

University of Arizona

Stormwater Management Plan

Revised
September 1, 2006
March 1, 2007
May 9, 2012
October 5, 2015
February 17, 2017

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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) RI8-9-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.

1.0 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 Figure C-2 (Appendix C). 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 Appendix A for the general permit conditions.

The U of A has provided the current Notice of Intent (NOI) in Appendix B of this document and has included it in this SWMP at <http://risk.arizona.edu/storm-water-management>. 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 U of A's Authorization Number under the MS4 General permit is MS42002-37. The U of A's NOI and the SWMP may be viewed online at http://risk.arizona.edu/sites/risk/files/1_-_final_u_of_a_swmp_02152017.pdf.

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 U of A's environmental commitment.

1.1 Legal and Financial Authority

The University of Arizona has the authority and the financial resources to implement all measures within this SWMP.

1.2 Objectives

The primary goal of the SWMP is to improve the quality of surface waters by reducing the amount of pollutants potentially contained in stormwater runoff to the maximum extent practicable (MEP). The U of A will seek 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.

1.3 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 (Figure C-1, Appendix C). 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 (SWMIP, p. 3-5). The campus is 393 acres in total area and is comprised of the Main Campus and the AHSC. Approximately 43,000 students attend the university and 15,000 full or

part-time employees work at the university (U of A, Fact Book 2015). 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.

TABLE 1- LAND AREA USE ON UNIVERSITY OF ARIZONA MAIN AND AHSC CAMPUS

Land Use	Acres
<i>Buildings</i>	102
<i>Parking Lots</i>	75
<i>Sidewalks</i>	74
<i>Streets</i>	35
<i>Total Impervious Cover:</i>	286
% of Total =	73%
<i>Landscaping</i>	107
TOTAL =	393

Source: (University of Arizona Fact Book, 2015)

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 (SWMIP, p. 3-4). Major drainage basins of the University of Arizona Main Campus are described in detail in the SWMIP (p. 3-11).

Stormwater drainage flows primarily via surface drainage ways to City of Tucson streets (Figure C-3, Appendix C). 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 on Figure C-4, Appendix C. 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) (Appendix D) 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, p. 3-3).

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. The portions of the DSS pertaining to water harvesting, stormwater retention/detention, and stormwater flow management (Tab B-11, Tab C-9, and Tab E – Div 2 Sec 2720) are presented in Appendix E.

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, p. 1-2).

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 (SWMIP, p. 3-6). The principles of water harvesting were incorporated into the Surface Water Procedures (Tab B-11) & Drainage and Surface Water Guidelines (Tab C-9) of the DSS (SWMIP, p. 3-6)

2.0 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.

The Department of Risk Management Services (RMS) coordinates overall U of A compliance with the SWMP and implementation of BMPs by assigned departments. 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 Appendix F.

3.0 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, p. 3-5).

Figure C-4, Appendix C is 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. Figure C-3 is a map that shows the location of all stormwater outfalls from the U of A Main Campus. Figure C-5 presents 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.

4.0 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 (Appendix E) 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 (Appendix D) 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.

5.0 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 (Appendix D). 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 BMPs employed by the U of A are summarized in a master BMP schedule presented in Appendix G. This master BMP schedule includes a description of the BMP, the targeted completion date, the actual completion date, and to whom the activity was assigned.

The six control measures addressed by this SWMP include:

- 5.1 Public Education and Outreach
- 5.2 Public Participation and Involvement
- 5.3 Illicit Discharge Detection and Elimination
- 5.4 Construction Site Runoff Control
- 5.5 Post-Construction Runoff Control
- 5.6 Pollution Prevention and Good Housekeeping

5.1 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.

5.1.1 Target Audiences

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.

