29/2021

Frequency: 1 Two times per year

Milestone Description:

During Fall and Spring semesters, dispense SWMP training at Environmental Caucus meetings.

Were milestones/measurable goals achieved for this reporting No period?

**ADEQ Directed** 

No

Change:

Provide a description of the reason(s) why milestones were not met and include measures that will be implemented to get back on schedule.

The covid-19 pandemic suspended all in-person meetings as well as training. But the MS4 information remained visible and active on the NAU EH&S web page that contains contact information for any questions/issues that may arise.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period:

No

Milestone Description:

As campus is back to full on site instruction, training can be offered once again at the environmental caucus meetings.

Question: For Minimum Control Measure 2: Public Involvement and Participation, Did the program implement any additional BMPs during this reporting period?

Answer:

Did the program implement any additional BMPs during this reporting period?

Provide a summary of compliance with the requirements for Minimum Control Measure2.

Current BMPs seem to working well.

Question: For each BMP in the Minimum Control Measure 3: Illicit Discharge Detection and Elimination Program, what was completed during this reporting period?

Answer:

**BMP Name:** Stormwater Line Mapping

Category: GIS Updates

Personnel Position/Department: NAU Geographic Information Systems (GIS)

BMP Description:

The GIS team is tasked with updating stormwater lines into database and keeping current. Deleting lines removed from construction/renovation activities or adding.

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Is another government entity responsible for this BMP? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/15/2021

Frequency: 1 Annually

Milestone Description:

GIS information updated as construction/renovation activities trigger changes in line mapping.

Were milestones/measurable goals achieved for this reporting Yes

period?

Actual BMP Start 09/30/2017

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

The NAU GIS department keeps the stormwater lines up to date and current.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

None planned.

BMP Name: Implement IDDE Program

Category: Implement IDDE Program

Personnel Position/Department: NAU Grounds, NAU EHS, NAU Police

BMP Description :

IDDE program implementation encompasses review of the plan and training with certain key personnel. These personnel typically comprise the NAU Grounds and Police departments as they have a more active role and presence throughout campus with assigned job functions.

Is another government entity responsible for this BMP? No

Measurable Goals:

Start Date: 09/30/2017

Targeted End Date: 09/29/2021

1 Annually Frequency:

Milestone Description:

Have key personnel aware of the IDDE policy that are involved in early detection of certain activities that could result in an illicit discharge. Events documented with any corrective action warranted.

Were milestones/measurable goals achieved for this reporting Yes

period?

**Main Office** Southern Regional Office 1110 W.Washington Street . Phoenix, AZ 85007 400 W.Congress Street . Suite 433 . Tucson, AZ 85701 Actual BMP Start 06/12/2019

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

IDDE Program training was performed for Grounds Personnel by the NAU EH&S safety trainer.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

None planned.

BMP Name: Wet Weather Monitoring

Category: Wet Weather Monitoring

NAU EHS, NAU Grounds Personnel Position/Department:

BMP Description :

Perform wet weather monitoring at a minimum of two stormwater discharge events during each wet season (summer, winter) of the representative outfalls that shall document and include results in each annual report. If possible, the monitoring to be performed would include the first flush.

Is another government entity responsible for this BMP? Nο

Measurable Goals:

Start Date: 09/30/2017

Targeted End Date: 09/29/2021

1 Weekly Frequency:

Milestone Description:

The wet weather monitoring is performed and recorded in annual report. It should be noted that wet weather monitoring is being performed almost on a daily basis as NAU Grounds dispatches crews to all parts of campus which would increase the likelihood of observing an illicit discharge to some capacity and being reported promptly.

Were milestones/measurable goals achieved for this reporting Yes period?

Actual BMP Start 09/30/2017

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

Wet weather monitoring events were performed and logged for recordkeeping.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

None planned.

**BMP Name:** Dry Weather Screening

Category: Dry Weather Screening

Personnel Position/Department: NAU EHS, NAU Grounds

BMP Description :

Incorporate dry weather outfall screening/monitoring criteria into IDDE plan.

