



Phase II Municipal Separate Storm Sewer System Management Program

Effective Date: Under Review as of May 31st, 2023
MS4 OKR04 Authorization Number: OKR040017
OKR04 Permit Period: June 1st, 2021 – May 31st, 2026



SIGNATURES OF RESPONSIBLE OFFICIALS

Per OKR04 Part VII.H.1-4, the following certification is hereby made to comply with the signatory requirements of the State of Oklahoma's Phase II Stormwater General Permit for Small Municipalities (OKR04 – Effective June 1, 2021).

"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 a fine and imprisonment for knowing violations".

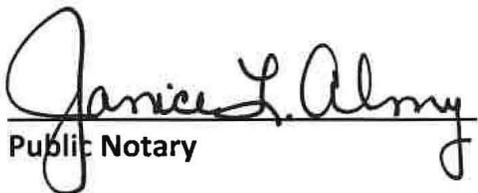


Michael S. Carter, City Manager

05/31/2023

Date

ATTEST:



Public Notary

05-31-23

Date

02002138

Commission Number

3-2-26

Expiration Date



Affix seal here



EXECUTIVE SUMMARY

The current Oklahoma Department of Environmental Quality (ODEQ) General Permit for Phase II Small Municipal Separate Storm Sewer System (MS4) Discharges Within the State of Oklahoma (OKR04) became effective June 1, 2021, and will expire May 31, 2026. Per the Part III.A.2 of the OKR04 permit 90-day requirement to renew the city's permittee status, the City of Sand Springs submitted an official Notice of Intent (NOI), required documentation, and permit fee on August 24, 2021, to:

Oklahoma Department of Environmental Quality
Water Quality Division
PO Box 1677, Oklahoma City, OK 73101-1677
(Fax) 405-702-8101
(Email) ms4permitting@deq.ok.gov

A certificate renewing the City's OKR04 permit number OKR040017 and authorizing the discharge of stormwater from the City's MS4 was received from DEQ on September 21, 2021. The authorization became effective on October 1, 2021, and will expire at midnight on May 31, 2026. A copy of this permit can be found on the City's stormwater website, [Sand Springs, OK - Official Website | https://sandspringsok.org/](https://sandspringsok.org/) and Part VI of this document.

Per Part VII: Standard Permit Conditions of the OKR04, *compliance with all applicable conditions of the permit is mandatory. Violations of the permit constitute a violation of the Oklahoma Pollutant Discharge Elimination System (OPDES) Act, 27A O.S. §2-6-206 et seq., the Clean Water Act (CWA), and regulations promulgated thereto. Permit violations may be grounds for the issuance of an enforcement action, permit termination, revocation and re-issuance, modification, and/or denial of a permit renewal application.* The OPDES Act and CWA also provide that any violation of this permit by the City of Sand Springs' MS4 may be subject to the following penalties:

- ◆ Administrative penalties are assessed up to \$10,000 per day, per violation, up to \$125,000 maximum.
- ◆ Civil penalties assessed up to \$10,000 per day, per violation
- ◆ Criminal penalties range from a minimum of \$2,500 to a maximum of \$2,000,000 with a maximum jail time of 30 years in the state penitentiary.
- ◆ Permit fraud penalties are assessed up to a maximum of \$20,000 and a maximum of 4 years in prison.

In response to and per the above requirements of the OKR04, the City of Sand Springs has prepared this updated Stormwater Management Program (SWMP) document. This SWMP addresses compliance by the City of Sand Springs with all the elements and requirements of the ODEQ's current Phase II General Permit for Small MS4s (OKR04) by defining each of the six required Minimum Control Measures (MCMs) and the Best Management Practice (BMP) activities utilized for each MCM. Following a similar numbering system as that used in the OKR04 permit, readers can find easily correlate SWMP passages with actual OKR04 permit language. References to other State or Federal documents are shown in *green text* and verbatim quotes are shown in *italicized green text*. Some referenced text may be deleted for brevity and replaced by "...." or underlined for emphasis.

All information contained in this SWMP represents a good faith effort on the part of the City of Sand Springs to comply with all applicable conditions of the current OKR04 permit and provides detailed descriptions of all activities that will be conducted on behalf of the City of Sand Springs to meet its obligations under the current permit and any additional recommendations or requirements that may be received from other regulatory or ODEQ administrative authorities



In the event of a declared City, State, or National/Federal emergency, alternative options for completing each MCM have been included. A brief notation has also been provided stating why the City of Sand Springs has elected not to participate in the seventh MCM - Optional Permit Requirements for Municipal Construction Activities (OKR04 Part VIII).

The City of Sand Springs may receive additional assistance from other entities to complete the requirements of each MCM, BMP, or Measurable Goal. Examples include testing services, the artistic creation of consumable resource materials, or co-sponsorship of educational workshops. Appendix A contains a list of other entities and the assistance the City may receive from that entity. Appendix B contains executed agreements with any listed entities that require contractual obligations. MCM BMP tables located in this SWMP, specify the BMP assistance that may be provided by each entity as part of this SWMP.

At any reasonable time, any authorized representative of the DEQ presenting proof of credentials and other documents as may be required by law may do any or all of the following:

- ◆ Per the conditions of the OKR04 permit, enter the premises where a regulated MS4 facility or activity is located;
- ◆ Inspect any MS4 facilities, equipment (including monitoring and control equipment), and operations regulated or required under the OKR04 permit;
- ◆ Sample or monitor any substances or parameters at any location within the City of Sand Springs MS4 for the sole purpose of assuring OKR04 permit compliance or as otherwise authorized by the CWA.



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I. INTRODUCTION

References to other State or Federal documents are shown in green text and verbatim quotes are shown in *italicized green text*.

In 1990 the U.S. Environmental Protection Agency (EPA) promulgated regulations for establishing water quality-based municipal stormwater programs to address stormwater runoff from certain industrial and construction activities and from medium and large Municipal Separate Storm Sewer Systems (MS4s) serving populations of 100,000 or greater. Per the *EPA and NPDES Permit Program*:

An MS4 is defined by the EPA as a “*conveyance or system of conveyances*” that is/are:

- *Owned by a state, city, town, village, or other public entity that discharges to waters of the U.S.,*
- *Designed or used to collect or convey stormwater (e.g., storm drains, pipes, ditches),*
- *Not a combined sewer, part of a sewage treatment plant, or publicly owned treatment works (POTW).*

These “Phase I” regulations were incorporated into the existing National Pollutant Discharge Elimination System (NPDES) permit rules that address point source dischargers. As a result, urban nonpoint source runoff became regulated as point source discharges.

On December 8, 1999, the EPA published final “Phase II” stormwater regulations that addressed urban stormwater runoff from cities under 100,000 population and counties that lie within the Urbanized Area (UA) as designated by the latest US Bureau of Census. The regulations divide small MS4s into categories based on population as determined by the most recent Decennial Census by the U.S. Bureau of Census. The City of Sand Springs requires a “Phase II” permit because it is classified as a Category 2 small MS4 per the definition listed in Part II.A and Part III.B of the OKR04 and as designated by 40 CFR §122.32(a)(1) and 40 CFR §122.32(a)(2):

Category 2 small MS4s serve a population greater than or equal to (\geq) 10,000, but less than ($<$) 50,000 within a UA, or a population greater than or equal to (\geq) 10,000 but less than or equal to (\leq) 100,000 with a population density greater than or equal to (\geq) 1,000/square miles or more located outside of a UA.

“Phase II” permits were also required for certain non-UA cities (small MS4s located outside of urbanized areas) designated by the Oklahoma Department of Environmental Quality (ODEQ).

In compliance with the provisions of the *Clean Water Act*, as amended, (33 U.S.C. 1251 et. seq.) as required under *Section 122.34(d)(2) of the Storm Water “Phase II” Rule*, and with the provisions under the Oklahoma Pollutant Discharge Elimination System (OPDES) *OAC 252:606-1-3(b)(3)* incorporating by reference *40 CFR §122.26-122.35*, and as jurisdictionally permitted by and enforced by the Oklahoma Department of Environmental Quality (ODEQ), operators of small MS4s are authorized to discharge per the conditions and requirements outlined in the ODEQ-issued OKR04 permit. The “Phase II” regulations issued by the EPA can be found in *FR Vol. 64 No. 235, December 8, 1999, beginning on page 68722*, and became effective on February 7, 2000.

On February 8, 2005, the ODEQ finalized the first General Permit for Phase II Small Municipal Separate Storm Sewer System Discharges Within the State of Oklahoma (OKR04). Per the five-year revision and reauthorization schedule, the OKR04 was reauthorized on October 1, 2015, with an effective date of November 1, 2015, and again on April 30, 2021, with an effective date of June 1, 2021, and an expiration date of May 31, 2026. The revised OKR04 permit reflects new requirements from EPA and specifically authorizes discharges of stormwater and certain non-stormwater discharges from MS4s to waters of the state (as defined in *OAC 252:606-1-3(b)(3)* incorporating by reference *40 CFR §122.26(b)(16)*).

The City of Sand Springs was required to submit and receive approval of/for a Notice of Intent (NOI) to receive authorization to discharge under the OKR04. As a regulated Category 2 MS4 and authorized permittee, the City is required to prepare a Storm Water Management Program (SWMP) that details the plan of how non-stormwater discharges within the MS4 jurisdictional area will be addressed utilizing the six “Minimum Control Measures” (MCMs) of:



-
1. Public Education and Involvement;
 2. Industrial Stormwater Runoff Control;
 3. Illicit Discharge Detection and Elimination;
 4. Construction Site Stormwater Runoff Control;
 5. Post-Construction Management in New Development and Redevelopment; and
 6. Pollution Prevention / Good Housekeeping for MS4 Operations

This SWMP document fulfills this requirement of the OPDES OKR04 permit and specifies all of the actions that the City will take to comply with ODEQ's stormwater regulations. This SWMP document also addresses what activities will be performed as Best Management Practices (BMPs) for each MCM, the BMP implementation schedules, and the Measurable Goals required by the OKR04 Permit for a successful stormwater program.

Per [OKR04 Part V.D.](#), this SWMP will be reviewed at least annually by the City of Sand Springs and amended, as needed, to improve compliance strategies and meet any additional requirements that may be forthcoming from DEQ or another regulatory or administrative authority.



II. COVERAGE

References to other State or Federal documents are shown in **green text** and verbatim quotes are shown in *italicized green text*.

II.A ELIGIBILITY

For permitted cities, the MS4 is all of the areas within the City's corporate boundaries. For counties, only the Urbanized Area (UA) within county unincorporated areas as defined by the 2010 US Bureau of Census is the permitted MS4 area. The map below contains a map of the City of Sand Springs's MS4 area. The following latitude-longitude coordinates are of the City of Sand Springs's City Hall which is close to the city center: Latitude: 36.139429 N, Longitude: -96.108586 W.

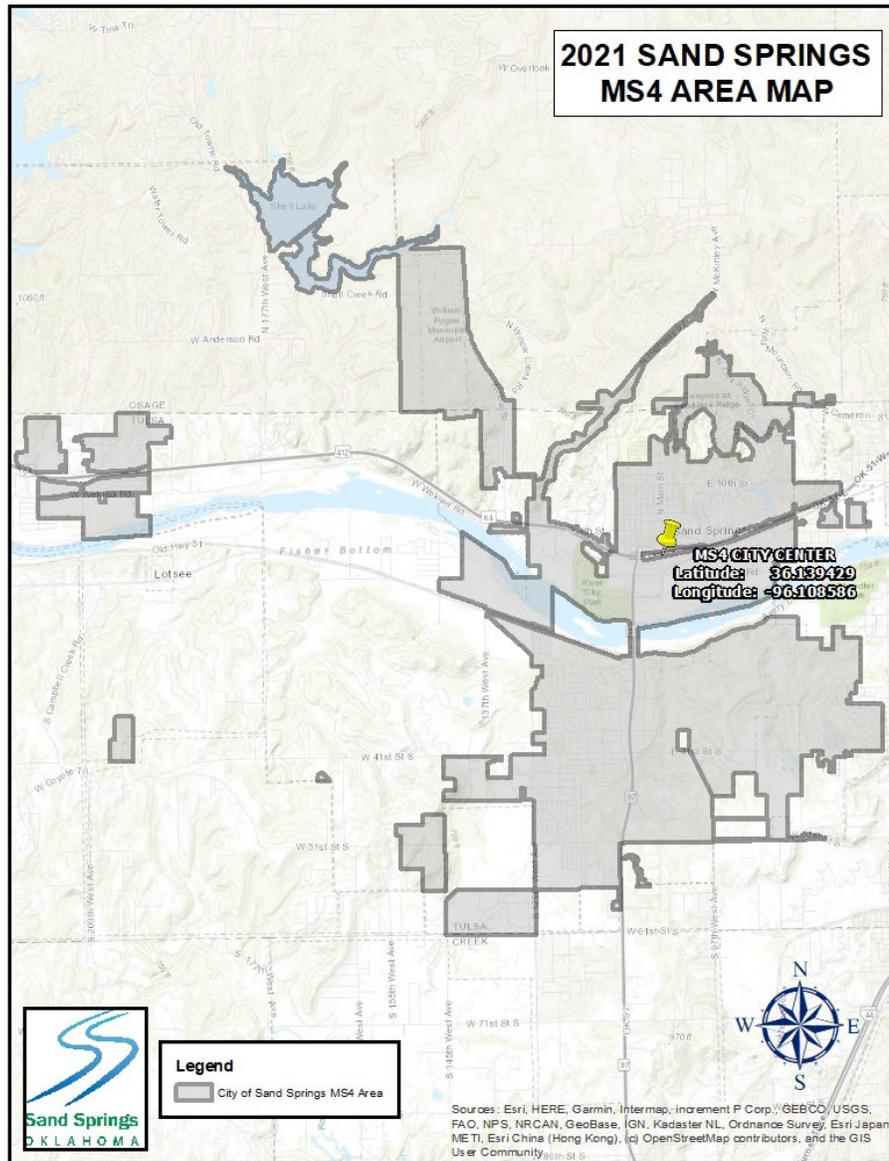


Figure 1- MS4 MAP

The City of Sand Springs is classified as a Category 2 small MS4 per the definition listed in **Part II.A of the OKR04 and 40 CFR §122.32(a)(1 & 2)**. Therefore the City of Sand Springs is required to comply with the OPDES OKR04 permit and all the requirements of Category 2 small MS4s.



II.B TYPES OF AUTHORIZED DISCHARGES

The City of Sand Springs has determined that the following non-storm water sources are not substantial contributors of pollutants to the MS4 or result from activities to protect public health and safety and are therefore allowed under OKR04 Part II.B and Part V.C.3.a.viii:

- a. *Diverted stream flows;*
- b. *Uncontaminated discharges from riparian areas and wetlands;*
- c. *Uncontaminated ground or spring water;*
- d. *Residential building wash water without detergents, solvents, and/or soaps;*
- e. *Uncontaminated pumped ground water;*
- f. *Uncontaminated ground water infiltration;*
- g. *Uncontaminated discharges from potable water sources, including water line flushing and fire hydrant flushing;*
- h. *Foundation drains;*
- i. *Air conditioning condensate;*
- j. *Water from crawl space pumps;*
- k. *Footing drains;*
- l. *Residential, non-commercial, or charity car washes;*
- m. *Landscape irrigation and lawn watering, provided all pesticides, herbicides, and fertilizers have been applied in accordance with the approved manufacturers' instructions and/or labeling;*
- n. *Uncontaminated de-chlorinated swimming pool discharges;*
- o. *Street wash water, including wash water generated from the washing of other impervious surfaces such as sidewalks and parking lots, that does not use detergents, solvents, and/or soaps;*
- p. *Discharges in compliance with a separate Oklahoma Pollutant Discharge Elimination System (OPDES) or National Pollutant Discharge Elimination System (NPDES) permit;*
- q. *Discharges of gray water from municipal splash pads (aka, spray parks or spray grounds), as defined in 27A O.S. § 2-6-107, unless otherwise permitted or regulated by DEQ, provided the discharges comply with all applicable municipal or county ordinances enacted pursuant to law (discharges from recirculating systems shall be dechlorinated);*
- r. *Documented discharges or flows from emergency firefighting activities or training activities that are not taking place at a permanent facility, provided procedures are in place for the Incident Commander, Fire Chief, or other on-scene firefighting officials in charge to make an evaluation regarding potential releases of pollutants from the scene, measures are taken to reduce any such pollutant releases to the maximum extent possible (while ensuring all appropriate actions necessary to ensure public health and safety). All discharges must be in compliance with Part IV of the OKR04 Permit.*
- s. *Discharges that are insignificant sources of pollutants because of the nature of the discharges or because of the conditions established for allowing the discharges to occur (e.g. charity car washes with appropriate controls, proximity to sensitive waterbodies).*



II.C LIMITATIONS ON COVERAGE

OKR04 Part II.C states that the following discharges are unauthorized:

- *Discharges mixed with non-stormwater that are not in compliance with a separate OPDES or NPDES permit or if they are determined not to be a substantial contributor of pollutants to waters of the state*
- *Discharges associated with industrial activity as defined in 40 CFR §122.26(b)(14)*
- *Discharges associated with construction activity as defined in 40 CFR §122.26(b)(15) unless covered by an OKR10 permit*
- *Discharges exceeding water quality standards*
- *Discharges not consistent with a TMDL*
- *Discharges originating on Indian Country as defined in 18 U.S.C. §1151*
- *Discharges of material resulting from a spill*

This SWMP includes a description of all necessary BMPs and other measures that will be used to ensure that discharges, or future discharges, will not cause, have the reasonable potential to cause or contribute to an exceedance of water quality standards. Where necessary, standard operating procedures (SOPs) detailing the methods and procedures used to ensure discharges are consistent with the assumptions and requirements of any TMDL or 303(d) watershed plan and compliance with OKR04 Part IV (A&B) may also be referenced. Appendix C contains a list of all SOPs referenced within this SWMP and the physical location(s) where they can be viewed.

Stormwater discharges occurring in Indian Country are not under the authority of DEQ and are not eligible for coverage under the OKR04 permit. If discharges from the MS4 require authorization under federal NPDES regulations, a permit for the discharges will be obtained from the EPA.



II.D HISTORIC PRESERVATION

Citing the OPDES Permit OKR04 for Small MS4s dated June 1, 2021:

“The Oklahoma DEQ’s OPDES permitting activities are not Federal undertakings and, therefore, are not subject to review under Section 106 of the National Historic Preservation Act (NHPA). However, applicants and permittees must comply with the Oklahoma State Register of Historic Places Act (53 O.S. § 361), where applicable, and the Burial Disturbance Law (21 O.S. §§ 1168.0-1168.6), as well as with any applicable local laws concerning the identification and protection of historic properties.

OKR04 permittees that receive Federal funding or other Federal assistance in the completion of their OKR04-related projects may have to comply with Section 106 of the NHPA. For information about the Section 106 review process in Oklahoma, Oklahoma properties listed on or eligible for the National Register of Historic Places, and related topics, the following shall be contacted”:

State Historic Preservation Office

Oklahoma Historical Society
Oklahoma History Center
800 Nazih Zuhdi Drive
Oklahoma City, OK 73105
Tel: (405) 521-6249

To identify historic properties,
See the following website:

Oklahoma Archeological Survey

111 East Chesapeake
Norman, OK 73019
Tel: (405) 325-7211

To identify historic properties,
See the following website:
<http://www.ou.edu/archsurvey>

The City of Sand Springs will comply with **OKR04 Part II.D (Historic Preservation)** whenever permit-related activities require such action. This will include communications with the State Historic Preservation Office and Oklahoma Archeological Survey to discuss what actions the City of Sand Springs may have to take to comply with rules governing the preservation of historical sites and resources, including compliance with the Oklahoma State Register of Historic Places Act and the Burial Disturbance Law of Oklahoma. It is understood that normal OKR04 permit-compliance actions taken by the City of Sand Springs under OKR04 do not require Section 106 review under the National Historic Preservation Act.



Acting as additional documentation for meeting Criterion A of the OKR04 Part II.E., Figure 3 below overlays the City of Sand Springs' MS4 on the "Exhibit 1 ARC map" and Appendix D contains a copy of the signed NOI specifying the appropriate criterion.

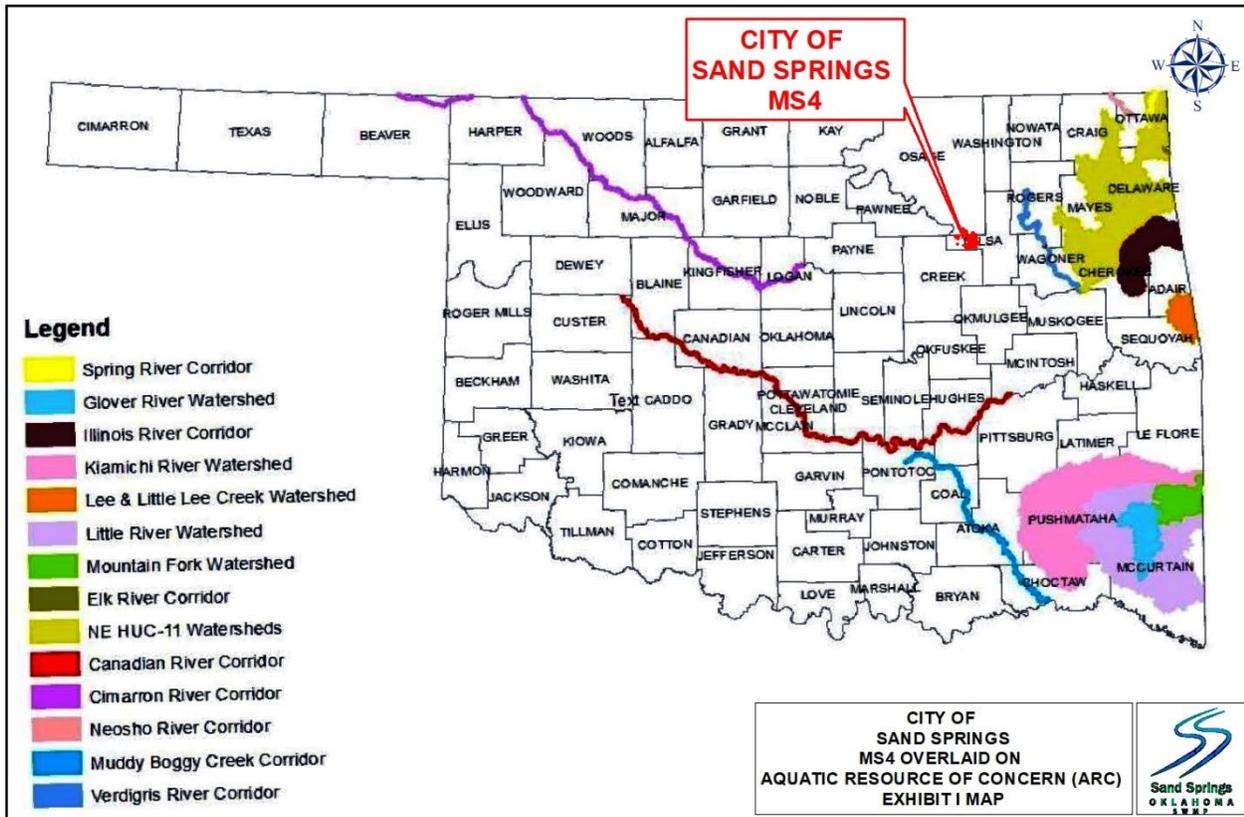


Figure 3 - ARC MAP OVER SAND SPRINGS' MS4



III. AUTHORIZATION

References to other State or Federal documents are shown in *green text* and verbatim quotes are shown in *italicized green text*.

III.A MEETING THE REQUIREMENTS OF OKR04 Parts III.A – III.F

The updated Oklahoma Department of Environmental Quality (ODEQ) General Permit for Phase II Small Municipal Separate Storm Sewer System (MS4) Discharges Within the State of Oklahoma (OKR04) became effective June 1, 2021, and will expire May 31, 2026. Per *Part III.A.2* of the OKR04 permit there is a 90-day requirement to renew the city's permittee status. The City of Sand Springs submitted an official Notice of Intent (NOI), the required NOI documentation, and the permit fee on August 24, 2021, to:

Oklahoma Department of Environmental Quality

Water Quality Division

PO Box 1677, Oklahoma City, OK 73101-1677

(Fax) 405-702-8101

(Email) ms4permitting@deq.ok.gov

The NOI required the City to list the following information:

- Category 2 small MS4 serving a population greater than or equal to (\geq) 10,000, but less than ($<$) 50,000, within an urban area (UA), or a population greater than or equal to (\geq) 10,000, but less than ($<$) 100,000 with a population density greater than or equal to (\geq) 10,000 per square mile or more located outside of a UA.
- Receiving Waterbodies: Anderson Creek, Arkansas River, Berryhill Creek, Sand Springs Creek East, Prattville Creek, Sand Springs Creek West, Fisher Creek, Eucree Creek, Shell Creek, Shell Lake, Phillips Creek, Sand Creek, and Little Sand Creek.
- Impaired Waterbodies: Arkansas River & Shell Lake.
- TMDL Waterbodies: Arkansas River.
- ARC: there are no Aquatic Resources of Concern (ARC).
- Co-permittees - the City elected not to share OKR04 compliance with another entity as a co-permittee.

A certificate renewing the City's OKR04 permit number OKR040017 and authorizing the discharge of stormwater from the City's MS4 was received from DEQ on September 21, 2021. The authorization became effective on October 1, 2021, and will expire at midnight on May 31, 2026. A copy of this permit can be found on the City's stormwater website, [Sand Springs, OK - Official Website | https://sandspringsok.org/](https://sandspringsok.org/) and in Part VIII of this SWMP document.



IV. SPECIAL CONDITIONS & COMPLIANCE

References to other State or Federal documents are shown in green text and verbatim quotes are shown in *italicized green text*.

IV.A DISCHARGES TO IMPAIRED WATERS

The Notice of Intent (NOI) application form, Item IV, requires each MS4 permittee to note every waterbody that receives discharges from its MS4 area. Waterbodies outside of the MS4 area but within one mile that receive MS4 discharges must also be included. Those waterbodies that are listed in the latest DEQ Integrated Report (IR) as 303(d) impaired or have completed TMDLs must be identified, and the 303(d) pollutants must also be listed for each waterbody. The City of Sand Springs has reviewed the latest version of the IR, dated July 2021, and the 303(d) list of impaired waters under the Clean Water Act. The receiving waterbodies within the City of Sand Springs' MS4 boundaries are shown below in Figure 4.

