



STORMWATER MANAGEMENT PLAN

Town of Camp Verde Utilities Department:

Stormwater Division

September 2026

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN

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INTRODUCTION

This Storm Water Management Plan (SWMP) outlines the Town of Camp Verde's program to reduce surface water pollution in accordance with the Arizona Pollution Discharge Elimination System. The Stormwater Management Plan was developed by the Town to describe the activities and measures that will be implemented in meeting the terms and conditions of the General Permit AZG2021-002 for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) as required by the Arizona Department of Environmental Quality (ADEQ) Arizona Pollutant Discharge Elimination System (AZPDES). The Small MS4 Permit was first issued by ADEQ effective on September 30th, 2021, and expires on September 29th, 2031. This general permit can be found in Appendix 7.

The Town of Camp Verde is authorized to discharge stormwater from MS4 outfalls to waters on the protected surface water list, including discharges to WATERS OF THE US (WOTUS) and non-WOTUS protected surface waters.

This SWMP is the principal document that outlines the policies and procedures the Town implements to minimize pollutants in stormwater discharges, including Best Management Practices (BMPs) and pollutant controls established by the Town to comply with the requirements of the Small MS4 permit.

The overall goal of this program is to reduce the negative impacts of urban runoff to the stormwater drainage system and to receiving water bodies from sources of pollution. To achieve this goal, the SWMP addresses the six (6) Minimum Control Measures (MCMs) to the Maximum Extent Practical (MEP) to protect water quality, and to satisfy water quality requirements of the Clean Water Act (CWA) 33 U.S.C § 1251. Those MCMs are:

1. Public Education and Outreach.
2. Public Involvement and Participation.
3. Illicit Discharge Detection and Elimination Program (IDDE).
4. Construction Activity Stormwater Runoff Control.
5. Post-Construction Stormwater Management in New Development and Redevelopment.
6. Pollution Prevention and Good Housekeeping for Municipal Operations.

The SWMP complies with the requirements specified in Code of Federal Regulations (CFR) Title 40, Chapter 1, Subchapter D, Part 122, Subpart B, incorporated by reference in Arizona Administrative Code (AAC) Title 18, Chapter 9, Article 9 and Chapter 11, Article 1, and provisions of the Arizona Revised Statutes (ARS), Title 49, Chapter 2, Article 3.1. The SWMP has been prepared to meet the requirements identified in the Small MS4 General Permit and is certified according to Section 9.9. See the appendices.

This SWMP is generally organized to reflect the structure and requirements of the permit as well as the real-world implementation of the Town's actions to reduce surface water pollution. It is a living document, reviewed at least annually, and updated as needed to reflect changes and improvements in stormwater management.

This SWMP is a guiding document for Town staff and provides transparency to the public. The Town of Camp Verde encourages the public to review this plan, provide comments, ask questions, and participate in reducing stormwater pollution in daily life. See Appendix 2 – Glossary, Acronyms & Definitions for a reference guide to the technical terms contained herein.

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The SWMP is reviewed annually and updated, modified, or revised as needed. As required, the current SWMP and Annual Report will be posted on the Town's website at:

www.campverde.az.gov/departments/utilities/stormwater-division/

SUMMARY OF PROGRAM MANAGEMENT REQUIREMENTS

Reporting & Assessment	Page Reference	Frequency	Timeframe
Annual Report	Page 4	Annually	September 30
Self-Evaluation	Page 4	Annually	September 30
Discharge Monitoring Reports	Page 5	Annually	September 30
Storm Sewer Mapping	N/A	Update as new facilities com are developed	Ongoing

REGULATORY AGENCY

ADEQ Representative:

Arizona Department of Environmental Quality
Water Quality Division
1110 West Washington Street
Phoenix, AZ 85007

Contact:

Rosi Sherrill, CPSWQ

sherrill.laurie@azdeq.gov

(602) 771-4409



SETTING

Camp Verde is located in Yavapai County at the intersection of Interstate Highway 17 and State Highway Route 260 in central Arizona, 86 miles north of Phoenix.

The climate is arid with hot summer days that are often cooled by monsoons rains and with winters that are generally mild. Camp Verde's valley floor is classified as Lower Sonoran Desert. However, because the Town is situated on the Verde River, Camp Verde occupies a rare and enviable position among Arizona cities and towns. The Town consists of river plains, traversed by an 18-mile segment of the Verde River, and its tributaries, with desert hills and mesas rising in the forefront of the distant mountains. To the southwest lie the Black Hills mountain range. The Mogollon Rim is just north of the Town and forms the southwestern edge of the large geologically ancient Colorado Plateau. Beyond the immediate settlement environs, Camp Verde is surrounded by Prescott National Forest and the Coconino National Forest administered by the U.S. Forest Service.



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COMMUNITY

Community Profile:

○ Population	12,147	2020 Decennial Census
○ Housing Units	5,199	2020 Decennial Census
○ Geographic Area	42.6 square miles	Census Bureau
○ Average Annual Rainfall	17.2 inches/year	Climate-Data.org
○ Elevation	3,147 feet	USGS Mapping

Responsible Department:

Town of Camp Verde
Stormwater Division
395 South Main Street
Camp Verde, AZ 86322



Town Contacts:

Bruce Connolly, Town Engineer	bruce.connolly@campverde.az.gov	(928) 554-9055
Lisa Vaughan, Utilities Director	lisa.vaughan@campverde.az.gov	(928) 554-0825
Kristen Gressly, Utilities/Stormwater Analyst	kristen.gressly@campverde.az.gov	(928) 554-0861

STORMWATER SYSTEM

The Town's stormwater system is comprised of a network of municipally owned curbs, gutters, inlets, catch basins, underground pipes, culverts, detention basins, natural washes, and man-made channels. The stormwater drainage system is managed by the Town's Stormwater Division.

LEGAL AUTHORITY

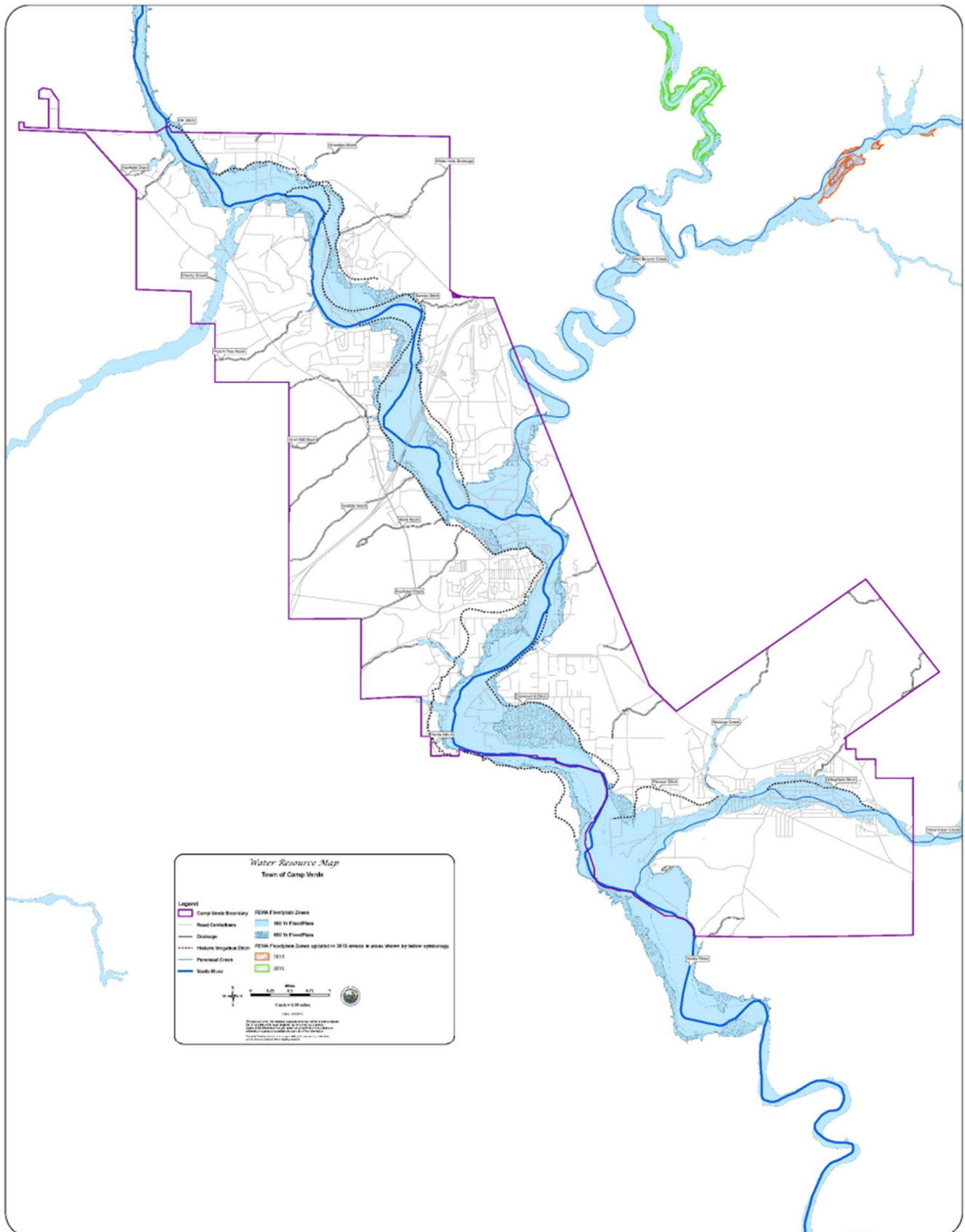
Article 7-9, Storm Water Protection, Town Code, of the Town of Camp Verde provides the legal authority for stormwater management and the protection of watercourses, including the numerous washes and storm drain systems, within the Town limits. Furthermore, Section 7-9-12 outlines the enforcement and penalties provisions for anyone found in violation of polluting the waterways of the community. This Town Code section can be found on the Town's Utilities Department webpage:

www.campverde.az.gov/departments/utilities/stormwater-division/

To assure compliance with the Permit, the Town has created an Enforcement Response Process. This Response Process has been outlined in this SWMP, see pages 43-49.

The incorporated area for the Town of Camp Verde is shown on the Water Resources Map extracted from the 2026 General Plan and shown on the next page, page 4:

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RECEIVING WATERS

The Town of Camp Verde is located within the Verde River Watershed. The primary receiving waters for Camp Verde's runoff are three perennial watercourses. These watercourses are:

1. Verde River
2. Beaver Creek
3. West Clear Creek

The ultimate receiving water for the Town's storm water discharges is the Verde River.

As a condition of discharging to the river system, the Town of Camp Verde must maintain the designated beneficial uses.

ADEQ has established a list of “designated uses” for all regulated water bodies in the State. These designated uses determine the Surface Water Quality Standards (SWQS) that a stream or lake must achieve. The designated uses assigned to receiving waters in Camp Verde’s MS4 include:

- Aquatic and Wildlife
- Fish Consumption (FC)
- Full Body Contact (FBC)
- Agricultural Irrigation (AGI)
- Agricultural Livestock Watering (ALW)

A water body that fails to meet the SWQS is listed as “Impaired” for a given pollutant of concern. For impaired waters, ADEQ drafts a Total Maximum Daily Load (TMDL), which assesses how much pollution the water body can receive and still achieve its SWQS. The TMDL establishes targets for each entity that contributes to the water body’s impairment, called Waste Load Allocations (WLAs).

As reported in the Town’s Notice of Intent (NOI), the three receiving waters identified above are not listed as an impaired, non-attaining, or an outstanding Arizona Water and therefore they do not have an assigned pollutant or TDML to monitor.

This SWMP has been designed to cover all storm water runoff and discharges located within the Town's boundaries. While much of the incorporated Town of Camp Verde is currently undeveloped, these areas will likely experience growth in the future. This SWMP was developed to serve as a comprehensive management tool to help maintain storm water quality throughout the entire town.

REPORTING REQUIREMENTS

Annual Report

The Town will submit an annual report each year, on or before September 30, to ADEQ using ADEQ’s ‘myDEQ’ online permitting system. The reporting period is from July 1 through June 30 each year. During the process of completing the annual report, the Stormwater Analyst and Town personnel will review the plan and arrange for updates as needed in accordance with the requirements in the Permit.

Program Evaluation

The Town of Camp Verde will annually self-evaluate the SWMP for compliance with the terms and conditions of the Small General MS4 Permit. All BMPs will be assessed for appropriateness and

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effectiveness by analyzing the progress towards their established goals. If necessary, ineffective or infeasible BMPs may be modified or replaced. However documentation of why the BMP was insufficient, expectations of the replacement BMP, and why the replacement BMP will meet the defined goals, is required within the updated SWMP. Adding components or controls to BMPs can be done at any time.

Self-evaluation documentation will be maintained digitally along with the SWMP and submitted to ADEQ as part of the annual report.

Discharge Monitoring Report

The Town will produce a Discharge Monitoring Report (DMR) to be completed digitally through 'myDEQ' and submit it on or before the Annual Report deadline. Inspection forms from all wet weather visual assessments will be included in the DMR. The DMRs will be submitted along with the annual report no later than September 30 of each year.

SWMP Objectives

This Storm Water Management Plan has been developed to achieve the following objectives:

1. Reduce the discharge of pollutants from the Camp Verde MS4 to the maximum extent practicable to protect water quality.
2. Set forth actions to prevent discharges from the Camp Verde MS4 from causing or contributing to an exceedance (or violation) of the State's Surface Water Quality Standards.
3. Increase the public's awareness of water quality issues and mitigation measures.

The Town of Camp Verde will maintain records pertaining to the annual report, program assessment, discharge monitoring, and associated documentation in its Storm Water Management Plan files.

The Town will make the records relating to this permit, including the written stormwater management plan, available to the public. The public may view the records during normal business hours. The Town may charge a reasonable fee for copying requests. The Town will also satisfy this requirement by posting the records online.

MINIMUM CONTROL MEASURES

The Town of Camp Verde is committed to reducing the discharge of pollutants to the maximum extent practicable. The goal is to protect water quality and to satisfy the appropriate requirements of the Clean Water Act and A.R.S 49-255.04 by implementing the six minimum control measures (MCMs) listed below.

1. Public Education and Outreach
2. Public Participation and Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Activity Stormwater Runoff Control
5. Post-Construction Stormwater Management in New Development and Redevelopment
6. Pollution Prevention and Good Housekeeping for Municipal Operations

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Implementation of these control measures is expected to result in reduction of pollutants discharged into receiving watercourses. Each control measure contains BMPs necessary for proper and effective stormwater management.

MCM 1: PUBLIC EDUCATION AND OUTREACH

Implement a program that is designed to educate the public about stormwater pollution and the impacts of stormwater discharges on receiving streams. The intent is to empower members of the community to take personal action in improving surface water quality. Outreach is to be made to target audiences from the general public and business sector defining specific relevant topics for each targeted group.

Website

The Town will use its website to provide residents with year-round 24/7 access to the Storm Water Master Plan, Annual Reports, and other informational topics and materials. Currently this information is found on the Town's website by selecting DEPARTMENTS, then UTILITIES, and then the STORMWATER tab.

The website also contains general stormwater information and fact sheets and is updated regularly to increase the amount of useful information to residents and businesses on how to reduce pollution and mitigate stormwater runoff. Webpage updates may include Frequently Asked Questions, resources for stormwater quality management, and news on stormwater programs at the Town.

BMPs / Measurable Action Items:

1. The Stormwater Analyst will update the Stormwater Division's webpage as needed to provide access to the current Stormwater Management Plan, Public Service Announcements, Fliers, the current Annual Report, and other pertinent information and materials.

Frequency: Quarterly – review website information and make appropriate updates.

2. The Stormwater Analyst will monitor and track the number of 'hits' on the Stormwater webpage.

Frequency: Bi-weekly monitoring

Public Service Announcements

The Utilities Department, Stormwater Division, will utilize various public outreach and educational events and methods to reach diverse audiences with sources of pollution prevention information and reportable facts. Public service announcements will include those on the Town's Stormwater page on its website.

BMPs / Measurable Action Items:

1. The Stormwater Analyst will post on the Stormwater Division's webpage an announcement of this updated Storm Water Management Plan, citing its purpose and need, and providing information on where to find and review a copy on the Town website.

Frequency: Annually, or as often as SWMP is modified

2. The Stormwater Analyst will prepare and disseminate via the Town's website the annual report submitted to ADEQ each year by September 30. The annual report serves as a 'State of the SWMP' report for the general public and other stakeholders in the community.

Frequency: Annually, after submittal

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Digital and Printed Materials

The Utilities Department, Stormwater Division, will use print materials to inform residents of common sources of pollutants and identify steps that can be taken to eliminate pollutants in stormwater runoff. Printed materials are distributed to interested community members and are utilized to alert nearby residents and businesses when illicit discharges are identified. Town staff can research and collect information fact sheets and educational information from other MS4 communities and agencies. Printed materials can take the form of fliers, fact sheets, brochures, and notices.

For the Town's general population, the objective is to make residents aware of the hazards and impacts of improper disposal of chemicals and household products such as, but not limited to, motor oil, paints, solvents, pesticides, yard materials, animal waste, nutrients, and sediment.

For the business community, the focus will be on illicit discharge topics related to industrial, cleaning, food service, landscapers, automotive, and hospitality businesses.

BMPs / Measurable Action Items:

1. Prepare a brief stormwater information piece on a specific storm water topic to inform and educate the general public in the community. Post the digital copy both on the Town website and on social media (to include the Town's Facebook and Instagram pages). Have printed copies of these information pieces at the front desks of the Utilities Department, Town Library, and Community Development.

Frequency: Quarterly – February, May, August, November

2. Prepare a brief storm water information piece on a specific storm water discharge topic to inform and educate the business community. Post the digital copy both on the Town website and on social media (to include the Town's Facebook and Instagram pages). Have printed copies of these information pieces at the front desks of the Utilities Department, Town Library, and Community Development.

Frequency: Semi-annually – once in March and once in September

Business Outreach

The Stormwater Division will provide real estate developers, engineers, and construction operators with education on the Town and State's stormwater regulations as well as stormwater best practices during the permitting process and during inspections on active construction sites.

BMPs / Measurable Action Items:

1. The Stormwater Division will create and produce stormwater best practices material for businesses and new construction sites.

Frequency: Once, update as needed

2. The Town will disperse these materials to any real estate developer, engineer, or construction operator looking to secure a permit for new construction activities.

Frequency: during the permitting process for any new development

MCM 2: PUBLIC PARTICIPATION AND INVOLVEMENT

The Town of Camp Verde encourages public participation and involvement in the implementation of the SWMP. Residents, visitors, businesses, and other members of the general public are encouraged to engage in any of the Best Management Practices (BMPs) described herein and is always accepting input on additional measures to minimize stormwater pollutants.

BMPs / Measurable Action Items:

1. The Stormwater Analyst will see that the Annual Report and any Updates to the SWMP are posted online on the Town's website within 30 days of submittal to ADEQ.

Frequency: Annually

Community Reporting

The Town asks community members to report storm water violations, illicit discharges, and other surface water quality concerns through use of the Town's online 'Storm Water Management Citizen Concern Form.' We request the form be completed and returned to the Town via mail or in person at 395 S Main St, Camp Verde, or by email at utilities@campverde.az.gov.

The community reporting form is found on the Town's Stormwater webpage:

<https://www.campverde.az.gov/departments/utilities/stormwater-division>

BMPs / Measurable Action Items:

1. The Stormwater Analyst will work with the Town staff to simplify the process for the public to complete and submit the form online. The form will then be automatically forwarded to the Stormwater Analyst and the Utilities Director.

Frequency: Continual

2. Town staff will recommend the pollution/stormwater concern reporting form at Town events, presentations to the public and target groups, and through the Town's Stormwater web page.

Frequency: Continual

3. The Utility Department, Stormwater Division, documents and investigates all storm water and water quality complaints submitted online or via telephone, mail, or email, or in person.

Frequency: Staff will respond to complaints within 48 hours of receipt, or as soon as practical.

Public Participation Opportunities

The Town of Camp Verde provides opportunities for volunteers to participate in stormwater related activities each year.

BMPs / Measurable Action Items:

1. The Town will advertise the free dump days at the Yavapai County Camp Verde Transfer Station on the Town's website.

Frequency: Matches the free dump days offered by Yavapai County.

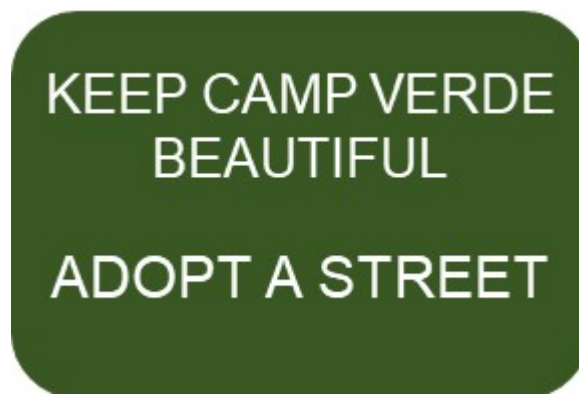
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2. The Town will initiate an 'Adopt a Street' program where volunteers are encouraged to clean up street rights of way. The Town will assist the volunteers by providing garbage bags to the group in advance and by picking up and disposing of the garbage bags afterwards.

Frequency: Annually in the fall by the end of November

3. The availability of the 'Adopt a Street' services will be featured on the Town's website and advertised at Town events, and presentations to the public.

Frequency: At least twice a year in advance of each program event.



MCM 3: ILLICIT DISCHARGE DETECTION AND ELIMINATION

The Town of Camp Verde must develop, implement, and enforce a program to detect and eliminate illicit discharges into their MS4. The Illicit Discharge Detection and Elimination (IDDE) program is intended to identify and eliminate illegal contributions of pollutants to the MS4 as well as unauthorized connections to the storm drain system.

To effectively implement its IDDE program, the Town relies on reports from citizens and staff across all departments to identify potential violations. Town Stormwater staff investigates these reports and determines appropriate enforcement and mitigation actions.

Illicit discharges and connections are also identified through visual screening of outfalls during dry-weather and wet-weather, and inspections of both construction and post-construction stormwater controls (see MCM 4 and MCM 5).

To expand public awareness and participation in detecting illicit discharges, the Town uses its website as well as the use of flyers at various locations to advertise its pollution reporting form and encourage residents to bring pollution concerns to the Town's attention (see MCM2).

Town staff is responsible for the day-to-day maintenance of streets, drainage facilities, water distribution, sewage collection, and related public infrastructure throughout the Town. Due to the mobile nature of their jobs, the Town staff will be key in identifying and reporting potential illicit discharges during their normal course of work.

Storm Sewer System Mapping

A Water Resource Map was acquired by the Town of Camp Verde in fiscal year 2015/2016 as part of the Town of Camp Verde 2016 General Plan. The Town used the Water Resources map to select outfalls based on Town protected water courses. The outfalls provide the Town with manageable areas for systematic maintenance and inspection in maintaining compliance and documentation as part of the SWMP. The outfall database should be considered a living document that can and should be updated as necessary when growth occurs and as Town staff discover changes to the storm water system that warrant updating existing outfall locations.

A map of the MS4 outfall locations can be found in Appendix 3, it is the Water Resources Map with the outfalls overlain.

BMPs / Measurable Action Items:

1. The Stormwater Analyst will work with the Public Works and Development Services Departments to create and maintain a Storm Sewer System Map that reflects the current existing storm system of the Town. As-built plans will be input into the mapping tool.

Frequency: Continually

Illicit Discharge Detection

Illicit discharge detection and elimination is a comprehensive program that assists the Town in detecting, identifying, isolating, regulating, and eliminating illicit discharges. Anything entering the MS4 that is not stormwater is an illicit discharge. Illicit discharges include:

- Illegal Dumping
- Littering
- Illicit Connections (connection of non-storm water source directly to a storm drain or waterway)
- Hazardous Waste
- Grey Water Discharges

The Town of Camp Verde will develop and implement a plan to detect, identify the source of, and address non-stormwater discharges including illegal dumping to the system.

Reporting of illicit discharges is to include:

- Date and time incident is reported or discovered
- Date(s) of the Town's response
- Identification if the discharge reached a protected surface water (yes, no, or unknown)
- Incident location (address and/or latitude/longitude)
- Pollutants involved
- Source of discharge
- Correction methods employed

BMPs / Measurable Action Items:

1. The Stormwater Analyst will track all suspected, reported, and confirmed cases of illicit discharge. During annual program evaluation, stormwater staff will review the past years' IDDE records and update procedures as needed to address excess time to case resolutions, unsatisfactory case resolution, and any other program issues that are identified.

Frequency: Annually, by the end of September each year

2. Through the Public Outreach program, citizens will be provided with educational information on how to identify illicit discharges and how to report such incidents as they occur to the Town online, by phone, by email, or in person at 395 S Main Street, Camp Verde.

Frequency: Annually, review/update the IDDE Public Outreach document and post it online

3. The Stormwater Analyst will provide training to Town staff on how to identify illicit discharges and outline the associated reporting procedures.

Frequency: Prepare an IDDE training presentation and conduct an annual training session for staff in January each year.

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Illicit Discharge Enforcement

Town of Camp Verde Code, Article 7-9, specifies that no person shall cause or allow the discharge to a public right-of-way or public storm drain system of any substance that is not composed entirely of storm water, and that no person shall use, store, spill, dump, or dispose of materials in a manner that those materials could cause or contribute to the addition of pollutants to storm water. This section of the Town Code sets forth enforcement procedures and penalties for violations of the Town's illicit discharge requirements.

The following non-stormwater discharges to the MS4 are allowed by the Town of Camp Verde.

- Water line flushing (requires an ADEQ De Minimis Discharge Permit).
- Landscape irrigation.
- Irrigation water.
- Discharges from potable water sources (requires an ADEQ De Minimis Discharge Permit).
- Foundation drains.
- Air conditioning condensation.
- Individual residential car washing.
- Discharges or flows from emergency firefighting activities.
- Uncontaminated groundwater infiltration into storm drains or pumped to the surface.

In addition, the Town considers non-commercial or charitable events such as charity or school fund raising car washes to be insignificant contributors of pollutants. Therefore, these discharges are not prohibited. Local controls or conditions will not be placed on discharges from such events, unless the Town obtains information and makes a determination that such a discharge is a significant contributor of pollutants to the MS4. See also MCM 6.

BMPs / Measurable Action Items:

1. Document and file any enforcement action taken including the outcome.

Frequency: Within 30 days of the conclusion of the enforcement action

Visual Monitoring

The Town of Camp Verde will conduct visual storm water discharge monitoring as required by the Permit. The following section describes the activities the Town will implement to conduct the monitoring.

BMPs / Measurable Action Items:

1. The Town will develop, implement, and maintain a visual monitoring program that includes both dry weather and wet weather storm water discharges to identify, monitor, and eliminate illicit discharges.

Frequency: Included in this 2026 update of the SWMP

Procedures for Conducting Wet and Dry Weather Visual Inspections

The following section describes the activities the Town will utilize to conduct the visual monitoring.

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Schedule

The Town will conduct visual stormwater discharge monitoring two times during the summer wet season and two times during the winter wet season (four events per year total). Wet seasons, for the purposes of visual assessments, are defined as follows:

- Summer Wet Season: May 1 – September 30 (two events during summer season)
- Winter Wet Season: October 1 – April 30 (two events during winter season)

Visual examination will occur when discharges resulting from a qualifying rainfall event causes runoff to be present at the outfall. A qualifying rainfall event is defined as an event that produces 0.1 inches or more in measured rainfall and occurs at least 72 hours from the previous 0.1-inch rainfall event.

Grab samples for visual examination are to be collected as soon as practicable. Visual examinations will be conducted during daylight hours in a well-lit area to accurately observe and document the results.

Locations

The Town has selected the following locations to conduct visual stormwater monitoring:

VISUAL OUTFALL DISCHARGE MONITORING LOCATIONS			
<i>Outfall ID No.</i>	<i>Location</i>	<i>Season</i>	<i>Name of Receiving Water</i>
OUT-01	Ward Ranch Gully at Verde Lakes Drive Crossing	Wet & Dry	West Clear Creek – Verde River
OUT-02	West Clear Creek Tributary at Verde Lakes Drive	Wet & Dry	West Clear Creek – Verde River
OUT-03	South Main Street Drainage Crossing	Wet & Dry	Drainageway – Verde River
OUT-04	Finnie Flat Channel at County Ditch/Verde River	Wet	County Ditch – Verde River
OUT-05	Beaver Creek at East Lacy Lane	Dry	Beaver Creek – Verde River
OUT-06	Grandpa Wash at Middle Verde Road	Dry	Beaver Creek - Verde River
OUT-07	Grief Hill Wash west of Dickison Park Road	Dry	Grief Hill Wash – Verde River
OUT-08	OK Ditch at Caughran Road	Dry	Grandpa Wash – Beaver Creek
OUT-09	Cherry Creek at Old Highway 279	Dry	Cherry Creek – Verde River

These locations were selected for their drainage types and areas, for the surrounding development in the area, accessibility, and consideration for safety of the person conducting the monitoring. See the Sampling Location Maps at the end of this section. These locations are identified in the ADEQ Notice of Intent (NOI) for the AZPDES Small MS4 General Permit.

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Parameters

Grab samples will be examined in a clear container and observed for the following parameters:

Color	Water that is colorless lacks pollutants that affect water color. Water that is slightly milky or light brown in color usually indicates the presence of suspended sediment. Suspended sediment will impart the same color to water as the surrounding soil. The presence of a color that is different from the surrounding soil color may indicate the presence of a chemical pollutant.
Odor	Most water is either odorless or has a slight “earthy” odor. Odors such as gasoline fumes, solvents, sulfur or rotten egg smell, sewage, or a sour smell may be indicative of chemical pollutants.
Clarity	Clarity refers to the amount of suspended material present that causes the water to be opaque and limits the amount of light that can pass through the water. The cloudier the water is, the more likely it is to contain suspended material.
Floating Solids	Solids may float if they are buoyant in water. Observe the surface of the grab sample for floating solids and describe them.
Settled Solids	Solids may settle to the bottom if they are heavier than water. Observe the bottom of the grab sample for settled solids and describe them.
Suspended Solids	Solids may remain in suspension if they have the same buoyancy as water or if their physical shape allows them to remain in suspension for long periods of time.
Foam	The presence of foam on the water surface may indicate the presence of industrial foaming agents or surfactants.
Oily Sheen	An oily sheen is present if a film of iridescent color is observed on the water surface. Look for a rainbow effect that can appear to be floating on the surface of the water. Usually an oily sheen indicates the presence of oil or grease. On rare occasions, and usually in the fall, an oily sheen can be the result of the decomposition of fallen leaves.
Other Indicators	Any other indicator of a pollutant that does not fall under any of the other categories will be noted.

Documentation

The results of the visual examination will be recorded on the Visual Monitoring Report Form and must include the following information:

- Location Name
- Date and Time of Examination
- Monitoring Personnel
- Monitoring Point Location
- Nature of Discharge (rainfall or snowmelt)
- Time the Rainfall Event Began

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- Duration of the Rainfall Event
- Inches of Rainfall from the Event
- Length of Time since the Last Qualifying Rainfall Event
- Description of the Nine Visual Examination Parameters

The Visual Monitoring Report Form is included herein on page 21.

The completed Visual Monitoring Report Forms for each of the four annual sampling periods at the identified sampling sites shall be filed for record and maintained on file by the Town for a period of ten (10) years.