Is another government entity responsible for this BMP?

Measurable Goals:

**Start Date:** 04/14/2017

Targeted End Date: 09/29/2021

**Frequency:** 1 One time event

Milestone Description:

Dry weather outfall screening is performed and recorded within 72 hours after storm events that resulted in a discharge from the storm sewer system. It should be noted here that the NAU Grounds department on almost daily basis has crews dispatched to many areas of campus for regular work detail. Because of this presence, an illicit discharge or anomaly is likely to be observed and reported promptly to EHS.

Were milestones/measurable goals achieved for this reporting Yes period?

**Actual BMP Start** 09/30/2017

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

Dry weather screening was performed and logged for recordkeeping.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

None planned.

**BMP Name:** IDDE Policy

Category: Written IDDE Procedures

Personnel Position/Department: NAU EHS, NAU Grounds, NAU Police

BMP Description :

IDDE policy drafted that includes departmental responsibilities and enforcement mechanisms.

Is another government entity responsible for this BMP?

Measurable Goals:

**Main Office** 

**Start Date:** 09/30/2017

Targeted End Date: 09/29/2021

**Frequency:** 1 One time event

Milestone Description:

Maintain monitoring throughout campus for illicit discharges and report promptly to implement corrective action. Each illicit discharge is documented with pertinent information from all parties involved.

Were milestones/measurable goals achieved for this reporting Yes period?

**Actual BMP Start** 09/30/2017

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

IDDE policy drafted and online via the NAU EHS web site.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

None planned.

**BMP Name:** Training

**Category:** Staff Training

Personnel Position/Department: NAU Grounds, NAU Police

BMP Description :

Provide appropriate subject matter in training curriculum to personnel involved with campus-wide maintenance and monitoring of storm line/flow activity. Typically delivered in electronic format.

Is another government entity responsible for this BMP?

Measurable Goals:

**Start Date:** 09/30/2017

**Targeted End Date:** 09/29/2021

Frequency: 1 Annually

Milestone Description:

Training performed and documented via Safety Skills database for applicable personnel.

Were milestones/measurable goals achieved for this reporting Yes period?

**Actual BMP Start** 09/30/2017

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

Training was performed at least once in the reporting cycle by the NAU EHS trainer.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

None planned.

Question: For Minimum Control Measure 3: Illicit Discharge Detection and Elimination Program, Did the program implement any additional BMPs during this reporting period?

Answer:

Did the program implement any additional BMPs during this reporting period? No Provide a summary of compliance with the requirements for Minimum Control Measure3.

Excellent as no illicit discharges were reported/found warranting corrective action.

Question: Were staff trained in IDDE Awareness and Response?

Answer:

Yes

Sr.No.	Date of Training Event	Training Subject	Number of Employees Trained	Frequency of Training
1	10/02/2020	Stormwater/IDDE/Response	25	Annually

Question: Minimum Control Measure 1: Illicit Discharge Detection and Elimination Program, Provide the details of the Illicit Discharge Detection and Elimination (IDDE) incidents that occurred during this reporting period.

Answer:

Number of IDDE incidents reported in this reporting period: 0

Number of IDDE incidents responded to in this reporting period: 0

Sr.No.	Enforcement Actions	Enforcements Issued	Enforcements Resolved	Enforcements Unresolved
1	NOV	0	0	0
2	NOC	0	0	0
3	Stop Work	0	0	0
4	Admin Order	0	0	0

5	Admin Fines	0	0	0
6	Civil Penalties	0	0	0
7	Criminal Action	0	0	0
	Total	0	0	0

Question: Were there any unpermitted discharges to the MS4?

Answer: No

Question: Were any samples collected to characterize illicit discharge(s) in this reporting period?

Answer: No

Number of Illicit Discharges Sampled are: No illicit discharges in reporting period.

Question: For each BMP in the Minimum Control Measure 4: Construction Activity Stormwater Runoff Control, what was completed during this reporting period?