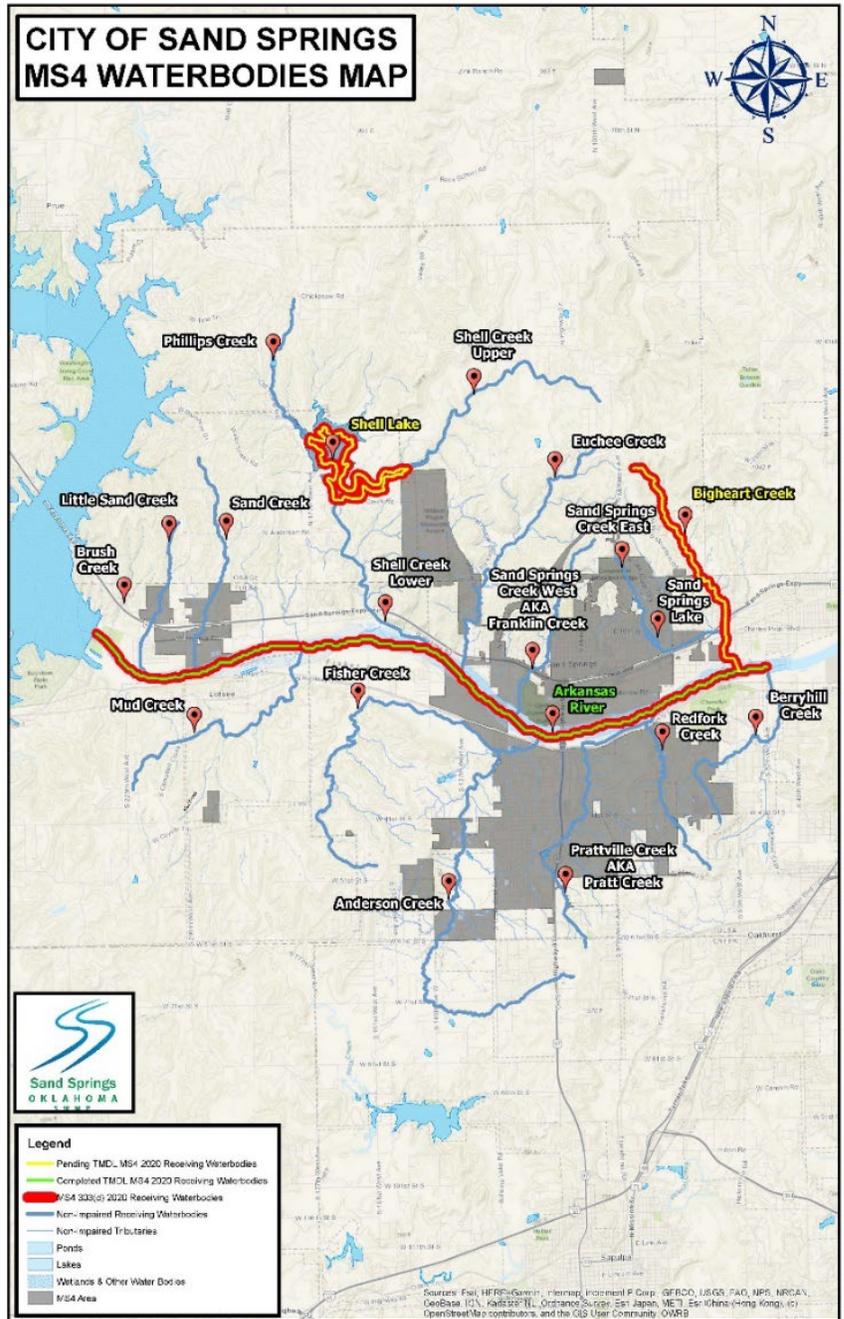


Figure 4 - MS4 RECEIVING WATERBODIES MAP



Figure 5 below highlights and details the receiving 303(d) waterbodies and TMDL waterbodies that affect the City of Sand Springs' OKR04 Permit.

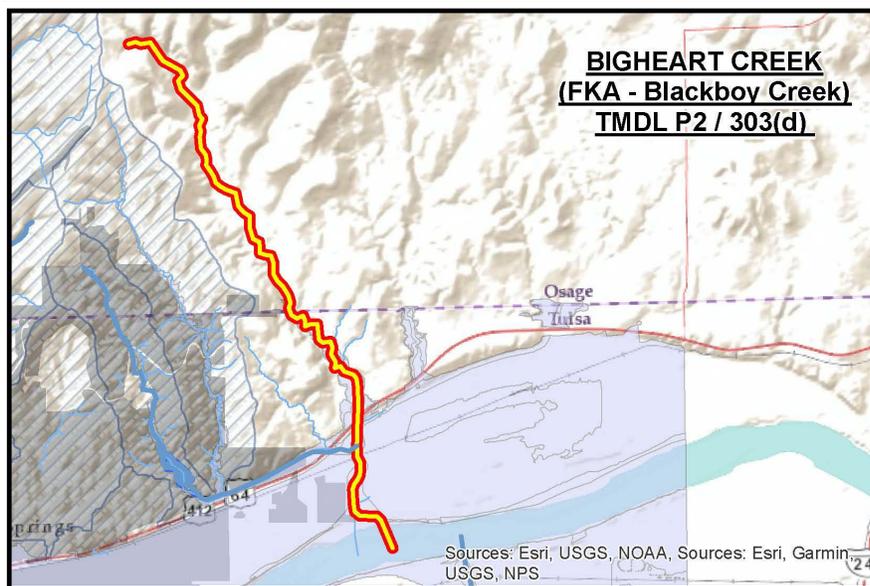
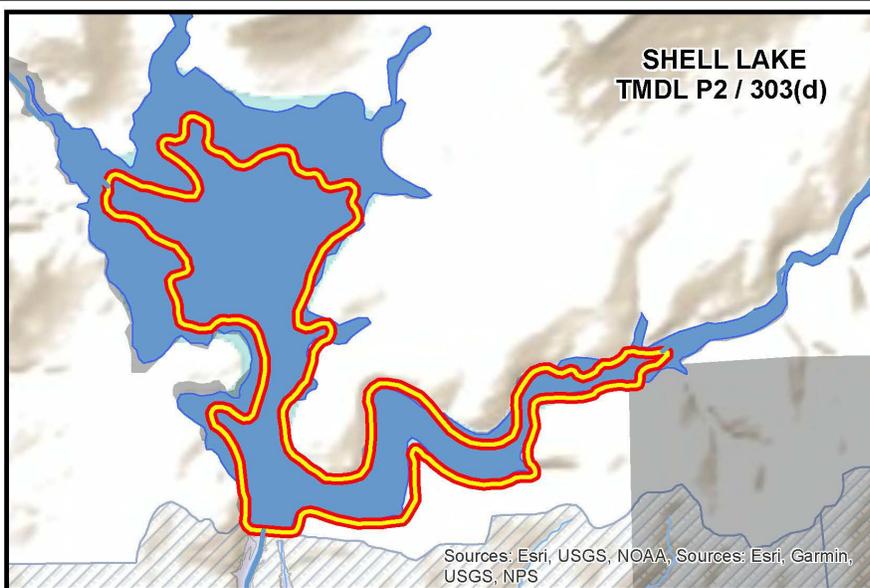
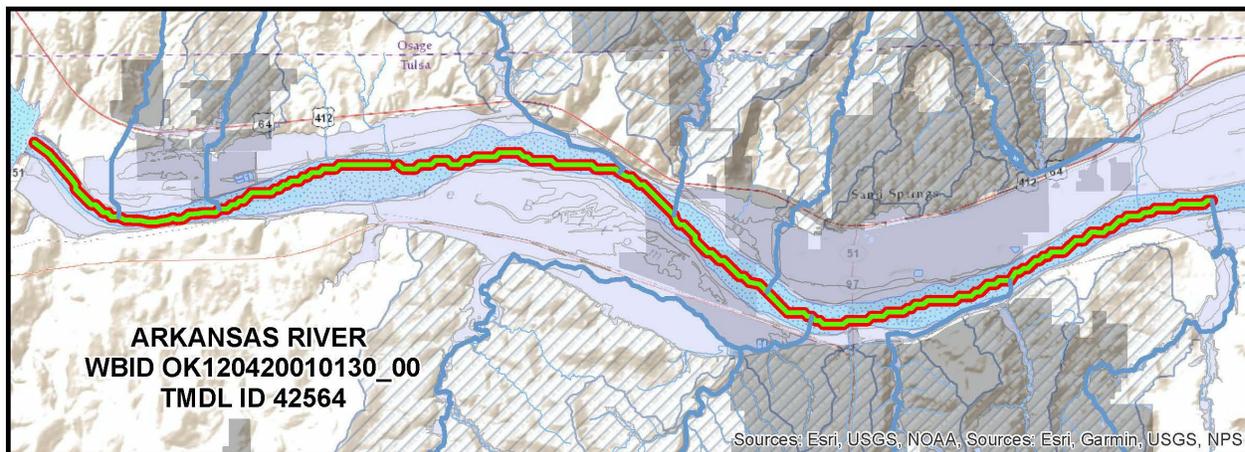


Figure 5 - 303(d) WATERBODIES & TMDL WATERBODIES

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Table 1 lists the following information for each receiving waterbody:

- The full and any “known former names” of each receiving Waterbody
- The 303(d), Outstanding Resource Waters (ORW), Aquatic Resources of Concern (ARC), and/or completed Total Maximum Daily Loads (TMDLs) status
- The Waterbody Identifier (WBID) number
- The Impairment type – Bacterial or Turbidity
- The length in miles or acres of impact per each waterbody
- And TMDL number and/or priority status information (if available).

This SWMP details how all requirements listed in the OKR04 Permit will be reported, addressed, implemented, improved upon, corrected as necessary, and complied with by the City of Sand Springs’ MS4. BMPs have been selected that ensure that the 303(d) waterbody impairments caused by the identified bacterial pollutants of concern, as listed in Table 1, in the MS4 receiving waters will not cause, have reasonable potential to cause or contribute to an in-stream exceedance of water quality standards. Some BMPs have been modeled from the EPA’s BMP menu located on the EPA website: <https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#edu>; others have been tailored to address the specific needs of the City of Sand Springs to meet the requirements of the OKR04 Permit and/or result in progress toward meeting the reduction goals established in the TMDL. The BMPs listed specifically define the operation and maintenance procedures for structural and non-structural stormwater controls, how illicit and non-stormwater discharges will be located and identified, how pollutants of concern will be reduced with outreach and education programs that are targeted towards commercial, industrial, and institutional entities, and how the MS4 will ensure that new flood management projects assess the impacts on water quality.



IV.B ESTABLISHED TOTAL MAXIMUM DAILY LOAD (TMDL) ALLOCATIONS

On June 1st, 2021, the [ODEQ Final Bacterial and Turbidity Total Maximum Daily Loads for the Arkansas-Verdigris River Study Area, Oklahoma \(OK120400, OK120410, OK120420, OK121500, OK12160\)](#) (TMDL), dated September 2012, was approved, issued an ID number – TMDL ID 42564, and given an effective date of June 1st, 2022. Section OKWBID ok120420010130_00 of the TMDL (TMDL Section) has been designated as being impacted by the City of Sand Springs’ municipal separate storm sewer systems (MS4).

Of the 12 total stream miles listed in this TMDL Section, 3.31 total stream miles flow within the City of Sand Springs MS4 limits and fall under the jurisdiction of the City of Sand Springs OKR04 Permit [OKR040017]. The remaining 8.69 stream miles are the jurisdiction of Tulsa County, the Army Corps of Engineers, or another NPDES permit. The following map shows Section OKWBID ok120420010130_00 of the Arkansas River TMDL that affects the City’s OKR04 Permit.

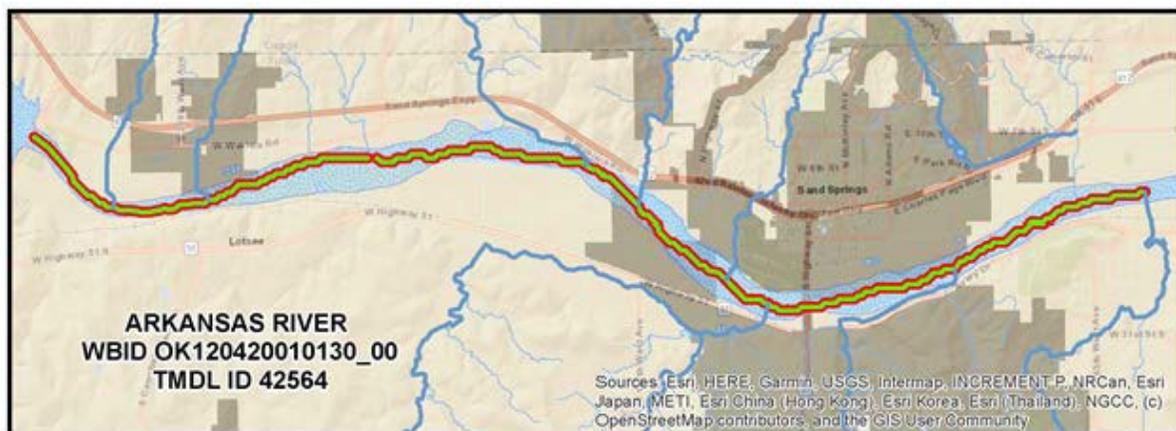


Figure 6 - INDIVIDUAL TMDL WATERBODY MAP_ ARKANSAS RIVER

A full copy of the stormwater permitting requirements from the ODEQ Final Bacterial and Turbidity Total Maximum Daily Loads for the Arkansas-Verdigris River Study Area, Oklahoma (OK120400, OK120410, OK120420, OK121500, OK12160), dated September 2012, can be found on the ODEQ website at <https://www.deq.ok.gov/wp-content/uploads/water-division/Arkansas-Verdigris-RiverBactTurbTMDLfinal2012.pdf> and will be referred to in this section as “TMDL Study” or “TMDL”.

Per the OKR04 Permit, the City of Sand Springs must meet certain deadlines regarding TMDL requirements:

- **June 1, 2022, to May 31, 2024**
 - Review the City’s SWMP and BMPs' ability to meet TMDL reduction loads concerning applicable discharges from the City to the Arkansas River. Specifically, the City’s MS4 system of stormwater conveyances that are owned by the City but not *“a combined sewer, part of a sewage treatment plant, or publicly owned treatment works (POTW)”* and falls jurisdictionally within City limits.
 - Make a list of potential significant sources of the TMDL POC.
 - Expand BMPs, IDDE, or DWFS programs or develop/design other strategies to specifically address the TMDL POC and *“to achieve progress toward meeting the reduction goals established in the TMDL”*. The TMDL states that *“Compliance with the following provisions will constitute compliance with the [reduction goals] of this TMDL: 1. Develop a Bacterial Reduction Plan, 2. Develop or Participate In a Bacterial Monitoring Plan, 3. Report Annually on TMDL implementation.”*
 - Make SWMP modifications or additions to ensure TMDL compliance.



- Make ordinance or other regulatory mechanism changes to require the reduction or control of the TMDL POC and the enforcement procedures for noncompliance.
- **May 31, 2024, to May 31, 2025**
 - Create a baseline monitoring program to track TMDL pollutants of concern (POC).
- **May 31, 2025, to May 30, 2030**
 - Fully implement a baseline monitoring program to track TMDL pollutants of concern (POC).
- **May 30, 2030**
 - Fully implement a TMDL Pollutant Reduction and Monitoring Plan

A justification must be provided for any changes that are not made by the deadlines listed. This SWMP will attempt to address each of these requirements.

TMDL REQUIREMENT 1 - DEVELOP A BACTERIAL REDUCTION PLAN

Enterococci is listed as the Bacterial Pollutant of Concern (BPOC) for the Sand Springs [Arkansas River TMDL Section OKWBID ok120420010130_00](#). The waste load allocation (WLA) for this BPOC is 5.37E+11 (537,000,000,000). The BPOC geometric mean is 33 colonies/100mL of Enterococci and the reduction requirement is 7.2%.

The development of the City of Sand Springs TMDL Bacterial Reduction Plan, as of May 31, 2023, is as follows:

- **Utilize MCM BMPs from the SWMP** - The purpose of the City's SWMP, in its entirety, is to improve the overall quality of stormwater discharged from the City of Sand Springs' MS4 and to reduce bacterial impacts on the Waters of the State. At this time, the City will continue to implement OKR04 MCM BMPs of education, involvement, inspection, monitoring, and enforcement against illicit discharges to increase pollution prevention and reduce the TMDL BPOC. BMP actions that currently affect stormwater discharges to the TMDL waterbody segments are CONSUMABLE RESOURCE DISTRIBUTION (Distribution of brochures, flyers, and other educational materials), EDUCATION (In-person classes or events that educate citizens about the TMDL and stormwater pollution prevention), CODE OF ORDINANCES (the local laws the City utilizes to define stormwater violations and the repercussions of violating those laws), ENFORCEMENT (Issuing tickets for stormwater violations), EMERGENCY OPERATIONS PLAN (the City's comprehensive all-hazard emergency plans' "who, what when, where, and how"), HAZARD MITIGATION PLAN, SPILL PLAN, and MS4 FACILITY SWP3s (Plans that define how each hazard/spill/pollutant is taken care of). Research is currently underway on additional BMPs that effectively reduce Enterococci and are appropriate for the City of Sand Springs' geography and socio-economic capabilities.
- **Research how other cities across the nation have implemented their TMDL bacterial reduction plans** – Research is being limited to cities that are equal in population size and socio-economics, have a similar total MS4 jurisdictional area, are located directly downstream of a dam and lake that have additional BPOCs, and to cities that have non-MS4 jurisdictional areas that occur between the jurisdictional MS4 areas.
- **Seek guidance from outside/additional sources** – Due to the multitude of jurisdictional boundaries that surround and impact the City of Sand Springs' portion of the TMDL, the City is seeking additional guidance from outside sources:
 - INCOG - INCOG is providing educational workshops and training in bacteria and bacterial reduction. City employees are attending these educational workshops and training.
 - ODEQ – The city, through INCOG, has requested direct guidance from ODEQ on proper reduction plan implementation and guidance on how cities can find funding to pay for the financial burden of TMDL testing and the necessary additional manpower needed to implement TMDL BPOC reduction and monitoring plans.



TMDL REQUIREMENT 2 - DEVELOP OR PARTICIPATE IN A BACTERIAL MONITORING PLAN

The geometric mean of all samples collected over the recreation period of May 1st through September 30th from the TMDL Study years 2001 to 2006 was used to place the Arkansas River on the DEQ 2008 303(d) list and then to approve TMDL requirements, specifically [Section OKWBID ok120420010130_00](#). Four (4) samples were collected in 2001. Five (5) samples were collected in 2002. Seven (7) samples were collected in 2003. Zero (0) samples were collected in 2004. Zero (0) samples were collected in 2005. Eight (8) samples were collected in 2006. The TMDL bacterial monitoring minimum requirements that Sand Springs must meet, based on the testing results of these samples, are listed as follows:

- Retrieve 10 grab samples during the primary contact recreational season annually
- Test all grab samples through an accredited lab
- Log laboratory results into the TMDL Sample Log
- File original hard copies of all laboratory results
- Using the sample log, focus or increase the efforts of the bacterial reduction plan on areas where samples exceed a geometric mean of 33 colonies/100mL of Enterococci.

The City of Sand Springs is in the process of developing a bacterial monitoring plan that complies with these minimum requirements. The development of the City of Sand Springs' TMDL Monitoring Plan, as of May 31, 2023, is as follows:

- **Research how other cities across the nation have implemented their TMDL bacterial monitoring plans** – Research is being limited to cities that are equal in population size and socio-economics, have a similar total MS4 jurisdictional area, are located directly downstream of a dam and lake that have additional BPOCs, and to cities that have non-MS4 jurisdictional areas that occur between the jurisdictional MS4 areas.
- **Seek guidance from outside/additional sources** – Due to the multitude of jurisdictional boundaries that surround and impact the City of Sand Springs portion of the TMDL, Sand Springs is seeking additional guidance from outside sources:
 - INCOG - A Quality Assurance Project Plan (QAPP) is being developed by INCOG. Once completed, TMDL SOP and QAPP documents detailing the exact procedures for monitoring will be formally defined and baseline monitoring and grab sample testing will begin. Each of these documents will be made available for viewing at the Public Works Department in the Stormwater Coordinator's office and online on the City's webpage no later than May 31st, 2024.
 - ODEQ – The city, through INCOG, has requested direct guidance from ODEQ on testing and sampling requirements, proper plan implementation, and guidance on how cities can find funding to pay for the financial burden of TMDL testing and the necessary additional manpower needed to implement TMDL Bacterial reduction and monitoring plans.

TMDL REQUIREMENT 3 - REPORT ANNUALLY ON TMDL IMPLEMENTATION

The City of Sand Springs is required to submit annual reports of this SWMP. A Template and Guidance for the TMDL Implementation Report is being prepared by ODEQ. The City of Sand Springs plans to use ODEQ's template and guidance, once finalized, to prepare the annual TMDL Implementation Report. Until that time, the City will give an account of specific actions taken toward TMDL Implementation during each reporting period.



IV.C DISCHARGES TO OUTSTANDING RESOURCE WATERS

Certain waters of the state constitute an outstanding resource (OWR) or have exceptional recreational and/or ecological significance. These waters include streams designated "Scenic River" or "ORW" and waters of the State located within watersheds of Scenic Rivers. Additionally, these may include waters located within National and State parks, forests, wilderness areas, wildlife management areas, wildlife refuges, and waters that contain species listed under the [Federal Endangered Species Act](#) as described in [785:45-5-25\(c\)\(2\)\(A\)](#) and [785:46-13-6\(c\)](#). No degradation of water quality shall be allowed in these waters.

There are no ORW waterbodies, as designated by the State of Oklahoma in the [Water Quality Standards 785:45 Appendix A](#), within the City of Sand Springs' MS4.



V. STORMWATER MANAGEMENT PROGRAM (SWMP)

References to other State or Federal documents are shown in green text and verbatim quotes are shown in italicized green text.

V.A REQUIREMENTS, REVIEWS, & UPDATES – OKR04 PARTS V.A,V.B, & V.D

OKR04 Part V requires Phase II MS4 cities to utilize continuously developed and improved BMPs, control techniques/systems, methods of design/engineering, and improved enforcement within their SWMPs to “...*reduce the discharge of pollutants from (the) MS4 to the MEP (Maximum Extent Possible), to protect water quality, and to satisfy the appropriate water quality requirements of the CWA (Clean Water Act)*”. BMPs for each MCM, as listed in Part V.B. of this SWMP, must define measurable goals, identify target audiences, list milestones/frequencies for undertaking BMP actions, and list who is responsible for implementation, coordination, and/or enforcement.

The City of Sand Springs’ previous SWMP, dated January 6, 2017, has been reviewed and changes have been made per the requirements of the current OKR04 permit. All updates, revisions, new BMP developments, and/or modifications made within this SWMP document will be kept “*up to date during the term of the permit*” and fully implemented, enforced, and/or amended no later than May 31, 2023.

An Annual Report will be submitted to ODEQ, no later than March 31st of each reporting period documenting the implementation, enforcement, and overall BMP effectiveness under each of the six MCMs during the preceding 12-month reporting period. Additionally, the Annual Report will:

- “*Address additional information related to receiving waters that have been adversely impacted by discharges from (the) MS4, or to discharges that have caused or contributed to or may have the reasonable potential to cause or contribute to a violation of a water quality standard.*”
- *Include more stringent requirements necessary to comply with new federal statutory or regulatory requirements;*
- *Include other conditions to comply with the goals and requirements of the CWA, including TMDL requirements*
- *Include requirements based on additional information obtained by DEQ during routine MS4 evaluations, annual report reviews, or as otherwise determined by the Director.”*

The option to share implementation responsibilities to meet these requirements, as outlined in OKR04 Part V.A.5, is allowable “*...if there is a written agreement (of what) they will implement*” on Sand Springs’ behalf. The City of Sand Springs will not be utilizing another MS4 to implement SWMP responsibilities or requirements. However, the City of Sand Spring will be utilizing other entities to implement SWMP responsibilities or requirements, and herein indicates all entities. Appendices A & B contain contact information and copies of all written agreements (where required) from the entities identified in Table 2.a and 2.b to accomplish MCMs, BMPs, and/or Measurable Goals on behalf of the City of Sand Springs.

Entity	Permit Minimum Control Measure to be Completed
INCOG / GCSA	To help implement certain aspects of the Phase II requirements, particularly regarding public education, public participation and training of City staff/crews/employees, the City of Sand Springs will participate in INCOG’s Green Country Stormwater Alliance (GCSA), a regional coalition of stormwater permitted cities and counties in Oklahoma. Members of INCOG’s GCSA will collectively fund, through annual membership dues, certain regional activities and technical assistance provided by INCOG and described in this SWMP. INCOG / GCSA will: <ul style="list-style-type: none"> • Conduct supplemental education, outreach, & monitoring on OKR04-required topics • Host GCSA regional stormwater website: www.stormwaterok.net • Conduct Employee Training on OKR04-required topics
M.e.T	Conduct supplemental education, outreach, & monitoring on OKR04-required topics and Provide Recycling Services.

Table 2.a –ASSISTANCE FROM OTHER ENTITIES LIST – WRITTEN AGREEMENT REQUIRED



Other Entity	MCM, BMP, or Measurable Goal to be Completed
OFMA	Conduct supplemental education & outreach on OKR04-required topics
ODOT (Stormwater)	Conduct supplemental education & outreach on OKR04-required topics
IECA	Conduct Employee Training on OKR04-required topics
Home Builders Association of Greater Tulsa	Conduct supplemental education & outreach on OKR04-required topics – specifically MCM 4 & MCM 5
Tulsa County Conservation Commission	Conduct supplemental education, outreach, & monitoring of OKR04-required topics
Chandler Nature Center	Conduct supplemental education & outreach events on OKR04-required topics

Table 2.b - ASSISTANCE FROM OTHER ENTITIES LIST – WRITTEN AGREEMENT NOT REQUIRED

Documents, including but not limited to, the NOI, this SWMP, the SWMP Annual report, and SWMP-related public notices, will be available for review and printing on the City of Sand Springs’ website: (<http://www.sandspringsok.org/387/Stormwater-Management-Program>). Signed original document(s) will be maintained and made available for review upon request at the Sand Springs Public Works Facility located at 13101 W. 46th Street, Sand Springs, OK 74063.



V.B MINIMUM CONTROL MEASURES (MCMs) – OKR04 PART V.C.

Under the current OKR04 Permit, the City of Sand Springs is considered to be a “Renewal Permittee”. As such, the current SWMP for the Sand Springs MS4 has been reviewed and, where necessary, the Best Management Practices (BMPs) and Measurable Goals for each Minimum Control Measure (MCM) have been revised, added to, or updated to ensure compliance with the CWA and the requirements of the new OKR04 Permit. Throughout the entire term of coverage under the current OKR04 Permit, the City of Sand Springs will continue developing, implementing, and enforcing new BMP elements, as necessary.

