



# SEDONA STORMWATER MANAGEMENT PLAN

September 2024



**Prepared for:**

City of Sedona  
Public Works Department  
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**Submitted by:**

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**Permit Number:** AZG2021-002

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## EXECUTIVE SUMMARY

This Stormwater Management Program (SWMP) has been prepared for the City of Sedona (Sedona) to comply with the Arizona Department of Environmental Quality's (ADEQ) Arizona Pollutant Discharge Elimination System (AZPDES), General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4), [AZG2021-002](#) (Permit). It is the intent of the Permit to reduce to the "maximum extent practicable" (MEP), the discharges of pollutants from small municipal separate storm sewer systems (MS4) to the designated Waters of the United States, located within the State of Arizona. This requirement is mandated by the Environmental Protection Agency through the Clean Water Act and [A.R.S.49-255.04](#).

To comply compliance with the permit, Sedona has developed a Storm Water Management Program (SWMP). The SWMP, presented in the proceeding pages, describes the minimum control measures (MCMs) separated into six (6) target areas used to reduce pollutants and meet stormwater quality standards. The MCMs, as defined in the Permit, are:

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

To achieve the goals of each MCM, Sedona has selected a series of Best Management Practices (BMPs) that will be implemented within Sedona's urbanized areas. While numerous governmental departments will be tasked with the implementation of the SWMP and BMPs described within the MCM categories, Sedona's Public Works Department will ultimately be responsible for administrating and overseeing their implementation. These best management practices are described in Appendix B – G of the SWMP.

Because the SWMP is designed to be a comprehensive program document outlining how the stormwater program is implemented and maintained, additional sections have been included to address:

- Legal Authority
- MS4 Mapping
- Monitoring
- Program evaluation and revision
- Reporting

The Permit was issued by ADEQ effective on November 29<sup>th</sup>, 2021, and will expire on November 28<sup>th</sup>, 2026. If ADEQ does not reissue the general permit before the expiration date, this permit will be administratively continued in accordance with [A.A.C. R-18-9-C903](#) and remain in force and effect until a new one is issued.

The SWMP will be reviewed annually, and the measurable goals associated with the MCMs will be tracked and reported to ADEQ within an Annual Report. Revisions to the SWMP, or the BMPs will be tracked with the supporting documentation incorporated into the appendix of this document and reported as part of the Annual Report. The Annual Report and SWMP are available to the public for review online ([City of Sedona Stormwater](#)).

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# SECTION 1     **STORMWATER MANAGEMENT PROGRAM**

## **INTRODUCTION**

### **1.1   REGULATORY BACKGROUND**

The Arizona Pollutant Discharge Elimination System (AZPDES) General Permit for Discharges from Small Municipal Separate Storm Sewer System (MS4) Permit was established by the Arizona Department of Environmental Quality (ADEQ) pursuant to the Clean Water Act (CWA), Section 402(p)(3)(iii) and A.R.S. 49-255.04, to ensure that pollutant discharges from the MS4s are reduced to the “maximum extent practicable” (MEP), protect water quality, and satisfy the appropriate water quality requirements of the CWA. ADEQ’s initial 2002 AZPDES general permit required small MS4s to develop and implement SWMPs designed to control pollutants to the MEP and protect water quality. Subsequent issuance of the permit reflects new guidelines and rules passed down by the Environmental Protection Agency to ADEQ.

In order to maintain authorization to discharge stormwater runoff from the MS4, the City of Sedona (Sedona) is required to update the 2016 SWMP to reflect the requirements presented in the General Permit [AZG2021-002](#) (Permit).

### **1.2   SWMP COVERAGE AREA**

Sedona is located within the Upper Sonoran Desert of northern Arizona at an average elevation of 4,500 feet above mean sea level. The City is located in both Coconino and Yavapai Counties with a total area of 19.2 square miles and has a population of 9,684 per latest U.S. Census (2020). The City and County boundaries are shown in **Figure 1**.

Areas in the incorporated boundaries not covered under this Permit are: USFS National Forest lands, ADOT Right of Way (all of AZ State Highway Route 179, all of AZ State Highway Route 89A, except for a portion of AZ State Highway Route 89A just north of the roundabout intersection of AZ State Highway Route 179 and AZ State Highway Route 89A to the Owenby Way roundabout), and the Sedona Airport; other portions are excluded. Additional exclusions from this are all private roads, and private commercial and residential development not connected to a City owned and operated stormwater collection and conveyance system, and other development areas required to be under its own Pollution Elimination System permit (AZPDES or NPDES).

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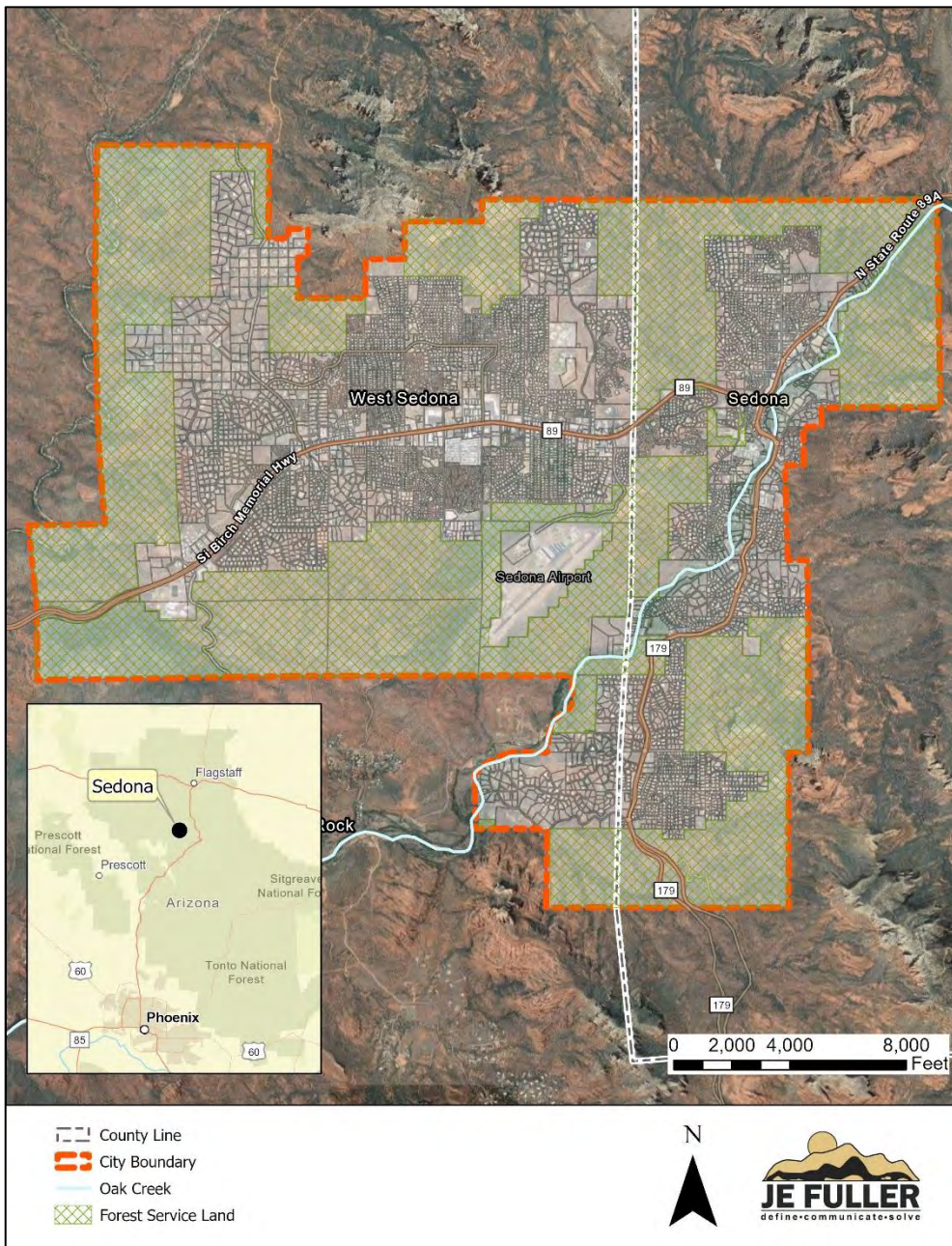


Figure 1-1: City of Sedona and Surround Areas

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### 1.3 ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM (AZPDES) SMALL MS4 GENERAL PERMIT

To achieve the goals of reducing pollutant discharges and protect water quality, the Permit requires the implementation of six (6) minimum control measures (MCM).

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

### 1.4 ORGANIZATION OF THE SWMP

This SWMP has been organized into thirteen (13) sections with their respective appendices. Each section is briefly described below:

#### **Section 1 Stormwater Management Program:**

This section briefly summarizes the history and requirements of Sedona’s stormwater program. It also outlines the roles and responsibilities of departments within the City of Sedona tasked with administrating, implementing and reviewing the SWMP.

#### **Section 2 Program Management:**

The goals of the Sedona’s stormwater program, the responsibilities of the City, developers, corporations, and individuals, and the legal authority/enforcement options available to the City are provided in this section.

#### **Section 3 Public Education and Outreach (MCM 1):**

The purpose of this program is to distribute information on the importance of clean stormwater runoff to the general public, residential communities, homeowners, schools and targeted business sectors (i.e., commercial and industrial facility owners and managers, developers, and contractors). The procedures associated with this program are briefly explained in this section.

#### **Section 4 Public Participation and Involvement (MCM 2):**

This section outlines the City’s goals for involving the general public in the creation, and review of a successful stormwater pollution prevention program, and the methods of involving the public during its implementation.

#### **Section 5 Illicit Discharge Detection and Elimination Program (MCM 3):**

This section describes the City’s Illicit Discharge Detection and Elimination (IDDE) program for prohibiting non-stormwater discharges into the MS4 and enforcement procedures being implemented to eliminate illicit discharges. Included are the methods for detecting non-stormwater discharges, and the education of the public, with emphasis on the target sectors of industry, regarding the prevention of illegal discharges into Sedona’s MS4.

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**Section 6 Construction Activity Stormwater Runoff Control (MCM 4):**

This section explains the program set forth by the City to reduce polluted stormwater runoff from construction sites. Within this section are the procedures for review of the stormwater quality process and elements to be implemented on a site, the inspection of the site during construction, and enforcement of the program by the City.

**Section 7 Post-Construction Stormwater Management in New Development and Redevelopment (MCM 5):**

This section identifies programs to be carried out by the City to reduce pollution from post-construction BMPs, including both structural and nonstructural BMPs, maintenance of infrastructure, and enforcement of regulations.

**Section 8 Pollution Prevention and Good Housekeeping for Municipal Operations (MCM 6):**

Described within this section are the operations for reducing pollution from municipal operations and facilities. The section further describes the City's training programs for stormwater pollution prevention designed to educate staff across multiple departments on the need for adherence to the Good Housekeeping protocols in order to keep pollutants out of the MS4.

**Section 9 Sampling and Analysis Plan:**

The plan, which is briefly explained in this section, defines the procedures and protocols to be used in sampling stormwater runoff, including those to be used for characterization monitoring and wet weather sampling.

**Section 10 Annual Program Evaluation Protocols:**

This section describes the procedure for reviewing, evaluating, and revising the City's SWMP. Included are the steps for preparing the Annual Report, where the report is filed and record keeping requirements specified in the permit.

**Section 11 Plan Availability and Record Retention:**

This section discusses where the SWMP will be made available and the procedure for keeping records, reports, and other documentation pertaining to the SWMP.

**Section 12 References:**

This section lists the reference used in the creation of the City of Sedona's Stormwater Management Plan.

**Section 13 Acronyms and Definitions**

This section contains an abbreviated list of acronyms and definitions relevant to the Permit and City of Sedona's Stormwater Management Plan.

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## SECTION 2 PROGRAM MANAGEMENT

### 2.1 OVERVIEW

The SWMP and its components will be implemented on an ongoing basis and will be updated as necessary during the permit term. This section describes the overall objectives of the City of Sedona's SWMP, some of the local issues specific to Sedona's small municipal separate storm sewer systems (MS4), departmental implementation of the SWMP, and an overview of the legal authority to implement and enforce the program.

### 2.2 STORMWATER SYSTEM

The City's stormwater system is comprised of a system of municipally owned or operated stormwater conveyances consisting of curbs, gutters, inlets, catch basins, underground pipes, retention basins, natural washes and man-made channels. The stormwater system is maintained by the City's Public Works Department. Copies of the current MS4 Infrastructure Maps are provided in **Appendix A**. The map will be updated as Capital Improvement Projects are completed and reviewed annually to verify that the map is current.

### 2.3 LOCAL RECEIVING WATERS

The City's MS4 discharges into Oak Creek, which is located within the eastern portion of the City and is designated as an Outstanding Arizona Water (OAW) as defined by Arizona Administrative Code R18-11-112(G). Oak Creek is also identified as non-attaining for *Escherichia coli* (E. Coli). A Total Maximum Daily Load (TMDL) for E. Coli was established in 2010 and will soon be updated as a new study of Oak Creek is underway (as of August 2024) to determine the current status of Oak Creek. The SAP (found in **Appendix H**) will be updated with the latest results when they are published. A TMDL is defined as a calculation of the maximum amount of a pollutant that a waterbody can receive and still safely meet water quality standards. The City of Sedona is fully within the Oak Creek watershed. In addition to the flows from the City boundary area, water from much of the western portions of Sedona passes beyond the City boundary and through Forest Service lands prior to reaching Oak Creek. Oak Creek flows through the City in the southwesterly direction.

### 2.4 STORMWATER MANAGEMENT RESPONSIBILITIES

Overall responsibility for administering the Permit and SWMP will be within the Public Works Department and under the supervision of the Public Works Director. However, implementing the SWMP will require assistance from multiple departments throughout the City. Given that each department/division may be responsible for only a small facet of this SWMP, the department responsible for each BMP is identified in the description in the following sections to help define roles and responsibilities. An organization chart of SWMP responsibilities is presented on [Figure 2-1](#).

The individuals responsible for ensuring based the implementation of the BMPs assigned to each department are listed in [Table 2-1](#).

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# Public Works Department

## City of Sedona

Organizational Chart

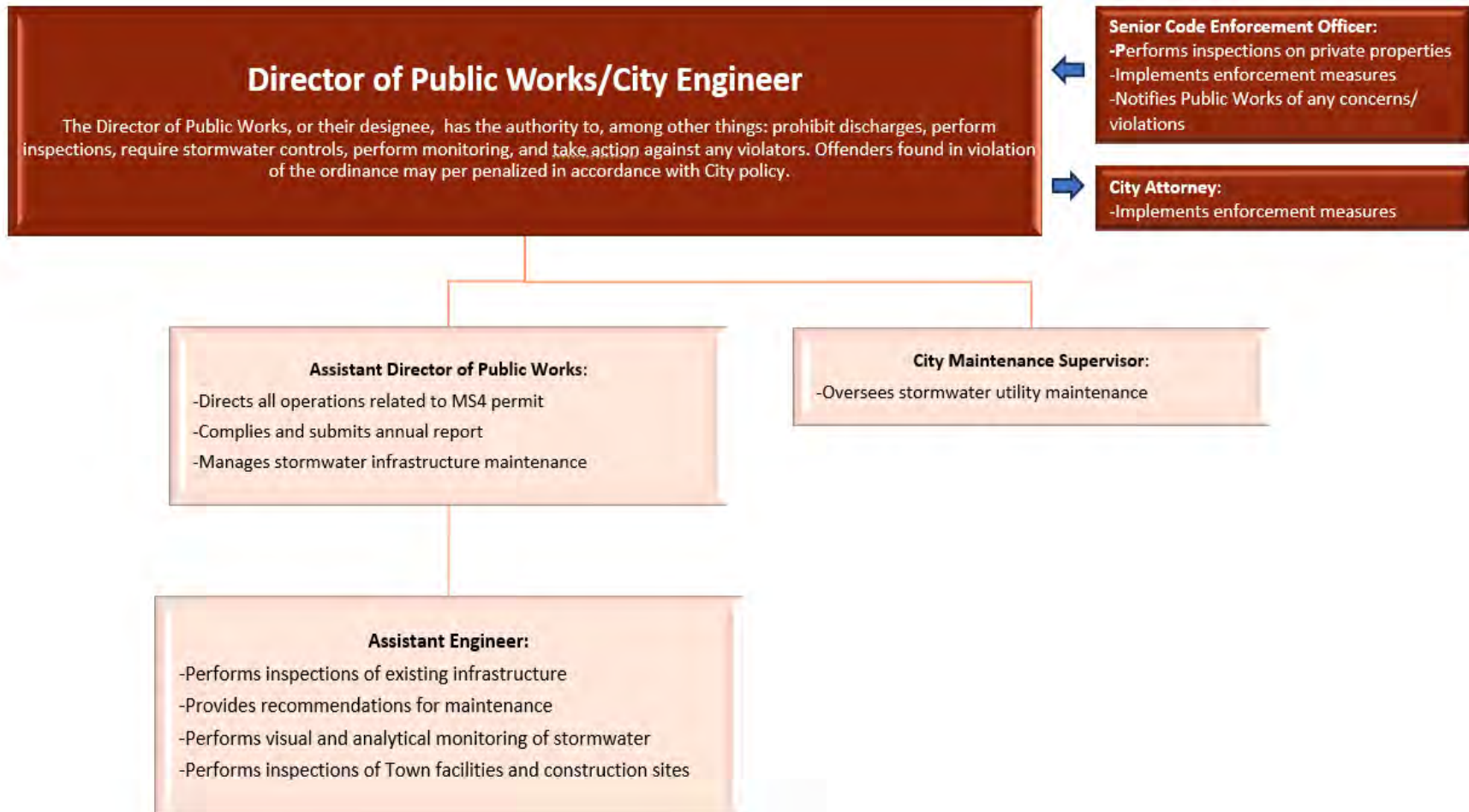


Figure 2-1: SWMP Organizational Chart

**Table 2-1: Summary of MCM Responsibilities**

Name	Title	Department	MCM Responsibility
Kurtis Harris	Director of Public Works/City Engineer	Public Works	4,5,6
Sandra Phillips	Assistant Director of Public Works/ Assistant City Engineer	Public Works	4,5,6
Michael Righi	Assistant Engineer	Public Works	All
Ryan Hayes	City Maintenance Manager	Public Works	3,6
Tony Schiaveto	Senior Code Enforcement Officer	Community Development (Code Enforcement)	3
Kurt Christianson	City Attorney	City Attorney	3,4,5

**2.5 LEGAL AUTHORITY**

The City of Sedona has established the legal authority to implement and enforce their stormwater program through [The Sedona City Code](#). For the purpose of permit, [Sedona City Code Chapter 13.50 Storm Water Discharge](#) will serve as the City’s Enforcement Response Plan, until such time it is superseded by a revised City Code or by an adopted Stormwater Enforcement Response Plan (ERP). Given that, the objectives of the Ordinance are:

- To regulate the contribution of pollutants to the City MS4 by stormwater drainage in incorporated urban areas of the City of Sedona.
- To prohibit illicit connections and discharges to the City MS4
- To establish the legal authority to carry out inspections, monitor and analyze stormwater discharges, and to enforce the procedures to ensure compliance with the Ordinance.

The legal authority to enforce the ordinance falls under the duties and responsibilities of the City Manager ([City Code Title 2](#)), the City Engineer ([City Code Title 13 Section 50.050](#)) and City Attorney ([City Code Title 2 Section 40.010](#)). The City Engineer at their discretion may designate other employees to administer, implement and enforce the provisions listed in City Code Title 13.

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**2.5.1 Enforcement Requirement Summary**

Table 2.2 demonstrates how the City Code adequately provides the procedures listed in Section 3.2 of the Permit.

**Table 2-2: Summary of Code References**

Permit Requirement	City Code
Prohibit and Eliminate Illicit Discharge	<a href="#">City Code 13.50.70</a> <a href="#">City Code 13.50.120</a>
Control spills and prohibit dumping into the MS4	<a href="#">City Code 13.50.140</a> <a href="#">City Code 8.10.220</a> <a href="#">City Code 13.50.130</a>
Require compliance	<a href="#">City Code 13.50.150</a>
Require owners of Construction Sites, Industrial and Commercial Facilities to minimize discharges using maintenance control measures	<a href="#">City Code 13.50.090</a> <a href="#">City Code 13.50.110</a>
Right of entry to inspect	<a href="#">City Code 13.50.090</a> <a href="#">City Code 13.50.110</a>
Issue cease and desist orders for illicit discharges and/or require clean up and abatement of such discharges	<a href="#">City Code 13.50.150</a>
Criminal and Civil Penalties for violators	<a href="#">City Code 13.50.150</a> <a href="#">City Code 1.15.010</a>
Identify key personnel responsible for administrating, implementing, and enforcing the stormwater quality programs	<a href="#">City Code 13.50.050</a> <a href="#">City Code 2.05.010</a> <a href="#">City Code 2.55.010</a> <a href="#">City Code 2.40.010</a>
Identification of Legal Procedures	<a href="#">City Code 13.50.150</a>
Description of how stormwater related ordinances are to be implemented	<a href="#">City Code 13.50</a>

**2.5.2 Enforcement Summary**

To comply with the Permit, the City Ordinance outlines a set of escalating enforcement measures the City will follow to enforce its relevant stormwater ordinances. Escalation measures presented in the City Code are briefly described below:

- A Notice of Violation - Upon discovery, a written notice of violation shall be served by hand, delivered certified mail or conspicuously posted at the violating facility to the owner, owner’s agent, occupant or lessee. The letter will state the nature of the violation, the corrective action required, the time frame for undertaking the corrective action and penalties associated with noncompliance.
- Civil Litigation – Should the responsible party fail to comply with the Notice of Violation, it will be considered as a Civil Infraction and may be referred to the City of Sedona and/or the Yavapai County Superior Court.

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Any person found violating the City Code or failing to comply with the Notice of Violation shall be liable to the City for all damages, fines and penalties incurred by the City. Judgement against the responsible party may result in monetary restitution, site restoration/clean up and/or cease and desist injunctions.

- Criminal Litigation – If the level of the violation is deemed to be a threat to public, health, safety or welfare, it may be considered to be a Public Nuisance and litigated in a misdemeanor offense ([City Code 8.10.190](#)) Penalties shall be administered based on [City Code Section 1.15.010](#).

## 2.6 ANNUAL REVIEW

To evaluate the effectiveness of the SWMP, Sedona Public Works will conduct a yearly review of each best management practice and the SWMP as a whole. The annual review is discussed in detail in Section 10.

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## SECTION 3 MCM 1 PUBLIC EDUCATION AND OUTREACH

### 3.1 OVERVIEW

The City of Sedona (Sedona) will implement a public education and outreach program that will distribute educational materials and provide outreach to the small municipal separate storm sewer systems (MS4) community. This program is required by Section 6.1 of the General Permit [AZG2021-002](#). The educational materials are required to provide messages for specific groups regarding the impact of stormwater discharges within the community. Measurable goals must also be developed to assess the effectiveness of the BMPs. The purpose of the public education and outreach programs are to increase public knowledge regarding stormwater, change the behavior of the public, and reduce pollutants in the stormwater system.

In implementing the Public Education and Outreach program, Sedona will target at least one of the following groups within the community at large:

- General Public (private citizens)
- Residential Community
- Homeowners and Landowners
- Schools
- Visitors and Tourists

In addition, the Public Education and Outreach Program will target at least one of the following groups within the business sector:

- Developers/ Contractors/Property Managers
- Homeowner and Neighborhood Associations
- Construction Site Operators and Supervisors
- Commercial and Industrial Businesses and their owners

In targeting the different sectors of the public, MCM 1 will strive for the maximum value and impact. According to the US Census Bureau, the general public demographics for Sedona include:

- The average household size is 1.98 persons per household.
- 49% of residents over the age of 25 have a bachelor's degree or higher.
- The median household income is \$58,901.
- 75% of the population is White, while Hispanic or Latino make up 21% of the population.
- 98% of households have a computer with 91% having an internet connection.

In providing the demographics noted above implementation of MCM-1 can tailor both the message relayed and the material distributed to the target audience. Approximately 60% of the population is over the age of 50 and therefore most public outreach efforts will target this age group. In so doing, the public is better informed about the importance of stormwater quality, and as a result, is more likely to support the efforts of the City. Methods will be developed to evaluate the effectiveness of the educational and outreach programs and tied to the defined goals of the program.

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### 3.2 SELECTED BMPs

Sedona has evaluated the public education and outreach component of their stormwater program and has identified BMPs to better inform the residents and businesses of the importance of preventing stormwater pollution. The selected BMPs are summarized in [Table 3-1](#) with a description of each BMP provided in this section. Detailed BMP information is provided in [Appendix B](#).

TABLE 3-1 – SUMMARY OF MCM 1 BMPs

BMP	Description
MCM 1.1	Educational Materials
MCM 1.2	Educational Events
MCM 1.3	Stormwater Webpage
MCM 1.4	Public Service Announcements
MCM 1.5	Public Signage
MCM 1.6a	Internal Updating (New Resource Research)
MCM 1.6b	Internal Updating (City Management Update)

#### MCM 1.1 EDUCATIONAL MATERIAL

**Description:** Sedona staff will promote an education program that increases the public’s knowledge of stormwater quality and stormwater pollution prevention.

**Responsible Department(s):**

Sedona Public Works Department

**Measurable Goals:** Sedona will develop, distribute and make available electronically, educational materials that focus on stormwater quality and pollution prevention. Brochures have been created for various audiences including the construction industry, the public, and visitors to Sedona. Brochures are available on the [stormwater webpage](#) and in printed form at several key locations in the City Hall complex (Public Works Department lobby, the Finance Department lobby, Community Development Department lobby, and the City Hall lobby.). Additional educational and stormwater related resource material will be provided in the form of on-line links. Current brochures focus on construction site stormwater, residential stormwater and general informaton for tourists.

Materials will be available throughout the year on the website and at key locations within City Hall complex and will be available at public events (MCM 1.2). Materials distributed to the public may be tracked. The materials will also be annually evaluated and when necessary modified. The types and quantities of education materials available will be summarized as part of the Annual Report. The City is currently exploring options for tracking material distribution and may include the number of brochures distributed in the future when possible. Revisions to the educational material will also be documented, as well any feedback regarding their effectiveness.

**Target Group:** General public, residential communities, homeowner’s associations, property management companies, restaurants, commercial facilities,

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automotive repair facilities, retail shopping centers, industrial facilities, construction companies, and visitors. A minimum of one (1) group within the general public and one (1) group within the business sector will be targeted each permit year for outreach. Note: Additional target groups will be included in the distribution efforts when available.

**Metrics:** The quantity of education materials distributed will be tracked and reported, if possible. Additionally, the material medium or type, the general information it contained, the target group who received the message, and how it was distributed will be tracked. Any revisions to the educational materials will be documented. The documented measures will be reported as of the Annual Report during each permit year.

### **MCM 1.2 EDUCATIONAL EVENTS**

**Description:** Sedona staff will engage Oak Creek Watershed Council to organize/coordinate and attend education events and distribute the education materials prepared as part of MCM 1.1. Sedona staff may attend these events in support, but at minimum track the event particulars for the Annual Report.

**Responsible Department(s):**

Sedona Public Works Department

**Measurable Goals:** Sedona staff will participate in a minimum of one (1) educational event during the permit year. Sedona typically partners with a non-profit organization (Oak Creek Watershed Council) to host such events. The events can include community events such as fairs, volunteer efforts or community expositions, stormwater focused community workshops, use of the Speakers Bureau to present stormwater related topics, and/or presentations at City council meetings. Because community events may vary over the Permit term, Sedona, at its discretion, may take advantage of these new opportunities. As such the events attended may vary yearly. The number of events, name/type of event, total number of event attendees, total number of persons meeting with staff persons will be documented.

**Target Group:** Residents, tourists, residential communities, homeowner's associations, contractors/developers, business owners, and commercial and industrial facilities.

**Metrics:** Oak Creek Watershed Council will report to Sedona staff the number of events, name/type of event, total number of event attendees, and total number of persons directly contacted during the event. This information will be included as part of the Annual Report during each permit year.

### **MCM 1.3 STORMWATER WEBPAGE**

**Description:** Sedona staff has created and will maintain a webpage dedicated to promoting education and communication on stormwater related topics ([City of Sedona Stormwater Webpage](#)).

**Responsible Department(s):**

Sedona Public Works Department

**Measurable Goals:** Sedona's stormwater webpage will be reviewed and/or periodically updated to provide information on stormwater related topics. The City will conduct annual research to ensure that all disseminated information is up-to-

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date and accurate. The webpage will contain an electronic copy of the Stormwater Management Plan, the City's Notice of Intent (NOI) to discharge, and the Annual Report as required by ADEQ. The webpage will provide the general public with the ability to request a stormwater presentation and will include educational material developed in MCM 1.1. The website contains information about stormwater quality concerns and how the public can help, as well as contact information for the City Engineer to address any stormwater related comments or questions. The number of annual website visitors, the number of total page views, and average time viewing the website will be documented. Updates made to the website during the permit year will also be documented.

**Target Group:** General Public (Homeowners, Business Owners, Contractors).

**Metrics:** Number of annual website visitors, the number of total page views, average time visiting the website, the number of complaints received, and the number and date of website updates will be tracked. The results will be reported within the Annual Report during each permit year. Any revisions to the webpage during the permit year will also be discussed.

### **MCM 1.4 PUBLIC SERVICE NOTIFICATIONS**

**Description:** The City of Sedona will publish press releases to disseminate public information regarding stormwater related news.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** Sedona staff will prepare and publish press releases to disseminate public information regarding stormwater related news using outlets such as radio, local newspapers, or the city website. Sedona will publish a minimum of two (2) public service notifications (typically 'City Talk' articles in the newspaper). These notifications will cover topics such as stormwater quality, stormwater management, or stormwater related events. The number of public service notifications per year will be tracked, along with the topic and target audience of the announcements. This information will be included in the Annual Report.

**Target Group:** General Public (Homeowners, Business Owners, Contractors).

**Metrics:** The number of public service notifications per year will be tracked, along with the topic and target audience of the announcements. This information will be included in the Annual Report during each permit year.

### **MCM 1.5 PUBLIC SIGNAGE**

**Description:** The City of Sedona will install and maintain tributary signage that promotes stormwater quality.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** Sedona staff will install and maintain signage throughout the City that promote stormwater quality. The signs and placards say either "Sedona Stormwater Keep It Clean" or "No Dumping, Drains to Oak Creek" to discourage illicit discharges. Signage will be placed at storm drain inlets and in other tributaries

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to Oak Creek. The number of signs installed and replaced/repared each permit year will be recorded in the Annual Report.