Answer:

**BMP Name:** Erosion & Sediment Control

Category: Erosion/ Sediment Control

Personnel Position/Department: NAU Planning, Design & Construction (PDC)

BMP Description :

The NAU Design Professional team and Project Manager to ensure all erosion and sediment control measures as outlined in the NAU Design Guideline and Technical Standards are stipulated in each construction contract prior to the commencement of each construction activity.

Is another government entity responsible for this BMP?

Measurable Goals:

 Start Date:
 09/30/2017

 Targeted End Date:
 09/29/2021

Frequency: 100 Percent per year

Milestone Description:

All construction work does not proceed until contracts signed and general and sub-contractors are aware of the control measures that are specific to each project.

Were milestones/measurable goals achieved for this reporting Yes period?

**Actual BMP Start** 09/30/2017

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

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Each major construction project over an acre in size triggers all the erosion and sediment control requirements in NAU's technical standards. All contract specifications were adhered to by the general contractor or construction manager at risk (CMAR). Only one project in reporting period triggered a construction NOI.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

None planned.

**BMP Name:** Site Plan Review

**Category:** Site Plan Review

Personnel Position/Department: NAU Project Design Team, Project Manager

BMP Description :

This BMP is to provide the structures necessary to make use of storm water through harvesting and infiltrating water, keeping water onsite wherever possible. Storm water drainage management also includes the LEED goals of water collection and onsite reuse. The entire project area needs to be considered for opportunities to collect and store stormwater for irrigation. These features must also be designed to withstand the stress of freezing and thawing that are a reality on the Flagstaff mountain campus. Within a project's design process, managing the storm water drainage is a key part of the integrated site design promoting proactive solutions that are consistent with or exceed regulatory standards. Given current limited storm drain and land capacities, some of the mitigation of past and future storm water drainage issues at NAU should occur on a project by project basis.

Is another government entity responsible for this BMP?

Measurable Goals:

**Start Date:** 09/30/2017

Targeted End Date: 09/29/2021

Frequency: 1 One time event

Milestone Description:

Frequency of Site Plan Reviews is on an "as-needed" or "as-required" basis which is triggered by the intent to develop/construct on campus. The Design Team/Professionals adhere to the policy/procedure outlined in NAU's Design Guidelines for each project. In particular, Chapter 5 pertaining to Storm Water Drainage Design & Surface Water Procedures. The specific details for storm water runoff control are identified in section 5.2.1. A Storm Water Drainage Report is prepared for each project and is based on the format and technical standards of the City of Flagstaff Engineer's Design Report. Incorporated by reference is also adhering to the City's Low Impact Development Guidance Manual.

Were milestones/measurable goals achieved for this reporting Yes period?

Actual BMP Start 09/30/2017

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

Only one project triggered a site plan review in reporting period.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

None planned.

BMP Name: Site Inspections

Category: Inspections

NAU PD&C, Project Managers, EH&S, General Contractor Personnel Position/Department:

BMP Description :

Inspections of all construction site activities are the responsibility of the General Contractor. The GC can perform inspections in accordance with the SWPPP or designate a subcontractor. The inspections for SWPPP compliance will be performed on a regular basis that will be dictated with site activities.

Is another government entity responsible for this BMP? No

Measurable Goals:

Start Date: 09/30/2017

Targeted End Date: 09/29/2021

1 Weekly Frequency:

Milestone Description:

No construction work commences without signed and vetted contract. Onus of obtaining an NOI is on the general contractor. The SWPPP will be included as document review prior to site-specific work. Inspection frequency may be daily, weekly, or bi-weekly depending on site characteristics and work activity but will be performed and documented in accordance with conditions outlined in the SWPPP.

Were milestones/measurable goals achieved for this reporting Yes period?

Actual BMP Start 09/30/2017

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

NAU met with the general contractor's safety and environmental representative performing the weekly/biweekly inspections and updated with a more recent and thorough version. All inspections were performed as verified by frequent follow up throughout construction process.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

None planned.