This SWMP provides information on the six (6) required MCMs listed within the OKR04 permit which are:

1. Public Education and Involvement;
2. Industrial Stormwater Runoff Control;
3. Illicit Discharge Detection and Elimination;
4. Construction Site Stormwater Runoff Control;
5. Post-Construction Management in New Development and Redevelopment; and
6. Pollution Prevention / Good Housekeeping for MS4 Operations

Each MCM will be formatted to provide:

MCM Number

Brief explanation/definition of the MCM (if necessary)

Overview of Requirements and/or Activities Table

BMP Number

Brief explanation/definition of the BMP (if necessary)

Visuals or Additional Tables (if necessary)

Reason for Selection

Target Audience or Participants

(Community, Commercial, industrial, and institutional groups likely to have significant stormwater impacts on impaired waters)

Measurable Goal(s)

Defined

Reason for Selection

Schedule or date of Completion

Quantifiable Target Measuring Progress

Time line for BMP implementation

Interim milestones

Frequency

Distribution Schedule

Control Techniques & Systems

Design and/or Engineering Methods

Enforcement, Implementation, and Coordination Responsibilities

In the event of a declared City, State, or National/Federal emergency or other disruptive events, alternative options for completing each MCM have been included. Where applicable, the City of Sand Springs has included procedures to notify DEQ if the City “lacks the legal authority for direct enforcement action” against violators who fail to comply with the City of Sand Springs’ SWMP.



MCM 1- PUBLIC EDUCATION & INVOLVEMENT

References to other State or Federal documents are shown in *green text* and verbatim quotes are shown in *italicized green text*.

A stormwater management program (SWMP) must have a community that is informed and knowledgeable to be successful and comply with State and Federal regulations. As the public gains a greater understanding of the reasons why it is necessary and important for an SWMP to be successful, and as greater compliance with the program is implemented and achieved, the water quality of receiving waterbodies within the MS4 is greatly improved. With continued public education and involvement, those areas impacted previously by pollution can be restored to healthy environmental conditions. Public support created from education on achieving water quality standards can lead to the restoration and protection of drinking water supplies, the restoration of protected watershed habitats for fish and wildlife, the creation of beautiful parks and recreation areas for public use, and generally making the waters within the MS4 drinkable, fishable, swimmable, and enjoyable for all.

A challenge in providing stormwater knowledge and gaining support is that Oklahoma is the only state where municipalities are almost entirely dependent on sales tax for general operations. Therefore, the money and resources needed to fund the SWMP come directly from the citizens and businesses of the City of Sand Springs. Whether in the form of higher sales taxes, stormwater fees, or citations; it is also the citizens and businesses that pay the cost of non-compliance. With ever-increasing regulations, there is a real possibility that additional funding will be needed to maintain compliance. However, the current system of funding via sales tax is inconsistent and unreliable. This has been proven during the 2020 COVID-19 pandemic as restaurants and retail establishments were shut down and sales tax revenues plummeted nearly 40% statewide. Therefore, it is imperative and advantageous that the public be educated on how to not only reduce the negative impact they may have on the receiving waterbodies of the MS4 but also how they can directly benefit from compliance.

To provide the MS4 the greatest environmental benefit in a manner that is both affordable and sustainable, while also mitigating potentially increased costs to the citizens, the City of Sand Springs will implement a variety of public education and involvement BMP Activities that utilize outside sources for consumable resources, create extensive volunteer and community involvement, and/or provide free or cost-reduced resources, classes, or educational opportunities.

Table 3 details the MCM requirement reference, the number of education and/or involvement activities required, the implementation schedule, and the available primary and alternate BMP activities that the City can or will utilize to meet these requirements.

Additionally, MCM 1 BMP Activities are implemented in coordination with MCM 3, 4, 5, and 6 with the following requirements:

One (1) educational activity must specifically instruct **City Staff/Crews/Employees** on:

- The hazards associated with illegal discharges and improper disposal of waste.
- The recognizing and reporting of illicit discharges.
- The inspection and enforcement of erosion and sediment control measures.
- The prevention and reduction of stormwater pollution from MS4 activities.

One (1) educational activity must specifically instruct **Developers, Construction & Contractor employees, and The General Public** on:

- Project designs that minimize water quality impact
- LID

BMP activities that are specifically utilized to meet these additional requirements are notated both in Table 3 and under each detailed primary BMP Activity heading. Table 3 is viewable as a separate document On the City of Sand Springs website - <https://www.sandspringsok.org/387/Stormwater-Management-Program>.



MCM 1: PUBLIC EDUCATION AND INVOLVEMENT

PERMIT REQUIREMENT REFERENCE	PERMIT REQUIREMENT ACTION	PERMIT REQUIREMENT AMOUNT	BMP OPTIONS TO COMPLETE REQUIRED ACTIVITIES										
			ACTIVITY 1	ACTIVITY 2	ACTIVITY 3	ACTIVITY 4	ALTERNATE ACTIVITY 1	ALTERNATE ACTIVITY 2	ALTERNATE ACTIVITY 3	ALTERNATE ACTIVITY 4	ALTERNATE ACTIVITY 5		
Part V.C.1.a.i	Conduct public EDUCATION efforts for target audiences - Including All Age, Ethnic, and Socio-Economic Groups	4 ACTIVITIES PER YEAR	BMP	CRM DISTRIBUTION - Distribute or display relevant educational consumable resource materials (CRMs)	IN-PERSON EDUCATIONAL EVENTS / PROGRAMS - Provide, Sponsor, or Support Educational Event or Program for target audience	EDUCATIONAL CLASSES - Provide, Sponsor, or Support Class / Training / Workshop / Presentation / Project / Video to Target Audience	EDUCATIONAL NOTIFICATIONS - Distribute, Provide, Sponsor, or Support Stormwater Notifications	EDUCATIONAL SIGNAGE / MARKINGS - Install or maintain MS4 waterway & watershed pollution prevention signage & markings	ELECTRONIC EDUCATION - Maintain or Support Stormwater Social Media / Website for stormwater education and notification	SECONDARY LANGUAGE EDUCATION - Provide Stormwater educational materials in Spanish or Another Language other than English	RECYCLING EDUCATION - Promote, sponsor, or host regional or local recycling centers	OTHER ENTITY ASSISTANCE - Maintain memberships & other government entity relationships for education & involvement events / resources	
			SCHEDULE	Distribute - 125 ANNUALLY	Provide, Sponsor, or Support - 1 ANNUALLY OR USE ALTERNATE	Provide, Sponsor, or Support - 1 ANNUALLY OR USE ALTERNATE	Distribute - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	
Part V.C.1.a.i	Conduct public INVOLVEMENT efforts for a target audience	2 ACTIVITIES PER YEAR	BMP	PUBLIC MEETINGS - Present stormwater management program (SWMP) activities including City Stormwater Report, SWMP Document, NOI, & ODEQ Annual Reports in Public City Council meeting	PUBLIC COMMENTS RECEIPT / REVIEW - Discuss and receive public comments on stormwater management program (SWMP) activities including City Stormwater Report, SWMP Document, NOI, & ODEQ Annual Reports in public forum	VOLUNTEER PROGRAM - Provide, Sponsor, or Support Volunteer Program	ELECTRONIC INVOLVEMENT - Maintain or Support Stormwater E-Mail / Social Media / Website for stormwater education and involvement	EDUCATIONAL SIGNAGE / MARKING INSTALLATION - Install or maintain MS4 waterway & watershed pollution prevention signage & markings	IN-PERSON INVOLVEMENT ACTIVITY / EVENT / PROGRAM - Provide, Sponsor, or Support Involvement Event or Program for Target Audience	OTHER ENTITY ASSISTANCE - Maintain memberships & other government entity relationships for involvement events			
			SCHEDULE	1 ANNUALLY OR USE ALTERNATE	1 ANNUALLY OR USE ALTERNATE	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY			
Part V.C.1.a.i.1.a	In coordination with MCM 2, implement an education program to involve local industry	NOT REQUIRED	BMP	CRM DISTRIBUTION - Distribute or display relevant industrial Specific Consumable Resource Materials (CRMs)	ELECTRONIC INVOLVEMENT - Maintain or Support Stormwater Department E-Mail / Social Media / Website for stormwater education and involvement	PUBLIC COMMENTS RECEIPT / REVIEW - Discuss and receive public comments on stormwater management program (SWMP) activities including City Stormwater Report, SWMP Document, NOI, & ODEQ Annual Reports in public forum	ELECTRONIC INVOLVEMENT - Maintain or Support Stormwater Department E-Mail / Social Media / Website for industrial stormwater education and involvement	INVOLVEMENT ACTIVITY / EVENT - Sponsor, Host, Promote, Participate, or Support Industrial Company's Clean Up / Trash Removal / Recycling / Collection Events & Fairs	EDUCATIONAL SIGNAGE / MARKING INSTALLATION - Install or maintain MS4 waterway & watershed pollution prevention signage & markings	EDUCATIONAL CLASSES - Provide, Sponsor, or Support Industrial Class / Training / Workshop / Presentation / Project / Video	OTHER ENTITY ASSISTANCE - Maintain memberships & other government entity relationships for education & involvement events / resources		
			BMP	Brochure / Pamphlet / Mailer / Enforcement Warning / Enforcement Citation	City E-Mail (stormwater@sandsspringsok.org) / NCOG website / GCSA website / City Stormwater website / City Facebook / City Instagram / Electronic Surveys / Report A Problem Links / Stormwater Excellence Award Nomination Forms / Self-guided Education Links / Development of MS4 SWMP / Video Links / Contexts / Digital Water Scavenger Hunt	Public Hearing / City Council Meeting / Stormwater Award Presentation / MS4 SWMP Annual Report Presentation	City E-Mail (stormwater@sandsspringsok.org) / NCOG website / GCSA website / City Stormwater website / City Facebook / City Instagram / Electronic Surveys / Report A Problem Links / Stormwater Excellence Award Nomination Forms / Self-guided Education Links / Development of MS4 SWMP / Video Links / Contexts / Digital Water Scavenger Hunt	Earth Day / Herbal Affair / Tire and E-Waste Collection Event / Company Clean Up Event / Great Spring Clean Event / M.A.T. Voucher Program / Sand Springs Recycling Center (open daily)	"No Dumping... Sign" / "Arkansas Watershed" Sign / "No Chemicals... Sign" / "No Dumping...Drains To..." Stormwater Medallions	Drop in the Bucket Stormwater Video / INCOG Priority Area Inspection Training / Pollution Prevention / Site-Specific or Issue-Specific Training	INCOG / GCSA / OFMA / ODOT Stormwater / M.A.T. / IECA / EPA / ODEQ / Home Builders Association of Greater Tulsa / Chandler Nature Center / Tulsa County Conservation Commission		
Part V.C.1.a.i.1.b	In coordination with MCM 2, conduct staff training to address requirements for inspection and enforcement of BMPs such as minimizing exposure, good housekeeping, preventive maintenance, spill prevention and response, and erosion and sediment controls at industrial facilities	NOT REQUIRED	BMP	ALTERNATE ACTIVITY 1 - MS4 STAFF EDUCATION - Provide, Sponsor, or Support Industrial Stormwater Inspection & Enforcement Class / Training / Workshop / Presentation / Project / Video for MS4 staff	ALTERNATE ACTIVITY 2 - MS4 STAFF EDUCATION - Provide, Sponsor, or Support Industrial Stormwater Inspection & Enforcement Class / Training / Workshop / Presentation / Project / Video for MS4 staff	ALTERNATE ACTIVITY 3 - MS4 STAFF EDUCATION - Provide, Sponsor, or Support Industrial Stormwater Inspection & Enforcement Class / Training / Workshop / Presentation / Project / Video for MS4 staff	ALTERNATE ACTIVITY 4 - MS4 STAFF EDUCATION - Provide, Sponsor, or Support Industrial Stormwater Inspection & Enforcement Class / Training / Workshop / Presentation / Project / Video for MS4 staff	ALTERNATE ACTIVITY 5 - MS4 STAFF EDUCATION - Provide, Sponsor, or Support Industrial Stormwater Inspection & Enforcement Class / Training / Workshop / Presentation / Project / Video for MS4 staff	ALTERNATE ACTIVITY 6 - MS4 STAFF EDUCATION - Provide, Sponsor, or Support Industrial Stormwater Inspection & Enforcement Class / Training / Workshop / Presentation / Project / Video for MS4 staff	ALTERNATE ACTIVITY 7 - MS4 STAFF EDUCATION - Provide, Sponsor, or Support Industrial Stormwater Inspection & Enforcement Class / Training / Workshop / Presentation / Project / Video for MS4 staff	ALTERNATE ACTIVITY 8 - MS4 STAFF EDUCATION - Provide, Sponsor, or Support Industrial Stormwater Inspection & Enforcement Class / Training / Workshop / Presentation / Project / Video for MS4 staff		
			BMP	Erosion Control Lunch and Learn / Resource Management Conference / LID Workshop / Post-Construction Workshop / Pollution Prevention Workshop / Drop in the Bucket Stormwater Video / Stormwatch Stormwater Education Video / Rain Check Stormwater Education Video / INCOG Priority Area Inspection Training / Stormwater Inspection Training / Stormwater Enforcement Training / Stream Restoration Design Video / Site-Specific or Issue-Specific Training	ALTERNATE ACTIVITY 1 - MS4 STAFF EDUCATION - Provide, Sponsor, or Support Industrial Stormwater Inspection & Enforcement Class / Training / Workshop / Presentation / Project / Video for MS4 staff	ALTERNATE ACTIVITY 2 - MS4 STAFF EDUCATION - Provide, Sponsor, or Support Industrial Stormwater Inspection & Enforcement Class / Training / Workshop / Presentation / Project / Video for MS4 staff	ALTERNATE ACTIVITY 3 - MS4 STAFF EDUCATION - Provide, Sponsor, or Support Industrial Stormwater Inspection & Enforcement Class / Training / Workshop / Presentation / Project / Video for MS4 staff	ALTERNATE ACTIVITY 4 - MS4 STAFF EDUCATION - Provide, Sponsor, or Support Industrial Stormwater Inspection & Enforcement Class / Training / Workshop / Presentation / Project / Video for MS4 staff	ALTERNATE ACTIVITY 5 - MS4 STAFF EDUCATION - Provide, Sponsor, or Support Industrial Stormwater Inspection & Enforcement Class / Training / Workshop / Presentation / Project / Video for MS4 staff	ALTERNATE ACTIVITY 6 - MS4 STAFF EDUCATION - Provide, Sponsor, or Support Industrial Stormwater Inspection & Enforcement Class / Training / Workshop / Presentation / Project / Video for MS4 staff	ALTERNATE ACTIVITY 7 - MS4 STAFF EDUCATION - Provide, Sponsor, or Support Industrial Stormwater Inspection & Enforcement Class / Training / Workshop / Presentation / Project / Video for MS4 staff	ALTERNATE ACTIVITY 8 - MS4 STAFF EDUCATION - Provide, Sponsor, or Support Industrial Stormwater Inspection & Enforcement Class / Training / Workshop / Presentation / Project / Video for MS4 staff	
Part V.C.1.a.ii.2.a	In coordination with MCM 3, implement an education program that instructs public employees, businesses, and the general public on the hazards associated with illegal discharges and improper disposal of waste.	1 ACTIVITY PER YEAR	BMP	CRM DISTRIBUTION - Distribute Illicit Discharge Prevention Consumable Resource Materials (CRMs) to General Public / All Audience Groups - Including All Age, Ethnic, and Socio-Economic Groups	IN-PERSON EDUCATIONAL EVENT / PROGRAM - Provide, Sponsor, or Support Illicit Discharge Prevention Class / Training / Workshop / Presentation / Project / Video	ELECTRONIC INVOLVEMENT - Maintain or Support Stormwater E-Mail / Social Media / Website for stormwater illicit discharge education	PUBLIC MEETING - Present stormwater management program (SWMP) activities including City Stormwater Report, SWMP Document, NOI, & ODEQ Annual Reports in Public City Council meeting	EDUCATIONAL SIGNAGE / MARKING INSTALLATION - Install or maintain MS4 waterway & watershed pollution prevention signage & markings	IN-PERSON INVOLVEMENT ACTIVITY / EVENT / PROGRAM - Provide, Sponsor, or Support Involvement Event or Program for Target Audience	OTHER ENTITY ASSISTANCE - Maintain memberships & other government entity relationships for education & involvement events / resources			
			SCHEDULE	Distribute - 125 ANNUALLY OR USE ALTERNATE	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY			
Part V.C.1.a.ii.2.b	In coordination with MCM 3, promote, publicize, and facilitate the reporting of illicit discharges.	THIS REQUIREMENT IMPLEMENTED CONTINUOUSLY UTILIZING ONE OR MORE OF THE LISTED BMP ACTIVITIES	BMP	CRM DISTRIBUTION - Distribute Illicit Discharge Reporting Consumable Resource Materials (CRMs) to General Public / All Audience Groups - Including All Age, Ethnic, and Socio-Economic Groups	PUBLIC MEETING - Present stormwater management program (SWMP) activities including City Stormwater Report, SWMP Document, NOI, & ODEQ Annual Reports in Public City Council meeting	ELECTRONIC INVOLVEMENT - Maintain or Support Stormwater E-Mail / Social Media / Website for receipt prevention and reporting of the reporting of illicit discharges	EDUCATIONAL SIGNAGE / MARKING INSTALLATION - Install or maintain MS4 waterway & watershed illicit discharge pollution prevention & reporting signage & markings	IN-PERSON EDUCATIONAL EVENT / PROGRAM - Provide, Sponsor, or Support Illicit Discharge Prevention and Reporting Class / Training / Workshop / Presentation / Project / Video	EDUCATIONAL SIGNAGE / MARKING INSTALLATION - Install or maintain MS4 waterway & watershed illicit discharge pollution prevention & reporting signage & markings	OTHER ENTITY ASSISTANCE - Maintain memberships & other government entity relationships for education & involvement events / resources	OTHER ENTITY ASSISTANCE - Maintain memberships & other government entity relationships for education & involvement events / resources		
			SCHEDULE	Distribute - 125 ANNUALLY OR USE ALTERNATE	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY		

TABLE 3 MCM 1: PUBLIC EDUCATION AND INVOLVEMENT



MCM 1: PUBLIC EDUCATION AND INVOLVEMENT

PERMIT REQUIREMENT REFERENCE	PERMIT REQUIREMENT ACTION	PERMIT REQUIREMENT AMOUNT	BMP OPTIONS TO COMPLETE REQUIRED ACTIONS			
			ACTIVITY 1	ALTERNATE ACTIVITY 1	ALTERNATE ACTIVITY 2	
Part V.C.1.a.ii.2.c	In coordination with MCM 3, conduct staff training to identify and report stormwater illicit discharges	1 ACTIVITY PER YEAR	BMP	MS4 STAFF EDUCATION Provide, Sponsor, or Support Illicit Discharge Class / Training / Workshop / Presentation / Project / Video for MS4 Staff	CRM DISTRIBUTION - Distribute Illicit Discharge Reporting Consumable Resource Materials (CRMs) to MS4 Staff	OTHER ENTITY ASSISTANCE Maintain memberships & other government entity relationships for education & involvement events / resources
			SCHEDULE	Provide, Sponsor, or Support - 1 ANNUALLY OR USE ALTERNATE	ALTERNATE - DISTRIBUTE 50 ANNUALLY	ALTERNATE - 1 ANNUALLY
Part V.C.1.a.ii.3.a	In coordination with MCM 4, implement an education program to involve local developers	1 ACTIVITY PER YEAR	BMP	CRM DISTRIBUTION Distribute Construction Consumable Resource Materials (CRMs) to Developers / Contractors / Subcontractors	EDUCATIONAL EVENTS / PROGRAMS Provide, Sponsor, or Support Construction Stormwater Education Class / Training / Workshop / Presentation / Project / Video	
			SCHEDULE	Distribute - 125 ANNUALLY OR USE ALTERNATE	ALTERNATE - 1 ANNUALLY	
Part V.C.1.a.ii.3.b	In coordination with MCM 4, implement and enforce procedures for receipt and consideration of information submitted by the public	THIS REQUIREMENT IMPLEMENTED CONTINUOUSLY UTILIZING ONE OR MORE OF THE LISTED BMP ACTIVITIES	BMP	ELECTRONIC INVOLVEMENT Maintain or Support Stormwater E-Mail / Social Media / Website for receipt of stormwater questions, complaints, or the reporting of construction site illicit discharges		
			SCHEDULE	Maintain or Support - 1 ANNUALLY		
Part V.C.1.a.ii.3.c	In coordination with MCM 4, conduct staff training to address requirements for inspection and enforcement of erosion and sediment control measures	1 ACTIVITY PER YEAR	BMP	MS4 STAFF EDUCATION Provide, Sponsor, or Support Erosion & Sediment Control Class / Training / Workshop / Presentation / Project / Video for MS4 Staff	CRM DISTRIBUTION Distribute Illicit Discharge Reporting Consumable Resource Materials (CRMs) to MS4 Staff	ENFORCEMENT When necessary, issue Warning / Notice of Stormwater Violation Citations
			SCHEDULE	Provide, Sponsor, or Support - 1 ANNUALLY OR USE ALTERNATE	ALTERNATE - DISTRIBUTE 50 ANNUALLY	ALTERNATE - AS NECESSARY / COUNTS TOWARDS CRM TOTAL
Part V.C.1.a.ii.4	In coordination with MCM 5, implement an education and outreach program for developers and the public about project designs that minimize water quality impacts, including LID strategies	1 ACTIVITY PER YEAR	BMP	IN-PERSON EDUCATIONAL EVENTS / PROGRAMS Provide, Sponsor, or Support Developer & Construction LID Training Class / Training / Workshop / Presentation / Project / Video for MS4 Staff	CRM DISTRIBUTION - Distribute LID Consumable Resource Materials (CRMs) to Developers / General Public / All Audience Groups - Including All Age, Ethnic, and Socio-Economic Groups	OTHER ENTITY ASSISTANCE Maintain memberships & other government entity relationships for education & involvement events / resources
			SCHEDULE	Provide, Sponsor, or Support - 1 ANNUALLY OR USE ALTERNATE	ALTERNATE - DISTRIBUTE 50 ANNUALLY	ALTERNATE - 1 ANNUALLY
Part V.C.1.a.ii.5	In coordination with MCM 6, conduct staff training to prevent and reduce stormwater pollution from MS4 activities	1 ACTIVITY PER YEAR	BMP	MS4 STAFF EDUCATION Provide, Sponsor, or Support MS4 Stormwater Pollution Prevention Training Class / Training / Workshop / Presentation / Project / Video for MS4 Staff	CRM DISTRIBUTION - Distribute LID Consumable Resource Materials (CRMs) to MS4 Staff	OTHER ENTITY ASSISTANCE Maintain memberships & other government entity relationships for education & involvement events / resources
			SCHEDULE	Provide, Sponsor, or Support - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY
Part V.C.1.a.iii	Include a process by which public comments on the SWMP are received and reviewed by the person(s) responsible for the SWMP	THIS REQUIREMENT IMPLEMENTED CONTINUOUSLY UTILIZING ONE OR MORE OF THE LISTED BMP ACTIVITIES	BMP	PUBLIC COMMENTS, RECEIPT / REVIEW Discuss and receive public comments on stormwater management program (SWMP) activities including City Stormwater Report, SWMP Document, NOI, & ODEQ Annual Reports in public forum	ELECTRONIC INVOLVEMENT Maintain or Support Stormwater E-Mail / Social Media / Website to receive and review public comments on the SWMP	OTHER ENTITY ASSISTANCE Maintain memberships & other government entity relationships for education & involvement events / resources
			SCHEDULE	Discuss Received - 1 ANNUALLY OR USE ALTERNATE	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY
Part V.C.1.a.iv	Comply with State and local public notice requirements	THIS REQUIREMENT IMPLEMENTED CONTINUOUSLY UTILIZING ONE OR MORE OF THE LISTED BMP ACTIVITIES	BMP	ACTIVITY 1 PUBLIC NOTICE COMPLIANCE. Allow the public the time and opportunity to respond to proposed MS4 actions, proceedings, and reporting by posting SWMP-related public notices		
			SCHEDULE	AT ALL TIMES		
Part V.C.1.a.v	Make your records, including the NOI and SWMP, available to the public	THIS REQUIREMENT IMPLEMENTED CONTINUOUSLY UTILIZING ONE OR MORE OF THE LISTED BMP ACTIVITIES	BMP	ACTIVITY 1 STORMWATER MANAGEMENT PROGRAM ACCESSIBILITY COMPLIANCE. Allow the public access to the Stormwater Management Program (SWMP), Notice of Intent (NOI), and Annual Stormwater Reports (AR).		
			SCHEDULE	AT ALL TIMES		



OKR04 Part V.C.1.a.i: MCM 1, Education BMP Activity 1 –CRM DISTRIBUTION

In conjunction with MCM 3, 4, 5 & 6	
Supplier / Source**	Description of Available Consumable Resource Material (CRM)
Sources as Located	Spanish language stormwater pollution prevention education materials.
Other Sources As Needed	Informational and Educational Newsletters, Fliers, Inserts, Brochures, Factsheets, Pamphlets, & Booklets, Color Sheets, Activity Sheets, Worksheets, Displays, Posters, and Seasonal Handouts.
	Promotional CRM items determined to be age/audience appropriate such as certificates, pens, pencils, stickers, magnets, cups, t-shirts, and other marketing, advertising, or give-away items will come from a variety of sources and be passed out at events associated with Public meetings, Educational classes, Contests, Events/Fairs, and Stormwater Environmental Excellence Awards Ceremonies. Reusable Banners & Signs, Disposable Banners & Signs, Presentation and Training Resources to promote specific events.
TAS	Brochure - <i>"Creating Healthy Habits in Your Backyard and Beyond"</i> by Tulsa Audubon Society
OCC	Brochure – <i>"Modern Conservationist; Strategies for Strong, Healthy, Resilient Communities"</i>
City of Sand Springs	Stormwater Environmental Excellence Award; presented annually to two (first and second place) outstanding organizations, businesses, companies, subcontractors, builders, etc. who have demonstrated a high level of distinction in stormwater compliance, green infrastructure, stormwater innovations, and/or stormwater projects.
	Enforcement Warnings, Citations, and Stop Work orders
	Survey Slips – Community Knowledge, Understanding, Interest & Involvement
	Junior Stormwater Guardian Activity Book – Elementary education tool
	Displays and Kiosks for all consumable resource materials
	Utility Bill Inserts - (Topic or notification as needed)
	Stormwater Award & Recognition Certificates
M.e.T. Recycling	Booklet – <i>"Tulsa Metropolitan Area Recycling Directory"</i> with Recycling Location Map Inserts in both Spanish & English
	Notifications, Newsletters, and Postings (Topic or notification as needed)
USDA	Brochure – <i>"What is a Watershed?"</i> by USDA National Resources Conservation Service;
WEF	Brochure – <i>"Nonpoint Source Pollution, You Are The Key To The Cleanup"</i> by Water Environment Federation
EPA	Brochures – <i>"After the Storm"</i> , <i>"Plug Into E-Cycling"</i> , <i>"Protecting Water Quality From Urban Runoff"</i> , <i>"The Solution to Pollution"</i> , <i>"Stormwater Structures and Mosquitoes Fact Sheet"</i> , <i>"Greenscaping Your Lawn & Garden"</i> , <i>"A Homeowner's Guide to Septic Systems"</i> , <i>"Household Hazardous Waste: Steps to Safe Management"</i>
INCOG/ GCSA	Brochures – <i>"Oil, Grease and Fat"</i> , <i>"How to Protect Your Local Watershed"</i> , <i>"Origins and Fate of PPCPs In the Environment Fact Sheet"</i> , <i>"Community Car Wash Events Fact Sheet"</i> , <i>"A Homeowner's Guide to Protecting our Water"</i> , <i>"A Homeowner's Guide to Recycling and Reuse"</i> , <i>"A Pet Owner's Guide to Protecting Our Water"</i> , <i>"So It's Raining"</i>
	Training Material – <i>"Phase II Stormwater: Information for City and County Officials"</i> , <i>"Handling and Disposal of Chemicals at Municipal Sites"</i> , <i>"Green Country Stormwater Alliance"</i> , <i>"Municipal Best Management Practices That Protect Our Water"</i> , <i>"A Retailers Guide to Pesticide Basics"</i> , <i>"A Food Service Guide to Waste Disposal"</i> , <i>"A Homebuilder's Guide to Erosion Control"</i> , <i>"Final Stabilization at Construction Sites: OKR10 Requirements"</i>
OSU	Training Material – <i>"Using Vegetation for Erosion Control on Construction Sites"</i>
Greenstar	Brochure – <i>Greenstar Recycling Locations</i> by Greenstar North America

Table 4 - CONSUMABLE RESOURCE MATERIALS LIST

**CRMs listed are not the only CRMs available or utilized. This list is annually reviewed and will be updated as necessary due to changes in availability or relevance. EXAMPLES ARE SHOWN IN APPENDIX E.



