



TOWN OF CAVE CREEK
37622 N CAVE CREEK RD
CAVE CREEK, AZ 85331

Municipal Separate Storm Sewer System (MS4)
Permit Number: AZG2021-002

STORMWATER MANAGEMENT PROGRAM

SEPTEMBER 2022

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1. INTRODUCTION

This Stormwater Management Plan, also referred to as a Stormwater Management Program (SWMP) was developed by the Town of Cave Creek (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 MS4 Permit was issued by ADEQ effective on September 30th, 2021, and expires on September 29th, 2026.

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 MS4 permit. The Town is authorized to discharge stormwater from MS4 outfalls to waters on the protected surface water list, including discharges to waters of the U.S. (WOTUS) and non-WOTUS protected surface waters.

The overall goal of this program is to reduce the negative impacts of urban runoff to stormwater and to protect receiving water bodies from the negative impacts 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:

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) Chapter 40 Part 122.32, incorporated by reference in Arizona Administrative Code (AAC) R18-9-A902 and A905 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 MS4 Permit and is certified according to Section 9.9.

The SWMP is reviewed annually and modified or revised as needed. As required in Section 4.3.D. of the MS4 Permit, the current SWMP and Annual Report will be posted on the Town's website www.cavecreekaz.gov.

1.1 GEOGRAPHIC SETTING

The Town of Cave Creek is in northern Maricopa County and is bounded by the Tonto National Forest to the north, Phoenix to the west and south, Carefree to the east, Scottsdale to the southeast and various parts of Unincorporated Maricopa County. The Town encompasses approximately 38 square miles.

The Town of Cave Creek is named for Cave Creek Wash, a stream that originates in the remote areas about 25 miles to the north. It flows through the Town and continues south into Phoenix. The stream derives its name from a high, overhanging bluff along its west bank that forms a wide open-mouthed cavern about two miles north of the Town's Historic Town Core.

The discovery of gold in California in 1848 brought thousands of miners to the West. In 1863 central Arizona had its turn at gold rush days. As prospectors explored mostly eastward from California, the Apache's resisted their influence and raided their mining camps. To protect the miners, the U.S. Army established Fort McDowell in 1865 on the west bank of the Verde River. Cave Creek was settled in 1870 by soldiers on horseback from Fort McDowell. In 1986 Cave Creek was incorporated as a self-governing community.

1.2 RECEIVING WATERS AND OUTFALLS

The Town's drainage system consists of numerous washes complete with culverts, overland wash crossings, and ditches. The sequence of flow is generally overland to roadside ditches then to culverts and then into either washes or drainage channels/ditches. The Town has one storm drain system which collects flows from behind the United States Post Office and carries the flows to Andorra Hills Wash.

There are no known ongoing discharges that would cause or contribute to the exceedance of an applicable Surface Water Quality Standards (SWQS).

The Town of Cave Creek discharges to the following Protected Surface Waters in the area:

- **Andorra (Hills) Wash** - The Town monitors the following outfalls (Latitude/Longitude):
 - Neary Storm Sewer (33.831064/-111.948738)
 - Cave Creek Rd Crossing Outfall (33.832559/-111.953631)
 - Hidden Valley Dr Crossing (33.830832/-111.951111)
 - Skyline Dr Crossing (33.830947/-111.947558)
 - Lind Dr Crossing (33.830636/-111.945139)
 - School House Rd / Military Rd Crossing (33.829992/-111.943285)

➤ **Galloway Wash** - The Town monitors the following outfalls (Latitude/Longitude):

- Spur Cross Rd Crossing (33.839986/-111.952198)
- School House Rd Crossing (33.836530/-111.943325)
- Vermeersch Rd Crossing (33.832102/-111.931236)
- Galloway Dr Crossing (33.831687/-111.928704)

Both Andorra (Hills) Wash and Galloway Wash are headwater sources for Cave Creek Wash.