BMP Name: Waste Control

Category: Control Wastes

Personnel Position/Department: NAU PD&C, Project Managers

BMP Description:

All construction site work activities will be bound by NAU Technical Standards via contractual agreements. The onus of regular solid and liquid waste control on all construction sites is the responsibility of the General Contractor or designated subcontractor. The mechanisms to achieve waste control will be stipulated in the contract. If certain regulated wastes (asbestos, PCBs, etc.) are found that were not identified in the pre-construction phase or site walk, NAU EH&S will assist in categorizing in accordance with EPA regulations and help coordinate the proper disposal.

Is another government entity responsible for this BMP?

Measurable Goals:

 Start Date:
 09/30/2017

 Targeted End Date:
 09/29/2021

*Frequency:* 1 One time event

Milestone Description:

All waste control requirements stipulated in signed contractual agreements between NAU PD&C and General Contractor prior to commencement of all construction activities on campus. Waste control measures generally incorporated into site-specific SWPPPs and inspected against on weekly or biweekly basis and recorded. Waste anomalies corrected as identified.

Were milestones/measurable goals achieved for this reporting Yes period?

**Actual BMP Start** 09/30/2017

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

This was achieved and complied with at one project triggering an NOI.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

None planned.

**BMP Name:** Construction Operator Training

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**Category:** Construction Operator Training

Personnel Position/Department: NAU PD&C

BMP Description :

NAU PD&C designates a qualified individual and works with the Project Manager to ensure site-specific sediment and erosion controls are appropriate and installed prior to the commencement of construction activity. Typically the control measures are drafted in each construction contract via the NAU Design Professional Team and awarded Architect/Engineer. Controls also incorporated into the General Contractors SWPPP.

Is another government entity responsible for this BMP?

Measurable Goals:

**Start Date:** 09/30/2017

**Targeted End Date:** 09/29/2021

**Frequency:** 1 One time event

Milestone Description:

The frequency is on an "as-needed" or "as-required" basis triggered by the intent to construct on campus for any acreage/size. The designated operator's inspection results for each project are documented and recorded and are typically retained on the GC's site trailer.

Were milestones/measurable goals achieved for this reporting Yes period?

**Actual BMP Start** 09/20/2018

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

Only one project triggering a construction NOI occurred in reporting period. Met with the general contractor of the site who introduced the safety representative who was also performing the inspections in association with the SWPPP. The weekly/bi-weekly checklist for the stormwater portion was not fully comprehensive so NAU EHS provided them with an updated and more thorough version and did a general walkabout of the site to instruct on how to detect structural control discrepancies.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

None planned.

Question: For Minimum Control Measure 4: Construction Activity Stormwater Runoff Control, Did the program implement any additional BMPs during this reporting period?

Answer:

Did the program implement any additional BMPs during this reporting period?

Provide a summary of compliance with the requirements for Minimum Control Measure4.

The mechanisms of control for this MCM are working extremely well.

Question: Were any construction activity operator training events conducted?

Answer:

Yes

Sr.No.	Date of Training Event	Training Subject	Number of Employees Trained	Frequency of Training
1	09/10/2020	SWPPP Inspections-site specific	1	Annually

Question: Minimum Control Measure 4: Construction Activity Stormwater Runoff Control, Provide the details of the construction activity complaints and inspections that were conducted during this reporting period.

#### Answer:

Number of active construction sites in this reporting period: 1

Has an inspection frequency been developed and implemented? YES

Number of active construction sites inspected at least weekly: 1

Number of active construction sites inspected at least one time 1 every six months:

Number of active construction sites inspected at least monthly: 1

Number of active construction sites inspected at least annually: 1

Number of construction activity complaints that were resolved or 0 responded to:

Number of active construction sites not inspected: 0

Number of construction activity complaints received in this or reporting period:

Number of active construction sites that required re-inspections 0 in this reporting period:

Sr.No.	Enforcement Actions	Enforcements Issued	Enforcements Resolved	Enforcements Unresolved
1	NOV	0	0	0
2	NOC	0	0	0

3	Stop Work	0	0	0
4	Admin Order	0	0	0
5	Admin Fines	0	0	0
6	Civil Penalties	0	0	0
7	Criminal Action	0	0	0
	Total	0	0	0

Question: For each BMP in the Minimum Control Measure 5: Post-Construction Stormwater Management in New Development and Redevelopment, what was completed during this reporting period?