5.1.2 Target Stormwater Pollutants, Sources, and Rationale for Selection

a. **Hazardous Wastes** – 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.

b. **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.

c. **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.

d. **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.

e. **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.

f. **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.

g. **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.

g. **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.

h. **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.

i. **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

5.1.3 U of A Best Management Practices for Public Education and Outreach

5.1.3.1 SWMP Website BMP

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

Measurable Goals:

- a. Make the SWMP available online, along with the appropriate contact points for more information.
Status: Complete January 2005
- b. Revise the NOI to indicate receiving waters, and add to the website (2006, 2015). Submit NOI renewal, per the letter provided by ADEQ by March 29, 2017.
Status: Complete June 2006, revised NOI submitted September, 2015. The upcoming renewal NOI is due to ADEQ by March 29, 2017; the targeted date of NOI renewal submittal is March 29, 2017 or sooner.
- c. Revise the website to include links to additional educational resources such as brochures, fact sheets and other municipal stormwater programs associated with each of the targeted pollutants listed above in section 5.1.2.
Status: Complete July 2006; Update website and educational BMP materials to include brochures and fact sheets that target the addition of pollutants listed in 5.1.2.g-i and verification of 5.1.2.a-f. In addition, the website will be updated to include an updated link to the City of Tucson MS4 information with a target completion date of June 30 2017.
- d. Identify on the SWMP website at least three (3) specific targeted stormwater pollution sources and provide information about their hazards, proper management, and how to recognize possible releases or illicit discharge.
Schedule: To be completed by September 30, 2006
Status: Complete March 2007
- e. 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.

Schedule: To be completed by September 30, 2006

Status: Complete October 2006

- f. Review the website at least annually to ensure the information is current, complete, and representative of current SWMP activities, and update as needed. Maintain records documenting these annual reviews and/or updates for a minimum of 3 years after permit expiration.

Schedule: To be done each year by June 30

Rationale: The U of A community makes extensive use of webpage technology to communicate policy and procedure information to faculty, staff, students, and visitors. Members of the campus community have widespread access to the internet from their offices, classrooms, libraries, residence halls, and homes. A comprehensive webpage of applicable information is the most efficient method for public education and outreach in a campus setting.

5.1.3.2 SWMP and Website Publicity BMP

Publicize the U of A SWMP and website to the U of A community and the public.

Measurable Goals:

Announce the SWMP website to the campus community in the following forums:

- a. Arizona Daily Wildcat – student newspaper – daily circulation= 15,000
- b. Lo Que Pasa – Electronic newsletter for faculty, staff and public. Periodically sent via email to 6,400 individual email addresses.

Schedule: Each to be completed by October 31, 2006. Forums a. & b. complete November 1, 2006. Annually by June 30, any SWMP amendments will be evaluated to determine if it is needed to recirculate to the Arizona Daily Wildcat, and Lo Que Pasa. The first deadline is June 30, 2017.

Rationale: Members of the campus community that are interested in stormwater issues and the U of A's SWMP need to be advised that the information is online and where to find it. The Arizona Daily Wildcat newspaper and the Lo Que Pasa newsletter, are the standard campus methods for disseminating important information.

5.1.3.3 SWMP Educational Materials and Signage BMP

- a. 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:

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

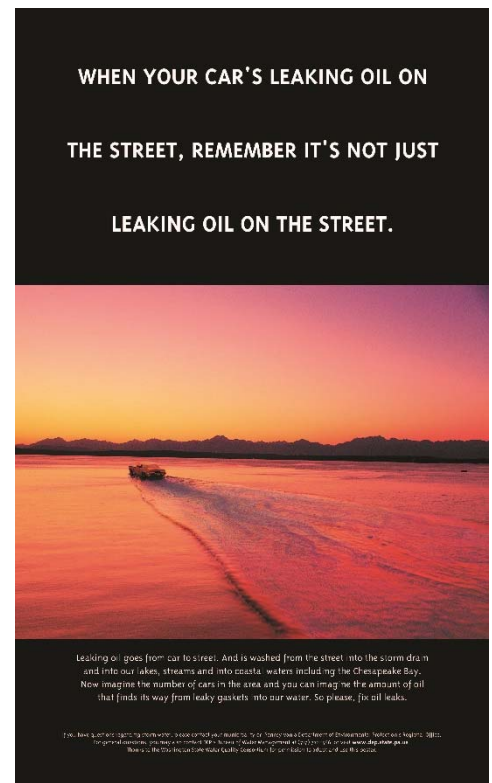
b. Hard-copies of educational materials that address trash, dumpster usage, illicit discharge reporting, vehicle leaks and other pollutants associated with vendors will be developed and provided. These activities are targeted to the following forums at a minimum:

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

Pet Waste & Business Educational Examples:



Standard Pet Waste Station. Cost is about \$200.



Example brochure targeting leaking oil that can be made available in various locations throughout campus.