The Town does not discharge to any non-attaining or impaired, or an Outstanding Arizona Water (OAW). Therefore, no Wet Season stormwater analytical monitoring is required to be conducted. However, visual monitoring as required by the MS4 Permit, will be performed at outfall locations.

1.3 IMPLEMENTATION OF THE SWMP

Overall responsibility for administering the MS4 Permit requirements and SWMP rests with the Town’s Engineer and Public Works Director. However, implementation of the SWMP is overseen by the Town’s Utility Assistant / Compliance Coordinator. The responsibilities for each department as well as the title of the primary responsible person(s) are provided in the table below:

Table #1 – Staff/Administration Contributions

Department	Positions	Responsibilities
Administration	Town Manager Information Technology (IT)	The overall management of the Town Providing technical support
Building & Fire Safety	Chief Building Official (or designees)	Administering the Town’s adopted building codes
Engineering & Public Works	Public Works Director (or designees)	Overall responsibility for administering the Permit and SWMP
Town Marshal	Town Marshal	Enforces all State of Arizona Statues, Town Code, and Ordinances

Utilities	Utilities Director (or designees)	Operation and maintenance of the water and wastewater system Implementation of the SWMP
	Utility Assistant / Compliance Coordinator	Responsible for creating and maintaining the MS4 system information, including oversight of the Town’s Geographic Information System (GIS)

2. STORMWATER PROGRAM ENFORCEMENT

Unless explicitly specified otherwise in the SWMP, all actions proposed to be undertaken exclusively apply to the designated urbanized areas only. Actions taken beyond these geographic bounds are done so at the discretion of the Town of Cave Creek. The Town intends to fully implement the conditions in this SWMP to control pollutant discharge.

2.1 TOWN CODE & ORDINANCES

The Town adopted and implemented local Ordinance O2019-07 (passed 11-18-2019) that amended Chapter 54 of the Town Code to provide adequate enforcement procedures that satisfy the requirements of the MS4 permit. Chapter 54, Stormwater Quality Management and Discharge Control Ordinance, includes the following:

- 54.001 Introduction
- 54.002 Purpose
- 54.003 Definitions
- 54.004 Enforcement, Violations, Notices and Penalties
- 54.005 Applicability
- 54.006 Illicit Non-Stormwater Drainage and Connections
- 54.007 Construction Site Stormwater Runoff Pollution Control
- 54.008 Post-construction Stormwater Management
- 54.009 Industrial Activity Discharges
- 54.010 Requirement to Prevent, Control, and Reduce Stormwater Pollutants by the Use of Best Management Practices

- 54.011 Notification of Spills
- 54.012 Compliance Monitoring
- 54.013 Violations Deemed A Public Nuisance
- 54.014 Remedies Not Exclusive
- 54.015 Compatibility with Other Regulations
- 54.016 Severability
- 54.017 Disclaimer
- 54.018 Other Regulatory Requirements
- 54.019 Town Permits and Approvals

2.2 ENFORCEMENT REQUIREMENTS & PROCEDURES

The enforcement procedures outlined in Town Code, Chapter 54, Stormwater Quality Management and Discharge Control and the Town’s IDDE Program, at a minimum, address the following:

1. Prohibit and eliminate illicit connections and discharges to the MS4.
2. Control the discharge of spills and prohibit dumping or disposal of materials other than stormwater into the MS4.
3. Require compliance with conditions in the ordinance, permits, contracts, and 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 MS4 through the installation, implementation, and maintenance of stormwater control measures.
5. Allowable 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 the Town’s stormwater control ordinance/standards.
6. 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. Provide for civil or criminal sanctions (including referral to a county district attorney) and escalate corrective response, consistent with its enforcement response.
8. Identify departments within the Town’s jurisdiction that conduct stormwater-related activities and their roles and responsibilities under the MS4 Permit.

9. Identify any other administrative and legal procedures and ordinances available to mandate compliance with stormwater issues if applicable.
10. Describe how stormwater related-ordinances are implemented and appealed.