Answer:

**BMP Name:** O&M Practices

Category: O&M Procedures

Personnel Position/Department: NAU Grounds, Project Managers

BMP Description:

Operation & Maintenance Plan drafted and implemented that details the procedures for ensuring long term O&M of post-construction storm water BMPs.

Is another government entity responsible for this BMP?

<u>Measurable Goals:</u>

 Start Date:
 09/29/2017

 Targeted End Date:
 09/29/2021

*Frequency:* 1 One time event

Milestone Description:

Frequency is on an "as-needed" or "as-required" basis and is generally performed by the NAU Grounds department. If any BMP warrants corrective action, the NAU Project Manager and/or EH&S will be notified to coordinate efforts.

Were milestones/measurable goals achieved for this reporting Yes period?

**Actual BMP Start** 07/01/2018

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

O&M training performed in Grounds department alongside IDDE and general stormwater awareness (once/year).

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

None planned.

**BMP Name:** Structural/Non-Structural Controls

Category: Structural/Non-Structural BMP

**Personnel Position/Department:** NAU Design Professional Team, Project Managers

BMP Description :

Structural and Non-structural controls are addressed by the NAU Design Team and associated architect/engineer in the design phase of all construction projects regardless of size. The awarded contract, or Construction Manager at Risk (CMAR), adheres to all controls specified on the contract which incorporates the Low Impact Development Plan and the specific control measures identified in the Design Guideline (Chapter 5, Section 5.2.1.). Stormwater Drainage Reports are prepared for each project based on the format and technical standards of the City of Flagstaff Engineer's Design Report. If a site presents unique characteristics in terms of potential negative watershed impact to the surrounding areas, an independent storm water drainage study is performed. Wherever possible, site development will occur such that all flows exiting the project site remain in the current watershed sub-basin so as to not impact drainage patterns in adjacent watershed sub-basins

Is another government entity responsible for this BMP?

Measurable Goals:

 Start Date:
 09/30/2017

 Targeted End Date:
 09/29/2021

*Frequency:* 1 One time event

Milestone Description:

Frequency is on an "as-needed" or "as-required" basis triggered by intent to construct on campus. All construction projects utilize the structural and non-structural controls outlined in the CMAR contract, Design Guidelines (including the Low Impact Development Plan), and controls specified by the architect/engineers. NAU Project Manager and/or their designee performs periodic inspections to ensure the appropriate controls are installed and maintained or the project is not accepted by NAU.

Were milestones/measurable goals achieved for this reporting Yes period?

**Actual BMP Start** 09/30/2018

Date:

#### Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

Very effective. Each construction project addresses the post-construction control mechanisms during the initial site walks with the NAU Design Professional, Architect/Engineer, and General Contractor. The GC signs off that all the technical standards and post-construction controls will be installed. Before each project close-out, the NAU Project Manager walks the site with the GC and does not sign off until all controls/mechanisms are in place and functioning.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

None planned.

BMP Name: Control Inventory

Category: Inventory

Personnel Position/Department: NAU EHS, NAU PD&C

BMP Description :

Inventory system maintained and tracked as information becomes available in project close-out documents. Acceptance of a project indicates that all control mechanisms required in the Design Guideline and contract have been met. Inventory tracked by electronic means via a unique project number and/or specific site location/description generated by the PD&C or EHS department.

Is another government entity responsible for this BMP? No

Measurable Goals:

Start Date: 09/30/2017

Targeted End Date: 09/29/2021

1 One time event Frequency:

Milestone Description:

Frequency is on an "as-completed" basis for each project. Inventory searchable by electronic means with project ID number or site specific location along with control details.

Were milestones/measurable goals achieved for this reporting Yes period?