**Target Group:** General Public (Homeowners, Business Owners, Contractors) and tourists.

**Metrics:** The number of signs and placards installed and repaired/replaced per year will be tracked, along with the location of the signage. This information will be included in the Annual Report during each permit year.

### **MCM 1.6A INTERNAL UPDATING (NEW RESOURCES RESEARCH)**

**Description:** The City of Sedona will conduct annual research on new stormwater quality information.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** Sedona staff will contact agencies and research websites with the intent of updating information annually on the [stormwater webpage](#) (MCM 1.3) and in the library of educational materials available (MCM 1.1). While new information may be identified throughout the year, City staff will set aside time at least twice per year to conduct research and update information accordingly. Information obtained will be documented in the Annual Report.

**Target Group:** General Public (Homeowners, Business Owners, Contractors) and tourists.

**Metrics:** The number of times research was conducted, and the information obtained will be documented and this information will be included in the Annual Report during each permit year.

### **MCM 1.6B INTERNAL UPDATING (CITY MANAGEMENT UPDATE)**

**Description:** The City of Sedona will conduct update meetings to inform department heads, directors, city council, and civic leaders of stormwater quality efforts and its importance.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** Sedona staff will compile information regarding the Stormwater Management Program and other stormwater related topics to update community leaders on their stormwater quality efforts and the importance of these efforts. A meeting will be held at least once per year to disseminate such information to the target audience. Record of these meetings will be kept in the Annual Report

**Target Group:** Department heads, Directors, City Council, Civic Leaders

**Metrics:** The number of management update meetings held, along with target audience and topics discussed will be documented. This information will be included in the Annual Report during each permit year.

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## SECTION 4 MCM 2 PUBLIC PARTICIPATION AND INVOLVEMENT

### 4.1 OVERVIEW

As an extension of MCM 1, the City of Sedona will implement a public participation and involvement program that provides opportunities to engage the public and promote stormwater quality within the MS4 (Section 6.2 of the General Permit [AZG2021-002](#)). Sedona also recognizes that the public’s involvement in the process of developing the City’s SWMP is crucial for developing support by the citizenry and is ultimately tied to the success of the SWMP. To that end Sedona will encourage the public to take a vested interest in stormwater quality program by being an active participant in the development of the city’s SWMP.

Stormwater meetings and events will be publicized and open to the public to promote and encourage participation.

### 4.2 SELECTED BMPs

In meeting the requirements stated in Section 6.2 and understanding their community, the City of Sedona has developed a series of best management practices for implementation. The selected BMPs are summarized in [Table 4-1](#) with a description of each BMP provided in this section. Detailed BMP information is provided in [Appendix C](#).

TABLE 4-1 - SUMMARY OF MCM 2 BMPs

BMP	Description
MCM 2.1	Community Reporting Line
MCM 2.2	Community Email
MCM 2.3	Community Reporting Tool
MCM 2.4	Stormwater Webpage
MCM 2.5	Public Signage
MCM 2.6	Educational Events
MCM 2.7a	Local Outreach (SWMP Public Review/Comment)
MCM 2.7b	Local Outreach (Pet Waste Program)
MCM 2.8a	Volunteer Opportunities (Sedona Sustainability Dept)
MCM 2.8b	Volunteer Opportunities (Oak Creek Watershed Council)

#### MCM 2.1 COMMUNITY REPORTING LINE

**Description:** To promote Public Participation and Involvement, the City of Sedona will make available, a phone number (928) 204-7111 (also provided on website) that the general public can use to report illicit discharges or make general stormwater management plan inquiries.

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**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** Sedona will provide a phone number on the stormwater website to allow the general public to inquire about the City’s SWMP, including, but not limited to general information, reporting illicit discharges, and answering other SWMP related questions. The number of calls and the type of inquiry (violation reporting or general question) received will be tracked and documented.

**Target Group:** General Public

**Metrics:** The total number of calls received via the reporting line will be reported on the Annual Report. The types of inquiries will be summarized and reported.

**MCM 2.2 COMMUNITY EMAIL**

**Description:** To promote Public Participation and Involvement, the City of Sedona will provide a link on its [stormwater webpage](#) to an email address such that the general public can use it to report illicit discharges or make general stormwater management plan inquiries.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** An email address will be provided to the general public to allow for stormwater related inquiries and to report illicit discharges. The number of emails and the type of inquiry (violation reporting or general question) received will be tracked and documented.

**Target Group:** General Public

**Metrics:** The total number of emails received through the community email will be reported in the Annual Report. The types of inquiries will be summarized and reported.

**MCM 2.3 COMMUNITY REPORTING TOOL**

**Description:** Sedona staff has created and will maintain a web-based reporting tool, “[Report It](#)”, found on the City Clerks webpage, which allows citizens to report problems including stormwater violations.

**Responsible Department(s):**

Sedona Public Works Department

**Measurable Goals:** As part of the City’s webpage, there is a “Report It” tool that allows the general public to report a stormwater violation or other stormwater related issues. The tool will be monitored year-round during business hours and a timely response will be provided to inquiries. The number of reports submitted, and the type of inquiry/violation will be tracked.

**Target Group:** General Public (Homeowners, Business Owners, Contractors).

**Metrics:** The total number of reports received through the “Report It” tool will be documented in the Annual Report. The types of inquiries will be summarized and reported.

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## MCM 2.4 STORMWATER WEBPAGE

**Description:** Sedona staff has created and will maintain a dedicated [stormwater webpage](#) to promote education and communication on stormwater related topics.

**Responsible Department(s):**

Sedona Public Works Department

**Measurable Goals:** Sedona’s stormwater webpage will be reviewed and/or periodically updated to provide information on stormwater related topics. The webpage will contain an electronic copy of the Stormwater Management Plan, the City’s Notice of Intent (NOI) to discharge and the Annual Report as required by ADEQ. The webpage will provide the general public with the ability to request a stormwater presentation or have a post-construction stormwater pollution prevention plan completed. Educational material developed in MCM 1.1 are included on the webpage as well. The website also contains a phone number, email address and the “Report It” tool to allow the general public to make general inquiries and report stormwater violations. Number of annual website visitors, the number of total page views, number of material downloads and the number and date of website updates will be documented.

**Target Group:** General Public (Homeowners, Business Owners, Contractors).

**Metrics:** Number of annual website visitors, average time of visit, and the number and date of website updates will be tracked. The results will be reported within the Annual Report during each permit year.

## MCM 2.5 PUBLIC SIGNAGE

**Description:** The City of Sedona will install and maintain tributary signage that promotes stormwater quality.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** Sedona staff will install and maintain signage throughout the City that promote stormwater quality. The signs and placards say either “Sedona Stormwater Keep It Clean” or “No Dumping, Drains to Oak Creek” to discourage illicit discharges. Signage will be placed at storm drain inlets and in other tributaries to Oak Creek. The number of signs installed and replaced/repared each permit year will be recorded in the Annual Report.

**Target Group:** General Public (Homeowners, Business Owners, Contractors) and tourists.

**Metrics:** The number of signs and placards installed and repaired/replaced per year will be tracked, along with the location of the signage. This information will be included in the Annual Report during each permit year.

## MCM 2.6 EDUCATIONAL EVENTS

**Description:** Sedona staff will engage Oak Creek Watershed Council to provide opportunities to increase knowledge on stormwater related topics and distribute the education materials. Sedona staff may participate in these events in support, but at a minimum staff will track the event particulars for inclusion into the Annual Report.

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**Responsible Department(s):**

Sedona Public Works Department

**Measurable Goals:** Sedona staff will participate in a minimum of one (1) educational event during the permit year. The events can include community events such as fairs, volunteer efforts or community expositions, stormwater focused community workshops, use of the Speakers Bureau to present stormwater related topics, and/or presentations at City council meetings. Because community events may vary over the Permit term, Sedona, at its discretion, may take advantage of these new opportunities. As such the events attended may vary yearly. The number of events, name/type of event, total number of event attendees, total number of persons meeting with staff persons will be documented.

**Target Group:** Residents, tourists, residential communities, homeowner's associations, contractors/developers, business owners, and commercial and industrial facilities.

**Metrics:** The number of events, name/type of event, total number of event attendees, and total number of persons meeting with staff persons will be reported as part of the Annual Report during each permit year.

**MCM 2.7A LOCAL OUTREACH (SWMP PUBLIC COMMENT/REVIEW)**

**Description:** To promote Public Participation and Involvement, Sedona staff will develop a local outreach program for soliciting, collecting, and processing public input regarding the City's Stormwater Management Program.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** The SWMP is posted on the City's website and is available year-round for comments from the public. Acknowledgement of the receipt of comments will be sent to the participant and, where appropriate, revisions will be made to the SWMP. The number of comments received, and the revisions made to the SWMP as a result will be documented.

**Target Group:** General Public

**Metrics:** The number of comments received will be documented. The number and type of revisions made to the SWMP as a result of the comments will also be documented in the Annual Report during each permit year.

**MCM 2.7B LOCAL OUTREACH (PET WASTE PROGRAM)**

**Description:** The City of Sedona will develop a program to encourage the self-policing of pet waste through the installation and maintenance of pet waste stations and increased community awareness.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** Sedona staff will install and maintain pet waste stations throughout the city to promote stormwater quality. The City will also create and update the [City Maintained Pet Waste Stations Map](#) and encourage public participation in the pet waste program by disseminating information on the importance of properly disposing of pet waste. Information will be distributed during

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educational events (MCM 2.6) and made available on the website (MCM 1.3). During the year, each pet station will be inspected one time and maintained as necessary. The number of new installations and repaired/replaced stations will be documented.

**Target Group:** General Public

**Metrics:** The number of new pet waste stations installed will be documented, as well as the number of stations repaired/replaced throughout the year. Amount of pet waste collected will also be documented and reported. This information will be documented in the Annual Report for each permitted year.

### **MCM 2.8A VOLUNTEER OPPORTUNITIES (SEDONA SUSTAINABILITY DEPARTMENT)**

**Description:** To promote Public Participation and Involvement, Sedona staff will coordinate with Sedona Sustainability Department to promote volunteer activities.

**Responsible Department:**

Sedona Public Works Department  
Sedona Sustainability Department

**Measurable Goals:** Sedona staff will promote opportunities and projects through the [stormwater webpage](#). Projects and events that Sedona supports are Ripple Effect, World Water Day, Project Wet, and clean-up events.

**Target Group:** General Public

**Metrics:** The number of opportunities and projects that Sedona supports through Sedona Sustainability Department will be documented.

### **MCM 2.8B VOLUNTEER OPPORTUNITIES (WATERSHED COUNCIL)**

**Description:** Oak Creek Watershed Council, an entity engaged by the City of Sedona, will identify projects that help reduce stormwater pollution and promote water quality.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** Sedona staff will support a minimum of one (1) volunteer opportunity per permit year that is organized by Oak Creek Watershed Council and designed to engage the community in improving storm water quality and reduce stormwater pollution. The number of events attended, and the number of participants will be documented.

**Target Group:** General Public

**Metrics:** The number of events, type of event, and number of participants will be documented as part of the Annual Report for the given permit year.

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## SECTION 5 MCM 3 ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM (IDDE)

### 5.1 OVERVIEW

The third mandated minimum control measure (MCM 3) includes developing, implementing, evaluating and updating a program to detect and eliminate illicit and non-stormwater discharges to the small municipal separate storm sewer systems (MS4) as required in Section 6.3 of the General Permit [AZG2021-002](#). This program is commonly referred to as an Illicit Discharge Detection and Elimination program, or IDDE.

The objectives of the IDDE program are to systematically find and eliminate sources of non-stormwater discharges to the (MS4) and to implement procedures to prevent illicit connections and discharges. The main components of the program used in meeting these objectives are:

- Outfall and storm sewer system inventorying
- Visual Dry Weather Outfall Monitoring of outfalls locations
- Visual Wet Weather Discharge Monitoring of outfalls locations
- Follow-up monitoring/inspections at outfalls points where identified or suspected illicit discharges were observed.
- Tracking sources of potential illicit discharges
- Legal Enforcement of the IDDE Program

As part of the IDDE Program, standardized forms will be used by the City of Sedona staff to document the Visual Monitoring efforts and IDDE Investigations. Templates are provided in **Appendix L** of this report. Completed forms will also be stored in Appendix L. In addition, Sedona Public Works Department will annually evaluate and will update the IDDE program as necessary to comply with the revised General Permit. Ongoing staff training will ensure that the processes developed as part of the IDDE are explained and reinforced such that they can be properly implemented through the permit term.

### 5.2 ALLOWABLE NON-STORMWATER DISCHARGES

Non-stormwater discharges allowed under [General Permit No. AZG2021-002](#), Section 6.3.6, that are not considered “illicit” include:

- water line flushing
- landscape irrigation
- diverted stream flows
- rising ground waters
- uncontaminated groundwater infiltration
- uncontaminated pumped ground water
- discharges from potable water sources
- foundation drains
- air conditioning condensate
- irrigation water
- springs
- water from crawl space pumps
- footing drains
- lawn watering
- individual residential car washing
- discharges from riparian habitats and wetlands
- dechlorinated swimming pool discharges
- street wash water
- discharge or flows from emergency firefighting activities
- discharges authorized by another NPDES or AZPDES permit

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Sedona Public Works has reviewed the above discharges and determined that they are not significant contributors of pollutants to waters of the United States. All discharges to and from the MS4, other than those named above and stormwater discharges, will be treated as potential illicit discharges until identified otherwise, as provided in [Chapter 13.50.070 of the Sedona City Code](#).

### 5.3 OUTFALL LOCATIONS

Sedona has identified four (4) outfalls within its MS4 area, with one (1) outfall specific to characterization monitoring only. The runoff from two (2) of the outfalls discharges directly into Oak Creek (OC-1 and OC-2). OC-1 discharges from Soldiers Wash behind Tlaquapaque, directly into Oak Creek. This outfall will be used for characterization and analytical monitoring and is representative of commercial runoff. OC-2 discharges from a concrete-lined culvert into Oak Creek and will be used for analytical monitoring only. BOB-1 discharges from a natural channel into Back O' Beyond Wash approximately 1 mile upstream of its confluence with Oak Creek. This outfall will be used for analytical and characterization monitoring and is representative of residential runoff. The final outfall is CCW-1, which discharges out of a box culvert into a natural channel and will be used for characterization monitoring of industrial runoff. Having identified four (4) outfalls, the SWMP does not meet the number of outfalls required by Section 6.3.7d. A list of the identified outfalls is presented in [Table 5-1](#). A map depicting the locations of the outfalls is presented on [Figure 5-1](#). In compliance with Section 6.3.7.b. of the General Permit, the City will visually monitor a minimum of 20% of the outfalls annually.

TABLE 5-1 - SUMMARY OF IDENTIFIED OUTFALL LOCATIONS

No.	Outfall ID	Description	Type of Monitoring	Longitude	Latitude
1	OC-1	Soldiers Wash at Tlaquapaque	Analytical and Characterization	-111.763	34.861
2	OC-2	Oak Creek @ Newcastle Ln	Analytical	-111.766	34.858
3	BOB-1	Back O' Beyond Wash @ Back O' Beyond Rd	Analytical and Characterization	-111.784	34.826
4	CCW-1	Carroll Canyon Wash	Characterization	-111.800	34.853

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Figure 5-1: Identified Outfall Locations

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### 5.4 AZPDES NON-FILERS COMPLIANCE

Sedona is aware that Oak Creek is an Outstanding Arizona Water per A.A.C.R18-11-112(G). As a result, ADEQ will not issue Notices of Intent to Discharge to construction sites applying for coverage under ADEQ’s CGP. ADEQ will also not issue Notices of Intent to Discharge to those facilities that conduct industrial activities (40 CFR 122.26(b)(14)(i)-(xi)) and are apply for coverage under ADEQ’s MSGP. Discharges of stormwater runoff into Oak Creek or its tributaries from construction sites and “industrial” facilities is prohibited. Given this, the above sites and facilities are considered to be “non-filers” by ADEQ and do not need to be reported to ADEQ.

### 5.5 SELECTED BMPs

The City of Sedona (Sedona) has selected a series of best management practices (BMPs) that are intended to meet the requirements specified in Section 6.3 of the Permit. A list of the BMPs is presented in [Table 5-2](#). While the BMPs used to comply with the requirements are explained in detail in **Appendix D**, a brief summary of each is provided below.

TABLE 5-2 - SUMMARY OF MCM 3 BMPs

BMP	Description
MCM 3.1	Storm Sewer System Mapping
MCM 3.2	Written Enforcement Procedures and Legal Authority Review
MCM 3.3	Visual Outfall Monitoring (Dry Weather)
MCM 3.4	Visual Outfall Monitoring (Wet Weather)
MCM 3.5	Analytical Monitoring (Wet Weather)
MCM 3.6a	Illicit Discharge Identification and Elimination
MCM 3.6b	Stormwater Discharge Identification and Elimination
MCM 3.7	Plan Review (Stormwater Detention)
MCM 3.8	IDDE Staff Training
MCM 3.9	Illicit Discharge On-line Reporting

#### MCM 3.1 STORM SEWER SYSTEM MAPPING

**Description:** Sedona will maintain and update the storm sewer system map containing all MS4 infrastructure to reflect new public and private structures constructed during the permit year to use as reference during inspections, and to help identify and eliminate illicit discharges.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** GIS features reflecting the new infrastructure will be added into Sedona’s existing storm sewer system map following final inspections and submittal of As-Built information. Map of the current MS4 infrastructure is provided in **Appendix A**. During the permit year, features may be added and/or revised. As part of the annual review of the SWMP, the map will be evaluated to ensure it reflects the added drainage infrastructure.

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**Metrics:** Number of completed stormwater projects will be documented on the Annual Report for each permitted year.

### **MCM 3.2 WRITTEN ENFORCEMENT PROCEDURES AND LEGAL AUTHORITY REVIEW**

**Description:** Sedona will implement proper enforcement procedures and actions through the preparation and adoption of ordinances and city codes.

**Responsible Department:**

Sedona Public Works Department  
Sedona City Attorney's Office

**Measurable Goals:** Assign staff from the Public Works Department, Community Development Department and City Attorney's Office to Director to review the [City of Sedona Land Development Code](#) and [City of Sedona City Code, Drainage Review, Engineering and Administrative Manual](#), and [Stormwater Ordinance](#) to ensure compliance with the stormwater enforcement requirements set forth in Section 3.0 and Section 6.3.2 of the [General Permit AZG2021-002](#). Any revisions necessary to the Codes or the Ordinances will be presented to the City Attorney's Office. It is expected that the any revision will require City Council action. Any revisions made to the City Code will be documented and updated in the SWMP.

**Metrics:** The occurrence of review will be documented and noted in the Annual Report. Any revisions to the Code and/or SWMP will be summarized.

### **MCM 3.3 VISUAL OUTFALL MONITORING (DRY WEATHER)**

**Description:** Sedona staff will conduct an annual monitoring of the outfalls during dry weather periods with the intent of detecting and eliminating potential illicit discharges.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** Annual dry-weather monitoring of outfalls will occur throughout the year with the goal of monitoring all three (3) identified outfalls once per permit year. Additional monitoring may occur in response to a filed complaint. The dry-weather monitoring efforts will be documented using a standardized form created as part of the SMWP (Appendix L).

**Metrics:** The number of visual monitoring efforts (routine, complaint response, or follow-up), as well as any findings, will be documented in the Annual Report for each permitted year.

### **MCM 3.4 VISUAL OUTFALL MONITORING (WET WEATHER)**

**Description:** Sedona staff will conduct an annual monitoring of the outfalls during wet-weather periods with the intent of detecting and eliminating illicit discharges and qualitatively assessing storm water quality.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** Annual wet-weather monitoring of outfalls will occur throughout the year with the goal of monitoring all three (3) identified outfalls once per permit year. Wet weather monitoring should occur during the first flush of a

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qualifying storm event when possible (see Sections 9.4 for description of a qualifying storm event). Samples will be inspected for color, odor, clarity, floatables, debris, and sheen. Visual wet weather monitoring may occur at the same time as active sampling used for analytical monitoring. Additional monitoring may occur in response to a filed complaint. The wet-weather monitoring efforts will be documented using a standardized form created as part of the SMWP (Appendix L).

**Metrics:** The number of visual monitoring efforts (routine, complaint response, or follow-up), as well as any findings, will be documented in the Annual Report once per permitted year.

### **MCM 3.5 ANALYTICAL MONITORING (WET WEATHER)**

**Description:** Sedona will collect and analyze samples for analytical monitoring following the procedures outlined in the Sampling and Analysis Plan (Appendix H).

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** Annual wet-weather monitoring of outfalls will occur throughout the year with the goal of monitoring all three (3) identified analytical monitoring outfalls once per permit year. Wet weather monitoring should occur during the first flush of a qualifying storm event when possible (see Sections 9.4 for description of a qualifying storm event). Samples will be submitted to a certified laboratory for analysis of the following constituents:

- pH
- Biological oxygen demand (BOD)
- Fecal coliform
- Total suspended solids (TSS)
- Oil/grease
- E. Coli

Results of analytical monitoring will be recorded in the SAP (Appendix H).

**Metrics:** Analytical monitoring will occur once per permitted year and the results of analytical monitoring will be recorded in the SAP (Appendix H).

### **MCM 3.6A ILLICIT DISCHARGE IDENTIFICATION AND ELIMINATION**

**Description:** Sedona will implement a process to detect and eliminate illicit discharges and unpermitted connections to the MS4.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** Sedona staff will investigate all reports of potential illicit discharges or storm water quality violations that were brought to the attention of staff during the permit year. The investigations will be documented using a standardized form created as part of the SMWP (Appendix L).

**Metrics:** The number of inspections will be documented in the Annual Report for the permit year. Follow-up actions will be summarized and provided as part of the Annual Report documentation.

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### **MCM 3.6B STORMWATER DISCHARGE (INDUSTRIAL ACTIVITIES FACILITIES)**

**Description:** Sedona will implement a process to prevent stormwater discharges from industrial sector facilities into their MS4.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** Sedona staff will investigate stormwater quality violations that were brought to the attention of staff during the permit year. For those sites that are found to be “Industrial Activity Facilities”, Sedona staff will inform the owner/operator that new stormwater cannot be discharged into the City’s MS4, or directly into Oak Creek or its tributaries and will provide guidance on how stormwater discharges can be eliminated. The investigations will be documented using a standardized form created as part of the SMWP (Appendix L).

**Metrics:** The number of investigations involving stormwater discharges will be documented in the Annual Report for the permit year. Follow-up actions will be summarized and provided as part of the Annual Report documentation.

### **MCM 3.7 PLAN REVIEW (STORMWATER DETENTION)**

**Description:** In compliance with the requirements associated with Oak Creek being an OAW, Sedona staff will verify that proper measures are in place to detain 100% of the stormwater generated by the site during construction and to the maximum extent practicable the new stormwater generated by facilities engaging in an industrial activity post-construction. Non-stormwater discharges shall be prohibited.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** Sedona staff, as part of the permit review process, will ensure that structural measures are incorporated into the plan set, that will ensure that new stormwater runoff will be detained on site and not discharged into Oak Creek or its tributaries. The number of plans reviewed will be tracked throughout the year. This information will be documented on the Annual Report for a given permit year.

**Metrics:** The number of plans reviewed will be tracked through the year. The information collected will be documented on the Annual Report for the given permit year.

### **MCM 3.8 IDDE STAFF TRAINING**

**Description:** Sedona Public Works Department will implement an annual program to train staff on the IDDE Program.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** During the course of the year, Sedona staff, who have been tasked with implementing an aspect of the IDDE program (ie: street workers, inspectors, solid waste personnel), will receive a minimum of one SWMP/IDDE training session. Training may be conducted in-house by qualified personnel or by an outside 3<sup>rd</sup> party. In-house training will be tracked using a standardized form

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provided in Appendix L of this document. Third-party training will be tracked through the receipt of training certificates.

**Metrics:** The number of attendees trained, and a summary of the training topics will be documented on the Annual Report for the given permit year.

### **MCM 3.9 ILLICIT DISCHARGE ON-LINE REPORTING**

**Description:** Sedona staff will develop and maintain measures that the public can use to report a potential illicit discharge or a stormwater violation, including the “[Report It](#)” tool on the City Clerks webpage and a phone number/email address on the [stormwater webpage](#).

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** The City will maintain public access to the “[Report It](#)” tool on the City Clerks webpage and the [stormwater webpage](#) which contains a phone number and an email address that will allow the public the means to report potential illicit discharges or a stormwater violation. Access to the website will be available through the permit term. All reports will be investigated in accordance with MCM 3.5.

**Metrics:** The number of potential illicit discharge/stormwater violations reported, and the means used for the report will be documented in the Annual Report for the given permit year.

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## SECTION 6 MCM 4 CONSTRUCTION ACTIVITY STORMWATER RUNOFF MANAGEMENT CONTROL

### 6.1 OVERVIEW

Section 6.4 of the General Permit [AZG2021-002](#) (Permit) outlines the requirements for the implementation of control measures to prevent illicit discharges and pollutants from stormwater runoff generated from construction activities from being discharged into The City of Sedona's (Sedona) small municipal separate storm sewer systems (MS4). To comply with the requirements presented in Section 6.4, the SWMP must include the following minimum control measures (MCM).

- An ordinance or other regulatory mechanism that requires the use of sediment and erosion control practices.
- 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 that will ultimately disturb greater than one (1) acre.
- Written procedures for site inspections and enforcement of sediment and erosion control measures.
- Inspection frequency based on the following:
  - Phase of construction
  - Proximity to an impaired, not-attaining water or Outstanding Arizona Water
  - Size of the construction activity (acreage disturbed)
  - History of non-compliance (site or operator)
- Requirements to take all necessary follow-up actions to ensure compliance.
- Requirements for construction operators to implement sediment and erosion control BMPs appropriate for the conditions at the construction activity.
- Requirements to control wastes such as discarded building materials, paints, fertilizers, concrete wash out, chemicals, litter, and sanitary wastes.
- Written procedures for site plan review.

In addition to the above, Sedona's SWMP provides education materials to contractors and construction personnel on erosion and sediment control best management practices. In addition, as part of the MCM 2 (SWMP Section 4) the public is allowed to submit information and considerations for inclusion in Construction Activity Stormwater Runoff Control during the annual review period.

### 6.2 LEGAL AUTHORITY

The requirement for construction sites to comply with rules and regulations associated with the AZPDES is presented in [Sedona City Code Article 13.50.090](#) and the [Storm Water Ordinance Section 14-1-9](#).

### 6.3 INSPECTION FREQUENCY

Sedona inspectors will inspect a minimum of 80% of the construction sites and construction activities. The frequency of the inspections is based on the requirements presented in Section 6.4.f of the Permit as listed below. Note: More

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frequent inspections can be scheduled for sites and operators that have a history of non-compliance. Compliance during the permit term shall be achieved by performing at least 80% of the scheduled inspections.

**GOAL FOR PRIVATE DEVELOPMENT PROJECTS:**

For sites disturbing 1 acre or more and within ¼ mile of an impaired, not attaining, or protected surface water

- Weekly and, within 24 hours of a storm event having a precipitation amount of 0.5 inches in a 24-hour period.

For sites not meeting the above

- Within 1 month of the start of construction,
- and quarterly thereafter,
- and upon completion of construction prior to final approval or occupancy

Inspections schedule will be incorporated into the SWPPP for the construction site with inspections being performed by the contractor as part of the CGP. The City of Sedona has the authority to audit the construction site to ensure that inspections are being performed as prescribed in the SWPPP.

**GOAL FOR CAPITAL IMPROVEMENT PROJECTS (CIP):**

For sites disturbing 1 acre or more and within ¼ mile of an impaired, not attaining, or protected surface water

- Weekly and, within 24 hours of a storm event having a precipitation amount of 0.5 inches in a 24-hour period.

For sites not meeting the above

- Within 1 month of the start of construction,
- and quarterly thereafter,
- and upon completion of construction prior to final approval or occupancy

For Publicly Funded Projects Inspections schedule will be incorporated into the SWPPP for the construction site with inspections being performed by the City of Sedona Senior Code Enforcement Officer.

**6.4 SELECTED BMPS**

In order to meet the requirements in Section 6.4, the City of Sedona (City) has evaluated the construction activity stormwater runoff control component of their stormwater program and has identified best management practices (BMPs) to better educate contractors and construction site operators of the importance of preventing stormwater pollution and to inspect construction sites and construction activities to ensure compliance with the City Codes and Ordinances. The selected BMPs are listed in Table 6-1 with a summary of each BMP provided in this section. Detailed BMP information is provided in **Appendix E**.

TABLE 6-1 - SUMMARY OF MCM 4 BMPS

BMP	Description
MCM 4.1	Construction Site Inventory
MCM 4.2	Site Plan Review
MCM 4.3	Contractor and Operator Educational Materials
MCM 4.4	Staff Training
MCM 4.5	Inspection and Enforcement Procedures

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#### **MCM 4.1 CONSTRUCTION INVENTORY**

**Description:** Sedona staff will prepare and maintain an up-to-date inventory of active construction sites and construction activities located within the city limits.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** In a cooperative effort, the Sedona Public Works Department will develop and maintain a spreadsheet or database to keep 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 greater than one (1) acre. All construction projects will be entered into the spreadsheet/database managed by the Sedona Public Works Department for tracking. Construction sites will no longer be tracked once the final inspection has been completed.

**Metrics:** The number of active construction sites during the permit year will be documented in the Annual Report.

#### **MCM 4.2 SITE PLAN REVIEW**

**Description:** Sedona staff will develop and implement a plan review process for reviewing civil plans to ensure compliance with the ADEQ's AZPDES CGP and Sedona City Code.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** Develop and implement a plan review process to review civil plans to ensure compliance with [ADEQ's AZPDES CGP](#), [General Permit AZGS2021](#), [Sedona City Code](#), [Sedona Land Development Code](#) and [Sedona Storm Water Ordinance](#). The authority to review plans is part of the [Sedona City Code Article 13.50.090](#) and the [Storm Water Ordinance Section 14-1-9](#). The number of plans reviewed throughout the year will be documented.

**Metrics:** The number of plans reviewed will be tracked. The data will be documented in the Annual Report for each permitted year.

#### **MCM 4.3 CONTRACTOR AND OPERATOR EDUCATION MATERIALS**

**Description:** Sedona staff will develop/catalogue and distribute educational materials with specific messaging for contractors and construction site operators.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** Educational Materials will be available throughout the year through the [stormwater web page](#). Materials will also be distributed to contractors and construction site operators as part of the plan review process.

**Metrics:** The number of materials distributed to construction operators will be documented in the Annual Report for each permitted year.