2.3 ENFORCEMENT RESPONSE PLAN

In addition to the Town Code and Ordinances, the Town's SWMP, and the Town's IDDE Program that address stormwater pollution impacts, an internal document, the Town of Cave Creek's Stormwater Enforcement Response Plan (ERP) has been revised to guide staff in their responsibilities and enforcement actions to comply with the MS4 Permit. The Town's ERP is available upon request.

3. CONTROLS TO REDUCE POLLUTANTS TO THE MAXIMUM EXTENT PRACTICABLE (MEP)

The following sections describe the Town's program to reduce pollutants from the discharge of pollutants from the MS4 to the maximum extent practicable. As necessary, this section describe partnerships that the Town is using to implement various BMPs. Like many of the local municipalities, the Town is considering a membership to Stormwater Outreach for Regional Municipalities (STORM) for an enhanced partnership. Currently the Town provides outreach and information for the public to participate in STORM events via website www.AZStorm.org.

The Town has established six (6) required MCMs to assist in reducing discharge of pollutants to the MEP to protect water quality, and to satisfy water quality requirements of the CWA Section 402(p)(3)(B)(iii) and ARS 49-255.04, including attainment of SWQS. These control measures include:

1. Public Education and Outreach
2. Public Involvement and Participation
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

3.1 PUBLIC EDUCATION AND OUTREACH

The ultimate objective of this public education program is to increase knowledge and change behavior of the public so that pollutants in stormwater are reduced. The Town will focus on the impacts of stormwater discharges to and from the MS4. The Town will modify any ineffective message or distribution technique as needed and document in each Annual Report the overall effectiveness of the education program.

Target Group	Control Measure	BMP – Brochure
General Public	Measurable Goal:	<p>The Town has developed brochures and other printed materials available within the front reception area of Town Hall.</p> <p>Topics include - Stormwater runoff issues and residential stormwater management practices; 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; proper management and disposal of used oil.</p>
	Department Responsible:	Town Utility and Engineering
Target Group	Control Measure	BMP – Website Outreach
General Public	Measurable Goal:	<p>The Town maintains and updates its stormwater page which contains links to Public Outreach, Stormwater Information and Education, Stormwater Management IDDE Program, and the current SWMP and Annual Report.</p> <p>The public is provided a contact to the Town’s Stormwater Management Program. Public can request information or file complaints.</p>
	Department Responsible:	Town Utility and Engineering
Target Group	Control Measure	BMP – Staff Guidance
Development	Measurable Goal:	The Town will provide contractors guidance on municipal stormwater

		requirements and stormwater management practices for construction sites.
	Department Responsible:	Engineering and Building & Fire Safety

3.2 PUBLIC INVOLVEMENT

The ultimate objective of this public involvement program is to provide opportunities to engage the public to participate in the review and implementation of the Town’s SWMP.

Target Group	Control Measure	BMP – Website & Public Comment Period
General Public	Measurable Goal:	<p>The Town is making the SWMP and Annual Report available to the public on the Town’s website www.cavecreekaz.gov.</p> <p>The anticipated audience is residents, businesses and/or anyone looking for information about the Town. The public will be able to comment and provide any feedback to participate in the review, revisions, updates, and implementation of the SWMP.</p> <p>The Town also provides the public with resources to participate in public events through www.AZStorm.org. Public participation includes Public Events and Storm Seminars.</p>
	Department Responsible:	Town Utility and Engineering
Target Group	Control Measure	BMP – Stormwater Ordinance
General Public	Measurable Goal:	<p>The Town will document the number of complaints related to volunteer monitoring of stormwater and their resolution.</p> <p>Any information on reported spills, discharges, and or dumping to the MS4 will be documented and provided to the General Public via the Town’s website www.cavecreekaz.gov.</p>

	Department Responsible:	Town Utility and Engineering
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3.3 ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM (IDDE)

The ultimate objective of the illicit discharge detection and elimination program is to develop, implement, and enforce a program to systematically find and eliminate sources of non-stormwater into the Town’s small MS4. The IDDE program is recorded in a written document and maintained in this SWMP.