Additional examples of educational materials can be found in Appendix H.

Measurable Goals:

Signage posted outdoors and brochures posted indoors:

- a. Signage and pet waste stations at large grass-stabilized open areas.
- b. Brochures in Student Union on identification of stormwater impacts.

Schedule: Each to be completed by June 30, 2017.

Rationale: Members of the campus community that are interested in stormwater issues and the U of A's SWMP need to be advised that the information is online and where to find it. The prominent displays of stormwater educational material will increase awareness.

5.2 Public Participation and Involvement

The U of A 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 the RMS Department 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:

- a. Picking up after pets, providing signage, and using pet cleanup stations.
- b. Calling to report illicit discharges or threats to stormwater quality. The SWMP website provides specific information on how to report illicit discharges that might impact stormwater (See BMP 5.3.2).
- c. Calling to report plant debris, sediments or other potential interferences with stormwater conveyance systems.
- d. Implementation of water harvesting projects for water conservation and to prevent adverse impacts to stormwater runoff.
- e. Marking storm drains to prevent illicit discharge or other adverse impacts to stormwater runoff or conveyance systems.
- f. Providing signage in vehicle maintenance areas, and parking lots to prevent illicit discharges or other adverse impacts to stormwater runoff or conveyance systems.

5.2.1 Campus Community Outreach BMP

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:

- a. In the publicity BMP described above, include language that requests input on the U of A's SWMP, and encourage volunteer involvement.

Schedule: To be completed by June 30, 2017

- b. The Neighborhood Relations Coordinator will request time on the agenda to present the U of A's SWMP to the Campus Community Relations Committee (CCRC), and encourage volunteer participation.

Schedule: To be completed by June 30, 2007 and relaunch the amended SWMP notification by June 30, 2017.

Complete: March 13, 2007

- c. 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: Begin by March 1, 2007, 50% campus storm drains marked by December 15, 2007. Any new and/or remaining campus storm drains marked by June 1, 2018

Item d revised March 1, 2007.

- d. Annual review of the Public Participation and Involvement Program to include consideration of new opportunities for community/volunteer involvement activities, ensuring any new storm drains are marked, and evaluation of the ability to partner with any local agencies on programs or activities, etc. This annual review will be documented along with any action items completed as a result of annual evaluation recommendations.

Ongoing Schedule: to be completed annually beginning June 30, 2017.

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.

5.3 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. U of A Facilities Management – Grounds and Labor has divided the campus into four sections with one maintenance team for each section (Figures C-6 through C-9). 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.

5.3.1 Allowable non-stormwater discharges

The U of A 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 (added 09/2015)

5.3.2 Illicit Discharge Detection and Elimination (IDDE) Inspection BMP

The U of A 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 Appendix I. The locations of loading docks and recessed loading docks with sumps are illustrated in Figure C-6. 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.

Measurable Goals:

Periodic inspection reports will be maintained with records for the SWMP in Appendix I. A program will be established to obtain spill kits for loading docks.

Scheduled completion dates:

10% Loading dock spill kits: June 30, 2017

100% Loading dock spill kits: June 30, 2018

The 3-yard trash trailers and trash compactors are located across the U of A campus. Figure C-7 provides an illustration of the locations of trash trailers and compactors. 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. The periodic inspection program for trash trailers and compactors is presented in Appendix I.

Measurable Goals:

Periodic inspection reports will be maintained with records for the SWMP in Appendix I. A program will be established to cover the 3-yard trash trailers and trash compactors.

Scheduled completion dates:

5% 3-yard trailers covered: June 30, 2017
 36% 3-yard trailers covered: June 30, 2018
 68% 3-yard trailers covered: June 30, 2019
 100% 3-yard trailers covered: June 30, 2020

5.3.3 Illicit Discharge Reporting

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 (See BMP 5.1.3.1.e.), 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 RMS. 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 RMS 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. Reports will be included in Appendix I of the SWMP.

Measurable Goals:

Written reports of illicit discharges will be maintained with records for the SWMP in Appendix I.

5.3.4 Survey, Inventory, Map Campus Pollution Sources BMP

Perform a survey of the U of A main and AHSC campus to identify, inventory, and map stormwater pollution sources including but not limited to loading docks, outdoor material storage areas, vehicle washing areas, drywells, and trash compactors. Develop and implement a system for inspection and maintenance of stormwater drainage infrastructure, such as drywells and retention/detention basins in each area as they are completed. Update Figure C-4 in the SWMP as information becomes available.