Reason for Selection – Consumable Resource Materials (CRMs) provide the community with a physical representation of the information available to assist them with self-education about their personal impact on and the pursuit of improving the overall water quality of their community. CRMs are cost, implementation, and impact effective.

Target Audience or Participants – The target audience for this BMP activity includes the entire City of Sand Springs MS4 Community – General Public (including all ethnic and socio-economic groups), Commercial Business Owners & Employees, Industrial Business Owners & Employees, Primary & Secondary Schools, Non-Profits, and City Staff/Crews/Employees. The City of Sand Springs considers them most likely to be significant sources of stormwater pollutants within the MS4.

Measurable Goal – There are over 1400 different CRM types currently available for distribution. A minimum of 500 CRM pieces will be distributed annually. This total may be of one CRM type or a combination of multiple CRMs.

Because the number of consumable materials produced, displayed, passed out, or used can be tracked, this BMP has a quantifiably measurable goal.

This BMP activity is also qualitatively measurable. Email, phone call, fax, City Website or Social Media, or in-person feedback from individuals and stakeholders in the MS4 will include requests for the restocking of current CRM materials that the community finds useful, comments on the quality of the materials, and/or requests for additional and/or different CRM materials.

Table 4 is a segment of the current “adaptive list” of CRMs used by the MS4. The table includes the supplier/source of the materials, the resource material type, and, if necessary, how the CRM will be utilized. CRMs listed as “As Needed/ As Located” are important for allowing new and more effective resources to be utilized as they become available or when special or focused events occur. The SWMP report(s) will list the actual CRMs used annually. Revisions to this table will be made based on the effectiveness reported in the annual SWMP report.

Effectiveness will be derived from the feedback from users on the material’s usefulness, any pollution abatement actions taken as a direct result of CRMs provided to the public, and the overall effectiveness of each CRM to target pollutant sources from pesticides, fertilizers, detergents, solvents, motor oil, antifreeze, other motor and engine fluids, oil-based paints or lacquers, rubbish (floatable materials), pet waste, and landscaping/yard waste, and/or TMDL pollutants of concern (POC). Because the list is an “adaptive list”, it will be constantly revised and updated to maintain the highest quality of CRMs available for public use.

Time line for BMP implementation – The distribution of Educational Materials is a historically utilized BMP of the City and will continue to be utilized until proven ineffective.

This BMP Activity is implemented in coordination with MCM 3, 4, 5, and 6 – Education BMP Activity 1 is implemented in coordination with MCM 3, 4, 5, & 6. BMP activities listed under Education BMP Activity 1 are specifically utilized to meet these additional MCM requirements.

Distribution Schedule – Consumable Resource Materials will be distributed per the amount shown in Table 3 and the type/number of CRMs listed will be updated with the SWMP Annual Report as necessary. Additionally,

- Brochures – Three (3) or more types will be available at all times in hard copy form at Public Works Facilities’ displays. If Brochures cannot be passed out in person or made available in hardcopy form due to a declared City, State, or National/Federal emergency, they will be scanned and posted on the City website OR mailed directly to requesting individuals.
- Training Resources – Will be made available with planned events. They will be passed out in hard copy form for in-person events or emailed/mailed when events are held on-line with resources like Zoom or Microsoft Teams.



- Mailers or Inserts – Will be sent via mail as necessary.
- Recognition/Participation Awards and Certificates – Will be presented in person at the time of award (in most cases annually) or mailed if necessary.
- Survey Slips – Surveys will be performed at events and/or posted on the City’s social media as necessary.
- Other Informational and Educational Newsletters, Fliers, Inserts, Posters, Banners, Fact Sheets, Pamphlets, Booklets, Brochures, Displays & Signs – Will be made available as needed, when located as a new resource, or with planned events.

Examples of current CRM materials are shown in Appendix E.

Control Techniques & Systems –CRMs will need to be replenished, rotated, reevaluated, and/or updated as necessary or as they become available. A quarterly visual inventory will be conducted to assist in this replenishment. If certain CRMs need to be replenished more often, a larger supply will be made available to the public and the item will be added, in electronic format, to the City’s website. If a CRM is no longer available or is found to be ineffective, an alternative will be located and the CRMs’ use will be notated in the annual report. If CRMs cannot be passed out in person form due to a declared City, State, or National/Federal emergency or other disruptive events, CRMs will be mailed directly to requesting individuals, and awards/certificates will be sent via mail instead of presented in person. If they cannot be distributed or made available in hardcopy, the City has provided the community with several ways to educate themselves and/or report a stormwater pollution concern:

- In person – 13101 W. 46th Street, Sand Springs, OK 74063
- Stormwater Coordinator Email – hlbrown@sandspringsok.org, cdblair@sandspringsok.org
- Stormwater Coordinator Phone Number – (918) 246-2589
- QR an Alternative BMP Activity from Table 3 will be utilized.
- City Instagram – @sandspringsok
- City Twitter – @Sand_Springs_OK
- City Website ‘Report a Problem’ and City Citizen Request Tracker iPhone App – <https://sandspringsok.org/387/Stormwater-Management-Program>



The CRT App allows citizens to report issues - potholes, graffiti, down street lights, stormwater pollution, etc. - using GPS location detection. Once the issue is submitted, the citizen will receive a confirmation email and can log in to view the status of their request/report along with comments posted by government officials. [Download Now](#)

- City Facebook ‘Report a Problem’ – <https://facebook.com/SandSprings.OK>



The CRT App for Facebook allows citizens to report issues - potholes, graffiti, down street lights, stormwater pollution, etc. - using GPS location detection. Once the issue is submitted, the citizen will receive a confirmation email and can log in to view the status of their request/report, along with comments posted by government officials, from Facebook.

Design and/or Engineering Methods – The design of all websites and social media and the design for each CRM will be the responsibility of the City of Sand Springs, its representatives, or each supplier/source as listed in Table 3. Each CRM must specifically address stormwater-related topics such as:

- The City of Sand Springs’ SWMP and MS4
- Water quality
- Environmental impacts & concerns
- Existing ordinances, laws, regulations, & requirements



- Pollutant & chemical proper use, storage, recycling & disposal
- Proper septic system maintenance
- How to get involved and/or report violations

There are no engineering methods for this BMP.

Enforcement, Implementation, and Coordination Responsibilities – This BMP will be enforced, implemented, and coordinated entirely by the City of Sand Springs and its authorized representatives. CRMs will be rotated and/or updated as necessary or as they become available.

NOTE:

<p>Indian Nations Council of Governments (INCOG) and Green Country Stormwater Alliance (GCSA)</p>	<p>The City of Sand Springs is a member of both INCOG and GCSA. The City will provide sufficient funds for INCOG to assist its GCSA members with their SWMP MCM and BMP requirements. INCOG’s GCSA program will be managed by the Environmental and Energy Division at INCOG. INCOG will submit an annual written scope of services to the City of Sand Springs that will specify INCOG’s role in providing technical support and activities, as well as maintaining the GCSA stormwater website on behalf of the City of Sand Springs and other GCSA members. INCOG and/or GCSA will provide members access to CRMs, Training, Classes, GIS Resources, Mapping Services, Hazard Mitigation Plan Development, TMDL guidance, and QAPP development. Some CRMs will be provided to INCOG by Federal, State, or other sources and distributed by INCOG/GCSA. Some training, classes, and/or CRM materials will be developed collaboratively by GCSA members.</p>
<p>M.e.T.</p>	<p>The City of Sand Springs is a member community of the Metropolitan Environmental Trust (M.e.T.). The City will provide sufficient funds to assist the Metropolitan Environmental Trust (M.e.T.) with its efforts to collaborate with member communities to develop, deliver, and support environmental programs and services that follow regulatory compliance, teach sound environmental practices, and reduce the solid waste stream. The M.e.T. provides environmental education to the public, hosts awareness and special recycling / hazardous waste collection events, and operates 10 public recycling centers on behalf of its member communities.</p>



OKR04 Part V.C.1.a.i: MCM 1, Education BMP Activity 2 – IN-PERSON EDUCATIONAL EVENTS/PROGRAMS

In conjunction with MCM 3, 4, 5 & 6	
Available Program/Event**	Description of Purpose
Hazardous Waste Collection Event	This M.E.T. co-sponsored event provides the community, as a whole, the opportunity to learn about/dispose of household, commercial, or industrial hazardous waste properly. Additional promotion, support, and/or staff will be provided by the City as needed or requested.
Adopt-A-Storm Drain Program	Church groups, the Boy Scouts, Neighborhood HOAs, or other groups can adopt one or more individual storm drains – accepting responsibility for making sure drains are properly marked, clear of debris and pollutants, monitor the drain to ensure it is in good working order and to help report any violations/illicit discharges. Illicit discharge education will be provided by City. Supplies for marking drains will be provided from CRM supplies. Additional promotion, support, and/or staff will be provided by the City as needed or requested.
Public Meetings	The City will hold public meetings at City Hall to discuss upcoming SWMP-related events, allow the public to bring any questions, concerns, or issues to the attention of the SWMP Coordinator and the City Staff, and distribute appropriate educational CRMs.
Recycling Collection Event	This M.E.T. co-sponsored event provides the community, as a whole, the opportunity to learn about/dispose of household, commercial, or industrial hazardous waste properly. Additional promotion, support, and/or staff will be provided by the City as needed or requested.
Earth Day at Chandler Park	Students from various schools including public, private, and home school groups learn about the environment, various pollution prevention techniques, how to protect the environment, and how to live “Earth Friendly”.
Contests, Giveaways & Awards	Stormwater Environmental Excellence Award / “Show Your Stormwater Knowledge & Win a Prize” contests at events and fairs / Cleanest Stormdrains Contest for neighborhoods with HOAs / Stormdrain/Stormwater Coloring and Artwork contests
Clean-up Days Event	Multiple local organizations – church groups, HOAs, Scouting troops, etc. Clean-up Days will be announced and advertised to the community. Recognition and/or Awards will be given to individuals/groups who submit proof of clean-up activities on the Sand Springs’ Facebook Page. Additional supplies for clean-up may be provided by the City as needed. Illicit discharge education will be provided by City. Additional promotion, support, and/or staff will be provided by the City as needed or requested.
Stormdrain Marking Day	Coordinated with and organized by Boy Scouts: Troop 101. Troops will recruit and then organize scouts and volunteers to mark stormdrains. Supplies for marking drains will be provided from City CRM supplies. Illicit discharge education will be provided by City. Additional promotion, support, and/or staff will be provided by the MS4 as needed or requested.
<i>Make Your Own Watershed Suitcase Educational Program</i>	Interactive curriculum presented to elementary students educating them on watersheds, how they work, and the pollutants that impact them. The <i>River Runner Rain Drop Simulation Program</i> and Multiple CRMs are used in conjunction with this program.
<i>Watershed in a Suitcase Educational Program</i>	Interactive presentation presented to elementary students educating them on watersheds, how they work, and the pollutants that impact them. The <i>River Runner Rain Drop Simulation Program</i> and Multiple CRMs are used in conjunction with this program.
<i>Storm Sewer In A Suitcase Educational Program</i>	Interactive presentation presented to elementary students educating them on how stormdrains work and the pollutants that impact the watershed. “ <i>Junior Stormwater Guardian Activity Book</i> ” and “ <i>So It’s Raining</i> ” CRMs used in conjunction with this program.
Volunteer Stormwater Helper	Community Service Hours will be awarded to student volunteers who need to complete hours for School, Scouting, Sports, or other non-court-mandated programs. Volunteers will be educated (age appropriately) on Stormwater Coordinator duties and will help perform/fulfill SWMP BMP required tasks.

Table 5 – IN-PERSON EDUCATIONAL EVENT/PROGRAM LIST

**The events/programs listed are not the only ones available or utilized. This list is annually reviewed and will be updated as necessary due to changes in availability or relevance. EXAMPLES ARE SHOWN IN APPENDIX E.



Reason for Selection – The programs listed in Table 5 were selected to accommodate the City’s need for cost-effectively implementing community educational involvement programs. These programs build trust and support for the overall SWMP; increasing the probability for continued public involvement, input, and overall success in completing OKR04 permit requirements of reducing pollutants in stormwater runoff. In cooperation with ODEQ and INCOG, the City of Sand Springs has taken several steps to inform and include the public in understanding and providing input in the development of the SWMP program. These include:

- Presenting program staff, activity implementation, and budget information about the SWMP program in City Council Public Meetings.
- Responding to questions from the public and distributing information to the community.
- Regular printing of articles in the Sand Springs Leader, a local newspaper, about the program and requesting citizen input.
- Providing links to educational information, additional resources like ODEQ, INCOG, and the GCSA, and providing a copy of both the OKR04 permit and the City’s SWMP on the City website: (<http://www.sandspringsok.org/387/Stormwater-Management-Program>).

Target Audience or Participants – The target audience for this BMP activity includes the entire City of Sand Springs MS4 Community – General Public (including all ethnic and socio-economic groups), Commercial Business Owners & Employees, Industrial Business Owners & Employees, Primary & Secondary Schools, Non-Profits, and City Staff/Crews/Employees. The City of Sand Springs considers them most likely to be significant sources of stormwater pollutants within the MS4.

Measurable Goal – Table 3, located at the beginning of MCM 1, details the requirement reference, the number of education and/or involvement activities required, the available primary and alternate BMP activities that the City can or will utilize to meet the requirement, and how often the BMP activity or alternate activity is required to be implemented. Table 5 above contains the current list of programs or events utilized by the City for this BMP activity, a description of the program, and reference to any outside implementer(s). This BMP activity is quantifiably measurable based on the attendance numbers at meetings, contests, and events, the number of volunteer hours awarded, the number of storm drains both adopted and properly monitored, and the number of entries for contests and giveaways. This BMP activity is also qualitatively measurable. Email, phone call, fax, City Website or Social Media, or in-person feedback from individuals and stakeholders in the MS4 will include requests for programs that the community finds useful, comments on the quality of the programs, and/or requests for additional or different programs.

The SWMP annual report(s) will list the actual attendance for each program, feedback on the materials/program, any pollution abatement actions taken as a direct result of the program(s), and the overall effectiveness of each program to target pollutant sources from pesticides, fertilizers, detergents, solvents, motor oil, antifreeze, other motor and engine fluids, oil-based paints or lacquers, rubbish (floatable materials), pet waste, landscaping/yard waste, and TMDL pollutants of concern (POC). Revisions to the available program or event listed in the SWMP will be made based on the effectiveness reported in the annual SWMP report.

Timeline for BMP implementation – In-person educational events are a historically utilized BMP of the City and will continue to be utilized until proven ineffective.

This BMP Activity is implemented in coordination with MCM 3, 4, 5, and 6 – Education BMP Activity 2 is implemented in coordination with MCM 3, 4, 5, & 6. BMP activities listed under Education BMP Activity 2 are specifically utilized to meet these additional MCM requirements.

Distribution Schedule – The BMP activity or alternate activity from Table 3 will be implemented per the schedule shown in Table 3 and updated with the SWMP Annual Report as necessary. If the BMP activity(s) listed cannot be implemented by the City per the schedule due to a declared City, State, or



National/Federal emergency or other disruptive event, CRM materials will be made available in one of the following manners:

- They will be made available via the City website or social media.
- They will take place via Zoom or another online meeting program.
- OR Another BMP Activity will be utilized.

By encouraging the community to be conscious of their impact on the environment, educating them on pollution prevention, and by involving them and making them stakeholders in the protection of MS4 stormwater, the public gains a greater understanding of the reasons why it is necessary and important for an SWMP to be successful. As greater compliance with the SWMP is implemented and achieved, the water quality of receiving waterbodies within the MS4 is greatly improved and those areas impacted previously by pollution can be restored to healthy environmental conditions.

Control Techniques & Systems – The programs/events listed in Table 5 are “adaptive” in that the plans are never complete. The process will require the City of Sand Springs community to continue to refine the program processes, check the effectiveness of the solutions, and reprioritize as necessary. This approach will ensure compliance with Federal and State regulations while addressing the specific stormwater and TMDL priorities of the Sand Springs community in the most efficient and effective way possible.

Design and Engineering Methods – The design of all programs/events and related materials will be the responsibility of the provider/implementer as listed and will be specifically SWMP related. There are no Engineering Methods necessary with this BMP.

Enforcement, Implementation, and Coordination Responsibilities –Implementation and coordination of this BMP activity will be shared responsibilities between the City of Sand Springs and its authorized representatives as noted in Table 5. The City of Sand Springs and its authorized representatives will be entirely responsible for enforcement.

NOTE:

<p>Indian Nations Council of Governments (INCOG) and Green Country Stormwater Alliance (GCSA)</p>	<p>The City of Sand Springs is a member of both INCOG and GCSA. The City will provide sufficient funds for INCOG to assist its GCSA members with their SWMP MCM and BMP requirements. INCOG’s GCSA program will be managed by the Environmental and Energy Division at INCOG. INCOG will submit an annual written scope of services to the City of Sand Springs that will specify INCOG’s role in providing technical support and activities, as well as maintaining the GCSA stormwater website on behalf of the City of Sand Springs and other GCSA members. INCOG and/or GCSA will provide members access to CRMs, Training, Classes, GIS Resources, Mapping Services, Hazard Mitigation Plan Development, TMDL guidance, and QAPP development. Some CRMs will be provided to INCOG by Federal, State, or other sources and distributed by INCOG/GCSA. Some training, classes, and/or CRM materials will be developed collaboratively by GCSA members.</p>
<p>M.e.T.</p>	<p>The City of Sand Springs is a member community of the Metropolitan Environmental Trust (M.e.T.). The City will provide sufficient funds to assist the Metropolitan Environmental Trust (M.e.T.) with its efforts to collaborate with member communities to develop, deliver, and support environmental programs and services that follow regulatory compliance, teach sound environmental practices, and reduce the solid waste stream. The M.e.T. provides environmental education to the public, hosts awareness and special recycling / hazardous waste collection events, and operates 10 public recycling centers on behalf of its member communities.</p>



OKR04 Part V.C.1.a.i: MCM 1, Education BMP Activity 3 – EDUCATIONAL CLASSES, WORKSHOPS, TRAININGS, PRESENTATIONS, AND/OR VIDEOS

In conjunction with MCM 3, 4, 5, & 6	
Presentation/ Workshop/ Seminar/ Class/ Training Program**	Description of Purpose
Outside Sponsored Training, Workshops, & Seminars	INCOG/GCSA – The City of Sand Springs will participate in the regional stormwater education activities sponsored by INCOG’s GCSA. Some educational materials will be provided by INCOG from existing Federal, State, or other sources while other materials will be developed collaboratively by all GCSA members. Additional promotion, support, and/or staff will be provided by the MS4 as needed or requested.
In-House City Employee Education	Employee training to prevent and reduce stormwater pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance. Training will address requirements for inspection and the enforcement of BMPs; Specifically: preventive maintenance, inspection of construction sites for erosion and sediment control measures, spill prevention and response, and expected good housekeeping measures to prevent and reduce stormwater pollution from MS4 activities.
Builder, Contractor, and Subcontractor Education	The City of Sand Springs will provide educational training to builders, contractors, and/or subcontractors detailing the specifics of the City of Sand Springs SWMP, local ordinances, and the current OKR04 and OK10 permit requirements applicable to them. Education will cover potential citations and fines that can be incurred for non-compliance. Events include the Annual Resource Management Conference and Sans Springs Stormwater Environmental Excellence Award. CRMs that detail proper stormwater pollution prevention such as “Material Washout Structures”, “Inlet Protection”, “Preserving Natural or Existing Vegetation”, “Vegetated Buffers” and “LID” will be provided from MS4 supplies and used in conjunction with this program.
General Public Education	The City of Sand Springs will give a presentation to the general public detailing the specifics of the current OKR04 and SWMP requirements applicable to them, local ordinances, and potential citations and fines that can be incurred for non-compliance, and pass out CRMs that detail proper stormwater pollution prevention.
Public School Education Programs	The public school education program will be presented by the City of Sand Springs staff and/or it will be made available to local teachers/educators. The program will focus on basic water quality impacts, pollutant reduction, and options for pollutant disposal (e.g. recycling and collection events). Programs include: “Storm Sewer In A Suitcase”, “Watershed In A Suitcase”, “Make Your Own Watershed”, and “River Runner Rain Drop Simulation”. Events include Earth Day at Chandler Park and the Sand Springs Herbal Affair. CRMs including, “Junior Stormwater Guardian Activity Book” and “So It’s Raining” will be provided from MS4 supplies and used in conjunction with this program.

Table 6 - CLASSES & EDUCATIONAL PRESENTATION LIST

**Educational classes/presentations listed are not the only ones available or utilized. This list is annually reviewed and will be updated as necessary due to changes in availability or relevance. EXAMPLES ARE SHOWN IN APPENDIX E.

Reason for Selection – The programs listed were selected to accommodate the City’s need for cost-effectively implementing stormwater education programs. These programs build trust and support for the overall SWMP; increasing the probability for continued public involvement, input, and overall success in completing OKR04 permit requirements of reducing pollutants in stormwater runoff.



The programs inform the target audience of pollution prevention such as local and regional recycling center locations/availabilities, household pollutant collection events, proper construction erosion control, and encourage and educate the target audience to properly store, use, and safely dispose of chemicals such as heavy metals, solvents, acids, and poisons.

Target Audience or Participants – The target audience for this BMP activity includes the entire City of Sand Springs MS4 Community – General Public (including all ethnic and socio-economic groups), Commercial Business Owners & Employees, Industrial Business Owners & Employees, Developer & Construction Industry Employees, Primary & Secondary Schools, and City Staff/Crews/Employees. The City of Sand Springs considers them most likely to be significant sources of stormwater pollutants within the MS4.

Measurable Goal – Table 3, located at the beginning of MCM 1, details the requirement reference, the number of education and/or involvement activities required, the available primary and alternative BMP activities that the City can or will utilize to meet the requirement, and how often the BMP activity or alternate activity is required to be implemented. Table 6 above contains the current list of Presentations, Workshops, Seminars, Classes, Training, or Programs utilized by the City for this BMP activity, a description of the activity item, and reference to any outside implementer(s). This BMP activity is quantifiably measurable based on the attendance numbers and/or the number of times an educational program or video is utilized. This BMP activity is also qualitatively measurable. Email, phone calls, fax, City Website or Social Media, or in-person feedback from individuals and stakeholders in the MS4 will include requests for presentations, workshops, seminars, classes, training, or other educational programs that the community finds useful. It will also include comments on the quality of the BMP activities, feedback on the materials, any pollution abatement actions taken as a direct result of the program(s), and/or requests for additional and/or BMP activities.

The SWMP annual report(s) will list the actual attendance for each BMP activity, feedback on the materials/programs, any pollution abatement actions taken as a direct result of the BMP activity(s), and the overall effectiveness of each program to target pollutant sources from pesticides, fertilizers, detergents, solvents, motor oil, antifreeze, other motor and engine fluids, oil-based paints or lacquers, rubbish (floatable materials), pet waste, landscaping/yard waste, and TMDL pollutants of concern (POC). Revisions to the available BMP activity listed in the SWMP will be made based on the effectiveness reported in the annual SWMP report.

Timeline for BMP implementation – Educational classes, training, workshops, presentations, projects, and video options are current BMP activities for the City of Sand Springs and will continue to be implemented, per the purpose and schedule by City SWMP staff or by another entity as listed in Table 3.

This BMP Activity is implemented in coordination with MCM 3, 4, 5, and 6 – Education BMP Activity 3 is implemented in coordination with MCM 3, 4, 5, & 6. BMP activities listed under Education BMP Activity 3 are specifically utilized to meet these additional MCM requirements.

Distribution Schedule – The BMP activity will be implemented per the schedule shown in Table 3 and updated with the SWMP Annual Report as necessary. If the BMP activity(s) listed cannot be implemented or provided by the City due to a declared City, State, or National/Federal emergency or other disruptive event, the BMP activity(s) listed will be made available in one of the following manners:

- They will be made available via the City website or social media.
- They will take place via Zoom or another online meeting program.
- They will be made available for check-out/borrowing instead of presented in person by a City employee.
- OR Another BMP Activity from Table 3 will be utilized.



By encouraging the community to be conscious of their impact on the environment, educating them on pollution prevention, and involving them and making them stakeholders in the protection of MS4 stormwater, the public gains a greater understanding of the reasons why it is necessary and important for an SWMP to be successful. As greater compliance with the SWMP is implemented and achieved, the water quality of receiving waterbodies within the MS4 is greatly improved and those areas impacted previously by pollution can be restored to healthy environmental conditions.

Control Techniques & Systems – The class/training/workshop/presentation/project/video options must remain “adaptive” to remain updated with the most current and relevant pollution prevention education, techniques, and technology. The process will require the City of Sand Springs & community to continue to refine the program processes, check the effectiveness of the solutions, and reprioritize as necessary. This approach will ensure compliance with Federal and State regulations while addressing the specific stormwater priorities of the Sand Springs community in the most efficient and effective ways possible.

Design and Engineering Methods – The design of all programs and related materials will be the responsibility of the provider/implementer as listed and will be specifically SWMP related. There are no Engineering Methods necessary with this BMP.

Enforcement, Implementation, and Coordination Responsibilities –Implementation and coordination of this BMP will be shared responsibilities between the City of Sand Springs and its authorized representatives - the Metropolitan Environmental Trust (M.E.T.), INCOG, and GCSA - as noted in Tables 3 and 6. The City of Sand Springs and its authorized representatives will be entirely responsible for enforcement.