Interpreting Visual Monitoring Results

Results of visual examinations will be used by Town personnel to identify issues of concern that require follow-up action. Some common storm water visual observations are provided below along with what action should be taken.

COMMON STORM WATER VISUAL OBSERVATIONS & ACTIONS	
<i>Observation</i>	<i>Action</i>
Oil Sheen	Conduct an inspection of the area of the site draining to the sample collection point. Look for obvious sources of spilled oil, leaks, etc. If a source can be identified, steps should be taken to immediately clean up or remove the source.
Floating Solids	Examine the solids to see if they are raw materials, waste materials, or other known products stored or used within the drainage area. Review the drainage basin area to find potential sources and eliminate them.
Unusual Color or Odor	Attempt to compare the color or odor to the colors or odors of known chemicals and other materials used within the area. If possible, find the source and take action to remove it.
Large Amounts of Settled Solids	Check unpaved unstabilized areas or areas of erosion. Take action to provide BMPs to control and minimize erosion.
Excess Foam, Suds, or Scum	If accompanied by a strong organic or sewage-like odor may indicate a sanitary sewer leak or connection. If the foam has a fragrant odor, they may indicate the presence of laundry water or similar wash waters and/or surfactants. If possible, find the source and remove it.
Cloudy – Very Slow to Settle Out	Evaluate the site draining to the discharge point for fine particulate material such as dust, ash, or other pulverized, ground, or powdered chemicals. If possible, find the source and remove or reduce its potential to be collected in stormwater runoff.
Clean & Clear Sample	This may indicate a high-quality result. However, the visual examination will not provide information about dissolved contamination.

Town personnel will perform a brief investigation to determine a potential source if an issue of concern is identified in the initial visual screening. Otherwise, the steps identified in the following section for Follow-Up Screening will be followed to identify a potential source of the contamination.

Follow-Up Screening

The Town will perform follow-up screening within two weeks of the initial visual monitoring that identified an issue of concern. The follow-up screening will consist of the following:

- Inspect the sampling location for visual signs of an illicit discharge
- Review the upstream drainage area for potential sources
- Take action to mitigate or eliminate the source if it can be identified

Illicit Discharge Detection and Elimination (IDDE) Program

Response to Complaint/Violations

Program Initiative/Purpose: This program within the MS4 is for the purpose of preventing, locating, identifying, reporting, mitigating, and permanently removing illicit discharges of anything but intended Stormwater into any part of the Town of Camp Verde MS4.

Responder: Please fill out all information. This is an official record. Please provide form to the Town of Camp Verde Public Works Department for the MS4 Annual Report Record.

Date:_____ Time:_____ Report Taken By:_____

- Location/Address of Discharge_____

- Description of Illicit Discharge:_____

- Location on Property of the Discharge:_____

- Complaint Made By (Include Contact Information)_____

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN

Initial Field Response Date: _____ Time: _____ By: _____

Describe Initial Description in Field of Illicit Discharge: _____

Owner of Property Present? _____ Owner's Name: _____

Owner Contact Information: _____

Describe Initial Action/Enforcement Taken: _____

Describe Initial Action Taken by Property Owner to Remediate Illicit Discharge: _____

Was further Enforcement Action Required to get Property Owner to take responsible action to remediate the Illicit Discharge? If Yes, Describe: _____

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN

VISUAL MONITORING REPORT FORM Town of Camp Verde

Type of Weather for Monitoring: ☐ Wet Weather ☐ Dry Weather		
MONITORING LOCATION:		DATE:
TIME:		
INSPECTOR:		
RAINFALL EVENT INFORMATION		
TYPE: ☐ RAINFALL ☐ SNOWMELT ☐ N/A (Dry)		TIME SINCE LAST QUALIFYING EVENT: (in days)
TIME BEGAN:	DURATION: (in hours)	AMOUNT: (in inches)
PHYSICAL OBSERVATIONS		
1. COLOR: ☐ NONE ☐ YELLOW ☐ BROWN ☐ TAN ☐ GREEN ☐ GRAY ☐ RED OTHER: _____		
COLOR INTENSITY: ☐ INTENSE ☐ MODERATE ☐ FAINT		
COMMENTS:		
2. ODOR ☐ NONE ☐ DIESEL ☐ GASOLINE ☐ SOLVENT ☐ CHLORINE		
☐ SEWAGE ☐ ROTTEN EGG ☐ MUSTY/EARTHY ☐ OTHER _____		
COMMENT:		
3. CLARITY ☐ OPAQUE ☐ CLOUDY ☐ TRANSPARENT		
COMMENT:		
4. FLOATING SOLIDS? ☐ NONE ☐ YES		
IF YES, DESCRIBE:		
5. SETTLED SOLIDS AFTER 24 HOURS? ☐ NONE ☐ YES		
IF YES, DESCRIBE:		
6. SUSPENDED SOLIDS? ☐ NONE ☐ YES		
IF YES, DESCRIBE:		
7. FOAM? ☐ NONE ☐ YES		
8. OILY SHEEN? ☐ NONE ☐ YES		
9. OTHER INDICATORS OF POSSIBLE STORM WATER POLLUTION? ☐ NONE		
COMMENT:		
POSSIBLE SOURCES OF OBSERVED POLLUTION INDICATORS		
DESCRIPTION:		
I state that this document was prepared under my direction or supervision in accordance with the visual monitoring procedures and that qualified personnel properly gathered and evaluated the samples. The information submitted is, to the best of my knowledge, information, and belief, true, accurate, and complete.		
Signed Name _____		Date _____
ATTACH ADDITIONAL PAGES AS NEEDED CONTAINING PHOTOGRAPHS OR ADDITIONAL NOTES.		

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN



Ward Ranch Gully OUT-01 & West Clear Creek OUT-02 Sampling Locations



South Main Street Sampling Location OUT-03

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN



Finnie Flat Road Channel Sampling Location OUT-04

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN



Beaver Creek Sampling Location OUT-05

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN



Grandpa Wash Sampling Location OUT-06

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN



Grief Hill Wash Sampling Location OUT-07

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN



OK Ditch Sampling Location OUT-08

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN



Cherry Creek Sampling Location OUT-09

MCM 4: CONSTRUCTION ACTIVITY STORM WATER RUNOFF CONTROL

The Town of Camp Verde will develop, implement, maintain, and enforce a construction activity storm water runoff control program to minimize or eliminate pollutant discharges to the MS4 from regulated construction activities that will result in disturbance of land within the Town.

MCM 4 requires the Town to regulate discharges from construction activity. Construction activities are one of the biggest sources of storm water pollutants. This is to be accomplished through:

1. Enforcing design plan standards
2. Inspection and enforcement of erosion and sediment controls on construction sites
3. Educating and engaging developer, construction operators, and the general public

The Town's construction storm water runoff control program places emphasis on minimization of sediment discharge which is the most common pollutant generated by construction activity and can be a vector for other pollutants including nutrients, bacteria, and a range of chemicals.

Chapter 7, Article 7-9 Storm Water Protection, of the Town Code requires the use of sediment and erosion control practices and allows the Town, to the extent authorized by law, to impose sanctions ensuring compliance with the local program.

Storm Water Pollution Protection Plan (SWPPP)

The Town currently requires construction site contractors to submit a Storm Water Pollution Protection Plan (SWPPP) that includes Best Management Practices (BMPs) for managing the construction site prior to beginning construction. The SWPPP must include a combination of structural and/or nonstructural BMPs appropriate to the site and community. Developers of one or more acres of land are also required to secure a Notice of Intent (NOI) to discharge.

The Town reviews development plans to ensure storm water compliance utilizing standard procedures and checklists developed by the Town's Stormwater Division and Engineering staff. Engineering service staff will review the submitted documents and plans to ensure compliance with all Town requirements. If not approved, comments will be provided by staff, and those comments must be addressed on subsequent submittals.

BMPs / Measurable Action Items:

1. During pre-construction meetings, Town staff will inform contractors that a SWPPP will be required for all commercial construction sites.

Frequency: At each commercial site pre-construction meeting during the year

2. Regularly use the inspection checklist, modify as needed to improve inspection processes and procedures. The checklist is found at the end of this section.

Frequency: Continually, update as needed

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN

Construction Site Inspections

All construction sites need to have adequate sediment and erosion control measures that keep soil stabilized and prevent pollutants from running off site in storm water events.

The Town Code provides the regulatory mechanism to prohibit erosion and waste on construction sites within the jurisdiction of the Town. The code also addresses violations that occur during construction activities and has provisions for authority to inspect construction sites.

The Town inspects eligible construction sites for storm water at the start of construction, then at least monthly thereafter, until a final walk-through inspection takes place. Inspections will be ongoing throughout all phases of construction and will be conducted on all new construction projects. The Inspector will complete a 'Stormwater Commercial Construction Site Inspection Report' form for each inspection of storm water control facilities and retain a copy for three (3) years. The inspector is to provide inspection details as well as photos documenting potential deficiencies and site progress.

Prior to final approval, the project will be inspected to evaluate the effectiveness of the site's temporary sediment and erosion control measures, final stabilization, and overall compliance with the Town's requirements.

If non-compliance is identified during the inspection, the Inspector will notify the permittee and follow up within seven (7) days to ensure corrective actions have been satisfactorily completed. If corrective actions have not been implemented, the inspector will begin the enforcement process.

In the case that a complaint is received for potential stormwater non-compliance at or emanating from a commercial construction site, the inspector will investigate the complaint within seven (7) days of receipt.

BMPs / Measurable Action Items:

1. Town staff will incorporate construction site stormwater inspections into regular inspection duties and complete a 'Stormwater Construction Site Inspection Report' on illicit discharge sightings and complaints.

Frequency: At least monthly for the duration of site disturbance activities for each project

2. Enforcement action will be taken on those who violate the Town Code utilizing the Town's Code Enforcement Branch.

Frequency: Each occurrence for any project during the course of the year

Developer and Contractor Education Program

The Town will develop an educational program targeting the construction industry and private developers on stormwater runoff issues aimed at controlling erosion and sedimentation control at construction sites.

BMPs / Measurable Action Items:

1. Town staff will prepare and make available an educational and instructive guideline document aimed at educating developers, contractors, and operators of BMP's and SWPPP requirements. This document will be available online on the Town's website and handed out at all pre-construction meetings for construction projects.

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN

Frequency: Complete preparation of education document by end of June 2027

2. Town staff will ensure known violations are corrected.

Frequency: Each occurrence for any project throughout the year. Maintain documentation of enforcement actions.

Inspection Training

The Stormwater Analyst will train the Town's construction site inspectors on erosion and sediment control inspections and enforcement procedures. Training includes inspection of erosion and sediment control BMPs, identification of storm water runoff issues at construction sites, enforcement of storm water construction regulations, and documentation of inspections and enforcement. Also see MCM 6.

BMPs / Measurable Action Items:

1. Develop and implement a training program for staff inspectors on erosion and sediment control inspections and enforcement procedures.

Frequency: Develop the inspector training program by the end of June 2027, then schedule and conduct the first annual training program in January 2028 and continue year to year.

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN

Town Of Camp Verde Stormwater Construction Site Inspection Report

Contractor			
Project Name & Number			
Location			
Date of Inspection		Start Time	End Time
Describe Current Phase of Construction			
Type of Inspection: ☐ Regular ☐ Pre-storm event ☐ During storm event ☐ Post-storm event			
Weather Information			
Weather at time of this inspection? ☐ Clear ☐ Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snowing ☐ High Winds ☐ Other:			
Do you suspect discharges may have occurred? ☐ Yes ☐ No If yes, describe:			
Are there any discharges at the time of inspection? ☐ Yes ☐ No If yes, provide the locations and a description of stormwater discharges from the site and any presence of suspended sediment, turbid water, discoloration, and/or oil sheen:			
Identify any non-storm water discharges for the site; i.e. water other than stormwater runoff directed to a watercourse, storm drain, or off the construction site:			

INSPECTION CHECKLIST				
#	BMP/Activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are perimeter controls and sediment barriers installed and maintained?	☐ Yes ☐ No	☐ Yes ☐ No	
2	Are discharge points and receiving waters free of sediment deposits?	☐ Yes ☐ No	☐ Yes ☐ No	
3	Are storm drain inlets properly protected?	☐ Yes ☐ No	☐ Yes ☐ No	
4	Are sediments being tracked into the street?	☐ Yes ☐ No	☐ Yes ☐ No	
5	Is trash and litter from work areas collected and placed into dumpsters?	☐ Yes ☐ No	☐ Yes ☐ No	
6	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or deleterious material?	☐ Yes ☐ No	☐ Yes ☐ No	
7	Are materials that are potential storm water contaminants stored inside or under cover, where practicable?	☐ Yes ☐ No	☐ Yes ☐ No	
8	Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	☐ Yes ☐ No	☐ Yes ☐ No	

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN

INSPECTION CHECKLIST				
#	BMP/Activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
9	Are there locations where additional BMPs are necessary?	☐ Yes ☐ No	☐ Yes ☐ No	
10	Are changes to the SWPPP necessary?	☐ Yes ☐ No	☐ Yes ☐ No	
11	Other Issues?	☐ Yes ☐ No	☐ Yes ☐ No	
☐ If there are no incidents of non-compliance noted during the inspection, the inspector certifies that the construction project and site is being operated in compliance with the Town's SWMP and Permit No. AZG2016-002.				

NOTED COMPLIANCE ISSUES		
#	Issue	Corrective Action

Inspector Name and Title: _____

Signature: _____ Date: _____

MCM 5: POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT & REDEVELOPMENT

The Town of Camp Verde will develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects. This includes projects of less than one acre that are part of a larger common plan of development or sale and that discharge into the small MS4.

When storm water quality is considered from the beginning of a project, new development and redevelopment projects will be better enabled to reduce pollution from storm water runoff throughout the life of the project. The intent is to confirm storm water discharge controls have been satisfactorily constructed, are in place and functioning as intended, and to provide for long-term operation and maintenance of implemented BMPs.

To effectively implement a post-construction storm water program, a combination of both structural and non-structural BMPs must be addressed. Permanent BMPs or post-construction BMPs that differ from the BMPs identified in the construction plan SWMPPP can be shown on the construction plan BMPs and called out as permanent or post-construction BMPs.

Non-Structural Controls are Best Management Practices (BMPs) that do not involve a structured or engineered solution. Because it is usually easier and more effective to prevent pollution before it occurs, non-structural BMPs are very cost-effective. These measures limit or eliminate pollutants before they end up in storm water. Some nonstructural BMPs include:

- Effective site planning to protect and utilize natural flow paths
- Low impact designs
- Maintain riparian buffers and provide non-required vegetation plantings
- Outreach and education
- Stormwater management regulations and ordinances

Structural BMPs are facilities that help prevent pollutants from leaving a developed property, entering storm systems, and/or impacting local waterways. Structural BMPs require regular inspection and maintenance to ensure that they are operating effectively. Some structural BMPs include:

- Infiltration facilities
- Dry wells
- Detention/retention basins
- Rain gardens
- Silt fences

The Town of Camp Verde has developed a post-construction storm water program that addresses storm water runoff for both new development and redevelopment. The Town of Camp Verde will continue to monitor both structural and nonstructural BMPs in order to reduce storm water pollution in new development and redevelopment areas.

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN

Post-Construction Storm Water Control Inventory

The Utilities Department, Stormwater Division, in cooperation with the Engineering Division and the Code Enforcement Division, and with support from the Stormwater Analyst as needed, shall maintain an inventory of approved and installed stormwater controls. The inventory is kept up-to-date and includes all sites with post-construction stormwater controls as well as relevant attachments such as operation and maintenance agreements, as-built site plans, inspection records, photos, etc.

Upon completion of projects, and upon final inspections, if permanent BMPs differ from those shown in the construction plans, as-builts will be required to document the BMPs and to achieve final certificate of occupancy issuance.

BMPs / Measurable Action Items:

1. The Stormwater Analyst shall set up an electronic filing system on the Town's computer server exclusively for maintaining documentation on Stormwater Controls in place. The file system will have the following structure:

Main Folder: Storm Water Controls

Level 1 Sub-Folder: Site Address

Level 2 Sub-Folders: Operation & Maintenance Agreements

As-Built Plans

Post Construction Site Storm Water Inspection Form

BMP Photos

Documents are to be filed with a date prefix of: YYYY-MM-DD File Name. This will provide a chronologic series of documentation for convenient retrieval.

Frequency: Computer file system to be set up on the Town's server by June 30, 2027

1. Town staff will perform a post-construction inspection on each newly constructed and completed development or redevelopment site utilizing the 'Post-Construction Site Storm Water Inspection Form' found at the end of this section to provide an inventory of structural storm water control BMPs. Photos of storm water control BMPs are to be taken for each facility.

Frequency: Form to be completed and filed within two weeks of the completion of construction.

Operation and Maintenance of Post-Construction BMPs

The Town of Camp Verde will require all new development and redevelopment projects to have an Operation & Maintenance Agreement for all post-construction BMPs. The agreement will clearly state the current property owner is the responsible party to maintain the BMP facilities. The Town retains a copy in its Stormwater Control inventory to inform future inspections.

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN

BMPs / Measurable Action Items:

1. Town staff inspects all post-construction stormwater controls each year and documents these inspections in its inventory database.

Frequency: Continually

Train Town Employees to Conduct Inspections

Training is required for employees responsible for inspecting post-construction site controls. Training for inspection staff with storm water responsibilities will include:

- a. Municipal ordinances related to storm water and post-construction.
- b. Requirements for structural storm water controls practices.
- c. Maintenance responsibilities through agreements and policies.
- d. Inspection procedures and use of inspection forms.
- e. Enforcement procedures.

BMPs / Measurable Action Items:

1. Provide post-construction site inspection training for Town inspection personnel on an annual basis.

Frequency: Annually to be completed by June 30 each year; conduct the training session for new hire inspectors prior to assigning them to perform post-construction inspections, and show new additional post-construction items for inspections

Enforcement

Town of Camp Verde Code, Article 7-9, specifies requirements for development projects to include permanent stormwater controls to minimize pollutants, including sediments, from leaving the construction site and to provide protection from accidental discharge of pollutants to the public storm drain system. It also requires property owners to provide long-term operation and maintenance of post-construction storm water runoff control mechanisms. This section of the Town Code sets forth enforcement procedures and penalties for violations of the Town's post-construction stormwater control requirements.

BMPs / Measurable Action Items:

1. Document and file any enforcement action taken including the outcome.

Frequency: Within 30 days of the conclusion of the enforcement action

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN

Town Of Camp Verde Post-Construction Site Storm Water Inspection Form

Have all temporary stabilization measures been removed? YES NO

Area	Required Per Plan?	Installed?	Operating as Intended?	Comments/Observations
Check dams	Y N	Y N	Y N	
Embankment Protection	Y N	Y N	Y N	
Rip Rap	Y N	Y N	Y N	
Retention/Detention Pond	Y N	Y N	Y N	
Vegetation	Y N	Y N	Y N	
Soil Retention Blankets	Y N	Y N	Y N	
Inlet Protection	Y N	Y N	Y N	
Outlet Protection	Y N	Y N	Y N	
Headwalls	Y N	Y N	Y N	
Other:	Y N	Y N	Y N	
Other:	Y N	Y N	Y N	
Other:	Y N	Y N	Y N	

Enforcement and Resolution

☐ Site IN Compliance	Evidence Collected (choose all that apply) ☐ Photographs ☐ Documents ☐ Samples
☐ Site NOT in Compliance (choose option and describe)	☐ Follow-up Inspection required ☐ Enforcement Action applied ☐ Stop Work Order
Enforcement action taken? ☐ Yes ☐ No If yes, describe: ☐ Verbal Notice ☐ Written Notice ☐ Fines ☐ Injunctive Relief	
Resolution:	

Inspector Certification

Inspector Signature:	Date:
Inspector Name:	Time:

MCM 6: POLLUTION PREVENTION & GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

Develop and implement an operations and maintenance program with the goal of preventing or minimizing pollutant runoff from municipal operations due to activities, including but not limited to public works, utilities, parks, fleet, building, grounds, construction, streets, drainage facilities, and stormwater maintenance. This will be accomplished through training, facility inspections, implementation of stormwater controls, and implementation of maintenance activities that reduce or eliminate pollutants discharged.

Municipal Facilities

Town Departments impacted by this operations and maintenance program are:

- a. Public Works
- b. Utilities
- c. Parks and Recreation
- d. Community Development

Facilities that are covered under a different AZPDES permit (for example an MSGP industrial stormwater permit, the wastewater collection system, and the wastewater treatment plant) are specifically exempt from the requirements under this MCM, as they have stormwater management requirements under their own permits.

BMPs / Measurable Action Items:

1. Municipal facilities that discharge pollutants need to be inventoried. Facilities can include public works and utilities yards, maintenance facilities, garages, parks, Town government buildings, library, public parking lots, etc.

Frequency: Complete an inventory of facilities by June 30, 2027. Maintain the inventoried facilities list thereafter with annual inspections.

2. Municipal activities that discharge pollutants need to be inventoried. Activities can include street sweeping, trash pickup and removal, grounds maintenance, vehicle maintenance, oil and grease disposal, etc.

Frequency: Complete an inventory of activities by June 30, 2027. Maintain the inventoried activities list thereafter.

Training

Inform and educate Town employees on requirements of the Town's SWMP. This requirement is intended to establish awareness of stormwater pollution and regulations throughout the Town's organization, to encourage a culture of pollution prevention activities, and to engage Town staff in reducing, identifying, and reporting illicit discharges.

Training courses for Town employees should involve classroom instruction and fieldwork. Classes can be in person, conducted by webinar (which is more one-way), or by another means and online sources.

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN

- a. Inform staff about identifying illicit discharges and the proper channels for relaying information about illicit discharges.

BMPs / Measurable Action Items:

1. The Stormwater Analyst will meet with appropriate Department staff annually to discuss the SWMP and to assist them and their staff to implement the program.

Frequency: Annually starting in June 2027.

2. Develop a list of training dates and audience for FY 2026-2027. Identify measurable outcomes to be achieved by each training session.

Frequency: List to be finalized by end of March 2027. Training program is to be conducted annually starting in FY 2026-2027.

3. Document all employees who received training and each topic for which they were trained.

Frequency: Annually within one week of the training session.

Operations and Maintenance Procedures

Review the Town's existing operation and maintenance programs to determine how they could be improved to meet the objectives of the SWMP. Programs should include measures to control pollutant runoff from all Town-operated streets, properties, and municipal facilities; provide for removal and disposal of pollutants from the storm sewer system; and have established operations and maintenance procedures that are designed to minimize pollution. Identify on-going maintenance needs such as sediment removal, seeding, and weed control.

Due to the large amount of pollutants that can be found on roadways, the Town will continue to conduct a street sweeping program as one of their best management practices. Street sweeping removes sediment buildup on the roadways and in the gutters, and will reduce the pollutant load during a storm water event. The objective is for two miles of street to be swept each month, after special events, and as part of storm cleanup activities to remove sediment on the road. The waste collected from street sweeping should be transported and disposed of at a landfill or other legal disposal site.

The Town conducts culvert and catch basin inspections on a regular schedule to identify maintenance needs and remove accumulated debris. Any dry weather flows or illicit discharges encountered are reported for IDDE investigation. Cleaning is conducted once annually and after notable storm events. If maintenance is needed and cannot be conducted at the time of inspection, the inspector submits a notification to the Town's Public Works work order system.

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN

BMPs / Measurable Action Items:

1. Division Managers, with the support of the Stormwater Analyst, will meet with their staff to review and improve existing operation and maintenance programs in their units aimed at achieving the objectives of the SWMP.

Frequency: Annually, starting June 2027.

2. Division Managers will work with the Stormwater Analyst on operations and maintenance programs to be adopted as policy under their jurisdiction and will provide updates to the Utilities Department Director and Stormwater Analyst.

Frequency: Provide updated O&M programs by August 1, 2027. Annual reviews thereafter.

Facility Inspections

Develop an internal inspection program to ensure that pollution prevention practices are being effectively carried out or are instituted when and where they are necessary. Inspection reports of municipal facility conditions are to be distributed to the staff via departmental meetings. Re-inspection of municipal facilities shall re-occur to assure identified improvement items have been addressed.

BMPs / Measurable Action Items:

1. The Town will implement a facilities inspection program and perform facilities inspections aimed at enforcing the current operations and maintenance programs. The program is to include inspections of storage yards and fleet maintenance facilities for oil and grease in stormwater runoff.

Frequency: Implement program by July 2027, conduct and document facility inspections annually thereafter.

2. The Town will properly maintain Town-owned vehicles and equipment.

Frequency: Inspect Town vehicles annually to mitigate oil and grease leaks.

Discharge Elimination

Provide control measures for reducing or eliminating pollutants from Town facilities. Target pollutants for municipal operations are litter, pet waste, household hazardous waste (HHW), waste automotive fluids, nutrients, overflowing septic systems, and sediment.

Town Projects will require the engineers and contractors to develop and follow an erosion and sediment control plan or Stormwater Pollution Prevention Plan (SWPPP), as applicable.

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN

BMPs / Measurable Action Items:

1. Town Staff/Project Managers will ensure that an erosion and sediment control plan or SWPPP is developed, submitted, and followed for every Town project.

Frequency: Continually, per town project.

2. Develop erosion and sediment control plans for Town facilities that include maintenance yards, parks, roadside areas, stormwater infrastructure, and similar. The plans will include best practices to use in the event of a spill.

Frequency: Develop erosion and sediment control plans for Town facilities by January 2028 and begin implementing July 2028.

ENFORCEMENT RESPONSE PLAN

Any enforcement action for a private sector project will be issued by the Town of Camp Verde Stormwater Division. For CIP projects, the Town Engineer or inspector responsible for the project will issue enforcement actions. The Town may also refer illicit discharges to ADEQ for enforcement actions.

ENFORCEMENT POLICY

The Town's policy is to prevent the discharge of pollutants from construction sites by inspecting both private sector and CIP projects and determining if the sites are implementing appropriate BMPs in accordance with the Town's NPDES Permit, policies, standards, project-specific requirements, and permits. The Town is authorized under Chapter 7, Article 7-9 Storm Water Protection, of the Town Code and/or the contract documents to take enforcement actions against the contractor or developer when a construction site is found to be out of compliance.

DISCOVERY OF NON-COMPLIANCE

The Town becomes aware of non-compliance at construction sites primarily by performing permit required inspections. The Community Development Department conducts permit inspections and will make the permittee aware of any non-compliance issues. The Town occasionally becomes aware of non-compliance through the following sources:

- Town personnel conducting routine activities such as driving to or from a construction site or when inspecting other activities at a site.
- Contractor compliance activities, such as conducting and submitting inspection reports or preparing, implementing, and updating Erosion and Sediment Control Plans or SWPPP.
- Public complaints.
- Regulatory agency inspections or audits.

ENFORCEMENT ACTIONS

Enforcement actions differ between private sector projects and CIP projects. Town inspectors use enforcement actions to enforce compliance with the building and grading permits. Town inspectors and construction managers use enforcement actions to enforce compliance with the contract documents.

The Town may not always take enforcement actions in the sequence provided and reserves the right to issue enforcement actions based on the facts of the violation, or history of noncompliance at the site, or with the contractor/developer. In general, enforcement actions are based on the type of BMP deficiency found at the site. In the event that no corrective actions were taken during the required time frame, the Town will escalate enforcement actions.

Verbal Warnings

Verbal warnings are typically the initial enforcement action used to request corrective action for both private sector and CIP projects. Verbal warnings are issued to the contractor/developer. The inspector who issues the warning shall document the violation, notification, specific time frame for correction, and follow-up inspection date. Verbal warnings are often sufficient to achieve correction of the violation. Many violations are often corrected while the inspector is still present at the construction site. The Town will document the verbal warning with a written or digital record for the annual report.

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN

Written Notice

Written notices are used for both private and CIP projects. For private projects, written notices may include Notice of Non-Compliance and/ or Stop Work Order. For CIP projects, written notices may include Notice of Non-Compliance, Administrative Compliance Order, Administrative Citations or Fines, and/ or a Stop Work Order and will be entered as a written record for the annual report.

Written notices are issued either when a prior verbal warning was not corrected within the specified time frame for correction or when the severity of the violation is such that a verbal warning is not deemed strong enough. Written notices shall include the description of the violation, suggested corrective actions, and time frame for correction as well as a follow-up inspection. The Stormwater Analyst will develop a form (hard copy or digital) to use to issue written Notice of Violation.

Stop Work Order

Stop work orders are used for private or public projects when items in a prior written notice were not corrected within the specified time frame, or a significant threat to water quality is observed. Stop work orders prohibit further construction activity until the problem is resolved. The stop work order will not be lifted until the contractor's project supervisor requests the inspector to re-inspect the project and verify that the deficiencies have been corrected. Work may not begin again until the inspector has signed off on the corrections. The stop work order must include the infraction and specify what corrective action must be taken within a specified timeframe.

Suspension or Revocation of Permits

Suspension or revocation of permits is used on private projects and only in severe cases of non-compliance or significant discharges. The Town may suspend or revoke the building or grading permit that a developer/contractor is working under or withhold final approval. The developer/contractor will have to re-submit detailed plans and proposals for compliance or re-apply for a permit and meet any requirement(s) that the Town may place on the project.

Contract Enforcement Mechanism

Contract enforcement mechanisms are used for CIP projects when written notices are insufficient. Construction contracts include language that gives the Town Engineer and Town inspector the right to enforce established policies including withholding payment(s), using contractor's bonds, applying fines, stopping work (without time penalties), or terminating contracts if the contractor performing the construction activities does not comply with contract documents, local ordinances, or the NPDES General Permit or other NPDES Permit, if required.

Referral to ADEQ

The Stormwater Division, Town Engineer, and/or Town inspectors will refer both private sector and Town projects to ADEQ for the following two (2) situations:

1. Critical Deficiency with Potential to Significantly Impact Public Health

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN

The procedures the Town will implement to notify ADEQ and/or DOH, once a critical deficiency occurs, are listed as follows:

- Inspector notifies the Town Engineer of the critical deficiency and corrective actions taken including inspection report and photo documentation.
- The Town notifies ADEQ of the critical deficiency and provides a Critical Deficiency Report which includes photo documentation.

In the event that the Town believes that a non-compliance situation has the potential to significantly impact public health or the environment, the Town will refer the situation to ADEQ for concurrent enforcement actions.

2. Exhausted all Enforcement Actions

In the event the Town exhausted all of the enforcement options discussed above, the Town will refer the project to ADEQ by providing:

- A verbal notification within one (1) week of exhausting enforcement actions.
 - A written report within two (2) weeks of exhausting enforcement actions.
- The written report shall include inspection checklists, notes and related correspondence.

There are two means available for the Town of Camp Verde to escalate an environmental violation to ADEQ.

The first option is to submit an environmental complaint to ADEQ using their online 'Environmental Complaint form that can be found on their website:

<https://www.azdeq.gov/EnvironmentalComplaints>

Use the online form for reporting activities you feel put the Arizona environment and/or public health at risk. Submitting an online complaint using the environmental complaint form is the best way to assure an efficient response to your complaint. After submitting the form, you will be contacted by an ADEQ team member assigned to your issue.

A screenshot of the online environmental complaint form can be found at the end of this section after the 'Notice Of SWPPP Non-Compliance' form.

