

UNIVERSITY OF ARIZONA STORMWATER MANAGEMENT PLAN (SWMP)

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1. PURPOSE

This Stormwater Management Plan (SWMP) is intended to set practices for the University of Arizona to improve the quality of surface waters by reducing the number of pollutants potentially contained in stormwater runoff to the maximum extent practicable (MEP). The U of A seeks to reduce the pollutants from entering stormwater run-off by implementing structural and non-structural BMPs. These BMPs meet the six minimum control measures as required by the AZPDES Small MS4 permit. The University of Arizona has the authority and the financial resources to implement all measures within this SWMP.

2. DEFINITIONS

Arizona Pollutant Discharge Elimination System (AZPDES) - The state of Arizona program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, incorporated by reference under Arizona Administrative Code (AAC) R18-9-A905.

Best Management Practice (BMP) - Permit condition used in place or in conjunction with effluent limitations to prevent or control the discharge of pollutants. May include schedule of activities, prohibition of practices, maintenance procedure, or other management practice. BMPs may include, but are not limited to, treatment requirements, operating procedures, or practices to control plant site runoff, spillage, leaks, sludge or waste disposal, or drainage from raw material storage

Clean Water Act (CWA) - The Clean Water Act is an act passed by the U.S. Congress to control water pollution. It was formerly referred to as the Federal Water Pollution Control Act of 1972 or Federal Water Pollution Control Act Amendments of 1972 (Public Law 92-500), 33 U.S.C. 1251 et. seq., as amended by: Public Law 96-483; Public Law 97-117; Public Laws 95-217, 97-117, 97-440, and 100-04.

Code of Federal Regulations (CFR) - A codification of the final rules published daily in the Federal Register. Title 40 of the CFR contains the environmental regulations.

The University of Arizona Manual of Design and Specification Standards (DSS) - The University of Arizona Manual of Design and Specification Standards meant to be utilized as a guideline for the execution of professional services associated with the design, construction, renovation and maintenance of all facility related projects. The DSS is also the standard of execution for all Job Order Contract work unless specified otherwise.

EPA - United States Environmental Protection Agency

Grab Sample - A sample which is taken from a waste stream on a one-time basis without consideration of the flow rate of the waste stream and without consideration of

time.

Maximum Extent Practicable (MEP) - Undefined by the EPA to allow greater flexibility by MS4's to limit and control impact to stormwater runoff.

Municipal Separate Storm Sewer System (MS4) - A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) owned by a state, city, town or other public body, that is designed or used for collecting or conveying stormwater, which is not a combined sewer, and which is not part of a publicly owned treatment works. Commonly referred to as an "MS4"[40 CFR 122.26(b)(8)].

National Pollutant Discharge Elimination System (NPDES) - The national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pre-treatment requirements, under Sections 307, 318, 402, and 405 of CWA.

Permittee - The University of Arizona (U of A).

Stormwater - Stormwater runoff, snow melt runoff, and surface runoff and drainage [40 CFR 122.26(b)(13)].

Stormwater Management Plan (SWMP) - A comprehensive plan for implementation of NPDES permit requirements.

Surface Water Master Implementation Plan (SWMIP) - A comprehensive plan that provides an analysis of current and future build-out conditions while recognizing the long-term inherent value of water by conserving, harvesting, capturing, and reusing it, demonstrating good environmental stewardship, making surface water a proactive influence on integrated site design, integrating engineering techniques used for flood prevention with natural ecological techniques used for water harvesting within a framework of designed multi-use landscapes, and assisting in making informed design and budgeting decisions based on a planned system for managing campus surface water.

Stormwater Pollution Prevention Plan (SWPPP) - A site specific plan for implementation of NPDES permit requirements.

Waters of the United States - All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide. Waters of the United States include but are not limited to all interstate waters and intrastate lakes, rivers, streams (including intermittent streams), mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, play lakes, or natural ponds.