NOTE:

<p>Indian Nations Council of Governments (INCOG) and Green Country Stormwater Alliance (GCSA)</p>	<p>The City of Sand Springs is a member of both INCOG and GCSA. The City will provide sufficient funds for INCOG to assist its GCSA members with their SWMP MCM and BMP requirements. INCOG’s GCSA program will be managed by the Environmental and Energy Division at INCOG. INCOG will submit an annual written scope of services to the City of Sand Springs that will specify INCOG’s role in providing technical support and activities, as well as maintaining the GCSA stormwater website on behalf of the City of Sand Springs and other GCSA members. INCOG and/or GCSA will provide members access to CRMs, Training, Classes, GIS Resources, Mapping Services, Hazard Mitigation Plan Development, TMDL guidance, and QAPP development. Some CRMs will be provided to INCOG by Federal, State, or other sources and distributed by INCOG/GCSA. Some training, classes, and/or CRM materials will be developed collaboratively by GCSA members.</p>
<p>M.e.T.</p>	<p>The City of Sand Springs is a member community of the Metropolitan Environmental Trust (M.e.T.). The City will provide sufficient funds to assist the Metropolitan Environmental Trust (M.e.T.) with its efforts to collaborate with member communities to develop, deliver, and support environmental programs and services that follow regulatory compliance, teach sound environmental practices, and reduce the solid waste stream. The M.e.T. provides environmental education to the public, hosts awareness and special recycling / hazardous waste collection events, and operates 10 public recycling centers on behalf of its member communities.</p>



OKR04 Part V.C.1.a.i: MCM 1, Education BMP Activity 4 – EDUCATIONAL NOTIFICATIONS

In conjunction with MCM 3, 4, 5, & 6	
Notification Medium**	Description of Purpose
City Website	The City maintains a website and Stormwater tab to keep the public informed about stormwater pollution prevention, educational classes, upcoming public involvement events, and to notify them of public meetings where they can review and comment on the SWMP or TMDL activities.
City Social Media	The City utilizes multiple Social Media outlets – Facebook pages, Instagram, Twitter – to keep the public informed about stormwater pollution prevention, educational classes, upcoming public involvement events, and to notify them of public meetings where they can review and comment on the SWMP.
Other Agency Website(s)	Other agencies such as INCOG, GCSA, OFMA, and FEMA provide educational information and links to the City’s website and multiple Social Media outlets- Facebook pages, Instagram, Twitter – to keep the public informed about stormwater pollution prevention, educational classes, upcoming public involvement events, and to notify them of public meetings where they can review and comment on the SWMP or TMDL activities.
Newsprint Public Notice / Newspaper Article(s) / Press Releases	The City issues newsprint public notices, article(s), and press releases to keep the public informed about stormwater pollution prevention, educational classes, upcoming public involvement events, and to notify them of public meetings where they can review and comment on the SWMP or TMDL activities.
Radio Commercials / Public Service Announcement(s)	The City issues public service announcements and radio commercials to keep the public informed about stormwater pollution prevention, educational classes, upcoming public involvement events, and to notify them of public meetings where they can review and comment on the SWMP or TMDL activities.
Printed Mailer / Utility Insert / Survey Slips / Event Banner / Poster	The City issues mailers, utility inserts, survey slips, event banners, and posters to keep the public informed about stormwater pollution prevention, educational classes, upcoming public involvement events, and to notify them of public meetings where they can review and comment on the SWMP or TMDL activities.
Publication – NOI / City Ordinance / SWMP / Annual Report	The City publishes the NOI, City Stormwater Ordinances, the SWMP, and the SWMP Annual Report on the City’s website. Hard copies are available for viewing and comment by the public.

Table 7 - EDUCATIONAL NOTIFICATIONS LIST

**Notification mediums listed are not the only ones available or utilized. This list is annually reviewed and will be updated as necessary due to changes in availability or relevance. EXAMPLES ARE SHOWN IN APPENDIX D.

Reason for Selection – For the community to be fully informed of educational opportunities, involvement opportunities, and any opportunities to question or comment on the SWMP or SWMP activities, the City of Sand Springs must provide adequate notification to the public in the form of:

- Press Releases and Publications,
- Commercial spots,
- Utilization of Other Entity notification networks,
- Banners/posters/billboards,
- Social media,
- Mailers, and/or
- The City website

Without notification, the community cannot reasonably be expected to become educated or involved.

Target Audience or Participants – The target audience for this BMP includes the entire City of Sand Springs MS4 Community – General Public (including all ethnic and socio-economic groups), Commercial Business



Owners & Employees, Industrial Business Owners & Employees, Developer & Construction Industry Employees, Primary & Secondary Schools, and City Staff/Crews/Employees. The City of Sand Springs considers them most likely to be significant sources of stormwater pollutants within the MS4.

Measurable Goal – Table 3, located at the beginning of MCM 1, details the requirement reference, the number of education and/or involvement activities required, the available primary and alternative BMP activities that the City can or will utilize to meet the requirement, and how often the BMP activity or alternate activity is required to be implemented. Table 7 above contains the current list of notification mediums utilized by the City for this BMP activity, a description of the medium, and reference to any outside implementer(s). This BMP activity is quantifiably measurable based on the click-through numbers online, subscriber numbers, or listener numbers. This BMP activity is also qualitatively measurable – Email, phone call, fax, City Website or Social Media, or in-person feedback from individuals and stakeholders in the MS4 at meetings, contests, and events, and the number of entries for giveaways can be directly related back to notification mediums.

The SWMP annual report(s) will list the actual quantitative and qualitative numbers and the effectiveness of each notification medium utilized during the reporting period. Revisions to the available program or event listed in the SWMP will be made based on the effectiveness reported in the annual SWMP report.

Timeline for BMP implementation – Educational notifications are a historically utilized BMP of the City and will continue to be utilized until proven ineffective.

This BMP Activity is implemented in coordination with MCM 3, 4, 5, and 6 – Education BMP Activity 4 is implemented in coordination with MCM 3, 4, 5, & 6. BMP activities listed under Education BMP Activity 4 are specifically utilized to meet these additional MCM requirements.

Distribution Schedule – The BMP activity or alternate will be implemented per the schedule shown in Table 3 and updated with the SWMP Annual Report as necessary. If the BMP activity(s) listed cannot be implemented by the City due to a declared City, State, or National/Federal emergency or other disruptive event another Educational BMP Activity from Table 3 will be utilized. By encouraging the community to be conscious of their impact on the environment, educating them on pollution prevention, and by involving them and making them stakeholders in the protection of MS4 stormwater, the public gains a greater understanding of the reasons why it is necessary and important for an SWMP to be successful. As greater compliance with the SWMP is implemented and achieved, the water quality of receiving waterbodies within the MS4 is greatly improved and those areas impacted previously by pollution can be restored to healthy environmental conditions.

Control Techniques & Systems – The notification mediums listed in Table 7 are “adaptive” in that the plans are never complete. The process will require the City of Sand Springs community to continue to refine the BMP activity’s implementation, check the effectiveness of the medium(s), and make changes as necessary. This approach helps ensure reaching the goal of total compliance with Federal and State regulations while addressing the specific SWMP and TMDL priorities of the Sand Springs community in the most efficient and effective way possible. Notifying the target audience of anything relating to the SWMP helps reach that goal of compliance.

Design and Engineering Methods – The design of all mediums will be the responsibility of the provider/implementer as listed in Table 3 and will be specifically SWMP related. There are no Engineering Methods necessary for this BMP activity.

Enforcement, Implementation, and Coordination Responsibilities – Implementation and coordination of this BMP activity will be shared responsibilities between the City of Sand Springs and its authorized representatives as noted in Tables 3 and 7. The City of Sand Springs and its authorized representatives will



be entirely responsible for the enforcement of proper notification laws, regulations, ordinances, or resolutions.

NOTE:

<p>Indian Nations Council of Governments (INCOG) and Green Country Stormwater Alliance (GCSA)</p>	<p>The City of Sand Springs is a member of both INCOG and GCSA. The City will provide sufficient funds for INCOG to assist its GCSA members with their SWMP MCM and BMP requirements. INCOG’s GCSA program will be managed by the Environmental and Energy Division at INCOG. INCOG will submit an annual written scope of services to the City of Sand Springs that will specify INCOG’s role in providing technical support and activities, as well as maintaining the GCSA stormwater website on behalf of the City of Sand Springs and other GCSA members. INCOG and/or GCSA will provide members access to CRMs, Training, Classes, GIS Resources, Mapping Services, Hazard Mitigation Plan Development, TMDL guidance, and QAPP development. Some CRMs will be provided to INCOG by Federal, State, or other sources and distributed by INCOG/GCSA. Some training, classes, and/or CRM materials will be developed collaboratively by GCSA members.</p>
<p>M.e.T.</p>	<p>The City of Sand Springs is a member community of the Metropolitan Environmental Trust (M.e.T.). The City will provide sufficient funds to assist the Metropolitan Environmental Trust (M.e.T.) with its efforts to collaborate with member communities to develop, deliver, and support environmental programs and services that follow regulatory compliance, teach sound environmental practices, and reduce the solid waste stream. The M.e.T. provides environmental education to the public, hosts awareness and special recycling / hazardous waste collection events, and operates 10 public recycling centers on behalf of its member communities.</p>



OKR04 Part V.C.1.a.i: MCM 1, Involvement BMP Activity 1 – VOLUNTEER PROGRAM

In conjunction with MCM 3, 4, 5, & 6	
Volunteer Program**	Description of Purpose
Stormwater Volunteer & Community Service Hours Program	The City provides students seeking to meet the requirements of school, sporting, or club programs or that are seeking to diversify their portfolio of activities for college and scholarship application purposes can receive volunteer and community service credits from the City. Volunteers will receive training and education on stormwater pollution prevention and they will assist the Sand Springs Stormwater Coordinator in completing SWMP BMP Activities.
Community Clean Up	The City sponsors and promotes community organizations such as churches, youth groups, and schools in Community Clean Up events or programs.
Internship & Seasonal Worker Programs	Multiple City Departments maintain Internship & Seasonal Worker Programs that provide opportunities to assist in the completion of SWMP BMP Activities.
Stormwater Environmental Excellence Awards	The City of Sand Springs presents awards to two organizations, businesses, companies, subcontractors, builders, or individuals (including City staff) who have voluntarily demonstrated a high level of distinction in stormwater compliance, green infrastructure, stormwater innovations, stormwater projects, or outstanding stormwater pollution prevention. Winners are nominated by the community and/or the City and chosen by the City Manager or City Council.

Table 8 – VOLUNTEER PROGRAM LIST

**The volunteer programs listed are not the only ones available or utilized.

This list is annually reviewed and will be updated as necessary due to changes in availability or relevance. EXAMPLES ARE SHOWN IN APPENDIX D.

Reason for Selection – The BMP activity programs listed were selected to accommodate local resources with cost-effectively implementing stormwater involvement programs. These programs build trust and support for the overall SWMP; increasing the probability for continued public involvement, input, and overall success in completing OKR04 permit requirements of reducing pollutants in stormwater runoff.

The programs inform the target audiences of stormwater pollution prevention and directly involve stakeholders in addressing existing or potential stormwater pollution problems.

Target Audience or Participants – The target audience for this BMP activity includes the entire City of Sand Springs MS4 Community – General Public (including all ethnic and socio-economic groups), Commercial Business Owners & Employees, Industrial Business Owners & Employees, Developer & Construction Industry Employees, Primary & Secondary Schools, and City Staff/Crews/Employees. The City of Sand Springs considers them most likely to be significant sources of stormwater pollutants within the MS4.

Measurable Goal – Table 3, located at the beginning of MCM 1, details the requirement reference, the number of involvement activities required, the available primary and alternative BMP activities that the City can or will utilize to meet the requirement, and how often the BMP activity or alternate activity is required to be implemented. Table 8 above contains the current list of Volunteer Programs utilized by the City for this BMP activity and a description of the activity item. This BMP activity is quantifiably measurable based on the number of volunteers, workers, or nominations. This BMP activity is also qualitatively measurable. Email, phone calls, fax, City Website or Social Media, or in-person feedback from individuals and stakeholders in the MS4 will include comments on the quality of the volunteer programs and any pollution prevention or abatement actions taken as a direct result of the program(s).

The SWMP annual report(s) will list the qualitative and quantitative numbers produced during the reporting period for volunteer activity(s), and the overall effectiveness of each volunteer program to target pollutant sources from pesticides, fertilizers, detergents, solvents, motor oil, antifreeze, other



motor and engine fluids, oil-based paints or lacquers, rubbish (floatable materials), pet waste, landscaping/yard waste, and TMDL pollutants of concern (POC). Revisions to the available BMP activity listed in the SWMP will be made based on the effectiveness reported in the annual SWMP report.

Timeline for BMP implementation – Volunteer programs are a current BMP activity for the City of Sand Springs and will continue to be implemented, per the purpose and schedule listed in Table 3, by City SWMP staff or by another entity as listed.

This BMP Activity is implemented in coordination with MCM 3, 4, 5, and 6 – Involvement BMP Activity 1 is implemented in coordination with MCM 3, 4, 5, & 6. BMP activities listed under Involvement BMP Activity 1 are specifically utilized to meet these additional MCM requirements.

Distribution Schedule – The BMP activity or an alternate activity from Table 3 will be implemented per the schedule shown and updated with the SWMP Annual Report as necessary. If the BMP activity(s) listed cannot be utilized in person by the City due to a declared City, State, or National/Federal emergency or other disruptive event, programs will be made available in the following manner:

- Programs will be made available via the City website or social media that will allow households, businesses, companies, individuals, etc. to voluntarily implement (without City assistance) and report to the City.
- OR Another BMP Activity will be utilized.

By encouraging the community to be conscious of their impact on the environment, educating them on pollution prevention, and by involving them and making them stakeholders in the protection of MS4 stormwater, the public gains a greater understanding of the reasons why it is necessary and important for an SWMP to be successful. As greater compliance with the SWMP is implemented and achieved, the water quality of receiving waterbodies within the MS4 is greatly improved and those areas impacted previously by pollution can be restored to healthy environmental conditions.

Control Techniques & Systems – The volunteer program options must remain “adaptive” to continue to be the most current and relevant options available. The process will require the City of Sand Springs & the MS4 community to continue to refine the program processes, check the effectiveness of the solutions, and reprioritize as necessary. This approach will ensure compliance with Federal and State regulations while addressing the specific SWMP and TMDL stormwater priorities of the Sand Springs community in the most efficient and effective way possible.

Design and Engineering Methods – The design of all programs and related materials will be the responsibility of the provider/implementer as listed and will be specifically SWMP related. There are no Engineering Methods necessary with this BMP in Table 3.

Enforcement, Implementation, and Coordination Responsibilities – Implementation and coordination of the BMP activities listed will be the shared responsibility between the City of Sand Springs and its authorized representatives as noted in Tables 3 and 8. The City of Sand Springs and its authorized representatives will be entirely responsible for enforcement.



OKR04 Part V.C.1.a.i: MCM 1, Involvement BMP Activity 2 – PUBLIC MEETINGS

In conjunction with MCM 3, 4, 5, & 6	
Meeting Type**	Description of Purpose
Public Hearings & City Council Meetings	The City holds Public Hearings and Council Meetings monthly. Information specific to SWMP, NOI, and Stormwater Annual Report documents will be presented at a minimum of one of these meetings.
NOI / SWMP / Stormwater Annual Report Presentations	Information specific to SWMP, NOI, and Stormwater Annual Report will be presented at a minimum of one PWAC meeting. Specifically: BMP Activity implementation, volunteer and educational opportunities, CRM availability/location pick-ups, and the SWMP, NOI, and Stormwater Annual Report documents.
INCOG/GCSA public meeting	INCOG/GCSA meetings will inform the public of pollution prevention techniques, TMDL management, Bacterial management, and other stormwater-specific topics.
Stormwater Environmental Excellence Award Presentations	The Stormwater Environmental Excellence Award Presentations will involve the general public, the award recipients, and the members of the City Council. The award presentations will detail the specific stormwater pollution prevention measures or activities accomplished by the award recipients.

Table 9 – PUBLIC MEETING LIST

**Meeting types listed are not the only ones available or utilized. This list is annually reviewed and will be updated as necessary due to changes in availability or relevance. EXAMPLES ARE SHOWN IN APPENDIX E.

Reason for Selection – The BMP activities listed were selected to accommodate local resources with cost-effectively involving the MS4 community. Involvement builds trust and support for the overall SWMP; increasing the probability for continued public involvement, input, and overall success in completing OKR04 permit requirements of reducing pollutants in stormwater runoff. Public meetings inform the target audience of SWMP & TMDL activities, pollution prevention such as local and regional recycling center locations/availabilities, household pollutant collection events, proper construction erosion control, and encourage and educate the target audience to properly store, use, and safely dispose of chemicals such as heavy metals, solvents, acids, and poisons.

Target Audience or Participants – The target audience for this BMP includes the entire City of Sand Springs MS4 Community – General Public (including all ethnic and socio-economic groups), Commercial Business Owners & Employees, Industrial Business Owners & Employees, Developer & Construction Industry Employees, Primary & Secondary Schools, and City Staff/Crews/Employees. The City of Sand Springs considers them most likely to be significant sources of stormwater pollutants within the MS4.

Measurable Goal – Table 3, located at the beginning of MCM 1, details the requirement reference, the number of involvement activities required, the available primary and alternative BMP activities that the City can or will utilize to meet the requirement, and how often the BMP activity or alternate activity is required to be implemented. Table 9 above contains the current list of meeting types utilized by the City for this BMP activity, a description of the meeting type, and reference to any outside implementer(s). This BMP activity is quantifiably measurable based on meeting attendance numbers. This BMP activity is also qualitatively measurable – Email, phone call, fax, City Website or Social Media, or in-person feedback from individuals and stakeholders in the MS4 can be directly related back to public meetings.

The SWMP annual report(s) will list the actual quantitative and qualitative numbers and the effectiveness of each meeting type utilized during the reporting period. Revisions to the available meetings listed in the SWMP will be made based on the effectiveness reported in the annual SWMP report.



Timeline for BMP implementation – Public Meetings are a current BMP activity for the City of Sand Springs and will continue to be implemented by City SWMP staff or by another entity as listed in Table 3. **This BMP Activity is implemented in coordination with MCM 3, 4, 5, and 6** – Involvement BMP Activity 2 is implemented in coordination with MCM 3, 4, 5, & 6. BMP activities listed under Involvement BMP Activity 2 are specifically utilized to meet these additional MCM requirements.

Distribution Schedule – The BMP activity or an alternate activity will be implemented per the schedule shown in Table 3 and updated with the SWMP Annual Report as necessary. If the BMP activity(s) listed cannot be utilized in person by the City due to a declared City, State, or National/Federal emergency or other disruptive event, programs will be made available in the following manner:

- Meetings will take place via Zoom or another online meeting program.
- Recordings of meetings will be posted via the City website or social media.
- Awards and certificates will be sent via mail instead of presented in person.
- OR Another BMP Activity will be utilized.

By encouraging the community to be conscious of their impact on the environment, educating them on pollution prevention, and by involving them and making them stakeholders in the protection of MS4 stormwater, the public gains a greater understanding of the reasons why it is necessary and important for an SWMP to be successful. As greater compliance with the SWMP is implemented and achieved, the water quality of receiving waterbodies within the MS4 is greatly improved and those areas impacted previously by pollution can be restored to healthy environmental conditions.

Control Techniques & Systems – The public meeting options must remain “adaptive” to remain updated with the most current and relevant meeting techniques and technology. The process will require the City of Sand Springs community to continue to check the effectiveness of the meeting types and reprioritize or update as necessary. This approach will ensure compliance with Federal and State regulations while addressing the specific stormwater priorities of the Sand Springs community in the most efficient and effective way possible.

Design and Engineering Methods – The design of all BMP activities and related materials will be the responsibility of the program provider/implementer as listed in Table 3 and will be specifically SWMP related. There are no Engineering Methods necessary for this BMP activity.

Enforcement, Implementation, and Coordination Responsibilities – Implementation and coordination of this BMP will be shared responsibilities between the City of Sand Springs and its authorized representatives as noted in Tables 3 and 9. The City of Sand Springs and its authorized representatives will be entirely responsible for enforcement.

NOTE:

<p>Indian Nations Council of Governments (INCOG) and Green Country Stormwater Alliance (GCSA)</p>	<p>The City of Sand Springs is a member of both INCOG and GCSA. The City will provide sufficient funds for INCOG to assist its GCSA members with their SWMP MCM and BMP requirements. INCOG’s GCSA program will be managed by the Environmental and Energy Division at INCOG. INCOG will submit an annual written scope of services to the City of Sand Springs that will specify INCOG’s role in providing technical support and activities, as well as maintaining the GCSA stormwater website on behalf of the City of Sand Springs and other GCSA members. INCOG and/or GCSA will provide members access to CRMs, Training, Classes, GIS Resources, Mapping Services, Hazard Mitigation Plan Development, TMDL guidance, and QAPP development. Some CRMs will be provided to INCOG by Federal, State, or other sources and distributed by INCOG/GCSA. Some training, classes, and/or CRM materials will be developed collaboratively by GCSA members.</p>
<p>M.e.T.</p>	<p>The City of Sand Springs is a member community of the Metropolitan Environmental Trust (M.e.T.). The City will provide sufficient funds to assist the Metropolitan Environmental Trust (M.e.T.) with its efforts to collaborate with member communities to develop, deliver, and support environmental programs and services that follow regulatory compliance, teach sound environmental practices, and reduce the solid waste stream. The M.e.T. provides environmental education to the public, hosts awareness and special recycling / hazardous waste collection events, and operates 10 public recycling centers on behalf of its member communities.</p>



OKR04 Part V.C.1.a.iii, iv, and v: Additional MCM 1 Requirements

Additional requirements are listed for MCM 1. The following is a list of the requirements and the BMP Activity(s) that fulfill the additional requirements.

Part V.C.1.a.iii - RECEIVE, REVIEW, AND RESPOND TO PUBLIC COMMENTS ON THE SWMP - Public comments on the SWMP are received and reviewed by the City of Sand Springs Coordinator and others that are responsible for the SWMP and its various BMP activities. In addition to responding to phone calls and emails, this requirement is met by the BMP activities listed under **Educational BMP Activity 4 – Educational Notifications** and **Involvement BMP Activity 2 - Public Meetings**. The activity types that are specifically utilized are:

In conjunction with MCM 3, 4, 5, & 6	
Activity Type**	Description of Purpose
City Website and Social Media	To provide public access to the City’s current SWMP, NOI, Stormwater Ordinances, and Links to government entities or authorized representative stormwater websites and social media. Exact Click-Through Numbers will be reported annually.
INCOG Website	INCOG’s Green Country Stormwater Alliance (GCSA) website contains web pages for the public about the Phase II stormwater permit program, including invitations to contact the local stormwater managers of each GCSA member to learn more about their local program. Exact Click-Through Numbers will be reported annually.
Public Hearings & Council Meetings	The City holds Public Hearings and Council Meetings monthly. Information specific to SWMP will be presented at a minimum of one of these meetings. Specifically: MCM & BMP implementation, volunteer and educational opportunities, CRM availability/location pick-ups.

Table 10 – Part V.C.1.a.iii Additional Activities

Part V.C.1.a.iv – COMPLY WITH STATE AND LOCAL PUBLIC NOTICE REQUIREMENTS - This requirement is met by the activities listed under **Educational BMP Activity 4 – Educational Notifications**. All activities listed under Educational BMP Activity 4 are required to meet state and local notification laws and ordinances.

Part V.C.1.a.v – AVAILABILITY AND PUBLIC ACCESS TO STORMWATER DOCUMENTS AND RECORDS - This requirement is met by the activities listed under **Educational BMP Activity 2 – In-Person Educational Events/Programs, Educational BMP Activity 3 – Educational Classes, Workshops, Training, Presentations, and/or Videos, and Educational BMP Activity 4 – Educational Notifications**. This requirement is also met by the activities listed under **Involvement BMP Activity 2 - Public Meetings**.



MCM 2- INDUSTRIAL STORMWATER RUNOFF CONTROL

References to other State or Federal documents are shown in green text and verbatim quotes are shown in *italicized green text*.

Per Part V.C.2, “*Category 3 MS4s are required to implement and enforce a program to prevent or reduce pollutants in any stormwater runoff to (the) MS4 from independently-owned industrial activities and list industrial facilities that are “subject to OKR05 or individual OPDES or NPDES permits”.*

The City of Sand Springs is classified as a Category 2 small MS4 per the definition listed in Part II.A. of the OKR04 and, therefore, is not subject to “*implement or enforce*” a program for MCM 2. However, the City of Sand Springs has chosen to be proactive and mitigate the potential impact of industrial stormwater runoff to the MS4 by utilizing activities from MCM 1 BMP Activities to detect and eliminate potential or actual illicit discharges from industrial stormwater runoff.

Reason for Selection – By being proactive, the City of Sand Springs will make industrial stormwater permit holders stakeholders in the protection of MS4 stormwater and give them a greater understanding of the reasons why it is necessary and important for the City of Sand Springs’ SWMP to be successful. As greater compliance with the program is implemented and achieved, the water quality of receiving waterbodies within the MS4 will be greatly improved and those areas impacted previously by illicit discharges and/or pollution will be restored to healthy environmental conditions.

Target Audience or Participants – Industrial Business Owners & Employees of MS4 facilities are the target audience for MCM 2.

Measurable Goal – Activities for this MCM are quantifiably measurable based on the reported numbers from MCM 1 BMP Activities 1-4. This MCM is also qualitatively measurable by tracking emails, phone calls, faxes, City website or social media comments, or in-person feedback from industrial business owners and employees or individuals and stakeholders in the MS4.

Time Line for Implementation – The City of Sand Springs is classified as a Category 2 small MS4 per the definition listed in Part II.A. of the OKR04 and, therefore, not subject to “*implement or enforce*” a program for MCM 2.

This BMP Activity is implemented in coordination with MCM 3, 4, 5, and 6 – MCM2 is implemented in coordination with MCM 3, 4, 5, & 6. BMP activities listed in Table 3 are specifically utilized.

Distribution Schedule – The City of Sand Springs is classified as a Category 2 small MS4 per the definition listed in Part II.A. of the OKR04 and, therefore, is not subject to implementing a “*distribution schedule*” for MCM 2.

Control Techniques & Systems – To mitigate the potential impact on the MS4 and to remain in compliance with all other areas of the current OKR04 Permit, the City of Sand Springs will take appropriate actions to abate OKR05 permittee source pollutants and discharges by:

- Distributing relevant educational brochures to OKR05 permittees;
- Training and educating City workers and representatives to:
 - Perform Dry Weather Field Screenings (DWFS);
 - To inspect for, identify, and report potential illicit discharges; and
 - To report and trace the source of an actual illicit discharge.
- The City will conduct inspections:
 - As part of DWFS
 - In direct response to community complaints about potential or actual illicit discharges;
 - In direct response to City, State, or Federal representatives’ field reports,
 - After locating episodic incidents with no determinable source;

Design and Engineering Methods –The design of all BMP activities (programs and related materials), as listed in Table 3, will be the responsibility of the program provider/implementer as listed and will be specifically SWMP related. There are no Engineering Methods necessary with this BMP.