#### **MCM 4.4 STAFF TRAINING**

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**Description:** The City of Sedona will implement a training program that provides training opportunities for staff. Training may be conducted in-house by qualified personnel or through a 3<sup>rd</sup> party vendor.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** One hundred percent (100%) of the staff involved in reviewing civil plans and conducting stormwater quality specific inspections on construction sites will be trained on an annual basis throughout the permit term. The number of attendees trained will be documented using the form provided in **Appendix L** or through participation certificates issued by the 3<sup>rd</sup> party.

**Metrics:** The number of persons trained will be tracked. A summary of the training topics will be tracked. The data used to track the training program will be documented as part of the Annual Report for the permit year.

### **MCM 4.5 INSPECTIONS AND ENFORCEMENT PROCEDURES**

**Description:** Sedona staff will conduct inspections of construction sites and construction activities at frequencies specified in **Section 6.3**.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** Regular inspections will be conducted on active construction sites during the permit year with the goal of achieving at least 80% of the scheduled inspections annually. The inspections will be documented using the form provided in **Appendix L**. See **Appendix E** for detailed inspection and enforcement procedures.

**Metrics:** The number of sites inspected, and the results will be documented as part of the Annual Report for the permit year.

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## SECTION 7 MCM 5 POST CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

### 7.1 OVERVIEW

Section 6.5 of the General Permit [AZG2021-002](#) (Permit) outlines the requirements for minimum control measures (MCM) used in developing, implementing, and enforcing a program that addresses post-construction stormwater stemming from new development and redevelopment projects. It is the intent of the MCM to prevent stormwater pollutants generated by private sector and public sector facilities from being discharged into the City of Sedona’s (Sedona) small municipal separate storm sewer systems (MS4). The program will include;

- An ordinance or other regulatory mechanism(s) that requires owners of new development and redevelopment that discharge into the MS4 to design, implement, and maintain post-construction stormwater controls to reduce or eliminate the discharge of pollutants from their site.
- An inventory of post-construction stormwater control measures installed and implemented at both public and private new development or redevelopment sites.
- Processes to review civil plans to evaluate and approve post-construction stormwater controls.
- Processes, procedures, or provisions for inspecting post-construction stormwater BMPs to ensure their long-term operation and maintenance.

In addition to the above, Sedona will provide staff training for both reviewers and inspectors and provide materials to the site operators and the general public to educate them on stormwater quality and the reduction of pollutants into the MS4.

### 7.2 LEGAL AUTHORITY

The requirement for construction sites to comply with rules and regulations associated with the AZPDES is presented in [Sedona City Code Article 13.50.090](#) and the [Storm Water Ordinance Section 14-1-9](#).

### 7.3 SELECTED BMPs

Upon evaluating its post-construction stormwater management program in new development and redevelopment, Sedona has selected the following BMPs to address post-construction stormwater (Table 7-1). A summary description of each BMP is provided in this section. Detailed BMP information is found in **Appendix F**.

TABLE 7-1 - SUMMARY OF MCM 5 BMPs

BMP	Description
MCM 5.1	Stormwater Control Measures Inventory
MCM 5.2	Site Plan Review
MCM 5.3	Inspection and Enforcement Procedures
MCM 5.4	Staff Training

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### **MCM 5.1 STORMWATER CONTROL MEASURES INVENTORY**

**Description:** Sedona staff will prepare and maintain an up-to-date inventory of new development and redeveloped projects completed during the permit year.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** In a cooperative effort, the Sedona Public Works Department and the Sedona Community Development will develop and maintain a spreadsheet or database to enter new development and redeveloped projects such that post-construction stormwater control measures can be inventoried and scheduled for inspections. The number of sites will be tracked and documented.

**Metrics:** Number of new development and redevelopment projects completed during the permit year will be documented on the Annual Report for each permitted year.

### **MCM 5.2 SITE PLAN REVIEW**

**Description:** Sedona staff will develop and implement a plan review process for reviewing civil plans to ensure compliance with the ADEQ’s AZPDES CGP and Sedona City Code requirements for ensuring post-construction stormwater quality.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** Develop and implement a plan review process to review civil plans to ensure compliance with [ADEQ’s AZPDES CGP](#), [General Permit AZGS2021](#), [Sedona City Code](#), [Sedona Land Development Code](#) and [Sedona Storm Water Ordinance](#). The authority to review plans is part of the [Sedona City Code Article 13.50.090](#) and the [Storm Water Ordinance Section 14-1-9](#). The number of plan reviews will be tracked and documented.

**Metrics:** Number of plan reviews will be documented in the Annual Report.

### **MCM 5.3 INSPECTIONS AND ENFORCEMENT PROCEDURES**

**Description:** Sedona staff will conduct inspections of publicly and, as necessary, privately owned and maintained post-construction stormwater control measures associated with new development and redevelopment projects in order to reduce pollutants in stormwater runoff.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** Inspections will be conducted on at least 20% of publicly owned and maintained stormwater control measures annually. Inspections of privately owned and operated facilities will be facilitated from reports of stormwater quality violations or reports of potential illicit discharges. One hundred percent (100%) of these reports will be inspected. The inspections will be documented using the form provided in **Appendix L**.

**Metrics:** The number of inspections of publicly owned and operated stormwater control measures will be tracked. The number of inspections of privately owned and maintained stormwater quality measures will be tracked. A summary of

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maintenance on publicly owned stormwater control measures will be prepared. A summary of any corrective actions on privately owned and maintained stormwater control measures will be prepared. The data collected as part of MCM 5.3. will be documented as part of the Annual Report.

#### **MCM 5.4 STAFF TRAINING**

**Description:** The City of Sedona will implement a training program that provides training opportunities for staff. Training may be conducted in-house by qualified personnel or through a 3<sup>rd</sup> party vendor.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** One hundred percent (100%) of the staff involved in reviewing civil plans and inspecting stormwater control measures will be trained on an annual basis throughout the permit term. The number of attendees trained will be documented using the form provided in **Appendix L** or through participation certificates issued by the 3<sup>rd</sup> party.

**Metrics:** The number of persons trained will be tracked. A summary of the training topics will be tracked. The data used to track the annual training program will be documented as part of the Annual Report.

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## SECTION 8 MCM 6 POLLUTION PREVENTION PLAN AND GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

### 8.1 OVERVIEW

Section 6.6 of the General Permit [AZG2021-002](#) (Permit) outlines the requirements for minimum control measures (MCM) used in developing, implementing and maintaining a program that's goal is to prevent or reduce pollutant runoff from municipal operations and ultimately protect water quality of the runoff discharged into City of Sedona's (Sedona) small municipal separate storm sewer systems (MS4).

In accordance with Section 6.6.2 the program will include:

- **Develop** an inventory of municipal operations.
- **Prioritize** risk of municipal facilities based on risk to discharge pollutants.
- **Implement** an inspection schedule based on prioritized risk ([Table 8.1](#)). A list of the site-specific risk rankings is provided in Appendix G.

TABLE 8-1 – INSPECTION SCHEDULE FOR MUNICIPAL OPERATIONS

Risk	Inspection Schedule
HIGH	4 TIMES/YEAR
MEDIUM	2 TIMES/YEARS
LOW	1 TIME/YEAR

- **Update** municipally owned or operated facilities priority status.
- **Modify** inspection frequency based on inspection findings.
- **Implement** stormwater controls to reduce or eliminate the discharge of pollutants.
- **Implement** an employee training program.
- **Develop** maintenance activities, maintenance schedules, and long-term inspection procedures.

### 8.2 MUNICIPAL FACILITIES

The City of Sedona will evaluate their municipal facilities that are not covered by a separate AZPDES permit (e.g., MSGP) to prioritize those facilities that will require site specific BMPs. The list of municipal facilities is presented in [Table 8-2](#). A complete list of the facilities operated and maintained by the City is provided in [Appendix G](#).

TABLE 8-2 – SEDONA MUNICIPAL FACILITIES

Facility Names	Address	Risk
Maintenance Yard #1	2070 Contractors Rd	Medium
Maintenance Yard #2	525 Posse Ground Rd	Low

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### 8.3 SELECTED BMPs

The City of Sedona has evaluated the Pollution Prevention and Good Housekeeping for Municipal Operations component of their stormwater program and has identified BMPs to reduce stormwater pollution. The selected BMPs are summarized in [Table 8-3](#), with a description of each BMP provided in this section. The site specific BMPs are presented in detail in [Appendix G](#).

TABLE 8-3 - SUMMARY OF MCM 6 BMPs

BMP	Description
MCM 6.1a	Inventory of Municipal Operations and Facilities
MCM 6.1b	Prioritization of Municipal Operations and Facilities
MCM 6.2	Site-specific Storm Water Pollution Prevention Plans (High and Medium Risk Sites)
MCM 6.3	Good Housekeeping Operations for Low-Risk Municipal Facilities and Operations
MCM 6.4	Municipal Operation and Facility Inspections
MCM 6.5a	Street Sweeping
MCM 6.5b	Oil-Water Separators/Catch Basin Cleaning
MCM 6.5c	Stormwater Infrastructure Maintenance and Cleaning Program
MCM 6.6	Staff Training

#### MCM 6.1A INVENTORY OF MUNICIPAL OPERATIONS AND SITE INSPECTIONS

**Description:** Sedona staff will prepare and maintain an updated inventory of municipal facilities and operations that may have the potential to discharge to the MS4. The inventory will be compiled as a list and also presented as a GIS Shapefile placed on a map.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** The map and/or list will be updated to reflect new municipal facilities constructed or redeveloped during the year, as well as any existing facilities that were not previously identified. This effort will be ongoing throughout the year and the facilities that are added will be documented.

**Metrics:** The list of facilities will be updated as necessary and changes will be documented as part of the Annual Report for the permit year.

#### MCM 6.1B PRIORITIZATION OF MUNICIPAL OPERATIONS

**Description:** Sedona staff will review the inspection records, type of operation and potential risk to discharge pollutants to the MS4 of all the municipal facilities and prioritize the list ranking them high risk, medium risk and low risk such that a routine inspection schedule of each facility can be established.

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**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** The map and/or list of the facilities will be updated to reflect new site prioritization and when the prioritization of a previously identified site has been revised. The number and types of revisions will be tracked. The data collected as part of MCM 6.1b will be documented as part of the Annual Report for the permit year.

**Metrics:** The number of revisions made to the map and/or list made during the permit year will be documented in the Annual Report for each permit year.

**MCM 6.2 SITE-SPECIFIC STORM WATER POLLUTION PREVENTION PLANS (HIGH AND MEDIUM RISK FACILITIES)**

**Description:** Sedona staff will develop, implement, and maintain site-specific Stormwater Pollution Prevention Plans (SWPPP) for high and medium risk municipal operations.

**Responsible Department:**

Sedona Public Works Department  
Sedona Public Works Streets Division

**Measurable Goals:** Within the permit year, SWPPs for new sites will be prepared. New SWPPs will be added to **Appendix M**.

**Metrics:** SWPPs and the name and location of the sites for which the SWPPP was prepared will be documented as part of the Annual Report for the permit year.

**MCM 6.3 GOOD HOUSEKEEPING OPERATIONS (LOW RISK FACILITIES)**

**Description:** Sedona Staff will develop and implement a good housekeeping program for low-risk facilities and municipal operations that includes installing and inspecting BMPS at low-risk facilities and municipal operations for the purpose of preventing, trash, floatable debris, pollutants, and illicit discharges from entering the MS4.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** The low-risk facilities will be inspected annually. The number of inspections and the name of the facilities inspected will be documented. Any corrective actions taken or BMPs modified for any of the low-risk sites inspected will be summarized as part of the Annual Report for the permit year.

**Metrics:** The number of inspections and the name of the facilities inspected will be documented as part of the Annual Report for the permit year. Any corrective actions taken or BMPs modified for any of the low-risk sites inspected will be summarized as part of the Annual Report for the permit year.

**MCM 6.4 FACILITY INSPECTIONS (HIGH AND MEDIUM RISK FACILITIES)**

**Description:** Sedona Staff will develop and implement an inspection program of the BMPS installed at the municipal operations for the purpose of preventing trash, floatable debris, pollutants, and illicit discharges from entering the MS4.

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**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** Inspections of high and medium risk facilities will be conducted in accordance with the inspection schedule provided in **Section 8.1**. The inspections will be documented using the form provided in **Appendix L**.

**Metrics:** The number of inspections and the name of the facilities inspected will be documented as part of the Annual Report for the permit year. Any corrective actions taken or BMPs modified for any of the high- or medium-risk sites inspected will be summarized as part of the Annual Report for the permit year.

**MCM 6.5A STREET SWEEPING**

**Description:** Maintain clean, safe streets and collect litter and sediment with the intent of capturing floatables and pollutants prior to entering the MS4 sewer system using equipment designed for cleaning paved surfaces.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** Throughout the year, Sedona will implement a street sweeping program in accordance with a master schedule. The total number of miles swept will be tabulated.

**Metrics:** The total number of miles swept will be documented within the Annual Report.

**MCM 6.5B OIL-WATER SEPARATORS/CATCH BASIN CLEANING**

**Description:** Sedona staff will develop a process to clean and maintain City owned oil-water separators and catch basins.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** During each permit year, all municipal oil-water separators and catch basins will be inspected, cleaned, and maintained if necessary. The number of oil-water separators and catch basins inspected/cleaned will be recorded, as well as ones requiring maintenance.

**Metrics:** The number of oil-water separators and catch basins inspected, cleaned, or maintained will be documented in the Annual Report for each permit year.

**MCM 6.5C STORMWATER INFRASTRUCTURE MAINTENANCE AND CLEANING PROGRAM**

**Description:** Sedona staff will maintain the publicly owned and operated stormwater control measures located within the MS4 boundary, removing trash, debris, and sediment in order to restore capacity and prevent pollutants from entering Oak Creek downstream.

**Responsible Department:**

Sedona Public Works Department

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**Measurable Goals:** The City will perform regular inspections of culverts, storm drains, and scuppers within the MS4 boundary and when necessary, will use water/vacuum trucks to remove pollutants. The number of facilities inspected/cleaned will be documented.

**Metrics:** The number of facilities inspected/cleaned will be documented in the Annual Report for each permit year.

### **MCM 6.6 STAFF TRAINING**

**Description:** The City of Sedona will implement a training program that provides training opportunities for staff. Training may be conducted in-house by qualified personnel or through a 3<sup>rd</sup> party vendor.

**Responsible Department:**

Sedona Public Works Department

**Measurable Goals:** One hundred percent (100%) of the staff involved in implementing the Pollution Prevention and Good Housekeeping for Municipal Operations will be trained on an annual basis throughout the permit term. The number of attendees trained will be documented using the form provided in **Appendix L** or through participation certificates issued by the 3<sup>rd</sup> party. The completed forms will be stored in Appendix L.

**Metrics:** The number of persons trained will be tracked. A summary of the training topics will be tracked. The data used to track the annual training program will be documented as part of the Annual Report.

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## SECTION 9 SAMPLING AND ANALYSIS PLAN

### 9.1 OVERVIEW

In compliance with the requirements set forth in Section 7.2 of the Permit, the City of Sedona (Sedona) has opted to create a Sampling and Analysis Plan (SAP) to document the processes and procedures used for Analytical Monitoring. These requirements are summarized in this section. The SAP, which is under development, will be incorporated into **Appendix H**. The results of the testing associated with the Sampling and Analysis Plan will be submitted electronically within 30 days after receiving the laboratory results to the Arizona Department of Environmental Quality through the [myDEQ](#) portal as a Discharge Monitoring Report (DMR). The results of the testing will be stored for a period of three (3) years following the expiration of the current permit.

### 9.2 MONITORING LOCATIONS

Sedona will collect stormwater samples at three (3) locations (General Permit [AZG2021-002](#) Section 7.2.4) as presented in Table 9.1. A map illustrating the location of the analytical monitoring outfalls is provided on Figure 9-1.

TABLE 9-1 – ANALYTICAL MONITORING LOCATIONS

No.	Outfall ID	Description	Longitude	Latitude
1	OC-1	Soldiers Pass Wash @ Tlaquapaque	-111.763	34.861
2	OC-2	Oak Creek @ Newcastle Ln	-111.766	34.858
3	BOB-1	Back O' Beyond Wash @ Back O' Beyond Rd	-111.784	34.826

### 9.3 MONITORING TIMELINE

Sedona will collect a single stormwater sample at each of the monitoring locations during the first three and one-half years of the effective date of the permit (General Permit [AZG2021-002](#) Section 7.2.1).

### 9.4 QUALIFYING STORM EVENT

Sampling will collect a “first flush” sample from the first 30 minutes of a stormwater discharge from a qualifying storm event (General Permit [AZG2021-002](#) Section 7.2.2).

For the purpose of the SWMP, “a qualifying storm event” is rainfall in the amount of 0.1 inches or more and a resulting discharge within the first 24-hours of the event.

To determine if a storm qualifies, data from gage network operated by the Yavapai County Regional Flood Control District can be accessed ([Yavapai Gage Data](#)).

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Figure 9-1: Analytical Monitoring Locations



## 9.5 CHARACTERIZATION MONITORING

The stormwater sample will be tested for the following constituents within the following classes. A complete list of chemicals to be sampled for is provided in the SAP, which can be found in [Appendix H](#).

1. Metals
2. Inorganics
3. Volatile Organic Compounds
4. Semi- Volatile Organic Compounds (Acid/Base/Neutral)

## 9.6 ANALYTICAL MONITORING

In accordance with General Permit [AZG2021-002](#) Section 7.4.2, analytical monitoring will be performed for the following parameters because the Cities MS4 discharges into Oak Creek which is an Outstanding Arizona Water (OAW). The procedures for analytical monitoring are included in the SAP found in [Appendix H](#).

1. Biochemical oxygen demand (BOD)
2. Total suspended solids (nonfilterable) (TSS)
3. pH
4. E. Coli
5. Fecal coliform
6. Oil and grease

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## SECTION 10 ANNUAL PROGRAM EVALUATION PROTOCOLS

Because the SWMP is a living document, the Sedona Public Works Department will review the SWMP annually and track the measurable goals associated with the MCMs. The annual SWMP evaluation will include an assessment of the effectiveness of the BMPs implemented by the City of Sedona (Sedona) staff and the progress made towards achieving each of the BMP objectives.

The annual program evaluation protocol shall follow the following steps:

1. Public Works shall contact each responsible party requesting a summary of the progress that was made on each BMP over the course of the permit year. A minimum of three (3) weeks will be provided for each responsible party to provide their information and backup data.
2. Public Works will review the information received and compare that to the BMP requirements outlined in this SWMP to ensure that the BMPs are being implemented.
3. Public Works will discuss with the other departments the efficacy of the BMPs and if any modifications are needed or recommended.
4. When applicable, Public Works will review newly adopted ordinance, manuals or policies to verify that any changes made to these documents is reflected in the SWMP.
5. Revisions made to the SWMP or the BMPs will be documented with the information stored in **Appendix K**.
6. Public Works will compile the information received into an Annual Report. The Annual Report will be submitted on or before September 30<sup>th</sup> of each permit year to the Arizona Department of Environmental Quality through the [myDEQ](#) portal.
7. The approved Annual Report will be posted on Sedona's stormwater webpage ([Stormwater Webpage](#)) for public viewing.

The BMPs and the SWMP may be updated and/or revised based on the results of the annual evaluation. Any BMP modifications will be made in accordance with Section 8.1 of the Permit. Minor updates will occur at the staff level and will consist of bookkeeping matters, such as changes in who is responsible for a specific BMP, etc. Major updates will include changes in the SWMP, such as the implementation of new BMPs or the discontinuance of ineffective ones, or policy changes. Documentation justifying a BMP modification will include the following:

1. Any analyses or supporting information used in determining that the BMP was ineffective or infeasible.
2. Expectations on the effectiveness of the replacement BMP; and
3. An analysis or supporting information as to why the replacement BMP is expected to achieve the defined goals of the BMP to be replaced.

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## SECTION 11 PLAN AVAILABILITY AND RECORD RETENTION

### 11.1 PLAN AVAILABILITY

The City's SWMP is available to the public via the [Sedona's Stormwater Webpage](#). This webpage also provides the City's Permit Authorization Certificate with authorization number. A hard copy of the SWMP is available for viewing by the public during business hours at the City of Sedona's Public Works.

### 11.2 RECORD RETENTION

The City will keep all records pertaining to the Permit for a minimum period of three (3) years from the end of the permit term (November 28<sup>th</sup>, 2029). The records will include all reports, follow up documentation, inspection records, enforcement actions, and data tracked and documented as part of the Annual Report.

The summary of findings from the Visual Monitoring efforts and the water quality analysis associated with the Characterization and Analytical Monitoring submitted with the Discharge Monitoring Report will be kept for a minimum period of three (3) years from the end of the permit term (November 28<sup>th</sup>, 2029).

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## SECTION 12 REFERENCES

- 1) Arizona Department of Environmental Quality “Arizona Pollutant Discharge and Elimination System General Permit for Stormwater Discharges from Small Municipal Separate Sewer System to Protected Surface Waters”, September 30, 2021.
- 2) Arizona Department of Environmental Quality “Arizona Pollutant Discharge and Elimination System (AZPDES) Small Municipal Separate Storm Sewer System (MS4) 2021 Fact Sheet for AZG2021-002.”
- 3) City of Sedona, “Land Development Code Title Article 5” December 14, 2018
- 4) City of Sedona, “Sedona City Code – Codification of the General Ordinances of the City of Sedona, Arizona 2012”, Revised April 25, 2023
- 5) City of Sedona “Stormwater Ordinance Appendix A”, Adopted 2007

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## SECTION 13 ACRONYMS AND DEFINITIONS

### 13.1 ACRONYMS

The following is a list of acronyms and abbreviations that are commonly associated with the Stormwater Management Plan and the MS4 Permit.

AAC	Arizona Administration Code
ADEQ	Arizona Department of Environmental Quality
ARS	Arizona Revised Statutes
AZPDES	Arizona Pollutant Discharge Elimination System
BMP(s)	Best Management Practice(s)
CWA	Clean Water Act
DMR	Discharge Monitoring Report
ECP	Erosion Control Plan
ERP	Enforcement Response Plan
GIS	Geographic Information System
IC	Illicit Connection
ID	Illicit Discharge
IDDE	Illicit Discharge Detection and Elimination
MCM(s)	Minimum Control Measure(s)
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System
MSGP	Multi-Sector General Permit
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and Maintenance
OAW	Outstanding Arizona Waters
SIC	Standard Industrial Classification
SAP	Sampling and Analysis Plan
SOP	Standard Operating Procedure
STORM	Stormwater Outreach for Regional Municipalities
SWMP	Stormwater Management Plan
SWPPP	Stormwater Pollution Prevention Plan
SQWS	Stormwater Quality Standards
TMDL	Total Maximum Daily Load

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## 13.2 DEFINITIONS

The following definitions are commonly associated with the Stormwater Management Plan and the MS4 Permit.

*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 stormwater, including snowmelt, from a site.

*Erosion Control Plan* – A document consisting of structural and non-structural BMPs to be implemented during construction or following construction to control pollutants and prevent illicit discharges from entering the MS4.

*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.

*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.

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

*Notice of Intent* - the application to operate under an ADEQ general permit (CGP, MS4 or MSGP)

*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 source discharge.

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

*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.

*Protected Water* - waters of the State listed on the protected surface water list under Section 49-221, Subsection G and all WOTUS.

*Qualifying Storm Event* – rainfall in the amount of 0.1 inches or more resulting in a discharge.

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

*Stormwater* - Stormwater runoff, snowmelt runoff, and surface runoff and drainage.

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*Stormwater Pollution Prevention Plan* - 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).

*Total Maximum Daily Load* - 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.

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## APPENDIX A MS4 INFRASTRUCTURE MAPS

FIGURE 6 – CITY OF SEDONA STORM DRAIN MAP

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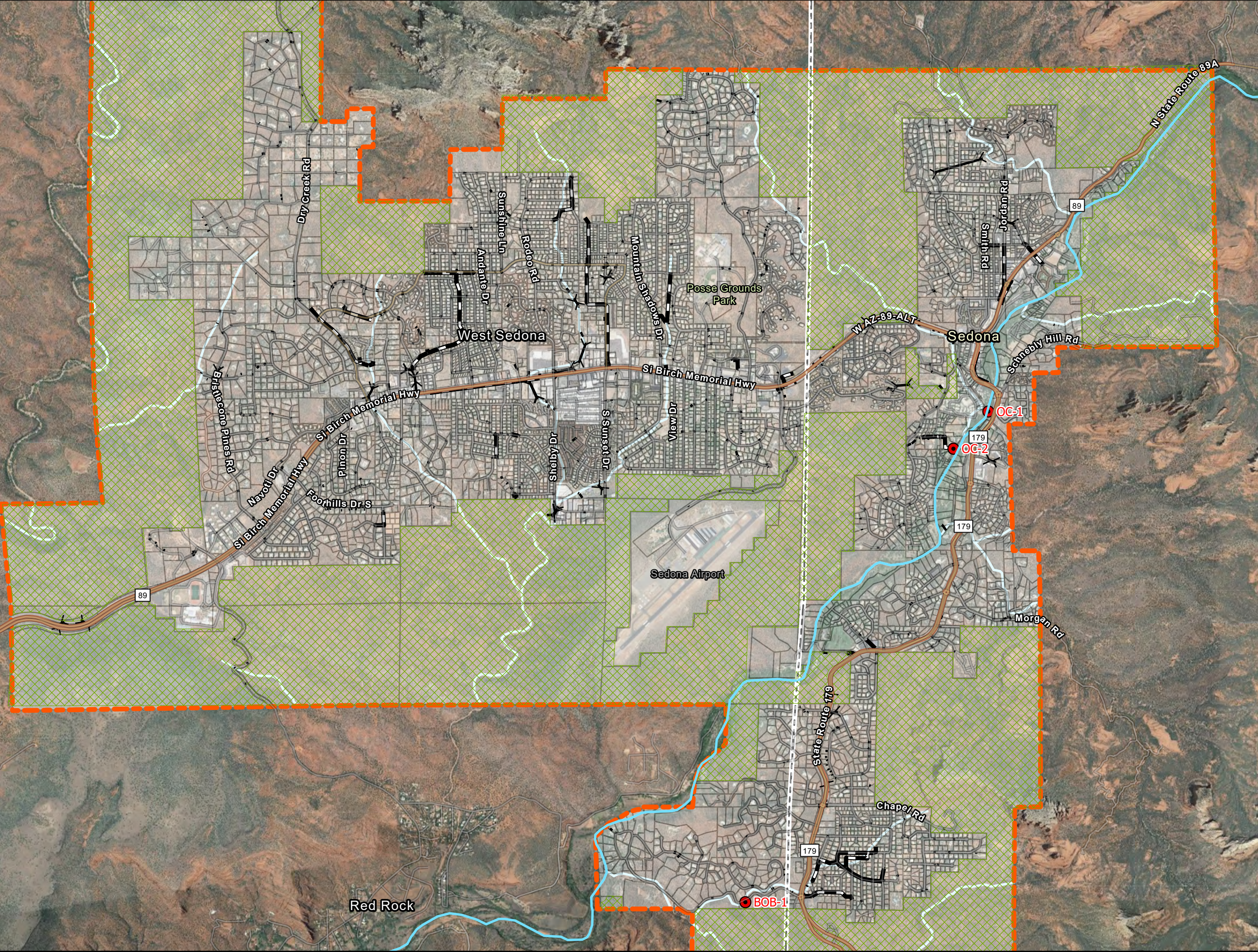
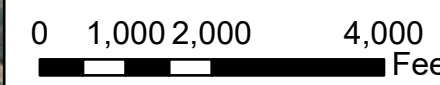




# City of Sedona Stormwater Management Plan

## Legend

- Forest Service Land
- County Line
- MS4 Outfalls
- City Boundary
- Sedona Stormdrains
- Sedona Culverts
- Sedona Parcels
- Oak Creek
- Drainage systems



Red Rock

Sedona Airport

Posse Grounds Park

West Sedona

Sedona

OC-1

OC-2

BOB-1



## APPENDIX B MCM 1 PUBLIC EDUCATION AND OUTREACH BMPS DETAILS

- MCM 1.1 EDUCATIONAL MATERIALS
- MCM 1.2 EDUCATIONAL EVENTS
- MCM 1.3 STORMWATER WEBPAGE
- MCM 1.4 PUBLIC SERVICE ANNOUNCEMENTS
- MCM 1.5 PUBLIC SIGNAGE
- MCM 1.6A INTERNAL UPDATING (NEW RESOURCE RESEARCH)
- MCM 1.6B INTERNAL UPDATING ((CITY MANAGEMENT UPDATE)

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BMP Category	Responsible Department(s)/Staff Titles	Objective	Procedure	Measurable Goals & Documentation Retention	BMP Frequency
1.1 Educational Materials	<p><b>Public Works Department:</b></p> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	<p>Develop and distribute educational materials with specific messages for specific target groups (i.e., to increase knowledge and change behavior of the public so that pollutants in stormwater are reduced).</p> <p>Target groups may include but are not limited to residents, residential communities, homeowner’s associations, property management companies, restaurants, commercial facilities, automotive repair facilities, retail shopping centers, construction companies and industrial facilities.</p>	<p>A. Identify priorities for stormwater brochures.</p> <p>B. Develop in-house or obtain from public sources storm water quality related brochures.</p> <p>C. Distribute educational materials with specific messages that include at least one (1) specific educational message directed at one (1) distinct target groups for each year of the permit term.</p> <p>Note: The educational messages may include but are not limited to general awareness, specific pollutants and/or pollutant sources. Examples of messages include the following, though it is anticipated that additional brochures will be produced during the permit period.</p> <p><u>General</u> “Sedona Stormwater Keep It Clean (Visitor Version)”</p> <p><u>Households/Businesses:</u> “Sedona Stormwater Keep It Clean (Residential Version)”</p> <p><u>Construction/Developers:</u> “Sedona Stormwater Keep It Clean (Construction Industry Version)”</p>	<p>The number of educational messages and their respective target groups will be documented and reported. All educational messages and their respective distribution will be quantified, if possible, to establish an approximate numerical value representative of each type of message and group. Applicable information associated with the BMP will be reported in the Annual Report for the permit year.</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p>	<p>Brochures and educational material will be available throughout the year via the webpage.</p> <p>Brochures and other educational materials will be distributed to the public at events (MCM-1.2) and as part of the permitting process MCM 4 and MCM 5.</p>
1.2 Educational Events	<p><b>Public Works Department:</b></p> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	<p>Identify and participate in educational events located in the City with the goal of increasing knowledge and changing behavior of the public so that pollutants in stormwater are reduced. This activity is generally performed by the Oak Creek Watershed Council when requested/hired by the City.</p> <p>Allow residents to request a free presentation on the importance of stormwater quality through Resources Tab the <a href="#">City of Sedona Stormwater Webpage</a>.</p> <p>Target groups may include but are not limited to tourists, residents, residential communities, homeowner’s associations, contractors/developers, business owners, commercial and industrial facilities</p>	<p>A. Identify community events to be used for priorities for stormwater brochures (i.e., Sedona Water Festival).</p> <p>B. Notify the public of potential participation in the event through a public information release (MCM 1.4).</p> <p>C. Identify appropriate brochures.</p> <p>D. Attend community event.</p> <p>E. Handout Stormwater brochures and related material at Sedona Water Festival and other City events.</p> <p>F. Respond to request for stormwater presentations and/or post-construction stormwater pollution prevention plans.</p>	<p>The number of events, type of event and Stormwater Management materials distributed will be documented. A form to track the events attended and the material distributed is provided in <b>Appendix L</b>. The number and name of the events attended will be documented as part of the Annual Report.</p> <p>The number of citizens attending the event and number of citizens interacted with will be documented.</p> <p>The number of requests for stormwater presentations will be documented. The number, target audience and topic will be documented.</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p>	<p>At least one (1) community event will be attended during each permit year.</p>



BMP Category	Responsible Department(s)/Staff Titles	Objective	Procedure	Measurable Goals & Documentation Retention	BMP Frequency
1.3 Stormwater Webpage	<b>Public Works Department:</b> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	Develop and maintain a <a href="#">City of Sedona Stormwater Webpage</a> that conveys pertinent information regarding Sedona's Stormwater Management Program with the goal of increasing knowledge and changing the behavior of the public so that pollutants in stormwater are reduced.  The posted information includes an electronic copy of the Stormwater Management Plan, Annual Reports, Notice of Intent, brochures and other educational resource material.	A. Identify staff that will review web content to ensure subject matter and links to resources are relevant and accurate. B. Provide updated SWMP(s), Annual Reports and the current Notice of Intent to Discharge (NOI). C. Provide links to educational resources and brochures. D. Provide a link to report stormwater quality complaints or potential illicit discharges. E. Provide a link to request a presentation. F. Updates to the website will occur when content is no longer applicable to the program or whenever new content, or educational materials are available.	The website will be reviewed a minimum of one time per year to ensure that content is still relevant. Additional reviews may occur whenever new content is added.  The number of website visitors, along with the average time of the visit will be tracked and documented.  The number of complaints received, and actions taken will be documented as part of the Annual Review.  Applicable information associated with the MCM will be reported in each Annual Report during the permit term.  The number of updates to the website will be documented.  Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.	The website is available year-round.  A complete review of the website will occur annually.
1.4 Public Service Notifications	<b>Public Works Department:</b> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	Prepare and publish press releases (ie: <i>City Talk</i> newspaper articles) to disseminate public information regarding stormwater and stormwater related news and events.  Information will be conveyed using such outlets as the radio, city website, local newspapers or	A. Identify information about stormwater and related events. B. Identify target audience. C. Select the proper medium for disseminating the information. D. Prepare public notices and publish.	It is anticipated that a minimum of two (2) public service notifications will be prepared and released to the public. These notifications may include topics on stormwater quality, stormwater management or stormwater specific events. However, they might also include notices on the available recycling programs, the annual Christmas Tree Recycling Event, pre-monsoon inspections or updates to the website.  The number of public service notifications will be tracked and documented.  The topic of the public service notifications will be documented.  The target audience for the public service announcement will be documented.  Applicable records will be maintained for a minimum of two (2) years following the end of the permit term.	The public service notifications will be prepared when deemed appropriate; a minimum of two (2) times per year.
1.5 Public Signage	<b>Public Works Department:</b> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	Install and maintain a series of signs that promote stormwater quality.  Messages include; Signs - "Sedona Stormwater Keep it Clean"  Catch Basin Placard - "No Dumping, Drains to Oak Creek"	A. Identify locations for signs and catch basin placards. B. Install signs and placards. C. Routinely inspect and maintain signs and placards, as necessary.	During the year, City staff will install signs and catch basin placards.  During the year, City staff will inspect signs and scupper placards and repair or replace them as necessary.  The number of signs and catch basin placards installed will be documented.  The number of signs and catch basin placards repaired/replaced will be documented.  Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.	Public Signage installation and maintenance will occur throughout the year.