TIME FRAME FOR CORRECTION

For each deficiency discovered, the Town will determine the required time frame the contractor/developer has to correct the deficiency before enforcement actions are escalated.

For minor deficiencies, the Town will require the deficiency to be corrected as soon as possible but no later than ten (10) calendar days after the deficiency is discovered or before the next forecasted rain event, whichever is sooner.

For major deficiencies, the Town will require the deficiency to be corrected as soon as possible but no later than five (5) calendar days after the deficiency is discovered or before the next forecasted rain event, whichever is sooner.

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For critical deficiencies, the Town will require the deficiency to be corrected or addressed before the close of business on the next calendar day that the deficiency was discovered.

ENFORCEMENT PROCEDURES FOR PRIVATE SECTOR AND CIP PROJECTS

The Town performs construction BMP inspection.

Step 1 Determine if a BMP deficiency has occurred.

- a. No deficiencies – no enforcement actions necessary.
- b. Minor deficiency – start at Step 2 or 3, depending on the severity.
- c. Major deficiency – start at Step 3 or 4, depending on the severity.
- d. Critical deficiency – start at Step 4 or 5, depending on the severity.
 - Notify the Town Engineer and provide inspection report and photo documentation.

Step 2 Issue a Verbal Warning by notifying the contractor/developer.

- a. Document on the construction site BMP checklist the following information:
 - Deficiencies to be corrected.
 - Specific time frame for correcting the problem.
 - Follow-up inspection date to confirm correction.
 - Complete a written record for the annual report.
- b. Perform follow-up inspection and document findings in the inspection file.
 - If corrective actions were taken, document correction on Construction Site BMP Checklist.
 - If corrective actions were not taken, issue a Written Notice.

Step 3 Issue Written Notice to contractor/developer's project supervisor and owner/developer.

- a. Written Notice shall be documented on the BMP checklist and a copy shall be placed in the active inspection file. Written Warning shall include:
 - Deficiencies to be corrected.
 - Suggested corrective actions.
 - Specific time frame for correction.
 - Date for follow-up inspection.
 - Complete a written record for the annual report.
- b. Perform follow-up inspection and document findings in the inspection file.
 - If corrective actions were taken, document correction on construction site BMP checklist.
 - If corrective actions were not taken, issue a Stop Work Order.

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN

Step 4 Issue Stop Work Order and provide copies to contractor's project supervisor and owner/developer and a copy shall be placed in the active inspection file.

- a. Stop Work Order shall include:
 - Deficiencies to be corrected.
 - Specific corrective action that must be taken and the timeframe required to correct.
- b. Perform re-inspection when the developer/contractor's project supervisor requests one.
 - If corrective actions were taken, sign off on the corrections and allow work to proceed.
 - If corrective actions were not taken, discuss with the Town Attorney if revocation of permit or denial of permits should be sought.

Step 5 Suspend/revoke grading and/or building permit that the developer/contractor is working under, withhold final approval, or deny future permits on the project.

Discuss with the Town Attorney, if necessary, and only after permit revocation or suspension is in place.

Step 6. Notify ADEQ if all enforcement actions are exhausted and contractor/developer is still out of compliance or poses an immediate or significant threat to water quality, and/ or human or environmental health.

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN

NOTICE OF SWPPP NON-COMPLIANCE			
Type of Notice	☐ Verbal	☐ Written Notice	☐ Stop Work Order ☐ Permit Suspension
Type of Project	☐ Private Development Project	☐ Public Capital Improvement Project	
Town of Camp Verde Utilities Department			
To the attention of:			
Name			
Address			
Regarding:			
Project Name			
Location of Work			
Project Manager		Project Number	
Requesting Party		Date of Notice	
<i>If a Stop Work Order or Permit Suspension, immediately cease and desist construction activities.</i>			
SWPPP Violation			
Time to Correct		Follow-on Inspection Date	
Notice Issued by:			
Name		Title	
Signature		Date	
Notice Acknowledged by:			
Name		Title	
Signature		Date	

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN

Environmental Complaint Form

Use this form to submit a complaint or report a possible violation of environmental law or rule. ADEQ will use the information to follow up on the complaint.

Note: Fields with a * are required. If you choose to submit online, you must complete all the required fields.

Complaint Details

Company/Facility Name: 	Company/Facility Address:
Company/Facility Phone #: 	Type of Business/Operation:
Major Cross Streets: 	*Nearest city:
*County: 	If requested, do you have photos/video?
Date of Occurrence: (i.e., 01/01/2013) 	Time of Occurrence:
Material Spilled/Dumped: 	Estimated Quantity that was spilled/dumped:
Best Time to Witness (if ongoing): 	* Type of Pollutant:

*Describe what you saw:

Characters Remaining: 2000

Your Information

Note: fields with "*" are required.

*Your name (first, last): 	*Address:
*City: 	*State:
*Zip: 	*E-mail:
*Phone: 	
Have you been referred to ADEQ?: ☐ Yes ☐ No	If yes, by whom:

*Would you like to be contacted about the result of your complaint?:
☐ Yes ☐ No

Arizona law requires you to provide your name when reporting an alleged violation. Under the law, your name will be placed in the public file unless the release of your name may result in substantial harm to any person, including yourself, or to the public health or safety. See A.R.S. § 41-1010.

*Do you feel that the release of your name may result in substantial harm to any person, including yourself, or to the public health or safety?
☐ Yes ☐ No

If yes, please describe:

☐ I'm not a robot


reCAPTCHA
[Privacy](#) - [Terms](#)

Please, only press submit once, otherwise, you will send multiple submittals to us.

ADEQ Environmental Complaint Form Screenshot

APPENDIX 1 – GLOSSARY, ACRONYMS & DEFINITIONS

Acronyms

The following is a list of acronyms and abbreviations that are used in this document.

AAC	Arizona Administration Code
ADEQ	Arizona Department of Environmental Quality
AMA	Active Management Area
ARS	Arizona Revised Statute
ATD	Authorization to Discharge
AZPDES	Arizona Pollutant Discharge Elimination System
BMPs	Best Management Practices
CFR	Code of Federal Regulations
CIP	Capital Improvement Program
CGP	Construction General Permit
CWA	Clean Water Act
DMR	Discharge Monitoring Report
EPA	Environmental Protection Agency
ERP	Enforcement Response Plan
GIS	Geographic Information System
GPS	Global Positioning System
IC	Illicit Connection
ID	Illicit Discharge
IT	Information Technology
IDDE	Illicit Discharge Detection and Elimination
MCMs	Minimum Control Measures
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System (Camp Verde is a Small MS4 system)
MSGP	Multi-Sector General Permit
MWS	Master Watershed Stewardship
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and Maintenance
P2	Pollution Prevention
SIC	Standard Industrial Classification
SWMP	Storm Water Management Plan
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
TOWN	Town of Camp Verde

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN

Definitions

Arizona Pollutant Discharge Elimination System (AZPDES) – The ADEQ implementation of the EPA program for issuing, modifying, revoking, reissuing, terminating, monitoring, and enforcing permits and imposing and enforcing pretreatment requirements under the Clean Water Act.

Best Management Practices (BMPs) – Measures or practices used to prevent or minimize the amount of pollution entering surface waters. BMPs may take the form of a process, activity, or physical structure.

Discharge – The conveyance, channeling, runoff, or drainage, including snowmelt, from a site.

Minor Spills – Spills that have a volume less than the reportable quantity, can be controlled and cleaned up with onsite resources, do not contaminate the environment, and do not cause injury to personnel.

National Pollutant Discharge Elimination System (NPDES) – The EPA program for issuing, modifying, revoking, reissuing, terminating, monitoring, and enforcing permits and imposing and enforcing pretreatment requirements under the Clean Water Act.

Non-Stormwater Discharge - Any discharge not comprised entirely of stormwater except discharges authorized by a NPDES/AZPDES permit.

Nonstructural BMPs – Practices that will reduce or eliminate the transfer of pollutants to stormwater and do not require installation of permanent structural devices to treat runoff.

Outfall – Any discernible stormwater conveyance (e.g., pipe, ditch, swale, canal) that discharges to waters of the State or to a separate municipal storm system. See also point discharge.

Point Discharge – Any discernible, confined, and discrete conveyance, including pipes, ditches, channels, tunnels, conduits, and wells.

Pollutant – Any dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discharged equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into stormwater.

Precipitation – Any form of rain or snow.

Run-on – Stormwater surface flow or other surface flow that enters the site other than where it originated.

Runoff – Part of precipitation, snowmelt, or irrigation water that runs off the land into streams or other surface waters. It can potentially carry pollutants from the air and land into the receiving waters.

Secondary Containment – Structures surrounding tanks or other storage containers that are designed to catch spilled material from the storage containers. Secondary containment must provide spill containment for the contents of the single largest tank within the containment structure plus sufficient freeboard to allow for the 25-year, 24-hour, storm event.

Stormwater – Stormwater runoff, snowmelt runoff, and surface runoff and drainage discharges.

Structural BMPs – Permanent structural devices that will reduce or eliminate pollutants discharge into stormwater runoff.

APPENDIX 2 – NOTICE OF INTENT

The Town of Camp Verde's Notice of Intent (NOI) for Arizona Pollutant Discharge Elimination System (AZPDES) Small Municipal Separate Storm Sewer System (MS4) General Permit dated December 28, 2021, is found starting on the next page:

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN

APPENDIX 3 – SAMPLING AND ANALYSIS PLAN

Sampling and Analysis Plan

For the

Town of Camp Verde Small MS4

Camp Verde, AZ 86322

Contact:

Kristen Gressly, Utilities/Stormwater Analyst

(928) 554-0861

kristen.gressly@campverde.az.gov

Date:

September 2026

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN

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TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN

1.0 Purpose and Objectives

This Sampling and Analysis Plan (SAP) has been prepared to meet the requirements of ADEQ's General Permit for Discharge from Small Municipal Separate Storm Sewer Discharge Systems (MS4s) to Waters of the United States.

The purpose of the SAP is to ensure sample collection, handling, and testing procedures are established and followed to produce quality data results.

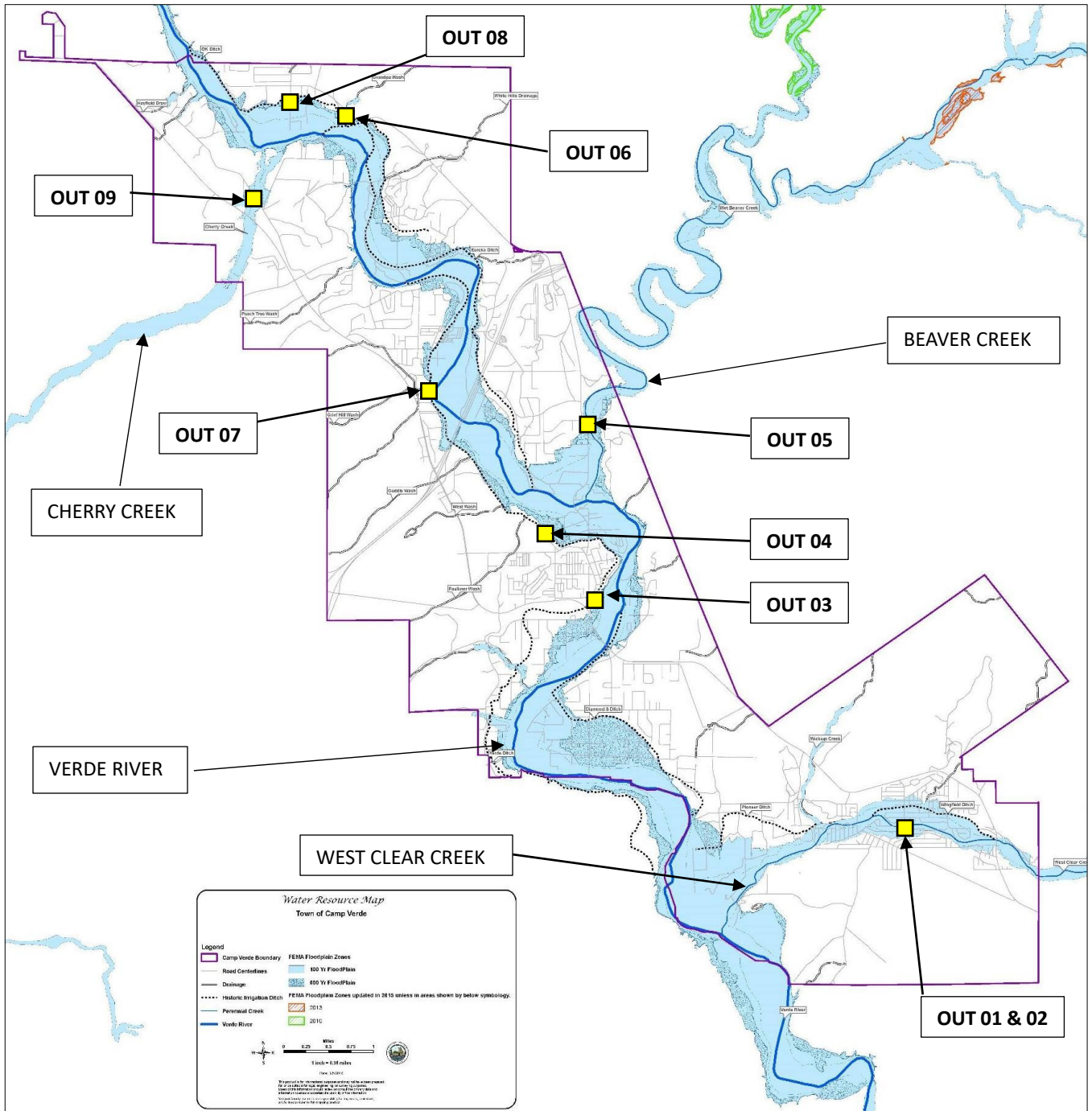
There are multiple objectives for this plan:

- Establish sampling protocols and methods for stormwater monitoring and sampling, as required under the Small MS4 General Permit.
- Document sampling and analysis methods and equipment for collecting representative samples of stormwater that maximize resources.
- Provide a framework to compare sampling results from the Town of Camp Verde outfalls to Arizona Surface Water Quality Standards (SWAQS).
- Provide sampling locations for the Town of Camp Verde, which are identified in the following table.

OUTFALL SAMPLING LOCATIONS FOR THE TOWN OF CAMP VERDE MS4		
<i>Outfall ID No.</i>	<i>Location</i>	<i>Name of Receiving Water</i>
OUT-01	Ward Ranch Gully at Verde Lakes Drive Crossing	West Clear Creek – Verde River
OUT-02	West Clear Creek Tributary at Verde Lakes Drive	West Clear Creek – Verde River
OUT-03	South Main Street Drainage Crossing	Drainageway - Verde River
OUT-04	Finnie Flat Channel at County Ditch/Verde River	County Ditch – Verde River
OUT-05	Beaver Creek at East Lacy Lane	Beaver Creek – Verde River
OUT-06	Grandpa Wash at Middle Verde Road	Beaver Creek - Verde River
OUT-07	Grief Hill Wash west of Dickison Park Road	Grief Hill Wash – Verde River
OUT-08	OK Ditch at Caughran Road	Grandpa Wash – Beaver Creek
OUT-09	Cherry Creek at Old Highway 279	Cherry Creek – Verde River

These sampling locations are shown on the map on the next page and are those locations most relative to impact by the occupants of Camp Verde.

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN



Outfall Sampling Locations

See MCM 3: ILLICIT DISCHARGE DETECTION AND ELIMINATION, for detailed site map locations of the outfall sites.

2.0 Recordkeeping Requirements

Records of monitoring information must include the results of each stormwater monitoring event using the Sample Collection Form and the laboratory analyses including field calibration/maintenance records.

Monitoring data shall be submitted on an electronic Discharge Monitoring Report (eDMR) via a myDEQ account within 30 days of receiving the laboratory analytical data. Copies of the analytical test results will be maintained with the Town's MS4 records.

3.0 Sampling Personnel

- Kristen Gressly, Utilities/Stormwater Analyst
kristen.gressly@campverde.az.gov
(928) 554-0861

These individuals are the primary parties responsible for the collection of samples and submittal to the laboratory for testing and analysis. They are also responsible for meeting the recordkeeping requirements.

4.0 Sampling Requirements

Seasonal wet weather monitoring will be conducted at two (2) outfalls each wet season.

The outfalls will be monitored on a rotating basis. The Town has identified 10 outfall locations total from which the Town will perform stormwater quality monitoring each year. Summer wet season is June 1 through October 31 and winter wet season is November 1 through May 31.

During each monitoring event, sufficient sample volume must be obtained to perform the required analysis. Additionally, samples must be properly preserved, analyzed within hold time requirements, and analyzed using appropriate analytical methods.

As reported in the Town's Notice of Intent (NOI) dated December 28, 2021, the receiving waters identified therein and are not listed as an impaired, non-attaining, or an outstanding Arizona Water and therefore they do not have an assigned pollutant or Total Maximum Daily Load (TDML).

All permittees shall conduct stormwater characterization monitoring for the parameters listed in table starting below as required by ADEQ Permit No. AZG2021-002.

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN

Constituent	Analytical Method	Units	Minimum Required Volume	Holding Time	Preservative
Metals					
Antimony	EPA 200.7	μ g/L	250 mL	6 mo	HNO ₃
Barium	EPA 200.7	μ g/L	250 mL	6 mo	HNO ₃
Beryllium	EPA 200.7	μ g/L	250 mL	6 mo	HNO ₃
Cadmium	EPA 200.7	μ g/L	250 mL	6 mo	HNO ₃
Nickel	EPA 200.7	μ g/L	250 mL	6 mo	HNO ₃
Mercury	EPA 245.1	μ g/L	250 mL	28 days	HNO ₃
Silver	EPA 200.7	μ g/L	250 mL	6 mo	HNO ₃
Thallium	EPA 200.7	μ g/L	250 mL	6 mo	HNO ₃
Inorganics					
Cyanide	SM 4500-CN	μ g/L	500 mL	14 days	NaOH
Volatile Organic Compounds (VOCs)					
Acrolein	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
Acrylonitrile	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
Benzene	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
Carbon tetrachloride	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
Chlorobenzene	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
Dibromochloromethane	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
Chloroethane	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
2-chloroethylvinyl ether	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
Chloroform	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
Bromodichloromethane	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
1,2-dichlorobenzene	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
1,3-dichlorobenzene	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
1,4-dichlorobenzene	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
1,1-dichloroethane	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
1,2-dichloroethane	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
1,3-dichloropropylene	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
Ethylbenzene	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
Bromomethane	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
Chloromethane	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
Methylene chloride	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
1,1,2,2-tetrachloroethane	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
Tetrachloroethylene	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
Toluene	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
1,2-trans-dichloroethylene	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
1,1,1-trichloroethane	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
1,1,2-trichloroethane	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
Trichloroethylene	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
Vinyl chloride	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
Xylene	EPA 624	μ g/L	5-44 mL	14 days	Sodium Thio.
Semi-VOCs – Acid Extractable					
2-chlorophenol	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
2,4-dichlorophenol	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.

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Constituent	Analytical Method	Units	Minimum Required Volume	Holding Time	Preservative
2,4-dimethylphenol	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
4,6-dinitro-o-cresol	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
2,4-dinitrophenol	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
2-nitrophenol	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
4-nitrophenol	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
p-chloro-m-cresol	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Pentachlorophenol	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Phenol	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
2,4,6-trichlorophenol	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Semi-VOCs – Base/Neutrals					
Acenaphthene	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Acenaphthylene	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Anthracene	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Benz(a)anthracene	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Benzo(a)pyrene	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Benzo(b)fluoranthene	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Benzo(g,h,i)perylene	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Benzo(k)fluoranthene	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Chrysene	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Dibenzo(a,h)anthracene	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
3,3'-dichlorobenzidine	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Diethyl phthalate	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Dimethyl phthalate	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Di-n-butyl phthalate	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
2,4-dinitrotoluene	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
2,6-dinitrotoluene	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Di-n-octyl phthalate	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
1,2-diphenylhydrazine (as azobenzene)	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Fluoranthene	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Fluorene	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Hexachlorobenzene	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Hexachlorobutadiene	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Hexachlorocyclopentadiene	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Hexachloroethane	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Indeno(1,2,3-cd)pyrene	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Isophorone	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Naphthalene	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Nitrobenzene	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
N-nitrosodimethylamine	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
N-nitrosodi-n-propylamine	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
N-nitrosodiphenylamine	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Phenanthrene	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
Pyrene	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
1,2,4-trichlorobenzene	EPA 625	μ g/L	4x 1L	7 days	Sodium Thio.
PCB / Pesticides					
Aldrin	EPA 608	μ g/L	2x 1L	7 days	Sodium Thio.
Alpha-BHC	EPA 608	μ g/L	2x 1L	7 days	Sodium Thio.
Beta-BHC	EPA 608	μ g/L	2x 1L	7 days	Sodium Thio.
Gamma-BHC	EPA 608	μ g/L	2x 1L	7 days	Sodium Thio.
Delta-BHC	EPA 608	μ g/L	2x 1L	7 days	Sodium Thio.

TOWN OF CAMP VERDE STORM WATER MANAGEMENT PLAN

Constituent	Analytical Method	Units	Minimum Required Volume	Holding Time	Preservative
Chlordane	EPA 608	μ g/L	2x 1L	7 days	Sodium Thio.
4,4'-DDT	EPA 608	μ g/L	2x 1L	7 days	Sodium Thio.
4,4'-DDE	EPA 608	μ g/L	2x 1L	7 days	Sodium Thio.
4,4'-DDD	EPA 608	μ g/L	2x 1L	7 days	Sodium Thio.
Dieldrin	EPA 608	μ g/L	2x 1L	7 days	Sodium Thio.
Alpha-endosulfan	EPA 608	μ g/L	2x 1L	7 days	Sodium Thio.
Beta-endosulfan	EPA 608	μ g/L	2x 1L	7 days	Sodium Thio.
Endosulfan sulfate	EPA 608	μ g/L	2x 1L	7 days	Sodium Thio.
Endrin	EPA 608	μ g/L	2x 1L	7 days	Sodium Thio.
Endrin aldehyde	EPA 608	μ g/L	2x 1L	7 days	Sodium Thio.
Heptachlor	EPA 608	μ g/L	2x 1L	7 days	Sodium Thio.
Heptachlor epoxide	EPA 608	μ g/L	2x 1L	7 days	Sodium Thio.
PCB-1242	EPA 608	μ g/L	2x 1L	7 days	Sodium Thio.
PCB-1254	EPA 608	μ g/L	2x 1L	7 days	Sodium Thio.
PCB-1221	EPA 608	μ g/L	2x 1L	7 days	Sodium Thio.
PCB-1232	EPA 608	μ g/L	2x 1L	7 days	Sodium Thio.
PCB-1248	EPA 608	μ g/L	2x 1L	7 days	Sodium Thio.
PCB-1260	EPA 608	μ g/L	2x 1L	7 days	Sodium Thio.
PCB-1016	EPA 608	μ g/L	2x 1L	7 days	Sodium Thio.
Toxaphene	EPA 608	μ g/L	2x 1L	7 days	Sodium Thio.

5.0 Monitoring Methods and Equipment

5.1 Sampling Equipment

Sample integrity starts before fieldwork begins. It is essential to ensure that sample bottles are made of materials that will not have an adverse effect on the sampled parameters. For this reason, all sampling containers will be provided by the laboratory and will not be substituted. Samples requiring preservatives will have the preservative already in the sampling jar and will not be overfilled or diluted. Sample jars will not be opened until they are in use. Decontaminated sampling jars within the autosamplers, if any, will be installed prior to each sampling event and will not need to be adjusted during sampling events.

Monitoring equipment will be gathered ahead of time to enable smooth mobilization. Stormwater monitoring generally requires the following equipment:

- Sampling equipment
- Field testing equipment
- Field forms
- Waterproof pens and Permanent markers
- Well-fitting powder-free nitrile gloves
- Sample containers (preserved and non-preserved sample containers from the laboratory)
- Sample container labels
- Chain of Custody (COC) forms
- Ice chest(s) with ice
- Ziploc style plastic bags to hold sample containers
- Foul-weather gear
- Strobe light (mounted and tested)
- Deionized water for rinsing and cleaning equipment
- Paper towels
- Digital or disposable camera



Collecting Sample with Long Handle Dipper

5.2 Clean Sampling Techniques

For automated sampling equipment, during final equipment installation, the tubing and intake strainer will be handled only while wearing clean powder-free nitrile/latex gloves. The strainer will be attached to the end of the intake tubing and secured at the sampling location. All hardware used to secure the suction tubing and intake strainer that has the potential to come into contact with the sample will be stainless steel, aluminum, PVC, or polyethylene to avoid sample contamination. An equipment blank will be taken prior to auto samplers being placed into service.

To assure that contamination, losses, or changes in the chemical form of the analyses of interest do not occur during handling of the composite bottle, bottle lid, sample and pump tubing, or intake strainer, personnel will follow these "clean sampling" techniques:

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- Samples will be collected only into pre-cleaned or laboratory-provided bottles.
- Sample containers will be placed in zipper storage bags before being placed in the ice chest to prevent melting ice from entering the sample containers.
- Vehicles will be turned off or downwind from sampling location area.
- Sample collection personnel will wear clean powder-free nitrile/latex gloves and not touch anything unnecessary while gloved.
- Sample collection personnel will not eat, drink, or smoke during sampling activities.
- Sample collection personnel will not sneeze or cough in the direction of an open sample bottle.
- Sample collection personnel will pay attention to avoid allowing rainwater to drip from rain gear into sample bottles.

6.0 Monitoring Preparation and Logistics

The Town of Camp Verde shall collect discrete samples and shall attempt to include the “first flush” (first 30 minutes of stormwater discharge) of a qualifying storm event whenever possible to do so. However, due to staff availability and safety concerns, wet weather monitoring will only be conducted only during regular business hours.

The following sections describe qualifying storm selection criteria and rainfall monitoring to detect qualifying storms.

Sampling will be conducted during an actual discharge at the sampling location. Some sampling sites are a considerable distance away, and while all efforts will be made to predict whether a storm event will produce flow, there may be events in which field staff are not onsite when there is flow. There may also be events where a storm creates unsafe conditions for field crew and sample collection is not completed due to safety concerns.

To maximize the likelihood of sampling personnel being onsite during a discharge event, the following criteria will be used:

- Forecasted to rain with a probability of precipitation equal to or greater than 30 percent.
- Preceded by at least 72 hours without a representative storm event. A representative storm event is defined as 0.1 inches or more of rainfall measured in a 24-hour period that generates runoff.
- The sample can be delivered within laboratory working hours and within recommended hold times.

The weather should be monitored for incoming storms on a regular basis using reliable sources such as www.weather.gov or www.noaa.gov. Smartphone applications can also be utilized to check hourly weather forecasts, view real time radar reports, and receive alerts when user-entered criteria is satisfied. During the permitted wet seasons, predicted storms of a 20% chance or greater should be closely monitored prior to arrival in order to gauge the appropriate time for sample collection. The use of available satellite or radar imaging should be used for even more accurate storm arrival estimates.

The overall monitoring of precipitation to identify the above selection criteria will be performed using rain gages around the Town of Camp Verde to ensure full coverage of monitoring sites. The rainfall datasets will be pulled from the Yavapai County Rainfall and Weather Data website:

www.yavapaiaz.gov/Resident-Services/Flood-Control/Flood-Safety/Rainfall-and-Weather-Data

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<u>ID</u>	<u>Number</u>	<u>Name</u>
5441500		Camp Verde

Town personnel will continually track weather conditions for forecasted storm events based on forecasting and radar. As a potential storm approaches the monitoring sites, the total precipitation depth and duration will be estimated based on forecasts, and should these estimates constitute a possible qualifying storm, a field crew will be on standby to be mobilized when it starts raining.

A storm event staffing readiness plan that specifies the personnel and equipment required for storm monitoring must be completed at the beginning of the monitoring period and will be updated as needed to ensure staffing responsibilities are established before a potential rainfall event is predicted based upon weather forecasting. This document will be for internal use only, and it will include the personnel needed, communications channels, equipment lists, and chain of custody and filed sampling forms.

7.0 Sampling Procedure, Preservation, and Delivery

Sampling will be conducted in accordance with the NPDES Storm Water Sampling Guidance Document. Additional reference sources include the 'Standard Operating Procedures for Surface Water Quality Sampling' (ADEQ, 03/2018) and the 'Surface Water Section Quality Assurance Program Plan' (ADEQ, 02/2015).

7.1 Forms

Field Sampling Form. Details of the site visit will be accurately recorded at the time of a site visit by field staff. At a minimum, the following general information will be recorded during each site visit:

- Date and time of visit
- Site location
- Observer identification information
- Meteorological characteristics
- Water quality appearance
- Other relevant observations.

All field forms will be dated, signed, legible, and written in permanent ink.

A Field Sampling Form is provided at the end of this SAP.

Chain-of-Custody Form. Chain-of-Custody forms (COCs) are sample collection and verification forms provided by the laboratory to document the sampling procedure (such as time and date of collection) completed by the field technician and when and to whom the sample was relinquished. COCs will be prefilled before a storm event so that only the field information (field technician name, sample collection dates/times, etc.) needs to be added when the samples are collected. COCs are filled out at the time of sample collection and relinquished to the laboratory upon their receipt of the sample. The COCs include project name or ID, sample ID, date and time of collection, sampler name, the analysis and preservative for the sample, etc.

A Chain of Custody form (from Legend Technical Services) is provided at the end of this SAP.

7.2 Grab Sampling

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Grab sampling will be used to capture discrete stormwater samples.

- Grab samples always use clear and clean sampling jars, and the rim or inside of the jar should not be touched while opening or closing the jar.
- Using appropriate Personal Protective Equipment (PPE) such as reflective rain gear, gloves, etc., samples will be collected directly into the lab-provided sample containers if practical, based on the conditions, including depth of flowing runoff.
- If direct collection is not practical, a dip sampler may be used to fill the containers by a repeated collection of small volumes of runoff at the outfall location and transferring it to the sample containers until the containers are full. If dip samplers are used, they must be new or previously decontaminated and kept in a sealed bag or package until use. The materials of construction must be selected so that contamination of the samples by the dip sampler material is not a problem. Generally, glass, PVC, or polytetrafluoroethylene (PTFE) are acceptable. Since the analytical suite includes metals, stainless steel, or other metal products should not be used.
- The sample location should be approached from downstream, and samples collected while facing upstream to avoid collecting samples that have been disturbed. The objective is to collect samples of the runoff without introducing water quality changes through the sampling process. The sample should be taken at the mid-flow depth level, and exercise care to ensure the sample bottle does not reach the bottom of the conveyance while avoiding collecting non-representative particulates such as leaves, algae, debris, or soil.
- Sample collection will be performed on a storm event that meets a qualifying storm event's conditions.
- Sampling is performed at each sampling location using discrete (grab) sampling methods and will be performed within the first 30 minutes of a stormwater discharge, if possible. If it is not possible to collect the samples within the first 30 minutes, samples should be collected as soon as possible thereafter and justification for why samples were not collected within the first 30 minutes will be documented on the sampling form.
- Upon completing sampling, the sample containers must be sealed, labeled, and placed in a cooler with ice.
- Chain-of-custody documentation furnished by the lab must be completed, and the samples delivered promptly to the lab for analysis.