3. INTRODUCTION

This Stormwater Management Plan (SWMP) covers operations at the University of Arizona (U of A) at the Tucson main campus, motor pool, Cat Tran Service Station, Rincon Vista, Sixth Street greenhouses, West Campus Agricultural Center (WCAC), Arizona Material Laboratory, Sunnyside Center, and the Arizona Health Sciences Center (AHSC) as illustrated in the appendices. The SWMP has been developed as required by the Stormwater Phase II Final Rule (64 Federal Register 68722) incorporated by reference in the Arizona Administrative Code (AAC) R18-9-A905. This plan meets the requirements of the Arizona Pollutant Discharge Elimination System Small MS4 General Permit (No. AZG2002-002) for Stormwater Management Program. See appendices the general permit conditions.

The U of A has provided the current Notice of Intent (NOI) in appendices of this document and has included it in this SWMP at <https://ehs.arizona.edu/waste-environmental>. A revised NOI will be prepared and submitted, if required by the new permit, when a new Arizona Pollutant Discharge Elimination System Small MS4 Permit is adopted. Stormwater from the U of A campus discharges through the City of Tucson to receiving waters as identified in the NOI. The UA Authorization Number under the MS4 General permit is MS42002-37. The UA's NOI and the SWMP may be [viewed online](#).

This SWMP describes the University of Arizona and its operations, identifies targeted potential sources of stormwater pollution from the campus, adopts appropriate Best Management Practices (BMPs) with scheduled completion dates, and provides for periodic review of this SWMP as part of the UA environmental commitment.

4. SITE DESCRIPTION

The U of A campus is located in Section 14 South, Township 14 South, Range 14 East, of the Gila and Salt River Base and Meridian, Pima County, Arizona. The campus is bounded by Lester Street to the north, Eighth Street to the south, Campbell Avenue to the East, and Euclid Avenue to the West. More than half of the campus is covered with impervious surfaces, such as roads, sidewalks, buildings, and parking lots. The campus is 380 acres in total area and is comprised of the Main Campus (south of Speedway) and the Arizona Health Sciences Campus (north of Speedway). Approximately 49,000 students attend the university and 16,000 full or part-time employees work at the university ([UAIR, 2026](#)). In addition to instruction and research, activities conducted at the U of A campus include building construction, landscape maintenance, small engine repair, vehicle washing, and chemical and material storage. Buildings and facilities include classroom buildings, research and medical laboratories, libraries, football stadium, theaters, basketball arena, cafeterias, restaurants, bookstores, swimming

pools, heating and cooling plants, and a planetarium. More than 73 percent of the campus is covered by buildings, parking lots, sidewalks or streets that are impervious to stormwater infiltration as presented in Table 1 below.

Land Use	Acres
<i>Buildings</i>	89
<i>Parking Lots</i>	67
<i>Sidewalks</i>	70
<i>Streets</i>	27
<i>Total Impervious Cover:</i>	264
% of Total =	71%
<i>Landscaping</i>	111
TOTAL =	374

Source: (University of Arizona Fact Book, 2024)

The U of A main campus is situated in a medium density neighborhood within one mile of downtown Tucson. The areas around the campus were developed in the early to mid-twentieth century. The project site is contained within the watersheds of the Rillito and Santa Cruz Rivers, both dry wash beds for the greater part of the year. The rainy monsoon season occurs during summer months and can precipitate flash flooding in washes and the flooding of surface streets due to low ground permeability. A small amount of the rainfall onsite is collected in retention/detention basins or stormwater sewers, while the majority of runoff is collected by campus streets and conveyed offsite westward on surface streets and in the Bronx and High School Washes to the Santa Cruz River and to a lesser degree, northward across surface streets and in the Mountain Avenue stormwater sewer to the Rillito River. Major drainage basins of the University of Arizona Main Campus are described in detail in the SWMIP.

Stormwater drainage flows primarily via surface drainage ways to City of Tucson streets. There are limited stormwater sewer systems serving isolated sections of the campus. These systems and other stormwater management structures such as retention and detention basins, are shown in the appendices. Most of the water used for drinking comes from groundwater wells on campus. Groundwater is also used for landscaping when there is insufficient reclaimed water.

The University of Arizona has prepared a Surface Water Master Implementation Plan (SWMIP) (appendices) that further discusses various landscaping considerations and existing stormwater management projects. These projects are both of recent and older construction and, in general, have addressed some local runoff and water harvesting. For example, the piped drainage system at the north end of McKale Center has a provision to close off drains during storm events to allow runoff to “bubble up” into the terraced landscape area for water harvesting (SWMIP).