BMP Category	Responsible Department(s)/ Staff Titles	Objective	Procedure	Measurable Goals & Documentation Retention	BMP Frequency
1.6a Internal Updating (New Resources Research)	<b>Public Works Department:</b> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	Conduct Research on Stormwater Quality Information.	A. City Staff will contact agencies and research websites with the intent of obtaining up-to-date information to add to the website and library of educational materials that can be used at events.	While new information may be identified throughout the year, at a minimum of twice per year, City Staff will set aside time to review information available on another agency's website or available in the public domain.  Information obtained and used by City Staff will be documented as part of the Annual Review	Research efforts and outside agency contacts will be conducted twice (2) a year.
1.6b Internal Updating (City management Update)	<b>Public Works Department:</b> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	Provide update meetings to Department Heads, Directors, City Council, Civic Leaders, regarding the storm water quality effort and its importance.	A. Compile information regarding the Stormwater Management Program and stormwater quality. B. Identify a target audience for the presentation (Department Heads, Directors, City Council, Civic Leaders) C. Schedule an update meeting and present	On an annual basis, meet with at least one of the target audience target audience groups to discuss stormwater quality and the on-going City of Sedona Stormwater Management Program.  The target audience, and topics discussed will be documented.  Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.	Internal updating of Department heads will occur on an annual basis.

## APPENDIX C MCM2 PUBLIC PARTICIPATION AND INVOLVEMENT BMPS DETAILS

- MCM 2.1 COMMUNITY REPORT LINE
- MCM 2.2 COMMUNITY EMAIL
- MCM 2.3 COMMUNITY REPORTING TOOL
- MCM 2.4 STORMWATER WEBPAGE
- MCM 2.5 PUBLIC SIGNAGE
- MCM 2.6 EDUCATIONAL EVENTS
- MCM 2.7A LOCAL OUTREACH (SWMP PUBLIC REVIEW/COMMENT)
- MCM 2.7B LOCAL OUTREACH (PET WASTE PROGRAM)
- MCM 2.8A VOLUNTEER OPPORTUNITIES (SEDONA SUSTAINABILITY DEPARTMENT)
- MCM 2.8B VOLUNTEER OPPORTUNITIES (OAK CREEK WATERSHED COUNCIL)

### QUICK LINKS

[Appendix A: MS4 Infrastructure Maps](#)

[Appendix B: MCM 1 Public Education and Outreach BMP Details](#)

[Appendix C: MCM 2 Public Participation and Involvement BMP Details](#)

[Appendix D: MCM 3 Illicit Discharge Detection and Elimination Program BMP Details](#)

[Appendix E: MCM 4 Construction Activity Stormwater Runoff Control BMP Details](#)

[Appendix F: MCM 5 Post-Construction Stormwater Management in New Development and Redevelopment BMP Details](#)

[Appendix G: MCM 6 Pollution Prevention/Good Housekeeping for Municipal Operations BMP Details](#)

[Appendix H: Sampling and Analysis Plan](#)

[Appendix I: Notice of Intent](#)

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[Appendix M: Site Specific SWPPP](#)





BMP Category	Responsible Department(s)/Staff Titles	Objective	Procedure	Measurable Goals & Documentation Retention	BMP Frequency
2.1 Community Reporting Line	<b>Public Works Department:</b> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	Provide a phone number that is available to the general public with the intention of providing a dedicated source of information regarding Sedona's SWMP, including, but not limited to general information, reporting of illicit discharges, and answering SWMP related questions.	As part of the <a href="#">City of Sedona Stormwater Webpage</a> , provide a phone number to report stormwater violations or ask questions related to stormwater quality and the stormwater management plan.	The number of calls associated with the reporting of illicit discharges or inquiring about the stormwater management plan will be tracked and reported in each Annual Report during the permit term.  Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.	The phone number will be available year-round and monitored during normal business hours.  The phone number will be verified as part of the webpage review that will occur annually.
2.2 Community Email	<b>Public Works Department:</b> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	Provide an email address that is available to the general public with the intention of providing a dedicated source of information regarding Sedona's SWMP, including, but not limited to general information, reporting of illicit discharges, and answering SWMP related questions.	As part of the <a href="#">City of Sedona Stormwater Webpage</a> , provide a contact email to report stormwater violations or to ask questions related to stormwater quality and the stormwater management plan.	The number of emails associated with the reporting of illicit discharges or inquiring about the stormwater management plan will be tracked and reported in each Annual Report during the permit term.  Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.	The email address will be available year-round, and emails will be answered during normal business hours within 1 day or receipt.  The email address will be verified as part of the webpage review, that will occur annually.
2.3 Community Reporting Tool	<b>Public Works Department:</b> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	Provide a web-based reporting tool "Report It" that is available to the general public with the intention of providing a dedicated source, reporting of illicit discharges, or other stormwater quality concerns.	Investigate all reports submitted via the <a href="#">"Report It" tool</a> on the City Clerks page related to stormwater violations or to ask questions related to stormwater quality.	The number of reports submitted through the "Report It" associated with the reporting of illicit discharges will be tracked and reported in each Annual Report during the permit term.  Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.	The "Report It" link will be available year-round and monitored during normal business hours. Report follow-up will occur within 1 day or receipt of the report.  The email address, phone number and link be verified as part of the webpage review that will occur annually.



BMP Category	Responsible Department(s)/Staff Titles	Objective	Procedure	Measurable Goals & Documentation Retention	BMP Category
2.4 Stormwater Webpage	<p><b>Public Works Department:</b></p> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul> <p><b>GIS Department</b></p> <ul style="list-style-type: none"> <li>GIS Analyst</li> </ul>	<p>Develop and maintain a <a href="#">City of Sedona Stormwater Webpage</a> that conveys pertinent information regarding Sedona's Stormwater Management Program with the goal of increasing knowledge and changing the behavior of the public so that pollutants in stormwater are reduced.</p> <p>The posted information includes an electronic copy of the Stormwater Management Plan, Annual Reports, Notice of Intent, brochures, and other educational resource material.</p>	<p>A. Identify staff that will review web content to ensure subject matter and links to resources are relevant and accurate.</p> <p>B. Provide updated SWMP(s), Annual Reports and the current Notice of Intent to Discharge (NOI).</p> <p>C. Provide links to educational resources and brochures.</p> <p>D. Provide a link to report stormwater quality complaints or potential illicit discharges.</p> <p>E. Provide a link to request a presentation.</p> <p>F. Updates to the website will occur when content is no longer applicable to the program or whenever new content, or educational materials are available.</p>	<p>The website will be reviewed a minimum of one time per year to ensure that content is still relevant. Additional reviews may occur whenever new content is added.</p> <p>The number of website visitors and average time of visit will be documented as part of the Annual Review.</p> <p>The number of complaints received, and actions taken will be documented. as part of the Annual Review.</p> <p>Applicable information associated with the MCM will be reported in each Annual Report during the permit term.</p> <p>The number of updates to the website will be documented.</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p>	<p>The website is available year-round.</p> <p>A complete review of the website will occur annually</p>
2.5 Public Signage	<p><b>Public Works Department</b></p> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	<p>Install and maintain a series of signs that promote stormwater quality.</p> <p>Messages include;</p> <p>Signs - "Sedona Stormwater Keep it Clean"</p> <p>Catch Basin Placard - "No Dumping, Drains to Oak Creek"</p>	<p>A. Identify locations for signs and catch basin placards.</p> <p>B. Install signs and placards.</p> <p>C. Routinely inspect and maintain signs and placards, as necessary.</p>	<p>During the course of the year, City staff will install signs and catch basin placards.</p> <p>During the course of the year, City staff will inspect signs and scupper placards and repair or replace them as necessary.</p> <p>The number of signs and catch basin placards installed will be documented.</p> <p>The number of signs and catch basin placards repaired/replaced will be documented.</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p>	<p>Public Signage installation and maintenance will occur throughout the year.</p>



BMP Category	Responsible Department(s)/Staff Titles	Objective	Procedure	Measurable Goals & Documentation Retention	BMP Frequency
2.6 Educational Events	<p><b>Public Works Department:</b></p> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	<p>Identify and participate in educational events located in the City with the goal of increasing knowledge and changing behavior of the public so that pollutants in stormwater are reduced.</p> <p>Allow residents to request a free presentation on the importance of stormwater quality through Resources Tab the <a href="#">City of Sedona Stormwater Webpage</a>.</p> <p>Target groups may include but are not limited to tourists, residents, residential communities, homeowner's associations, contractors/developers, business owners, commercial and industrial facilities</p>	<p>A. Identify Community Events to be used for priorities for stormwater brochures (i.e., Sedona Water Festival).</p> <p>B. Notify public of potential participation in the event through a public information release (MCM 1.4).</p> <p>C. Identify appropriate brochures.</p> <p>D. Attend community event.</p> <p>E. Handout Stormwater brochures and related material at Sedona Water Festival and other City events.</p> <p>F. Respond to request for stormwater presentations and/or post-construction stormwater pollution prevention plans.</p>	<p>The number of events, type of event and Stormwater Management materials distributed will be documented. A form to track the events attended and the material distributed is provided in <b>Appendix L</b>. The number and name of the events attended will be documented as part of the Annual Report.</p> <p>The number of citizens attending the event and number of citizens interacted with will be documented.</p> <p>The number of requests for stormwater presentations will be documented. The number, target audience and topic will be documented.</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p>	<p>At least one (1) community event will be attended during each permit year.</p>
2.7a Local Outreach (SWMP Public Comment/Review)	<p><b>Public Works Department:</b></p> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul> <p><b>GIS Department</b></p> <ul style="list-style-type: none"> <li>GIS Analyst</li> </ul>	<p>Develop a program for soliciting, collecting, and processing input regarding the City of Sedona's Stormwater Management Program.</p>	<p>A. Prior to the end of the permit year, publish a press release to solicit input regarding City of Sedona Stormwater Management Program. A point of contact with email and phone number information will be provided as part of the press release.</p> <p>B. Collect and review feedback.</p> <p>C. Respond to comments and make changes as appropriate to the SWMP provided that the revision comply with the requirements of the MS4 Permit.</p>	<p>One time per year, City staff will solicit comments for the public. Acknowledgment of the receipt of comments will be sent to the participant and where applicable and appropriate revision to the program will be made.,</p> <p>The number of comments received will be documented.</p> <p>The number and type of revisions made to the Stormwater Management Program will be documented. Revisions may include changes to the SWMP but also the website, attended community events, volunteer programs or the response protocols for investigating illicit discharges.</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p>	<p>The SWMP is available online year round for comments.</p>
2.7b Local Outreach (Pet Waste Program)	<p><b>Public Works Department:</b></p> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	<p>Develop a program to encourage the self-policing of pet waste through the installation and maintenance of pet waste stations and community awareness.</p>	<p>A. Identify locations for pet waste stations.</p> <p>B. Install and maintain pet waste stations and pet waste disposal areas.</p> <p>C. Create and update the <a href="#">City Maintained Pet Waste Stations Map</a>.</p> <p>D. Encourage participation by disseminating information on the importance of cleaning up and disposing of pet waste. Information will be distributed during Educational Events (BMP 2.6) and made available for download on the <a href="#">City of Sedona Stormwater Webpage</a> Stormwater Quality Tab.</p>	<p>During the course of the year and based on need, new pet stations may be installed to encourage pet waste management.</p> <p>During the course of the year, pet stations will be inspected and, as necessary, the stations will be repaired or replaced.</p> <p>The number of Pet Waste Stations installed and maintained will be documented as part of the Annual Report.</p> <p>The amount of pet waste collected will be documented in the Annual Report.</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p>	<p>The installation of maintenance and Pet Waste Stations will occur through the year as needed.</p>





BMP Category	Responsible Department(s)/Staff Titles	Objective	Procedure	Measurable Goals & Documentation Retention	BMP Frequency
2.8a Volunteer Opportunities (Sedona Sustainability Department)	<b>Public Works Department:</b> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul> <b>Sedona Sustainability Department</b>	<p>To promote Public Participation and Involvement, Sedona staff will coordinate with Sedona Sustainability Department to promote volunteer activities.</p> <p>The events may disseminate information regarding the prevention of stormwater pollution and proper places to dispose of hazard waste and green waste.</p>	<p>A. In cooperation with Sedona Sustainability Department, identify volunteer opportunities and projects that can promote stormwater quality, and reduce stormwater pollution.</p> <p>B. Promote the opportunities and projects through the <a href="#">City of Sedona Stormwater Webpage</a> and media outlets.</p> <p>C. Support opportunities financially or by providing Sedona staff volunteers, as applicable.</p>	<p>The number of opportunities and projects, and the types of opportunities/projects that Sedona Public Works promotes or supports will be recorded.</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p>	<p>A minimum of one (1) project/volunteer opportunity will be supported or promoted during the course of the permit year.</p>
2.8b Volunteer Opportunities (Oak Creek Watershed Council)	<b>Public Works Department:</b> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	<p>In a partnership with the Oak Creek Watershed Council, identify projects that help reduce stormwater pollution and promote water quality.</p>	<p>A. In a cooperative effort, identify and select volunteer opportunities and projects.</p> <p>B. Promote the opportunities and projects through the <a href="#">City of Sedona Stormwater Webpage</a> and the <a href="#">Oak Creek Watershed Council website</a> and media outlets.</p> <p>D. Attend at a minimum of one (1) organized volunteer event per year.</p>	<p>The number of volunteer events organized will be documented as part of the Annual Report</p> <p>The number of participants and their respective organizations along with a brief synopsis of the event will be documented as part of the Annual Report.</p> <p>reported</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p>	<p>One (1) volunteer opportunity will be conducted during the course of the permit year.</p>

## APPENDIX D MCM3 ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM BMP DETAILS

- MCM 3.1 STORM SEWER SYSTEM MAPPING
- MCM 3.2 WRITTEN ENFORCEMENT PROCEDURES AND LEGAL AUTHORITY REVIEW
- MCM 3.3 VISUAL OUTFALL MONITORING (DRY WEATHER)
- MCM 3.4 VISUAL OUTFALL MONITORING (WET WEATHER)
- MCM 3.5 ANALYTICAL MONITORING (WET WEATHER)
- MCM 3.6A ILLICIT DISCHARGE IDENTIFICATION AND ELIMINATION
- MCM 3.6B STORMWATER DISCHARGE (INDUSTRIAL ACTIVITIES FACILITIES)
- MCM 3.7 PLAN REVIEW (STORMWATER RETENTION)
- MCM 3.8 IDDE STAFF TRAINING
- MCM 3.9 ILLICIT DISCHARGE ON-LINE REPORTING

### QUICK LINKS

[Appendix A: MS4 Infrastructure Maps](#)

[Appendix B: MCM 1 Public Education and Outreach BMPs](#)

[Appendix C: MCM 2 Public Participation and Involvement BMP Details](#)

[Appendix D: MCM 3 Illicit Discharge Detection and Elimination Program BMP Details](#)

[Appendix E: MCM 4 Construction Activity Stormwater Runoff Control BMP Details](#)

[Appendix F: MCM 5 Post-Construction Stormwater Management in New Development and Redevelopment BMP Details](#)

[Appendix G: MCM 6 Pollution Prevention/Good Housekeeping for Municipal Operations BMP Details](#)

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BMP Category	Responsible Department(s)/Staff Titles	Objective	Procedure	Measurable Goals & Documentation Retention	BMP Frequency
3.1 Storm Sewer System Mapping	<p><b>Public Works Department:</b></p> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	<p>Prepare and maintain an up-to-date map of the MS4 infrastructure that has sufficient scope and detail to use as a reference during proactive inspections or during the investigations to identify and eliminate illicit discharges.</p>	<p>Identify staff that will be responsible for collecting data regarding newly constructed stormwater infrastructure. The collection of data will include cataloguing infrastructure attributes such as type and size from as-built plans. The location of the infrastructure will be georeferenced during field reconnaissance.</p> <p>Information will be passed to the GIS Department for the purpose of creating a map that includes, locations of discharges to the Waters of the United States; jurisdictional MS4 boundaries; new land annexations during the respective permit year; interconnections with other MS4s including linear drainage structures used for conveyance (Example: streets, channels, floodways, pipes, etc.); storm drain inlet structures (Example: catch basins, scuppers, etc.); outfalls; dry weather field screening (monitoring) locations including unique identifier, receiving water, dimensions, shape, spatial location (latitude/longitude), Physical condition, indicators of potential non-stormwater discharges; and detention/retention basins that are part of the MS4.</p>	<p>The Storm Sewer System Mapping will occur over the course of the year as new infrastructure is constructed or improved.</p> <p>The number of new features added to the map will be tracked and reported in each Annual Report during the permit term.</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p>	<p>Infrastructure information will be added to the GIS Database throughout the permit year once construction has been completed. Corrections, additions, or revisions to the GIS database will be made upon notification or discovery.</p>
3.2 Written Enforcement Procedures and Legal Authority Review	<p><b>Public Works Department:</b></p> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> <li>City Manager</li> </ul> <p><b>City Attorney's Office</b></p> <ul style="list-style-type: none"> <li>City Attorney</li> </ul>	<p>Implement proper enforcement procedures and actions through the preparation and adoption of ordinances, and city codes.</p>	<p>Assign staff from the Public Works Department, Community Development Department and City Attorney's Office to Director to review the <a href="#">City of Sedona Land Development Code</a> and <a href="#">City of Sedona City Code, Drainage Review, Engineering and Administrative Manual</a>, and <a href="#">Stormwater Ordinance</a> to ensure compliance with the stormwater enforcement requirements set forth in Section 3.0 and Section 6.3.2 of the <a href="#">General Permit AZG2021-002</a>.</p> <p>Any revisions necessary to the Codes or the Ordinances will be presented to the City Attorney's Office. It is expected that the any revision will require City Council action.</p>	<p>The listed documents will be reviewed as part of the annual review of the Storm Water Management Program. As part of the Annual Report, any revisions will be summarized. In the event no revisions were made during the permit year, a statement acknowledging that the review of the Code and Ordinance was performed, and no revisions were made, will be included.</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p>	<p>The documents used to enforce the MS4 Permit and by extension the Stormwater Management Program will be reviewed once per year.</p>



BMP Category	Responsible Department(s)/Staff Titles	Objective	Procedure	Measurable Goals & Documentation Retention	BMP Frequency												
3.3 Visual Monitoring (Dry Weather)	<p><b>Public Works</b>  <b>Department:</b></p> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	<p>Detect and eliminate illicit discharges and connections to Sedona's MS4 through the implementation of annual dry-weather visual monitoring effort.</p>	<p>A. Identify staff to perform routine dry weather monitoring at MS4 Outfalls.</p> <p>B. Conduct monitoring at the three (3) monitoring locations as listed below. Dry weather monitoring cannot be conducted within 72 hours of a <a href="#">qualifying storm event</a>.</p> <table border="1" data-bbox="1227 534 1802 695"> <thead> <tr> <th>No.</th> <th>Outfall ID</th> <th>Location</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>OC-1</td> <td>Soldiers Wash at Tlaquapaque</td> </tr> <tr> <td>2</td> <td>OC-2</td> <td>Oak Creek @ Newcastle Ln.</td> </tr> <tr> <td>3</td> <td>BOB-1</td> <td>Back O' Beyond Wash @ Back O' Beyond Rd</td> </tr> </tbody> </table> <p>C. Monitoring will be documented using the Visual Inspection Form (<b>Appendix L</b>). Completed forms will be saved in Appendix L for future reference.</p> <p>D. If an illicit discharge is observed, additional investigations will be performed to determine the source.</p> <p>E. If necessary, enforcement actions will be taken to eliminate the illicit discharge in accordance with <a href="#">Sedona City Code Chapter 13.50.150</a>.</p>	No.	Outfall ID	Location	1	OC-1	Soldiers Wash at Tlaquapaque	2	OC-2	Oak Creek @ Newcastle Ln.	3	BOB-1	Back O' Beyond Wash @ Back O' Beyond Rd	<p>One hundred (100) percent of the outfalls will be visually monitored during dry weather conditions. Additional monitoring efforts will be performed in response to complaints filed with the City (On-line Reporting, Email and/or Reporting Line).</p> <p>The number of visual monitoring efforts (routine, complaint response, or follow-up) will be reported, as well as any findings, as part of the Annual Report. Any actions taken will be summarized as part of the Annual Report.</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p>	<p>Visual monitoring will occur annually over the permit term.</p>
No.	Outfall ID	Location															
1	OC-1	Soldiers Wash at Tlaquapaque															
2	OC-2	Oak Creek @ Newcastle Ln.															
3	BOB-1	Back O' Beyond Wash @ Back O' Beyond Rd															



BMP Category	Responsible Department(s)/Staff Titles	Objective	Procedure	Measurable Goals & Documentation Retention	BMP Frequency
3.4 Visual Monitoring (Wet Weather)	<p><b>Public Work Department:</b></p> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	<p>Monitor stormwater discharges at MS4 outfalls during a qualifying storm event. To the extent practicable, the stormwater sampling should include the first-flush discharge.</p>	<p>A. Identify staff responsible for performing routine wet weather monitoring at MS4 Outfalls (See List in MCM 3.3), collecting of first-flush samples, and maintaining the passive water samplers.</p> <p>B. Collect samples from passive samplers following a qualifying storm event.</p> <p>C. Collect samples using active samplers (pole mounted dipper/ladle).</p> <p>D. Take photos of the sample and provide comments on the following observations, which may indicate a potential illicit discharge or indicate an area that requires pollution prevention BMP.</p> <ul style="list-style-type: none"> <li>• color</li> <li>• clarity</li> <li>• floatables</li> <li>• odor</li> <li>• debris</li> <li>• sheen</li> </ul> <p>E. The findings will be documented on the Visual Monitoring Inspection Form (<b>Appendix L</b>).</p> <p><sup>1</sup> Staff members assigned to conduct monitoring activities must be aware of their surroundings at all times and cease monitoring activities whenever site conditions are determined to be unsafe or hazardous in nature.</p> <p><sup>2</sup> If possible, during active sampling will be conducting the wet weather visual monitoring efforts.</p> <p><sup>3</sup> Until a local rain gage has been installed, precipitation data can be obtained from the Yavapai County Flood Control District Rainfall webpage at <a href="#">Yavapai County Rainfall Gages</a>.</p> <p><sup>4</sup> Should an illicit discharge or potential pollutant source be suspected, additional wet weather and dry weather monitoring efforts will occur and appropriate actions will be taken (i.e., enforcement, implantation of additional BMPs).</p>	<p>One hundred percent (100%) percent of the outfalls will be visually monitored during wet weather conditions. Additional monitoring efforts will be performed should an illicit discharge be suspected.</p> <p>The number of visual monitoring efforts (routine, complaint response, or follow-up) will be reported, as well as any findings, as part of the Annual Report. Any actions taken will be summarized as part of the Annual Report.</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p>	<p>Visually monitoring will occur annually over the permit term.</p>



BMP Category	Responsible Department(s)/Staff Titles	Objective	Procedure	Measurable Goals & Documentation Retention	BMP Frequency
<p>3.5 Analytical Monitoring (Wet Weather)</p>	<p><b>Public Works Department:</b></p> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	<p>Monitor stormwater discharges at MS4 outfalls during a qualifying storm event. To the extent practicable, the stormwater sampling should include the first-flush discharge.</p>	<p>A. Identify staff responsible for performing routine wet weather monitoring at MS4 Outfalls (See List in MCM 3.3), collecting first-flush samples, and sending samples to a certified laboratory.</p> <p>B. Collect samples using active samplers (pole mounted dipper/ladle).</p> <p>C. Take photos of the sample and submit to a certified laboratory for testing of the following constituents:</p> <ul style="list-style-type: none"> <li>pH</li> <li>Biological Oxygen Demand</li> <li>Fecal Coliform</li> <li>Total Suspended Solids</li> <li>Oil/Grease</li> <li>E. Coli</li> </ul> <p>D. The findings will be documented on the Stormwater Characterization/Analytical Monitoring Collection Form (<b>Appendix L</b>).</p> <p><sup>1</sup> Staff members assigned to conduct monitoring activities must always be aware of their surroundings and cease monitoring activities whenever site conditions are determined to be unsafe or hazardous in nature.</p> <p><sup>2</sup> If possible, during active sampling will be conducting the wet weather visual monitoring efforts.</p> <p><sup>3</sup> Until a local rain gage has been installed, (Future best management practice MCM 3.9) precipitation data can be obtained from the Yavapai County Flood Control District Rainfall webpage at <a href="#">Yavapai County Rainfall Gages</a>.</p> <p><sup>4</sup> Should an illicit discharge or potential pollutant source be suspected, additional wet weather and dry weather monitoring efforts will occur, and appropriate actions will be taken (i.e., enforcement, implantation of additional BMPs).</p>	<p>One hundred percent (100%) percent of the outfalls will be visually monitored during wet weather conditions. Additional monitoring efforts will be performed should an illicit discharge be suspected.</p> <p>The number of visual monitoring efforts (routine, complaint response, or follow-up) will be reported as part of the Annual Report. Any actions taken will be summarized as part of the Annual Report.</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p>	<p>Analytical monitoring will occur at a minimum one (1) time per wet season (2 times per year) over the permit term.</p>