Enforcement, Implementation, and Coordination Responsibilities – The City of Sand Springs is classified as a Category 2 small MS4 per the definition listed in Part II.A. of the OKR04 and, therefore, not subject to *“implement or enforce”* a program for MCM 2. However, if the City determines a facility or permittee violates its ODEQ Multi-Sector General Permit for Industrial Activities or individual OPDES or NPDES permits (OKR05) for discharges of stormwater, the City will utilize its Stormwater Citation system to ticket and/or fine violators. Appendix E contains copies of the current enforcement mechanisms the City utilizes. If the City lacks the legal authority to implement direct enforcement actions against violators, DEQ authorities will be notified by both email and direct phone calls.



MCM 3- ILLICIT DISCHARGE DETECTION AND ELIMINATION

References to other State or Federal documents are shown in *green text* and verbatim quotes are shown in *italicized green text*.

The City of Sand Springs recognizes two distinct categories of stormwater pollutant incidents – Untraceable Sources and Traceable Sources.

The first category, untraceable sources, covers pollutants introduced into the MS4 from individuals in a one-time episode at a discrete point of entry in which the responsible party or source is not traceable. Examples of these are the dumping of yard waste or trash, motor oil, anti-freeze, or chemicals directly or indirectly (near) into a stormdrain, creek, river, or pond. It may not always be possible to locate the source and/or find the individual causing the pollution for these types of pollutants. Discovery of this type of pollution will be from incident reports from citizens, city crews, police and fire workers, businesses, and State and Federal agency field crews. Remediation/Clean-up measures will be implemented utilizing the City's Work Order system. Prevention of future episodic pollution incidents will rely upon the implementation of Public Education and Public Participation programs as defined in MCM 1 of this SWMP.

The second category, traceable sources, contains pollutants introduced into the MS4 from sources that are frequently or consistently occurring or otherwise traceable through stream channels within the MS4 system. Pollutants discovered during visual inspections, following complaints or reports, or during DWFS, can be verified with simple chemical field testing and/or with formal chemical sampling via laboratory analysis. Pollutants from these sources are dispersed downstream as a detectable odor, visual color, increased turbidity, excessive algae growth, or changes in water chemistry (e.g. pH or conductivity) when compared to uncontaminated water in the stream or MS4. These potentially traceable pollutants are amenable to "source tracking" inspections such as Stormwater Complaint Inspections and Dry Weather Field Screenings, where the sources are more likely to be found and remediated.

To address each category and as listed above, the City of Sand Springs implements and enforces an IDDE program that performs all of the minimum requirements of OKR04 V.C.3 and utilizes additional Best Management Practices (BMPs) as necessary. Many of the BMPs are implemented in conjunction with the BMPs listed for other MCMs and/or the TMDL plan. Table 11 shows all of the requirements, the BMP activities, and alternate activities that the City can or will utilize to meet the requirements for Illicit Discharge Detection and Elimination (IDDE). Detailed requirements for MCM 3 education and involvement activities are detailed in MCM 1 of this SWMP document.

The City of Sand Springs will use either its properly trained field collection crews or contract professionals to conduct appropriate sampling and information gathering to locate sources and characterize pollution events. Standard paper Stormwater Complaint Inspection Report forms, DWFS & IDDE Outfall Reconnaissance Work Sheets, and/or electronic field data recording devices (e.g. laptops, PDAs, GPS, or Tablet PCs) will be used to make data collection systematic. Data will be entered and/or downloaded into computer databases for analysis, sharing, and reporting. As needed, field data will be linked to MS4 map attributes. If requested to do so by ODEQ, certain monitoring data will be reported to ODEQ on ODEQ's Discharge Monitoring Report (DMR) forms.

If necessary for the protection of public health, public safety, and the environment, or the collection of scientifically defensible data for possible litigation and/or enforcement actions, outside agencies will be contacted to collect, assess, and or perform sample testing. All samples collected for transport to laboratories for analysis shall be collected under the agency's or lab's written Quality Assurance (QA) protocols, including the use of Chain of Custody forms, appropriate sample bottles with labels, field forms describing sample collection sites and conditions, and proper sample preservation. All laboratory analyses will follow 40 CFR Part 136 methods.



MCM 3: ILLICIT DISCHARGE DETECTION AND ELLIMINATION (IDDE)

PERMIT REQUIREMENT REFERENCE	PERMIT REQUIREMENT ACTION	PERMIT REQUIREMENT AMOUNT	BMP OPTIONS TO COMPLETE REQUIRED ACTIONS							
			ACTIVITY 1	ALTERNATE ACTIVITY 1	ALTERNATE ACTIVITY 2	ALTERNATE ACTIVITY 3	ALTERNATE ACTIVITY 4	ALTERNATE ACTIVITY 5	ALTERNATE ACTIVITY 6	
Part V.C.1.a.ii.2.a	In coordination with MCM 1, implement an education program that instructs public employees, businesses, and the general public on the hazards associated with illegal discharges and improper disposal of waste.	1 ACTIVITY PER YEAR	BMP	CRM DISTRIBUTION Distribute Illicit Discharge Reporting Consumable Resource Materials (CRMs) to General Public / All Audience Groups - Including All Age, Ethnic, and Socio-Economic Groups	IN PERSON EDUCATIONAL EVENT / PROGRAM Provide, Sponsor, or Support Illicit Discharge Prevention Class / Training / Workshop / Presentation / Project / Video	ELECTRONIC INVOLVEMENT Maintain or Support Stormwater E-Mail / Social Media / Website for stormwater illicit discharge education	PUBLIC MEETING Present stormwater management program (SWMP) activities including City Stormwater Report, SWMP Document, NOI, & ODEQ Annual Reports in Public City Council meeting	EDUCATIONAL SIGNAGE / MARKING INSTALLATION Install or maintain MS4 waterway & watershed pollution prevention signage & markings	IN-PERSON INVOLVEMENT ACTIVITY / EVENT / PROGRAM Provide, Sponsor, or Support Involvement Event or Program for Target Audience	OTHER ENTITY ASSISTANCE Maintain memberships & other government entity relationships for education & involvement events / resources
			SCHEDULE	Distribute - 125 ANNUALLY OR USE ALTERNATE	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY
			BMP ITEMS, ACTIONS, EVENTS, OR ACTIVITIES	Brochures / Pamphlets / Activity Books / Color Books / Activity Pages / Color Pages / Utility Mailers / Survey Slips / Disposable Signage & Banners / Presentation and Training Consumable Resources / Logo Items / Mailers / Enforcement Warnings / Enforcement Citations / Seasonal Hand-outs / Displays / Posters / Kiosks / Stormwater Excellence Awards / Earth Day / Stormwater Volunteer & Service Hours Program / Internship & Seasonal Worker Programs / Seasonal Hand-outs / Displays / Posters / Kiosks	Erosion Control Lunch and Learn / Resource Management Conference/ LID Workshop / Post-Construction Workshop / Pollution Prevention Workshop / Drop in the Bucket Stormwater Video / Stormwatch Stormwater Education Video / Rain Check Stormwater Education Video / INCOG Priority Area Inspection Training / Stormwater Inspection Training / Stormwater Enforcement Training / Stream Restoration Design Video / Site-Specific or Issue-Specific Training	City E-Mail (stormwater@sandsspringsok.org) / INCOG website / GCSA website / City Stormwater website / City Facebook / City Instagram / Electronic Surveys / Report A Problem Links / Stormwater Excellence Award Nomination Forms / Self-guided Education Links / Development of MS4 SWMP / Video Links / Contests / Digital Water Scavenger Hunt	Public Hearing / City Council Meeting / Stormwater Award Presentation / MS4 SWMP Annual Report Presentation	"No Dumping..." Sign / "Arkansas Watershed" Sign / "No Chemicals..." Sign / "No Dumping...Drains To..." Stormwater Medallions	Tire and E-Waste Collection Event / Earth Day / Herbal Affair / Truck Touch / Community Clean Up / Great Spring Clean / M.e.T. Voucher Program / Sand Springs Recycling Center (open daily) / Monthly Chipper Days / Great Pumpkin Rescue Event / Christmas Tree Collection Event / MS4 Facility Recycling Boxes, Buckets, Bins, etc. / Storm Sewer in a Suitcase / Watershed in A Suitcase / Watershed in My Hand Suitcase / Stormwater Volunteer & Community Service Program / Stormwater Excellence Award Program / Erosion Control Lunch and Learn / Pollution Prevention Workshop / Detection, Retention, and Reserve Workshop/ Resource Management Conference/ LID Workshop / Post-Construction Workshop / Pollution Prevention Workshop / INCOG Priority Area Inspection Training / Stormwater Inspection Training / Detention, Retention, and Reserve Workshop / Stormwater Enforcement Training / Site-Specific or Issue-Specific Training	INCOG /GCSA / OFMA / ODOT Stormwater / M.e.T. / IECA / EPA / ODEQ / Home Builders Association of Greater Tulsa / Chandler Nature Center / Tulsa County Conservation Commission
Part V.C.1.a.ii.2.b	In coordination with MCM 1, promote, publicize, and facilitate the reporting of illicit discharges.	THIS REQUIREMENT IMPLEMENTED CONTINUOUSLY UTILIZING ONE OR MORE OF THE LISTED BMP ACTIVITIES	BMP	CRM DISTRIBUTION Distribute Illicit Discharge Reporting Consumable Resource Materials (CRMs) to General Public / All Audience Groups - Including All Age, Ethnic, and Socio-Economic Groups	PUBLIC MEETING Present stormwater management program (SWMP) activities including City Stormwater Report, SWMP Document, NOI, & ODEQ Annual Reports in Public City Council meeting	ELECTRONIC INVOLVEMENT Maintain or Support Stormwater E-Mail / Social Media / Website for receipt of stormwater questions, complaints, or the reporting of illicit discharges	EDUCATIONAL SIGNAGE / MARKING INSTALLATION Install or maintain MS4 waterway & watershed illicit discharge pollution prevention & reporting signage & markings	IN PERSON EDUCATIONAL EVENT / PROGRAM Provide, Sponsor, or Support Illicit Discharge Prevention & Reporting Class / Training / Workshop / Presentation / Project / Video	EDUCATIONAL SIGNAGE / MARKING INSTALLATION Install or maintain MS4 waterway & watershed illicit discharge pollution prevention & reporting signage & markings	OTHER ENTITY ASSISTANCE Maintain memberships & other government entity relationships for education & involvement events / resources
			SCHEDULE	Distribute - 125 ANNUALLY OR USE ALTERNATE	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY
			BMP ITEMS, ACTIONS, EVENTS, OR ACTIVITIES	Brochures / Pamphlets / Activity Books / Color Books / Activity Pages / Color Pages / Utility Mailers / Survey Slips / Disposable Signage & Banners / Presentation and Training Consumable Resources / Logo Items / Mailers / Enforcement Warnings / Enforcement Citations / Seasonal Hand-outs / Displays / Posters / Kiosks / Stormwater Excellence Awards / Earth Day / Stormwater Volunteer & Service Hours Program / Internship & Seasonal Worker Programs / Seasonal Hand-outs / Displays / Posters / Kiosks	Public Hearing / City Council Meeting / Stormwater Award Presentation / MS4 SWMP Annual Report Presentation	City E-Mail (stormwater@sandsspringsok.org) / INCOG website / GCSA website / City Stormwater website / City Facebook / City Instagram / Electronic Surveys / Report A Problem Links / Stormwater Excellence Award Nomination Forms / Self-guided Education Links / Development of MS4 SWMP / Video Links / Contests / Digital Water Scavenger Hunt	Tire and E-Waste Collection Event / Earth Day / Herbal Affair / Truck Touch / Community Clean Up / Great Spring Clean / M.e.T. Voucher Program / Sand Springs Recycling Center (open daily) / Monthly Chipper Days / Great Pumpkin Rescue Event / Christmas Tree Collection Event / MS4 Facility Recycling Boxes, Buckets, Bins, etc. / Storm Sewer in a Suitcase / Watershed in A Suitcase / Watershed in My Hand Suitcase / Stormwater Volunteer & Community Service Program / Stormwater Excellence Award Program / Erosion Control Lunch and Learn / Pollution Prevention Workshop / Detection, Retention, and Reserve Workshop/ Resource Management Conference/ LID Workshop / Post-Construction Workshop / Pollution Prevention Workshop / INCOG Priority Area Inspection Training / Stormwater Inspection Training / Detention, Retention, and Reserve Workshop / Stormwater Enforcement Training / Site-Specific or Issue-Specific Training	Erosion Control Lunch and Learn / Resource Management Conference/ LID Workshop / Post-Construction Workshop / Pollution Prevention Workshop / Drop in the Bucket Stormwater Video / Stormwatch Stormwater Education Video / Rain Check Stormwater Education Video / INCOG Priority Area Inspection Training / Stormwater Inspection Training / Stormwater Enforcement Training / Stream Restoration Design Video / Site-Specific or Issue-Specific Training	"No Dumping..." Sign / "Arkansas Watershed" Sign / "No Chemicals..." Sign / "No Dumping...Drains To..." Stormwater Medallions	INCOG /GCSA / OFMA / ODOT Stormwater / M.e.T. / IECA / EPA / ODEQ / Home Builders Association of Greater Tulsa / Chandler Nature Center / Tulsa County Conservation Commission
Part V.C.1.a.ii.2.c	In coordination with MCM 1, conduct staff training to identify and report stormwater illicit discharges	1 ACTIVITY PER YEAR	BMP	MS4 STAFF EDUCATION Provide, Sponsor, or Support Illicit Discharge Class / Training / Workshop / Presentation / Project / Video for MS4 Staff	CRM DISTRIBUTION Distribute Illicit Discharge Reporting Consumable Resource Materials (CRMs) to MS4 Staff	OTHER ENTITY ASSISTANCE Maintain memberships & other government entity relationships for education & involvement events / resources				
			SCHEDULE	Provide, Sponsor, or Support - 1 ANNUALLY OR USE ALTERNATE	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - 1 ANNUALLY	
			BMP ITEMS, ACTIONS, EVENTS, OR ACTIVITIES	Erosion Control Lunch and Learn / Resource Management Conference/ LID Workshop / Post-Construction Workshop / Pollution Prevention Workshop / Drop in the Bucket Stormwater Video / Stormwatch Stormwater Education Video / Rain Check Stormwater Education Video / INCOG Priority Area Inspection Training / Stormwater Inspection Training / Stormwater Enforcement Training / Stream Restoration Design Video / Site-Specific or Issue-Specific Training	Brochures / Pamphlets / Activity Books / Color Books / Activity Pages / Color Pages / Utility Mailers / Survey Slips / Disposable Signage & Banners / Presentation and Training Consumable Resources / Logo Items / Mailers / Enforcement Warnings / Enforcement Citations / Seasonal Hand-outs / Displays / Posters / Kiosks / Stormwater Excellence Awards / Earth Day / Stormwater Volunteer & Service Hours Program / Internship & Seasonal Worker Programs / Seasonal Hand-outs / Displays / Posters / Kiosks	INCOG /GCSA / OFMA / ODOT Stormwater / M.e.T. / IECA / EPA / ODEQ / Home Builders Association of Greater Tulsa / Chandler Nature Center / Tulsa County Conservation Commission				
Part V.C.3.a	Perform Dry Weather Field Screenings	2 ACTIVITIES PER YEAR	BMP	ACTIVITY 1 DWFS - OUTFALL	ACTIVITY 2 DWFS - HIGH PRIORITY OUTFALL					
			SCHEDULE	40% ANNUALLY	100% ANNUALLY					
			BMP ITEMS, ACTIONS, EVENTS, OR ACTIVITIES	Perform Dry Weather Field Screening (DWFS) inspections using DWFS SOPs at 40% of all outfalls. Currently there are 72 listed outfalls, including high priority outfalls, total. 40% = 29 total outfalls.	Perform Dry Weather Field Screening (DWFS) inspections using DWFS SOPs at all high priority outfalls. Currently there are 19 listed high priority outfalls.					
Part V.C.3.a.i and Part V.C.a.vii	Identify and Map priority areas including areas with a higher likelihood of illicit connections or discharges.	2 ACTIVITIES PER YEAR	BMP	ACTIVITY 1 OUTFALL MAP	ACTIVITY 2 HIGH PRIORITY OUTFALL MAP					
			SCHEDULE	ANNUALLY	ANNUALLY					
			BMP ITEMS, ACTIONS, EVENTS, OR ACTIVITIES	Maintain, Review and/or Update Map showing outfalls, Waters of the State, and MS4 structures as part of annual reporting or more often as necessary.	Maintain, Review and/or Update Map showing high priority outfalls, Waters of the State, and MS4 structures as part of annual reporting or more often as necessary.					
Part V.C.3.a.ii	In coordination with MCM 3, 4, 5, & 6 - Trace or investigate the source of an illicit discharge	AS NECESSARY	BMP	ACTIVITY 1 COMPLAINT REPORT INSPECTIONS	ALTERNATE ACTIVITY 1 CONSTRUCTION SITE INSPECTIONS	ALTERNATE ACTIVITY 1 FACILITY INSPECTIONS				
			SCHEDULE	WITHIN 72 HOURS	WITHIN 72 HOURS	WITHIN 72 HOURS				
			BMP ITEMS, ACTIONS, EVENTS, OR ACTIVITIES	Perform field inspections following receipt of complaints, incident reports, or monitoring information that indicates a potential illicit discharge.	Perform construction site inspections following receipt of complaints, incident reports, or monitoring information that indicates a potential illicit discharge.	Perform MS4 Facility inspections following receipt of complaints, incident reports, or monitoring information that indicates a potential illicit discharge.				
Part V.C.3.a.vi	Implement and enforce and ordinance or other regulatory mechanism.	1 ACTIVITY PER YEAR	BMP	ACTIVITY 1 ORDINANCE OR LOCAL CODE	ALTERNATE ACTIVITY 1 ENFORCEMENT	ALTERNATE ACTIVITY 2 FACILITY SWPS				
			SCHEDULE	ANNUALLY	AS NECESSARY	AS NECESSARY				
			BMP ITEMS, ACTIONS, EVENTS, OR ACTIVITIES	Review and/or update IDDE ordinance or local code to control pollution as part of annual reporting period or more often as necessary.	Warning and violation citations/ Stop Work Orders	Warning and violation citations/ Stop Work Orders				
Part V.C.3.a.viii	Maintain and update a list of occasional incidental non-stormwater discharge or flows that will not be addressed as illicit discharges	1 ACTIVITY PER YEAR	BMP	ACTIVITY 1 INCIDENTAL NON-STORMWATER LIST						
			SCHEDULE	ANNUALLY						
			BMP ITEMS, ACTIONS, EVENTS, OR ACTIVITIES	Maintain a list of local occasional incidental non-stormwater discharges as part of annual reporting.						

TABLE 11 - MCM 3: ILLICIT DISCHARGE DETECTION AND ELLIMINATION (IDDE)



OKR04 Part V.C.3.a.i and Part V.C.a.vii: MCM 3, Requirement Activity 1 – MAPS

Part V.C.vii. - Storm Sewer System Map: The City of Sand Springs storm sewer system is a system of conveyances (e.g., storm drains, pipes, ditches) designed to carry runoff from rain, or ice and snow melt, away from impervious surfaces such as paved streets, car parks, parking lots, footpaths, sidewalks, and roofs. The Sand Springs storm sewer system conveyances are owned by the City and discharge directly to waters of the state (as defined in OAC 252:606-1-3(b)(3) incorporating by reference 40 CFR §122.26(b)(16)). They are not designed to carry sewage or accept hazardous materials. Figure 7 shows the Sand Springs Storm Sewer System currently available in GIS format. Periodic updates of map data from sub-state planning agencies and State and Federal agencies will be used to make future changes to the MS4 map as needed. Map features will also be amended in the future as more system inspections are performed by MS4 staff. Updated map information, such as outfall locations and site descriptions, will be reviewed annually by city staff and reflected in the map updates. The map is available for viewing on the City’s website: <https://www.sandspringsok.org/387/Stormwater-Management-Program>.

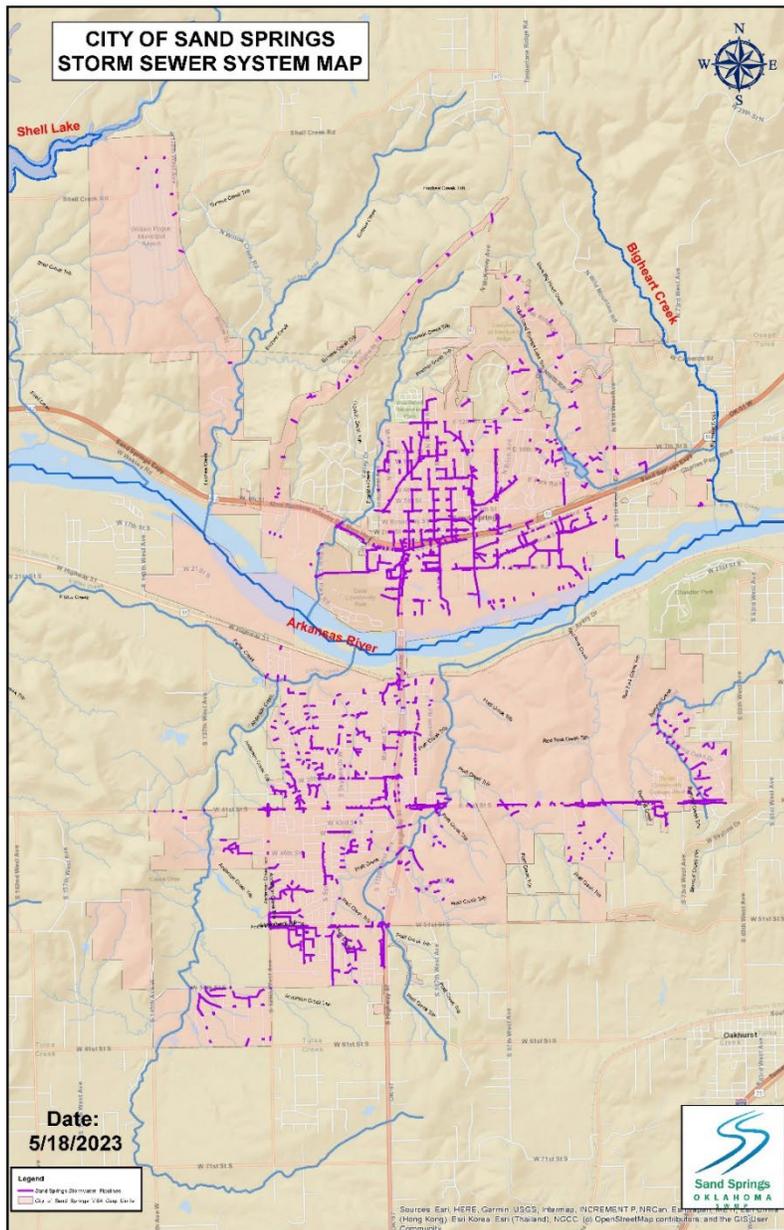


Figure 7 – CSS STORM SEWER SYSTEM MAP



Part V.C.vii. - Outfall Map: The EPA defines an “outfall” as a “*point source as defined by Code of Federal Regulations 40 122.26(b)(9) at the point where a municipal separate storm sewer system discharges to waters of the United States and does not include open conveyances connecting two municipal separate storm sewers or pipes, tunnels, or other conveyances which connect segments of the same stream or other waters of the United States and are used to convey waters of the United States.*”

The OPDES permit, the NPDES permit (OKR05 / OKR10), and the DEQ website define an “outfall” as “*any point where a separate storm sewer system discharges to either the Waters of the United States or to another MS4*”. In simpler terms, an outfall is a place where a river, drain, or sewer empties into a river or a lake or where two municipalities’/cities’ storm sewer systems connect. Table 12, below, lists the outfalls that must be included.

OUTFALLS INCLUDED IN MAP	OUTFALLS NOT INCLUDED IN THE MAP
<p>Pipes – Pipes that discharge stormwater from the highway, “daylight” in the highway embankment, or are in close proximity to a water body. Pipes that may discharge to a waterbody through a bridge abutment or wall of a cross-culvert that conveys a stream.</p>	<p>Culverts that convey a stream or other waterbody considered a Water of the US is not an outfall.</p>
<p>Concentrated Flows – If the discharge from a potential outfall is delivered to a waterbody as concentrated flow, whether directly or by end section, stone apron, or if the earth beyond the discharge point is eroded such that it is reasonable that the water discharges to the waterbody in concentrated flow, that discharge point shall be considered an outfall.</p>	<p>The permit does not require overland flows to be mapped but rather channeled conveyances. The general permit states “...areas of non-concentrated (sheet) flow which drain to the Waters of the United States or to another MS4’s system are not considered outfalls and should not be identified as such on the system map.”</p>
<p>Scuppers – A bridge will likely have multiple scuppers. As long as the stormwater is discharged from these scuppers to the same waterbody, all of the scuppers shall be mapped as one outfall.</p>	<p>“Waters of the United States” are considered surface waters only; therefore, discharges to groundwater are not considered outfalls.</p>
<p>Drainage Connections – Surface and subsurface drainage connections from the state Right-of-Way to the jurisdiction of another regulated MS4.</p>	<p>Daylighted underdrains are not to be counted as stormwater outfalls.</p>
<p>Gutters, Swales, & Ditches - Stormwater in ditches, swales, or gutters that discharge stormwater by dropping the stormwater through a grate directly into a water body. Each swale, ditch, or gutter shall be mapped as separate outfalls, even when they are in close proximity to each other, such as around bridges. For example, if there are ditches that discharge to a stream in four quadrants of a bridge, each ditch outlet to the stream should be mapped as an outfall.</p>	

Table 12– Outfalls

The City of Sand Springs’ Stormwater Atlas inventories, in maps and tables, all known stormwater outfall locations discharging from the MS4 to the waters of the State. It identifies all known contributing catch basins and surface areas for each of these stormwater discharges and establishes priorities for illicit discharge inspection.

Figure 8 shows all outfalls that are located in the City of Sand Springs MS4 and the waters of the state (as defined in OAC 252:606-1-3(b)(3) incorporating by reference 40 CFR §122.26(b)(16)) that receive discharges from City of Sand Springs’ outfalls. Periodic updates of map data from sub-state planning agencies and State and Federal agencies will be used to make future changes to the MS4 map as needed. Map features will also be amended in the future as more system inspections are performed by MS4 staff. Updated map information, such as outfall locations and site descriptions, will be reviewed



annually by city staff and reflected in the map updates. The map is available for viewing on the City's website: <https://www.sandspringsok.org/387/Stormwater-Management-Program>.