Actual BMP Start 09/30/2017

**Main Office** 

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

Any site-specific structural and non-structural controls are added to the inventory retained in the EH&S office. No controls were added in reporting period as the only project triggering an NOI is not yet completed.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

None planned.

**BMP Name:** Site Plan Reviews **Category:** Site Plan Reviews

Personnel Position/Department: NAU Design Professional Team, Project Manager

BMP Description :

The site plan review process to evaluate and approve post-construction stormwater controls is actually performed by the NAU Design Professional Team, Project Manager, and Architect/Engineer in the design stages of a project. The team will use initial site inspection data, and drainage or other reports to appropriately recommend the installation of post-construction BMPs. Generally this is accomplished by adhering to NAU's Design Guidelines following the Low Impact Development Plan.

Is another government entity responsible for this BMP?

**Measurable Goals:** 

**Start Date:** 09/30/2017

Targeted End Date: 09/29/2021

*Frequency:* 1 One time event

Milestone Description:

Performed on "as-needed" or "as-required" basis which is triggered by project initiations. A determination will be made by the NAU Project Manager with respect to ensuring that all post-construction BMPs have been installed and are functioning per design specifications outlined in the contract and plans. NAU will not accept the project as complete from the general contractor until all discrepancies have been corrected.

Were milestones/measurable goals achieved for this reporting Yes period?

**Actual BMP Start** 09/30/2017

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

Site plan reviews have been conducted and documented in the PD&C group for each applicable project. Only one project (SAHPC-south campus) in reporting period triggered NOI notification.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

None planned.

**Question: For Minimum Control Measure 5: Post-Construction Stormwater Management in New** Development and Redevelopment, Did the program implement any additional BMPs during this reporting period?

Answer:

Did the program implement any additional BMPs during this reporting period? No Provide a summary of compliance with the requirements for Minimum Control Measure5.

Working extremely well!

**Question: Minimum Control Measure 5: Post-Construction Stormwater Management in New** Development and Redevelopment, Provide the details of the Post-Construction Stormwater controls used during this reporting period

Answer:

Number of sites that required Post-Construction Stormwater 0 controls in this reporting period:

Number of Post-Construction Stormwater controls inspected in 0 this reporting period:

Sr.No.	Enforcement Actions	Enforcements Issued	Enforcements Resolved	Enforcements Unresolved
1	NOV	0	0	0
2	NOC	0	0	0
3	Stop Work	0	0	0
4	Admin Order	0	0	0
5	Admin Fines	0	0	0
6	Civil Penalties	0	0	0
7	Criminal Action	0	0	0
	Total	0	0	0

Question: For each BMP in the Minimum Control Measure 6: Pollution Prevention and Good Housekeeping, what was completed during this reporting period?

Answer:

BMP Name: O&M Plan Category: O&M Procedures

Facility Information:

NAU Transportation & Fleet Services

Parking Lots

Hazardous Waste Facility

**Facilities Streets** 

Personnel Position/Department: NAU Fleet Services & Maintenance, Grounds

#### BMP Description :

Employees adhere to procedures outlined in the O&M Plan as it relates to various work activities throughout campus. Each work task/trade may be impacted by any one or more of the following components in the plan: stormwater catch basin cleanout, deicing and snow removal, storage/washing/maintenance of fleet vehicles, building exterior maintenance, application of fertilizer/pesticides, material/equipment storage, and other campus activities.

Is another government entity responsible for this BMP?

Measurable Goals:

**Start Date:** 09/30/2017

**Targeted End Date:** 09/29/2021

Frequency: 1 Daily

Milestone Description:

Components in the O&M Plan are followed for each work project throughout campus that might warrant protective controls.

Were milestones/measurable goals achieved for this reporting Yes period?