BMP Category	Responsible Department(s)/Staff Titles	Objective	Procedure	Measurable Goals & Documentation Retention	BMP Frequency
3.6a Illicit Discharge Identification and Elimination	<p><b>Public Works Department:</b></p> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	Implement a process to detect and eliminate illicit discharges and unpermitted connections to the MS4s.	<p>Assign staff to investigate potential illicit discharges. Sources that could necessitate an investigation include:</p> <ul style="list-style-type: none"> <li>dry weather visual monitoring,</li> <li>field observations</li> <li>complaints received through the illicit discharge reporting system (MCM 2.3).</li> <li>routine inspections of storm sewer and sanitary sewer infrastructure (Routine inspections of MS4 infrastructure, including but not limited to, storm drains, culverts and scupper and catch basins will be conducted by the Code Enforcement Officer)</li> </ul> <p>Once a potential illicit discharge is reported the investigation will begin as soon as practicable. The steps in responding to a potential illicit discharge are as follows.</p> <ol style="list-style-type: none"> <li>Locate the reported discharge or evidence of a recent discharge.</li> <li>Determine if the discharge is prohibited by <a href="#">Sedona City Code Title 13.50.70</a>. If the discharge is not prohibited by the Code, contact the responsible party and provide information on how to minimize pollutants that may enter into the MS4.</li> <li>Tracking the discharge or evidence of a recent discharge by inspecting upstream sources, (streets, gutters, catch basins, laterals, mains, manholes, etc.), or reviewing as-built plans or GIS Data to determine storm drain connection points, laterals, mains, landmarks, etc. Video inspections may be used when tracking through sub-surface infrastructure.</li> <li>Upon confirming an illicit discharge, contact the responsible party to inform them they need to cease discharging into the MS4 immediately and if necessary clean up pollutants.</li> <li>Conduct a reinspection within three (3) business days.</li> <li>Document findings and actions on the IDDE Form found in <b>(Appendix L)</b>.</li> </ol>	<p>Sedona staff will investigate all reports of a potential illicit discharge regardless of source. The number of IDDE Inspections will be tracked and documented as part of the Annual Report for the permit year. Follow-up actions will be summarized for each investigation and provided as supporting documentation.</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p> <p>Completed forms will be stored in <b>(Appendix L)</b> of the SWMP.</p>	<p>Scheduled dry weather monitoring will occur one (1) per year at the outfalls.</p> <p>Field observations will be unscheduled and will occur throughout the permit year.</p> <p>The means to report a violation to the City of Sedona will be available throughout the permit year.</p>
3.6b Stormwater Discharge (Industrial Facility Activities)	<p><b>Public Works Department:</b></p> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	Sedona will implement a process to prevent stormwater discharges from industrial sector facilities into their MS4.	Sedona staff will investigate stormwater quality violations that were brought to the attention of staff during the permit year. For those sites that are found to be "Industrial Activity Facilities", Sedona staff will inform the owner/operator that <b>new</b> stormwater cannot be discharged into the City's MS4, or directly into Oak Creek or its tributaries and will provide guidance on how stormwater discharges can be eliminated.	<p>The number of inspections will be tracked and documented as part of the Annual Report for the permit year. Follow-up actions will be summarized for each investigation and provided as supporting documentation.</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p> <p>Completed forms will be stored in <b>(Appendix L)</b> of the SWMP.</p>	<p>Scheduled dry weather monitoring will occur one (1) per year at the outfalls.</p> <p>Field observations will be unscheduled and will occur throughout the permit year.</p> <p>The means to report a violation to the City of Sedona will be available throughout the permit year.</p>



BMP Category	Responsible Department(s)/Staff Titles	Objective	Procedure	Measurable Goals & Documentation Retention	BMP Frequency
3.7 Plan Review (Stormwater Detention)	<p><b>Public Works Department:</b></p> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	<p>In compliance with the requirements associated with Oak Creek being an OAW, Sedona staff will verify that proper measures are in place to retain <b>detain</b> 100% of the stormwater generated by the site during construction and to the maximum extent practicable the <b>new</b> stormwater generated by facilities engaging in an industrial activity post-construction.</p>	<p>Sedona staff, as part of the permit review process, will ensure that structural measures are incorporated into the plan set, that will ensure that <b>new</b> stormwater runoff is retained on site and not discharged into Oak Creek or its tributaries. The number of plans reviewed will be tracked throughout the year. This information will be documented in the Annual Report for a given permit year.</p>	<p>The number of plans reviewed will be tracked through the year. The information collected will be documented in the Annual Report for the given permit year</p>	<p>Reviewing construction sites and industrial facilities will occur throughout the year.</p>
3.8 IDDE Staff Training	<p><b>Public Works Department:</b></p> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> <li>Code Enforcement Officer</li> </ul>	<p>Implement a training program on illicit discharge detection and elimination, stormwater quality and all facets of the SWMP.</p>	<p>Assign staff to oversee SWMP Training program that may include training opportunities generated by in-house staff or through a 3<sup>rd</sup> party vendor to provide training on the SWMP, ADEQ IDDE Requirements, Sedona’s IDDE BMPs, Construction Sites and Post Construction Inspections and overall stormwater quality and pollution prevention. Training attendance will be tracked using the Training Log provided in (<b>Appendix L</b>) or certificates of completion if conducted by a 3<sup>rd</sup> Party Vendor.</p>	<p>The number of training opportunities will be tracked. The number of staff trained will be tracked. The topics will be documented. The data will be reported as part of the Annual Report for each the permit year.  Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p>	<p>Training will be conducted throughout the year and will be attended by 100% of staff that are tasked with implementing any aspect of the SWMP.</p>
3.9 Illicit Discharge Reporting	<p><b>Public Works Department:</b></p> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul> <p>Code Enforcement Officer</p>	<p>Develop and maintain measures that will allow the public to report a potential illicit discharge or stormwater violation for the purpose of eliminating illicit discharges and improving stormwater quality.</p>	<p>Sedona staff will actively respond to Stormwater Violation Reports stemming from the <a href="#">Stormwater Webpage</a>. The webpage provides two (2) methods for reporting a violation (phone number, and email).  The City Clerks page also includes an on-line reporting tool (<a href="#">Report It</a>) where people can report a stormwater violation. Applicable complaints will be forwarded to the Assistant City Engineer and/or the City of Sedona Code Enforcement Officer.  As part of the annual review of the Stormwater Management Program, the on-line form, phone number and email will be verified to ensure they are functioning as intended.</p>	<p>The number of complaints submitted through three (3) methods will be tracked and documented as part of the Annual Report for the permit year.  Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p>	<p>The means to report a violation will be active throughout the permit year.</p>



## APPENDIX E MCM4 CONSTRUCTION ACTIVITY STORMWATER RUNOFF CONTROL BMP DETAILS

- MCM 4.1 CONSTRUCTION SITE INVENTORY
- MCM 4.2 SITE PLAN REVIEW
- MCM 4.3 CONTRACTOR AND OPERATOR EDUCATION
- MCM 4.4 STAFF TRAINING
- MCM 4.5 INSPECTION AND ENFORCEMENT PROCEDURES

### QUICK LINKS

[Appendix A: MS4 Infrastructures Maps](#)

[Appendix B: MCM 1 Public Education and Outreach BMPs](#)

[Appendix C: MCM 2 Public Participation and Involvement BMP Details](#)

[Appendix D: MCM 3 Illicit Discharge Detection and Elimination Program BMP Details](#)

[Appendix E: MCM 4 Construction Activity Stormwater Runoff Control BMP Details](#)

[Appendix F: MCM 5 Post-Construction Stormwater Management in New Development and Redevelopment BMP Details](#)

[Appendix G: MCM 6 Pollution Prevention/Good Housekeeping for Municipal Operations BMP Details](#)

[Appendix H: Sampling and Analysis Plan](#)

[Appendix I: Notice of Intent](#)

[Appendix J: Annual Report](#)

[Appendix K: Annual Review and Revision Log](#)

[Appendix L: Forms](#)

[Appendix M: Site Specific SWPPP](#)





BMP Category	Responsible Department(s)/Staff Titles	Objective	Procedure	Measurable Goals & Documentation Retention	BMP Frequency
4.1 Construction Site Inventory	<b>Public Works Department:</b> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	Prepare and maintain an up-to-date inventory of all active construction sites and construction activities that are located within City of Sedona incorporated limits.	In a cooperative effort, the Sedona Public Works Department and the Sedona Community Development will develop and maintain a spreadsheet or database to keep 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 greater than one (1) acre. Construction sites will no longer be tracked once the final inspection has been completed.	All construction projects will be entered into the spreadsheet/database managed by the Sedona Public Works Department for tracking. The number of active construction projects will be documented as part of the Annual Report for the permit year.  Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.	Data will be entered into spreadsheet/database throughout the course of the year.
4.2 Site Plan Review	<b>Public Works Department:</b> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	Develop and implement a plan review process to review civil plans to ensure compliance with <a href="#">ADEQ's AZPES CGP</a> , <a href="#">General Permit AZGS2021</a> , <a href="#">Sedona City Code</a> , <a href="#">Sedona Land Development Code</a> and <a href="#">Sedona Storm Water Ordinance</a> . The authority to review plans is part of the <a href="#">Sedona City Code Article 13.50.090</a> and the <a href="#">Storm Water Ordinance Section 14-1-9</a> .	Assign staff to perform plan reviews. All plan reviews will be conducted in accordance with the adopted plan review process. <ul style="list-style-type: none"> <li>Civil Plans are submitted to the City's Community Department and the project is logged into the City's Permit Tracking System.</li> <li>As plans are reviewed, approval dates are documented in the City's Permit Tracking System.</li> <li>The owner/operator/contractor is notified once plans have been approved such that a building permit can be issued.</li> <li>In the event that the construction site is found to be located within ¼ mile of an Arizona Outstanding Water or an Impaired/Not Attaining Water, the applicant will be informed that the SWPPP will need to be submitted to ADEQ for review and approval.</li> <li>The approved plans are stamped with a reminder for the Contractor to review the associated stormwater requirements with ADEQ. The contractor is responsible for providing the City with a copy of the Stormwater Pollution Prevention Plan (SWPPP<sup>1</sup>), with accompanying copy of the NOI, and Authorization To Discharge Letter with AZCON Number, and/or Erosion Control Plan (ECP<sup>2</sup>) before the contractor can begin earthwork.</li> </ul> <p><sup>1</sup> For construction sites or 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 that will ultimately disturb greater than one (1) acre a Stormwater Pollution Prevention (SWPPP) will be required as part of the submittal.</p> <p><sup>2</sup> For sites that do not require an SWPPP, an erosion control plan, to be implemented during construction, will be required.</p>	The number of plans reviewed will be documented as part of the Annual Report for the permit year. The number of plans reviewed will be documented as part of the Annual Report for the permit year.  Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.	Plan reviews will occur throughout the year.



BMP Category	Responsible Department(s)/Staff Titles	Objective	Procedure	Measurable Goals & Documentation Retention	BMP Frequency
4.3 Contractor and Operator Education Materials	<p><b>Public Works Department:</b></p> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	<p>Develop, catalogue, and distribute educational materials with specific messages for contractors and construction site operators.</p>	<p>Throughout the permit term, assigned staff will distribute educational materials to contractors and operators. Opportunities when materials are distributed include;</p> <ul style="list-style-type: none"> <li>During initial plan review application (Hotlink to the web page).</li> <li>At the time when the building permit is issued. (Hard Copy Brochures)</li> <li>During Site Inspections (Hard Copy Brochures)</li> </ul> <p>Current brochures include:</p> <ul style="list-style-type: none"> <li>Construction Activities – Stormwater Pollution Prevention”</li> <li>“Construction BMPs”</li> <li>“Stormwater Pollution Prevention for Construction Sites”</li> </ul>	<p>The number of educational materials distributed will be documented in the Annual Report for the permit year.</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p>	<p>Construction-site specific brochures and educational material will be available throughout the year via the webpage. Hardcopies of the material will be available throughout the year as part of the distribution efforts.</p>
4.4 Staff Training	<p><b>Public Works Department:</b></p> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	<p>Implement a training program that is specific to pollution prevention and illicit discharge elimination at construction sites and associated with construction activities.</p>	<p>Assign staff to oversee SWMP training program that may include training opportunities generated by in-house staff or through a 3<sup>rd</sup> party vendor. Training topics specific to Construction Activity Stormwater Runoff Control include, but are not limited to;</p> <ul style="list-style-type: none"> <li>Plan review for stormwater quality, stormwater pollution prevention and erosion control,</li> <li>Construction sites inspections for storm water quality, stormwater pollution prevention and erosion control,</li> <li>and/or an Overview of the IDDE Program and the recognition of what is considered to be an allowable non-stormwater discharge.</li> </ul> <p>Training attendance will be tracked using the Training Log provided in (<b>Appendix L</b>) or certificates of completion if conducted by a 3<sup>rd</sup> Party Vendor.</p>	<p>100% of City Sedona’s staff that are responsible for implementing or enforcing the construction aspects of the Stormwater Management Program will be trained annually.</p> <p>The number of training opportunities will be tracked. The number of staff trained will be tracked. The topics will be documented. The data will be reported as part of the Annual Report for each the permit year.</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p>	<p>Training will be conducted throughout the year.</p>



BMP Category	Responsible Department(s)/Staff Titles	Objective	Procedure	Measurable Goals & Documentation Retention	BMP Frequency
4.5 Inspection and Enforcement Procedures	<p><b>Public Works Department:</b></p> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	<p>Develop, implement, and enforce a program to reduce pollutants in stormwater runoff to the Sedona's MS4 from construction activities.</p>	<p>Sedona staff will perform stormwater quality inspections of construction sites and construction activities based on the following frequency criteria (General Permit <a href="#">AZGS2021-002</a> Section 6.4.f). and using the form prepared by ADEQ and provided in <b>Appendix L</b>. The approved Stormwater Pollution Prevention Plan (SWPPP) and/or Erosion Control Plan (ECP) will serve as the basis for the inspection.</p> <p><u>GOAL FOR PRIVATE DEVELOPMENT PROJECTS:</u></p> <p><u>For sites disturbing 1 acre or more and within ¼ mile of an impaired, not attaining, or protected surface water.</u></p> <ul style="list-style-type: none"> <li>➤ Weekly and, within 24 hours of a storm event having a precipitation amount of 0.5 inches in a 24-hour period.</li> </ul> <p><u>For sites not meeting the above</u></p> <ul style="list-style-type: none"> <li>➤ Within 1 month of the start of construction</li> <li>➤ and quarterly thereafter</li> <li>➤ and upon completion of construction prior to final approval or occupancy</li> </ul> <p><u>GOAL FOR CAPITAL IMPROVEMENT PROJECTS (CIP):</u></p> <p><u>For sites disturbing 1 acre or more and within ¼ mile of an impaired, not attaining, or protected surface water.</u></p> <ul style="list-style-type: none"> <li>➤ Weekly and, within 24 hours of a storm event having a precipitation amount of 0.5 inches in a 24-hour period.</li> </ul> <p><u>For sites not meeting the above</u></p> <ul style="list-style-type: none"> <li>➤ Within 1 month of the start of construction</li> <li>➤ and quarterly thereafter</li> <li>➤ and upon completion of construction prior to final approval or occupancy</li> </ul> <p>The inspection procedure to be used by the Sedona Inspectors includes the following tasks.</p> <p>A. Performing a visual inspection of the site/activity perimeter to;</p> <ul style="list-style-type: none"> <li>• identify discharge locations as presented on the SWPPP or ECP and evidence of new off-site discharges locations,</li> <li>• locate/identify the perimeter controls as shown on the SWPPP or ECP,</li> <li>• locate the posted AZCON# or NOI Certificate. (If none is evident, the inspector may request to see the documents. If at the completion of the inspection the documents are</li> </ul>	<p>Sedona staff will perform inspections of construction sites and construction activities with the intent of achieving 80% of the scheduled inspections during the course of the permit year. The inspections will be completed using the form provided in Appendix L.</p> <p>The number of construction sites inspected, and the frequency of the inspections will be documented as part of the Annual Report for the permit year.</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p> <p>Completed inspection forms will be stored in Appendix L of the SWMP.</p>	<p>Inspections will occur throughout the course of the year.</p>



			<p>not observed, found or provided, Sedona will notify ADEQ for follow-up.)</p> <ul style="list-style-type: none"> <li>• Document the findings on Section II of the Form.</li> </ul> <p>B. Upon notifying the facility operator, site supervisor, and/or NOI/SWPPP Point of Contract, proceed with the on-site inspection comparing the implemented best management practices (BMPs) with those presented on the SWPPP or Erosion Control Plan. (Note that the site representative will be allowed to accompany the inspector during the inspection. The on-site inspection, at a minimum, will;</p> <ul style="list-style-type: none"> <li>• locate/identify the erosion and sediment control best management practices controls as shown on the SWPPP or ECP,</li> <li>• identify/review/locate the good housekeeping BMPs implemented at the facility,</li> <li>• compare the implemented BMPs with those presented in the SWPPP and ECP noting omissions, revisions, or discrepancies,</li> <li>• evaluate the effectiveness of the BMPs,</li> <li>• document the findings on Section III of the form and on the SWPPP or ECP.</li> </ul> <p>C. Upon completion of the inspection, the inspector will meet with site representatives to explain the outcome of the inspection and address any required corrective actions. If corrected actions are needed a Follow-Up Inspection can be scheduled within ten (10) business days from the date of the initial inspection. (It should be noted that because the SWPPP and ECP are meant to be living documents, the inspector, at their discretion, may review the on-site SWPPP or ECP to verify if any missing or omitted items were part of a documented revision).</p> <p>D. Failure to address the corrective actions will be enforced in accordance with the <a href="#">Sedona City Code</a>.</p>		
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## **APPENDIX F MCM5 POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT BMP DETAILS**

- MCM 5.1 STORMWATER CONTROL MEASURES INVENTORY
- MCM 5.2 SITE PLAN REVIEW
- MCM 5.3 INSPECTION AND ENFORCEMENT PROCEDURES
- MCM 5.4 STAFF TRAINING

### **QUICK LINKS**

[Appendix A: MS4  
Infrastructure Maps](#)

[Appendix B: MCM 1 Public  
Education and Outreach  
BMPs](#)

[Appendix C: MCM 2 Public  
Participation and Involvement  
BMP Details](#)

[Appendix D: MCM 3 Illicit  
Discharge Detection and  
Elimination Program BMP  
Details](#)

[Appendix E: MCM 4  
Construction Activity  
Stormwater Runoff Control  
BMP Details](#)

[Appendix F: MCM 5 Post-  
Construction Stormwater  
Management in New  
Development and  
Redevelopment BMP Details](#)

[Appendix G: MCM 6 Pollution  
Prevention/Good  
Housekeeping for Municipal  
Operations BMP Details](#)

[Appendix H: Sampling and  
Analysis Plan](#)

[Appendix I: Notice of Intent](#)

[Appendix J: Annual Report](#)

[Appendix K: Annual Review  
and Revision Log](#)

[Appendix L: Forms](#)

[Appendix M: Site Specific  
SWPPP](#)





BMP Category	Responsible Department(s)/Staff Titles	Objective	Procedure	Measurable Goals & Documentation Retention	BMP Frequency
5.1 Stormwater Control Measures Inventory	<p><b>Public Works Department:</b></p> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	<p>Prepare and maintain an up-to-date inventory of post-construction stormwater control measures.</p>	<p>Using the internal project tracking software, Sedona staff will enter new development and redevelopment projects such that post-construction stormwater control measures can be inventoried and scheduled for inspections.</p> <p>Once recorded, Sedona Staff will inventory the post-construction stormwater control measures and categorize them such that they can be added to the database.</p>	<p>The number of new developments and redeveloped sites completed during a permit year will be tracked. The number and type of post-construction stormwater control measures will be tracked. The data collected as part of MCM 5.1 will be documented as part of the Annual Report for the permit year.</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p>	<p>Data will be entered into the Sedona’s internal tracking system throughout the course of the year.</p>
5.2 Site Plan Review	<p><b>Public Works Department:</b></p> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	<p>Develop and implement a plan review process to review civil plans to ensure compliance with <a href="#">ADEQ’s AZPES CGP</a>, <a href="#">General Permit AZGS2021</a>, <a href="#">Sedona City Code</a>, <a href="#">Sedona Land Development Code</a> and <a href="#">Sedona Storm Water Ordinance</a>. The authority to review plans is part of the <a href="#">Sedona City Code Article 13.50.090</a> and the <a href="#">Storm Water Ordinance Section 14-1-9</a>.</p>	<p>Assign staff to perform plan reviews. All plan reviews will be conducted in accordance with the adopted plan review process.</p> <ul style="list-style-type: none"> <li>Civil Plans are submitted to the City’s Development Services Department and the project is logged into Sedona’s internal permit tracking system.</li> <li>As plans are reviewed, approval dates are documented in the Sedona’s internal permit tracking system.</li> <li>Plans are reviewed to verify that post-construction stormwater control measures are include and that general notes or recorded covenants, conditions and restrictions are in place to;                             <ul style="list-style-type: none"> <li>ensure that the stormwater measures are to be maintained in perpetuity,</li> <li>name the party responsible(s) for overseeing the operation and maintenance of the measure,</li> <li>ensure that Sedona has the right to inspect the post-construction stormwater control measures,</li> <li>state that failure to maintain the stormwater control measures will result in a notice of violation,</li> <li>and provide the City, at its discretion, the right to perform maintenance on the post-construction control measure, and the right to seek reimburse for the incurred cost.</li> </ul> </li> </ul>	<p>The number of plans reviewed, as entered in the Sedona’s internal permit tracking system will be documented as part of the Annual Report for the permit year.</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p>	<p>Plan reviews will occur throughout the year.</p>



BMP Category	Responsible Department(s)/Staff Titles	Objective	Procedure	Measurable Goals & Documentation Retention	BMP Frequency
5.3 Inspection and Enforcement Procedures	<p><b>Public Works Department:</b></p> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	<p>Develop, implement, and enforce an inspection program of public and private post-construction stormwater control measures, in order to reduce pollutants in stormwater runoff from entering to the MS4.</p>	<p>Sedona staff will perform post-construction reviews for both publicly and privately owned and operated facilities and stormwater control measures (Note storm water control measures include but are not limited to culverts, channels, storm drains, catch basins, retention basins and drywells). The inspections will be documented using the form provided in <b>Appendix L</b>.</p> <p>Sedona requires the owner/operator to properly maintain privately owned post-construction stormwater controls. This requirement is documented in the form of maintenance agreements, covenants, conditions, and restrictions and is recorded on the final as-built plans, recorded with the deeds/plats, and entered into the City's internal permit tracking system. However, upon receiving a report of a potential stormwater quality violation or potential illicit discharge, Sedona staff will inspect the privately owned and maintained stormwater control measures. These inspections will be documented using the form provided in Appendix L.</p>	<p>Sedona staff will inspect, at a minimum, 20% of its post-construction stormwater control measures annually (Public Facilities).</p> <p>Sedona staff will inspect 100% of the stormwater quality violations or potential illicit discharges reported (Private Facilities).</p> <p>The number of inspections of publicly owned and operated stormwater control measures will be tracked.</p> <p>The number of inspections of privately owned and maintained stormwater quality measures will be tracked. A summary of maintenance on publicly owned stormwater control measures will be prepared.</p> <p>A summary of any corrective action taken on privately owned and maintained stormwater control measures will be prepared. The data collected as part of MCM 5.3.will be documented as part of the Annual Report for the permit year.</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p> <p>Completed inspection forms will be stored in Appendix L of the SWMP.</p>	<p>Inspections will occur throughout the course of the year.</p>
5.4 Staff Training	<p><b>Public Works Department:</b></p> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	<p>Implement a training program that is specific to post-construction pollution prevention and illicit discharge elimination at development and redevelopment sites.</p>	<p>Assign staff to oversee SWMP Training program that may include training opportunities generated by in-house staff or through a 3<sup>rd</sup> party vendor. Training topics specific to Construction Activity Stormwater Runoff Control include but are not limited to;</p> <ul style="list-style-type: none"> <li>Reviewing Plans for post-construction stormwater controls and required maintenance agreements.</li> <li>Inspection of publicly owned and maintained storm water quality measures.</li> <li>Inspection of privately owned and maintained storm water quality measures.</li> </ul> <p>Training attendance will be tracked using the Training Log provided in (<b>Appendix L</b>) or certificates of completion if conducted by a 3<sup>rd</sup> Party Vendor.</p>	<p>100% of City Sedona's staff that are responsible for implementing or enforcing the post-construction aspects of the Stormwater Management Program will be trained annually.</p> <p>The number of training opportunities will be tracked. The number of staff trained will be tracked. The topics will be documented. The data will be reported as part of the Annual Report for each the permit year.</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p>	<p>Training will be conducted throughout the year.</p>



## **APPENDIX G MCM 6 POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS BMP DETAILS**

MCM 6.1A	INVENTORY OF MUNICIPAL OPERATIONS AND FACILITIES
MCM 6.1B	PRIORITIZATION OF MUNICIPAL OPERATIONS AND FACILITIES
MCM 6.2	SITE SPECIFIC STORM WATER POLLUTION PREVENTION PLANS (HIGH AND MEDIUM RISK SITES)
MCM 6.3	GOOD HOUSEKEEPING OPERATIONS FOR LOW-RISK MUNICIPAL FACILITIES AND OPERATIONS
MCM 6.4	MUNICIPAL OPERATION AND FACILITY INSPECTIONS
MCM 6.5A	STREET SWEEPING
MCM 6.5B	OIL-WATER SEPARATORS/CATCH BASIN CLEANING
MCM 6.5C	STORMWATER INFRASTRUCTURE MAINTENANCE AND CLEANING PROGRAM
MCM 6.6	STAFF TRAINING

### **QUICK LINKS**

[Appendix A: MS4 Infrastructure Maps](#)

[Appendix B: MCM 1 Public Education and Outreach BMP Details](#)

[Appendix C: MCM 2 Public Participation and Involvement BMP Details](#)

[Appendix D: MCM 3 Illicit Discharge Detection and Elimination Program BMP Details](#)

[Appendix E: MCM 4 Construction Activity Stormwater Runoff Control BMP Details](#)

[Appendix F: MCM 5 Post-Construction Stormwater Management in New Development and Redevelopment BMP Details](#)

[Appendix G: MCM 6 Pollution Prevention/Good Housekeeping for Municipal Operations BMP Details](#)

[Appendix H: Sampling and Analysis Plan](#)

[Appendix I: Notice of Intent](#)

[Appendix J: Annual Report](#)

[Appendix K: Annual Review and Revision Log](#)

[Appendix L: Forms](#)

[Appendix M: Site Specific SWPPP](#)





BMP Category	Responsible Department(s)/Staff Titles	Objective	Procedure	Measurable Goals & Documentation Retention	BMP Frequency
6.1a Inventory of Municipal Operations and Facilities	<u>Public Works Department:</u> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	Prepare and maintain an up-to-date inventory of municipal operations and facilities that may have the potential to discharge pollutants to the MS4.	Sedona Public Works Department staff will develop and maintain a map and/or list of all facilities that can be utilized for conducting site inspections. Facilities may include, but are not limited to the City Hall, police and fire stations, municipal pools, parks, city yards, well sites, airport, water and wastewater treatment facilities, fleet repair, etc.	<p>The map and/or list will be updated to reflect new municipal facilities constructed or redeveloped during the year, and any existing facility not previously identified. The number and types of revisions will be tracked. The data collected as part of MCM 6.1a will be documented as part of the Annual Report for the permit year.</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p>	The map and/or list will be updated as necessary throughout the year.
6.1b Prioritization of Municipal Operations and Facilities	<u>Public Works Department:</u> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	Prioritize the municipal facilities inventory, ranking them from lowest to highest risk in terms of the potential for the discharge of pollutants to the MS4.	<p>Sedona Public Works Department will review the inspection records, type of operation and potential risk to discharge pollutants to the MS4 of all the municipal facilities. Following this review, a priority ranking will be assigned, and inspection schedule determined based on Section 6.6.2.c <a href="#">General Permit AZGS2021</a>.</p> <p>The Rankings are as follows:</p> <ul style="list-style-type: none"> <li>Industrial Facilities (MSGP) Priority 1 - High</li> <li>City Controlled Yards/Oil Separators/Catch Basins Priority 2 – Medium</li> <li>City Controlled Yards/City Municipal Buildings /Parking Lots Priority 3 – Low</li> </ul> <p>The rankings will be represented on a map of the municipal operations or as part of a list of the operations. A list of the rankings is provided below (<b>Site Rankings</b>).</p>	<p>The map and/or list will be updated to reflect new site prioritization or when the prioritization of a site has been revised. The number and types of revisions will be tracked. The data collected as part of MCM 6.1b will be documented as part of the Annual Report for the permit year.</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p>	The prioritization for each facility will be reviewed annually.
6.2 Site Specific Storm Water Pollution Prevention Plans (High and Medium Risk Sites)	<u>Public Works Department:</u> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	Develop, implement, and maintain site-specific Stormwater Pollution Prevention Plans (SWPPP) for high and medium risk municipal operations and capital improvement projects.	<p>A. Sedona Public Works staff will prepare site-specific (SWPPPs) for the Priority 1 (High Risk) and Priority 2 (Medium Risk) facilities. The SWPPP will contain the best management practices (BMPs) that will be implemented at the municipal operation.</p> <p>B. Sedona Public Works Department in cooperation with the facility supervisors will implement the BMPS for the facilities as outlined in the SWPPP.</p> <p>C. Sedona Public Works and the facility supervisor will evaluate and modify the SWPPP to prevent storm water pollution and illicit discharges from exiting the facility and entering the MS4.</p> <p>The SWPPP will be implemented upon completion and will be evaluated during site inspections and as part of the Annual Review of the SWMP.</p> <p>The SWPPP will be stored in <b>Appendix M</b> of the SWMP.</p>	<p>The number of SWPPPs and the name and location of the sites for which an SWPPP was prepared will be documented as part of the Annual Report for the permit year.</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p>	SWPPPs will be implemented as needed throughout the year.