The SWMIP also provides many useful hydrologic tools for the University of Arizona. Some of which are provided below:

- Many catchment opportunities have been located and analyzed to eliminate or greatly decrease flooding nuisances on campus. Many of these opportunities exist currently, while others will be available as the implementation of the campus plan progresses.
- Volumes at various concentration points along each major flow path were calculated and identified to provide a working model in which volumes can easily be modified to reflect changes made to the campus landscape.
- Several options for runoff retention/detention, both above and below ground, have been identified for implementation into future campus projects. In addition, Guidelines have been added or modified in The University of Arizona Manual of [Design and Specification Standards \(DSS\)](#) to reflect the findings and concerns encountered.

After the analysis and investigation of the hydrological conditions of the University of Arizona, it has become apparent that an event, such as a 100-year storm, could cause significant flooding problems in both streets and buildings throughout campus and in neighboring communities. The contained runoff can be managed using a combination of deep infiltration and bleed-off into landscape areas that may be stored for later use (SWMIP).

The DSS is a tool that provides guidelines for design, construction, renovation, and maintenance of all facility related projects. The DSS is also the standard of execution for all Job Order Contract work unless specified otherwise. The principles of water harvesting were incorporated into the Surface Water Procedures & Drainage and Surface Water Guidelines of the DSS.

5. STORMWATER POLLUTION PREVENTION TEAM

The stormwater pollution prevention team is responsible for developing, implementing, maintaining, and revising this SWMP. The members of the team are familiar with the management and operations of the University of Arizona.

Environmental Health & Safety (EHS) coordinates overall U of A compliance with the SWMP and implementation of BMPs. The members of the team and their responsibilities (i.e., implementing, maintaining, record keeping, submitting reports, conducting inspections, employee training, conducting annual compliance evaluation, etc.) are provided in the appendices.

6. STORMWATER DRAINAGE SYSTEM

Since the 1970s the campus has experienced most of its new development at sites north of Speedway Boulevard and south of Sixth Street. These projects displaced previously existing developments, so the impact on drainage from these sites was not significant. The most significant change in drainage patterns from the campus was the construction of the Mountain Avenue stormwater sewer, which has decreased the amount of surface street drainage northward from the campus by collecting stormwater underground and conducting it directly to the Rillito River (SWMIP).

Appendices show a map of the U of A's Phase II stormwater drainage system, as required by 40 CFR 122.34(b)(3)(i). In addition, the map identifies locations of materials or activities that may be exposed to stormwater, including loading/unloading areas, solid waste trash compactors, drywells, outdoor materials storage or handling areas, and vehicle washing areas. There is also a map that shows the location of all stormwater outfalls from the U of A Main Campus and the location of the U of A campus in relation to Waters of the U.S. All stormwater from the U of A empties into the City of Tucson, MS4. Waters of the U.S. do not receive stormwater flow directly from the campus.

7. OTHER PLANS INCORPORATED BY REFERENCE

Incorporated by reference into this document is the U of A's Manual of Design and Specification Standards (DSS) as well as the U of A's Surface Water Master Implementation Plan (SWMIP).

The [DSS](#) identifies policies, procedures, and standards that contractors are to abide by in activities conducted on-site for the U of A. The DSS is meant to be utilized as a guideline for the execution of professional services associated with the design, construction, renovation and maintenance of all facility related projects. The DSS is also the standard of execution for all Job Order Contract work unless specified otherwise.

The SWMIP is a comprehensive plan that provides an analysis of current and future build-out conditions while recognizing the long-term inherent value of water by conserving, harvesting, capturing, and reusing it, demonstrating good environmental stewardship, making surface water a proactive influence on integrated site design, integrating engineering techniques used for flood prevention with natural ecological techniques used for water harvesting within a framework of designed multi-use landscapes, and assisting in making informed design and budgeting decisions based on a planned system for managing campus surface water.

8. CONTROL MEASURES

The MS4 Permit outlines the minimum control measures required to effectively control the discharge of pollutants in stormwater discharge from Small MS4s to waters of the United States. In addition to implementing the minimum control measures, the U of A has implemented stormwater management projects as discussed in the SWMIP. The SWMIP details the application of water harvesting strategies including measures to reduce the volume of stormwater runoff leaving the U of A campus. These and other stormwater management controls, or Best Management Practices (BMPs) will be implemented to prevent pollution in stormwater discharged from the U of A campus.