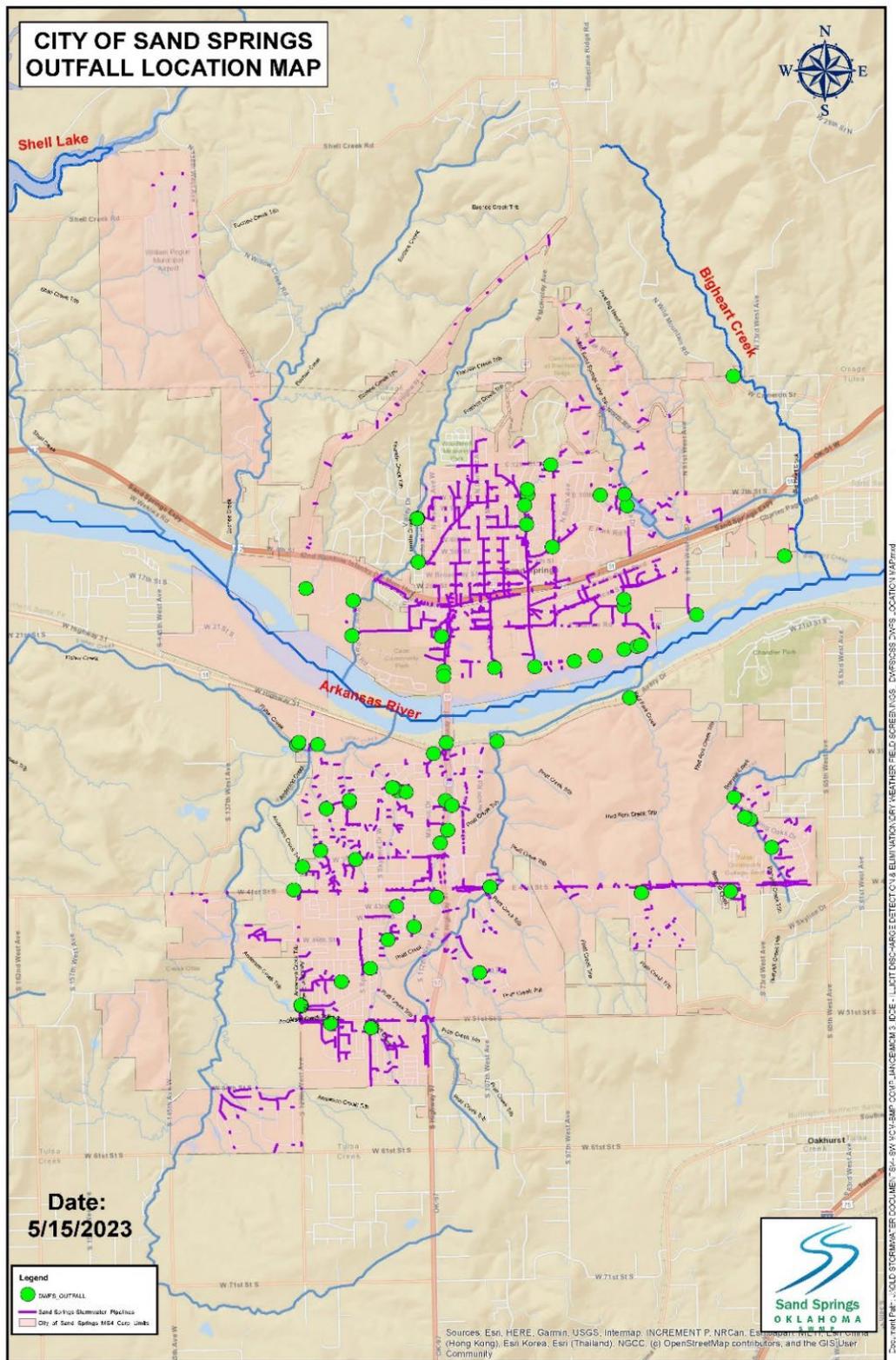


Figure 8 – OUTFALL DWFS MAP



Part V.C.i. - High-Priority Outfall Map: High-priority areas have a “higher likelihood of illicit connections or discharges because they are areas that have older sanitary sewer system infrastructure or they are areas of industrial, commercial or mixed-use. Because the majority of areas located within the Sand Springs city limits contain homes and/or businesses with older sanitary sewer infrastructure, the city limits shown in Figure 9 are considered high-priority areas. The outfalls shown area are high-priority outfalls that empty stormwater from high-priority areas directly into the waters of the state (as defined in OAC 252:606-1-3(b)(3) incorporating by reference 40 CFR §122.26(b)(16)). At a minimum, this high-priority area and outfall map is reviewed and updated annually.

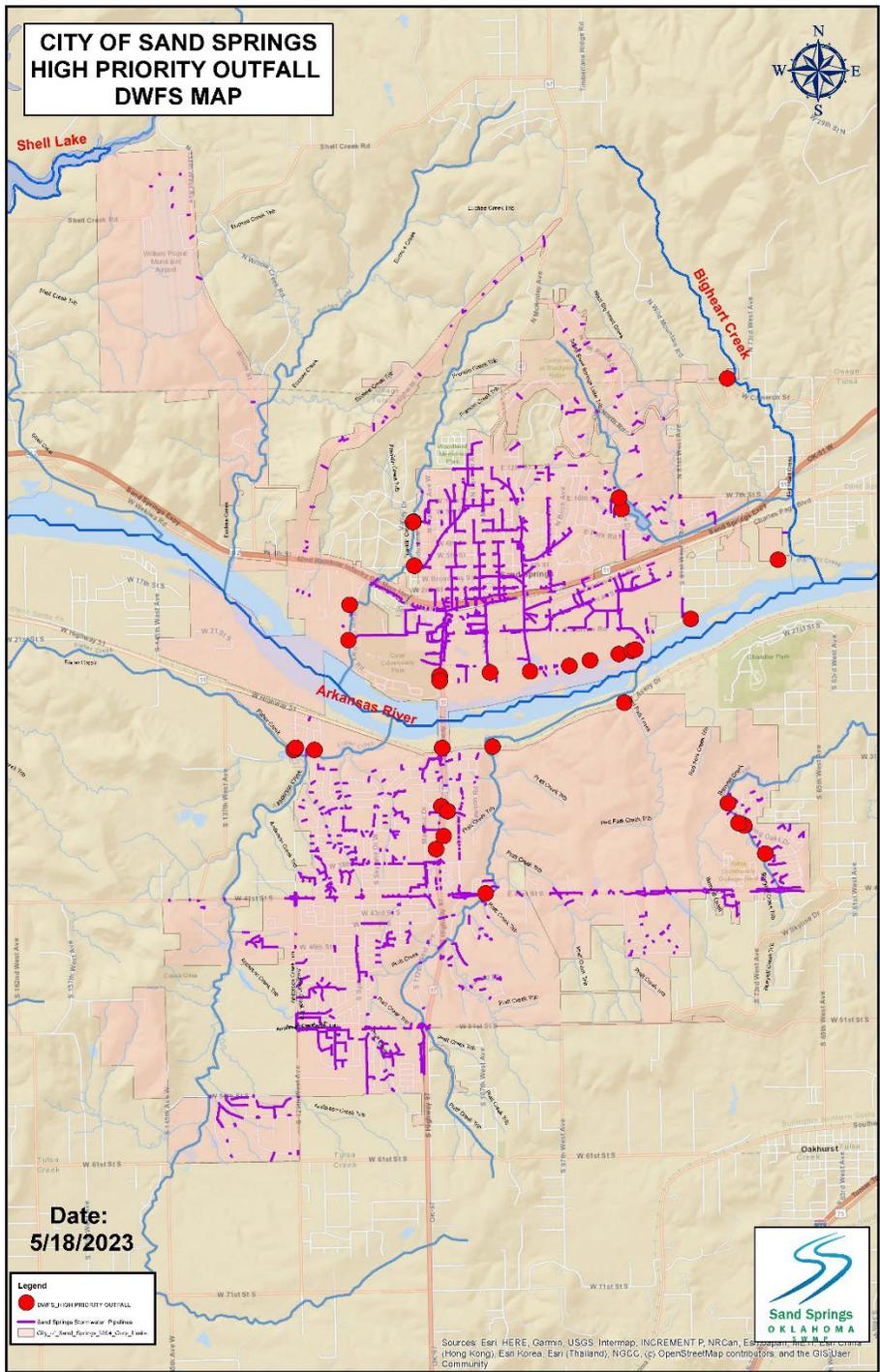


Figure 9 –PRIORITY OUTFALL DWFS MAP



Reason for Selection – Maps are a current BMP implemented by the City of Sand Springs and required by the 2021 OKR04 permit. By utilizing either hard copies of these maps or the City map viewer ([City of Sand Springs GIS \(arcgis.com\)](http://City of Sand Springs GIS (arcgis.com))) for the storm sewer system map, potential sources of illicit discharge and other high-priority areas will be marked.

CITY LAND USE MAP LINKS	CITY ZONING MAP LINKS
<p style="text-align: center;"><u>https://arcg.is/1SraWK</u></p> <p style="text-align: center;">OR</p> <p><u>http://www.sandspringsok.org/502/Comprehensive-Plan-Map</u></p>	<p style="text-align: center;"><u>http://www.sandspringsok.org/438/Zoning-Map</u></p> <p style="text-align: center;">OR</p> <p style="text-align: center;"><u>Zoning Map (arcgis.com)</u></p>

Target Audience or Participants - The target audience for this BMP includes the General Public (including all ethnic and socio-economic groups), Commercial Business Owners & Employees, Industrial Business Owners & Employees, and City Staff/Crews/Employees. The City of Sand Springs considers them most likely to be significant sources of and preventers of stormwater pollutants within the MS4. Stormwater Community Service Volunteer participants may assist in updating one or all of these maps.

Measurable Goal(s) – This MCM is quantifiably measurable based on the number of reviews and/or updates performed to each map annually. This MCM is also qualitatively measurable by tracking emails, phone calls, faxes, City website or social media comments, or in-person feedback requesting information on volunteer and community service participation.

Timeline for BMP implementation – Maps are a current BMP activity implemented by the City of Sand Springs and required by the 2021 OKR04 permit; this activity will continue to be implemented as required.

Distribution Schedule – Maps will be reviewed, updated as necessary, and distributed in the following ways:

- With the Annual Stormwater Department Report to the City
- With the Annual SWMP Report to the City
- With the Annual SWMP Report to ODEQ
- As necessary to update the City’s GIS database or Website

Control Techniques & Systems – The City’s storm sewer system map will be maintained, updated, and submitted with the annual report. DWFS will be performed following DWFS standard operating procedures (SOP) to verify outfall locations.

Design and Engineering Methods – The design of all BMP and all DWFS SOP activities and related materials will be the responsibility of the City of Sand Springs or the program provider/implementer as listed in Table 3 and will be specifically SWMP related. Any Engineering Methods necessary for this BMP activity will be the responsibility of the City of Sand Springs or a qualified representative. The process for both creating new maps and updating existing maps will involve collecting updated data from agencies and organizations, collecting field data during inspections to verify locations and descriptions of MS4 spatial map attributes, periodic review of MS4 system map data by City and outside professional staff, and updating maps as needed. Global Positioning System (GPS) will be used when needed to provide coordinate data for the MS4 system, facility locations, and sampling sites. Other coordinate data will be collected using aerials and GIS map layers that show structures and sites. Digital and paper aerial photography and USGS 7.5 Minute Quadrangle maps will be used to assist with locating outfalls and updating their positions as necessary. INCOG will provide GIS data and aerial photos of the City’s MS4 upon request.

Enforcement, Implementation, and Coordination Responsibilities –Implementation and coordination of this BMP will be shared responsibilities between the City of Sand Springs and its authorized representatives as noted in Tables 3 and 11. The City of Sand Springs and its authorized representatives will be entirely responsible for enforcement.



OKR04 Part V.C.3.a.ii-v: MCM 3, BMP Requirement Activity 2 – DRY WEATHER FIELD SCREENING

Dry weather field screening (DWFS) is a tool used to detect, investigate, and eliminate non-stormwater flows and illicit discharges and is a required activity of the City’s OKR04 Permit. The City of Sand Springs utilizes DWFS Standard Operating Procedure (SOP) and source tracking programs to identify illicit discharges to the MS4 and to trace the pollution to the source(s). City of Sand Springs staff conduct visual inspections utilizing the City’s DWFS SOP and one or more field test kits to monitor the most likely type of stormwater pollution - chlorine residual, pH, dissolved oxygen, conductivity, etc. – at MS4 outfalls and areas with a higher likelihood of illicit connections or discharges.

Reason for Selection – DWFS are a current BMP implemented by the City of Sand Springs and required by the 2021 OKR04 permit.

Target Audience or Participants - City Staff/Crews/Employees are the primary audience for DWFS implementation education. However, the General Public (including all ethnic and socio-economic groups), Commercial Business Owners & Employees, and Industrial Business Owners & Employees are a secondary target audience. If/when illicit discharges are identified, the City must educate and/or enforce against the violators. Additionally, Stormwater Community Service Volunteer participants may assist in performing DWFS and/or completing DWFS goals. Therefore, the City of Sand Springs considers these groups both the most likely to be significant sources of and the preventers of stormwater pollutants within the MS4.

Measurable Goal(s) – Activities for this MCM are quantifiably measurable based on the number of outfalls and high-priority areas inspected, the numbers reported from MCM 1 BMP Activities, the number of samples taken and/or lab tests performed, and/or the number of warnings or citations issued for violations. This MCM is also qualitatively measurable by tracking emails, phone calls, faxes, City website or social media comments, or in-person feedback, requesting additional information on/for IDDE Education, or requesting information on volunteer and community service participation.

Timeline for BMP implementation – DWFS are a current SWMP BMP for the City of Sand Springs under the November 1st, 2015 OKR04 permit and will continue to be implemented per the requirements of the June 1st, 2021 OKR04 permit.

Distribution Schedule – For the OKR04 permit with the effective date of June 1st, 2021, the following will be the frequency:

DWFS LOCATION	MINIMUM CHECKED	MINIMUM FREQUENCY
IDENTIFIED OUTFALLS	40% OF IDENTIFIED OUTFALL LOCATIONS	ONCE PER YEAR. SCREENINGS PERFORMED IN THE 4 TH QTR.
HIGH PRIORITY AREAS	ALL IDENTIFIED HIGH-PRIORITY LOCATIONS	ONCE PER YEAR. SCREENINGS PERFORMED IN THE 4 TH QTR.

Table 13– DWFS Minimum Frequency

Control Techniques & Systems –

DWFS will be performed following DWFS standard operating procedures (SOP). As part of those SOP procedures, the City will provide the following items to properly perform DWFS:

- Qualified personnel –
 - Knowledgeable about visual indicators of stormwater pollutants
 - Experienced with the testing instrument(s) - making and reporting data, information, and observations.
 - Familiar with the data form and able to act as a scribe to record the reported data.
 - Annually trained in current OKR04 Permit requirements.
- Logs, Forms, and Ticket Books–
 - Calendars and Logs tracking DWFS



-
- Inspection forms and log sheets
 - Testing and Monitoring forms and log sheets
 - Calibration logs and purchase/usage logs for testing equipment and supplies
 - Outfall location lists and/or maps – All outfalls, High-Priority outfalls
 - DWFS, Inspection, and/or testing chain of custody forms
 - Warning and Violation Citation ticket books
 - Map(s) –
 - City atlas showing all streets and Waters of the State
 - MS4 stormwater atlas showing all streets and Waters of the State
 - Priority Area Map showing areas with a higher likelihood of illicit connections or discharges, Waters of the State, and MS4 structures
 - Map showing outfalls, Waters of the State, and MS4 structures
 - Map showing high-priority outfalls, Waters of the State, and MS4 structures
 - Equipment –
 - A marked City vehicle in good working order with emergency flashers or safety bar/bubble light(s) AND/OR Marked City Utility Task Vehicle (UTV)
 - Measuring Instrument capable of measuring the stream/water temperature, the conductivity (mineral content), and pH
 - Cell phone or walkie-talkie for emergency use – fully charged and/or with charging cable or extra batteries
 - Safety cones
 - Other equipment deemed necessary
 - Manuals –
 - Measuring Instrument Manual
 - DWFS Procedure Manual
 - Vehicle Owner’s Manual
 - Supplies –
 - A clipboard and multiple writing utensils
 - Laboratory Collection cups – Laboratory methods are reserved for situations where a problem/pollutant has been identified and it is necessary to trace the problem to a particular illicit discharger
 - A sufficient number of DWFS forms to record the day’s work
 - Other supplies deemed necessary
 - Safety Gear –
 - Reflective vests or high-visibility shirts
 - Tall Rubber boots, hip-height wader boots, or full-bib wader boots
 - Steel toe boots
 - Gloves – both leather and vinyl/latex
 - Bug repellent
 - Safety vest(s)
 - Life Vest(s)
 - Other necessary PPE deemed necessary for safety (Hard Hats, Safety glasses, bottled water, etc.)

The following steps are utilized in inspecting an outfall or high-priority area: Once the workers arrive at the pre-defined site, the City vehicle will park as close as practical to the stormwater outfall. After walking to the outfall, workers will perform a visual evaluation of the site.

- Standard paper field forms and/or electronic field data recording devices (e.g. laptops, PDAs, GPS, or Tablet PCs) will be used to make data collection systematic. Data will be entered and/or downloaded into computer databases for analysis, sharing, and reporting. As needed, field data



will be linked to MS4 map attributes. If requested to do so by ODEQ, certain monitoring data will be reported to ODEQ on ODEQ's Discharge Monitoring Report (DMR) forms.

- If there is water present but no visible evidence of pollutants, water temperature, conductivity, and pH will be recorded.
- In the event there is no water flow present, the only data recorded will be the location, date, time, weather, and visible description of the site.
- If there is evidence of or suspicion of pollution:
 - Acquire additional information utilizing the Measuring Equipment.
 - Determine if it will be possible to trace the source by looking for evidence of pollutants upstream or coming from a discharge pipe or channel.
 - If the pollutants appear to be due to an episodic, one-time discharging event with no traceability:
 - Ensure that inspection results and field and laboratory data are properly documented with a level of quality assurance appropriate to the use of the data.
 - Note the findings and results on the inspection report.
 - Request the issuance of a Work Order from Customer Relations for clean-up.
 - Confirm clean-up completion
 - If the source of pollutants is located:
 - Ensure that inspection results and field and laboratory data are properly documented with a level of quality assurance appropriate to the use of the data.
 - Present written documentation of findings to the owner/discharger citing pollutant, point of discharge into MS4, and/or Point of discharge into 303(d) or TMDL waterbody.
 - Educate owner/discharger on illicit discharges and proper pollution prevention.
 - Issue the owner/discharger a clean-up completion requirement date and a follow-up inspection date.
 - Complete follow-up inspection to verify clean-up of discharge and the removal of potential future illicit discharge.
 - If the follow-up inspection reveals a failure to comply
 - Assess the good-faith-effort compliance level to determine if an additional amount of time should be awarded to complete clean-up; OR
 - Proceed with enforcement steps as provided in the local IDDE ordinances and codes; and/or
 - Consult with ODEQ if faced with a refusal by owners of the pollutant source.
- Upon completion of all inspection, clean-up, and necessary enforcement actions, enter and/or download data into computer databases for analysis, sharing, and reporting. As needed, link field data w to MS4 map attributes. If requested to do so by ODEQ, report monitoring data to ODEQ on ODEQ's Discharge Monitoring Report (DMR) forms.
- Close the report.



The majority of illicit discharge events will be addressed utilizing these listed procedures. However, for severe pollution events, assistance from ODEQ or another outside agency may be necessary.

The following steps are utilized after receiving a report of a pollutant in the MS4 or a receiving waterbody:

Upon discovery or after receiving a report of a pollutant in the MS4 or a receiving waterbody, prepare a Stormwater Complaint Inspection Report or, if more appropriate, a Work Order.

- Use standard paper field forms and/or electronic field data recording devices (e.g. laptops, PDAs, GPS, or Tablet PCs) to perform an initial visual observation at the site of the reported pollution event and to collect data.
- If pollutants are not found, close out the Stormwater Complaint Inspection Report or Work Order noting the inspection results.
- If Pollutants are found, determine if it will be possible to trace the source by looking for evidence of pollutants upstream or coming from a discharge pipe or channel.
 - If the pollutants appear to be due to an episodic one-time discharging action with no traceability (e.g. motor oil dumped into a storm drain), the MS4 stormwater staff will record the date, location, information source, and description of the event. If necessary, a Work Order will be issued, and a public works crewman will be sent to investigate to determine how the site should be cleaned (e.g. removal of yard waste, oil spill cleanup, etc.).
 - If the pollutant source(s) can be traced, incident information will be recorded and MS4 staff will be sent to investigate utilizing either a Stormwater Complaint Inspection form or Work Order. If the source is not immediately obvious, the MS4 staff will initiate a source tracing inspection and/or seek professional investigation assistance from outside representatives and attempt to trace the source upstream from the pollutant incident site. If the source is located, MS4 staff will contact the owner / responsible party to request that the source be abated within a reasonable time per local ordinance.
 - If source tracking requires scientifically defensible data for possible litigation and/or enforcement action, then the City of Sand Springs will use either its properly trained field collection crews or contract professionals to conduct appropriate sampling and information gathering to locate sources and characterize pollution events. Outside agencies will be contacted, if necessary, to report potentially illegal discharges or to protect health, safety, or the environment. All samples collected for transport to laboratories for analysis shall be collected under written Quality Assurance (QA) protocols, including the use of Chain of Custody forms, appropriate sample bottles with labels, field forms describing sample collection sites and conditions, and proper sample preservation. All laboratory analyses will follow 40 CFR Part 136 methods. Seek out additional outside expertise to help document pollution severity or extent if necessary.
 - Present written documentation of findings to the owner/discharger citing pollutant, point of discharge into MS4, and/or Point of discharge into 303(d) or TMDL waterbody.
 - Educate owner/discharger on illicit discharges and proper pollution prevention.



- Issue the owner/discharger a clean-up completion requirement date and a follow-up inspection date.
- Complete follow-up inspection to verify clean-up of discharge and the removal of potential future illicit discharge.
- If the follow-up inspection reveals a failure to comply
 - Assess the good-faith-effort compliance level to determine if an additional amount of time should be awarded to complete clean-up; OR
 - Proceed with enforcement steps as provided in the local IDDE ordinances and codes; and/or
- a. Consult with ODEQ if faced with a refusal by owners of the pollutant source.
- Upon completion of all inspection, clean-up, and necessary enforcement actions, enter and/or download data into computer databases for analysis, sharing, and reporting. As needed, link field data to MS4 map attributes. If requested to do so by ODEQ, report monitoring data to ODEQ on ODEQ’s Discharge Monitoring Report (DMR) forms.
- Close the report.

The DWFS SOP will be **reviewed annually** to remain updated with the most current and relevant investigation, screening, collection, and testing techniques and technology. The process will require the City of Sand Springs to consistently educate staff, check the effectiveness of current SOP activities/requirements, verify that equipment and testing are the most technologically advanced that the City can make available, and update the SOP as necessary. This approach will ensure compliance with Federal and State regulations while addressing the specific stormwater priorities of the Sand Springs community in the most efficient and effective way possible.

Design and Engineering Methods – The design of all BMP and all DWFS SOP activities and related materials will be the responsibility of the City of Sand Springs or the program provider/implementer as listed in Table 3 and will be specifically DWFS related. Any Engineering Methods necessary for this BMP activity will be addressed by the City of Sand Springs Engineering Department as necessary.

Enforcement, Implementation, and Coordination Responsibilities –Implementation and coordination of this BMP will be shared responsibilities between the City of Sand Springs and its authorized representatives as noted in Tables 3 and 11. The City of Sand Springs and its authorized representatives will be entirely responsible for enforcement.

NOTE:

Indian Nations Council of Governments (INCOG) and Green Country Stormwater Alliance (GCSA)	The City of Sand Springs is a member of both INCOG and GCSA. The City will provide sufficient funds for INCOG to assist its GCSA members with their SWMP MCM and BMP requirements. INCOG’s GCSA program will be managed by the Environmental and Energy Division at INCOG. INCOG will submit an annual written scope of services to the City of Sand Springs that will specify INCOG’s role in providing technical support and activities, as well as maintaining the GCSA stormwater website on behalf of the City of Sand Springs and other GCSA members. INCOG and/or GCSA will provide members access to CRMs, Training, Classes, GIS Resources, Mapping Services, Hazard Mitigation Plan Development, TMDL guidance, and QAPP development.
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OKR04 Part V.C.3.a.ii-vi: MCM 3, BMP Activity 3 – DETECTION & ELIMINATION

ITEM OR PROGRAM **	DESCRIPTION
<p>EDUCATION In coordination with MCM 1, 4, 5, & 6</p>	<p>Distribution of CRMs to target audiences that address: Household chemical disposal, Business chemical storage and disposal, Proper on-site sewage disposal system maintenance, and Recycling programs and sites.</p>
	<p>Training for the general public to know what an illicit discharge looks like, who to call or where to report if an illicit discharge is suspected, and the specific information to report.</p>
	<p>Training for Small Businesses, Restaurants, Construction Companies, and Industrial Businesses for proper waste and chemical storage/disposal/recycling, illicit discharge prevention, and spill prevention/clean-up.</p>
	<p>Training for City Employees, Police, and Fire for proper waste & chemical storage/disposal/recycling, illicit discharge detection/prevention, spill prevention/clean-up, and how to report if/when an illicit discharge is suspected.</p>
<p>COMMUNITY NOTIFICATIONS In coordination with MCM 1, 4, 5, & 6</p>	<p>Websites: Support regional INCOG and GCSA stormwater websites and maintain a City website for stormwater that provide links to educational materials, and notifications of upcoming training classes or events.</p>
	<p>Social Media: Maintain a City Facebook page that provides links that the community can use to report potential illicit discharges.</p>
	<p>Public Meeting: Allow the community to voice concerns and/or report potential illicit discharges.</p>
<p>COMMUNITY INVOLVEMENT In coordination with MCM 1, 4, 5, & 6</p>	<p>Clean-up Events: City-wide events that help to detect and eliminate illicit discharges.</p>
	<p>Identifying & Marking: Stormwater Volunteer and Service Hours program that applies pollution prevention markings to identified inlets and drains will also visually detect illicit discharges to the same.</p>
	<p>Pollutant Collection: Promote the use of and support regional household pollutant collection events that eliminate illicit discharges and illegal dumping.</p>
	<p>Recycling: Promote the use of and support regional recycling centers that eliminate illegal dumping.</p>
	<p>Trash and Debris Removal: Promote proper trash disposal and chipper programs that eliminate illegal dumping.</p>
<p>INCIDENTAL NON-STORMWATER LIST</p>	<p>Incidental Non-Stormwater Lists: Solicit and compile illicit discharge and pollution information from citizens, local businesses, other municipalities, non-profit organizations, volunteer stream monitors, students, and educational institutions, construction contractors and workers, local building officials, floodplain administrator(s), and State and Federal agencies. Compile data with the lists maintained by various City departments and facilities to track incidental non-stormwater incidents</p>
<p>SPILL (SWP3s), HAZARD MITIGATION, & EMERGENCY OPERATION PLANS In coordination with MCM 1, 4, 5, & 6</p>	<p>Facility Stormwater Pollution Prevention Plan review/inspection (OKR04 / OKR05 SWP3s)</p>
	<p>Construction Site Stormwater Pollution Prevention Plan review/inspection (OKR10 SWP3s)</p>
	<p>Emergency Response Plan Review/education/implementation</p>
	<p>Hazard Mitigation Plan Review/education/implementation</p>
	<p>Multi-Hazard Mitigation Plan Review/education/implementation</p>



ITEM OR PROGRAM **	DESCRIPTION
<p style="text-align: center;">INSPECTIONS In coordination with MCM 4, 5, & 6</p>	<p>High Priority Area Inspections: inspections will be performed in High priority areas as part of annual DWFS outfall inspections.</p>
	<p>Stormwater Complaint Inspections: Inspections will be performed randomly or as necessary when complaints, reports, or monitoring flags are received on possible illicit discharge(s) to outfalls, catch basins, stormwater pipes or conduits, ditches, and/or directly to the Waters of the State.</p> <ul style="list-style-type: none"> • Problems identified by visual indicators and with simple field test kits will be tested using additional laboratory methods within 72 hrs. of initial identification. • A list of all inspections performed, incidental non-stormwater discharges/flows (as allowed in Part II (B)(2) of the OKR04 permit), and any identified illicit discharges/flows will be maintained and annually updated.
	<p>Perform Construction Site Inspections within 72 hrs. following receipt of complaints, incident reports, or monitoring information that indicates a potential illicit discharge.</p>
	<p>Field Inspections will be performed within 72 hrs. following receipt of complaints, incident reports, or monitoring information that indicates a potential illicit discharge.</p>
<p style="text-align: center;">ENFORCEMENT In coordination with MCM 4, 5, & 6</p>	<p>Multiple City Ordinances are in place to educate the Sand Springs community on requirements, violations, and fines related to stormwater and storm sewers of the MS4. They are annually reviewed and updated as necessary.</p>
	<p>Facility SWP3: Educate employees on the use of spill response activities and tools to effectively prevent illicit discharges</p>
	<p>Construction SWP3: Enforce the use of spill response activities and tools to effectively prevent illicit discharges</p>

Table 14 –Part V.C.3.a.ii-vi DETECTION & ELIMINATION Activities

** This list is annually reviewed and will be updated as necessary. EXAMPLES ARE SHOWN IN APPENDIX D.

Reason for Selection –The activities listed in Tables 3, 11, and 14 are designed to meet the Permit requirements. The activities are utilized to detect, reduce, deter, and/or eliminate specific or predictable illicit discharge problems. These activities promote the protection of the overall water quality of the Sand Springs community because, the only way to ultimately achieve clean **Waters of the State** is to prevent those waters, and the waters that discharge to them, from being polluted in the first place. By encouraging the community to be conscious of their impact on the environment, educating them on pollution prevention, and by involving them and making them stakeholders in the protection of MS4 stormwater, the public gains a greater understanding of the reasons why it is necessary and important for an SWMP to be successful. As greater compliance with the SWMP is implemented and achieved, the water quality of receiving waterbodies within the MS4 is greatly improved and those areas impacted previously by pollution can be restored to healthy environmental conditions.