BMP Category	Responsible Department(s)/Staff Titles	Objective	Procedure	Measurable Goals & Documentation Retention	BMP Frequency
<p>6.3 Good Housekeeping Operations for Low-Risk Municipal Facilities and Operations</p>	<p><b>Public Works Department:</b></p> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	<p>Develop and implement a good housekeeping program for low-risk facilities and municipal operations, which includes installing, and inspecting BMPS at low-risk municipal operations for the purpose of preventing, trash, floatable debris, pollutants, and illicit discharges from entering the MS4.</p>	<p>In an inter-division, cooperation effort, Public Works Department staff will develop, implement, and maintain a series of BMPs at the low-risk municipal operations and facilities. Operations and facilities may include, but are not limited to the City Hall, low-risk fire and police stations, parks, libraries, tech facilities, select well sites and public pools.</p> <p style="text-align: center;"><u>LOW-RISK MUNICIPAL OPERATIONS BMPs</u></p> <p><u>Material/Chemical Storage:</u></p> <ul style="list-style-type: none"> <li>It is recognized that minor amounts of chemicals will be stored at each facility (i.e., cleaning products). These products will be kept indoors in their original containers. Pesticides and herbicides associated with landscaping efforts will be brought on-site at the time of need and not stored within the facility. Bulk amounts of materials or chemicals necessary for facility maintenance, or improvements will be brought on-site at the time of need and not stored within the facility.</li> </ul> <p><u>Litter Control:</u></p> <ul style="list-style-type: none"> <li>Trash receptacles will be provided on site to collect small amounts of garbage and non-hazardous waste. The receptacles will have lids to prevent wind from carrying refuse out of the receptacle.</li> </ul> <p><u>Waste and Trash Removal:</u></p> <ul style="list-style-type: none"> <li>Removal of waste and trash will be based on a set schedule (trash receptacles).</li> </ul> <p><u>Training:</u></p> <ul style="list-style-type: none"> <li>It is recognized that staff at these facilities will not be part of the routine training schedule. However, the Sedona Public Works Department, will provide when the opportunity arises, (i.e., after an inspection) to educate facility operators of the importance of stormwater quality and the City's responsibilities in implementing its Stormwater Management Program.</li> </ul> <p><u>Inspections:</u></p> <ul style="list-style-type: none"> <li>Site inspections will occur at least once during the permit year.</li> <li>Inspections will examine the following items:                             <ul style="list-style-type: none"> <li>trash receptacles</li> <li>vehicle/equipment storage areas and parking lots</li> <li>outdoor storage areas</li> <li>drainage infrastructure (i.e., retention basins, culverts and storm drains, sumps)</li> </ul> </li> </ul>	<p>The number of inspections conducted, the names and locations of the inspections and the results will be tracked. The number of inspections and the name of the facilities inspected will be documented as part of the Annual Report for the permit year. Any corrective actions taken or BMPs modified for any of the low-risk sites inspected will be summarized as part of the Annual Report for the permit year.</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p>	<p>Implementation of the Good Housekeeping Operations as well as the inspections of the low-risk municipal facilities will occur throughout the year.</p>



			<ul style="list-style-type: none"> <li>✓ common areas and landscape areas</li> <li>✓ facility specific areas identified by the Sedona Public Works Department</li> </ul> <p>The assigned staff will review the results of the inspection and, if necessary, escalate items that need attention such that work orders can be created. Inspections will be documented on the form provided in <b>Appendix L</b>. Upon completion inspection forms will be stored Appendix L.</p>		
6.4	<p>Municipal Operation and Facility Inspections</p> <p><b>Public Works Department:</b></p> <ul style="list-style-type: none"> <li>• Assistant City Engineer</li> </ul>	<p>Develop, and implement an inspection program of the BMPS installed at the municipal operations for the purpose of preventing, trash, floatable debris, pollutants, and illicit discharges from entering from entering the MS4.</p>	<p>D. Sedona Public Works staff will review the Stormwater Pollution Prevention Plans for each high and medium risk municipal operation. The number of inspections is provided in <b>Section 8.1</b> of the SWMP.</p> <p>E. Staff, accompanied by facility managers and maintenance staff, if necessary, will inspect the facility based on the BMPs presented on the SWPPP.</p> <p>F. The inspections will be performed to identify structures or other BMPs that are damaged, in need of repair or maintenance and to evaluate the effectiveness of a BMP. The inspection should also include the identification of possible pollutant sources for the facility and ensure that BMPs are in place to account for the potential pollutant source.</p> <p>G. Inspections will be documented using the form provided in <b>Appendix L</b>. Completed forms will be stored Appendix L for future reference.</p> <p>H. The assigned staff will review the results of the inspection and, if necessary, escalate items that need attention such that work orders can be created.</p>	<p>The number of inspections conducted, the names and locations of the inspections and the results will be tracked. The number of inspections and the name of the facilities inspected will be documented as part of the Annual Report for the permit year. Any corrective actions taken or BMPs modified for any of the low-risk sites inspected will be summarized as part of the Annual Report for the permit year.</p> <p>Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.</p>	<p>Inspections of the high and medium risk municipal facilities will occur throughout the year.</p>



BMP Category	Responsible Department(s)/Staff Titles	Objective	Procedure	Measurable Goals & Documentation Retention	BMP Frequency
6.5a Street Sweeping	<b>Public Works Department:</b> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	Maintain clean, safe streets and collect litter and sediment with the intent of capturing floatables and pollutants prior to entering the MS4 sewer system using equipment designed for cleaning paved surfaces. This effort will also reduce fugitive dust particulates from being entrained into the ambient air and keep gutters clear of dirt and refuse to ensure proper flow of water within the gutter and protection of asphalt surfaces along gutter line from deterioration due to water and dirt accumulation.	A. Sedona Public Works staff will be assigned to street sweeping BMP. B. Sweeping will occur in a master schedule. C. Collected material will be brought to the Public Works Yard at Contractors Road for proper disposal. D. Swept material will be tested for hazardous characteristics as mandated by the recipient landfill operator. Note if materials are found to contain unusual material, the findings will be brought to the attention of the Public Works Director and/or the Environmental Compliance Manager.  Note: The Streetsweeper will be maintained on a set schedule. Cleaning of the sweepers will be conducted off-site by a 3 <sup>rd</sup> Party Vendor.	The total number of miles swept will be documented and reported within the Annual Report.  Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.	Street Sweeping will occur throughout the year.
6.5b Oil-water Separators /Catch basin Cleaning	<b>Public Works Department:</b> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	Develop a process to clean and maintain City owned oil-water separators and catch basins.	A. Sedona Public Works staff will be assigned to the oil-water separators/catch basin BMP. B. Sedona Public Works staff will inspect 100% of the oil-water separators annually. The inspection will include whether maintenance is necessary. C. Sedona Public Works staff will perform maintenance and/or cleaning will occur for 100% of the oil-water separators and catch basins recommended to have such services. D. Collected material will be brought to the Public Works Yard at Contractors Road for proper disposal.  Note: The equipment used to clean out the oil-water separators and the catch basins will be maintained off-site by a 3 <sup>rd</sup> Party Vendor.	The number of oil-water separators and catch basins inspected will be documented and reported within the Annual Report.  The number of oil-water separators and catch basins maintained/cleaned will be documented and reported within the Annual Report.  Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.	Inspections of the oil-water separators and catch basins occur throughout the year.  As recommended maintenance and cleaning of the oil-water separators and catch basins occur throughout the year.



BMP Category	Responsible Department(s)/Staff Titles	Objective	Procedure	Measurable Goals & Documentation Retention	BMP Frequency
6.5c Stormwater Infrastructure Maintenance and Cleaning Program	<b>Public Works Department:</b> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	Maintain the publicly owned and operated stormwater control measures located within the MS4, removing trash, debris, and sediment to restore capacity and prevent pollutants from entering Oak Creek (the OAW) downstream.	A. Sedona Public Works staff will be assigned to perform routine maintenance of the public publicly owned and operated stormwater control measures. B. Sedona Public Works staff will inspect 100% of the oil-water separators annually. The inspection will include whether maintenance is necessary. C. Sedona Public Works staff, using water/vacuum trucks, will remove pollutants from culverts, storm drains and scuppers recommended to have such services.  Collected material will be brought to the Public Works Yard at Contractors Road for proper disposal.	The number of facilities cleaned during the permit year will be tracked. The data collected as part of MCM 6.6 will be incorporated into the Annual Report for the permit year.  Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.	Maintenance of the stormwater controls will occur throughout the year.
6.6 Staff Training	<b>Public Works Department:</b> <ul style="list-style-type: none"> <li>Assistant City Engineer</li> </ul>	Implement a training program that is specific to Pollution Prevention and Good Housekeeping at municipal facilities.	Assign staff to oversee SWMP training program that may include training opportunities generated by in-house staff or through a 3 <sup>rd</sup> party vendor. Training topics specific to Good Housekeeping and Pollution Prevention include but are not limited to; <ul style="list-style-type: none"> <li>Inspection of publicly owned and maintained storm water quality measures.</li> <li>Importance of Stormwater Pollution Prevention on publicly owned and operated facilities.</li> <li>Developing, implementing, and maintaining site-specific SWPPPs.</li> <li>Implementation and proper installation of spill prevention measures such as:                             <ul style="list-style-type: none"> <li>Spill Kits</li> <li>Drip Pans</li> <li>Secondary containment devices</li> <li>Chemical Storage and Hazardous Waste Disposal</li> </ul> </li> <li>Implementation and proper use of sediment and pollution control measures such as:                             <ul style="list-style-type: none"> <li>Silt Fences,</li> <li>Straw Wattle</li> <li>Filter socks</li> <li>Sand and Gravel Berms</li> <li>Vehicle/Tire Wash Facilities</li> <li>Gravel beds/ Track Out Control Mats</li> </ul> </li> <li>Training attendance will be tracked using the Training Log provided in (<b>Appendix L</b>) or certificates of completion if conducted by a 3<sup>rd</sup> Party Vendor.</li> </ul>	The number of training opportunities will be tracked.  The number of staff trained will be tracked. The topics will be documented. The data will be reported as part of the Annual Report for each the permit year.  Applicable records will be maintained for a minimum of three (3) years following the end of the permit term.	Training will be conducted throughout the permit year.

## MUNICIPALLY OWNED AND OPERATED FACILITIES WITH PRIORITY RANKINGS

CITY CONTROLLED YARDS			
FACILITY	LOCATION	SITE PRIORITY (L/M/H)	INSPECTION FREQUENCY
City Maintenance Yard	2070 Contractors Road	M	2
Posse Grounds Yard	Posse Ground Road	L	1
OTHER MUNICIPAL BUILDINGS			
FACILITY	LOCATION	SITE PRIORITY (L/M/H)	INSPECTION FREQUENCY
City Sedona Municipal Complex	102 Roadrunner Drive	L	1
Brewer Facility	221 Brewer Road	L	1
POLICE STATIONS/FACILITIES			
FACILITY	LOCATION	SITE PRIORITY (L/M/H)	INSPECTION FREQUENCY
Station 1	102 Roadrunner Drive	L	1
STORMSCEPTORS*			
FACILITY	LOCATION	SITE PRIORITY (L/M/H)	INSPECTION FREQUENCY
Morgan Wash Stormsceptor 1	Morgan Wash at State Route 179 (North)	L	1
Morgan Wash Stormsceptor 2	Morgan Wash at State Route 179 (South)	L	1
Oak Creek Stormsceptor 1	Oak Creek at State Route 179	L	1
Oak Creek Stormsceptor 2	Oak Creek at State Route 179/Schnebly Hill Roundabout	L	1

\*There are four (4) Stormsceptors that are located within the MS4 boundary in the ADOT right of way. They are not owned or operated by the City but are maintained and inspected by the City once annually.

### QUICK LINKS

[Appendix A: MS4 Infrastructure Maps](#)

[Appendix B: MCM 1 Public Education and Outreach BMP Details](#)

[Appendix C: MCM 2 Public Participation and Involvement BMP Details](#)

[Appendix D: MCM 3 Illicit Discharge Detection and Elimination Program BMP Details](#)

[Appendix E: MCM 4 Construction Activity Stormwater Runoff Control BMP Details](#)

[Appendix F: MCM 5 Post-Construction Stormwater Management in New Development and Redevelopment BMP Details](#)

[Appendix G: MCM 6 Pollution Prevention/Good Housekeeping for Municipal Operations BMP Details](#)

[Appendix H: Sampling and Analysis Plan](#)

[Appendix I: Notice of Intent](#)

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[Appendix M: Site Specific SWPPP](#)



## APPENDIX H SAMPLING AND ANALYSIS PLAN

CHARACTERIZATION MONITORING CHEMICAL LIST  
ANALYTICAL MONITORING CONSTITUENTS LIST  
SAMPLING AND ANALYSIS PLAN

### QUICK LINKS

[Appendix A: MS4  
Infrastructure Maps](#)

[Appendix B: MCM 1 Public  
Education and Outreach BMP  
Details](#)

[Appendix C: MCM 2 Public  
Participation and Involvement  
BMP Details](#)

[Appendix D: MCM 3 Illicit  
Discharge Detection and  
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[Appendix E: MCM 4  
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[Appendix F: MCM 5 Post-  
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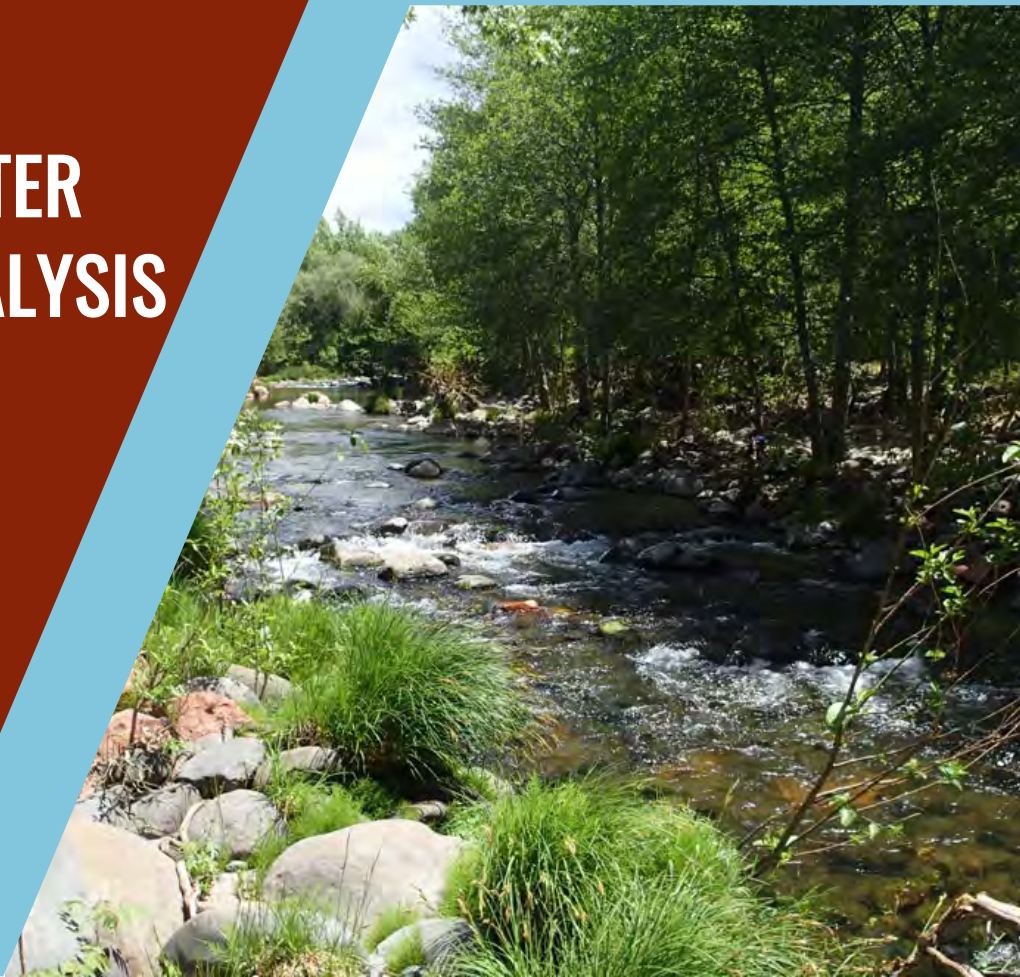






# SEDONA STORMWATER SAMPLING AND ANALYSIS PLAN

October 2023



**Prepared for:**

City of Sedona  
Stormwater Management  
102 Roadrunner Drive  
Sedona, Arizona 86336

**Submitted by:**

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## SECTION 1 INTRODUCTION

This Sampling and Analysis Plan (SAP) has been prepared for City of Sedona to comply with the Arizona Department of Environmental Quality’s (ADEQ) Arizona Pollution Discharge Elimination System General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems to Protected Surface Waters [AZG2021-002](#) (Permit) for the regulating stormwater discharges from Small Municipal Separate Storm Sewer Systems (MS4). The SAP is intended to provide the details required by the Permit and, while it is part of the City of Sedona’s Stormwater Management Plan ([SWMP](#)), it can be used as a stand-alone document.

### 1.1 SAMPLING AND ANALYSIS PLAN OBJECTIVES

There are multiple objectives for this plan:

- Establish sampling protocols and methods for stormwater monitoring and sampling, in order to characterize and analyze stormwater runoff from the County’s MS4, as required under the Permit.
- Document the sampling locations to be used for City of Sedona’s characterization and analytical monitoring efforts. Note that the sampling locations discharge into Oak Creek, which is an Outstanding Arizona Water (OAW) and has been identified as non-attaining for Escherichia Coli (E. Coli) with an established Total Maximum Daily Load (TMDL).
- Document sampling and analysis methods and equipment for collecting representative samples of stormwater that maximize resources.

### 1.2 CONTACT INFORMATION

The following table outlines the personnel responsible for overseeing the City of Sedona Stormwater Management Plan and who will serve as the main points of contact overseeing the sampling and analysis processes.

**Table 1-1: SWMP Contact Information**

SWMP CONTACT INFORMATION
<p><b>Sandra Phillips</b>  Assistant Public Works Director/Assistant City Engineer  102 Roadrunner Drive  Sedona AZ 86336  Phone: (928) 203-5076  Email: <a href="mailto:sphillips@sedonaaz.gov">sphillips@sedonaaz.gov</a></p>

### 1.3 REASON FOR ANALYTICAL MONITORING

- Characterization Monitoring Required by ADEQ per permit number AZG2021-002
- Impaired Waters Monitoring with a TMDL
- Outstanding Arizona Water (OAW) Monitoring





## SECTION 2 SAMPLING PROCESS

The general approach for this SAP is to collect a grab sample of stormwater from sample locations during the first 30 minutes of a “qualifying storm event”. For the purpose of this document, a grab sample is defined as a single sample manually collected at one location during a short time period.

For characterization monitoring, sample collection will occur one (1) time per outfall within the first three and a half (3.5) years of the permit. The following sections outline the procedures that should be followed for safely accessing the outfalls and collecting a representative ‘first flush’ stormwater sample.

### 2.1 QUALIFYING STORM EVENT

Characterization and analytical monitoring shall be collected during a qualifying storm event. As defined in Section 7.2.2 of AZG2021-002, a qualifying storm event is an event that results in an amount of rainfall equal to or greater than 0.1 inches and results in a discharge within the first 24-hours of the event.

Until such time that a City of Sedona owned/operated rain gauge becomes available, local rain gages will be used to identify a “qualifying storm event.” These gages may include those operated by The Yavapai County Flood Control District ([Yavapai Gage Data](#)).

### 2.2 SAMPLING FREQUENCY

For characterization monitoring, sample collection will occur one (1) time per outfall within the first three and a half (3.5) years of the permit. The following sections outline the procedures that should be followed for safely accessing the outfalls and collecting a representative ‘first flush’ stormwater sample.

For analytical monitoring, a sample shall be collected a minimum of one (1) time per wet season through the duration of the permit for all outfalls. Analytical monitoring is only required when stormwater or snowmelt from an outfall is sufficient such that a sample can be collected and analyzed. For the purpose of analytical monitoring, wet seasons are defined as.

Summer Wet Season	June 1 – October 31
Winter Wet Season	November 1 – May 31





### 2.3 SAMPLING PERSONNEL

The following table outlines the personnel responsible for collecting, packing, and delivering samples to a laboratory.

**Table 2-1: Sampling Personnel**

STAFF NAME	EMAIL	SPECIFIC RESPONSIBILITY
Michael Righi	mrigi@sedonaaz.gov	Perform stormwater sampling and deliver samples to a certified laboratory or to a third party for transport to the testing laboratory.
		Deliver samples to a certified laboratory or to a third party for transport to the testing laboratory.

### 2.4 LOCATION AND DESCRIPTION OF OUTFALLS

The MS4 is located in the urbanized areas of Sedona, Arizona. The City has identified four (4) outfalls within its MS4 area that will be used for characterization and analytical monitoring. The coordinates for the outfalls are presented in Table 2-2. The runoff from two (2) of the outfalls discharges directly into Oak Creek (OC-1 and OC-2). OC-1 discharges from a natural channel behind Tlaquapaque, directly into Oak Creek. This outfall will be used for characterization and analytical monitoring and is representative of commercial runoff. OC-2 discharges from a concrete-lined culvert into Oak Creek and will be used for analytical monitoring only. BOB-1 discharges from a natural channel into Back O' Beyond Wash approximately 1 mile upstream of its confluence with Oak Creek. This outfall will be used for analytical and characterization monitoring and is representative of residential runoff. The final outfall is CCW-1, which discharges out of a box culvert into a natural channel and will be used for characterization monitoring of industrial runoff. Figure 2-1 provides photos of each of the identified outfalls. Figure 2-2 shows the location of the outfalls.

**Table 2-2: Outfall location and descriptions**

No.	Outfall ID	Description	Type of Monitoring	Longitude	Latitude
1	OC-1	Tlaquapaque behind tennis courts	Analytical and Characterization	-111.763	34.861
2	OC-2	Oak Creek @ Newcastle Ln	Analytical	-111.766	34.858
3	BOB-1	Back O' Beyond Wash @ Back O' Beyond Rd	Analytical and Characterization	-111.784	34.826
4	CCW-1	Carroll Canyon Wash	Characterization	-111.800	34.853



***Figure 2-1: Representative photos of each outfall***



**Figure 2-2: Identified outfall locations within Sedona's MS4**



## 2.5 SAMPLING PROCEDURES

The objective of this SAP is to analyze the stormwater runoff from the MS4 for characterization and analytical monitoring. There will be no testing of parameters in the field. All other analyses will be completed by an Arizona Registered Laboratory. The testing laboratory may provide sample containers and labels and may also provide information about required sample preservation and sample delivery methods. The testing laboratory should also be consulted to determine the appropriate sample volume required for each analyte. The complete list of constituents being analyzed can be found in [Appendix A](#). All laboratory analysis must be conducted according to test procedures specified in [40 CFR 136](#).

### 2.5.1 GRAB SAMPLE PROCEDURES

The following procedures will be used to collect a manual grab sample (sample) at the identified outfall locations.

1. Review weather forecasts in anticipation of a [“qualifying storm event”](#).
2. Collect the following materials prior to arriving at the collection site:
  - Sample Collection Form(s) for each outfall
  - Chain of Custody (COC) forms and seal
  - Camera (or Cell Phone with Camera)
  - Sample labels
  - Waterproof Ink Pen
  - Ladle used for sample collection
  - Sample collection containers
  - Sample preservation compounds (if needed)
  - Personal protective equipment (PPE)
  - Traffic Control Equipment (Cones, Signs, Barricades, Light bar etc.)
3. Photograph flow discharging the site at the time of collection with time/date stamp.
4. Collect a sample of stormwater at the downstream side of the outfall location directly from the outfall structure within 30 minutes of a “qualifying storm event”.
  - i. Rinse collecting equipment with site water.
  - ii. Collect sample with ladle or directly into a clean, clear glass or plastic container from the center of flowing water directly from the outfall, if possible, avoiding uncharacteristic debris or sediment from the bottom of natural channels.
  - iii. Bring the sample to a clean location for transference to the collection container.
  - iv. Remove sample container lid, ensuring that you do not contaminate the neck, lid or inside of the container with fingers, particles or dripping water.
  - v. Fill container to the proper volume as determined by the testing laboratory and secure the lid. If necessary, repeat steps “i” and “ii” until the required volume is obtained. The required volume will be predetermined by the laboratory.



- vi. If a preservative is to be used, once the appropriate volume has been reached, mix the preservative through the sample by rotating the container top to bottom.
  - vii. Secure the sample lid and remove any dirt or debris from the outside of the container.
5. Complete the sample label provided by the testing laboratory with waterproof ink and adhere to sample container. Ensure that the following information is included on the label.
    - i. Sample identifier (e.g.: OC-1\_YMMMDD)
    - ii. Sampler initials
    - iii. Sample collection date/time
    - iv. Type of preservation used, if any.
  6. Photograph the collected sample with the sample label visible.
  7. Complete field documentation using the Stormwater MS4 Sample Collection Form found in [Appendix B](#).
  8. Complete the chain of custody (COC) form found in [Appendix B](#) at the end of the Stormwater MS4 collection form.
  9. If preservation of the sample is needed, follow all instructions given by the laboratory for sample preservation.
  10. Deliver sample promptly to the laboratory that will be performing the analysis, along with a list of analytes being tested for, which is found in [Appendix A](#).
    - i. Analytical monitoring samples must be delivered to the laboratory within 6 hours.
    - ii. Characterization monitoring samples must be delivered within 48-72 hours.
  11. Relinquish the samples to the laboratory personnel. Sign and date COC forms.
  12. Review local rain gage information to verify that the storm event is a “qualifying storm event”.
- Note that the characterization monitoring effort may also include visual monitoring. If performed, the visual monitoring will be documented on the Visual Monitoring Form Provided in [Appendix B](#).



## 2.6 SAFETY PROCEDURES

- Sampling personnel shall wear appropriate personal protective equipment (PPE) when collecting samples. This includes, but is not limited to, close-toed shoes, safety vest, and gloves at the time of collection. If there is the potential for coming into contact with hazardous materials, then chemical resistant gloves shall be worn.
- Personnel should not collect a sample if there is lightning in the area and should remain at a safe distance from rapidly moving water, keeping in mind that water levels in washes and canals can rise quickly during a storm event.
- If personnel are working close to or in a roadway to collect a sample, traffic cones should be placed in the roadway to ensure an adequate distance is kept between personnel and oncoming traffic. Vehicle hazard lights will be activated and, if equipped, the vehicle lightbar will be turned on.
- If, at any time, the sampling personnel feel that the sample cannot be collected safely, activities should immediately be stopped, and personnel should move to a safe location.

## 2.7 EQUIPMENT CALIBRATION AND MAINTENANCE

- No testing of parameters will be done in the field and therefore no equipment calibration is necessary.

## SECTION 3 ANALYTICAL PROCESSES

### 3.1 ANALYTICAL METHODS

Samples will be analyzed by the testing laboratory for all parameters required by ADEQ's Stormwater Characterization Monitoring Requirements, as well as analytical monitoring related to discharging into an OAW. Each sample will be tested for constituents in the following classes: metals, inorganics, VOC's, semi-VOC's- acid extractable, semi-VOC's- bases/neutrals, and PCB's/pesticides for the characterization monitoring. A complete list of constituents being tested can be found in [Appendix A](#). It should be noted that the constituents presented are particular to those required for Characterization Monitoring.

Analytical monitoring of the samples is required because the MS4 discharges into Oak Creek, which has been designated by ADEQ as an OAW and is non-attaining for E. Coli. The parameters that will be tested during analytical monitoring effort are Biological Oxygen Demand (BOD), Total Suspended Solids (TSS), pH, fecal coliform, and oil and grease. Additionally, the samples will need to be tested for E. Coli, which can be performed on the same sample as the fecal coliform. These additional constituents have been added to those compiled for characterization monitoring in [Appendix A](#).

ADEQ's environment quality standards ([R18-11-109, Arizona Administrative Code](#)) for analytical monitoring can be seen in Table 3-1. Oak Creek follows the standards for full body contact (FBC) because it is used for recreational swimming, and for aquatic and wildlife-warm water (A&Ww) due to an average elevation of less than 5000 feet.

**Table 3-1: Environmental Quality Standards for Analytical Monitoring**

Constituent	Water Quality Criteria (per ADEQ)	Units
Biological Oxygen Demand (BOD)	None	mg/L
pH	6.5 - 9	None
Suspended Solids (TSS)	None	mg/L
Oil and Grease	None	mg/L
Fecal Coliform	None	CFU/100mL
E. Coli	235	CFU/100mL

### 3.2 TMDL AND WLA DETERMINATION

#### 3.2.1 TMDL DETERMINATION

A TMDL was established by the ADEQ on August 30, 2010 for five (5) segments of Oak Creek. The City of Sedona was specifically identified in the TMDL document as having a waste load allocation (WLA) assigned to it for the segment between Slide Rock State Park and Dry Creek. The WLA allocated to the City is 5% of the TMDL and is expressed as billion cfu/day (G-cfu/day) based on flow conditions as identified below.

**Table 3-2: Waste Load Allocations for Oak Creek**

Flow Conditions in Oak Creek	Sedona WLA (G-cfu/day)
High Flows (flood conditions)	84
Moist Conditions (above average flows)	12
Midrange Flows (average flow conditions)	10

The WLA for Sedona is based upon flow conditions of Oak Creek. A review of the nearest United States Geological Survey (USGS) gaging station within Oak Creek.

**Table 3-3: USGS statistics for Oak Creek at Sedona, AZ**

Min (1989)	25 <sup>th</sup> Percentile	Most Recent Instantaneous Value	Median	75 <sup>th</sup> Percentile	Mean	Max (1988)
28	30	33	33	36	115	1450

A general determination can be made from review of the flow data within Oak Creek for determining which WLA to use:

- High Flows: > 115cfs
- Moist Conditions: 50-115cfs
- Midrange flows 28 to 50 cfs

The City can review Oak Creek flow data from the USGS website ([USGS Oak Creek near Sedona, AZ](#)). This data will be used to estimate pollutant loading of E. Coli.

### 3.2.2 CALCULATING WLA

The City will calculate its WLA by converting each sample concentration from cfs/100ml to Gcfu/day. The formula to conduct the WLA calculations can be seen below.

#### **Equation 3-1: WLA conversion equation**

$$\text{Concentration} \left( \frac{\text{cfu}}{100\text{ml}} \right) * \text{Discharge (cfs)} * 0.02446 = \text{New Concentration} \left( \frac{\text{G} - \text{cfu}}{\text{day}} \right)$$

Each sampled event will then be compared to the appropriate WLA depending upon flow of Oak Creek (high, moist or midrange) as identified in Section 3.2.1.

### 3.2.3 CALCULATING FLOW

The City will utilize the Float Method to determine flow at each sampling location. The flow rate is calculated by estimating the velocity of the flow and the cross-sectional areas of the discharge, and then entering it into the standard flow rate equation seen below.

### **Equation 3-2: Standard flow rate equation**

$$\text{Flow rate (cfs)} = \text{Velocity} \left( \frac{\text{ft}}{\text{s}} \right) * \text{Area (ft}^2\text{)}$$

The velocity is estimated by measuring the time it takes a float to travel between two points along a flow path. For the most accurate results, the two points should be at least 5 feet apart. The cross-sectional area is estimated by measuring the depth and width of the water at the downstream point and multiplying them.

#### **3.2.4 SINGLE SAMPLE MAXIMUM**

The TMDL for Oak Creek is based upon obtaining an in-stream single sample maximum (SSM) value of 235cfu/100ml for E. Coli. Therefore, if the City's stormwater monitoring program does not exceed 235 cfu/100ml, it is not likely that it will exceed its WLA. If the sample exceeds the WLA or the SSM, the City will contact ADEQ in accordance with the procedures outlined in Section 3.4.

### **3.3 EXCEEDANCE INVESTIGATION AND SOURCE DETERMINATION**

If a sample exceeds the WLA or SSM for E. Coli, the city will perform an investigation of potential upstream sources that may be contributing to the exceedance. Such an investigation may utilize a variety of methods to including (but not limited to):

- Review available storm drain maps
- Inspect draining area and catch basins
- Identify areas/locations for additional assessment

If applicable, the City will utilize its IDDE manual as a resource to identify an E. Coli exceedance. Common sources of high levels of E. Coli may be the result of the following and will be considered as potential sources:

- Illegal dumping practices
- Broken sanitary sewer line
- Cross-connections
- Connection of floor drains to storm sewer
- Sanitary sewer overflows
- Inflow and infiltration
- Straight pipe sewer discharge
- Failing septic systems
- Improper RV/boat waste disposal
- Pump station failure
- Pet waste
- Wildlife (the City has minimal to no control on this issue)

The City will take the necessary actions to eliminate and/or reduce the identified source(s).