State and federal regulations require BMPs addressing six minimum control measures outlined in the MS4 permit. These BMPs are described in the remaining subsections of this section with applicable measurable goals and schedules including completion dates for each BMP.

The six control measures addressed by this SWMP include:

- Public Education and Outreach
- Public Participation and Involvement
- Illicit Discharge Detection and Elimination
- Construction Site Runoff Control
- Post-Construction Runoff Control
- Pollution Prevention and Good Housekeeping

a. Public Education and Outreach

Stormwater pollution prevention education leads to an informed and knowledgeable community that is more likely to support and comply with the BMP provisions. The target audiences of this SWMP are U of A faculty, staff, students and visitors, which populate the campus on any given day. The Public Education and Outreach BMPs serve to educate these target audiences about the U of A's stormwater program.

These materials include spent hazardous chemicals as listed in EPA regulations, or defined by any of the following characteristics: ignitable, corrosive, toxic, reactive. Sources include teaching and research laboratory operations, art studios, and building or grounds maintenance activities. These materials are targeted in the SWMP because discharge to stormwater would endanger the campus community, surrounding neighborhoods, and the environment.

Pesticides and Fertilizers – These materials include commercial

products that are used on campus as part of the landscape and grounds maintenance operation. These materials are targeted because they may contain toxic ingredients that could pose a hazard to the campus community, surrounding neighborhoods, and the environment.

Pet Waste – The U of A has large turf areas that are popular for use by surrounding neighborhoods for walking pets, especially dogs. Although pet owners are expected to clean up after their pets, this is not always the case. This is a targeted pollutant because accumulated pet waste is unsightly and detrimental to stormwater runoff if it is not properly managed and disposed.

Plant Waste – Plant waste results from landscape maintenance operations on campus, storm events or, in rare instances, from illicit dumping by individuals outside the campus community. This pollutant is targeted by the SWMP because accumulated and/or unmanaged plant waste may clog or interfere with stormwater conveyance systems.

Waste Oil, Gasoline, Lubricants, and other chemicals – Waste oil, gasoline, lubricants, and other chemicals can be a potential byproduct of building and vehicle maintenance activities, certain laboratory activities, and illicit dumping. These materials are targeted pollutants in the SWMP because they may contain toxic constituents that pose a risk to the campus community, surrounding neighborhoods, and the environment. Additionally, these improperly managed wastes may be unsightly and could damage campus property.

Cooling Tower Treatment Chemicals – The generation of chilled water for utility systems requires the use of corrosive and caustic chemicals, in particular sulfuric acid and sodium hydroxide. The cooling tower water itself is not a concern, since the cooling water pH is near neutral. BMPs should address the storage and handling of the bulk treatment chemicals that are stored onsite. These compounds are targeted pollutants because in the event of a release, they pose an acute risk of injury to the campus community and surrounding neighborhoods. In addition to their injury risk, the corrosive nature of these chemicals will cause damage to university facilities and infrastructure.

Vehicle and Equipment Wash Water- Wash and rinse water from cleaning vehicles and equipment can carry chemical constituents of

surfactants and detergents in wash water offsite. These are unallowable discharges under the Permit. Wash water discharges are typically associated with staining or corroding of impermeable surfaces leaving evidence of discharge.

Trash – Trash can be a byproduct of a wide range of student, faculty, visitor and general campus activity. Trash dumpsters, compactors, and trailers must be covered to prevent stormwater contact with wastes. Dumpsters, compactors, and trailers must have plugs to prevent liquids from discharging to the ground or impermeable surfaces and coming into contact with stormwater run-off. Covers also prevent floatable trash from coming into contact with stormwater. Floatable trash is a targeted pollutant in the SWMP because it is unsightly, bad for the environment, and can inhibit performance of structural stormwater BMPs.

Swimming Pool Discharges – Chlorinated pool water may not be discharged from swimming pools and exercise pools to streets or storm drains in the MS4. Pool water must be dechlorinated prior to discharge, because chlorinated water can kill aquatic life in local rivers and streams.