1. Storm Sewer Mapping

The Town has contracted with a consultant to create and maintain a GIS database of the Town’s storm sewer system, outfalls, and washes. The GIS system is continually updated but will be reviewed by the Town’s Utility Assistant / Compliance Coordinator at least annually. The Town’s GIS mapping includes the following:

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

2. Enforcement Procedures

The Town prohibits non-stormwater discharges into the storm sewer by imposing appropriate enforcement procedures and actions authorized by current ordinances described in the Enforcement Section of this SWMP. The support actions of the Town focus on maintaining and reviewing the current enforcements available through Town Code and providing revisions and updates to Ordinances for Town Council consideration when needed. Any updated information will be made available upon request.

3. Statement of IDDE Program Responsibilities

The Town currently has full time staff members that fulfill portions of a complete IDDE program: Utility, Engineering, Public Works, Building & Fire Safety, Public Safety, etc. The Town is responsible for implementing the IDDE Program. Through proper application of this SWMP, Enforcement Procedures, Town Ordinances, and proper training of Town Staff to identify and report instances of illicit discharges, the Town can properly coordinate and respond to reports of illicit discharges.

The Town Marshal maintains a hotline that citizens can call to report potential illegal activities, including illicit discharges. The Town Marshal will then contact the appropriate Department Staff or outside agency to visit the location of the complaint if appropriate. The representative(s) will respond to all calls from citizens regarding spills and illicit discharges.

If the emergency is a major spill or associated with a hazardous chemical, the Fire Department is notified.

The Building & Fire Safety Department staff members will inspect the stormwater system of new construction to ensure that no cross-connections or illegal connections are installed during construction prior to issuing occupancy certificates.

The Public Works staff members maintain and repair the stormwater system as needed. By making timely repairs to the existing stormwater system, the likelihood of contaminants entering the stormwater system from the surrounding ground or nearby sanitary sewer pipes is greatly reduced.

All staff members will provide proper storm water incident information to the Utility Assistant / Compliance Coordinator to ensure proper documentation and reporting for any IDDE incident. If the emergency endangers the environment or human health and reach a protected surface water, the Town will report the information to the ADEQ Spill Line at 602-771-2330, within 24 hours from the time the Town becomes aware of the event. For non-emergency non-compliance, the Town will provide a written notification to ADEQ at stormwatercompliance@azdeg.gov within five (5) calendar days of the non-compliance event.

4. Illicit Discharge Detection and Elimination Reporting

The Town will track and maintain records of activities conducted to meet MS4 Permit requirements. The Town will submit as part of each annual report a summary of IDDE activities in tabular format, they are:

- MS4 Name
- Date incident reported or discovered
- Date of the beginning of Town response
- Date of the end of Town response
- Did the discharge reach a protected surface water (yes, no, or unknown)
- Incident location (address or latitude and longitude)
- Pollutants
- Source

➤ Correction method(s)

Upon detection or report of an illicit discharge, the Town will identify and notify all responsible parties for any such discharge and require immediate cessation in accordance with Town Ordinances. When the elimination of an illicit discharge is not immediately possible the Town shall establish an expeditious schedule for its elimination and report the dates of identification and the schedule for removal in the Annual Report. The Town will then commence immediate actions necessary for elimination, including the hiring of a 3rd Party environmental company if required. Interim activities will focus around reasonable and prudent measures to minimize the discharge of pollutants to its MS4.

5. Visual Monitoring of Outfalls

The Town is required to proactively conduct field assessments to check for illicit discharges and illegal connections to the Town's stormwater system and receiving waterbodies, as described in the Monitoring Section of this SWMP.