### 3.4 LABORATORY CONTACT INFORMATION

Testing will be conducted by a laboratory certified by the [Arizona Department of Health Services](#). For this process, the following laboratory will be used.

**Table 3-4: Analytical Monitoring Testing Facility Contact Information**

TESTING FACILITY	
Laboratory Name: Inner Basin Environmental, LLC	
Address: 2355 N Steves Blvd, Suite C, Flagstaff, AZ 86004	
Hours of Operation: 8:30am - 5:00pm	
Phone: (928) 440-5168	Email: <a href="mailto:scott@ibelabs.com">scott@ibelabs.com</a> , <a href="mailto:spenser@ibelabs.com">spenser@ibelabs.com</a>

**Table 3-5: Characterization Monitoring Testing Facility Contact Information**

TESTING FACILITY	
Laboratory Name:	
Address:	
Hours of Operation:	Sales Contact:
Phone:	Email:

All laboratory analysis must be conducted according to test procedures specified in 40 CFR 136. The laboratory results must identify analytical methods and limits of detections for each analyte. Note that the limit of detection will be set lower than the effluent limits specified by ADEQ.



### 3.5 TESTING RESULTS AND RECORDKEEPING REQUIREMENTS

Records of monitoring information must include the results of each stormwater monitoring event using the Stormwater Collection Form, found in [Appendix B](#), and laboratory analyses.

All results must be submitted within 30 days of receipt from the testing laboratory on an electronic Discharge Monitoring Report (eDMR) via a myDEQ account as prescribed in the AZG2021-002, Part 7.2(6)(a).

All results, including the sample collection form, will be incorporated into this document or Storm Water Management Plan. Records will be retained for a period of three (3) years following the expiration of the current Permit.

Should the results indicate that the site is noncompliant, the Arizona Department of Environmental Quality will be notified orally within 24 hours and in writing at the following address within five (5) business days.

Arizona Department of Environmental Quality  
1110 W. Washington Street  
Mail Code 5515 B-1  
Phoenix, AZ 85007  
Phone: 602.771.4508

If there is a danger to human health, notification can be made via phone to ADEQ's Phone Number: **602.771.2330**.





# APPENDIX A STORMWATER CHARACTERIZATION MONITORING PARAMETERS

Characterization Monitoring Analytes

Analytical Monitoring Analytes



### STORMWATER CHARACTERIZATION MONITORING REQUIREMENTS

All permittees shall conduct stormwater characterization monitoring for the parameters listed below.

PARAMETER	UNITS	MONITORING FREQUENCY	MONITORING TYPE
<b>METALS</b>			
Antimony	µg/L	1x during first 3.5 years of permit term	Discrete
Barium	µg/L	1x during first 3.5 years of permit term	Discrete
Beryllium	µg/L	1x during first 3.5 years of permit term	Discrete
Cadmium	µg/L	1x during first 3.5 years of permit term	Discrete
Mercury	µg/L	1x during first 3.5 years of permit term	Discrete
Nickel	µg/L	1x during first 3.5 years of permit term	Discrete
Silver	µg/L	1x during first 3.5 years of permit term	Discrete
Thallium	µg/L	1x during first 3.5 years of permit term	Discrete
<b>INORGANICS</b>			
Cyanide	µg/L	1x during first 3.5 years of permit term	Discrete
<b>VOLATILE ORGANIC COMPOUNDS (VOCs)</b>			
Acrolein	µg/L	1x during first 3.5 years of permit term	Discrete
Acrylonitrile	µg/L	1x during first 3.5 years of permit term	Discrete
Benzene	µg/L	1x during first 3.5 years of permit term	Discrete
Carbon tetrachloride	µg/L	1x during first 3.5 years of permit term	Discrete
Chlorobenzene	µg/L	1x during first 3.5 years of permit term	Discrete



PARAMETER	UNITS	MONITORING FREQUENCY	MONITORING TYPE
Dibromochloromethane	µg/L	1x during first 3.5 years of permit term	Discrete
Chloroethane	µg/L	1x during first 3.5 years of permit term	Discrete
2-chloroethylvinyl ether	µg/L	1x during first 3.5 years of permit term	Discrete
Chloroform	µg/L	1x during first 3.5 years of permit term	Discrete
Bromodichloromethane	µg/L	1x during first 3.5 years of permit term	Discrete
1,2-dichlorobenzene	µg/L	1x during first 3.5 years of permit term	Discrete
1,3-dichlorobenzene	µg/L	1x during first 3.5 years of permit term	Discrete
1,4-dichlorobenzene	µg/L	1x during first 3.5 years of permit term	Discrete
1,1-dichloroethane	µg/L	1x during first 3.5 years of permit term	Discrete
1,2-dichloroethane	µg/L	1x during first 3.5 years of permit term	Discrete
1,3-dichloropropylene	µg/L	1x during first 3.5 years of permit term	Discrete
Ethylbenzene	µg/L	1x during first 3.5 years of permit term	Discrete
Bromomethane	µg/L	1x during first 3.5 years of permit term	Discrete
Chloromethane	µg/L	1x during first 3.5 years of permit term	Discrete
Methylene chloride	µg/L	1x during first 3.5 years of permit term	Discrete
1,1,1,2-tetrachloroethane	µg/L	1x during first 3.5 years of permit term	Discrete
Tetrachloroethylene	µg/L	1x during first 3.5 years of permit term	Discrete
Toluene	µg/L	1x during first 3.5 years of permit term	Discrete
1,2-trans-dichloroethylene	µg/L	1x during first 3.5 years of permit term	Discrete
1,1,1-trichloroethane	µg/L	1x during first 3.5 years of permit term	Discrete



PARAMETER	UNITS	MONITORING FREQUENCY	MONITORING TYPE
1,1,2-trichloroethane	µg/L	1x during first 3.5 years of permit term	Discrete
Trichloroethylene	µg/L	1x during first 3.5 years of permit term	Discrete
Vinyl chloride	µg/L	1x during first 3.5 years of permit term	Discrete
Xylene	µg/L	1x during first 3.5 years of permit term	Discrete
<b>SEMI-VOCS - ACID EXTRACTABLE</b>			
2-chlorophenol	µg/L	1x during first 3.5 years of permit term	Discrete
2,4-dichlorophenol	µg/L	1x during first 3.5 years of permit term	Discrete
2,4-dimethylphenol	µg/L	1x during first 3.5 years of permit term	Discrete
4,6-dinitro-o-cresol	µg/L	1x during first 3.5 years of permit term	Discrete
2,4-dinitrophenol	µg/L	1x during first 3.5 years of permit term	Discrete
2-nitrophenol	µg/L	1x during first 3.5 years of permit term	Discrete
4-nitrophenol	µg/L	1x during first 3.5 years of permit term	Discrete
p-chloro-m-cresol	µg/L	1x during first 3.5 years of permit term	Discrete
Pentachlorophenol	µg/L	1x during first 3.5 years of permit term	Discrete
Phenol	µg/L	1x during first 3.5 years of permit term	Discrete
2,4,6-trichlorophenol	µg/L	1x during first 3.5 years of permit term	Discrete
<b>SEMI-VOCS – BASE/NEUTRALS</b>			
Acenaphthene	µg/L	1x during first 3.5 years of permit term	Discrete
Acenaphthylene	µg/L	1x during first 3.5 years of permit term	Discrete
Anthracene	µg/L	1x during first 3.5 years of permit term	Discrete
Benz(a)anthracene	µg/L	1x during first 3.5 years of permit term	Discrete



PARAMETER	UNITS	MONITORING FREQUENCY	MONITORING TYPE
Benzo(a)pyrene	µg/L	1x during first 3.5 years of permit term	Discrete
Benzo(b)fluoranthene	µg/L	1x during first 3.5 years of permit term	Discrete
Benzo(g,h,i)perylene	µg/L	1x during first 3.5 years of permit term	Discrete
Benzo(k)fluoranthene	µg/L	1x during first 3.5 years of permit term	Discrete
Chrysene	µg/L	1x during first 3.5 years of permit term	Discrete
Dibenzo(a,h)anthracene	µg/L	1x during first 3.5 years of permit term	Discrete
3,3'-dichlorobenzidine	µg/L	1x during first 3.5 years of permit term	Discrete
Diethyl phthalate	µg/L	1x during first 3.5 years of permit term	Discrete
Dimethyl phthalate	µg/L	1x during first 3.5 years of permit term	Discrete
Di-n-butyl phthalate	µg/L	1x during first 3.5 years of permit term	Discrete
2,4-dinitrotoluene	µg/L	1x during first 3.5 years of permit term	Discrete
2,6-dinitrotoluene	µg/L	1x during first 3.5 years of permit term	Discrete
Di-n-octyl phthalate	µg/L	1x during first 3.5 years of permit term	Discrete
1,2-diphenylhydrazine (as azobenzene)	µg/L	1x during first 3.5 years of permit term	Discrete
Fluoranthene	µg/L	1x during first 3.5 years of permit term	Discrete
Fluorene	µg/L	1x during first 3.5 years of permit term	Discrete
Hexachlorobenzene	µg/L	1x during first 3.5 years of permit term	Discrete
Hexachlorobutadiene	µg/L	1x during first 3.5 years of permit term	Discrete
Hexachloro- cyclopentdiene	µg/L	1x during first 3.5 years of permit term	Discrete
Hexachloroethane	µg/L	1x during first 3.5 years of permit term	Discrete



PARAMETER	UNITS	MONITORING FREQUENCY	MONITORING TYPE
Indeno(1,2,3-cd)pyrene	µg/L	1x during first 3.5 years of permit term	Discrete
Isophorone	µg/L	1x during first 3.5 years of permit term	Discrete
Naphthalene	µg/L	1x during first 3.5 years of permit term	Discrete
Nitrobenzene	µg/L	1x during first 3.5 years of permit term	Discrete
N-nitrosodimethylamine	µg/L	1x during first 3.5 years of permit term	Discrete
N-nitrosodi-n-propylamine	µg/L	1x during first 3.5 years of permit term	Discrete
N-nitrosodiphenylamine	µg/L	1x during first 3.5 years of permit term	Discrete
Phenanthrene	µg/L	1x during first 3.5 years of permit term	Discrete
Pyrene	µg/L	1x during first 3.5 years of permit term	Discrete
1,2,4-trichlorobenzene	µg/L	1x during first 3.5 years of permit term	Discrete
<b>PCB / PESTICIDES</b>			
Aldrin	µg/L	1x during first 3.5 years of permit term	Discrete
Alpha-BHC	µg/L	1x during first 3.5 years of permit term	Discrete
Beta-BHC	µg/L	1x during first 3.5 years of permit term	Discrete
Gamma-BHC	µg/L	1x during first 3.5 years of permit term	Discrete
Delta-BHC	µg/L	1x during first 3.5 years of permit term	Discrete
Chlordane	µg/L	1x during first 3.5 years of permit term	Discrete
4,4'-DDT	µg/L	1x during first 3.5 years of permit term	Discrete
4,4'-DDE	µg/L	1x during first 3.5 years of permit term	Discrete
4,4'-DDD	µg/L	1x during first 3.5 years of permit term	Discrete



PARAMETER	UNITS	MONITORING FREQUENCY	MONITORING TYPE
Dieldrin	µg/L	1x during first 3.5 years of permit term	Discrete
Alpha-endosulfan	µg/L	1x during first 3.5 years of permit term	Discrete
Beta-endosulfan	µg/L	1x during first 3.5 years of permit term	Discrete
Endosulfan sulfate	µg/L	1x during first 3.5 years of permit term	Discrete
Endrin	µg/L	1x during first 3.5 years of permit term	Discrete
Endrin aldehyde	µg/L	1x during first 3.5 years of permit term	Discrete
Heptachlor	µg/L	1x during first 3.5 years of permit term	Discrete
Heptachlor epoxide	µg/L	1x during first 3.5 years of permit term	Discrete
PCB-1242	µg/L	1x during first 3.5 years of permit term	Discrete
PCB-1254	µg/L	1x during first 3.5 years of permit term	Discrete
PCB-1221	µg/L	1x during first 3.5 years of permit term	Discrete
PCB-1232	µg/L	1x during first 3.5 years of permit term	Discrete
PCB-1248	µg/L	1x during first 3.5 years of permit term	Discrete
PCB-1260	µg/L	1x during first 3.5 years of permit term	Discrete
PCB-1016	µg/L	1x during first 3.5 years of permit term	Discrete
Toxaphene	µg/L	1x during first 3.5 years of permit term	Discrete

**Notes:**

1. The permittee shall include any additional parameters in stormwater sampling as specified by Part 5.0 Water Quality Standards 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 whenever possible to do so. 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. Hardness data must also be collected and used to calculate the corresponding SWQS for certain metals as indicated by SWQS rules.



### STORMWATER ANALYTICAL MONITORING CONSTITUENTS

The sampling constituents for analytical monitoring are presented below.

PARAMETER	Water Quality Criteria (per ADEQ)	UNITS	MONITORING FREQUENCY	MONITORING TYPE
Biological Oxygen Demand (BOD) <sup>1</sup>	None	mg/L	1x per wet season per outfall	Discrete
Total Suspended Solids (TSS) <sup>1</sup>	None	mg/L	1x per wet season per outfall	Discrete
pH <sup>1</sup>	6.5 - 9	None	1x per wet season per outfall	Discrete
Oil and Grease <sup>1</sup>	None	mg/L	1x per wet season per outfall	Discrete
Fecal Coliform <sup>1</sup>	None	CFU/100 mL	1x per wet season per outfall	Discrete
E. Coli <sup>2</sup>	235	CFU/100 mL	1x per wet season per outfall	Discrete

- 1) Based on the thresholds for Oak Creek as an Outstanding Arizona Water.
- 2) Based on the Total Maximum Daily Load (TDML) threshold for Oak Creek as an Impaired Watercourse.





## APPENDIX B FORMS

Stormwater Sample Collection Form

Chain of Custody Form – Characterization Monitoring (To be Added)

Chain of Custody Form – OAW and Impaired (To be Added)

Sampling Visual Monitoring Form



# Stormwater Characterization/Analytical Monitoring Collection Form

(Complete a separate form for each outfall sampled)

Facility Sample Information			
Name:	City of Sedona	AZPMS4 Auth. No.	AZSM92122
Outfall Identifier:	OC-1	Photo of Site	
General Location:	_____ _____ _____ _____		
Sampling Personnel Information			
Person(s)/Title(s) collecting sample:			
Email:		Phone	
Person(s)/Title(s) assisting with sample:			
Email:		Phone	
Field Sampling Data (Part 1)			
Nature of Discharge: <input type="checkbox"/> Stormwater <input type="checkbox"/> Snowmelt <input type="checkbox"/> Other (explain):			
Date & Time Storm Event:	Date & Time Sample Collected:		
Rainfall Amount (inches):	Gage Source/Location (If used to determine rainfall amount)		
Was the sample taken in first 30 minutes of storm? <input type="checkbox"/> Yes <input type="checkbox"/> No	Was the sample taken at least 72 hours after a previous storm event?*	If no, to either provide explanation:	
* The 72-hour interval can be waived when the previous storm did not yield a measurable discharge or if you are able to document (attach applicable documentation) that less than a 72-hour interval is representative of local storm events during the sampling period.			
Field Sampling Data (Part 2)			
Purpose for Sampling	<input checked="" type="checkbox"/> Characterization <input checked="" type="checkbox"/> Analytical <input type="checkbox"/> TDML Based <input type="checkbox"/> ADEQ Request <input type="checkbox"/> Other		
Type of Sample	<input type="checkbox"/> Grab <input type="checkbox"/> Auto sampler <input type="checkbox"/> Passive sampler <input type="checkbox"/> Other _____		
Field Instrument Calibration Data: (Auto Sampler only)	Date of Last Calibration: _____ Method of Calibration: _____		
Quantity of Sample	Number of Laboratory Containers		or Number of ml (ml)
Unique Sample Identifier (To be matched to Identifier on COC)			
Laboratory Testing Parameters	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Type and Amount: _____		



(Maybe provided by Testing Lab)			
Preservatives Added to Samples	<input type="checkbox"/> Yes <input type="checkbox"/> No    If Yes, Type and Amount: _____		
<b>Field Observation Data</b>			
Indicators of Stormwater Pollution Observed? (May be based on a Visual Assessment)	<input type="checkbox"/> No <input type="checkbox"/> Yes (Describe): _____		
Do the observations indicate an illicit discharge?	<input type="checkbox"/> No <input type="checkbox"/> Yes (Describe): _____		
Do the observations indicate require further investigation?	<input type="checkbox"/> No <input type="checkbox"/> Yes (Describe): _____		
Additional observations of sampling procedures and conditions at the time of sampling:			
Description of problems encountered, or deviations made from the Sampling and Analysis Plan (SAP):			
<b>Certification Statement</b>			
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."			
A. Printed Name:		B. Title:	
C. Signature:		D. Date Signed:	
Email:		Phone	
<b>Chain of Custody (To be completed unless separate Chain of Custody Form is used)</b>			
Laboratory: Name:			
Laboratory: Address		Phone:	
Custodian Name		Title:	
Custodian Signature		Date Signed	
COC Identifier	Used as validation of information in		
Email:		Phone	



# Stormwater Characterization/Analytical Monitoring Collection Form

(Complete a separate form for each outfall sampled)

Facility Sample Information			
Name:	City of Sedona	AZPMS4 Auth. No.	AZSM92122
Outfall Identifier:	OC-2	Photo of Site	
General Location:	_____ _____ _____ _____		

Sampling Personnel Information			
Person(s)/Title(s) collecting sample:			
Email:		Phone	
Person(s)/Title(s) assisting with sample:			
Email:		Phone	

Field Sampling Data (Part 1)		
Nature of Discharge: <input type="checkbox"/> Stormwater <input type="checkbox"/> Snowmelt <input type="checkbox"/> Other (explain):		
Date & Time Storm Event:	Date & Time Sample Collected:	
Rainfall Amount (inches):	Gage Source/Location (If used to determine rainfall amount)	
Was the sample taken in first 30 minutes of storm? <input type="checkbox"/> Yes <input type="checkbox"/> No	Was the sample taken at least 72 hours after a previous storm event?*	If no, to either provide explanation:

\* The 72-hour interval can be waived when the previous storm did not yield a measurable discharge or if you are able to document (attach applicable documentation) that less than a 72-hour interval is representative of local storm events during the sampling period.

Field Sampling Data (Part 2)	
Purpose for Sampling	<input type="checkbox"/> Characterization <input checked="" type="checkbox"/> Analytical <input type="checkbox"/> TDML Based <input type="checkbox"/> ADEQ Request <input type="checkbox"/> Other
Type of Sample	<input type="checkbox"/> Grab <input type="checkbox"/> Auto sampler <input type="checkbox"/> Passive sampler <input type="checkbox"/> Other _____
Field Instrument Calibration Data: (Auto Sampler only)	Date of Last Calibration: _____ Method of Calibration: _____
Quantity of Sample	Number of Laboratory Containers _____ or Number of ml _____ (ml)
Unique Sample Identifier (To be matched to Identifier on COC)	
Laboratory Testing Parameters	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Type and Amount: _____



(Maybe provided by Testing Lab)			
Preservatives Added to Samples	<input type="checkbox"/> Yes <input type="checkbox"/> No    If Yes, Type and Amount: _____		
<b>Field Observation Data</b>			
Indicators of Stormwater Pollution Observed? (May be based on a Visual Assessment)	<input type="checkbox"/> No <input type="checkbox"/> Yes (Describe): _____		
Do the observations indicate an illicit discharge?	<input type="checkbox"/> No <input type="checkbox"/> Yes (Describe): _____		
Do the observations indicate require further investigation?	<input type="checkbox"/> No <input type="checkbox"/> Yes (Describe): _____		
Additional observations of sampling procedures and conditions at the time of sampling:			
Description of problems encountered, or deviations made from the Sampling and Analysis Plan (SAP):			
<b>Certification Statement</b>			
<p>"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."</p>			
A. Printed Name:		B. Title:	
C. Signature:		D. Date Signed:	
Email:		Phone	
<b>Chain of Custody (To be completed unless separate Chain of Custody Form is used)</b>			
Laboratory: Name:			
Laboratory: Address		Phone:	
Custodian Name		Title:	
Custodian Signature		Date Signed	
COC Identifier	Used as validation of information in		
Email:		Phone	



# Stormwater Characterization/Analytical Monitoring Collection Form

(Complete a separate form for each outfall sampled)

Facility Sample Information			
Name:	City of Sedona	AZPMS4 Auth. No.	AZSM92122
Outfall Identifier:	BOB-1	Photo of Site	
General Location:	_____		
	_____		
	_____		
Sampling Personnel Information			
Person(s)/Title(s) collecting sample:	_____		
Email:	_____	Phone	_____
Person(s)/Title(s) assisting with sample:	_____		
Email:	_____	Phone	_____
Field Sampling Data (Part 1)			
Nature of Discharge: <input type="checkbox"/> Stormwater <input type="checkbox"/> Snowmelt <input type="checkbox"/> Other (explain): _____			
Date & Time Storm Event:	Date & Time Sample Collected: _____		
Rainfall Amount (inches):	Gage Source/Location (If used to determine rainfall amount)		
Was the sample taken in first 30 minutes of storm? <input type="checkbox"/> Yes <input type="checkbox"/> No	Was the sample taken at least 72 hours after a previous storm event?*	If no, to either provide explanation:	
	<input type="checkbox"/> Yes <input type="checkbox"/> No		
* The 72-hour interval can be waived when the previous storm did not yield a measurable discharge or if you are able to document (attach applicable documentation) that less than a 72-hour interval is representative of local storm events during the sampling period.			
Field Sampling Data (Part 2)			
Purpose for Sampling	<input checked="" type="checkbox"/> Characterization <input checked="" type="checkbox"/> Analytical <input type="checkbox"/> TDML Based <input type="checkbox"/> ADEQ Request <input type="checkbox"/> Other		
Type of Sample	<input type="checkbox"/> Grab <input type="checkbox"/> Auto sampler <input type="checkbox"/> Passive sampler <input type="checkbox"/> Other _____		
Field Instrument Calibration Data: (Auto Sampler only)	Date of Last Calibration: _____ Method of Calibration: _____		
Quantity of Sample	Number of Laboratory Containers _____ or Number of ml _____ (ml)		
Unique Sample Identifier (To be matched to Identifier on COC)	_____		
Laboratory Testing Parameters	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Type and Amount: _____		



(Maybe provided by Testing Lab)			
Preservatives Added to Samples	<input type="checkbox"/> Yes <input type="checkbox"/> No    If Yes, Type and Amount: _____		
<b>Field Observation Data</b>			
Indicators of Stormwater Pollution Observed? (May be based on a Visual Assessment)	<input type="checkbox"/> No <input type="checkbox"/> Yes (Describe): _____		
Do the observations indicate an illicit discharge?	<input type="checkbox"/> No <input type="checkbox"/> Yes (Describe): _____		
Do the observations indicate require further investigation?	<input type="checkbox"/> No <input type="checkbox"/> Yes (Describe): _____		
Additional observations of sampling procedures and conditions at the time of sampling:			
Description of problems encountered, or deviations made from the Sampling and Analysis Plan (SAP):			
<b>Certification Statement</b>			
<p>"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."</p>			
A. Printed Name:		B. Title:	
C. Signature:		D. Date Signed:	
Email:		Phone	
<b>Chain of Custody (To be completed unless separate Chain of Custody Form is used)</b>			
Laboratory: Name:			
Laboratory: Address		Phone:	
Custodian Name		Title:	
Custodian Signature		Date Signed	
COC Identifier	Used as validation of information in		
Email:		Phone	



# Stormwater Characterization/Analytical Monitoring Collection Form

(Complete a separate form for each outfall sampled)

Facility Sample Information			
Name:	City of Sedona	AZPMS4 Auth. No.	AZSM92122
Outfall Identifier:	CCW-1	Photo of Site	
General Location:	_____ _____ _____ _____		

Sampling Personnel Information			
Person(s)/Title(s) collecting sample:			
Email:		Phone	
Person(s)/Title(s) assisting with sample:			
Email:		Phone	

Field Sampling Data (Part 1)		
Nature of Discharge: <input type="checkbox"/> Stormwater <input type="checkbox"/> Snowmelt <input type="checkbox"/> Other (explain):		
Date & Time Storm Event:	Date & Time Sample Collected:	
Rainfall Amount (inches):	Gage Source/Location (If used to determine rainfall amount)	
Was the sample taken in first 30 minutes of storm? <input type="checkbox"/> Yes <input type="checkbox"/> No	Was the sample taken at least 72 hours after a previous storm event?*	If no, to either provide explanation:

\* The 72-hour interval can be waived when the previous storm did not yield a measurable discharge or if you are able to document (attach applicable documentation) that less than a 72-hour interval is representative of local storm events during the sampling period.

Field Sampling Data (Part 2)	
Purpose for Sampling	<input checked="" type="checkbox"/> Characterization <input type="checkbox"/> Analytical <input type="checkbox"/> TDML Based <input type="checkbox"/> ADEQ Request <input type="checkbox"/> Other
Type of Sample	<input type="checkbox"/> Grab <input type="checkbox"/> Auto sampler <input type="checkbox"/> Passive sampler <input type="checkbox"/> Other _____
Field Instrument Calibration Data: (Auto Sampler only)	Date of Last Calibration: _____ Method of Calibration: _____
Quantity of Sample	Number of Laboratory Containers _____ or Number of ml _____ (ml)
Unique Sample Identifier (To be matched to Identifier on COC)	
Laboratory Testing Parameters	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Type and Amount: _____





(Maybe provided by Testing Lab)			
Preservatives Added to Samples	<input type="checkbox"/> Yes <input type="checkbox"/> No    If Yes, Type and Amount: _____		
<b>Field Observation Data</b>			
Indicators of Stormwater Pollution Observed? (May be based on a Visual Assessment)	<input type="checkbox"/> No <input type="checkbox"/> Yes (Describe): _____		
Do the observations indicate an illicit discharge?	<input type="checkbox"/> No <input type="checkbox"/> Yes (Describe): _____		
Do the observations indicate require further investigation?	<input type="checkbox"/> No <input type="checkbox"/> Yes (Describe): _____		
Additional observations of sampling procedures and conditions at the time of sampling:			
Description of problems encountered, or deviations made from the Sampling and Analysis Plan (SAP):			
<b>Certification Statement</b>			
<p>"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."</p>			
A. Printed Name:		B. Title:	
C. Signature:		D. Date Signed:	
Email:		Phone	
<b>Chain of Custody (To be completed unless separate Chain of Custody Form is used)</b>			
Laboratory: Name:			
Laboratory: Address		Phone:	
Custodian Name		Title:	
Custodian Signature		Date Signed	
COC Identifier	Used as validation of information in		
Email:		Phone	



## Stormwater Management Program – Visual Monitoring Report Form

SECTION A GENERAL INFORMATION	
Inspection Date:	Time:
Outfall Location:	<input type="checkbox"/> <b>Outfall OC-1 – Tlaquapaque behind Tennis Courts</b> (Long: -111.763, Lat: 33.861) <input type="checkbox"/> <b>Outfall OC-2 – Oak Creek @ Newcastle Lane</b> (Long: -111.766, Lat: 34.858) <input type="checkbox"/> <b>Outfall BOB-1- Back O’ Beyond Wash</b> (Long: -111.784, Lat: 34.826) <input type="checkbox"/> <b>Outfall CCW-1- Carroll Canyon Wash</b> (Long: -111.800, Lat: 34.853)
Staff Present at Time of Monitoring:	Name: Phone: Email: Department:
Type of Monitoring:	<input type="checkbox"/> Dry Weather <input type="checkbox"/> Wet Weather <input type="checkbox"/> Characterization
Was Flow Observed:	<input type="checkbox"/> Yes <input type="checkbox"/> No <i>Notify the Stormwater Programs Coordinator immediately if any visual observations may be an active upstream discharge that could not be identified or determined at the time of the inspection.</i>
Structure Type:	<input type="checkbox"/> Channel <input type="checkbox"/> Manhole <input type="checkbox"/> Catch Basin <input type="checkbox"/> Other _____
Dominant Watershed Land:	<input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Residential <input type="checkbox"/> Other _____

SECTION B WEATHER CONDITIONS	
Rainfall Intensity:	<input type="checkbox"/> No Rain <input type="checkbox"/> Heavy <input type="checkbox"/> Moderate <input type="checkbox"/> Light
Rain Gage Data:	Total Inches: _____ Storm Duration: _____ Peak Intensity: _____
Flow Intensity: <i>(If no flow meter present.)</i>	<input type="checkbox"/> Substantial <input type="checkbox"/> Moderate <input type="checkbox"/> Light <i>(above curb)              (below curb)              (gutter only)</i>



Flow Rate: (Flow Meter Reading):	_____ <input type="checkbox"/> gpm <input type="checkbox"/> cfs
-------------------------------------	---

**SECTION C VISUAL OBSERVATIONS (DISCHARGE SAMPLE)**

Odor:	<input type="checkbox"/> None <input type="checkbox"/> Musty <input type="checkbox"/> Sewage <input type="checkbox"/> Rotten Eggs <input type="checkbox"/> Sour Milk <input type="checkbox"/> Other _____
Color:	<input type="checkbox"/> None <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Brown <input type="checkbox"/> Green <input type="checkbox"/> Grey <input type="checkbox"/> White <input type="checkbox"/> Other _____
Clarity:	<input type="checkbox"/> Clean <input type="checkbox"/> Cloudy <input type="checkbox"/> Opaque
Solids:	<input type="checkbox"/> None <input type="checkbox"/> Floating <input type="checkbox"/> Suspended <input type="checkbox"/> Settled
Floatables:	<input type="checkbox"/> None <input type="checkbox"/> Trash/Litter <input type="checkbox"/> Sewage (Toilet Paper) <input type="checkbox"/> Petroleum <input type="checkbox"/> Soap/Suds/Foam <input type="checkbox"/> Oily Sheen <input type="checkbox"/> Other _____



SECTION D VISUAL OBSERVATIONS (OTHER)	
Deposits/Staining:	<input type="checkbox"/> None <input type="checkbox"/> Sediment <input type="checkbox"/> Oily <input type="checkbox"/> Rusty <input type="checkbox"/> Other _____
Vegetation Growth:	<input type="checkbox"/> None <input type="checkbox"/> Normal <input type="checkbox"/> Excessive <input type="checkbox"/> Inhibitive <input type="checkbox"/> Other _____
Structural Conditions:	<input type="checkbox"/> Normal <input type="checkbox"/> Cracking <input type="checkbox"/> Corrosion <input type="checkbox"/> Repairs Needed
Biological:	<input type="checkbox"/> None <input type="checkbox"/> Mosquito Larvae/Pupa <input type="checkbox"/> Algae <input type="checkbox"/> Other _____

SECTION E – WORK ORDER NOTES	
Work Order created for maintenance or repairs?	<input type="checkbox"/> Yes <input type="checkbox"/> No    Work Order # _____
Description	

SECTION F - SIGNATURES			
Inspector:	Signature:	Date:	
	Title:	Dept:	



## APPENDIX C LABORATORY RESULTS

## APPENDIX I NOTICE OF INTENT

### QUICK LINKS

[Appendix A: MS4 Infrastructure Maps](#)

[Appendix B: MCM 1 Public Education and Outreach BMP Details](#)

[Appendix C: MCM 2 Public Participation and Involvement BMP Details](#)

[Appendix D: MCM 3 Illicit Discharge Detection and Elimination Program BMP Details](#)

[Appendix E: MCM 4 Construction Activity Stormwater Runoff Control BMP Details](#)

[Appendix F: MCM 5 Post-Construction Stormwater Management in New Development and Redevelopment BMP Details](#)

[Appendix G: MCM 6 Pollution Prevention/Good Housekeeping for Municipal Operations BMP Details](#)

[Appendix H: Sampling and Analysis Plan](#)

[Appendix I: Notice of Intent](#)

[Appendix J: Annual Report](#)

[Appendix K: Annual Review and Revision Log](#)

[Appendix L: Forms](#)

[Appendix M: Site Specific SWPPP](#)





**ARIZONA DEPARTMENT  
OF  
ENVIRONMENTAL QUALITY**

1110 West Washington Street Phoenix, Arizona 85007  
(602) 771-2300 [www.azdeq.gov](http://www.azdeq.gov)



## Permit Authorization Certificate

**Authorization Number: AZSM92122**

Permit Name: **AZPDES Small Municipal Separate Storm Sewer Systems (MS4s) General Permit**

LTF Number: **92122**

Permit Number: **AZG-2021-002**

Issue Date: **11/29/2021**

**Coverage Issued to:**

Name: **CITY OF SEDONA - ENGINEERING SERVICES**

**MS4 Contact Information:**

Name: **JOSEPH DICKEY**

Phone: **9282035039**

Work Email: **ADICKEY@SEDONAAZ.GOV**

**AZPDES MS4 Annual Permit Fee**

Please note, that pursuant to Arizona Administrative Code, Title 18, Chapter 14, Article 109(C), you will be billed an annual permit fee equal to the initial fee until such time as you submit a Notice of Termination to close out your permit coverage.