Water from External Pumps/Loading Dock Sumps - Pumps that discharge water collected from sumps and external locations are potentially subject to vehicle and pedestrian traffic, maintenance activities, and illicit dumping of trash, oils, greases and other parameters of concern. These materials are targeted in the SWMP because they pose a risk to the campus community, surrounding neighborhoods, and the environment

i. BMPs for Public Education and Outreach

ii. SWMP Website and Community Education/Information

Develop a U of A Stormwater Management Program webpage, linked to the UA EHS website, for use by faculty, staff, students, and campus visitors.

Strategic placement of signage or curb markers visible to the public including but not limited to, pedestrian traffic, recreators, pet-owners and pet-walking traffic areas, parking lot users, and maintenance and laboratory operations in the following forums:

- Storm drain labels (curb markers)
- Areas commonly used to walk pets
- Parking lots
- In locations where maintenance of vehicles occurs
- In key areas at the agricultural experimental station

Hard-copies of educational materials that address trash, dumpster usage, illicit discharge reporting, vehicle leaks and other pollutants associated with vendors will be developed and provided. These activities are targeted to the following forums at a minimum:

- Student Union
- Periodic fliers in the student newspaper (bi-annually)
- Agricultural experimental station lobby

Measurable Goals:

- Make the SWMP available online, along with the appropriate contact points for more information.
- Offer online SWMP training to employees and document that they have completed the program.
- Revise the website to provide specific instructions for reporting illicit discharges, or other activities that may negatively impact stormwater quality. List specific names and contact information.
- Announce the SWMP website to the campus community in the following forums:
 - Lo Que Pasa – Electronic newsletter for faculty, staff and public. Periodically sent via email to 6,400 individual email addresses.
 - Building Managers Meeting – Meeting with 150-400 attendees that occurs biweekly and is comprised of Building Managers for all UA properties.
- Signage posted outdoors and brochures posted indoors:
 - Signage and pet waste stations at large grass-stabilized open areas.
 - Brochures/TV screen notifications in Student Union on identification of stormwater impacts.

Scheduled Completion Dates:

Summer 2027, Summer 2028 (signage)

b. Public Participation and Involvement

The UA community can provide valuable input and assistance to the SWMP if given opportunities to participate in the development and implementation of the program. The targeted audience for campus community involvement includes faculty, staff, students, and campus visitors. Comments and suggestions received from the campus community will be reviewed by EHS for applicability to the SWMP, and possible implementation as opportunities for further public participation and involvement.

The types of activities that will benefit from campus community involvement include:

- Picking up after pets, providing signage, and using pet cleanup stations.
- Calling to report illicit discharges or threats to stormwater quality.
- Calling to report plant debris, sediments or other potential interferences with stormwater conveyance systems.
- Implementation of water harvesting projects for water conservation and to prevent adverse impacts to stormwater runoff.
- Marking storm drains to prevent illicit discharge or other adverse impacts to stormwater runoff or conveyance systems.
- Providing signage in vehicle maintenance areas, and parking lots to prevent illicit discharges or other adverse impacts to stormwater runoff or conveyance systems.

iii. BMPs for Campus Community Outreach

Solicit input and involvement from faculty, staff, students, visitors, and campus environmental organizations on SWMP program design and implementation. Encourage public involvement with SWMP program goals and activities. All stormwater community outreach events and meetings are open to the public.

Measurable Goals:

Design and implement a student/volunteer/employee project to mark campus storm drains to prevent illicit discharge and other adverse impacts to stormwater runoff.

Schedule:

Propose partnership with academic programs and allied units (Office of

Sustainability) to create internship programs to support SWMP. Estimated completion to start work Fall 2028.

Rationale:

Accomplishing the goals of the SWMP will require participation by multiple campus departments and groups. Providing opportunities for public participation and volunteer service will serve to enhance these efforts.

c. Illicit Discharge Detection and Elimination

Regulations require identification and elimination of all non-stormwater discharges, and appropriate response to protect the campus community and the environment. These four sections will be the basis for the stormwater pollution source mapping and inventory effort to manage the inventorying, inspections, and elimination of illicit discharges under this BMP.

iv. Allowable non-stormwater discharges

The UA considers the following non-stormwater discharges into the stormwater/sewer system allowable. This list includes occasional, incidental non-stormwater discharges that the university does not expect to be a significant contributor of pollutants to the stormwater/sewer system.