The first step of this proactive work is to prioritize those areas most likely to contain illicit discharges ("hot spots") based on an analysis of land use and other specific information. The following types of areas are more likely to generate polluted discharges than others:

- Any locations where there have been repeated problems in the past. This could include areas with water quality data or where repeated complaints have been filed, including the following:
 - Sanitary Sewer Overflows at the Rancho Manana Lift Station – Town staff reported two (2) events in 2021 of excessive inflow into the collection system due to ongoing storm events. Both events were reported to ADEQ & Maricopa County Environmental Services (MCES) and did not pose an imminent and substantial threat to public health or the environment.
- Older areas of a community typically have a higher percentage of illegal connections. Also, deteriorating sewer pipes can allow wastewater to exfiltrate out of the sanitary lines and into the surrounding environment.
- Commercial or industrial areas tend to have a higher percentage of illicit discharges.
- Areas with large and/or many storage vessels of hazardous solids or liquids

The Town is required to conduct stormwater visual monitoring on at least 20% of all outfalls each year, per Section 6.3(8) of the MS4 Permit. During each dry and wet weather inspection, it is expected that field personnel will collect data on the physical

conditions at the outfall and if conditions warrant, an optional water samples for lab analysis.

The following general recommendations apply to field inspection and water sampling work.

- Develop training and protocols to keep workers safe during field work
- Make good use of the mapping information that has been developed by the Town
- Fill out a standard field inspection form

If an illicit discharge is identified during the visual monitoring, steps outlined in the Enforcement Procedures will be implemented and if applicable, additional visual monitoring will be conducted and reported to ADEQ in the Annual Report.

6. Indicators of IDDE Program Progress

The Town will continue to annually review and refine the IDDE program. The Town currently has options for public reporting of suspected illicit discharges with associated response and follow up by staff. Town staff currently receives on the job training and general online training through the Town's Human Resources training modules. Program success will be evaluated through defined metrics described in the Program Evaluation section of this SWMP. Annual review and modification as needed will be reported to ADEQ.

7. Staff Training

At a minimum, the Town provides annual training to employees involved in the IDDE program. The training includes the IDDE program components and how to recognize illicit discharges. More detailed training, including stormwater certifications, is provided to specific staff depending on duty, roles, and responsibilities for the IDDE program.

8. AZPDES Non-Filers

The Town will assist ADEQ in the identification of any AZPDES Non-Filers if any are found. Non-Filers are any facilities and activities (e.g., industrial facilities, construction activities, etc.) that discharge to the MS4 without an AZPDES/NPDES permit. The Non-Filer will be identified, and reporting to ADEQ at AZPDES@azdeq.gov will occur monthly, if there is a Non-Filer to report. This report will include, at a minimum, the facility name and location of the suspected non-filer. The email subject line will include "Non-filer – MS4 Permittee Name."

3.4 CONSTRUCTION ACTIVITY STORMWATER RUNOFF CONTROL

The ultimate objective is to develop, implement, maintain, and enforce a construction activity program stormwater runoff program to minimize or eliminate pollutant discharges to the MS4 from any construction activities that could disturb one (1) or more acres of land.

Control Measure	BMP – Inventory
Measurable Goal:	The Town has developed an online reporting tool for all active permits issued and will continue to maintain inventory within that system.
Department Responsible:	Town Utility, Engineering and Building & Fire Safety
Control Measure	BMP – Written Procedures
Measurable Goal:	The Town trains related Town personnel on implementation of written IDDE procedures.
Department Responsible:	Town Utility, Engineering and Building & Fire Safety
Control Measure	BMP – Inspections
Measurable Goal:	The Town reviews its current construction site inspection procedures and seek opportunities to update inspection of stormwater runoff controls.
Department Responsible:	Town Utility, Engineering and Building & Fire Safety
Control Measure	BMP – Education & Public Involvement
Measurable Goal:	The Town provides contractors with educational brochures on stormwater compliance.
Department Responsible:	Engineering and Building & Fire Safety
Control Measure	BMP – Enforcement
Measurable Goal:	The Town has developed, implement, and will enforce a stormwater ordinance to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one (1) acre, including projects less than one (1) acre that are part of a larger common plan of development

	or sale, and discharge into the Town’s MS4. The Ordinance meets all requirements outlined in the MS4 Permit.
Department Responsible:	Town Marshall, Engineering, and Building & Fire Safety
Control Measure	BMP – Training
Measurable Goal:	The Town provides construction inspectors training to identify compliance/non-compliance with the stormwater ordinance requirements.
Department Responsible:	Engineering and Building & Fire Safety