**Phoenix Office**

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

**Southern Regional Office**

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

[www.azdeq.gov](http://www.azdeq.gov)

## APPENDIX J ANNUAL REPORT

[STORMWATER ANNUAL REPORT – 2022/2023 {TO BE INSERTED}](#)

[STORMWATER ANNUAL REPORT – 2023/2024 {TO BE INSERTED}](#)

[STORMWATER ANNUAL REPORT – 2024/2025{TO BE INSERTED}](#)

[STORMWATER ANNUAL REPORT – 2025/2026 {TO BE INSERTED}](#)

### QUICK LINKS

[Appendix A: MS4 Infrastructure Maps](#)

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## APPENDIX K ANNUAL REVIEW AND REVISION LOG

### QUICK LINKS

[Appendix A: MS4 Infrastructure Maps](#)

[Appendix B: MCM 1 Public Education and Outreach BMP Details](#)

[Appendix C: MCM 2 Public Participation and Involvement BMP Details](#)

[Appendix D: MCM 3 Illicit Discharge Detection and Elimination Program BMP Details](#)

[Appendix E: MCM 4 Construction Activity Stormwater Runoff Control BMP Details](#)

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[Appendix L: Forms](#)

[Appendix M: Site Specific SWPPP](#)





SWMP ANNUAL REVIEW DATE	COMPLETED BY: {SIGNATURE}	SWMP REVISED (Y/N)	REVISION DATE	REVISION COMPLETED BY: (PRINT)	REVISION SUMMARY
<u>2023</u>					
<u>2024</u>					
<u>2025</u>					
<u>2026</u>					
<u>2027</u> (If extended)					
<u>2028</u> (If extended)					

## APPENDIX L FORMS

PUBLIC EVENT TRACKING FORM  
IDDE COMPLAINT INSPECTION FORM  
CONSTRUCTION INSPECTION FORM (ADEQ VERSION)  
POST-CONSTRUCTION INSPECTION FORM  
VISUAL MONITORING FORM  
EMPLOYEE TRAINING FORM  
FACILITY ACTIVITIES FORM  
CHEMICAL TRACKING FORM  
GOOD HOUSEKEEPING/FACILITY INSPECTION FORM

## QUICK LINKS

[Appendix A: MS4 Infrastructure Maps](#)

[Appendix B: MCM 1 Public Education and Outreach BMPs](#)

[Appendix C: MCM 2 Public Participation and Involvement BMP Details](#)

[Appendix D: MCM 3 Illicit Discharge Detection and Elimination Program BMP Details](#)

[Appendix E: MCM 4 Construction Activity Stormwater Runoff Control BMP Details](#)

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[Appendix G: MCM 6 Pollution Prevention/Good Housekeeping for Municipal Operations BMP Details](#)

[Appendix H: Sampling and Analysis Plan](#)

[Appendix I: Notice of Intent](#)

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[Appendix K: Annual Review and Revision Log](#)

[Appendix L: Forms](#)

[Appendix M: Site Specific SWPPP](#)





## **STORMWATER MANAGEMENT PROGRAM – PUBLIC EVENT REPORT FORM**

<b>SECTION A - CONTACT INFORMATION</b>			
<b>EVENT COORDINATOR</b>		<b>SEDONA STAFF TEAM LEAD</b>	
Name:		Name:	
Email:		Email:	
Phone:		Phone:	

<b>SECTION B - EVENT INFORMATION</b>	
Name:	Location:
Date(s):	Time:
Type of Event:	
Event Description:	
Estimated Attendance:	
Estimated # of Attendees with Direct Discussion of Stormwater Pollution Prevention:	
Type and # of Brochures Distributed:	
Type and # of Handouts Distributed:	
Type of Displays Utilized:	
Other:	



Case #. \_\_\_\_\_

## Stormwater Management Program – Illicit Discharge Investigation Form

{Insert Map of Outfall Location}

**LOCATION MAP**

Section A INSPECTION TRACKING INFORMATION	
Notice:	<input type="checkbox"/> 1 <sup>st</sup> Notice <input type="checkbox"/> 2 <sup>nd</sup> Notice
Person Taking the Complaint:	
How was the complaint filed?	<input type="checkbox"/> On-line Form <input type="checkbox"/> Phone Call <input type="checkbox"/> Email <input type="checkbox"/> In Person
Name of Inspector:	
Inspection Date:	Time of Inspection:
Weather Conditions:	

SECTION B SITE LOCATION: (SEE LOCATION MAP)		
ADDRESS:		
Latitude:		Longitude:
Section:	Township:	Range:
Closest Cross-Streets:		
Upstream Land Use:	<input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Residential <input type="checkbox"/> Other: _____	



Case #. \_\_\_\_\_

**Photo of Illicit Discharge Site 1  
(Two Photos Minimum)**

{Insert Photo of Illicit Discharge}

**Photo of Illicit Discharge Site 1  
(Additional Photos can be added as attachments)**

{Insert Photo of Illicit Discharge}

SECTION C ILLICIT DISCHARGE DESCRIPTION	
TYPE OF ILLICIT DISCHARGE	GENERAL DESCRIPTION
<input type="checkbox"/> Trash/Debris/Vegetation/	_____
<input type="checkbox"/> Hazardous Material Spill	_____
<input type="checkbox"/> Chemical Spill	_____
<input type="checkbox"/> Sediment Laden Flow	_____
<input type="checkbox"/> Non-stormwater Flow	_____
<input type="checkbox"/> Other: _____	
Was there stormwater runoff present at the time of the inspection?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Flow Description:	<input type="checkbox"/> Light (above curb) <input type="checkbox"/> Moderate (below curb) <input type="checkbox"/> Substantial (gutter only)



If the illicit discharge contains hazardous materials, immediately clear the area and report the spill to the City of Chandler Fire.



Case #. \_\_\_\_\_

SECTION D RESPONSIBLE PARTY INFORMATION POLLUTANTS/PARAMETERS MONITORED				
POTENTIAL SOURCE	CHECK ALL THAT APPLY	ADDRESS OF SOURCE	CONTACT NAME	CONTACT PHONE NUMBER
Private Resident	<input type="checkbox"/>			
Commercial Facility	<input type="checkbox"/>			
Industrial Facility	<input type="checkbox"/>			
Public Facility	<input type="checkbox"/>			
Other	<input type="checkbox"/>			

SECTION E COMPLAINT CLOSE OUT		
TYPE OF ACTIONS	DESCRIPTION OF ACTION (INCLUDE DATES IF POSSIBLE)	
Notice of Violation	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Follow-up Inspection	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Clean up Request	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Plan of Action Request	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Civil Penalty	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Criminal Lawsuit	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Arbitration	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Appeal	<input type="checkbox"/> Yes <input type="checkbox"/> No	
No Action	<input type="checkbox"/> Yes <input type="checkbox"/> No	



Case #. \_\_\_\_\_

**SECTION F COMMENTS (ADD ADDITIONAL INFORMATION PERTINENT TO FUTURE INSPECTIONS)**


**SECTION G 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 gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, I believe the information submitted is 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."*

Printed Name: _____	Title: _____	Phone: _____
Signature: _____		Date: _____





Case #. \_\_\_\_\_

**CITY OF SEDONA**  
**Public Works**  
**Environmental Compliance Division**  
**NOTICE TO COMPLY**  
**This notice is not a ticket or a citation**

Date:		Time:	<input type="checkbox"/> AM <input type="checkbox"/> PM	Inspection No:	<input type="checkbox"/> 1st <input type="checkbox"/> 2nd <input type="checkbox"/> 3rd <input type="checkbox"/> Other
Responsible Party:	<input type="checkbox"/> Residential <input type="checkbox"/> Business <input type="checkbox"/> HOA	Address or Neighborhood			

It is our sincere intent to protect the health, safety and welfare of the citizens of Sedona and the protection of Oak Creek by ensuring that its streets, alleys, storm drainage system and other rights-of-ways remain clean and safe. This effort is regulated by the Arizona Department of Environmental Quality and requires The City to reduce or remove pollutants from the storm drain system. The City's storm drain system includes streets, gutters, channels, culverts scupper and catch basins drains. In order to protect the environment and your neighbors, we ask that you do your part. (*City of Sedona Stormwater Ordinance, Sedona City Code ARTICLE 13*)

VIOLATION AND CORRECTIVE ACTION NEEDED	
<u>Specific Location:</u>	<input type="checkbox"/> Front Yard <input type="checkbox"/> Side Yard <input type="checkbox"/> Rear Yard <input type="checkbox"/> Alley <input type="checkbox"/> Town Right-of-Way <input type="checkbox"/> Drainageway <input type="checkbox"/> Other : _____
DESCRIPTION OF VIOLATION: (CHECK ALL THAT APPLY)	_____ Unauthorized dumping/discharge to the storm drain system <input type="checkbox"/> Motor Oil <input type="checkbox"/> Antifreeze/Other Automotive Fluid <input type="checkbox"/> Paint <input type="checkbox"/> Unknown Substance <input type="checkbox"/> landscape waster <input type="checkbox"/> Pet Waste <input type="checkbox"/> Trash <input type="checkbox"/> Pesticide/Fertilizer <input type="checkbox"/> excessive dirt or gravel <input type="checkbox"/> Pool filter backwash or pool water with excess chemicals/algae causing residue <input type="checkbox"/> Other : _____
	_____ Leaking vehicle that has or may result in storm drain pollution
	_____ Open container of hazardous material stored outdoors
	_____ Abandoned household hazardous waste
REQUIRED ACTION	_____ _____
A REINSPECTION WILL BE CONDUCTED ON	Date: _____ 20__ Time: _____ <input type="checkbox"/> AM <input type="checkbox"/> PM

Failure to Comply may result in civil infraction, in accordance with *Sedona's Stormwater Enforcement Response Plan*

**Thank you in advance for your cooperation in making the City of Sedona a better place to live and work. For more information go to [The City of Sedona Stormwater Webpage](#).**

**If for any reason, you have difficulty complying with the corrective action(s) listed above or need further information, please contact the inspector listed below.**

Inspector: \_\_\_\_\_ Phone: \_\_\_\_\_ Email: \_\_\_\_\_

**Materials Distributed:**  Notice to Comply  Brochure  Town Code  Town Ordinance  Other

Applicable Regulations:

- *Stormwater Ordinance*
- *SEDONA CITY CODE ARTICLE 13*
- *National Pollutant Discharge Elimination System (NPDES Permit: (40 Code of Federal Regulations Part 122)*
- *Arizona Pollutant Discharge Elimination System (AZPDES) Permit (Arizona Administrative Code R18-9-A902)*

**REMEMBER: ONLY RAIN IN THE STORM DRAIN!**



# 2020 Construction General Permit (CGP) Routine Inspection Report Form

## Section I. General Information (see instructions)

Name of Project	CGP Authorization No.	AZCN- _____	Inspection Date
-----------------	-----------------------	-------------	-----------------

Check box when using this form to inspect an inactive/unstaffed construction site (this option applies to an entire site only). See Part 4.2(4) of the permit. Inspect the site immediately before becoming inactive/unstaffed and every 6 months thereafter and within 24 hours of each storm event of 0.5 inch or greater in 24 hours.

Inspector Name, Title and Contact Information	Name: _____ Title: _____
	Contact information: _____

Present Phase of Construction	_____
-------------------------------	-------

**Inspection Schedule (all days are calendar days)** *(Note: you may be subject to different inspection frequencies in different areas of the site. Check all that apply. \* See Part 4.2 for qualifications)*

**Routine Schedule:**     Within 7 days\*     Within 14 days\* and within 24 hours of a 0.5" storm event  
     Once per month, but not within 14 days of the previous inspection and within 24 hours of a 0.25" storm event

**Reduced Schedule:** once per month (but not within 14 days of the previous inspection) and before an anticipated storm event and within 24 hours of the end of each storm event of 0.5 inch or greater in 24 hours.

Once per month (in stabilized areas)  
 Once per month (where discharges are unlikely based on seasonal rainfall patterns)  
 Once per month (where winter conditions exist and earth-disturbing activities are being conducted)

**Outfalls within 1/4 mile of an impaired water or outstanding Arizona water (OAW):**                     Every 7 days and within 24 hours of a 0.5" storm event

**Was this inspection triggered by either a 0.25" or 0.5" storm event?**     Yes     No

**If yes, duration of storm event:**     < 1 hour     < 6 hrs     > 6 hrs

**If yes, how was the storm event determined (either 0.25" or 0.5")?**

Rain gauge on site     Weather station representative of site. Specify weather station source: \_\_\_\_\_

**Total rainfall amount that triggered the inspection (in inches):** \_\_\_\_\_

### Identify all sources of non-stormwater discharges occurring at the site and the associated control measures in place

sources of non-stormwater discharges:	control measures associated with the non-stormwater discharges:
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
5. _____	5. _____

**Adverse or Unsafe Conditions for Inspection**

Did you determine that any portion of the site was unsafe for inspection per CGP Part 4.2(6)?  Yes  No

If “yes”, complete the following:

- Describe the conditions that prevented you from conducting the inspection in this location:
  
- Location(s) where conditions were found:

***Note:** Inspections may be postponed when adverse or unsafe conditions exist such as local flooding, high winds, or electrical storms, or situations that otherwise make inspections unsafe. However, the inspection must resume as soon as conditions are safe.*

**Section II. Description of Discharges and Condition of the Discharge Locations (CGP Part 4.3(10))** (see instructions)

Outfall(s)	Observations <i>(Note: discharges may not occur at every outfall on the site after a storm event. Check all that apply.)</i>
1.	Describe the discharge: <input type="radio"/> Stormwater <input type="radio"/> Non-stormwater <input type="radio"/> None Since the last inspection, do you see any evidence of erosion, sediment accumulation and/ or other pollutants that can be attributed to your discharge? <input type="radio"/> Yes <input type="radio"/> No
<i>If yes, describe the characteristics of the discharge (color, odor, clarity, etc.) specify the location(s) of these conditions, and indicate whether modification, maintenance, or corrective action is needed to correct the problem. Also, describe any visible signs of erosion or sediment accumulation.</i>	
2.	Describe the discharge: <input type="radio"/> Stormwater <input type="radio"/> Non-stormwater <input type="radio"/> None Since the last inspection, do you see any evidence of erosion, sediment accumulation and/ or other pollutants that can be attributed to your discharge? <input type="radio"/> Yes <input type="radio"/> No
<i>If yes, describe the characteristics of the discharge (color, odor, clarity, etc.) specify the location(s) of these conditions, and indicate whether modification, maintenance, or corrective action is needed to correct the problem. Also, describe any visible signs of erosion or sediment accumulation.</i>	
3.	Describe the discharge: <input type="radio"/> Stormwater <input type="radio"/> Non-stormwater <input type="radio"/> None Since the last inspection, do you see any evidence of erosion, sediment accumulation and/ or other pollutants that can be attributed to your discharge? <input type="radio"/> Yes <input type="radio"/> No
<i>If yes, describe the characteristics of the discharge (color, odor, clarity, etc.) specify the location(s) of these conditions, and indicate whether modification, maintenance, or corrective action is needed to correct the problem. Also, describe any visible signs of erosion or sediment accumulation.</i>	

**Section III. Condition and Effectiveness of All On-site Control Measures (Erosion and Sediment (E&S)), Stabilization and Pollution Prevention (P2) Practices (CGP Part 3.3 through 3.5) (see instructions)**

Description of Control Measures	Type of Control Measure: ▪ Erosion and Sediment (E&S) ▪ Stabilization ▪ Pollution Prevention (P2)	Additional controls required?	Repairs or other maintenance needed? <sup>1</sup>	Corrective action required? <sup>1, 2</sup> Date of discovery	Specify stabilization method (mulch, rock, planted vegetation, etc.)
1.	<input type="radio"/> E&S <input type="radio"/> Stabilization <input type="radio"/> P2	<input type="radio"/> Yes  <input type="radio"/> No	<input type="radio"/> Yes  <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	

**Notes** (e.g., provide details about needed additional control measures, maintenance performed, etc.)

Description of Control Measures	Type of Control Measure: ▪ Erosion and Sediment (E&S) ▪ Stabilization ▪ Pollution Prevention (P2)	Additional controls required?	Repairs or other maintenance needed? <sup>1</sup>	Corrective action required? <sup>1, 2</sup> Date of discovery	Specify stabilization method (mulch, rock, planted vegetation, etc.)
2.	<input type="radio"/> E&S <input type="radio"/> Stabilization <input type="radio"/> P2	<input type="radio"/> Yes  <input type="radio"/> No	<input type="radio"/> Yes  <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	

**Notes** (e.g., provide details about needed additional control measures, maintenance performed, etc.)

**Note 1:** The permit differentiates between conditions requiring repairs and maintenance, and those requiring corrective action. The permit requires maintenance in order to keep controls in effective operating condition and requires repairs if controls are not operating as intended. Corrective actions are triggered only for specific, more serious conditions, which include: 1) A necessary stormwater control was never installed, was installed incorrectly, or not in accordance with the requirements in Part 3.1 and/or Part 3.2; 2) One of the prohibited discharges in Part 1.4 is occurring or has occurred; or 3) ADEQ or USEPA determines that modifications to the control measures are necessary to meet the requirements of Part 3.

**Note 2:** If answering "Yes" (i.e., a site condition that meets one or more of the three criteria in Note 1 above requires a corrective action), you must complete a Corrective Action Report. See Part 5 of the permit for more information.



## Section VI. Certification and Signature (CGP Appendix B. 9.)

### Section IV.A. – Certification and Signature by Contractor or Subcontractor performing the inspections (if applicable)

Check one of the following:

- No instances of non-compliance were discovered during this inspection and the project was in full compliance with the SWPPP and permit.
- Inspection follow-up is required, in accordance with Parts 4.5(1) and 4.5(2) of the permit.

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

Signature of Contractor or Subcontractor: \_\_\_\_\_ Title: \_\_\_\_\_

Printed name : \_\_\_\_\_ Date: \_\_\_\_\_

Business / Agency: \_\_\_\_\_ Phone number: \_\_\_\_\_

### Section IV.B. – Certification and Signature by Permittee (permittee / operator or a duly authorized representative is required to sign)

Check one of the following:

- No instances of non-compliance were discovered during this inspection and the project was in full compliance with the SWPPP and permit.
- Inspection follow-up is required, in accordance with Parts 4.5(1) and 4.5(2) of the permit.

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

Signature of Permittee or  
“Duly Authorized Representative”: \_\_\_\_\_ Title: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Date: \_\_\_\_\_

Business / Agency: \_\_\_\_\_ Phone number: \_\_\_\_\_



## Stormwater Management Program – Post Construction Inspection Form

Section A General Information			
Development/Business Name:			
Type of Development Business:	<input type="checkbox"/> HOA <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Other _____		
Development Plan. No.			
Responsible Party/Property Manager:	Name:		
	Phone:		
	Email:		
Type of Inspection: <i>(If compliant, fill out Section C)</i>	<input type="checkbox"/> Routine <input type="checkbox"/> Complaint <input type="checkbox"/> Field Observation <input type="checkbox"/> Post-Storm Event <input type="checkbox"/> Reinspection Date/Time _____ <input type="checkbox"/> Other		
Date of Inspection:		Start/End Time	
Inspector Information:	Name:		
	Phone:		
	Email:		
	Department		

Section B Inspection Information			
<p><i>Number the Post-Construction Control Measures identified in the Development/Grading Plan (add as many control measures as are implemented on-site). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required control measures at your facility.</i></p> <ul style="list-style-type: none"> <li><i>Identify if maintenance or corrective action is needed.</i></li> <li><i>If maintenance is needed, fill out section B of this template</i></li> <li><i>If corrective action is needed, fill out section G of this template</i></li> </ul>			
Inspected	Structural Control Measure/Location	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?
			Maintenance or Corrective Action Needed and Notes <b>{Describe}</b>
1	Drainage Ditches	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement
2	Retention Basins	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement
3	Scuppers/Inlets	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement



### Section B Inspection Information

Number the Post-Construction Control Measures identified in the Development/Grading Plan (add as many control measures as are implemented on-site). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required control measures at your facility.

- Identify if maintenance or corrective action is needed.
- If maintenance is needed, fill out section B of this template
- If corrective action is needed, fill out section G of this template

	Inspected Structural Control Measure/Location	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Maintenance or Corrective Action Needed and Notes <b>{Describe}</b>
4	Storm Drain	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	
5	Drywell	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	
6	Culverts	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	
7	Oil Separators	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	
8		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	
9		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	
10		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	
11		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	
12		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	
13		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	
14		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair	



### Section B Inspection Information

Number the Post-Construction Control Measures identified in the Development/Grading Plan (add as many control measures as are implemented on-site). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required control measures at your facility.

- Identify if maintenance or corrective action is needed.
- If maintenance is needed, fill out section B of this template
- If corrective action is needed, fill out section G of this template

Inspected Structural Control Measure/Location	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Maintenance or Corrective Action Needed and Notes <b>{Describe}</b>
		<input type="checkbox"/> Replacement	
15	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	
16	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input checked="" type="checkbox"/> Repair <input type="checkbox"/> Replacement	

### Section C - Summary of Complaint

Describe the complaint that facilitated the inspection.





### Section D - Summary of Reinspection Findings

Summarize the inspection observations that would require corrective actions. If taken, attach photos to the end to this document.



### Section E – Summary of Corrective Actions

Describe any additional measures needed to comply with the permit requirements.

### Section F - Notes

Use this space for any additional notes or observations from the inspection:

### Section G - Signatures

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

Inspector:	Signature:	Date:	
	Title:	Dept:	
On-Site Rep:	Signature:	Date:	
	Title:	Company	



## Stormwater Management Program – Visual Monitoring Report Form

SECTION A GENERAL INFORMATION	
Inspection Date:	Time:
Outfall Location:	<input type="checkbox"/> <b>Outfall OC-1 – Tlaquapaque behind Tennis Courts</b> (Long: -111.763, Lat: 33.861) <input type="checkbox"/> <b>Outfall OC-2 – Oak Creek @ Newcastle Lane</b> (Long: -111.766, Lat: 34.858) <input type="checkbox"/> <b>Outfall BOB-1- Back O’ Beyond Wash</b> (Long: -111.784, Lat: 34.826) <input type="checkbox"/> <b>Outfall CCW-1- Carroll Canyon Wash</b> (Long: -111.800, Lat: 34.853)
Staff Present at Time of Monitoring:	Name: Phone: Email: Department:
Type of Monitoring:	<input type="checkbox"/> Dry Weather <input type="checkbox"/> Wet Weather <input type="checkbox"/> Characterization
Was Flow Observed:	<input type="checkbox"/> Yes <input type="checkbox"/> No <i>Notify the Stormwater Programs Coordinator immediately if any visual observations may be an active upstream discharge that could not be identified or determined at the time of the inspection.</i>
Structure Type:	<input type="checkbox"/> Channel <input type="checkbox"/> Manhole <input type="checkbox"/> Catch Basin <input type="checkbox"/> Other _____
Dominant Watershed Land:	<input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Residential <input type="checkbox"/> Other _____

SECTION B WEATHER CONDITIONS	
Rainfall Intensity:	<input type="checkbox"/> No Rain <input type="checkbox"/> Heavy <input type="checkbox"/> Moderate <input type="checkbox"/> Light
Rain Gage Data:	Total Inches: _____ Storm Duration: _____ Peak Intensity: _____
Flow Intensity: <i>(If no flow meter present.)</i>	<input type="checkbox"/> Substantial <input type="checkbox"/> Moderate <input type="checkbox"/> Light <i>(above curb)              (below curb)              (gutter only)</i>



Flow Rate: (Flow Meter Reading):	_____ <input type="checkbox"/> gpm <input type="checkbox"/> cfs
-------------------------------------	---

**SECTION C VISUAL OBSERVATIONS (DISCHARGE SAMPLE)**

Odor:	<input type="checkbox"/> None <input type="checkbox"/> Musty <input type="checkbox"/> Sewage <input type="checkbox"/> Rotten Eggs <input type="checkbox"/> Sour Milk <input type="checkbox"/> Other _____
Color:	<input type="checkbox"/> None <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Brown <input type="checkbox"/> Green <input type="checkbox"/> Grey <input type="checkbox"/> White <input type="checkbox"/> Other _____
Clarity:	<input type="checkbox"/> Clean <input type="checkbox"/> Cloudy <input type="checkbox"/> Opaque
Solids:	<input type="checkbox"/> None <input type="checkbox"/> Floating <input type="checkbox"/> Suspended <input type="checkbox"/> Settled
Floatables:	<input type="checkbox"/> None <input type="checkbox"/> Trash/Litter <input type="checkbox"/> Sewage (Toilet Paper) <input type="checkbox"/> Petroleum <input type="checkbox"/> Soap/Suds/Foam <input type="checkbox"/> Oily Sheen <input type="checkbox"/> Other _____



SECTION D VISUAL OBSERVATIONS (OTHER)	
Deposits/Staining:	<input type="checkbox"/> None <input type="checkbox"/> Sediment <input type="checkbox"/> Oily <input type="checkbox"/> Rusty <input type="checkbox"/> Other _____
Vegetation Growth:	<input type="checkbox"/> None <input type="checkbox"/> Normal <input type="checkbox"/> Excessive <input type="checkbox"/> Inhibitive <input type="checkbox"/> Other _____
Structural Conditions:	<input type="checkbox"/> Normal <input type="checkbox"/> Cracking <input type="checkbox"/> Corrosion <input type="checkbox"/> Repairs Needed
Biological:	<input type="checkbox"/> None <input type="checkbox"/> Mosquito Larvae/Pupa <input type="checkbox"/> Algae <input type="checkbox"/> Other _____

SECTION E – WORK ORDER NOTES	
Work Order created for maintenance or repairs?	<input type="checkbox"/> Yes <input type="checkbox"/> No         Work Order # _____
Description	

SECTION F - SIGNATURES			
Inspector:	Signature:	Date:	
	Title:	Dept:	



## Stormwater Management Program – Employee Training Form

### Training Information

Training Date: \_\_\_\_\_ Instructor: \_\_\_\_\_

Title of Training: \_\_\_\_\_

Location of Training: \_\_\_\_\_

Description of Training: \_\_\_\_\_

### Attendees

	Department	Trainee Name (Printed):	Employee Signature:	Email
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				

Instructor: \_\_\_\_\_ Signature: \_\_\_\_\_

Note: Training records need to be retained as part of the SWMP.



## Stormwater Management Program – Summary of Chemical Tracking

Chemical/ Pollutant <sup>1</sup>	Amount Stored	Packaging/ Stored Location <sup>2</sup>	Storage Date <sup>3</sup>	Removal Date <sup>4</sup>	Reportable Quantity	Verified by (Print Name/Signature/Date) <sup>5</sup>
						_____ Printed Name: _____ Date:
						_____ Printed Name: _____ Date:
						_____ Printed Name: _____ Date:
						_____ Printed Name: _____ Date:
						_____ Printed Name: _____ Date:
						_____ Printed Name: _____ Date:

1. Insert names of chemicals or pollutants that are located on site. (Hydraulic Fluid)
2. Indicate where it is stored (e.g. Drum/Outside Shed #2)
3. Provide a date when the material was brought onto the site.
4. If no longer on site, provide a date when the material was permanently removed.
5. Printed name of the person maintaining the list and date it was updated.
6. Use as many forms as necessary







### SECTION B CERTIFICATION

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

Inspector:	Signature:	Date:	
	Title:	Dept:	

## APPENDIX M SITE SPECIFIC SWPPP

### QUICK LINKS

[Appendix A: MS4 Infrastructure Maps](#)

[Appendix B: MCM 1 Public Education and Outreach BMPs](#)

[Appendix C: MCM 2 Public Participation and Involvement BMP Details](#)

[Appendix D: MCM 3 Illicit Discharge Detection and Elimination Program BMP Details](#)

[Appendix E: MCM 4 Construction Activity Stormwater Runoff Control BMP Details](#)

[Appendix F: MCM 5 Post-Construction Stormwater Management in New Development and Redevelopment BMP Details](#)

[Appendix G: MCM 6 Pollution Prevention/Good Housekeeping for Municipal Operations BMP Details](#)

[Appendix H: Sampling and Analysis Plan](#)

[Appendix I: Notice of Intent](#)

[Appendix J: Annual Report](#)

[Appendix K: Annual Review and Revision Log](#)

[Appendix L: Forms](#)

[Appendix M: Site Specific SWPPP](#)