Measurable Goals:

The information is currently presented in figure C-4. Update Figure C-4.

Schedule: September 30, 2017.

All dry wells or other installations that require registration with ADEQ have been registered as part of this BMP as indicated in the schedule below.

Scheduled completion dates:

Section/Team 1: June 30, 2004

Section/Team 2: June 30, 2005

Section/Team 3: June 30, 2007

Section/Team 4: June 30, 2007

Complete: All have been completed as of June 30, 2007

5.3.5 Revision of Enforcement Response Plan

Enforcement will be consistent with the enforcement response plan.

If Campus Use Policies are needed to prevent stormwater runoff, revision of Campus Use Policies must be accomplished in accordance with state law for public entities and policies of the Arizona Board of Regents. These procedures provide for notification to the public of proposed changes, a public comment period, and review and response to comments received prior to finalizing any change.

Schedule: Revise enforcement response plan by September 30, 2017.

5.3.6 Illicit Discharge Detection and Elimination Training BMP

In addition to posting signage as described in sections 5.1.5 and 5.2, the University of Arizona proposes adding an Illicit Discharge Prevention Training component to the required initial training and subsequent trainings triggered by either a change in the MS4 permit or the SWMP document for pertinent employees in an effort to prevent pollution and illicit discharge with special attention paid to clearly outlining the process used to inspect for illicit discharges and report illicit discharges. 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). The SWMP training program is presented in Appendix P.

Schedule: Conduct initial IDDE Training by January 30, 2017. Prepare inspection forms by February 17, 2017.

Complete: Initial training conducted on January 23, 2017. IDDE inspection forms/templates were complete by February 17, 2017 and are provided in Appendix I as part of the February 17, 2017 SWMP submittal package.

5.4 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.

5.4.1 Construction Contractor SWMP Compliance BMP

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 Appendix J of the SWMP.

Measurable Goals:

- a. Notify current construction contractors of the new Phase II requirements for construction on parcels of 1 acre or greater in size. Document the notifications and verify response within 60 days.
- b. Develop 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

Status: Complete January 1, 2006

- c. Develop and implement processes to control and/or prevent potential construction site waste, procedures for site plan review, and construction site inspections. The construction site plan review and inspection program is presented in Appendix K.

Schedule: Propose draft by March 2017, and finalize by June 30, 2017. Begin Implementation once finalized.

The U of A has included in standard construction contract specifications a section on Erosion and Sediment Control. These standard construction contract specifications are presented with the DSS in Appendix E. 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 Erosion and Sediment Control Plan submitted by the Contractor will be monitored at weekly site meetings to ensure compliance. If the Contractor does not comply with requirements of the Erosion and Sediment Control Plan, future construction progress payments will be withheld until corrective action has been taken.

The University of Arizona, Planning, Design and Construction 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.

U of A 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).

The University of Arizona, Planning, Design and Construction Project Manager will review the approved Stormwater Pollution Prevention Plan with the Contractor at the weekly site meetings and conduct periodic oversight inspections to ensure compliance. If deficiencies are noted, the Contractor will be directed to take corrective action. If the Contractor does not comply with requirements of their Stormwater Pollution Prevention Plan (SWPPP) or Erosion and Sediment Control Plan, future construction progress payments will be withheld until corrective action has been taken.

5.5 Post-Construction Runoff Control

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

5.5.1 Post-Construction Management BMP

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 University Master Drainage Plan and the University's Manual of Design and Specification Standards. The design of University projects is reviewed by planning, RMS, design, construction, and maintenance departments to ensure that appropriate BMP's are incorporated into projects.

The University's organization includes an inspection group within Facilities Design & Construction, the University Department designated to manage the design and construction process for the University, and to ensure that the site based and structural BMP's incorporated into the design of the project are constructed correctly and serve their intended purpose.

The University of Arizona has educational materials for Contractors, Architects and the Campus Community. This program consists of access to the University's Manual of Design and Specifications Standards (DSS) and the proposed development and distribution of other educational materials as discussed previously in section 5.1.

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 Planning, Design and Construction. 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, p. 2-1, 2-2).