**Actual BMP Start** 07/01/2018

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

Very effective. Facilities supervisors reach out to the NAU EH&S office for guidance if "normal"maintenance operations may result in a discharge. Alternate methods are discussed and implemented and varies depending on the project. Most, if not all, of the washing/maintenance of vehicles/equipment is performed indoors at the wash bay located in the fleet service garage area. The in-floor trenching diverts the washout to a three-stage oil/water/grit separator prior to discharging to the domestic sewer system. The MS4 at this location is segregated from the domestic lines to the City.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

**BMP Name:** Employee Training

Category: Training

Facility Information:

NAU Transportation & Fleet Services

Parking Lots

**Hazardous Waste Facility** 

**Facilities Streets** 

Personnel Position/Department: NAU Fleet Services & Maintenance, Grounds

BMP Description :

Employee training program developed and implemented by EH&S that incorporates pollution prevention and good housekeeping behavior/technique into daily work activities. This performed annually via electronic training module and/or departmental meetings.

Is another government entity responsible for this BMP?

Measurable Goals:

**Start Date:** 09/30/2017

Targeted End Date: 09/29/2021

Frequency: 1 Annually

Milestone Description:

Employee training documented and recorded on either supervisor attendance sheets or tracked electronically with NAU's training database (SafetySkills).

Were milestones/measurable goals achieved for this reporting Yes period?

**Actual BMP Start** 07/01/2018

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

Very effective. Training dispensed and documented once/year for the Facilities shops.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

None planned.

**BMP Name:** Fleet Service/Maintenance Inspections

Category: Inspections

Main Office

1110 W.Washington Street . Phoenix, AZ 85007
(602)771-2300

Southern Regional Office
400 W.Congress Street . Suite 433 . Tucson, AZ 85701
(520)628-6733

#### Facility Information:

NAU Transportation & Fleet Services

Parking Lots

Hazardous Waste Facility

**Facilities Streets** 

Personnel Position/Department:

**NAU Fleet Services & Maintenance** 

#### BMP Description:

Perform perimeter inspection of structure to ensure no illicit discharges identified. Ensure the pumping and cleanout of three-chamber solid/liquid separator is performed when required and documented.

Is another government entity responsible for this BMP?

No

#### Measurable Goals:

**Start Date:** 09/30/2017

Targeted End Date: 09/29/2021

Frequency: 1 Annually

#### Milestone Description:

Perimeter inspections performed once/annually or on an "as-identified"basis; especially around the fuel dispensing island. Fleet and maintenance activities are largely performed in interior environments with in-floor drains to collect any spills that are capped and remain on site for subsequent pumping. This is contracted out by a third-party environmental service (ThermoFluids, Safety Kleen, etc.). This entity also performs the pumping and cleaning of the three-chamber soil/liquid separator just south of the building.

Were milestones/measurable goals achieved for this reporting Yes period?

**Actual BMP Start** 07/01/2018

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

Very effective as the EH&S office is housed in a facility that is in close proximity to the inspection sites. The sites are observed almost on a daily basis or at least a few times/week.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

None planned.

**BMP Name:** Maintenance Schedule

Category: Maintenance Schedule

Facility Information:

Main Office

Parking Lots

**Facilities Streets** 

NAU Transportation & Fleet Services

Hazardous Waste Facility

Personnel Position/Department: NAU Grounds

BMP Description:

Follow O&M Plan during daily work activities for those tasks that could potentially result in an illicit discharge. Follow streetsweeping maintenance schedule as needed based on seasonal snow reduction/removal tasks on streets and parking lots following the application of cinders for traction.

Is another government entity responsible for this BMP?

Measurable Goals:

**Start Date:** 09/30/2017

**Targeted End Date:** 09/29/2021

Frequency: 1 Monthly

Milestone Description:

Streetsweeping performed at least monthly but perhaps more often depending on seasonal snow loading of streets and parking lots. Events recorded in the Grounds Department.

Were milestones/measurable goals achieved for this reporting Yes period?

**Actual BMP Start** 07/01/2018

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

No change in maintenance operation frequency and the seasonal snow loading seemed "normal" or perhaps less. Road cinders removed as needed.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

None planned.