Grab Sampling

7.3 Container Labeling

Samples should be pre-labeled and applied to sample bottles in a dry environment prior to field crew mobilization. The sampling team will assign each sample a unique identifier for each screening point location. The unique identifier will consist of the sample location name (e.g., Cherry Creek OUT-10) followed by a date suffix of MM-DD-YYYY, followed by the sample number (e.g., 01, 02, 03...).

Each container in the sample must be labeled with the unique identifier as well as the following minimum information:

- Sampler initials
- Sample collection date
- Sample collection time

7.4 Water Quality Field Measurements

The field crew will perform field measurements for temperature, conductivity, and pH. A single measurement for each of these parameters will be taken during each monitoring event and recorded on the field form. Measurements should be taken during the middle of the sampled storm event, based on the best estimate that field technicians can make. Measurements will be conducted in-situ by placing the monitoring probe(s) directly in the water column. Probes should be exposed to flow discharging from the outfall. A secondary container may be used if the water depth does not allow the probe to be completely submerged and/or if placement of the probe in the outfall discharge is not feasible due to safety or access limitations.

Temperature may be measured either with a standard mercury-free glass thermometer, an infrared thermometer, or with the temperature function on a pH meter. If a glass thermometer is used, the field technician collects a sample from the runoff stream in a plastic container and immediately takes the temperature by submerging the thermometer bulb in the sample and allowing it to stabilize for 30 seconds.

Conductivity is measured using a field conductivity probe. This instrument will be calibrated according to the manufacturer's specifications and recorded on the field form. Conductivity probes are sensitive and will always be kept with the probe submerged and in a protective encasing to ensure accurate results.

The pH is measured using a temperature-compensated pH meter. Instrument calibration and sample analysis will be performed according to the manufacturer's instructions and recorded on the field form.

Turbidity may be measured in the field with a turbidity meter. The LaMotte 2020we (Part Number 1970-EPA) is compliant with USEPA 180.1 standards and is recommended. The sample vial is to be rinsed several times with representative sample water then filled, capped, and wiped clean. The sample vial will be placed immediately in the calibrated turbidity meter and measured. The measured value will be recorded on a field data sheet. Note that very turbid waters may require dilution with deionized water prior to measurement to obtain a more accurate value. Additional information regarding turbidity field measurement is provided in Section 3 of the Standard Operating Procedures for Surface Water Quality Sampling (ADEQ, 03/2018).

7.5 Preservatives and Hold Times

Water sample preservation procedure is based on the analysis methodology.

- Bottle sets are typically shipped from the contract laboratory with preservatives contained in the bottle but may include separately contained preservative vials for special circumstances.
- A colored dot or sticker typically identifies the type of preservative used for the analysis to be performed on the pre-preserved bottle, including a written notation of the added preservative.
- Sample bottles will be shipped for each sampling event on a per event/request basis.
- Bottles will be new and contain the premeasured amount of the preservative, except as noted above.

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- Any pre-preserved bottle discolored around the cap, without a preservative label, or lacking sufficient preservative will be discarded.
- A crucial requirement for sample preservation is to extract the sample within established hold times for the specific analysis. This is particularly important for *E. coli*. Prompt delivery to the selected lab is critical.
- The hold times and preservatives for each constituent:
 - *e-Coli* – 8 hours (if tested)
 - TSS – 7 days
 - Nitrogen – 28 days
 - Phosphorous – 28 days

8.0 Laboratory

Samples will be delivered to and analyzed by the following laboratory:

Legend Technical Services, Inc.

17631 N 25th Ave, Phoenix, AZ, 85023

(602) 324-6100

www.legend-group.com

Hours: Monday – Friday, 8 am to 5 pm; Saturday 10 am to 2pm; Sunday 12 pm to 2 pm; MST.

Capabilities: All necessary testing requirements can be met.

Nortest Analytical Labs

2400 E Huntington Drive, Flagstaff, AZ 86004

(928) 7745-2312

www.nortestanalytical.com

Hours: Monday through Thursday, 9 am to 5 pm; Friday 9 am to 3 pm; MST.

Capabilities: E.Coli, Total Nitrogen, Phosphorous, Alkalinity, Chloride, pH, Settleable Solids, Total Suspended Solids, Turbidity.

8.1 Data Deliverable

Laboratories will be required to provide a maximum three-week turnaround on the deliverable package per event. The deliverable package will include electronic data reports of all samples analyzed. The files will then need to be reviewed to identify any analytical problems, QA/QC exceedances, and provide corrective actions, if necessary.

9.0 Quality Assurance and Quality Control (QA/QC)

This section addresses quality assurance/quality controls (QA/QC) activities associated with both field sampling and laboratory analyses.

Field quality control (QC) samples are used to evaluate potential contamination and sampling error introduced prior to submittal of samples to the analytical laboratory.

9.1 Field Quality Control

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Field blanks are analyzed to determine if any field collection processes have caused sample contamination, and if so, to what extent. Appropriate blank water is provided by the analytical laboratory and placed in a clean sample container during field sampling. Field blanks are treated as regular samples in all respects, including contact with the sampling divided and exposure to sampling conditions, storage, preservation, and filtration, if applicable. In general, blank contamination above the method reporting limit should be rejected except for parameters normally detected in blank water. Chapter 3 of the ADEQ Surface Water Quality Assurance Program Plan (SWQAPP) provides additional information. One (1) field blank should be collected each sample collection trip.

Field duplicates are analyzed to determine variability associated with field collection processes. Duplicates are collected from the same site, at the same time, and analyzed in the same manner. In general, field duplicates should have a relative percent difference (RPD) of 20% or less if the results are greater than two times the reporting limit. Chapter 3 of the SWQAPP provides additional information regarding field quality control samples. One (1) field duplicate should be collected each sample collection trip.

9.2 Laboratory Quality Control

Only Arizona Department of Health Services (ADHS) certified laboratories were considered to support the testing and analysis needs for the Town of Camp Verde. Practices and procedures outlined in these documents will ensure sampling is consistent for evaluation and comparison to previous or future studies.

Laboratory QA/QC activities provide information needed to assess laboratory contamination, analytical precision, and analytical accuracy. If any QA/QC standards are not met, the appropriate corrective actions will be taken in accordance with the laboratories' QA Manuals. If issues are identified, the Town's representative will be notified immediately and documentation of the issue and the corrective action will be made.

Trip Blanks – A trip blank is an analysis of a laboratory prepared analyte-free water sample that has been subjected to the same complete analytical procedure as the field sample to determine if potential contamination has been introduced during processing. Blank analysis results are evaluated by checking against reporting limits for that analyte to determine if any contamination has occurred. Results obtained should be less than the reporting limit for each analyte.

Duplicate Samples – A duplicate sample is two separate samples taken in the field at the same site, within close proximity and time of each other. These samples are analyzed in the same manner, but may contain slightly different chemical compositions. Duplicate samples are usually taken when it is not possible to use a churn splitter to homogenize and split one sample. The generally accepted relative percent difference between duplicate samples is 20% or less.

9.3 Measurement Quality Objectives

Data quality problems can be caused both in the field during sample collection, in transport, and in the laboratory during sample storage, preparation, and analysis. Quality assurance/quality control (QA/QC) is designed to check the following aspects of data quality:

- Contamination – Avoiding any introduction of any material into a sample during collection, transport, storage, or analysis that affects the analysis results.

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- Accuracy – The degree to which an analytical result agrees with the true value of the measured quantity. This means how close the observed analyte concentration is to the actual concentration present in the water quality analysis sample.
- Precision – The degree to which an analytical result can be reproduced consistently under stable conditions. This means how closely replicate analyses of the same sample agree with each other in water quality analysis.
- Completeness – The number of usable data points produced as a percentage of the number of collected samples. Completeness is calculated for each project constituent. For example, if five samples are collected and analyzed for copper and four of the results are valid and one rejected, completeness for copper would be 80 percent.

Field forms and COCs will be prefilled with data that does not change (e.g. sample site location) but will be reviewed for accuracy in the course of ensuring samples and documentation is following proper procedures. These forms are reviewed to ensure information is correctly conveyed regarding field measurements and equipment calibration, sample size, and adherence to hold times. Analytical reports received from samples will also be reviewed to ensure samples were analyzed correctly and no flags or issues resulted in unusable data.

9.5 Data Tracking and Management

Data received from the analytical laboratory will be via electronic copy. The data will need to be input into a Town database in order to compare findings against previous sampling results as well as to track sampling progress.

Long term results can be used to determine the effectiveness of implemented best management practices and control measures. The detailed tracking spreadsheet or database should be updated, maintained, and tracked throughout the year.

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Field Sampling Form

Inspector Name: _____

Date/Time Arrived Onsite: _____ Date/Time Departed Site: _____

Sample ID: _____ Last storm >72 hrs. prior? ☐ Yes ☐ No

Weather: _____

Time sample taken: _____

Location: ☐ SP-1 Meridian Contessa ☐ SP-2 Meridian Apache Trail ☐ SP-3 ADOT North of US-60

☐ SP-4 Southern ☐ SP-5 Baseline

Sample looks:

☐ Clear ☐ Cloudy ☐ Oily/sheen ☐ Unusual color ☐ Has an odor ☐ Has floatables/debris

Field Sampling Data				
Field Parameters:	pH: Time:	Temp: Time:	Conductivity:	Flow Rate: Time:
Indicators of Stormwater Pollution Observed?			☐ No ☐ Yes (Describe):	
Observations of sampling procedures and conditions at the time of sampling				
Description of problems encountered, or deviations made from the Sampling and				
Label on Bottle(s):				

Comments:

Analyst Name: _____

Signature: _____

CHAIN OF CUSTODY RECORD

Page _____ of _____

APPENDIX 4 – STORM WATER BEST MANAGEMENT PRACTICES

The primary method to control stormwater runoff is the use of best management practices (BMPs). Stormwater BMPs are devices, practices, or methods that are used to manage stormwater runoff by controlling peak runoff rate, improving water quality, and managing runoff volume.

Important considerations when selecting BMPs include but are not limited to:

- 1) Site conditions (e.g. slope and soil types)
- 2) Existing and surrounding land uses
- 3) Priority stormwater management goals (e.g. water quality regulations)
- 4) Additional site development or redevelopment goals (e.g. recreational opportunities).

Select stormwater BMPs to fit the natural environment and systems.

Types of BMPs

Stormwater best management practices (BMPs) fall into two categories: structural or non-structural. Structural BMPs are engineered systems that “reduce and mitigate impacts of development” while non-structural BMPs are “broader planning and design approaches that prevent stormwater generation”. More information on each BMP is available below.

Non-Structural BMPs

The most effective way to manage stormwater begins with the prevention of problems. Non-structural BMPs include design approaches and practices that are used for their ability to prevent the occurrence of stormwater runoff. Utilizing non-structural BMPs during site development is much more efficient and cost-effective than attempting to correct problems after development has occurred. Read below to learn about specific types of non-structural BMPs.

Riparian Corridors/Buffers

A riparian corridor includes a body of water (wash, stream, river, pond, or lake), its lower and upper banks, and the vegetation that stabilizes the area of land adjacent to the body of water. This area of land adjacent to the body of water can also be referred to as a “riparian buffer”. This corridor or buffer is important because natural trees and vegetation can filter out air and water pollution, roots from trees and other vegetation can hold the soil in place providing protection from significant erosion and sedimentation, provide cover and shade, provide food and habitat for fish and wildlife, and can provide flood water retention.

Preservation and restoration of riparian corridor/buffers has been identified as one of the most important ways to protect and improve water quality by government and state agencies.

Protect Sensitive and Special Value Features

Sensitive features are those that are exceptionally vulnerable to stormwater damage. Examples include steep slopes and neighboring properties. Special value features are those that provide exceptional value stormwater benefits. Examples include riparian areas, wetlands, hydric soils, and floodplains. Damage to both special value and sensitive features can exacerbate stormwater volume, flow rate, and quality problems. When developing a site, special attention should be paid to these areas.

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Protect/Utilize Natural Flow Pathways in Overall Stormwater Planning and Design

Sites usually have areas where stormwater is being stored and/or conveyed prior to development. These features should be identified and preserved during planning and construction in order to minimize the impacts of stormwater runoff. The preservation of such features can reduce the need for structural BMPs.

Cluster Uses at Each Site and Build on Smallest Area Possible

Through clustering uses at each site, and building on the smallest area possible, additional runoff that is generated through the development process is minimized. Additional benefits of this design approach include the preservation of open space, the minimization of impervious area, and more. Practical examples of this non-structural BMP include reducing lot sizes, building vertically, and leaving areas in their natural state.

Use Smart Growth Practices

Smart Growth practices are typically used at the community, municipal, or multi-agency level. This planning technique guides growth towards parcels that are most desirable for this use. Smart Growth employs similar methods on a macro scale as clustering does on a micro (site) scale. Tools used in Smart Growth include urban growth boundaries, agricultural zoning, transfer of development rights, donation of conservation easement by owners, and more.

Minimize Total Disturbed Area and Grading

This design approach works with the existing site topography instead of against it. By reducing the need for site grading, soil disturbance, and removal of vegetation, this planning and development approach aims to prevent the generation of stormwater. Additional benefits of minimizing total disturbed areas and grading include reduction of areas that need to be landscaped and maintained.

Minimize Soil Compaction

Minimizing soil compaction and maintaining topsoil quality during construction provides numerous stormwater benefits. Stormwater benefits of this practice include: minimizing runoff and erosion, maximizing water retention capacity, filtering of stormwater, and reducing resources needed to maintain landscaping.

Re-Vegetate Disturbed Areas

Disturbed areas should be re-vegetated with native plants, grasses, shrubs, and trees. Since these species are adapted to local climate and conditions, they require less fertilizers and pesticides and have better chances of surviving. Stormwater benefits of established native plantings include runoff volume and rate reduction as well as water quality improvements.

Reduce Street Imperviousness and Parking Imperviousness

The benefits of reducing impervious areas for streets and parking through innovative planning are numerous. Benefits include: increased infiltration, decreased stormwater volume, pollutant load reduction, and preservation of natural habitats.

Rooftop Disconnection

Rooftop disconnection is also known as downspout disconnection. Disconnecting rooftop leaders from the storm sewer system and re-directing towards vegetated areas is an effective way to manage stormwater volume. This BMP can be more effective when the flow is directed towards a structural BMP such as a rain garden.

Disconnection from Storm Sewers

Disconnecting stormwater generated from impervious areas, such as roads and driveways, from storm sewers and directing the runoff towards structural BMPs, such as bio-infiltration areas, is effective in many ways where applicable. Managing the flow near the source instead of sending downstream via traditional piping allows for increased infiltration and evapotranspiration, increased filtration, and decreased runoff volume.

Streetsweeping

Streetsweeping is a form of source control that is key to ensuring the function of stormwater facilities and keeps local waterways free of debris and other pollutants. In order for streetsweeping to be effective, the equipment used should have a vacuum filter.

Structural BMPs

Infiltration Basins and Infiltration Trenches

Infiltration devices drain or infiltrate water directly into the ground, providing opportunity for groundwater recharge. Infiltration facilities are below ground. The length of time that water is allowed to be on the surface is determined by municipal codes.

Dry Wells

Dry wells collect and infiltrate roof runoff at gutter downspouts, roof valleys, and other places where large amounts of concentrated water flow off of a roof. The water is conveyed typically through an underground pipe into an excavated pit (the dry well). They help reduce erosion on the property and can reduce ponding and standing water.

Rain Barrels

A rain barrel is a device to collect rainwater from downspouts. Rain barrels can be purchased or can be made at home. They come in all sizes and shapes. Some benefits of rain barrels include: reduction of stormwater runoff, promotion of local watershed awareness, education of neighbors about stormwater issues, lowered water bill by reducing metered water usage, and water reuse for landscaping, washing, etc.

Rain Gardens

A rain garden is a landscaped area planted with wildflowers and other native vegetation that is used to soak up rainwater from the roof, driveway, and lawn. The water slowly seeps into the ground instead of heading for the nearest storm drain. A rain garden allows for significantly more water to soak into the ground than a conventional lawn.

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Pervious Pavement

Porous asphalt, porous concrete, and porous pavers are all types of pervious pavements. These are typically used with infiltration beds below the pervious surfaces, which allow for the temporary stormwater storage and infiltration into the ground. These technologies are used for stormwater peak rate control.

Subsurface Infiltration Bed

Temporary storage and infiltration can be attained when including subsurface infiltration beds underneath vegetated surfaces. Subsurface infiltration beds are typically filled with stones (for void space) and wrapped in geotextile fabric. Subsurface infiltration beds work well in large and generally flat spaces that are located downhill from impervious areas.

Vegetated Swale

Vegetated swales, also known as bioswales, are broad channels that are densely planted with vegetation. Designed to attenuate and sometimes infiltrate flow, vegetated swales provide peak rate control and also allow for pollutants to settle out, therefore improving water quality. In sloped areas, check dams are needed to enhance the stormwater management functions of vegetated swales.

Vegetated Filter Strip

Vegetated filter strips, also called buffer strips, are areas in between sources of nonpoint source pollutants and the receiving body of water. They can include native or indigenous vegetation such as grasses, shrubs, and trees. Turf grasses are also used sometimes but their functionality in stormwater management is limited. The primary stormwater function of vegetated filter strips is water quality improvement; however, some volume reduction and ground water recharge can occur depending on site conditions such as soil and slope.

Constructed Filter

A constructed stormwater filter is a structure or excavated area that is filled with material that filters stormwater. These devices can be designed to filter floatables, sediments, metals, hydrocarbons, and other pollutants. There are many variations on the constructed filter, including vegetated and non-vegetated, infiltration, contained, subsurface, and linear perimeter filters.

Infiltration Berm & Retentive Grading

Infiltration berms are linear landscape features that are parallel to existing site contours in areas with moderate slopes. They are earthen embankments that divert, retain, slow down, divert, and promote the infiltration of stormwater. Berms are most effective in areas that receive runoff from small impervious areas. Retentive grading creates small depressions that store and infiltrate stormwater.

Vegetated Roof

Vegetated roofs are roofs that are covered with specialized media and planted with vegetation. This enables the roof to hydrologically perform in a manner similar to vegetated surfaces. The media holds water, which is eventually evapotranspired by the plants. The primary function of the vegetated roof in stormwater management is volume reduction. Additional stormwater benefits include water quality

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improvements and some peak rate control. Environmental benefits beyond stormwater control include building temperature moderation and wildlife habitat.

Runoff Capture & Reuse

Runoff capture and reuse refers to the variety of techniques that are used to capture precipitation, store it for a period of time, and reuse the water. Devices used to capture and store stormwater include rain barrels, cisterns, vertical storage mechanisms, and below ground storage systems. These BMPs are most effective for use in controlling small frequent storm events. Stormwater management benefits of runoff capture and reuse devices include volume reduction, water quality improvements, peak rate control, and groundwater recharge.

Constructed Wetland

Constructed wetlands (CWs), also known as stormwater wetlands, are shallow aquatic systems planted with emergent vegetation. They are highly effective at removing pollutants from stormwater. They also mitigate peak flow rates and reduce runoff volume. Beyond stormwater management, CWs provide wildlife habitat and aesthetic value. Detention basins, a basic BMP that temporarily stores stormwater, can be retrofitted into CWs in order to maximize stormwater management function of the space and obtain the added benefits.

Wet Pond/Retention Basin

Wet ponds (WPs), also called retention basins, are stormwater basins that include a permanent pool of water, as well as additional capacity for the temporary storage of stormwater. They are very effective at controlling peak stormwater rates and also provide water quality benefits. Beyond stormwater management, WPs can also provide aesthetic and wildlife benefits.

Dry Extended Detention Basin

Dry extended detention basins (DEDBs) are detention basins which are designed to provide temporary stormwater storage and water quality benefits. The temporary storage of stormwater alleviates downstream flooding. Water quality benefits are achieved through sediment settling out of the stormwater while held in the DEDB. DEDBs are often used in conjunction with other BMPs to maximize stormwater management benefits on site. The DEDB is a design enhancement from the Dry Detention Basin, which has been widely used since the 1970s. The extended detention of stormwater maximizes water quality benefits.

Water Quality Filters & Hydrodynamic Devices

Water quality filters are stormwater inlets that are fitted with devices to filter pollutants from stormwater. Hydrodynamic devices are separate from inlets, but serve the same function of filtering pollutants. Both water quality filters and hydrodynamic devices rely on some form of settling and filtration to remove pollutants from runoff. There are numerous variations available commercially.

Riparian Buffer Restoration

Riparian buffer restoration (RBR) is the restoration of the area surrounding washes, streams, lakes, ponds, and wetlands. The restoration of these areas provides numerous stormwater management benefits, including water quality improvement, volume reduction, groundwater recharge, and peak rate

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control. Ecological benefits beyond stormwater management are numerous, including providing wildlife habitat and providing aesthetic value.

Landscape Restoration

Landscape restoration is the term used for the implementation of sustainable landscape practices outside of the riparian buffer and/or other specially protected areas. Landscape restoration can include vegetation restoration, meadow restoration, and the conversion of turf to meadow. Native plants should be used and the use of pesticides and herbicides should be eliminated, if possible.

Soil Amendment and Restoration

The soil amendment and restoration BMP refers to the process of improving disturbed soils. By reducing compaction and adding organic materials, stormwater infiltration and pollutant removal capacity can be greatly increased. In addition to the added stormwater capacity of the soil itself, soil amendment and restoration improves conditions for growing vegetation, which further improves stormwater management.

Floodplain Restoration

Floodplain restoration aims to restore a floodplain to conditions present prior to development. It is a system-based BMP that strives to mimic undisturbed conditions between groundwater, stream base flow, and vegetation. Floodplain restoration provides substantial water quality and quantity stormwater management benefits.

Level Spreader

Level spreaders are a structural BMP that are designed to reduce the erosive energy of stormwater. Examples of level spreaders include earthen berms, level perforated pipes, or concrete curbs. Level spreaders are often used in conjunction with other BMPs such as filter strips. Filter strips function significantly better when stormwater is distributed across the BMP.

Special Detention Areas

The implementation of special detention areas entails using spaces that are not typically utilized for stormwater management, such as parking lots, to temporarily detain stormwater. A flow control structure is typically used to allow runoff to a pond. This BMP is specifically used to control peak rate volume and is more effective when combined with other BMPs that address water quality and volume reduction.

BMPs by Land Use

Nonpoint source water pollutants enter streams and other aquatic environments through precipitation that runs off the land. Pollutants originate from a variety of different land uses such as residential, agricultural, commercial, urban, and highways/roads. Explore BMPs for each land use below.

Residential

Water pollutants that may originate from residential properties include sediment, pathogens, nutrients, toxins such as pesticides, yard waste, and trash. Homeowners can help control stormwater runoff and improve water quality by utilizing best management practices (BMPs) on their property. Common stormwater runoff and infiltration practices for the homeowner can consist of structural, non-structural,

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and behavioral changes. Examples of structural BMPs include rain gardens, infiltration trenches, permeable pavements, walkways, patios, and rain barrels/cisterns. Non-structural BMPs for residents include downspout disconnection, riparian stream buffers with native vegetation, and minimizing disturbed areas. Behavioral changes can include scooping animal waste, containing garbage, bagging or composting grass clippings, washing cars on lawns or in car washes, and proper car maintenance.

See the table below for common sources and BMPs to address each pollutant.

Pollutant	Common Source	BMP Examples
Sediment	Home construction / renovation, streambank erosion, eroding ditches, bare spots in lawn.	Proper permitting for home grading and construction, restore stream buffers, cover bare spots in lawn.
Pathogens	Animal waste, leaking septic systems, garbage.	Proper installation and maintenance of sanitary sewer lines, establish stream buffers, scoop the poop, contain garbage to cans.
Nutrients	Animal waste, fertilizers, soap from washing cars, grass clippings, septic systems.	Scoop animal waste, reduce use of fertilizers, wash car on lawn or in car wash, plant native species, create rain gardens, establish stream buffers.
Chemicals	Misapplication of pesticides and herbicides, improper disposal of chemicals, and home car repairs.	Proper car maintenance, proper disposal of hazardous waste, proper disposal of oil and grease.
Trash	Uncontained garbage.	Contain garbage to cans, pick up trash on lawns/streets.

Common residential stormwater pollutants, their source, and how to manage.

Agricultural

Stormwater management on agricultural land focuses on both protecting water quality and reducing runoff volumes and rates. Potential water quality pollutants from agriculture include sediment, nutrients, bacteria, and pesticides. Runoff quantity management aims to protect stream and groundwater quality, stability of streams, cropland, and infrastructure and encourages groundwater recharge.

Stormwater management on agricultural lands can be broken into two major categories: 1) erosion and sediment control, and 2) manure and nutrient management. Specific best management practices (BMPs) to consider under erosion and sediment include but are not limited to: crop field soil erosion and sediment control; streamside pasture management; management of farm lanes, walkways, and forest lanes; maintenance of existing BMPs; and more. Factors to consider that are associated with manure and nutrient management include manure storage, heavy use areas protection, record keeping,

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surface and roof water control, well head and groundwater protection, maintenance of existing BMPs, and more.

Riparian buffers are non-structural BMPs that are extremely beneficial tools for stormwater management. Agricultural land is often an ideal setting to preserve or restore riparian buffers. Their many stormwater benefits include:

- Filter pollutants
- Reduce peak rate
- Reduce runoff volume
- Stabilize banks
- Moderate in-stream temperature
- Facilitate groundwater recharge

These land management practices have numerous benefits beyond stormwater management, including but not limited to the following:

- Provide habitat for aquatic and terrestrial wildlife
- Moderate temperature
- Improve aesthetics
- Improve air quality

Construction

The Clean Water Act (CWA) requires best management practices on construction sites, due to the high possibility of pollutant runoff during precipitation events. Sediment is the primary water pollutant in the United States. Therefore, it is the main pollutant being controlled on construction sites. Construction sites are required to obtain an NPDES permit, as well as an agency permit for land disturbance.

Stormwater Pollutant Prevention Plans (SWPPPs) are required on construction sites. These plans detail the BMPs that are to be used to prevent sediment from traveling off the site.

The list below provides a few common best management practices (BMPs) that can be used on construction sites. This is not intended to be a complete list.

1. Silt fence
2. Sediment basin
3. Inlet protection
4. Clean sediment out of storm drains regularly
5. Stabilize sediment by covering soil, vegetation, phased development, mulch, sod, rock riprap, mats, and blankets
6. Sediment traps
7. Concrete washout area
8. Vehicle maintenance
9. Building maintenance – dispose of debris properly
10. Construction exit facilities

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Urban, Commercial, and Industrial

Non-point source pollution, localized flooding, and degraded waterways are just some of the stormwater management challenges in urban areas. Impervious surfaces often account for a majority of the land associated with commercial areas due to large parking areas, rooftops, and sidewalks. The densely developed nature of many urban areas can be problematic when looking for ways to retrofit locations to incorporate green stormwater infrastructure. Fortunately, due to the significant need across the nation to effectively manage stormwater in urban areas, an extensive body of literature has been developed on the subject. When developing, redeveloping, or retrofitting an area, the incorporation of structural and non-structural stormwater best management practices can greatly reduce and mitigate the impacts of stormwater.

Highways and Roads

Mitigating the impacts of runoff from highways and roads is a major concern for municipalities. Highways, streets and roads face specific challenges in managing stormwater, including:

- The need to manage stormwater while maintaining safe road conditions
- Limited available space and the need to locate BMPs within the right-of-way, if possible.
- Drainage area imperviousness greater than 50 percent, and sometimes 100% - use of rain gardens and tree wells can help.
- Areas of extensive disturbance and compaction of soils (cuts and fills).
- The potential for spills of hazardous materials.
- Higher concentration of pollutants as compared to many other land uses.

Although there are many challenges associated with stormwater management and transportation infrastructure, there are also many opportunities. Communities across the nation are incorporating innovative stormwater management practices into their design and re-design of transportation networks.

Many municipalities are creating “Green Streets” and “Green Alleys” to manage stormwater runoff while also reaping the additional environmental and social benefits of green infrastructure.

Additional Resources

EPA's National Menu of Best Management Practices (BMPs) for Stormwater - Construction

Uncontrolled stormwater runoff from construction sites can significantly impact rivers, lakes, and estuaries. Sediment in waterbodies from construction sites can reduce the amount of sunlight reaching aquatic plants, clog fish gills, smother aquatic habitat and spawning areas, and impede navigation.

Small Municipal Separate Storm Sewer System (MS4) permits specify minimum elements and require regulated MS4 owners/operators to develop, implement, and enforce a program to reduce pollutants in stormwater to the small MS4 from certain construction activities.

This primarily includes developing:

- An ordinance
- Requirements to implement erosion and sediment control best management practices (BMPs)
- Requirements to control other waste at the construction site
- Procedures for reviewing construction site plans
- Procedures to receive and consider information submitted by the public
- Procedures for inspections and enforcement of stormwater requirements at construction sites

In addition to the stormwater requirements that MS4s place on construction sites, construction operators may also need to apply for NPDES permit coverage, generally if their project disturbs more than 1 acre and discharges to a waterbody.

See the EPA's website for more information.

<https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater-construction>

On this website the user can download BMP fact sheets for the following topics:

Construction Site Planning and Management

- Construction Sequencing
- Erosion and Sediment Control Inspection and Maintenance
- Preserving Natural or Existing Vegetation

Erosion Control

- Chemical Stabilization
- Compost Blankets
- Dust Control
- Geotextiles, Matting and Netting
- Land Grading
- Mulching
- Riprap
- Permanent Seeding
- Sodding
- Soil Retention

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- Soil Roughening
- Temporary Slope Drains
- Temporary Stream Crossings
- Wind Fences and Sand Fences

Runoff Control

- Check Dams
- Grass-Lined Channels
- Land Grading

Sediment Control

- Brush Barrier
- Compost Filter Berms
- Compost Filter Socks
- Construction Track-out Controls
- Fiber Rolls
- Filter Berms
- Sediment Basins and Rock Dams
- Sediment Filters and Sediment Chambers
- Sediment Traps
- Silt Fences
- Storm Drain Inlet Protection
- Straw or Hay Bales
- Treatment Chemicals for Particulate Removal from Construction Stormwater
- Vegetated Buffers

Good Housekeeping/Materials Management

- Concrete Washout
- General Construction Site Waste Management
- Spill Prevention and Control Measures
- Vehicle Maintenance and Washing Areas at Construction Sites

APPENDIX 5 – STORM WATER POLLUTION PREVENTION PLANS

The Stormwater Pollution Prevention Plan, often abbreviated as SWPPP, is a plan created by contractors to show their plans for sediment and erosion control. Typically these plans are part of an overall design that details procedures to be followed during various phases of construction. This is required by a federal regulation of the United States of America governing stormwater runoff from active construction sites that are more than one acre in area. The SWPPP is considered a mitigation guideline for stormwater runoff from construction sites that have the potential to damage waterways while complying with the Clean Water Act's provisions and EPA regulations.

Town of Camp Verde SWPPP Program for Construction Projects

The overwhelming pollutant flowing into our creeks and lakes is sediment. As the Town of Camp Verde grows, construction of roadways, shopping centers, and residential and commercial properties continues. Once land is disturbed, the opportunity for dirt and sediment to enter our storm drain system, washes, and other drainageways increases significantly.

There are two types of controls that need to be considered during construction, one is erosion control and the other is sediment control. Best Management Practices (BMPs) have been identified and should be incorporated into any design where soil is disturbed. The type and placement of these BMPs will be included in the Storm Water Pollution Prevention Plan (SWPPP).