- water line flushing
- landscape irrigation
- uncontaminated groundwater infiltration
- uncontaminated pumped groundwater
- discharges from potable water sources
- foundation drains
- roof drainage from precipitation
- air-conditioning/steam condensate
- water from crawlspace/tunnel pumps
- footing drains
- individual residential car washing dechlorinated swimming pool discharges
- discharges from fire sprinkler system maintenance sidewalk/street wash sweeping water
- discharges or flows from emergency fire-fighting activities
- discharges from fire pump testing
- water/ice discharges from demonstration events

v. BMPS for Illicit Discharge Detection and Elimination (IDDE) Inspection

The UA has initiated an illicit discharge inspection program to periodically inspect areas identified as being potential illicit discharges to stormwater runoff including:

- sump pump discharges to impervious surfaces
- loading docks
- 3-yard waste trailers
- trash compactors

The inspection program for sump discharges, loading docks, and waste trailer/compactors is presented in the appendices. Sumps for subsurface loading docks are currently pumped to either vegetated, landscaped areas or impervious surfaces such as parking lots or streets. Stormwater pumped from subsurface loading docks to impervious surfaces could potentially be contaminated, making it a potential illicit stormwater discharge. Periodic illicit discharge inspections will focus on evidence of spills or illicit wash down activities occurring at loading docks leading to contact with stormwater runoff on streets. Loading docks will be inspected for spill containment kits. Trash dumpsters are not to be placed within or near recessed loading dock areas.

The U of A relies on multiple methods to identify illicit discharges as quickly as possible. Investigation and mitigation measures are implemented upon detection to identify possible sources of illicit discharge, and to either prevent or reduce adverse impacts to stormwater runoff and the environment. The SWMP website provides specific information on how to report illicit discharges that might impact stormwater and the hazards associated with different types of illicit discharge. Other discovery and reporting methods include reports phoned in from the campus community to the University Police Department (UAPD), or to EHS. Reports might originate from faculty, staff, students, or campus visitors. In particular, U of A staff with specific training on illicit discharge identification will increase the probability of proper and timely reporting.

All illicit discharge reports will be forwarded to EHS to coordinate investigation and mitigation if warranted. Investigation of illicit discharges will commence as soon as practicable, but always within 15 working days of the initial discovery or report. A written report will be prepared to document each illicit discharge investigation. Reports will include the nature of the discharge, possible sources, mitigation or cleanup measures implemented, and any steps taken to prevent similar discharges in the

future.

Review current SWMP training to ensure comprehensive Illicit Discharge Prevention Training component is included. The training includes the evaluation and prioritization of areas that appear more heavily impacted by discharge activity (e.g. loading docks, sump pump discharges, and trash dumpsters/compactors).

Measurable Goals:

- Periodic inspection reports will be maintained with records for the SWMP. A program will be established to obtain spill kits for loading docks.
- The 3-yard trash trailers and trash compactors are located across the U of A campus. Open trash trailers and compactors will be inspected for signs of floatable trash and leakage of waste liquids. Periodic inspections will continue until all trailers and compactors are covered. A program will be established to cover the 3-yard trash trailers and trash compactors.
- Communicate and investigate IDDE reporting submitted to EHS through website or other means.

Scheduled completion dates:

- Create plan to audit and ensure compliance with previous program implementation by June 2027.
- Update Stormwater Training and ensure IDDE latest practices are included. Offer training to building managers and UFS employees by Fall 2028.

d. Construction Site Runoff Control

This measure is intended to reduce polluted stormwater runoff from construction sites that can contain sediment, solid and sanitary wastes, excessive nutrients, oil and grease, and construction debris.

vi. BMPs for Construction Contractor SWMP Compliance

Take appropriate steps to ensure that all contracted construction projects at the U of A are independently in compliance with stormwater management requirements. A copy of the ADEQ AZPDES Construction General Permit (Permit No. AZG2013-001) is included in appendices of

the SWMP. The UA has included in standard construction contract specifications a section on Erosion and Sediment Control. These standard construction contract specifications are presented with the [DSS](#). This section specifies compliance with the University of Arizona Stormwater Management Plan. The Contractor is also required to submit a letter stating that they will comply with all Federal and State regulations regarding stormwater runoff.