Measurable Goals:

Ongoing implementation of recommendations provided within the Surface Water Master Implementation Plan (SWMIP) (Appendix D)

Schedule: Ongoing

5.5.2 Dry Well Registration BMP

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

Measurable Goals:

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 Planning, Design and Construction with copies of the registry forms. Incorporate registered drywells into U of A facilities database. Installation of new drywells is strongly discouraged by RMS and the DSS.

Schedule: Completed February 1, 2007.

5.6 Pollution Prevention and Good Housekeeping

This measure requires the U of A 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. This document provides information on the locations of industrial source areas in Figure C-8.

5.6.1 Street, Sidewalk, Parking Lot, and Garage Sweeping BMP

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

Measurable Goals:

Conduct sweeping with the following minimum frequencies, and properly dispose of all collected solids in accordance with regulations:

<i>Streets</i> – weekly	Facilities Management Department
<i>Sidewalks</i> – monthly	Facilities Management Department
<i>Parking garages</i> – monthly	Parking & Transportation Services
<i>Parking lots</i> – once per year	Parking & Transportation Services

Schedule – Ongoing through MS4 Permit Period

Rationale: Street and parking area sweeping protects water quality by preventing vehicle contaminants from reaching surface waters.

5.6.2 Outdoor Material Storage BMP

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 Small MS4 Permit is presented in Appendix A. The MSGP is presented in Appendix L of this SWMP. 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. The industrial facilities identified at the U of A are summarized Appendix R. 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.

Measurable Goals:

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.

Schedule: Ongoing through MS4 Permit Period

Rationale: By either moving liquid containers inside or providing adequate secondary containment, potential contaminants can be prevented from reaching surface waters and thus protecting water quality.

5.6.3 Storm Drain System Inspection and Cleaning BMP

Storm drains and bubblers will be inspected annually as part of the SWMP. The storm drain inspection and maintenance program is summarized in Appendix I. Figure C-9 provides an illustration of storm drains and bubblers across the campus. Debris accumulated within storm drains will be removed and properly disposed. Spills will be handled consistent with the U of A spill response program presented in Appendix N. 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:

- a. Develop and implement a tracking system of storm drain/bubbler maintenance for each of the four University Grounds and Labor maintenance areas (see Section 5.3 and Figure C-9).
Schedule: To be completed concurrent with BMP 5.3.4
- b. Identify problem drainage areas, develop plans for correction of identified problem areas, and implement as appropriate.
Schedule: To be completed by June 30 of each year.
- c. Review and update inspection procedures as necessary.
Schedule: To be completed by June 30 of each year.

Rationale: The inspection of storm drains/bubblers and debris removal will be a proactive approach to prevent pollutants from contaminating stormwater runoff. The tracking of storm drain maintenance will increase staff awareness of stormwater issues and assist in developing plans for correcting problem areas.

5.6.4 Industrial Facility Stormwater Pollution Prevention and Inspections

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. There are currently no privately owned industrial facilities located within the U of A boundary. The Small MS4 Permit is presented in Appendix A. The MSGP is presented in Appendix L of this SWMP. 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). Industrial facilities include vehicle and equipment maintenance and fueling operations, central refrigeration buildings and cooling towers, ground services material and laydown yards, mason yard, and waste recycling center. A list of industrial facilities within the U of A MS4 is presented in Appendix R. SWPPPs will be prepared for facilities with the potential for industrial processes to contact stormwater runoff. SWPPPs will include a description of the site-specific industrial process and list of BMPs to control potential contact of stormwater with these site-specific processes. An example industrial facility SWPPP template is presented in Appendix O.

Industrial facilities presented in Appendix R are grouped under departments that will be responsible for SWPPP and BMP inspection. Stormwater inspections of industrial facilities will be conducted by RMS, Facilities Management, and the College of Agriculture and Life Sciences. The organization chart for industrial stormwater inspections is presented in Appendix F. Stormwater inspections of industrial facilities will be performed on a quarterly basis. Appendix M includes inspection checklists for industrial facilities.

Measurable Goals:

- a. Identify and document industrial facilities that require the development of a site-specific SWPPP
Schedule: To be completed by June 30, 2017
- b. Develop site-specific SWPPP for industrial facility sites.
Schedule: To be completed by June 30, 2018
- c. Complete initial quarterly stormwater inspections for industrial facilities.
Schedule: To be completed by June 30, 2017.
- d. Depending on available storm occurrences, complete initial visual inspections of stormwater runoff at industrial sites
Schedule: To be completed by June 30, 2017.