Erosion Control

Erosion control is the process of installing BMPs that will protect the soil surface so that water and wind will not carry the soil from the construction site. Some examples of BMPs that would help control erosion are proper scheduling of the construction sequence, preserving existing vegetation, slope treatments, mulch, hydroseeding, soil binders, geotextiles, plastic covers, erosion control blankets/mats, drainage swales, and storm drainage structure protection.

Sediment Control

Sediment control is the process of installing BMPs that will intercept and slow the flow of storm water. This enables the sediment to settle out and be kept on site. Some examples of BMPs that would help control sediment loss are sediment control berms, silt fences, sediment traps, check dams, sediment wattles and logs, sand bag barriers, storm drain structure protection, stabilized construction entrance/exit provisions, and street/paved area sweeping.

Storm Water Pollution Protection Plan (SWPPP)

A SWPPP is a plan shall be prepared and submitted by an engineer or erosion pollution control specialist and is required for projects one (1) acre or more in size. It is submitted prior to construction and controls must be installed before an area is disturbed. The SWPPP addresses the site to be disturbed and describes in detail the BMPs that will be used to minimize erosion and sediment loss. The plan will identify the specialist of the SWPPP and indicate the maintenance requirements, the frequency of inspection, and the temporary and permanent controls for the site. Successful implementation of the SWPPP will result in minimal erosion, which will keep sediment out of our washes, creeks, and the Verde River.

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Additional Resources

ADEQ offers a checklist and template to help contractors ensure the site SWPPP meets permit requirements (found herein starting on the next page). The checklist includes guidance for preparing your initial SWPPP, as well as information to include throughout the duration of your construction project, such as control measures, inspections and corrective actions.

The ADEQ Construction General Permit Checklist and SWPPP template can be downloaded from the following website:

<https://www.azdeq.gov/node/2328>

Another useful resource is the EPA's 'Developing Your Stormwater Pollution Prevention Plan – A Guide for Construction Sites'. This document can be downloaded from the following website:

<https://www.epa.gov/npdes/developing-stormwater-pollution-prevention-plan-swppp>

This EPA web page also includes example Construction SWPPPs and informational brochures.

Erosion & Sediment Control Measures for Construction Activities

Camp Verde Stormwater Management Program

The Town of Camp Verde operates a Stormwater Management Program (SWMP) as part of the Arizona Pollutant Discharge Elimination System (AzPDES) General Permit for Discharge from Small Municipal Separate Storm Sewer Systems (MS4), administered by the Arizona Department of Environmental Quality (ADEQ) (A.A.C. R18-9-A9).

The SWMP addresses problems related to nonpoint source pollution from urbanized areas that negatively impact water quality in local washes, creeks, ponds, and the Verde River.

This program encompasses public education and involvement, illicit discharge detection and elimination, construction site stormwater controls, post construction stormwater management for new development, and pollution prevention for municipal operations.

Erosion and Sediment Control Plan

For single family residential construction sites, an erosion and sediment control site plan is required as part of grading and building permits. The site plan should illustrate what measures will be taken to prevent erosion and sediment from leaving the site. All BMPs must be in place and approved by a Town Inspector prior to the commencement of soil disturbing activities.

State Construction Regulations

For construction sites one acre or greater in size, or less than one acre but part of a common plan of development (a contiguous area where multiple lots will be constructed at different times, on different schedules, but under one plan), you must apply for coverage under the AzPDES Construction General Permit (CGP) for Stormwater Discharges.

- Apply for coverage using ADEQ's Smart NOI system online: <https://az.gov/app/smartnoi>.
- Develop and implement a Stormwater Pollution Prevention Plan (SWPPP).

Construction Site Erosion/Sediment Control Code

Section 7-9-8 of the Town Code requires any soil disturbing activity to implement Best Management Practices (BMPs) to prevent erosion and control sediment from leaving the construction site. BMPs are operational activities or physical controls that reduce the discharge of stormwater and pollutants, including sediment, and minimize potential impacts upon the municipal storm sewer or receiving waters. This code is for compliance with the AzPDES General Permit for Discharge from Small MS4s.

Erosion and Sediment Control Code Violations

- *1st Notice – Verbal Warning*
Correction action must be promptly initiated and completed within 2 working days.
- *2nd Notice – Written Notice*
Correction action must be completed within 2 working days or as specified in the Notice.
- *Stop Work Order*
A Stop Work Order will be issued for the site when the corrective action has not completed within the specified time period.

You can also see the following resources:

ADOT Erosion and Pollution Control Manual, 2020
<https://azdot.gov/business/environmental-planning/water-resources/manuals-and-agreements-water-resources>

Maricopa County Drainage Design Manual: Erosion Control, 2013

<http://www.fcd.maricopa.gov/Pub/manuals/downloads/ErosionControlManual.pdf>

For more information contact:

Town of Camp Verde Public Works Department
395 South Main Street, Camp Verde, AZ 86322
928-554-0820

<https://www.campverde.az.gov/departments/utilities/stormwater-division>

APPENDIX 6 – GENERAL PERMIT FOR STORMWATER DISCHARGES FROM SMALL MS4s

The General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) as required by the Arizona Department of Environmental Quality (ADEQ) Arizona Pollutant Discharge Elimination System (AZPDES) is found starting on the next page. The Small MS4 Permit was issued by ADEQ effective on September 30th, 2026, and expires on September 29th, 2031:



ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY



Arizona Pollutant Discharge Elimination System General Permit for Stormwater Discharges From Phase II (small) Municipal Storm Sewer Systems to Protected Surface Waters

This permit provides authorization to discharge under the Arizona Pollutant Discharge Elimination System (AZPDES) program, in compliance with the provisions of the Arizona Revised Statutes (A.R.S), Title 49, Chapter 2, Article 3.1; the Arizona Administrative Code (A.C.C.), Title 18, Chapter 9, Article 9, and Chapter 11, Article 1; and the Clean Water Act as amended (33 U.S.C. 1251 *et seq.*). This general permit authorizes stormwater discharges of pollutants from small municipal separate storm sewer systems (SMS4s) in Arizona to WOTUS Protected Surface Waters, pursuant to federal conditions in 40 CFR § 122.34 and A.R.S. Title 49 Chapter 2, Article 3.1 *et seq.* State requirements for discharges to non-WOTUS Protected Surface Waters are enforceable solely by the Arizona Department of Environmental Quality (ADEQ). All discharges authorized by this general permit shall be consistent with the terms and conditions of this general permit.

This general permit is signed on 9/21/2026

This general permit is effective on **September 30, 2026.**

This general permit and the authorization to discharge expires at midnight on **September 29, 2031.**

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

DocuSigned by:

Josephine Maressa

A5AF0048FAC0426...

Josephine Maressa, Deputy Director

Water Quality Division

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1.0 COVERAGE UNDER THIS GENERAL PERMIT

1.1 Permit Area (40 CFR §122.28(a)(1))

This permit covers and applies to traditional and non-traditional regulated Phase II Small Municipal Separate Storm Sewer Systems (SMS4s) in Arizona, except those located on Tribal lands. This permit is not authorized for use by sites with stormwater discharges associated with SMS4s on Tribal lands in Arizona. Authorization for such discharges must be obtained through U.S. Environmental Protection Agency (EPA) Region IX or other appropriate authority.

The permit area should correspond to existing geographic or political boundaries and include:

1. City or Town – Urban area(s) determined by the latest U.S. Decennial Census by the U.S. Census Bureau, including areas annexed during the permit term;
2. County – Unincorporated urban area determined by the latest Decennial Census by the U.S. Census Bureau;
3. State, federal, and other publicly-owned properties – That the Director determines contributes to a violation of a water quality standard or is a significant contributor of pollutants to protected surface waters; and
4. Areas outside of an urban area – As designated by the Director pursuant to Arizona Administrative Code (A.A.C.) R18-9-A902(D).

If your Phase II Small SMS4 (SMS4) is not located entirely within an urban area, only the portion that is within the urban area is regulated, pursuant to 40 CFR §122.32(1)(a).

1.2 Eligibility (40 CFR §122.32)

This permit authorizes the discharge of stormwater from SMS4s to all waters on the protected surface water list, including discharges to Waters of the U.S. (WOTUS) and non-WOTUS protected surface waters. The requirements of discharges to non-WOTUS protected surface waters are state-only and enforceable solely by ADEQ. A SMS4 requiring coverage is:

1. Located fully or partially within an urban area with a population of 50,000 or more people as determined by the latest Decennial Census by the U.S. Census Bureau;
2. Designated for permit authorization by the department under the A.A.C. R18-9-A902(D)(1), R18-9-A902(D)(2), R18-9-A902(E), R18-9-A905(A)(1)(f) which incorporate 40 CFR §122.32 by reference; or
3. An existing or new permittee as defined in this permit.

1.2.1 Implementation Timeframe

1. Existing permittees shall implement all requirements of this permit within one (1) year of the effective date of the permit.
2. Existing permittees shall maintain their Stormwater Management Program (SWMP) implemented under the existing SMS4 permit until requirements of this permit are implemented.
3. New permittees shall implement all requirements of this permit within two (2) years of obtaining permit coverage.
 - a. A new permittee may submit a written request to ADEQ, for a one-time extension of one (1) additional year to complete a specific permit requirement.
 - b. Requests should be emailed to AZPDES@azdeq.gov.

1.3 Limitations of Coverage

This general permit does not authorize:

1. Discharges mixed with sources of non-stormwater unless the non-stormwater discharges comply with an applicable National Pollutant Discharge Elimination System (NPDES) or AZPDES permit, as addressed in Part 6.3(6).
2. Stormwater discharges associated with industrial activity as defined in 40 CFR §122.26(b)(14)(i)-(ix) and (xi).
3. Stormwater discharges associated with construction activity as defined in 40 CFR §122.26(b)(14)(x) or 40 CFR §122.26(b)(15).
4. Stormwater discharges currently covered under another permit.
5. Discharges to impaired or not-attaining waters listed under section 303(d) of the Clean Water Act (CWA). If discharge(s) from the SMS4 contains, or may contain, pollutant(s) for which the receiving water is listed, this permit does not authorize such discharges except:
 - a. If a Total Maximum Daily Load (TMDL) has been established and the SWMP contains requirements consistent with the TMDL, including any wasteload allocation or load allocation in the TMDL (see Appendix C). The SWMP shall identify Best Management Practices (BMPs) the permittee will use to meet wasteload allocations or load allocations and include monitoring for associated pollutant(s); or
 - b. If a TMDL has not been established, the SWMP contains a section describing how the permittee will control discharge of 303(d) listed pollutants to the maximum extent practicable and ensure that discharges from the SMS4 will not cause or contribute to exceedances of surface water quality standards (SWQS). The SWMP shall

identify BMPs the permittee will use to control discharges and include monitoring of their effectiveness.

6. New or expanded point source discharges directly to water classified as an Outstanding Arizona Water (OAW) designated in A.A.C. R18-11-112.

1.4 Permit Compliance (40 CFR §122.36)

Noncompliance with any requirement of this permit constitutes a violation of the permit and may result in an enforcement action, including notices of violation, consent orders, injunctive relief, and/or penalties under state and federal laws.

2.0 AUTHORIZATION UNDER THIS PERMIT

1. Existing permittees that have coverage as of the effective date of this permit, shall:
 - a. Within the first year of this permit, update the SWMP as necessary to comply with the requirements of Part 4 of this permit; and
 - b. Within the first 60 calendar days from the effective date of this permit, submit a new Notice of Intent (NOI) in myDEQ.

The permittee may continue to comply with the terms and conditions of the expired permit (AZG2021-002) until the NOI is submitted and payment is made for the permit application fee pursuant to A.A.C. R18-09-C903(B)(1) (see also Part 2.5 of this permit).

2. New permittees shall submit an NOI in myDEQ and pay the permit application fee to obtain coverage under this permit.

2.1 Notice of Intent (NOI)

1. A person seeking authorization to discharge under this general permit shall submit to the department a complete and accurate NOI in the myDEQ Permitting Portal. The NOI shall include, at a minimum, the following information:
 - a. Name of the SMS4;
 - b. Operator name and title;
 - c. Mailing address;
 - d. Annual fee billing information;
 - e. Contact person;
 - f. Contact information;
 - g. Estimated population of regulated area (based on the latest Decennial Census by the U.S. Census Bureau);
 - h. Name(s) of protected surface water(s);
 - i. The number of outfalls that discharge to a protected surface water(s); and
 - j. Outfall name or identification, and latitude and longitude (in decimal degrees), for outfalls required in Part 2.1.1.i herein.
2. If the department notifies the applicant of deficiencies or inadequacies in any portion of the NOI, or requests additional information, the applicant shall correct the deficient or inadequate portions and submit a revised NOI that addresses the deficiencies within seven (7) business days of receiving notification.

3. The permittee shall submit a revised NOI in the myDEQ Permitting Portal within fifteen (15) days whenever there is a change of information (certifying official, mailing address, contact information, etc.).

2.2 Permit Fees

Permittees are subject to fees established in A.A.C. R18-14-109, Table 6. The department will issue an invoice annually to the permittee at the address identified on the NOI. Permittees shall submit the applicable fee when submitting an NOI to obtain coverage under this permit.

2.3 Terminating Coverage

A permittee may terminate coverage under this general permit by submitting a Notice of Termination (NOT) on a form provided by the department. Authorization to discharge terminates at midnight on the day the NOT is received by the department.

If the operator does not obtain coverage under an alternate AZPDES permit that authorizes the discharge of stormwater prior to submitting the NOT, the operator will be considered to be discharging without a permit.

NOTs shall be signed in accordance with Part 9.9 of this permit and shall be submitted to ADEQ via email at AZPDES@azdeq.gov. The email subject line must include "Termination – SMS4 Permittee Name."

2.4 Coverage Under an Individual Permit

Pursuant to A.A.C. R18-9-C902, a person may request, or be required by the Director, to obtain coverage under an individual permit.

2.5 Continuation of this General Permit

If this permit is not reissued prior to the expiration date, it will be administratively continued in accordance with A.A.C. R18-9-C903 and will remain in force and in effect for discharges that were authorized prior to expiration.

If the SMS4 operator does not submit a timely, complete, and accurate NOI requesting authorization to discharge under a reissued permit, or a timely request for authorization under an individual or alternative general permit, authorization under this permit will terminate on the effective date of the reissued permit unless otherwise specified in this permit.

3.0 STORMWATER PROGRAM ENFORCEMENT

3.1 Establish Enforcement Procedures (40 CFR §122.34(b)(3)(B))

The permittee shall adopt and implement local ordinance(s) or other regulatory mechanism(s) that provide adequate enforcement procedures to satisfy the requirements of this permit to control pollutant discharges into the SMS4.

3.2 Enforcement Requirements

If not already developed, the permittee shall establish and exercise enforcement procedures to comply with this permit. To be considered adequate, enforcement procedures shall, at a minimum, address the following:

1. Prohibit and eliminate illicit connections and discharges to the SMS4;
2. Control the discharge of spills, and prohibit dumping or disposal of material other than stormwater into the SMS4;
3. Require compliance with conditions in the permittee's ordinances, permits, contracts, or orders;
4. Require owners/operators of construction activities, new or redeveloped land, and industrial and commercial facilities to minimize the discharge of pollutants to the SMS4 through the installation, implementation, and maintenance of stormwater control measures;
5. To the extent allowed under State law, the permittee shall have methods to enter private property for the purpose of inspecting at reasonable times any facilities, equipment, practices, or operations related to stormwater discharges to determine whether there is compliance with local stormwater control ordinances/standards;
6. The permittee shall promptly require violators to cease and desist illicit discharges or discharges of stormwater in violation of any ordinance or standard and/or cleanup and abate such discharges;
7. To the extent allowable under State and federal law, the permittee shall impose civil or criminal sanctions (including referral to a city or district attorney) and escalate corrective responses, consistent with the permittee's enforcement response plan;
8. Identify departments within the permittee's jurisdiction that conduct stormwater-related activities and their roles and responsibilities under this permit. Include an up-to-date organizational chart specifying these departments and key personnel positions;

9. Identification of the local administrative and legal procedures and ordinances available to mandate compliance with stormwater-related ordinances and therefore with the conditions of this permit; and
10. A description of how stormwater related-ordinances are implemented and appealed.

3.3 Enforcement Response Plan(s)

The permittee shall develop an enforcement response plan (ERP) that specifies how the permittee will exercise its legal authority to comply with this permit. The ERP shall include a prioritization schedule that establishes escalated enforcement for noncompliance involving illicit discharges and construction activities. In developing the ERP, the permittee shall include the following factors in prioritizing escalated enforcement:

1. Severity of noncompliance;
2. Repeated noncompliance;
3. Proximity to a receiving water or storm sewer system; and
4. Other appropriate factors.

4.0 STORMWATER MANAGEMENT PROGRAM

The permittee shall develop, implement, and enforce a Stormwater Management Program (SWMP) that is designed to reduce the discharge of pollutants from the SMS4 to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the federal CWA and A.R.S. Title 49, Chapter 2, Article 3.1 *et seq.* The program shall be documented and available for review by ADEQ, U.S. EPA, and interested persons.

1. Existing permittees shall modify or update their existing SWMP to meet the terms and conditions of this permit within one (1) year of the effective date of this permit.
2. New permittees shall develop a SWMP that meets the conditions of this permit within two (2) years of the effective date of their coverage.
3. At a minimum, and at least annually, the permittee shall assess, evaluate, and update the SWMP and incorporate any revisions necessary to maintain permit compliance. The permittee shall include a summary documenting the status of compliance with permit terms, any planned revisions to BMPs, and any available monitoring or assessment information. The annual SWMP review shall occur in connection with preparing the annual report as required in Parts 8.1 and 8.3 of this permit.

4.1 Contents of the Stormwater Management Program

At a minimum, the SWMP shall contain the following:

1. A listing of all protected surface waters, their classification under the applicable state surface water quality standards (SWQS), any impairment(s) and associated pollutant(s) of concern, applicable TMDLs and WLAs, and the number of outfalls from the SMS4 that discharge to each waterbody;
2. The process and schedule for creating and maintaining an up-to-date map that includes, at a minimum, the storm sewer system, outfalls, and protected surface waters;
3. Illustration of any areas that are not subject to the SMS4 and identify why there is no discharge within the SMS4 boundaries;
4. A listing of all known, ongoing discharges that cause or contribute to the exceedance of an applicable surface water quality standard;
5. A description of practices to achieve compliance with the permit. For each permit condition identify:
 - a. The personnel, position or department responsible for implementing the measure; and
 - b. The BMPs for each control measure or permit requirement.

6. A description of practices to achieve compliance with applicable TMDLs or wasteload allocations, including measurable goal(s) for each BMP and corresponding milestones and timeframes. Each goal shall have an associated measure of assessment;
7. Analytical monitoring program for impaired or not-attaining waters, and for Outstanding Arizona Waters, to ensure compliance with permit limitations, wasteload allocation(s), and SWQS;
8. An analytical monitoring program shall include a sampling and analysis plan (see Part 7.3 of this permit) that includes, at a minimum, but not limited to, the following components:
 - a. Sample collection, equipment and containers, decontamination, calibration procedures;
 - b. Sample frequency (based on illicit discharge characteristics);
 - c. Documentation of site conditions, field notes; and
 - d. Sample preservation, tracking (chain-of-custody), and handling.
9. A protocol for annual program evaluation (Part 8.1), updated annually and maintain copies; and
10. Identification of personnel (department, position, etc.) responsible for program implementation.

4.2 Stormwater Management Program Plan Availability

The permittee shall retain a copy of the current SWMP required by this permit at the office or facility identified on the NOI and shall make it available upon request by ADEQ or U.S. EPA, or their authorized representatives.

A copy of the most up-to-date SWMP shall be made available to the public during normal business hours and shall be posted on the permittee's website.

5.0 WATER QUALITY STANDARDS

The permittee shall develop, implement, and enforce a program to reduce the discharge of pollutants from the SMS4 to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of federal and state laws.

5.1 Water Quality Based Effluent Limitations

Pursuant to Clean Water Act 402(p)(3)(B)(iii) and A.R.S. 49-255.04, this permit includes provisions to ensure that discharges from the permittee's SMS4 do not cause or contribute to an exceedance of SWQS, in addition to requirements to reduce the discharge of pollutants to the maximum extent practicable.

To ensure compliance with permit limitations, ADEQ may require the permittee to conduct analytical monitoring and will provide notice to the permittee in writing (see Part 7 of this permit).

5.2 Surface Water Quality Standards (SWQS)

1. The permittee shall implement the six (6) minimum control measures (MCMs) specified in Part 6.0 to the maximum extent practicable, to protect water quality, and to satisfy water quality requirements of the Clean Water Act, including attainment of SWQS.
2. If the permittee discovers, or is otherwise notified by ADEQ or U.S. EPA, that a discharge from the SMS4 is causing or contributing to an exceedance of an applicable surface water quality standard, the permittee shall expand or better tailor its BMPs within the scope of the six (6) minimum control measures as specified in Part 6.0 of this permit, to achieve progress toward attainment of SWQS.
3. The requirements for discharges to non-WOTUS protected surface waters are state-only and enforceable solely by ADEQ.

6.0 MINIMUM CONTROL MEASURES

The permittee shall reduce the discharge of pollutants to the maximum extent practicable (MEP) to protect water quality, and to satisfy the appropriate requirements of the Clean Water Act and A.R.S. 49-255.04 by implementing the six (6) minimum control measures (MCMs) as described in Parts 6.1 – 6.6 of this permit.

1. Existing permittees shall continue to implement their existing SWMPs while making updates pursuant to this permit (see Part 2.0). This permit does not extend the compliance deadlines set forth in previous permits.
2. The permittee may rely on another entity (including another interconnected SMS4) to implement, in whole or in part, one (1) or more of the minimum control measures described in Parts 6.1 through 6.6 or other permit requirements if the following requirements are satisfied (see 40 CFR §122.35(a)):
 - a. The other entity implements the control measure as specified in the SWMP;
 - b. The particular control measure or component thereof undertaken by the other entity is at least as stringent as the corresponding permit requirements;
 - c. The other entity agrees to implement the control measure on the permittee's behalf. The SWMP shall specify that the permittee is relying on another entity to satisfy some of its permit obligations and specify what those obligations are; and
 - d. The permittee remains responsible for compliance with all permit obligations if the other entity fails to implement the control measures (or component thereof). The permittee may enter into a legally binding agreement with the other entity regarding the other entity's performance of control measures, but the permittee remains ultimately responsible for permit compliance.

6.1 Public Education and Outreach (40 CFR §122.34(b)(1))

The permittee shall identify and implement an educational program that focuses on the impacts of stormwater discharges to protected surface waters.

1. At a minimum, the permittee shall provide public education and outreach to at least one (1) target group and convey relevant messages using one (1) or more appropriate topics listed below during each year of the permit term. Topics listed are not exclusive, and the permittee may focus its efforts on one (1) or more target group(s) and topic(s) most relevant to the SMS4.
 - a. Target Groups:
General Public, Residential Community, Homeowners, Schools

- b. Topics:
 - i. Post-construction ordinances and long-term maintenance requirements for permanent stormwater controls;
 - ii. Stormwater runoff issues and residential stormwater management practices;
 - iii. Potential water quality impacts of application of pesticides, herbicides, and fertilizers and control measures to minimize runoff of pollutants in stormwater;
 - iv. Potential impacts of animal waste on water quality and the need to clean up and properly dispose of pet waste to minimize runoff of pollutants in stormwater;
 - v. Illicit discharges and illegal dumping, proper management of non-stormwater discharges, and information on reporting spills, dumping, and illicit discharges;
 - vi. Spill prevention, proper handling and disposal of toxic and hazardous materials, and measures to contain and minimize discharges to the storm sewer system;
 - vii. Installation of catch basin markers or stenciling of storm sewer inlets to minimize illicit discharges and illegal dumping to the storm sewer system;
 - viii. Proper management and disposal of used oil; or
 - ix. Community activities (monitoring programs, environmental protection organization activities, etc.).
- 2. At a minimum, the permittee shall provide business sector education/outreach to at least one (1) target group and convey relevant messages using one (1) or more appropriate topic(s) listed below during each year of the permit term. Topics listed are not exclusive, and the permittee may focus its efforts on one (1) or more target group(s) and topic(s) most relevant to the SMS4.
 - a. Target Groups:

Development, Community/Homeowner Associations, Construction Site Operators, Targeted Sources or Types of Businesses (Industrial or Commercial)
 - b. Topics:
 - i. Planning ordinances and grading and drainage design standards for stormwater management in new developments and significant redevelopments;

- ii. Post-construction ordinances and long-term maintenance requirements for permanent stormwater controls;
 - iii. Municipal stormwater requirements and stormwater management practices for construction sites;
 - iv. Illicit discharges and proper management of non-stormwater discharges;
 - v. Spill prevention, proper handling of toxic and hazardous materials, and measures to contain and minimize discharges to the storm sewer system;
 - vi. Proper management and disposal of used oil and other hazardous or toxic materials, including practices to minimize exposure of materials/wastes to rainfall and minimize contamination of stormwater runoff;
 - vii. Stormwater management practices, pollution prevention plans, and facility maintenance procedures; or
 - viii. Water quality impacts associated with land development (including new construction and redevelopment).
3. The program shall focus on messages for specific audiences as well as demonstrate progress toward the defined educational goals of the program. The permittee shall identify methods that will be used to evaluate the effectiveness of the educational messages and the overall education program.
4. The permittee shall modify any ineffective messages or distribution techniques on an annual basis. See Part 8.1(3) of this permit for record keeping requirements.

6.2 Public Participation and Involvement (40 CFR §122.34(b)(2))

The permittee shall provide opportunities to engage the public to participate in the review and implementation of the permittee's SWMP.

- 1. All public involvement activities shall comply with state and local public notice requirements. The SWMP and all annual reports shall be made available to the public. The current SWMP and annual report shall be posted no later than 30 days after the due date of the annual report (see Parts 1.2(3) and 1.2(4) of this permit).
- 2. The permittee shall annually provide the public with an opportunity to participate in the review, revisions, updates, and implementation of the SWMP.
- 3. The permittee shall create opportunities for citizens to participate in the implementation of stormwater controls, including but not limited to:
 - a. Stream clean-ups;
 - b. Storm drain stenciling;

- c. Volunteer monitoring;
 - d. Disposal of household hazardous waste;
 - e. Educational activities; and
 - f. Facilitation of Adopt-A-Wash, Adopt-A-Park, and Adopt-A-Street litter control activities.
- 4. The permittee shall provide and publicize a reporting system to facilitate and track public reporting of spills, discharges, and/or dumping to the SMS4 on a continuous basis.
 - 5. The permittee shall document the details of the public involvement and participation program in the SWMP.

6.3 Illicit Discharge Detection and Elimination Program (40 CFR § 122.34(b)(3))

The permittee shall identify, develop, implement, and enforce a program to detect and eliminate illicit discharges into the SMS4. The Illicit Discharge Detection and Elimination (IDDE) program shall be recorded in a written document and maintained in the SWMP. The IDDE program shall include each of the elements listed in this section.

1. Storm Sewer Mapping

The permittee shall prepare and maintain an up-to-date map of the SMS4. At a minimum, the storm sewer map shall be sufficient in scope and detail to identify and isolate illicit discharges. The permittee is not required to submit storm sewer system mapping of infrastructure to ADEQ unless specifically requested and shall make mapping information available to ADEQ or U.S. EPA to assess permit compliance.

The permittee shall develop a map that includes, at a minimum, the following:

- a. The storm sewer system, including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains that are owned or operated by the permittee and convey stormwater to protected surface waters;
- b. The location of all outfalls; and
- c. The name and location of all protected surface waters that receive discharges from those outfalls.

The following requirements apply to storm sewer mapping under this section:

- d. Existing permittees shall review and update maps within one (1) year of the effective date of this permit, including areas annexed during the previous permit term.
- e. For existing permittees that have an increase in their urban area based on the latest Decennial Census, mapping shall be completed as follows:

- i. Within three (3) years of the effective date of the updated Urban Area from the latest Decennial Census;
 - ii. At a minimum of 33% each year (permit years 1-3) (see Part 8.0 of this permit) and will be updated in the annual report; and
 - iii. All supporting documentation should be maintained in the SWMP.
- f. New permittees must include a mapping schedule in their NOI. The schedule must include how the permittee will conduct the mapping process, a timeline, and estimated completion dates.

2. Enforcement Procedures

- a. The permittee shall prohibit non-stormwater discharges into the storm sewer system by implementing appropriate enforcement procedures and actions authorized by current ordinances, by-laws, or other regulatory mechanisms (see Part 3.2 of this permit for additional requirements on ordinances); and
- b. The written IDDE program shall include a reference or citation of the authority (ordinance or other regulatory mechanism) the permittee will use to implement all aspects of the IDDE program.

3. Statement of IDDE Program Responsibilities

The permittee shall establish a written statement that clearly identifies responsibilities with regard to eliminating illicit discharges. The statement shall identify the lead municipal agency or department responsible for implementing the IDDE program as well as any other agencies or departments that may have responsibilities for aspects of the program. Where multiple departments and agencies have responsibilities for the IDDE program, specific areas of responsibility shall be defined and processes for coordination and data sharing shall be established and documented.

4. Illicit Discharge Detection and Elimination Reporting

The permittee shall track and maintain records of the activities conducted to meet the requirements of Parts 6.1 through 6.6 of this permits. The permittee shall submit as part of each annual report (see Appendix A of this permit) a summary of IDDE activities in tabular format. The required fields are:

- a. SMS4 name;
- b. Date incident was reported or discovered;
- c. Date of the beginning of the permittee's response;
- d. Date of the end of the permittee's response;
- e. Whether the discharge reached a protected surface water (yes, no, or unknown);

- f. Incident location (address or latitude and longitude);
- g. Pollutant(s);
- h. Source; and
- i. Correction method(s).

5. Eliminating Illicit Discharges

Illicit discharges to the SMS4 are prohibited and constitute a violation of this permit when the permittee is not fully implementing applicable permit requirements and the SWMP.

Upon detection of an illicit discharge or receipt of a complaint regarding a discharge, the permittee shall eliminate the discharge as expeditiously as possible. The permittee shall identify and notify all responsible parties for any such discharge and require immediate cessation in accordance with its legal authority. Where elimination of an illicit discharge is not immediately possible, the permittee shall establish an expeditious schedule for its elimination and report the dates of identification and schedules for removal in the permittee's annual reports (see Part 8.0 of this permit). The permittee shall immediately commence actions necessary for elimination. In the interim, the permittee shall take all reasonable and prudent measures to minimize the discharge of pollutants to the SMS4.

6. Non-Stormwater Discharges

The following categories of non-stormwater discharges or flows shall be addressed when such discharges are identified by the permittee as significant sources of pollutants to a protected surface water:

- a. Water line flushing;
- b. Landscape irrigation, including flood irrigation;
- c. Diverted stream flows;
- d. Rising ground waters;
- e. Uncontaminated groundwater infiltration (as defined at 40 CFR 35.2005(b)(20)) to separate storm sewers;
- f. Uncontaminated pumped groundwater;
- g. Discharges from potable water sources;
- h. Foundation drains;
- i. Air conditioning condensation;
- j. Irrigation water;
- k. Springs;

- l. Water from crawl space pumps;
- m. Footing drains;
- n. Lawn watering;
- o. Individual residential car washing;
- p. Flows from riparian habitats and wetlands;
- q. Street wash water;
- r. Discharges or flows from emergency firefighting activities; and
- s. Discharges authorized by another NPDES or AZPDES permit.