The UFS Project Manager will determine the size of the site and if larger than one acre, the contract documents then will require the Contractor to comply with all Federal and State regulations regarding stormwater runoff. The University's Project Manager will review the site plans and ensure that the Contractor has performed (carried out) the control measures outlined in the plan.

U of A contractors are responsible for implementing effective erosion and sediment control BMPs. During the construction process, soil is the most vulnerable to erosion by wind and water. UA contractors are also responsible for cleaning up and properly disposing of all spilled pollutants brought to the site as part of the contractor's work, including but not limited to oil, paint, fuels, antifreeze, solvents, etc., in accordance with applicable laws and regulations. Contractors must keep accurate records (such as receipts, copies of analytical results, etc.) indicating proper disposal of spilled materials, in accordance with applicable laws and regulations. Contractors are responsible for ensuring that there are no discharges from a site area. No substance may be allowed to be dumped or leaked onto the ground or allowed to runoff a construction site that might cause pollution. Contractors are responsible for containment of runoff and proper disposal of all waste materials generated as a result of the contractor's activities (e.g., equipment cleaning, pressure washing, waste storage & disposal, sediment, site dewatering, tank & pipe testing, chemical material storage areas if applicable, petroleum product or other chemical spills).

Measurable Goals:

- Validate provisions for the U of A's standard construction contract requiring all construction contractors to develop and implement a Stormwater Pollution Prevention Plan in full compliance with all federal and state regulations

Scheduled Completion Dates:

Goal to complete by June 2027.

e. Post-Construction Runoff Control

This measure is designed to ensure that new construction designs do not result in increased stormwater pollution.

vii. BMPs for Post-Construction Runoff Control

Stormwater runoff from new development and new re-development projects is addressed in the planning and design phases of University projects. Initial planning is guided by the UA DSS. The design of University projects is reviewed by UFS, EHS, design, construction, and maintenance departments to ensure that appropriate BMP's are incorporated into projects.

The DSS contains sections on Erosion and Sediment Control and Stormwater Harvesting. Architects and Contractors are required to comply with these standards according to their contracts. The Campus Community also has access to the standards through a website maintained by UFS. There is no formal training in the use of the DSS, but the designs are reviewed on a project by project basis by the Project Manager.

The SWMIP provides recommendations of a surface water infrastructure system made up of individual, prioritized / phased projects along with BMP maintenance, inspection, and cleanout considerations. These projects should be considered first, during any proposed development and implementation of post- construction BMPs since this document assists in making informed design and budgeting decisions based on a planned system for managing campus surface water. The University of Arizona recognizes the long- term inherent value of water by conserving, harvesting, capturing and reusing it. The U of A also aims to demonstrate good environmental stewardship to both the University community and our neighbors by mitigating impacts of floodwaters and providing models that may be replicated in the community while making surface water a proactive influence on integrated site design (SWMIP).

Contractually require construction contractors to register all completed dry wells with the Arizona Department of Environmental Quality (ADEQ).

Measurable Goals:

- Ongoing implementation of recommendations provided within the

Surface Water Master Implementation Plan (SWMIP)

- Develop provisions for the U of A's standard construction contract used by the U of A requiring all construction contractors to register all completed drywells with the ADEQ's drywell registry and to provide UFS and EHS with copies of the registry forms. Incorporate registered drywells into U of A facilities database. Installation of new drywells is strongly discouraged by EHS and the DSS.

Scheduled Completion Dates:

Validate existing process by June 2027.

f. Pollution Prevention and Good Housekeeping

This measure requires the UA to examine and if necessary modify current operations to help ensure a reduction in the amount and type of pollution, including pollution that collects on streets and parking areas and runoff from vehicle washing and maintenance areas.

viii. BMPs for Pollution Prevent & Good Housekeeping

Conduct regular sweeping of streets, sidewalks, parking lots and parking garages.