3.5 POST CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

The ultimate objective is to 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 common plan of development that discharges in the Town’s MS4.

Control Measure	BMP – Inventory
Measurable Goal:	The Town has developed an online reporting tool for all active permits issued and will continue to maintain inventory within that system.
Department Responsible:	Town Utility, Engineering and Building & Fire Safety
Control Measure	BMP – Enforcement
Measurable Goal:	The Town has developed, implement, and will enforce a stormwater ordinance to address post construction stormwater management in new development and redevelopment. The Ordinance meets all requirements outlined in the MS4 Permit.
Department Responsible:	Town Utility, Engineering and Building & Fire Safety

Control Measure	BMP – Inspections/Site Plan Reviews
Measurable Goal:	The Town will review its current construction site inspection procedures and seek opportunities to update inspection of stormwater runoff controls.
Department Responsible:	Town Utility, Engineering and Building & Fire Safety

3.6 POLLUTION PREVENTION AND GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

The ultimate objective is to develop, implement and maintain an operations and maintenance program that includes a training component with the goal of preventing or reducing pollutant runoff and protecting water quality from municipal facilities and activities.

Control Measure	BMP – Training
Measurable Goal:	The Town provides for and documents all employees who receive training.
Department Responsible:	Town Utility, Engineering and Building & Fire Safety
Control Measure	BMP – Inspections
Measurable Goal:	The Town will Prioritize and schedule Town maintenance yard, parking lots, catch basins and public streets for pollution prevention activities.
Department Responsible:	Town Engineer and Public Works
Control Measure	BMP – Operations and Maintenance Procedures
Measurable Goal:	The Town will inventory its municipal operations and prioritize activities that have the potential to discharge stormwater to the MS4 and inspect them annually.
Department Responsible:	Town Engineer and Public Works

4. MONITORING REQUIREMENTS

The Town does not discharge stormwater to impaired or not-attaining waters and therefore is currently not required by the MS4 Permit to do additional monitoring beyond the Characterization Monitoring outlined in Section 4.1 below. If at any time notification from ADEQ for additional monitoring is received by the Town, this SWMP will be updated.

4.1 STORMWATER CHARACTERIZATION MONITORING

All MS4s are required to performed Stormwater Characterization Monitoring, Per Section 7.0 of the Town's MS4 Permit. Characterization monitoring will be performed by staff, at a minimum, on three (3) of the ten (10) outfalls by September 30, 2023. All parameters listed in Appendix B of the MS4 Permit shall be monitored and reported in ADEQ via the DMR provided in MyDEQ. The DMR will be submitted within 30 days after receiving laboratory results.

Any sampled qualifying storm event will be defined as rainfall in the amount of 0.1 inches or more and a resulting discharge at each outfall location and collection will occur within "First Flush" (first 30 minutes of storm event discharge) of a qualifying storm event, to the MEP. However, the normalized rainfall in the amount of 0.5 inches or more is typical for Cave Creek due to topography and distances of the Town's storm sewer system for outfall discharge. The Town will include the sampled qualifying storm event data in the DMR. Characterization sampling will not be conducted in any adverse climatic conditions.

Additionally, ADEQ may notify the MS4 in writing of any 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.

4.2 STORMWATER MONITORING AND ASSESSMENT

The Town does not discharge to any non-attaining or impaired, or an OAW. Therefore, no Wet Season stormwater analytical monitoring is required to be conducted. As a result, this SWMP does not include provision for Wet stormwater analytical monitoring.