7. Visual Monitoring

The permittee shall develop, implement, and maintain a visual monitoring program that includes both dry weather and wet weather stormwater discharges to identify, monitor, and eliminate illicit discharges and to ensure compliance with effluent limitations in this permit. The ratio of dry weather and wet weather screenings conducted each year will be determined by the permittee.

- a. The monitoring program shall include written procedures for conducting visual monitoring of outfalls from the SMS4. Monitoring procedures shall include, at a minimum, the following information and observations:
 - i. Outfall identification;
 - ii. Personnel, time, date;
 - iii. Weather conditions at time of inspection;
 - iv. Estimated flow rate; and
 - v. Apparent odor, color, clarity, debris, floatables, and other information necessary to characterize the screening.
- b. The permittee shall visually monitor at least 20% of all outfalls each year, including both dry and wet weather screenings. The ratio of dry weather and wet weather screenings conducted each year will be determined by the permittee. ADEQ may require the permittee to adjust the ratio based on data review, or monitoring results, as necessary to protect water quality. Reinspection of outfalls may be included in the annual monitoring percentage. In the event an illicit discharge is discovered, the permittee shall implement measures to eliminate the illicit discharge (see Parts 6.3(1) through 6.3(6) of this permit);

- c. The permittee shall establish a follow-up screening schedule for identified or suspected illicit discharges to ensure they do not recur; and
- d. In the event a SMS4 has fewer than five (5) outfalls, a minimum of five (5) field screening points, or a combination of outfalls and field screening points, shall be utilized for the visual monitoring requirement.

Field screening points shall be at locations where stormwater leaves the SMS4 permitted area and discharges to another SMS4 or other conveyance.

8. Indicators of IDDE Program Progress

The permittee shall define or describe indicators for tracking program success. At a minimum, indicators shall include measures that demonstrate efforts to locate illicit discharges and to verify that identified discharges were removed. Such measures may include response time to inspection, an increase in public awareness, time from discovery to elimination, and other appropriate factors.

The permittee shall evaluate the overall effectiveness of the program at least annually and shall incorporate improvements as necessary.

9. Staff Training

The permittee shall, at a minimum, provide annual training to employees involved in the IDDE program (e.g., street workers, inspectors, and solid waste personnel, etc.). The training shall include IDDE program components and how to recognize and report illicit discharges.

10. AZPDES Non-Filers

The permittee shall implement a program to identify illicit discharges (non-filers) discharging to the SMS4 in accordance with the IDDE program established in this Section.

The permittee shall report suspected non-filers to ADEQ within 30 days. The report shall include, at a minimum, the facility name and the location of the suspected non-filer. Non-filer reports shall be submitted to ADEQ at stormwatercompliance@azpdes.com. If more than one non-filer is identified within a 30-day period, the notifications may be combined into a single report.

6.4 Construction Activity Stormwater Runoff Control (40 CFR §122.34(b)(4))

The permittee shall develop, implement, maintain, and enforce, a construction activity stormwater runoff control program to minimize or eliminate pollutant discharges to the SMS4 from construction activities that disturb one (1) or more acres of land, including sites of less than one (1) acre that are part of a larger common plan of development or sale if the larger common plan will ultimately disturb one (1) or more acres.

1. Construction Activity Stormwater Runoff Implementation

The permittee shall assess existing legal authority, codes, and other relevant mechanisms, and shall adopt and implement measures to ensure compliance with construction activity runoff control requirements specified in Part 3.0 of this permit and within the timeframe(s) established in Part 1.2.1 of this permit.

2. Construction Activity Stormwater Runoff Program Components

The construction activity stormwater runoff control program shall include, at a minimum, the elements in Parts 6.4.2(a)-6.4.2(i) of this section:

- a. An ordinance or other regulatory mechanism that requires the use of sediment and erosion control practices and allows the permittee, to the extent authorized by law, to impose sanctions ensuring compliance with the local program (see Part 3.2 of this permit for additional requirements on ordinances).
- b. An inventory of all construction activities that disturb or will disturb one (1) or more acres within the permitted area, including those that are less than one (1) acre but are part of a larger common plan of development or sale if the larger common plan will ultimately disturb one (1) or more acres.
- c. Written procedures for site plan review that include, at a minimum:
 - i. A review of the site design;
 - ii. The planned operations at the location of the construction activity;
 - iii. Planned stormwater controls during each construction phase; and
 - iv. The planned controls to be used to manage runoff created after development (see Part 6.5 of this permit).
- d. Written procedures for site inspections and enforcement of sediment, and erosion control measures. The procedures shall clearly define who is responsible for site inspections as well as who has authority to implement enforcement procedures. The program shall allow the permittee, to the extent authorized by law, to impose sanctions ensuring compliance with the local program. These procedures and regulatory authorities shall be documented in the SWMP.

- e. In developing procedures for site inspections and enforcement of control measures, the permittee shall consider, at a minimum, the following:
 - i. The phase of construction;
 - ii. Proximity to an impaired, not-attaining, or OAW;
 - iii. Size of the construction activity (acreage disturbed); and
 - iv. History of noncompliance of the site.
- f. Procedures for site inspections of public and private construction projects in accordance with the frequency specified in this sub-item below:
 - i. Sites of one (1) acre or larger that have outfalls within 1/4 mile of an impaired or not-attaining protected surface water that is impaired for turbidity or suspended sediment concentration (SSC), shall be inspected a minimum of once per week, and within 24 hours of the occurrence of each storm event of 0.5 inches or greater in a 24-hour period;
 - ii. Site inspection frequency for sites not subject to sub-item f.i may follow sub-item f.ii or f.ii below, or any combination thereof:
 - 1. Sites shall be inspected within one month of the start of construction. This inspection may count towards quarterly inspections.
 - a. Sites shall be inspected quarterly; and
 - b. Sites shall be inspected upon completion of construction and prior to final approval or occupancy. This inspection may count towards quarterly inspections.
 - 2. Sites meeting requirements (a) through (e) below may reduce inspection frequency to every six months. The permittee must document which sites are inspected under this reduced frequency section:
 - a. The nearest downstream receiving water is ephemeral;
 - b. The construction activity occurs on a site designed so that all stormwater generated by disturbed areas of the site, exclusive of public rights-of-way, is directed to one or more retention basins that are designed to retain the runoff from an extreme event.

For the purposes of this provision, "extreme event" means a rainfall event that meets or exceeds the local one hundred-year, two-hour storm event as calculated by an Arizona registered professional engineer using industry

practices;

- c. The owner or operator complies with erosion and sediment control measures;
- d. The owner or operator maintains the capacity of the retention basins; and
- e. Construction conforms to the standards prescribed by this section.

3. Compliance during this permit term shall be determined by achieving at least 80% of scheduled inspections annually.

- g. Based on construction activity inspection findings, the permittee shall take all necessary follow-up actions (including re-inspection and enforcement) to ensure compliance in accordance with the permittee's enforcement response plan required under Part 3.3 of this permit.
- h. The permittee shall require construction operators to implement sediment and erosion control BMPs appropriate for the conditions at the construction site. Examples of appropriate sediment and erosion control measures for construction activities include local requirements to:
 - i. Minimize the amount of disturbed areas and protect natural resources;
 - ii. Stabilize sites when projects are complete or operations have temporarily ceased;
 - iii. Protect slopes on the site of the construction activity;
 - iv. Protect storm drain inlets and armor all newly constructed outlets;
 - v. Use perimeter controls at the site;
 - vi. Stabilize entrance(s) and exit(s) at the location of the construction activity to prevent off-site tracking; and
 - vii. Inspect stormwater controls at consistent intervals.
- i. The permittee shall require construction operators to control wastes, including but not limited to: discarded building materials, paints, fertilizers, concrete washout, chemicals, litter, equipment leaks, and sanitary wastes.

3. Personnel Qualifications

The permittee shall ensure that staff who conduct activities related to implementing the construction stormwater program (permitting, plan review, construction activity inspections, and enforcement, etc.) have the knowledge, skills, and abilities to proficiently carry out their assigned duties.

4. Construction Activity Operator Education and Public Involvement

The permittee must develop and implement a program to provide education to construction activity operators on erosion and sediment control BMP requirements and must establish procedures for the receipt and consideration of information submitted by the public.

6.5 Post-Construction Stormwater Management in New Development and Redevelopment (40 CFR §122.34(b)(5))

The permittee shall develop, implement, and enforce, a program to address post-construction stormwater runoff from new development and redevelopment projects that disturb one (1) or more acres of land (or less than one (1) acre if part of a larger common plan of development or sale, if the larger common plan will ultimately disturb one (1) or more acres that discharge into the permittee's SMS4.

1. The post-construction stormwater management program shall include a combination of structural and/or non-structural best management practices, as well as the components identified in this section.
2. An ordinance or regulatory mechanism shall be implemented to address runoff from new development and redevelopment projects. The regulatory mechanism shall specify that owners or operators of new development and redevelopment sites discharging to the SMS4, design, install, and maintain post-construction stormwater controls that reduce or eliminate the discharge of pollutants from the site after construction activities are completed (see part 3.2 of this permit for additional requirements on ordinances).

The permittees shall evaluate existing ordinances or other regulatory mechanism(s) to address post-construction stormwater runoff from new development and redevelopment projects. If it is determined that existing ordinances or other regulatory mechanism(s) must be modified, the permittee shall develop, adopt, and implement a revised ordinance or other mechanism within the timeframes specified in part 1.2.1 of this permit.

The permittee's new development/redevelopment program shall include procedures to ensure that any stormwater controls or management practices for new development and redevelopment will prevent or minimize impacts to water quality from stormwater runoff.

3. Site Plan Review

The permittee shall design, implement, and maintain a site plan review process to evaluate and approve post-construction stormwater controls (see Part 6.4(2)(c) of this permit for site plan review requirements).

4. Post-Construction Stormwater Control Inventory

The permittee shall implement and maintain an inventory system of all post-construction structural stormwater control measures installed and implemented at new development and redeveloped sites, including both public and private sector sites located within the permit area that discharge into the SMS4.

The inventory must be searchable by property location (either on paper or electronic) and the following criteria:

- a. Type (e.g. retention, detention, green stormwater infrastructure, permeable pavement, and dry well);
- b. Size (e.g. feet, acre, and volume); and
- c. Purpose (e.g. sediment removal, metals treatment, oil, and grease).

5. Operation and Maintenance of Post-Construction BMPs

The permittee shall establish processes, procedures, and other such provisions necessary, including routine inspections of post-construction BMPs, to ensure the long-term operation and maintenance of post-construction stormwater BMPs.

6.6 Pollution Prevention and Good Housekeeping for Municipal Operations (40 CFR §122.34(b)(6))

The permittee shall develop, implement, and maintain an operations and maintenance program that includes a training component with the ultimate goal of preventing or reducing pollutant runoff and protecting water quality from municipal facilities and activities. The provisions in this section apply to facilities and activities that are not subject to separate AZPDES permitting.

1. At a minimum, the program shall include control measures for reducing or eliminating the discharge of pollutants from:
 - a. Streets, roads, and highways;
 - b. Municipal parking lots;
 - c. Maintenance and storage yards;
 - d. Fleet or maintenance shops with outdoor storage areas;
 - e. Salt/sand storage locations and snow disposal areas operated by the permittee;
 - f. Waste transfer stations; and
 - g. Disposal of waste removed from the separate storm sewers and areas listed above (including dredge spoil, accumulated sediments, floatables, and other debris).

2. Operation and Maintenance of Pollution Prevention and Good Housekeeping Best Management Practices (BMPs)

The permittee shall establish processes, procedures, and other provisions necessary to ensure the long-term operation and maintenance of stormwater BMPs. At a minimum, the permittee shall:

- a. Develop an inventory of municipally-owned and operated facilities and activities that have the potential to discharge;
- b. Prioritize municipal facilities based on their risk to discharge pollutants. Develop and implement a site inspection schedule (e.g., more frequent inspections for higher risk facilities, less frequent inspections for lower risk facilities);
- c. Develop and implement an inspection schedule for municipally-owned or operated facilities and activities, based on priority, to ensure stormwater controls are effective and properly maintained. Inspections shall be implemented with the following frequencies:
 - i. High-risk facilities shall be inspected at least once every quarter;
 - ii. Medium-risk facilities shall be inspected at least twice per year; and
 - iii. Low-risk facilities shall be inspected at least once per year.
- d. Based on inspection findings, update municipally-owned or operated facility(s) priority status and modify inspection frequencies, as appropriate;
- e. Develop and implement stormwater controls at municipally-owned or operated facilities and discharge activities to reduce or eliminate the discharge of pollutants;
- f. Develop and implement an annual employee training program to incorporate pollution prevention and good housekeeping techniques into everyday operations and maintenance activities; and
- g. Develop maintenance activities, maintenance schedules, and long-term inspection procedures for structural and non-structural stormwater controls to reduce floatables, trash, and other pollutants discharged from the SMS4.

Existing permittees shall continue to implement established operation and maintenance programs while updating those programs, as necessary, to comply with the requirements of this permit.

7.0 MONITORING REQUIREMENTS

All SMS4 permittees are required to perform stormwater characterization monitoring as set forth in this section. Additionally, SMS4s that have stormwater discharges to impaired or not-attaining waters, OAWs, or waters with TMDLs shall monitor for the impairments, as outlined in this section.

Additionally, ADEQ may notify the SMS4 in writing of any additional monitoring requirements to ensure protection of receiving water quality or to ensure permit compliance. Additional monitoring will be required if there is evidence that a pollutant is being discharged by the permittee that may be causing or contributing to exceedances of a water quality standard. Any such notice will provide an explanation of the reasons for the monitoring, locations, and parameters to be monitored, frequency and period of monitoring, sample types, and reporting requirements.

Analytical monitoring shall be conducted using approved test methods in accordance with A.A.C. R18-9-A905(B).

7.1 Monitoring and Assessment Program

1. The monitoring provisions of this section apply to all permittees that must conduct analytical monitoring. The permittee shall implement, and revise as necessary, a comprehensive monitoring and assessment program that includes a sampling and analysis plan (see Part 7.3 of this permit).

A description of this program shall be included in the SWMP. The monitoring and assessment program shall be designed to meet the following objectives:

- a. Assess the impacts to impaired, not-attaining, or OAWs resulting from stormwater discharges from SMS4 outfalls;
 - b. Characterize stormwater discharges;
 - c. Identify sources of elevated pollutant loads and specific pollutants; and
 - d. Assess the overall health and evaluate long-term trends in water quality of impaired, not-attaining, or OAWs.
2. The permittee shall identify outfall locations in the SWMP that:
 - a. Discharge to impaired waters (Category 5);
 - b. Discharge to not-attaining waters (Category 4);
 - c. Discharge(s) to OAWs listed in A.A.C. R18-11-112; and
 - d. Are subject to additional monitoring required by ADEQ.

7.2 Stormwater Characterization Monitoring Requirements

1. Stormwater Sampling

The permittee shall conduct stormwater characterization monitoring of discharges from the SMS4 to protected surface waters. The permittee shall sample stormwater discharges from the SMS4, as required in Appendix B of this permit, one (1) time at each outfall identified by the permittee in sub-item 4 of this section, within the first three and one-half (3.5) years of the effective date of the permit. New permittees shall sample stormwater discharges from the SMS4 within the first three and one-half (3.5) years after obtaining permit coverage. This monitoring requirement shall provide discharge characterization data of stormwater discharges from the SMS4.

2. Qualifying Storm Event

The permittee shall conduct the required stormwater characterization monitoring for qualifying storm events. A “qualifying storm event” is defined as rainfall in the amount of 0.1 inches or more and a resulting discharge, within the first 24-hours of the event. A qualifying storm event also includes snowmelt that produces a measurable discharge at the outfall. The permittee shall design stormwater sampling procedures to include the “first flush” (first 30 minutes of storm event discharge) of a qualifying storm event, to the maximum extent practicable. In the case of snowmelt, the “first flush” provision does not apply.

3. Storm Event Records

The permittee shall include the characterization monitoring data from qualifying storm events in the discharge monitoring report (DMR), including, at a minimum, the following information:

- a. Date of the qualifying storm event; and
- b. Amount of rainfall (in inches) in the drainage area for each stormwater monitoring location identified in sub-item 4 of this section. The permittee may record snowmelt in place of a rainfall amount.

4. Monitoring Locations

The permittee shall identify at least three (3) outfalls or field screening points within the SMS4 representative of stormwater discharges from the SMS4, for stormwater characterization monitoring. The identified outfalls for this one-time characterization monitoring must be reported in a DMR, including the identification of the land use for the area served by the outfall from the following three categories (uses):

- a. Residential;

- b. Commercial; and
- c. Industrial.

The permittee's selected outfalls or field screening points must be representative SMS4 discharges to a protected surface water.

5. Adverse Climatic Conditions

Sampling of a qualifying storm event is not required during adverse climatic conditions. Adverse climatic conditions that prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (including local flooding, high winds, electrical storms, etc.). Information on the conditions that prevented sampling shall be reported to ADEQ with the DMRs. Where additional stormwater sampling is required, permittee shall continue to monitor subsequent storm events during the monitoring season and perform storm water sampling of a qualifying storm event if another occurs during the same wet season.

6. Stormwater Characterization Discharge Monitoring Report

All parameters listed in Appendix B shall be monitored. Any additional parameters may be monitored as determined by the permittee. All parameters monitored must be reported to ADEQ via the DMR in myDEQ.

ADEQ will provide an electronic DMR template in myDEQ for each permittee to record their stormwater characterization monitoring.

- a. The DMR shall be submitted within 30 days after receiving laboratory results from characterization monitoring.
- b. For existing permittees, the DMR will be available from October 1, 2026, through March 30, 2030, allowing the entry of data and/or no-discharge codes throughout the first three and one-half (3.5) years of permit coverage.
- c. For new permittees, a DMR will be made available for the first three and one-half (3.5) years after obtaining permit coverage.

If the permittee cannot complete the stormwater characterization monitoring specified in Part 7.2(1), within the first three and one-half (3.5) years, the permittee may request an extension.

- a. An extension request must be submitted by email ADEQ to stormwatercompliance@azdeq.gov. The email shall include the permit number, LTF number, and identify the permittee as a SMS4. The justification for the extension shall be included in the body of the email.
- b. If an extension is approved, stormwater characterization monitoring shall be completed before the end of the current permit term.

The permittee shall retain records of all stormwater monitoring information with the SWMP.

7.3 Sampling and Analysis Plan

The permittee shall develop a written sampling and analysis plan (SAP) for analytical monitoring of stormwater discharges, including but not limited to:

1. The name(s) and title of the person(s) who will perform the monitoring;
2. Locations of monitoring sites;
3. A map showing the segments or portions of the protected surface water that are most likely to be affected by the discharge of pollutant(s);
4. Water quality parameters and pollutants to be sampled;
5. The citation and description of the sampling protocols to be used; and
6. Identification of the analytical methods and related method detection limits (if applicable) for each parameter required. The permittee shall use analytical methods with a limit of quantitation (LOQ) that is lower than the effluent limitations, Assessment Levels, Action Levels, or other water quality criteria, if any, specified in this permit. If all methods have LOQs higher than the applicable water quality criteria, the permittee shall use the approved analytical method with the lowest LOQ.

7.4 Discharges to Impaired or Not-Attaining Waters or Outstanding Arizona Waters

1. Discharges to impaired or not-attaining waters:
 - a. If an outfall discharges to an impaired or not-attaining water, the permittee shall develop and implement a monitoring program for all pollutants for which the waterbody is listed.
 - b. If the waterbody is listed for suspended solids, turbidity, or sediment/sedimentation and the discharge occurs for more than 72 hours after the storm event, the permittee shall monitor for suspended sediment concentration (SSC). If the pollutant causing the impairment is expressed in the form of an indicator or surrogate pollutant, the permittee shall monitor for that indicator or surrogate pollutant.
 - c. The permittee shall comply with all applicable wasteload allocations (WLA) established in approved TMDLs. In the event monitoring requirements (including frequency and analytical parameters) are established in an approved TMDL, the permittee shall comply with the specifications in that TMDL.
2. Discharges to OAWs:
 - a. If the SMS4 has discharges to an OAW, the permittee shall perform analytical

monitoring for the following parameters:

- i. Biochemical oxygen demand (BOD);
- ii. Total suspended solids (nonfilterable) (TSS);
- iii. pH;
- iv. *Escherichia coli* (*E. coli*); and
- v. Oil and grease.

- b. The permittee shall also sample for any pollutants for which the OAW is impaired or not-attaining. This condition does not apply for discharges to OAWs that are non-WOTUS protected surface waters.

3. Discharges to a lake:

If the protected surface water is a lake that is impaired or not-attaining, the permittee shall develop and implement a site-specific proposal for sampling the affected area. The proposal shall be kept as part of the SWMP.

7.5 Monitoring Frequency and Deadlines

All SMS4s that have discharges to impaired or not-attaining waters, or OAWs shall perform analytical monitoring in accordance with the frequencies and deadlines stated in this section of the permit.

1. The permittee shall conduct analytical monitoring a minimum of one (1) time per wet season throughout the duration of permit coverage. Analytical monitoring is only required when stormwater or snowmelt discharges from an outfall in sufficient quantity to allow for sample collection and analysis.

For the purposes of analytical monitoring, wet seasons are defined as follows:

Summer wet season	June 1 – October 31
Winter wet season	November 1 – May 31

2. The permittee shall conduct analytical monitoring at outfalls observed or suspected to discharge the greatest amount of pollutants. Table 7 specifies the minimum number of outfalls to sample based on the total number of outfalls:

Table 7: Minimum Number of Outfalls to Sample	
Total Number of Outfalls	Number to Sample
1 to 4	All outfalls
5 to 20	5
over 20	10

The minimum number of outfalls to sample, specified in Table 7, applies to each wet season.

3. Calibration and Maintenance of Equipment and Monitoring Methods:

- a. All monitoring instruments and equipment (including the permittee's own field instruments for measuring pH and turbidity) shall be calibrated and maintained in accordance with manufacturers' recommendations.
- b. All laboratory analyses shall be conducted according to test procedures specified in 40 CFR §122 Part 136.
- c. The permittee shall use analytical methods with a Limit of Quantitation (LOQ) that is lower than the effluent limitations, Assessment Levels, Action Levels, or other water quality criteria, if any, specified in this permit. If all methods have LOQs higher than the applicable water quality criteria, the permittee shall use the approved analytical method with the lowest LOQ.
- d. All samples collected for analytical monitoring shall be analyzed by a laboratory that is licensed by the Arizona Department of Health Services (ADHS) Office of Laboratory Licensure and Certification. This requirement does not apply to parameters that require analysis at the time of sample collection as long as the testing methods used are approved by ADHS or ADEQ. These parameters may include:
 - i. Flow;
 - ii. Dissolved oxygen (DO);
 - iii. pH;
 - iv. Temperature; and
 - v. Total residual chlorine.
- e. The permittee may conduct field analysis of turbidity if the permittee has sufficient capability (including qualified and trained employees and properly calibrated and maintained field instruments) to properly perform the field analysis.
- f. The permittee may conduct field analysis of *E. coli* if the permittee has sufficient capability (including qualified and trained employees and properly calibrated and maintained field instruments) to properly perform the field analysis using Colilert or an equivalent method.

7.6 Analytical Monitoring Discharge Monitoring Report

1. All permittees subject to analytical monitoring shall submit the results on the electronic DMR in myDEQ within 30 days after receiving laboratory results.
2. In the event that no samples are collected during a wet season, the DMR indicating “no data” using the appropriate No Discharge Information (NODI) code(s) shall be submitted no later than:
 - a. June 30 (for winter sampling); and
 - b. November 30 (for summer sampling).

8.0 PROGRAM ASSESSMENT, RECORDKEEPING, AND REPORTING

8.1 Program Evaluation

1. The permittee shall annually self-evaluate its compliance with the terms and conditions of this permit. The permittee shall maintain the annual evaluation documentation as part of the SWMP.
2. The permittee shall evaluate the appropriateness of the selected BMPs in achieving the objectives of each control measure and the defined measurable goals. The permittee may change BMPs in accordance with the following provisions:
 - a. Components or controls may be added (not subtracted) at any time;
 - b. Ineffective or infeasible BMP specifically identified in the SWMP may be replaced with an alternative BMP if the proposed replacement meets the criteria in this section.
3. BMP modification documentation shall include the following information and all documentation shall be kept in the SWMP:
 - a. An analysis of why the BMP is ineffective or infeasible;
 - b. Expectations on the effectiveness of the replacement BMP; and
 - c. An analysis of why the replacement BMP is expected to achieve the defined goals of the BMP to be replaced.
4. ADEQ may require the permittee to add, modify, repair, replace, or change BMPs or other measures described in the SWMP:
 - a. To address impacts to receiving water quality caused or contributed to by discharges from the SMS4;
 - b. To satisfy the conditions of this permit;
 - c. To incorporate more stringent requirements necessary to comply with new state or federal legal requirements; or
 - d. To achieve attainment of SWQS.
5. Any changes requested by ADEQ will be in writing and will require the permittee to develop a schedule to implement the changes and will offer the permittee the opportunity to propose alternative program changes to meet the objective of the requested modification.

8.2 Recordkeeping

1. The permittee shall keep all records required by this permit for a period of three (3) years from the date the record is created. Records include, but are not limited to:
 - a. Information used in the development of any written program required by this permit;
 - b. Any and all monitoring results;
 - c. Copies of reports;
 - d. Records of screening, follow-up, and elimination of illicit discharges;
 - e. Maintenance records;
 - f. Inspection and enforcement action records; and
 - g. Data used in the development of the NOI, SWMP, plans, and annual reports.
2. Records other than those required to be included in the DMR (see Part 7.2(6) and 7.6 of this permit) and annual report shall be submitted upon request by ADEQ or U.S. EPA.
3. Requirements for discharges to non-WOTUS protected surface waters are state-only and records need only be submitted to ADEQ.
4. The permittee shall make the records relating to this permit, including the SWMP plan, available to the public. The public may view the records during normal business hours. The permittee may charge a reasonable fee for copying requests. The permittee is encouraged to satisfy this requirement by posting records online.

8.3 Annual Report

The permittee shall submit an annual report each year of the permit term to ADEQ. The reporting period is from July 1 through June 30 each year. The annual report is due on or before September 30 each year for the reporting period (see Appendix A of this permit).

9.0 STANDARD PERMIT CONDITIONS

Standard permit conditions in Part 9 are consistent with the general permit provisions required under 40 CFR §122.41 and A.A.C. R18-9-A905(A)(3).

1. Duty to Comply: (A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR122.41(a)(1) and A.R.S. §§ 49-261, 262, 263.01, and 263.02)

- a. The operator shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act, A.R.S. Title 49, Chapter 2, Article 3.1, and A.A.C. Title 18, Chapter 9, Article 9, and is grounds for enforcement action, permit termination, revocation and reissuance, or modification, or denial of a permit renewal application.
- b. The issuance of this permit does not waive any federal, state, county, or local regulations or permit requirements with which a person discharging under this permit is required to comply.
- c. The operator shall comply with any effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

2. Duty to Reapply / Continuation of the Expired General Permit: (A.A.C. R18-9-A905, which incorporates 40 CFR §122.41(b) and A.A.C. R18-9-C903)

- a. Upon reissuance of the general permit, the permittee shall file an NOI, within the timeframe specified in the new general permit, and shall obtain new written authorization to discharge from the Director.
- b. If the Director does not reissue the general permit before the expiration date, the current general permit will be administratively continued and remain in force and effect until the general permit is reissued.
- c. Any operator granted authorization to discharge under the general permit before the expiration date automatically remains covered by the continued general permit until the earlier of:
 - i. Reissuance or replacement of the general permit, at which time the operator shall comply with the NOI conditions of the new general permit to maintain authorization to discharge; or
 - ii. The date the operator has submitted a NOT; or
 - iii. The date the Director has issued an individual permit for the discharge; or
 - iv. The date the Director has issued a formal permit decision not to reissue the general permit, at which time the operator shall seek coverage under an alternative general permit or an individual permit, or cease discharge.

3. Need to Halt or Reduce Activity Not a Defense: (A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR §122.41(c))

It shall not be a defense for an operator in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

4. Duty to Mitigate: (A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR §122.41(d))

The operator shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment per A.R.S. § 49-255.01(E)(1)(d).

5. Proper Operation and Maintenance: (A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR §122.41(e))

The operator shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the operator to achieve compliance with the conditions of this permit. Proper operation and maintenance also include adequate laboratory controls and appropriate quality assurance procedures.

6. Permit Actions: (A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR §122.41(f))

This permit may be modified, revoked and reissued, or terminated for cause. Filing a request by the operator for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

7. Property Rights: (A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR §122.41(g))

This permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, nor any infringement of federal, state, Indian tribe, or local laws or regulations.

8. Duty to Provide Information: (A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR §122.41(h))

The operator shall furnish to ADEQ, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The operator shall also furnish to ADEQ upon request, copies of records required to be kept by this permit.

9. Signatory Requirements: (A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR §122.41(k) and (l); A.A.C. R18-9-A905(A)(1)(c), which incorporates 40 CFR §122.22)

- a. All Notices of Intent (NOI) and Notices of Termination (NOT) shall be signed as follows:

- i. For a corporation: By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
 - ii. For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or
 - iii. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal (or state) agency includes: (1) The chief executive officer (or director) of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
- b. All NOTs, reports, plans, inspection reports, monitoring reports, and other information required by this permit shall be signed by a person described in Part 9.9(a), above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- i. The authorization is made in writing by a person described in Subsection 9(a) above;
 - ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of manager, operator, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may be either a named individual or any individual occupying a named position); and
 - iii. The signed and dated written authorization is included in the SWMP. A copy shall be submitted to ADEQ, upon request.

- c. Certification. Any person signing documents under the terms of this permit shall make the following 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 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. Inspection and Entry: (A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR §122.41(i))

The operator shall allow the Director or an authorized representative upon the presentation of credentials and such other documents as may be required by law to:

- a. Enter upon the operator's premises where a regulated facility or activity is located or conducted or where records shall be kept under the conditions of this permit;
- b. Have access to and copy at reasonable times, any records that shall be kept under the conditions of this general permit;
- c. Inspect at reasonable times any facility or equipment (including monitoring and control equipment), practices or operations regulated or required under this permit;
- d. Sample or monitor at reasonable times any substances or parameters at any location, for the purposes of assuring permit compliance or as otherwise authorized by A.R.S. Title 49, Chapter 2, Article 3.1, and 18 A.A.C. 9, Articles 9.

11. Monitoring and Records: (A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR §122.41(j))

- a. Representative Samples/Measurements: Samples and measurements taken for the purpose of monitoring shall be representative of the volume and nature of the monitored activity.
- b. Retention of Records: The operator shall retain records of all monitoring information, including all calibration and maintenance records, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date permit coverage ends. Operators shall submit any such records to the Director upon request. The operator shall retain the SWMP developed in accordance with

Part 4 of this permit, for at least three (3) years after the last modification or amendment is made to the plan. The Director may extend this retention period upon request by notifying the operator in writing at any time prior to the end of the standard three-year retention period.