U of A-owned industrial stormwater discharge areas will be maintained and monitored consistent with requirements for the Small MS4 Permit (Permit No. AZG2002-002 reissued as AZG2016-002). Privately owned industrial facilities located within the U of A boundary will be monitored consistent with the ADEQ Multi-Sector General Permit (MSGP) for non-mining industrial facilities (Permit No. ASMSG2010-002), if applicable. The U of A has a variety of sites housing industrial activities that could have the potential for stormwater runoff to come into contact with industrial processes, raw materials, and/or products, and which would require individual Storm Water Pollution Prevention Plans (SWPPPs). There are currently no privately owned industrial facilities located within the U of A boundary. All industrial facilities at the U of A must provide cover and secondary containment for all liquid containers stored outside. In addition, all lay down areas for raw, untreated metal materials must either be tarped or placed under cover to prevent contact with stormwater runoff. Stockpiles must be managed per fact sheet specifications, tarped or covered when not in use, at the end of the day, and prior to a storm event. Secondary containment structures must have weather protection.

Storm drains and bubblers will be inspected annually as part of the SWMP. Debris accumulated within storm drains will be removed and properly disposed. All industrial facilities will have spill kits commensurate with the activities being performed at the site. Any waste from spills will be collected, accumulated, and disposed of in accordance with local, state, and federal regulations.

Measurable Goals:

- Conduct sweeping with the with regularity (coordinate with appropriate unit on frequencies) and properly dispose of all collected solids in accordance with regulations: streets, sidewalks, parking garages, parking lots.
- Identify all outside storage areas with liquids containers. Move containers inside when possible. Provide adequate secondary containment for the largest container stored for all outside storage that cannot be moved inside. Arrange cover (tarps, etc.) to prevent contact of liquids or untreated metal surfaces with stormwater.
- Develop and implement a tracking system of storm drain/bubbler maintenance.
- Identify problem drainage areas, develop plans for correction of identified problem areas, and implement as appropriate.
- Identify and document industrial facilities that require the development of a site-specific SWPPP
- Develop site-specific SWPPP for industrial facility sites.
- Complete initial quarterly stormwater inspections for industrial facilities.
- Depending on available storm occurrences, complete initial visual inspections of stormwater runoff at industrial sites

Scheduled Completion Dates:

Ongoing through MS4 Permit Period (2026-2031)

9. REVIEWING AND UPDATING SWMP

a. Annual Review and Report

The U of A will review the SWMP annually in conjunction with preparation of the annual report required under Part V, Section G of the Small MS4 Permit.

The annual report will be submitted to ADEQ for each year of the permit term.

The first report was due September 30, 2004 covering activities from the period March 10, 2003 to June 30, 2004. Subsequent annual reports are due September 30 of each year following 2004 and will cover the activities for the previous year up to and including June 30.

The reports will consist of:

- Compliance status including:
 - assessment of the appropriateness of the BMPs
 - progress towards achieving the statutory goals of reducing the discharge of pollutants and protecting water quality
 - measurable goals for each of the minimum control measures
- Results of information collected and analyzed, if any, during the reporting period.
- Any changes made to the SWMP since the last annual report and a summary of the stormwater activities the U of A plans to undertake during the next reporting cycle.
- Proposed changes to the SWMP.
- Description of BMPs to be implemented within any new areas annexed over the past year that are located within the regulated boundaries of the U of A.
- Description and schedule for implementation of additional BMPs that may be necessary based on monitoring results.

Annual reports will be signed by Senior Director, EHS (Leon Harris), and sent to:

Arizona Department of Environmental Quality Compliance Data Unit
1110 West Washington
Phoenix, AZ 85007

b. SWMP Revisions

The U of A may change the SWMP during the permit term to address:

- Changes adding components, controls, or requirements to the SWMP with written notification to ADEQ.
- Changes needed to replace an ineffective or infeasible BMP with an alternative BMP with a written analysis to ADEQ explaining the change.

All change notifications to the ADEQ must also be signed by the Senior Director EHS. U of A staff responsible for implementing BMPs will track the progress at the end of each annual reporting cycle utilizing the BMP tracking sheet.

c. Monitoring

The U of A will use documentation of progress on measurable goals to evaluate

program compliance and the appropriateness of the BMPs. Records and documentation will be retained for a minimum of three years after permit expiration.

BMP status will be reported in the SWMP annual report submitted every September to ADEQ. The U of A does not discharge to water for which there is an established Total Maximum Daily Load or to a 303(d) listed water. Therefore, no monitoring is required.

CERTIFICATION

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



10-13-26

Leon Harris, Senior Director EHS

Date