The Town conducting both dry weather and wet weather stormwater visual monitoring on at least 20% of all outfalls each year, per Section 6.3(8) of the MS4 Permit. The Summer Wet Season is from June 1st to October 31st and Winter Wet Season is from November 1st to May 1st each year. Re-inspection of outfalls may be included in the annual monitoring percentage. In the event an illicit discharge is discovered, the Town will implement measures to eliminate the illicit discharge.

The procedures for Stormwater Monitoring and Assessment are further outlined in the Town's IDDE program and ERP.

4.3 SAMPLING AND ANALYSIS PLAN (SAP)

The Town utilizes employees who are qualified and trained in stormwater sampling and compliance inspections. All qualified employees receive annual Stormwater Compliance Training. In accordance with requirements presented in Section 7.3 of the MS4 Permit, the following criteria will be included for any analytical monitoring (including Characterization Sampling) of stormwater discharges:

- Names and titles of the person(s) performing monitoring
- Location/Outfall site
- A map showing the most likely area to be impacted by discharge of pollutant(s)
- Water quality parameters and pollutants to be sampled
- The citation and description of the sampling protocols to be used
- Identification of the analytical methods and related method detection limits (if applicable) for each parameter required.

All sampling is performed using standard sampling protocols as defined by the MS4 Permit, ADEQ and industry standards.

5. PROGRAM ASSESSMENT, RECORDKEEPING, AND REPORTING

5.1 PROGRAM EVALUATION

Per the MS4 Permit, the following steps will be taken during annual program evaluation:

1. The Town will self-evaluate its compliance with the terms and conditions of the permit. As required, the Town will maintain the annual evaluation documentation as part of this SWMP. It will be up uploaded into **Appendix A** each year as supporting documentation to the SWMP.
2. The Town will evaluate appropriateness of the selected BMPs in achieving the objectives of each control measure and the defined measurable goals.
3. Any BMP modification documentation will include the following information and all documentation shall be kept in **Appendix B** of this SWMP:
 - a. An analysis of why the BMP is ineffective or infeasible
 - b. Expectations on the effectiveness of the replacement BMP

- 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 Town to add, modify, repair, replace or change BMPs or other measures described in the SWMP to address the following:
 - a. Impacts to receiving water quality caused or contributed to by discharges from the Town's MS4
 - b. To satisfy conditions of the MS4 Permit
 - c. To include more stringent requirements necessary to comply with new state or federal legal requirements
 - d. Attaining surface water quality standards
5. Any changes requested by ADEQ will be in writing and will require the Town to develop a schedule to implement the changes and will offer the Town the opportunity to propose alternative program changes to meet the objective of the requested modification.

5.2 RECORDKEEPING

The Town will, at a minimum, retain all records required by the MS4 Permit for a period of three (3) years from the date the record is created. Records include information used in the development of any written program required by this permit, any monitoring results, copies of reports, records of screening, follow-up and elimination of illicit discharges; maintenance records; inspection records; enforcement actions; and data used in the development of the NOI, SWMP, plans, and Annual Reports. Any additional records deemed to be pertinent in managing this SWMP shall also be retained.

Records other than those required to be included in DMRs and the Annual Report will be submitted upon request by ADEQ or USEPA. Requirements for discharges to non-WOTUS protected surface waters are state-only and records need only be submitted to ADEQ.

The Town will make the records relating to the MS4 Permit, including this SWMP, available to the public. The current SWMP and Annual Report will be posted on the Town's website.

5.3 REPORTING

The Town prepares its Annual Report during the required permit term to ADEQ. The annual reporting period is from July 1st through June 30th each year. The Annual Report is due to ADEQ on or before September 30th each year for the reporting period.

APPENDIX A – ANNUAL REPORTS

APPENDIX B – PROGRAM MODIFICATIONS