- c. Records Contents: Records of monitoring information shall include:
- i. The date, exact location, and time of sampling or measurements;
 - ii. The initials or name(s) of the individual(s) who performed the sampling or measurements;
 - iii. The date(s) analyses were performed;
 - iv. The time(s) analyses were initiated;
 - v. The initials or name(s) of the individual(s) who performed the analyses;
 - vi. References and written procedures, when available, for the analytical techniques or methods used;
 - vii. The analytical techniques or methods used; and
 - viii. The results of such analyses.
- d. Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained in this permit is subject to the enforcement actions established under A.R.S. Title 49, Chapter 2, Article 4, which includes the possibility of fines and/or imprisonment.

12. Reporting Requirements: (A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR §122.41(l))

- a. Planned changes: The operator shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
- i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR §122.29(b) (incorporated by reference at A.A.C. R18-9-A905(A)(1)(e)); or
 - ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR §122.42(a)(1) (incorporated by reference at A.A.C. R18-9-A905(A)(3)(b)).
- b. Monitoring reports: Monitoring results shall be reported at the intervals specified elsewhere in this permit.
- i. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or forms (paper or electronic) provided or specified by ADEQ.

- ii. If the operator monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
- iii. Calculations for all limitations which require averaging of measurements shall use an arithmetic mean and non-detected results shall be incorporated in calculations as the limit of quantitation for the analysis.

c. Anticipated noncompliance:

The operator shall give advance notice to the Director of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

d. Twenty-four hour reporting:

For emergency noncompliance which may endanger the environment or human health and reach a protected surface water, the permittee shall orally report the information to the ADEQ Spill Line at 602-771-2330, within 24 hours from the time the permittee becomes aware of the event.

For non-emergency noncompliance, the permittee shall provide a written notification to ADEQ at stormwatercompliance@azdeq.gov within five (5) calendar days of the noncompliance event. The permittee shall include in the written notification a description of the noncompliance and its cause; the period of noncompliance, including dates and times, and, if the noncompliance has not been corrected, the anticipated timeline it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

- a. Other information: When the permittee becomes aware that it failed to submit any relevant facts or submitted incorrect information in an NOI or in any other report to ADEQ, the permittee shall promptly submit the facts or information to stormwatercompliance@azdeq.gov.

13. Reopener Clause: (A.A.C. R18-9-A905(A)(3)(d), which incorporates 40 CFR 122.44(c))

The Department may elect to modify the permit prior to its expiration (rather than waiting for the new permit cycle) to comply with any new statutory or regulatory requirements, such as for effluent limitation guidelines, which may be promulgated in the course of the current permit cycle.

14. Other Environmental Laws:

No condition of this general permit releases the operator from any responsibility or requirements under other environmental statutes or regulations. For example, this permit does not authorize the “taking” of endangered or threatened species as prohibited by Section 9 of the Endangered Species Act, 16 U.S.C. 1538. Information regarding the location of endangered and threatened species and guidance on what activities constitute a “taking” are available from the U.S. Fish and Wildlife Service. The operator shall also comply with applicable State and Federal laws, including Spill Prevention Control and Countermeasures (SPCC), where applicable.

15. State or Tribal Law: (Pursuant to A.A.C. R18-9-A904(C))

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties established pursuant to any applicable State or Tribal law or regulation under authority preserved by Section 510 of the Clean Water Act.

16. Severability:

The provisions of this general permit are severable, and if any provision of this general permit, or the application of any provision of this general permit to any circumstance, is held invalid, the application of the provision to other circumstances, and the remainder of this general permit shall not be affected.

17. Requiring Coverage under an Individual Permit or an Alternative General Permit:
(Pursuant to A.A.C. R18-9-C902 and R18-9-A909)

- a. The Director may require a person authorized by this permit to apply for and/or obtain either an individual AZPDES permit or an alternative AZPDES general permit. Any interested person may petition the Department to take action under this section. The Department may require an operator authorized to discharge under this permit to apply for an individual permit in any of the following cases:
 - i. A change occurs in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;
 - ii. Effluent limitation guidelines are promulgated for point sources covered by the general permit;
 - iii. An Arizona Water Quality Management Plan containing requirements applicable to the point sources is approved;
 - iv. Circumstances change after the time of the request to be covered so that the discharger is no longer appropriately controlled under the general permit, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary;

- v. If the Director determines that the discharge is a significant contributor of pollutants. When making this determination, the Director shall consider:
 - 1. The location of the discharge with respect to protected surface waters;
 - 2. The size of the discharge;
 - 3. The quantity and nature of the pollutants discharged to protected surface waters; and
 - 4. Any other relevant factors.
- b. If an individual permit is required, the Director shall notify the discharger in writing of the decision. The notice shall include:
 - i. A brief statement of the reasons for the decision;
 - ii. An application form;
 - iii. A statement setting a deadline to file the application;
 - iv. A statement that on the effective date of issuance or denial of the individual permit, coverage under the general permit will automatically terminate;
 - v. The applicant's right to appeal the individual permit requirement with the Water Quality Appeals Board under A.R.S. § 49-323, the number of days the applicant has to file a protest challenging the individual permit requirement, and the name and telephone number of the Department contact person who can answer questions regarding the appeals process; and
 - vi. The applicant's right to request an informal settlement conference under A.R.S. 41-1092.03(A) and 41-1092.06.
- c. The discharger shall apply for an individual permit within 90 days of receipt of the notice, unless the Director grants a later date. In no case shall the deadline be more than 180 days after the date of the notice.
- d. If the discharger fails to submit the individual permit application within the time period established in Part 9.17(c) the applicability of the general permit to the discharger is automatically terminated at the end of the day specified by the Director for application submission .
- e. Coverage under the general permit shall continue until an individual permit is issued or denied unless the general permit coverage is terminated under Part 9.17(d).

18. Request for an Individual Permit: (Pursuant to A.A.C. R18-9-C902)

- a. An operator may request an exclusion from coverage of a general permit by applying for an individual permit.
 - i. The operator shall submit an individual permit application under R18-9-B901(B) and include the reasons supporting the request no later than 90 days after publication of the general permit.

- ii. The Director shall grant the request if the reasons cited by the operator are adequate to support the request.
- b. If an individual permit is issued to a person otherwise subject to a general permit, the applicability of the general permit to the discharge is automatically terminated on the effective date of the individual permit.

19. Change of Operator: (A.A.C. R18-9-C904)

If a change of ownership or operator occurs for a facility operating under a general permit:

- a. Permitted owner or operator: The operator shall provide the Department with a NOT by certified mail within 30 days after the new owner or operator assumes responsibility for the facility.
 - i. The NOT shall include all requirements for termination specified in the general permit for which the NOT is submitted.
 - ii. An operator shall comply with the permit conditions specified in the general permit for which the NOT is submitted until the NOT is received by the Department.
- b. New owner or operator:
 - i. The new owner or operator shall complete and file an NOI with the Department within the time period specified in the general permit before taking over operational control of, or initiation of activities at, the facility.
 - ii. If the previous operator was required to implement a stormwater pollution prevention plan, the new owner shall develop a new stormwater pollution prevention plan, or may modify, certify, and implement the old stormwater pollution prevention plan if the old stormwater pollution prevention plan complies with the requirements of the current general permit.
 - iii. The operator shall provide the Department with a NOT if a permitted facility ceases operation, ceases to discharge, or changes operator status. In the case of a construction activity, the operator shall submit a NOT to the Department when:
 - 1. The facility ceases construction operations and the discharge is no longer associated with construction or construction-related activities,
 - 2. The construction is complete and final site stabilization is achieved, or
 - 3. The operator's status changes.

20. Bypass: (A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR 122.41(m))

- a. Definitions:
 - i. Bypass means the intentional diversion of waste streams from any portion of a treatment facility;

- ii. Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
 - b. Bypass not exceeding limitations: The operator may allow any bypass to occur that does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions Part 9.20(c) and 20(d).
 - c. Notice:
 - i. Anticipated bypass. If the operator knows in advance of the need for a bypass, if possible prior notice shall be submitted at least ten days before the date of the bypass.
 - ii. Unanticipated bypass. The operator shall submit notice of an unanticipated bypass as required in Part 9.12(d).
 - d. Prohibition of bypass:
 - i. Bypass is prohibited, and ADEQ may take enforcement action against the operator for bypass, unless:
 - 1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - 2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - 3. The operator submitted notices as required under Part 9.20(c).
 - ii. ADEQ may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above Part 9.20(d).
- 21. Upset:** (A.R.S. §§ 49-255(8) and 255.01(E), A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR §122.41(n))
- a. Definition: Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the operator. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

- b. Effect of an upset: An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Part 9.21(c) are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- c. Conditions necessary for a demonstration of upset: An operator who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - i. An upset occurred and the operator can identify the cause(s) of the upset;
 - ii. The permitted facility was at the time being properly operated;
 - iii. The operator submitted notice of the upset as required in Part 9.12(d)(iii); and
 - iv. The operator complied with any remedial measures required under Part 9.4.
- d. Burden of proof: in any enforcement proceeding, the operator, who is seeking to establish the occurrence of an upset, has the burden of proof.

22. Penalties for Violations of Permit Conditions

Any permit noncompliance constitutes a violation and is grounds for an enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application.

- a. Civil Penalties: A.R.S. § 49-262 provides that any person who violates any provision of A.R.S. Title 49, Chapter 2, Article 2, 3 or 3.1 or a rule, permit, discharge limitation or order issued or adopted under A.R.S. Title 49, Chapter 2, Article 3.1 is subject to a civil penalty not to exceed \$25,000 per day per violation.
- b. Criminal Penalties: Any person who violates a condition of this general permit, or violates a provision under A.R.S. Title 49, Chapter 2, Article 3.1, or A.A.C. Title 18, Chapter 2, Article 9 is subject to the enforcement actions established under A.R.S. Title 49, Chapter 2, Article 4, which may include the possibility of fines and/or imprisonment.

10.0 DEFINITIONS

Analytical monitoring – monitoring conducted to provide quantitative results in accordance with A.A.C. R18-9-A905(B).

Best management practices (BMPs) – schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of “surface waters.” BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. Also called Controls or Control Measures.

Common plan of development – a contiguous area where multiple separate and distinct land disturbing activities may be taking place at different times, on different schedules, but under one plan. A ‘plan’ is broadly defined to include design, permit application, advertisement or physical demarcation indicating that land-disturbing activities may occur.

Construction activity – earth-disturbing activities such as, clearing, grading, excavating, stockpiling of fill material and other similar activities. This definition encompasses both large construction activities defined in 40 CFR §122.26 (b)(14)(x) and small construction activities in 40 CFR §122.26 (b)(15)(i) and includes construction support activities.

Controls or Control Measures or Measures – see Best Management Practices (BMPs).

CWA or The Act – Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub. L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483 and Pub. L. 97-117, 33 U.S.C. 1251 et seq.

Department – means the Arizona Department of Environmental Quality (ADEQ).

Director – the Director of ADEQ.

Discharge – means the “discharge of a pollutant”.

Discharge of a pollutant – means:

- a. Any addition of any “pollutant” or combination of pollutants to protected surface waters from any “point source,” or
- b. Any addition of any pollutant or combination of pollutants to the protected surface waters of the “contiguous zone” or the ocean from any point source other than a vessel or other floating craft, which is being used as a means of transportation.

This definition includes additions of pollutants into protected surface waters from:

- a. Surface runoff which is collected or channeled by man;
- b. Discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other person which do not lead to a treatment works; and

- c. Discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works.

This term does not include an addition of pollutants by any “indirect discharger”.

Discharge point – the location where stormwater flows exit the SMS4 or other regulated activities, such as construction sites and industrial sites.

Effluent limitations – any limitation or condition on quantities, discharge rates, or concentration of pollutants, which are discharged from a point source.

Effluent Limitations Guideline (ELG) – defined in 40 CFR § 122.2 as a regulation published by the Administrator under section 304(b) of CWA to adopt or revise effluent limitations.

Existing permittees – SMS4 operators who had coverage under ADEQ’s 2021 SMS4 General Permit.

Facility – any “point source” or any other facility (including land or appurtenances thereto) that is subject to regulation under the AZPDES/NPDES program.

Field Screening Point –location(s) where municipal stormwater leaves a SMS4 operator’s permitted area and travels to a protected surface water by way of a discrete and channelized conveyance (such as another municipal storm sewer system).

Illicit connection – any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer.

Illicit Discharge – any discharge to a municipal separate storm sewer that is not composed entirely of stormwater except discharges pursuant to an AZPDES/NPDES permit (other than the AZPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from firefighting activities.

Impaired water – waters that have been assessed by ADEQ, under the Clean Water Act, as not attaining a water quality standard for at least one (1) designated use, and are listed in Arizona’s current 303(d) List or on the 305(b) Category 4 list.

Maximum Extent Practicable (MEP) – the technology-based discharge standard for municipal separate storm sewer systems to reduce pollutants in storm water discharges. A discussion of MEP as it applies to SMS4 is found at 40 CFR §122.34. CWA section 402(p)(3)(B)(iii) requires that a municipal permit “shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system design, and engineering methods, and other provisions such as the Administrator or the State determines appropriate for the control of such pollutants.

Measurable goal – a quantitative measure of progress in implementing a component of a storm water management program (SWMP).

Minimize – to reduce and/or eliminate to the extent achievable using control measures that are technologically available and economically practicable and achievable in light of best industry practices.

Municipal separate storm sewer – a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- a. Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under section 208 of the Clean Water Act (33 U.S.C. 1288) that discharges to protected surface waters;
- b. Designed or used for collecting or conveying stormwater;
- c. Which is not a combined sewer; and
- d. Which is not part of a Publicly Owned Treatment Works.

Municipal separate storm sewer system (SMS4) – all separate storm sewers defined as “large,” “medium,” or “small” municipal separate storm sewer systems or any municipal separate storm sewers on a system-wide or jurisdiction-wide basis as determined by the Director under A.A.C. R18-9-C902(A)(1)(g)(i) through (iv). [A.A.C. R18-9-A901(23)]. This also includes similar systems owned or operated by separate storm sewer municipal jurisdictions not required to obtain stormwater discharge authorization.

New permittees – SMS4 operators who did not have permit coverage under ADEQ’s 2021 SMS4 General Permit.

Non-Fileers – construction or industrial sites operating within a SMS4 that do not appear to have active stormwater coverage (for construction, signage indicating a CGP NOI authorization number) that discharge into a SMS4 storm sewer.

Not-Attaining Water – a protected surface water is assessed as impaired, but is not placed on the 303(d) List or equivalent for non-WOTUS protected state waters because:

- a. A TMDL is prepared and implemented for the surface water;
- b. An action, which meets the requirements of R18-11-604(D)(2)(h), is occurring and is expected to bring the surface water to attaining before the next 303(d) List submission; or
- c. The impairment of the surface water is due to pollution but not a pollutant, for which a TMDL load allocation cannot be developed.

Non-traditional SMS4 – systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings. [40 CFR §122.26(a)(16)(iii)].

Non-WOTUS protected surface water – means a protected surface water, as listed under (A.R.S. §49-221(G)), that is not a water of the United States (WOTUS).

Notice of Intent (NOI) – the application to operate under this general permit.

Notice of Termination (NOT) – the application to terminate coverage under this general permit.

Outfall – a *point source* as defined by 40 CFR §122.2 at the point where a municipal separate storm sewer discharges to protected surface waters. An outfall does not include open conveyances connecting two (2) municipal separate storm sewers, or pipes, tunnels or other conveyances, which connect segments of the same stream or other protected surface waters and are used to convey protected surface waters.

Outstanding Arizona Water (OAW) – a protected surface water that has been designated by ADEQ as an outstanding state resource under A.A.C. R18-11-112.

Owner or operator – the owner or operator of any “facility or activity” subject to regulation under the NPDES program.

Permittee – refers to any person (defined below) authorized by this NPDES permit to discharge to protected surface waters.

Person – an individual, employee, officer, managing body, trust, firm, joint stock company, consortium, public or private corporation, including a government corporation, partnership, association or state, a political subdivision of this state, a commission, the U.S. government or any federal facility, interstate body, or other entity.

Point source – any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

Pollutant – sediment, fluids, contaminants, toxic wastes, toxic pollutants, dredged spoil, solid waste, substances and chemicals, pesticides, herbicides, fertilizers and other agricultural chemicals, incinerator residue, sewage, garbage, sewage sludge, munitions, petroleum products, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt (e.g., overburden material), and mining, industrial, municipal and agricultural wastes or any other liquid, solid, gaseous or hazardous substances. [A.R.S. § 49-201(29)]

Protected Surface Water – waters of the State listed on the protected surface water list under Section §49-221, Subsection G and all Waters of the United States (WOTUS). Protected Surface Waters are established and administered under the Arizona Surface Water Protection Program (SWPP) pursuant to A.R.S. Title 49, Chapter 2, Article 3.1 *et seq.*

Receiving water – as used in this permit means a Protected Surface Water that receives discharges from the SMS4.

Stormwater – stormwater runoff, snow melt runoff, and surface runoff and drainage. See 40 CFR §122.26(b)(13) as incorporated by AAC R18-9-A905.

Stormwater discharge associated with construction activity – a discharge of pollutants in stormwater runoff from areas where soil disturbing activities (e.g., clearing, grading, or excavating), construction materials, or equipment storage or maintenance (e.g., fill piles, borrow areas, concrete truck washout, fueling), or other industrial stormwater directly related to the construction process (e.g., concrete or asphalt batch plants) are located. See 40 CFR §122.26(b)(14)(x) and 40 CFR §122.26(b)(15).

Stormwater discharge associated with industrial activity – a discharge from any conveyance which is used for collecting and conveying stormwater and which is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant (See 40 CFR §122.26(b)(14) for specifics of this definition).

Stormwater Management Program (SWMP) – a comprehensive program to manage the quality of stormwater discharged from the municipal separate storm sewer system. For the purposes of this permit, the Stormwater Management Program is considered a single document, but may actually consist of separate programs (e.g. "chapters") for each permittee.

Stormwater Pollution Prevention Plan (SWPPP) – a site-specific, written document that, among other things: identifies potential sources of stormwater pollution at the location of the disturbance; describes control measures to reduce or eliminate pollutants in stormwater discharges from the facility/activity; and identifies procedures the operator will implement to comply with the terms and conditions of the general permit (typically CGP or MSGP).

Surface Water Quality Standards – means a standard adopted for a protected surface water pursuant to Section 49-221 and, in the case of WOTUS, pursuant to Section 49-222.

Total Maximum Daily Load (TMDL) – an estimation of the total amount of a pollutant from all sources that may be added to a water while still allowing the water to achieve and maintain applicable SWQS. Each total maximum daily load shall include allocations for sources that contribute the pollutant to the water. Total Maximum Daily Loads for Waters of the U.S. shall meet the requirements of section 303(d) of the Clean Water Act (33 USC 1313(d) and regulations implementing that statute to achieve applicable surface water quality standards."

Turbidity – a condition of water quality characterized by the presence of suspended solids and/or organic material; expressed as Nephelometric turbidity units (NTU).

Urban Area – urban areas with a population of at least 50,000 as defined by the SMS4.

Wasteload allocation (WLA) – The maximum load of pollutants each discharger of waste is allowed to release into a particular waterway. Discharge limits are usually required for each specific water quality criterion being, or expected to be, violated. WLAs constitute a type of water quality-based effluent limitation (see 40 C.F.R. § 130.2(h)).

Waters of the United States (WOTUS) – means the waters of the United States as defined by section 502.(7) of the CWA (33 United States Code section 1362(7)). [A.R.S. §49-201(53); A.A.C. R18-9-A901(26)].

Waters of the U.S. – see Waters of the United States (WOTUS).

Wetland – an area that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. A wetland includes a swamp, marsh, bog, Cienega, tinaja, and similar areas. [A.A.C. R18-11-101(49)].

Appendix A: Annual Report Requirements

4.0 Stormwater Management Program (SWMP):

1. Did the permittee assess and evaluate the SWMP as part of preparing the annual report, per Permit Section 4.0?

6.0 Minimum Control Measures (MCMs):

2. Did the permittee have another entity implement control measures on behalf of the SMS4 per Permit Section 6.0(2)? If yes, identify the entity and give a brief explanation of their involvement.

6.1 MCM1: Public Education and Outreach:

3. Did the permittee provide outreach and education to the public on the stormwater program issues and requirements, per Permit Section 6.1(1)?
 - a. Identify the target group and topic used for outreach and education.
 - b. Identify the message used for each target group and topic.
 - c. Identify how the message was conveyed to each target group.
 - d. Identify measures/methods used to assess the effectiveness of the message used for each target group.
4. Did the permittee provide outreach and education to the public on the stormwater program issues and requirements, per Permit Section 6.1(2)?
 - a. Identify the target group and topic used for outreach and education.
 - b. Identify the message used for each target group and topic.
 - c. Identify how the message was conveyed to each target group.
 - d. Identify measures/methods used to assess the effectiveness of the message used for each target group.

6.2 MCM2: Public Participation and Involvement:

5. Did the permittee post the SWMP and annual report on its website, per Permit Section 6.2(1)?
6. Did the permittee provide and publicize a reporting system to facilitate and track public reporting of spills, discharges, and/or dumping to the SMS4 on a continuous basis, per Permit Section 6.2(4)?

6.3 MCM3: IDDE:

7. a. Provide a narrative description of the status of the storm sewer mapping, per Permit Section 6.3(1).

- b. What is the date of the most recent storm sewer system map showing the location of all outfalls?
- 8. a. Did the permittee establish an ordinance or other regulatory mechanism for enforcement procedures of the IDDE program, per Permit Section 6.3(2)?
b. What is the citation of the ordinance or other regulatory mechanism to prohibit non-stormwater discharges into the permittee's SMS4?
- 9. Did the permittee establish or update the "statement of IDDE program responsibilities", per Permit Section 6.3(3)?
- 10. Did the permittee submit a summary of the IDDE activities in a tabular format per Permit Section 6.3(4)?
- 11. Did the permittee visually monitor at least 20% of all outfalls this permit year, per Permit Section 6.3(7)?
- 12. Did the permittee identify indicators of IDDE program progress or success per Permit Section 6.3(8)?
- 13. Did the permittee provide annual staff training, per Permit Section 6.3(9)?
 - a. Approximately how many staff attended?
 - b. What was the topic?

6.4 MCM4: Construction Activity Stormwater Runoff Control:

- 14. a. Did the permittee establish an ordinance or other regulatory mechanism for enforcement procedures of the construction activity stormwater runoff control program, per Permit Section 6.4(2)(a)?
b. What is the citation of the ordinance or other regulatory mechanism to require erosion and sediment controls, including sanctions to ensure compliance?
- 15. Did the permittee implement a construction site inventory, per Permit Section 6.4(2)(b)?
- 16. Did the permittee develop written procedures for site plan review, per Permit Section 6.4(2)(c)?
- 17. Did the permittee implement written procedures for site inspections and enforcement of control measures, per Permit Section 6.4(2)(f)?
 - a. How many construction site inspections were done in the permit year?
 - b. How many follow-up actions were necessary (re-inspection, enforcement actions)?
- 18. Did the permittee develop and implement an educational program focused on erosion and sediment control for construction operators, per Permit Section 6.4(2)(h)?

19. Did the permittee develop and implement a program requiring construction operators to control wastes from their sites, per Permit Section 6.4(2)(i)?
20. Did the permittee implement procedures to receive and act on information submitted by the public (complaints), per Permit Section 6.4(4)?

6.5 MCM5: Post Construction:

21. Did the permittee implement a program that includes a combination of structural and non-structural BMPs, per Permit Section 6.5(1)?
22. a. Did the permittee establish an ordinance or other regulatory mechanism for enforcement procedures of the post-construction stormwater management, per Permit Section 6.5(2)?
b. What is the citation for the ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects?
23. Did the permittee implement a program to prevent or minimize impacts to water quality from stormwater runoff from new development and redevelopment sites, per Permit Section 6.5(2)?
24. Did the permittee implement procedures for site plan review, per Permit Section 6.5(3)?
25. Did the permittee implement an inventory of post-construction site structural stormwater control measures installed within the SMS4, per Permit Section 6.5(4)?
26. Did the permittee implement a program to ensure the long-term operation and maintenance of post-construction BMPs, per Permit Section 6.5(5)?

6.6 MCM6: Pollution Prevention and Good Housekeeping:

27. Did the permittee implement a program to reduce or eliminate discharges of pollutants from facilities and operations, per Permit Section 6.6(1)?
28. Did the permittee implement a program to ensure the long-term operation and maintenance of stormwater BMPs, per Permit Section 6.6(2)?
29. Did the permittee develop an inventory of facilities, prioritized based on their risk of discharging pollutants, per Permit Section 6.6(2)(a) and (b)?
30. Did the permittee implement an inspection schedule for prioritized facilities, per Permit Section 6.6(2)(c)?
31. Did the permittee implement an annual training program for staff that incorporates pollution prevention and good housekeeping techniques, per Permit Section 6.6(2)(f)?
 - a. Approximately how many staff attended?
 - b. What was the topic?

32. Did the permittee develop maintenance activities, schedules, and long-term inspections to reduce floatables, trash, and other pollutants discharged from the SMS4, per Permit Section 6.6(2)(g)?
33. Does the permittee discharge to an impaired water or not-attaining water, or an Outstanding Arizona Water (OAW)?
- a. If so, are outfall locations that discharge to impaired, not-attaining, or OAW identified in the SWMP, per Permit Section 7.1(2)?
 - b. Did the permittee develop and implement a monitoring and assessment program, per Permit Section 7.1(1)?
 - c. Did the permittee develop a sampling and analysis plan for analytical monitoring, per Permit Section 7.3?
 - d. Did the permittee submit all required DMRs for analytical monitoring during the reporting period, per Permit Section 7.6?
34. Did the permittee conduct the annual program evaluation, per Permit Section 8.1(1)?

Appendix B: Stormwater Characterization Monitoring Requirements

All permittees shall conduct stormwater characterization monitoring for the parameters listed in Table B, as required by Parts 7.1, 7.2, and 7.3 of this permit.

Table B: Analytical Wet Weather Characterization Monitoring

Parameter	Units	Monitoring Frequency	Monitoring Type
Metals			
Antimony	µg/L	1x during first 42 months of permit term	Discrete
Barium	µg/L	1x during first 42 months of permit term	Discrete
Beryllium	µg/L	1x during first 42 months of permit term	Discrete
Cadmium	µg/L	1x during first 42 months of permit term	Discrete
Nickel	µg/L	1x during first 42 months of permit term	Discrete
Mercury	µg/L	1x during first 42 months of permit term	Discrete
Silver	µg/L	1x during first 42 months of permit term	Discrete
Thallium	µg/L	1x during first 42 months of permit term	Discrete
Inorganics			
Cyanide	µg/L	1x during first 42 months of permit term	Discrete
Volatile Organic Compounds (VOCs)			
Acrolein	µg/L	1x during first 42 months of permit term	Discrete
Acrylonitrile	µg/L	1x during first 42 months of permit term	Discrete
Benzene	µg/L	1x during first 42 months of permit term	Discrete
Carbon tetrachloride	µg/L	1x during first 42 months of permit term	Discrete
Chlorobenzene	µg/L	1x during first 42 months of permit term	Discrete
Dibromochloromethane	µg/L	1x during first 42 months of permit term	Discrete

Parameter	Units	Monitoring Frequency	Monitoring Type
Chloroethane	µg/L	1x during first 42 months of permit term	Discrete
2-chloroethylvinyl ether	µg/L	1x during first 42 months of permit term	Discrete
Chloroform	µg/L	1x during first 42 months of permit term	Discrete
Bromodichloromethane	µg/L	1x during first 42 months of permit term	Discrete
1,2-dichlorobenzene	µg/L	1x during first 42 months of permit term	Discrete
1,3-dichlorobenzene	µg/L	1x during first 42 months of permit term	Discrete
1,4-dichlorobenzene	µg/L	1x during first 42 months of permit term	Discrete
1,1-dichloroethane	µg/L	1x during first 42 months of permit term	Discrete
1,2-dichloroethane	µg/L	1x during first 42 months of permit term	Discrete
1,3-dichloropropylene	µg/L	1x during first 42 months of permit term	Discrete
Ethylbenzene	µg/L	1x during first 42 months of permit term	Discrete
Bromomethane	µg/L	1x during first 42 months of permit term	Discrete
Chloromethane	µg/L	1x during first 42 months of permit term	Discrete
Methylene chloride	µg/L	1x during first 42 months of permit term	Discrete
1,1,2,2-tetrachloroethane	µg/L	1x during first 42 months of permit term	Discrete
Tetrachloroethylene	µg/L	1x during first 42 months of permit term	Discrete
Toluene	µg/L	1x during first 42 months of permit term	Discrete
1,2-trans-dichloroethylene	µg/L	1x during first 42 months of permit term	Discrete
1,1,1-trichloroethane	µg/L	1x during first 42 months of permit term	Discrete
1,1,2-trichloroethane	µg/L	1x during first 42 months of permit term	Discrete
Trichloroethylene	µg/L	1x during first 42 months of permit term	Discrete

Parameter	Units	Monitoring Frequency	Monitoring Type
Vinyl chloride	µg/L	1x during first 42 months of permit term	Discrete
Xylene	µg/L	1x during first 42 months of permit term	Discrete
Semi-VOCs - Acid Extractable			
2-chlorophenol	µg/L	1x during first 42 months of permit term	Discrete
2,4-dichlorophenol	µg/L	1x during first 42 months of permit term	Discrete
2,4-dimethylphenol	µg/L	1x during first 42 months of permit term	Discrete
4,6-dinitro-o-cresol	µg/L	1x during first 42 months of permit term	Discrete
2,4-dinitrophenol	µg/L	1x during first 42 months of permit term	Discrete
2-nitrophenol	µg/L	1x during first 42 months of permit term	Discrete
4-nitrophenol	µg/L	1x during first 42 months of permit term	Discrete
p-chloro-m-cresol	µg/L	1x during first 42 months of permit term	Discrete
Pentachlorophenol	µg/L	1x during first 42 months of permit term	Discrete
Phenol	µg/L	1x during first 42 months of permit term	Discrete
2,4,6-trichlorophenol	µg/L	1x during first 42 months of permit term	Discrete
Semi-VOCs – Base/Neutrals			
Acenaphthene	µg/L	1x during first 42 months of permit term	Discrete
Acenaphthylene	µg/L	1x during first 42 months of permit term	Discrete
Anthracene	µg/L	1x during first 42 months of permit term	Discrete
Benz(a)anthracene	µg/L	1x during first 42 months of permit term	Discrete
Benzo(a)pyrene	µg/L	1x during first 42 months of permit term	Discrete
Benzo(b)fluoranthene	µg/L	1x during first 42 months of permit term	Discrete

Parameter	Units	Monitoring Frequency	Monitoring Type
Benzo(g,h,i)perylene	µg/L	1x during first 42 months of permit term	Discrete
Benzo(k)fluoranthene	µg/L	1x during first 42 months of permit term	Discrete
Chrysene	µg/L	1x during first 42 months of permit term	Discrete
Dibenzo(a,h)anthracene	µg/L	1x during first 42 months of permit term	Discrete
3,3'-dichlorobenzidine	µg/L	1x during first 42 months of permit term	Discrete
Diethyl phthalate	µg/L	1x during first 42 months of permit term	Discrete
Dimethyl phthalate	µg/L	1x during first 42 months of permit term	Discrete
Di-n-butyl phthalate	µg/L	1x during first 42 months of permit term	Discrete
2,4-dinitrotoluene	µg/L	1x during first 42 months of permit term	Discrete
2,6-dinitrotoluene	µg/L	1x during first 42 months of permit term	Discrete
Di-n-octyl phthalate	µg/L	1x during first 42 months of permit term	Discrete
1,2-diphenylhydrazine (as azobenzene)	µg/L	1x during first 42 months of permit term	Discrete
Fluoranthene	µg/L	1x during first 42 months of permit term	Discrete
Fluorene	µg/L	1x during first 42 months of permit term	Discrete
Hexachlorobenzene	µg/L	1x during first 42 months of permit term	Discrete
Hexachlorobutadiene	µg/L	1x during first 42 months of permit term	Discrete
Hexachlorocyclopentadiene	µg/L	1x during first 42 months of permit term	Discrete
Hexachloroethane	µg/L	1x during first 42 months of permit term	Discrete
Indeno(1,2,3-cd)pyrene	µg/L	1x during first 42 months of permit term	Discrete
Isophorone	µg/L	1x during first 42 months of permit term	Discrete

Parameter	Units	Monitoring Frequency	Monitoring Type
Naphthalene	µg/L	1x during first 42 months of permit term	Discrete
Nitrobenzene	µg/L	1x during first 42 months of permit term	Discrete
N-nitrosodimethylamine	µg/L	1x during first 42 months of permit term	Discrete
N-nitrosodi-n-propylamine	µg/L	1x during first 42 months of permit term	Discrete
N-nitrosodiphenylamine	µg/L	1x during first 42 months of permit term	Discrete
Phenanthrene	µg/L	1x during first 42 months of permit term	Discrete
Pyrene	µg/L	1x during first 42 months of permit term	Discrete
1,2,4-trichlorobenzene	µg/L	1x during first 42 months of permit term	Discrete
PCB / Pesticides			
Aldrin	µg/L	1x during first 42 months of permit term	Discrete
Alpha-BHC	µg/L	1x during first 42 months of permit term	Discrete
Beta-BHC	µg/L	1x during first 42 months of permit term	Discrete
Gamma-BHC	µg/L	1x during first 42 months of permit term	Discrete
Delta-BHC	µg/L	1x during first 42 months of permit term	Discrete
Chlordane	µg/L	1x during first 42 months of permit term	Discrete
4,4'-DDT	µg/L	1x during first 42 months of permit term	Discrete
4,4'-DDE	µg/L	1x during first 42 months of permit term	Discrete
4,4'-DDD	µg/L	1x during first 42 months of permit term	Discrete
Dieldrin	µg/L	1x during first 42 months of permit term	Discrete
Alpha-endosulfan	µg/L	1x during first 42 months of permit term	Discrete
Beta-endosulfan	µg/L	1x during first 42 months of permit term	Discrete

Parameter	Units	Monitoring Frequency	Monitoring Type
Endosulfan sulfate	µg/L	1x during first 42 months of permit term	Discrete
Endrin	µg/L	1x during first 42 months of permit term	Discrete
Endrin aldehyde	µg/L	1x during first 42 months of permit term	Discrete
Heptachlor	µg/L	1x during first 42 months of permit term	Discrete
Heptachlor epoxide	µg/L	1x during first 42 months of permit term	Discrete
PCB-1242	µg/L	1x during first 42 months of permit term	Discrete
PCB-1254	µg/L	1x during first 42 months of permit term	Discrete
PCB-1221	µg/L	1x during first 42 months of permit term	Discrete
PCB-1232	µg/L	1x during first 42 months of permit term	Discrete
PCB-1248	µg/L	1x during first 42 months of permit term	Discrete
PCB-1260	µg/L	1x during first 42 months of permit term	Discrete
PCB-1016	µg/L	1x during first 42 months of permit term	Discrete
Toxaphene	µg/L	1x during first 42 months of permit term	Discrete

Notes:

1. The permittee shall include any additional parameters in stormwater sampling as specified in Part 5.0 of this permit.
2. The permittee shall collect discrete samples and shall attempt to include the “first flush” (first 30 minutes of stormwater discharge) of a qualifying storm event (see Part 7.2 of this permit) as practicable. In the case of snowmelt, the “first-flush” sampling does not apply. Auto Sampling equipment may be used, if available.
3. When analyzing for metals, the permittee shall assume a 1:1 total dissolved ratio for purposes of reporting and comparison with SWQS. Alternatively, the permittee may test for dissolved metals, if appropriate field filtering is completed.
4. Hardness data must also be collected and used to calculate the corresponding SWQS for certain metals as indicated by SWQS rules.