**BMP Name:** Municipal Operations

Category: Inventory

Facility Information:

**Facilities Streets** 

Parking Lots

(602)771-2300

NAU Transportation & Fleet Services

Main Office Southern Regional Office
1110 W.Washington Street . Phoenix, AZ 85007 400 W.Congress Street . Suite 433 . Tucson, AZ 85701

Hazardous Waste Facility

Personnel Position/Department: NAU EH&S, NAU Grounds

BMP Description :

Inventory of all municipal operations that have potential to discharge on campus identified.

Is another government entity responsible for this BMP? No

Measurable Goals:

Start Date: 09/30/2017

Targeted End Date: 09/29/2021

1 One time event Frequency:

Milestone Description:

Inventory complete.

Were milestones/measurable goals achieved for this reporting Yes

period?

Actual BMP Start 07/01/2018

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

Inventory up to date and no revision required in reporting period.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

None planned.

BMP Name: Hazwaste Facility Inspections

Category: Inspections

Facility Information:

**Hazardous Waste Facility** 

NAU Transportation & Fleet Services

Parking Lots

**Facilities Streets** 

Personnel Position/Department: NAU EH&S

BMP Description :

Perform weekly inspections of hazardous waste facility (Building 78) as per 40 CFR 264.174.

Is another government entity responsible for this BMP? No

Measurable Goals:

Southern Regional Office **Main Office** 1110 W.Washington Street . Phoenix, AZ 85007

**Start Date:** 09/30/2017

**Targeted End Date:** 09/29/2021

Frequency: 1 Weekly

Milestone Description:

Weekly inspections performed and documented.

Were milestones/measurable goals achieved for this reporting Yes

period?

**Actual BMP Start** 07/01/2018

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

Very effective. Inspections were performed and documented on a weekly basis per RCRA rules.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

None planned.

**BMP Name:** Maintenance Activities

Category: Maintenance Activities

Facility Information:

NAU Transportation & Fleet Services

Parking Lots

**Hazardous Waste Facility** 

**Facilities Streets** 

Personnel Position/Department: NAU Fleet Services & Maintenance

BMP Description :

Operations & Maintenance (O&M) Plan drafted that details work practice procedures among the various trade shops to avoid certain practices that could potentially result in an illicit discharge to the MS4.

Is another government entity responsible for this BMP?

Measurable Goals:

**Start Date:** 09/30/2017

**Targeted End Date:** 09/29/2021

Frequency: 1 Daily

Milestone Description:

The O&M Policy is a living document and employees incorporate the procedures in daily work activities.

Main Office

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(602)771-2300

Southern Regional Office
400 W.Congress Street . Suite 433 . Tucson, AZ 85701
(520)628-6733

Were milestones/measurable goals achieved for this reporting Yes period?

**Actual BMP Start** 07/01/2018

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

Very effective. Again, most of the facilities work activities occur at indoor locations with no discharges to the MS4 system.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

None planned.

Question: For Minimum Control Measure 6: Pollution Prevention and Good Housekeeping, Did the program implement any additional BMPs during this reporting period?

Answer:

Did the program implement any additional BMPs during this reporting period? No Provide a summary of compliance with the requirements for Minimum Control Measure6.

Seems to be working quite well. And now that the EH&S group has moved to an office in close proximity to the affected employees/areas, communication seems to have increased. Employees seem to inquire more often about project/task specific issues to get guidance. This will also most likely occur in the monthly supervisors meetings as at least one member of the EH&S group will attend and entertain any MS4 questions and provide guidance.

Question: Was staff training conducted?

Answer:

Yes

Sr.No.	Date of Training Event	Training Subject	Number of Employees Trained	Frequency of Training
1	09/10/2020	PP & Good Housekeeping	30	Annually

### CERTIFICATION OF SUBMISSION

#### **JAMES BIDDLE**

You validated your identity by answering your personal security question and password on myDEQ at **03:36 PM** on **09/23/2021**. At this time, you certified the summary information above by checking that you agreed to the following statement:

## **Certify your submission:**

By checking this box I certify under penalty of law that this submittal was prepared by me, or under my direction or supervision of personnel appropriately qualified to properly gather and evaluate the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I understand that all information submitted to ADEQ is public record unless otherwise identified by law as confidential. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.