5.6.5 Training for University of Arizona Employees BMP

The U of A will implement a training program for informing pertinent management and staff on the background, requirements, and implementation of an MS4 under the ADEQ Small MS4 Permit (Permit No. AZG2002-002). The MS4 stormwater training program is summarized in Appendix P. The training program will consist of an initial training session and subsequent web-based trainings whenever there is a change to the MS4 permit or the SWMP. The U of A will utilize a web--based approach to ensure that university employees receive the proper training and information about the SWMP as it relates to their job duties. The purpose will be to prevent pollutant runoff from campus operations due to activities such as container handling, turf and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance.

Measurable Goals:

- a. Update existing online information and training tool that will provide SWMP information to employees, and document that they have completed the program.
Schedule: To be completed by January 31, 2018
- b. Develop and conduct a train the trainer field based training for staff working outdoors (e.g., maintenance and construction activities).
Schedule: to be completed by June 2017 and by June 30 during years when there is a change to the MS4 permit or the SWMP.

- c. Provide trainings to new-hires within one month of hire date.
Schedule: Ongoing as staff is hired
- d. Evaluate whether training materials need to be updated and update training materials whenever there is a change to the MS4 permit or the SWMP. Provide updated training if needed.
Schedule: Annual evaluation to occur during the annual review and report described in section 6.1. If needed, the training will be updated to include any new MS4 or SWMP requirements and will be provided online.

6.0 Reviewing and Updating SWMP

6.1 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 (Appendix A).

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 Mr. Steven C. Holland, Chief Risk Officer, and sent to:

Arizona Department of Environmental Quality
Compliance Data Unit
1110 West Washington

Phoenix, AZ 85007

6.2 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.

A tracking sheet to document SWMP review and changes is located in Appendix G. All change notifications to the ADEQ must also be signed by the Chief Risk Officer. All changes to the SWMP are presented in Appendix Q. 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 in Appendix G.

7.0 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.

8.0 References and Interviews

Documents were reviewed and U of A staff were interviewed to collect information in the preparation of this plan.

8.1 References

University of Arizona 2015, University of Arizona Fact Book, Decision and Planning Services, web address: <http://factbook.arizona.edu/>

Pertinent sections of the University of Arizona Manual of Design and Specification Standards (DSS) 2015, Appendix E

The University of Arizona Surface Water Master Implementation Plan (SWMIP) 2009, Campus and Facilities Planning, Appendix D

8.2 Interviews

U of A staff and personnel were interviewed concerning activities and practices currently in place to prevent impacts to stormwater. Additionally, the staff provided comment for additional activities that may be added to limit impacts to stormwater. The staff interviewed for development of this SWMP included (as of 2017):

- Steve Holland, Chief Risk Officer
- Herb Wagner, Director Occupational and Environmental Health and Safety
- Lloyd Wundrock, Environmental Safety Officer, Risk Management Services
- Jeff Christensen, Hazardous Waste Supervisor, Risk Management Services
- Christopher Kopach, Assistant Vice President, Facilities Management
- Rick Harbaugh, Senior Program Coordinator, Parking & Transportation Services
- Matt Anderson, Manager, Turf, Facilities Management
- Dan Nelson, General Maintenance Supervisor, Campus Agricultural Center
- Steve Hussman, Director of the Campus Agricultural Center
- Frank Zuern, Assistant Director of Facility Operations, Residence Life
- Martin Tuck, Director, Aquatics, University of Arizona Athletics
- David Reiber, Project Manager, Facilities Management
- Randy Livingston, Office Supervisor, Facilities Management Garage
- David Ouellette, Program Coordinator, Parking and Transportation
- Grant McCormick, Campus Planner, Planning/Design & Constructions
- Brian Dolan, Assistant Director of Construction
- Luis Rocha, Associate Director, Facilities Management

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly 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.

Steven C. Holland, Chief Risk Officer

Date

RECORD OF STORMWATER MANAGEMENT PLAN TRAINING

Employee Name (PRINT)

UA Department Position/Title

SWMP sections reviewed or “entire plan”

Supervisor’s Name (PRINT)

Date of Training

Supervisor’s Signature