Appendix C: Total Maximum Daily Load (TMDL) Requirements

The following requirements are included in this permit based on applicable TMDL requirements in accordance with Part 1.3(5). See permit Parts 7.4 through 7.6 for specific analytical monitoring requirements.

Gila River

Name of TMDL	Gila River – Centennial Wash to Gillespie Dam
Document(s) for TMDL	https://mywaterway.epa.gov/state/AZ/advanced-search
Location of Original 303(d) Listings	AZ15070101-008
Area Where TMDL Requirements Apply	TMDL coverage includes areas served by an SMS4 draining to the Gila River
Parameter(s)	Total Boron and Total Selenium
EPA Approval Date	November 2015
SMS4 Permittee(s)	Town of Buckeye, Maricopa County

Town of Buckeye and Maricopa County:

The Town of Buckeye and Maricopa County shall analytically monitor stormwater discharges from SMS4 outfalls to the Gila River, from Centennial Wash to Gillespie Dam. Analytical monitoring shall be submitted as established in Part 7.0 of this permit. Concentration-based wasteload Allocation (WLA) for this TMDL are 1,000 g/L Total Boron and 2.0 g/L Total Selenium.

If the WLA is exceeded, the permittee shall propose to ADEQ an action plan including a schedule for implementation, and submit it to ADEQ at stormwatercompliance@azdeg.gov within 60 calendar days of becoming aware of the WLA exceedance. ADEQ shall provide a review and approval within 30 calendar days. The permittee shall then incorporate the action plan into its SWMP. Repeat exceedances for the same parameter of the WLA does not require submittal of another action plan.

Granite Creek

Name of TMDL	Upper Granite Creek Watershed
Document(s) for TMDL	https://mywaterway.epa.gov/state/AZ/advance-d-search
Location of Original 303(d) Listings	AZ15060202-059A
Area Where TMDL Requirements Apply	TMDL coverage includes areas served by an SMS4 draining to Granite Creek
Parameter(s)	<i>E. coli</i>
EPA Approval Date	November 2015
SMS4 Permittee(s)	City of Prescott, Yavapai County

City of Prescott and Yavapai County

The City of Prescott and Yavapai County shall analytically monitor stormwater discharges from SMS4 outfalls to Granite Creek. Analytical monitoring shall be submitted as established in Part 7.0 of this permit. Concentration-based WLAs for this TMDL are 410 cfu/100 ml (single sample maximum).

If the WLA is exceeded, the permittee shall propose to ADEQ an action plan, including a schedule for implementation, and submit it to ADEQ at stormwatercompliance@azpdes.com within 60 calendar days of becoming aware of the WLA exceedance. ADEQ shall provide a review and approval within 30 calendar days. The permittee shall then incorporate the action plan into its SWMP. Repeat exceedances for the same parameter of the WLA does not require submittal of another action plan.

Oak Creek

Name of TMDL	Oak Creek and Spring Creek	
Document(s) for TMDL	https://mywaterway.epa.gov/state/AZ/advanced-search	
Location of Original 303(d) Listings	Oak Creek-Headwaters to West Fork Oak Creek	15060202-019
	Oak Creek-West Fork to Slide Rock State Park	15060202-18A
	Oak Creek-At Slide Rock State Park	15060202-18B
	Oak Creek-Below Slide Rock S.P. to Dry Creek	15060202-18C
	Oak Creek-Dry Creek to Spring Creek	15060202-017
	Spring Creek-Coffee Creek to Oak Creek	15060202-022
Area Where TMDL Requirements Apply	TMDL coverage includes areas served by an SMS4 draining to any of the reaches of Oak Creek or Spring Creek listed above.	
Parameter(s)	<i>E. coli</i>	
EPA Approval Date	August 2010	
SMS4 Permittee(s)	City of Sedona, Coconino County, Yavapai County	

City of Sedona

The City of Sedona shall analytically monitor stormwater discharges from SMS4 outfalls to Oak Creek. Analytical monitoring shall be submitted as established in Part 7.0 of this permit. The City shall implement the WLAs for *E. coli* listed in Part 6.1.3 of the 2010 Oak Creek and Spring Creek TMDL Document.

If the WLA is exceeded the permittee shall propose to ADEQ an action plan, including a schedule for implementation, and submit it to ADEQ at stormwatercompliance@azdeq.gov within 60 calendar days of becoming aware of the WLA exceedance. ADEQ shall provide a review and approval within 30 calendar days. The permittee shall then incorporate the action plan into its SWMP. Repeat exceedances for the same parameter of the WLA does not require submittal of another action plan.

Coconino County and Yavapai County

Coconino County and Yavapai County shall analytically monitor stormwater discharges from SMS4 outfalls to Oak Creek. Analytical monitoring shall be submitted as established in Part 7.0 of this permit. Concentration-based WLAs for this TMDL are 410 cfu/100 ml (single sample maximum).

If the WLA is exceeded the permittee shall propose to ADEQ an action plan, including a schedule for implementation, and submit it to ADEQ at stormwatercompliance@azdeg.gov within 60 calendar days of becoming aware of the WLA exceedance. ADEQ shall provide a review and approval within 30 calendar days. The permittee shall then incorporate the action plan into its SWMP. Repeat exceedances for the same parameter of the WLA does not require submittal of another action plan.

San Pedro

Name of TMDL	San Pedro River (Aravaipa Creek to Gila River)	
Document(s) for TMDL	https://mywaterway.epa.gov/state/AZ/advanced-search	
Location of Original 303(d) Listings	San Pedro River, Aravaipa Creek to Gila River	15050203-001
Area Where TMDL Requirements Apply	TMDL coverage includes areas served by an SMS4 draining to any of the reaches of the San Pedro River	
Parameter(s)	<i>E. coli</i>	
EPA Approval Date	August 2013	
SMS4 Permittee(s)	City of Sierra Vista, Cochise County	

City of Sierra Vista and Cochise County

The City of Sierra Vista and Cochise County shall analytically monitor stormwater discharges from SMS4 outfalls to the San Pedro River. Analytical monitoring shall be submitted as established in Part 7.0 of this permit. Concentration-based WLAs for this TMDL are 410 cfu/100 ml (single sample maximum).

If the WLA is exceeded the permittee shall propose to ADEQ an action plan, including a schedule for implementation, and submit it to ADEQ at stormwatercompliance@azdeq.gov within 60 calendar days of becoming aware of the WLA exceedance. ADEQ shall provide a review and approval within 30 calendar days. The permittee shall then incorporate the action plan into its SWMP. Repeat exceedances for the same parameter of the WLA does not require submittal of another action plan.

Santa Cruz

Name of TMDL	Upper Santa Cruz River Sub-watershed Clean Water Plan for <i>E. coli</i>	
Document(s) for TMDL	https://mywaterway.epa.gov/state/AZ/advanced-search	
Location of Original 303(d) Listings	Santa Cruz River, Nogales IOW Outfall to Josephine Canyon	15050301-009
	Santa Cruz River, Josephine Canyon to the Tubac Bridge	15050301-008A
	Santa Cruz River, Tubac Bridge to Sopori Wash	15050301-008B
	Nogales Wash, US/Mexico Border to Potrero Creek	15050301-011
	Potrero Creek, Below I-19 to the Santa Cruz River	15050301-500B
Area Where TMDL Requirements Apply	TMDL coverage includes areas served by an SMS4 draining to any of the reaches of Santa Cruz River, Nogales Wash and Potrero Creek as listed above.	
Parameter(s)	<i>E. coli</i>	
EPA Approval Date	February 2020	
SMS4 Permittee(s)	City of Nogales	

City of Nogales

The City of Nogales shall analytically monitor stormwater discharges from SMS4 outfalls to Nogales Wash and Potrero Creek. Analytical monitoring shall be submitted as established in Part 7.0 of this permit. Concentration-based WLAs for this TMDL are 410 cfu/100 ml (single sample maximum).

If the WLA is exceeded the permittee shall propose to ADEQ an action plan, including a schedule for implementation, and submit it to ADEQ at stormwatercompliance@azdeq.gov within 60 calendar days of becoming aware of the WLA exceedance. ADEQ shall provide a review and approval within 30 calendar days. The permittee shall then incorporate the action plan into its SWMP. Repeat exceedances for the same parameter of the WLA does not require submittal of another action plan.

Watson Lake

Name of TMDL	Watson Lake TMDL
Document(s) for TMDL	https://mywaterway.epa.gov/state/AZ/advanced-search
Location of Original 303(d) Listings	AZL15060202-1590
Area Where TMDL Requirements Apply	TMDL coverage includes areas served by an SMS4 draining to Watson Lake
Parameter(s)	Nutrients (Nitrogen, Phosphorus)
EPA Approval Date	February 2015
SMS4 Permittee(s)	City of Prescott, Yavapai County

City of Prescott and Yavapai County

The City of Prescott and Yavapai County shall analytically monitor stormwater discharges from SMS4 outfalls to Watson Lake. Analytical monitoring shall be submitted as established in Part 7.0 of this permit. Concentration-based WLAs for this TMDL are equal to 1.0 mg/L total nitrogen and 0.10 mg/L total phosphorus.

If the WLA is exceeded the permittee shall propose to ADEQ an action plan, including a schedule for implementation, and submit it to ADEQ at stormwatercompliance@azdeq.gov within 60 calendar days of becoming aware of the WLA exceedance. ADEQ shall provide a review and approval within 30 calendar days. The permittee shall then incorporate the action plan into its SWMP. Repeat exceedances for the same parameter of the WLA does not require submittal of another action plan.

APPENDIX 7 – TOWN OF CAMP VERDE CODE, CHAPTER 7: STORMWATER PROTECTION

Service drop refers to that line which extends from the service utility's existing utility system and connects to the individual customer who is the ultimate user of that service.

- C. Permit for above Ground Installation. After the effective date of this ordinance, no developer shall erect any new utility system, nor relocate an existing utility system, within Town limits above the surface of the ground, whether along streets or over individual lots or parcels of the development, unless a special permit described herein is first granted by the Town. The undergrounding requirements herein shall apply regardless of the existence or availability of easements for overhead lines. The developer shall be required to comply with any underground policy of the utility, and undergrounding shall be completed and approved prior to any occupancy of the project. If poles are removed which include streetlights, the streetlights will be replaced by the developer at its cost with freestanding poles and luminaries approved by the Town. In the event the utility company adds new poles or lines as a system upgrade or power line extension, it shall be considered the developer, and pay any undergrounding costs. In cases where utility lines are required to be placed underground due to a combination of needs generated by (re) development, utility system upgrade, and governmental improvement projects, there shall be an equitable sharing of the cost of that undergrounding effort between the Town or governmental agency, utility, and developer.
- D. Exemptions. This ordinance shall not apply to transmission or feeder lines having a voltage rating greater than 12,500 volts; switchyards and substations utilized in a new utility system; pad-mounted transformers, cabinets, pull boxes, and similar on-the-ground equipment; temporary service equipment for emergency services, special events, or construction sites; service drops from existing overhead lines, unless underground service is required under municipal or state subdivision statutes or codes; or normal maintenance and repairs of existing utility systems.
- E. Special Permits. A special permit to waive the underground requirements of this ordinance may be issued by the Town. Granting of a special permit is rare and shall not undermine the purpose of the ordinance. Cost disparity in itself shall not constitute grounds for issuance of a special permit. A request for the special permit shall be filed with the Community Development Director for approval. If the permit is denied, the applicant may file a request for review with the Planning & Zoning Commission for their recommendation. The final decision on an appeal shall be with the Town Council.
- F. Permits. Developers shall be required to submit a written application to obtain a construction permit for undergrounding of facilities as part of the permit process. The content of the permit shall be established from time-to-time by the Community Development Director and/or Director of Public Works/Town Engineer, but shall include as a minimum:
 - Plot plans to scale showing the proposed location of the underground facilities, cross-sections of the below grade areas, and other information necessary to properly identify and record the work
 - Roadway cut permits from the Town or ADOT, and a traffic control plan, if needed
 - Performance bonds and insurance

Article 7-9

STORM WATER PROTECTION (2005-A310)

Section 7-9-1 Purpose

This Article sets forth the requirements for the control of pollutants that are or may be discharged to the public storm drain system. The purpose of this Article is to enable the Town to comply with all applicable State and Federal Laws related to Storm Water Management, including but not limited to, the Clean Water Act (33 United States Code 1251 ET Seq.) The National pollutant discharge elimination system regulations (40 code of Federal regulations part 122), and the Town's Arizona pollutant discharge elimination system (AZPDES) permit (Arizona Administrative Code R18-19-A902).

Section 7-9-2 Definitions

For the purposes of this Article, the following words and terms shall be defined as follows.

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (ADEQ) means the State Agency charged with enforcement of Environmental Laws and Regulations.

ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM (AZPDES) STORM WATER PERMIT means a permit issued by ADEQ which authorizes the discharge of storm water pursuant to Arizona Administrative Code R18-9-A902, which incorporates 40 Code of Federal Regulations §122.32.

BEST MANAGEMENT PRACTICES (BMP'S) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to storm water. BMP's also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from outdoor storage areas.

CLEAN WATER ACT MEANS THE FEDERAL WATER POLLUTION CONTROL ACT, AS AMENDED, 22 UNITED STATES CODE 1251 ET SEQ.

ENGINEER means the Town Engineer.

DISCHARGE means any spilling, leaking, pumping, pouring, emitting, emptying, injecting, placing, releasing, leaching, dumping, or disposing into or on any land in a manner that may cause pollution.

ENVIRONMENTAL PROTECTION AGENCY (EPA) means that the Federal Agency charged with enforcement of Environmental Laws and Regulations.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORM WATER PERMIT means a permit issued by EPA which authorizes the discharge of storm water pursuant to the Clean Water Act § 402 (33 U.S.C. § 1342).

NOTICE OF INTENT (NOI) means a form submitted to ADEQ notifying of person's intent to be covered under a separate AZPDES Storm Water Permit, as required by Federal and State Law.

PERSON means any individual, partnership, co-partnership, firm, company, corporation, Limited Liability Company, association, Joint Stock Company, trust, estate, governmental entity, or any other legal entity; or their legal representatives, agents, or assigns.

POLLUTANT shall have the same meaning as defined in 40 C.F.R. § 122.2, and includes but is not limited to any solid, liquid, gas, or other substance that can alter the physical or chemical properties of water including but not limited to fertilizers, solvents, sludge, petroleum and petroleum products, solid waste, garbage, biological materials, radioactive materials, sand, dirt, animal waste, acids, and bases..

PREMISES mean any building, lot, parcel, real estate, land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.

PUBLIC STORM DRAIN SYSTEM means all or any part of the publicly-owned and maintained roads, streets, catch basins, curbs, gutters, ditches, man-made channels, storm drains, and dry wells located with public easements, right-of-way, parks, common areas, retention areas, or other publicly-owned or maintained real property designed or used for collecting, holding, or conveying storm water.

STORM WATER means storm water runoff, surface runoff, and drainage.

Section 7-9-3 Applicability

This Article shall apply to all water entering the storm drain system generated on any developed and undeveloped lands unless explicitly exempted by an authorized enforcement agency.

Section 7-9-4 Responsibility For Administration and Enforcement

The Town Engineer is delegated the authority to exercise the powers and perform the duties set forth in this Article and to administer and enforce provisions of this Article. The Engineer may designate other employees to exercise such powers and perform such duties, as he deems appropriate.

Section 7-9-5 Severability

If any section, subsection, sentence, clause, phrase, or portion of this ordinance or any part of the code adopted herein by reference, is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions thereof.

Section 7-9-6 Discharge Prohibitions And Exemptions

- A. Unless expressly authorized or exempted by this Article, no person shall cause or allow the discharge to a public right-of-way or public storm drain system of any substance that is not composed entirely of storm water.
- B. Unless expressly authorized or exempted by this Article, no person shall use, store, spill, dump, or dispose of materials in a manner that those materials could cause or contribute to the addition of pollutants to storm water.
- C. Exemptions. The following discharges are exempt from the prohibitions set forth in subsections (A) and (B) of this section:
 1. Discharges authorized by a separate NPDES or AZPDES permit.
 2. The following categories of non-storm water discharges are permissible unless otherwise prohibited under subsections C)(3), (C)(4) OR (C)(5):

- A. Water line flushing,
- B. Landscaping irrigation,
- C. Diverted stream flows,
- D. Rising groundwater,
- E. Uncontaminated groundwater infiltration as defined in
40 C.F.R. § 35.2005(20),

- F. Uncontaminated pumped groundwater,
 - G. Discharges from potable water sources,
 - H. Foundation drains,
 - I. Air conditioning condensation,
 - J. Irrigation water,
 - K. Springs,
 - L. Water from crawl space pumps,
 - M. Footing drains,
 - N. Lawn watering,
 - O. Individual residential car washing,
 - P. Flows from riparian habitats and wetlands,
 - Q. De-chlorinated swimming pool discharges,
 - R. Discharges from emergency firefighting activity,
 - S. Dust control watering; or
 - T. Any other activity that the Engineer identifies is not a significant contributor of pollutants during the Town's AZPDES Storm Water permit term. (40 C.F.R. § 122.34(B)(3)(III)).
3. No person shall discharge to the public storm drain system any exempted discharge under this subsection if the Engineer or assigned designee identifies and provides written notice to the person that the discharge has the potential to be a source of pollutants to receiving waters, waterways, or groundwater.
 4. No person shall discharge to the public storm drain system that would result in or contribute to a violation of the AZPDES storm water permit issued to the Town. Liability for any such discharge shall be the responsibility of the person causing or responsible for the discharge.
 5. No person shall establish, use, maintain, or continue any connection to the public storm drain system, which has caused or is likely to cause a violation of this section.

Section 7-9-7 Operating Facilities Or Activities

- A. All persons owning or operating premises or engaged in activities who are required by Federal or State Law to submit to EPA and/or ADEQ a notice of intent (NOI) to comply with an NPDES or AZPDES Storm Water permit shall provide a copy of such notice to the Engineer upon request. Facilities required to apply for a Storm Water permit are identified in 40 C.F.R. 122.26(B)(14).
- B. All persons engaged in activities which will or may reasonably be expected to result in pollutants entering the public storm drain system shall undertake best management practices (BMP's) to minimize such pollutants, shall provide protection from accidental discharge of pollutants to the public storm drain system and comply with the cleanup and notification requirements of this Article. Such measures shall include the requirements imposed by Federal, State, County, or Local Authorities. BMP's are site-specific and are described in the document "Storm Water

Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices” (EPA 832-R-92-006) or other guidance documents available from EPA and/or ADEQ.

- C. If a best management practice is required by the Engineer to prevent a pollutant from entering the public storm drain system, the person receiving the notice of such a requirement may petition the Engineer to reconsider the application of the BMP to the premises or activity. The written petition must be received within ten (10) working days setting forth any reasons and proposed alternatives. The Engineer will act within thirty (30) days of the petition.

Section 7-9-8 Construction Sites

- A. All persons engaged in construction activities that are required by Federal or State law to submit to EPA and/or ADEQ a notice of intent to comply with an NPDES or AZPDES Storm Water permit shall provide the Town with copies of the NOI and the NPDES Storm Water permit issued by ADEQ. Construction activities that will disturb one acre or more of land area or smaller land areas if they are part of a larger common plan of development or sale are required to apply for a Storm Water permit. (40 C.F.R. 122.26(B)(15).
- B. Any person performing construction shall not cause or contribute to a violation of the AZPDES Storm Water permit issued to the Town. Liability for any such discharge shall be the responsibility of the person causing or responsible for the discharge. Any person performing construction shall undertake Best Management Practices to minimize pollutants (including sediments) from leaving the construction site, shall provide protection from accidental discharge of pollutants to the public storm drain system, and comply with the cleanup and notification requirements of this Article. Site operator shall ensure erosion and sediment control and control waste and properly dispose of wastes, such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality. Such measures shall include the requirements imposed by Federal, State, County, or Local Authorities. BMP’s are site-specific and are described in the document “Storm Water Management for Construction Activities: Developing pollution Prevention Plans and Best Management Practices” (EPA 832-R-92-005) or other guidance documents available from EPA and /or ADEQ.
- C. If a Best Management Practice is required by the Engineer to prevent a pollutant from entering the public storm drain system, the person receiving the notice of such a requirement may petition the Engineer to reconsider the application of the BMP to the premises or activity. The written petition must be received within ten (10) working days setting forth any reasons and proposed alternative. The Engineer will act within thirty (30) days of receipt of the petition.

Section 7-9-9 Post-Construction

Property owners or operators shall ensure long-term operation and maintenance of post-construction storm water runoff control mechanisms, such as retention basins, dry wells and other measures described in 40 C.F.R. § 122.34(B)(5)(III).

Section 7-9-10 Cleanup And Notification Requirements

- A. As soon as any owner or operator has actual or constructive knowledge of any discharge which may result in pollutants entering the public storm drain system, such person shall promptly take all necessary steps to ensure the discovery of the source and the extent and proceed with containment and cleanup of such discharge.

- B. The owner or operator shall notify the Engineer of the discharge in both of the following manners:
 - 1. By telephone as soon as practical or by calling 9-1-1 if hazardous materials are involved; and
 - 2. By written report identifying the discharge source, extent, pollutant, measures taken to mitigate the discharge, and preventative measures put in place to prevent a subsequent discharge.

Section 7-9-11 Inspections

- A. **AUTHORITY TO INSPECT.** Upon presentation of credentials and at all reasonable or necessary hours, all authorized employees of the Town shall have access to all premises and to all records pertaining to those premises for purposes of ensuring compliance with this Article. Inspection, interviewing, copying, sampling, photographing, and other activities conducted on the premises shall be limited to those which are reasonably needed by the Town in determining compliance with the requirements of this Article. All persons shall allow such activities under safe and non-hazardous conditions with a minimum of delay.
- B. **MONITORING ACTIVITIES.** The Engineer may order any person engaged in any activity or owning or operating a business or enterprise on any premises which may cause or contribute to discharges of pollutants to the public storm drain system in violation of this Article or any applicable NPDES or AZPDES Storm Water permit condition to undertake such monitoring activities and analyses and furnish such reports as the Engineer reasonably may specify. The costs of such activities analyses and reports shall be borne by the recipient of the order.
- C. **ACCESS REFUSAL.** If an authorized employee of the Town has been refused access to any premises, and is able to demonstrate probable cause to believe that there may be a violation of this Article, or that there is a need to inspect, interview, copy, photograph or sample as part of an inspection and sampling procedure of the Town designed to determine compliance with the requirements of this Article or any related laws or regulations, or to protect the environment and the public health, safety and welfare of the community, then the Engineer may seek issuance of a search warrant from the Town Municipal Court.

Section 7-9-12 Enforcement and Penalties (2006-A332)

- A. **CHARGES.** Charges levied pursuant to this Article shall be collected by the Public Works Department. The Public Works Director/Engineer shall manage the Town's Storm Drain System.
- B. **OWNER OF RECORD.** The owner of record of the property upon which a violation of this Article occurs shall be presumed to be a person having lawful control over the activity or premises unless it is demonstrated that another person has knowingly and in good faith accepted responsibility for the activity at issue. If more than one person is identified as the owner, such persons shall be presumed to be jointly and severally in lawful possession and control the activity or premises.
- C. **NOTICE OF VIOLATION.** The Engineer may issue a written notice of violation to any person who has violated or is in violation of this Article. Failure to comply with any act required in the notice of violation shall be a separate violation for each day beyond the thirtieth (30) day following the notice of violation. Nothing in this section shall limit the authority of the Engineer to take any action, including emergency actions or any other enforcement action, without first issuing a notice of violation. In appropriate situations the Engineer may notify the person orally either in person or by telephone prior to, and in some cases in lieu of, written notification.
- D. **CONSENT ORDERS.** The Engineer may enter into consent orders, assurances of voluntary compliance, negotiated settlement agreements or other similar documents establishing an

agreement with any person responsible for noncompliance. Such documents will include specific action to be taken by the person to correct the noncompliance within a time period specified by the document, including an identification and description of the Best Management Practices and measures to utilize in implementing the order. Such documents shall have the same force and effect as any other orders issued under this Article and shall be judicially enforceable.

- E. CEASE AND DESIST ORDERS. When the Engineer finds that a person has violated, or continues to violate, any provision of this Article or any related laws or regulations, or that the person's past violations are likely to recur, the Engineer may issue an order to the person directing them to cease and desist all such violations and direct the person to immediately comply with all requirements; and take such appropriate remedial or preventive action as may be needed to properly address a continuing or threatened violation. Issuance of a cease and desist order shall not be a bar against, or prerequisite for, taking any other action against the person. A person's failure to comply with an order of Engineer issued pursuant to this Article shall constitute a violation of this Article.
- F. CIVIL PENALTIES. In addition to any other enforcement authority contained in this Article, the Engineer may issue a civil citation to any person who has violated, or continued to violate, any provision of this Article or any related laws or regulations. A person who violates any requirement of this Article or any applicable NPDES or AZPDES Storm Water permit condition shall be civilly liable to the Town for a sum not to exceed \$27,500 per day for each violation.
- G. CRIMINAL PENALTIES. A person who willfully or negligently violates any provision of this Article, or any related laws or regulations shall, upon conviction, be guilty of a misdemeanor and upon conviction thereof shall be punished by a fine not to exceed \$27,500 per day for each violation and/or by imprisonment for a period not to exceed six months.
- H. CRIMINAL PROSECUTION. Some intentional violations may constitute criminal violations of Federal, State, and Town Law, and that under such circumstances, the Engineer may seek the assistance of the EPA, the Attorney General, the County Attorney, or the Town prosecutor to commence civil and/or criminal action against any person who violates any requirement of this Article or any applicable NPDES or AZPDES Storm Water Permit condition.
- I. REVOKING OR WITHHOLDING OF PERMIT. In addition to or in lieu of all other available penalties, the Town may revoke or withhold any permit, approval or license to construct improvements to real property or operate a business in the Town related to the violation if the holder of such permit, approval, or license is in violation of any requirement of his Article or any applicable NPDES or AZPDES Storm Water Permit condition.
- J. LIABILITY FOR COSTS. The Engineer may assess liability for costs to any person in violation of this Article for all actual costs incurred by the Town in surveillance, sampling and testing, abatement, and remediation associated with a discharge. Additionally, the Engineer may assess liability for costs to any person whose discharge resulted in a violation of the Towns AZPDES Storm Water Permit.

Article 7-10

MUNICIPAL DEVELOPMENT FEES (2006-A337-Referred to a vote 3-22-2007)

Section 7-10-1 Definitions

The words or phrases used herein shall have the meaning attributed or prescribed to them in the Camp Verde Town Code, except as may otherwise be indicated herein:

“Applicant” means any person who files an application with the Town for a building permit.

STORMWATER MANAGEMENT PLAN

*TOWN OF CAMP VERDE UTILITIES:
STORMWATER DIVISION*

2026