Target Audience or Participants – The target audience for this BMP includes the entire City of Sand Springs MS4 Community – General Public (including all ethnic and socio-economic groups), Commercial Business Owners & Employees, Industrial Business Owners & Employees, Primary & Secondary Schools, Non-Profits, and City Staff/Crews/Employees. The City of Sand Springs considers them most likely to be significant sources of and preventers of stormwater pollutants within the MS4.

Measurable Goal – This BMP is quantifiably measurable because,

- The number of complaints, reports, or monitoring flags can be tracked.
- The number of field tests or lab tests performed can be tracked.
- The number of dry weather field screenings performed at outfalls can be tracked.
- The number of dry weather field screenings performed at high-priority area outfalls can be tracked.
- The number of reported occasional incidental non-stormwater discharges can be tracked



- The number of enforcement actions taken can be tracked.
- The number of illicit discharge sources that are removed can be tracked.

This BMP is also qualitatively measurable. Email, phone call, fax, City Website or Social Media, or in-person feedback from individuals and stakeholders in the MS4 will include:

- Requests for inspections based on community knowledge of illicit discharges.
- Requests from the community for additional programs that provide education on what qualifies as an illicit discharge and when/to whom a potential illicit discharge should be reported.

ODEQ, through the OKR04 permit, has determined that these activities are effective ways to prevent or reduce illicit discharges.

Table 11 at the beginning of MCM 3 includes the prevention measures. If a Prevention Item or Program is listed as “In Conjunction with MCM 1”, a review of MCM 1 BMP Activities will provide additional information, a description of the program and implementer(s), planned or potential attendance numbers, and how often the item or program is scheduled to be implemented/distributed. The SWMP annual report(s) will list the actual attendance for each program, feedback on the materials/program, any pollution abatement actions taken as a direct result of the Prevention Item or Program, and the overall effectiveness of each to target pollutant sources. Revisions to the SWMP for each Prevention Item or Program listed will be made based on the effectiveness reported in the annual SWMP report.

Timeline for BMP implementation – Activities for Illicit Discharge Detection and Elimination are current BMP(s) for the City of Sand Springs and will continue to be implemented.

Distribution Schedule – Each activity or program listed in Tables 3, 11, and/or in Table 14 will be distributed/implemented per the schedule/amount shown. If the BMP activity(s) listed cannot be implemented by the City due to a declared City, State, or National/Federal emergency or another disruptive event, an Alternate Activity from the tables will be utilized. All prevention measures listed will be reviewed and updated as necessary with the SWMP Annual Report.

Control Techniques & Systems –

EDUCATION: Control Techniques & Systems for this activity can be located under Table 3 or 11 of this SWMP.

COMMUNITY NOTIFICATIONS: The City has provided the community with several ways to educate themselves and/or report an illicit discharge concern:

- In person – 13101 W. 46th Street, Sand Springs, OK 74063
- Stormwater Coordinator Email – hlbrown@sandspringsok.org, cdblair@sandspringsok.org
- Stormwater Coordinator Phone Number – (918) 246-2589
- City Instagram – @sandspringsok
- City Twitter – @Sand_Springs_OK
- City Website ‘Report a Problem’ and City Citizen Request Tracker iPhone App – <https://sandspringsok.org/387/Stormwater-Management-Program>



The CRT App allows citizens to report issues - potholes, graffiti, down street lights, stormwater pollution, etc. - using GPS location detection. Once the issue is submitted, the citizen will receive a confirmation email and can log in to view the status of their request/report along with comments posted by government officials. [Download Now](#)

- City Facebook ‘Report a Problem’ – <https://facebook.com/SandSprings.OK>



The CRT App for Facebook allows citizens to report issues - potholes, graffiti, down street lights, stormwater pollution, etc. - using GPS location detection. Once the issue is submitted, the citizen will receive a confirmation email and can log in to



view the status of their request/report, along with comments posted by government officials, from Facebook.

COMMUNITY INVOLVEMENT: Control Techniques & Systems for this activity can be located under Table 3 or 11 of this SWMP.

INCIDENTAL NON-STORMWATER LISTS: Both the City of Sand Springs Fire Department and the City of Sand Springs Stormwater Departments maintain a list of occasional incidental non-stormwater discharges or flows as allowed in Part II (B)(2) of the OKR04 permit. This list is available for review in person at either department's facility location. The incidental non-stormwater discharges or flows for each reporting year are presented within the annual SWMP report to ODEQ and available to review at all times online at: <https://sandspringsok.org/387/Stormwater-Management-Program>

INSPECTIONS: Inspections are performed as part of the detection process. Forms prompt City inspectors to visually inspect for and identify illicit discharges. Classes, training, and educational materials keep inspectors knowledgeable and current on inspection techniques.

SPILL, HAZARD & EMERGENCY PLANS: The City utilizes various plans to prevent illicit discharges and/or respond to and eliminate them.

Emergency Firefighting Pollutant Release Procedures:

Chemicals and their byproducts provide significant hazard to the public, environment, and emergency responders. The City of Sand Springs Fire Department (CSSFD) has an excellent relationship with manufacturers and distributors that store hazardous materials locally, or within impact range of the City, in order to be knowledgeable of and protect citizens from accidental releases. The department is equipped to handle a wide spectrum of hazardous materials and are regularly trained and refreshed in the associated skills to ensure responders are well-prepared. Nearly 100% of the department is trained at the "hazardous materials technician" level - the highest level of hazardous materials training. Detailed procedure methods, utilized for addressing hazardous materials, are located with the CSSFD SOP.

Minimum Procedures: The on-scene commander at the firefighting scene will follow the Sand Springs Fire Department's Standard Operating Procedures for Hazardous Materials Incident Actions. Any observed releases of chemicals into the Sand Springs' stormwater system and/or protected waterbodies will be reported to the City of Sand Springs Stormwater Coordinator. If local remediation is possible, the Sand Springs Fire Department will deploy absorbents, chemical neutralizers and/or booms and water skimmers to contain, neutralize and/or remove the chemicals. If the release is beyond the capability of local resources to safely and effectively remediate, the City of Sand Springs will contract the appropriate hazardous spill remediation company to properly complete the clean-up processes. Appropriate State and Federal agencies will be notified as required / as necessary.

ENFORCEMENT: Ordinances, warning citations, violation citations, and stop work orders are all tools that the City of Sand Springs utilizes to enforce against illicit discharges.

Design and/or Engineering Methods – The design of all activities will be the combined responsibility of the City of Sand Springs, INCOG, and GCSA. CRMs and educational activities will be designed by the providers/creators of each CRM/activity as listed in Table 3 or Table 11. There are no Engineering Methods necessary with this BMP other than those listed per the DWFS plan.

Enforcement, Implementation, and Coordination Responsibilities – This BMP may be implemented and coordinated by authorized representatives of Sand Springs or by others as noted in Tables 3 and 11, however, Enforcement, Implementation, and Coordination Responsibilities of this MCM will primarily be the combined responsibility of the City of Sand Springs' Stormwater Department, Water & Waste Water Department, Environmental Services, Police Department, and Fire Department. The following is a list of each department's responsibilities.



STORMWATER DEPARTMENT - The permit governing the operation of the storm drain system, including the streets, curbs, gutters, ditches, man-made channels, storm drain inlets, and other facilities it includes, prohibits anything but stormwater – water from rain - from entering the system. The City has adopted and implemented ordinances providing the City with the authority to require best management practices to prevent discharges of pollutants into the storm drain system and to enforce against any illegal discharges of non-stormwater and/or pollutants into the storm drain system. The City has included the ordinances as part of the Municipal Code which gives the City the necessary tools required to protect our local waterways from pollutants.

The City's ODEQ-issued stormwater permits and the City's ordinances require escalating enforcement when illegal discharges occur. This means that if a resident, business owner, or property owner illegally discharges into the storm drain system, enforcement actions against them will increase in severity with each incident. The severity of the enforcement action is based on a variety of factors, including, but not limited to, the type of substance discharged, the volume of discharge, and its proximity to waterways. Enforcement actions can include a warning letter, Notice of Violation, Administrative Citation, Civil Penalty, or criminal prosecution. Citations range from \$100 to \$1,000, and Civil Penalties can reach up to \$10,000 per day per violation.

The Sand Springs Public Works Department's stormwater code enforcement and inspection team responds to complaints of illicit discharges, carries out proactive patrols of residential properties, and inspects businesses to ensure compliance with the Permit and Municipal Code. All Commercial Business Owners & Employees, Industrial Business Owners & Employees, and City Staff/Crews/Employees must comply with the stormwater sections of the Code.

- **FIRE DEPARTMENT** - Discharges of material resulting from a spill, specifically Firefighting Activities, will be handled in the following manner: The local Incident Commander at the firefighting scene will report to the City of Sand Springs Stormwater Coordinator any observed releases of chemicals into the MS4 stormwater system and/or directly into waterbodies of the state during firefighting activities necessary to prevent an imminent threat to human life, personal injury, or severe property damage.

All reasonable and prudent local measures will be taken to minimize the impact of discharges on human health and the environment during these releases; Specifically the Sand Springs Fire Department will utilize and implement the following prevention and/or remediation measures to contain, neutralize, and/or remove the chemicals:

- Deployment of Absorbents;
- Deployment of Chemical Neutralizers;
- Deployment of Booms and Water Skimmers; and
- Appropriate Clean-up and Removal of all deployed prevention and/or remediation measures.

If the overall impact of release to the MS4 stormwater system and/or the water bodies of the state is beyond the capability of local measures to safely and effectively remediate, then the City of Sand Springs will contact a certified and reputable clean-up company that specializes in large-scale hazardous waste remediation.

- **WATER AND WASTE WATER DEPARTMENT** – The Water and Wastewater department maintains a comprehensive Stormwater Management Program separate from the SWMP.
- **ENVIRONMENTAL SERVICES** – Environmental services will assist the Stormwater Department in the prevention and elimination of potential illicit discharges and any necessary cleanup measures in the event of an illicit discharge.



If the overall impact of release to the MS4 stormwater system and/or the water bodies of the state is beyond the capability of local measures to safely and effectively remediate, then the City of Sand Springs will contact a certified and reputable clean-up company that specializes in large-scale hazardous waste remediation.

- **POLICE DEPARTMENT** – An officer or officers of the Sand Springs Police Department will assist the Stormwater Department when tickets must be issued to hostile or potentially hostile stormwater ordinance violators for safety purposes.

If the City determines an illicit discharge has been made, the City will utilize its Stormwater Citation system to ticket and/or fine violators. Appendix E contains copies of the current warning and citation ticket formats. If the City lacks the legal authority for direct enforcement action against violators who fail to comply with the City of Sand Springs' SWMP and Citation system, DEQ will be notified by both email and direct phone calls.



OKR04 Part V.C.3. a.vi: MCM 3, BMP Activity 4 – PREVENTION (IN COORDINATION WITH OTHER MCMs)

ITEM, ACTIVITY AND/OR PROGRAM **	DESCRIPTION
<p>SWP3 PLANS In coordination with MCM 4, 5, & 6</p>	<p>SWP3 Plans for each Sand Springs Facility/Department will be reviewed, employees will be educated on its use, and the facility will be inspected for adherence annually. SWP3 Plans are maintained separately from this SWMP by each Facility/Department.</p>
	<p>Permitted construction and/or development SWP3 plans are reviewed as part of the project approval process and construction sites are inspected for adherence. Construction SWP3 Plans are maintained separately from this SWMP by each project.</p>
<p>IN-SYSTEM SANITARY SEWER OVERFLOW PREVENTION In coordination with MCM 1, 4, 5, & 6</p>	<p>Sanitary sewer overflow is a condition in which untreated sewage is discharged from a sanitary sewer into the environment before reaching sewage treatment facilities. When caused by rainfall it is also known as wet weather overflow. Causes of sanitary sewer overflows include Blockage of sewer lines, infiltration/Inflow of excessive stormwater into sewer lines during heavy rainfall, malfunction of pumping station lifts or electrical power failure, and broken sewer lines. Prevention of sanitary sewer overflow events involves regular maintenance and timely upgrades of infrastructure as necessary. The Sand Springs Waste Water Treatment Plant maintains a plan to detect and address illicit discharges from sanitary sewer overflows, on-site sewage disposal systems, and illegal sewage dumping. The City maintains a Work-Order system to track all repairs and maintenance related to sanitary sewers.</p>
<p>ON-SITE (PORT-A-POTTY) / SEPTIC /PRIVATE SANITARY SEWER OVERFLOW PREVENTION In coordination with MCM 1, 4, 5, & 6</p>	<p>On-Site/Septic/Private Property sewer overflow is a condition in which untreated sewage is discharged from a septic or on-site portable sewer into the environment. When caused by rainfall it is also known as wet weather overflow. Causes of these sewer overflows include Blockage and leaking of septic lines or tanks, infiltration/Inflow of excessive stormwater into septic tanks/lines during heavy rainfall, blow-over of portable restroom units, and broken private sewer lines. Prevention of on-site/septic overflow events involves education on regular maintenance and timely upgrades of septic tanks as necessary. The Sand Springs Stormwater Waste Water Maintenance and Operations Departments perform inspections following complaints, incident reports, or monitoring information to detect, address, and enforce against Illicit discharge from these sources. The City maintains inspection documentation, an illicit discharge list, and a Work-Order system to track all clean-up efforts related to on-site/septic sewers.</p>
<p>COMMUNITY NOTIFICATIONS In coordination with MCM 1, 4, 5, & 6</p>	<p>Websites: Support regional INCOG and GCSA stormwater websites and maintain a City website for stormwater that provide links to educational materials, and notifications of upcoming training classes or events.</p>
	<p>Social Media: Maintain a City Facebook page that provides links to educational materials, and notifications of upcoming training classes or events.</p>
	<p>Public Meeting: Discuss the SWMP program & Annual SWMP Reports in public city council meetings.</p>
<p>COMMUNITY INVOLVEMENT In coordination with MCM 1, 4, 5, & 6</p>	<p>Clean-up Events: City-wide events.</p>
	<p>Identifying & Marking: Stormwater Volunteer and Service Hours program.</p>
	<p>Pollutant Collection: Promote the use of and support regional household pollutant collection events.</p>
	<p>Recycling: Promote the use of and support regional recycling centers.</p>
	<p>Trash and Debris Removal: Promote proper trash disposal and chipper programs.</p>



ITEM, ACTIVITY, AND/OR PROGRAM **	DESCRIPTION
<p>EDUCATION In coordination with MCM 1, 4, 5, & 6</p>	<p>Distribution of CRMs to target audiences that address: Household chemical/fats/oil/grease/trash disposal; Business chemical storage and disposal; Food Service chemicals/fats/oil/grease/trash waste disposal; Proper in-system sewer overflow prevention, spill clean-up, & system maintenance; Proper on-site sewage disposal system maintenance, and Recycling programs and sites.</p>
	<p>Training for the general public to know what an illicit discharge looks like, who to call or where to report if an illicit discharge is suspected, and the specific information to report.</p>
	<p>Training for Small Businesses, Restaurants, Construction Companies, and Industrial Businesses for proper waste and chemical storage/disposal/recycling, illicit discharge prevention, and spill prevention/clean-up.</p>
	<p>Training for City Employees, Police, and Fire for proper waste & chemical storage/disposal/recycling, illicit discharge detection/prevention, spill prevention/clean-up, and how to report if/when an illicit discharge is suspected.</p>
<p>INSPECTIONS In coordination with MCM 4, 5, & 6</p>	<p>DWFS performed per the Sand Springs DWFS plan at 40% of all identified outfalls and 100% of priority outfalls annually.</p>
	<p>Inspections will be performed randomly at potential pollution sources that may discharge to outfalls, catch basins, stormwater pipes or conduits, ditches, and/or directly to the Waters of the State.</p> <ul style="list-style-type: none"> • Problems identified by visual indicators and with simple field test kits will be tested using additional laboratory methods within 72 hrs. of initial identification. • A list of all inspections performed, incidental non-stormwater discharges/flows (as allowed in Part II (B)(2) of the OKR04 permit), and any identified illicit discharges/flows will be maintained and annually updated.
	<p>Perform construction site inspections within 72 hrs. following receipt of complaints, incident reports, or monitoring information that indicates a potential illicit discharge.</p>
	<p>Field Inspections will be performed within 72 hrs. following receipt of complaints, incident reports, or monitoring information that indicates a potential illicit discharge.</p>
<p>SPILL, HAZARD & EMERGENCY PLANS In coordination with MCM 4, 5, & 6</p>	<p>Facility Stormwater Pollution Prevention Plans (OKR04 / OKR05 SWP3s)</p>
	<p>Construction Site Stormwater Pollution Prevention Plans (OKR10 SWP3s)</p>
	<p>Emergency Response Plan</p>
	<p>Hazard Mitigation Plan</p>
<p>ORDINANCES In coordination with MCM 4, 5, & 6</p>	<p>Multiple city ordinances are in place instructing the Sand Springs community in requirements, violations, and fines related to stormwater and storm sewers of the MS4.</p>

Table 15 –Part V.C.3a.vi IDDE PREVENTION Activities

** This list is annually reviewed and will be updated as necessary. EXAMPLES ARE SHOWN IN APPENDIX D.

Reason for Selection –The prevention method items or program activities listed in Tables 3, 11, and 14 respectively seek to reduce, deter, or eliminate specific or predictable illicit discharge problems, protect the overall water quality of the MS4 community, and promote positive actions and behaviors through awareness and understanding. The only way to ultimately achieve clean Waters of the State is to prevent those waters and the waters that discharge to them, from being polluted in the first place.

Target Audience or Participants – The target audience for this BMP includes the entire City of Sand Springs MS4 Community – General Public (including all ethnic and socio-economic groups), Commercial Business Owners & Employees, Industrial Business Owners & Employees, Primary & Secondary Schools, Non-



Profits, and City Staff/Crews/Employees. The City of Sand Springs considers them most likely to be significant sources of and preventers of stormwater pollutants within the MS4.

Measurable Goal – Tables 3 and 11 detail the requirement reference, the number of education and/or involvement activities required, the available primary and alternative BMP activities that the City can or will utilize to meet the requirement, and how often the BMP activity or alternate activity is required to be implemented. Table 14 contains the current list of activities and programs utilized by the City for this BMP, a description, and reference to any outside implementer(s). If a prevention item, activity, or program is listed as “In Coordination with MCM...” a review of the notated MCM(s) BMPs will provide additional information, a description of the program and implementer(s), planned or potential attendance numbers, and how often the item or program is scheduled to be implemented/distributed. This BMP is quantifiably measurable because:

- The number of consumable materials produced, displayed, passed out, or used can be tracked.
- The attendance numbers at meetings, classes, and/or events can be tracked.
- The number of volunteer hours awarded can be tracked.
- The number of storm drains both marked and properly monitored can be tracked.
- The number of pounds/gallons of pollutants collected from recycling events can be tracked.
- The number of notifications sent out can be tracked.
- The number of DWFS and random inspections performed can be tracked.
- The number of sanitary sewer overflow prevention measures performed can be tracked.
- The number of Stormwater Complaint Inspection Reports and/or Work Orders performed can be tracked.
- The number of Stormwater Complaint Inspection Reports and/or Work Orders completed can be tracked.

This BMP is also qualitatively measurable. Email, phone calls, fax, City Website or Social Media, or in-person feedback from individuals and stakeholders in the MS4 will include:

- Requests for the restocking of current IDDE-related CRM materials that the community finds useful, comments on the quality of the materials, and/or requests for additional and/or different CRM materials.
- Requests for programs that the community finds useful, comments on the quality of the programs, and/or requests for additional and/or different programs.
- The estimated quantities of pollutants eliminated from the MS4.
- Documentation of any public health problems or complaints.
- Input from ODEQ and the county health department on activity effectiveness.

Effectiveness will be derived from the feedback from users on the material’s usefulness, any pollution abatement actions taken as a direct result of Educational CRMs, Programs, or Preventative Inspections, and the overall effectiveness of each to target and eliminate pollutant sources.

The SWMP annual report(s) will list the actual attendance for each program, feedback on the materials/program, any pollution abatement actions taken as a direct result of the prevention item, activity, or program, and the overall effectiveness of each to target pollutant sources. Revisions to the SWMP for each prevention item, activity, or program listed will be made based on the effectiveness reported in the annual SWMP report.

Timeline for BMP implementation – Illicit Discharge Detection and Elimination (IDDE) is a current BMP for the City of Sand Springs and will continue to be implemented. Each Prevention Item or Program will be distributed/implemented per the amount shown in Table 3 (located under MCM1), the DWFS plan, and the minimum required amount listed in Table 11. All prevention measures listed will be reviewed and



updated as necessary and quantitative and qualitative activity measurements will be reported in the SWMP Annual Report.

This BMP Activity is implemented in coordination with MCM 3, 4, 5, and 6

Distribution Schedule – The distribution schedule for this BMP can be found in Table 3 and Table 11 of this SWMP.

Control Techniques & Systems – The Control Techniques & Systems for this BMP can be located under TABLE 3, and/or per Table 11, or in the DWFS plan located in Part V.C.3 BMP Activity 4 of this SWMP. The City has also provided the community with several ways to educate themselves and/or report a stormwater pollution concern:

- In person – 13101 W. 46th Street, Sand Springs, OK 74063
- Stormwater Coordinator Email – hlbrown@sandspringsok.org, cdblair@sandspringsok.org
- Stormwater Coordinator Phone Number – (918) 246-2589
- City Instagram – @sandspringsok
- City Twitter – @Sand_Springs_OK
- City Website ‘Report a Problem’ and City Citizen Request Tracker iPhone App – <https://sandspringsok.org/387/Stormwater-Management-Program>



The CRT App allows citizens to report issues - potholes, graffiti, down street lights, stormwater pollution, etc. - using GPS location detection. Once the issue is submitted, the citizen will receive a confirmation email and can log in to view the status of their request/report along with comments posted by government officials. [Download Now](#)

- City Facebook ‘Report a Problem’ – <https://facebook.com/SandSprings.OK>



The CRT App for Facebook allows citizens to report issues - potholes, graffiti, down street lights, stormwater pollution, etc. - using GPS location detection. Once the issue is submitted, the citizen will receive a confirmation email and can log in to view the status of their request/report, along with comments posted by government officials, from Facebook.

Design and/or Engineering Methods – The design of all websites and social media will be the responsibility of the City of Sand Springs. Educational programs will be the combined responsibility of the City of Sand Springs, INCOG, and GCSA. CRMs will be designed by the providers/creators of each CRM listed in Table 3. There are no Engineering Methods necessary with this BMP other than as listed per the DWFS plan located in Part V.C.3 BMP Activity 4 of this SWMP.

Enforcement, Implementation, and Coordination Responsibilities –Implementation and coordination of this BMP will be shared responsibilities between the City of Sand Springs and its authorized representatives as noted in Tables 3 and 11. The City of Sand Springs and its authorized representatives will be entirely responsible for enforcement.



MCM 4- CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

References to other State or Federal documents are shown in *green text* and verbatim quotes are shown in *italicized green text*.

Per OKR04 Permit requirement V.C.4, the City of Sand Springs will implement a comprehensive education, inspection, and enforcement program to “*reduce pollutants in any stormwater runoff to [the] MS4 from active construction sites*”. The City of Sand Springs will take the following actions to address construction-related activities as defined in OKR04 Part V.C.4 to ensure that construction site operators implement proper erosion and sediment control measures and control wastes at construction sites:

- Provide education materials for construction site operators.
- Require construction site operators, through local ordinance, site plan review, the building permit application process, and all state/federal requirements, to establish stormwater pollution prevention procedures such as erosion and sediment controls and controls of site waste;
- Inspect sites for compliance with codes, ordinances, and permit requirements from site operators.
- Enforce penalties for violations such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste and siltation leaving the site and impacting the MS4.
- Increase the severity of penalties when corrective action requirements have been ignored or not fully achieved.

Table 16 details the MCM reference, the number of MCM activities required, the available primary and alternate BMP activities that the City can or will utilize to meet the requirement, and how often the BMP activity or alternate activity is required to be implemented. Detailed requirements for MCM 4 education and involvement activities are detailed in MCM 1 of this SWMP document.



MCM 4: CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

PERMIT REQUIREMENT REFERENCE	PERMIT REQUIREMENT ACTION	PERMIT REQUIREMENT AMOUNT	BMP OPTIONS TO COMPLETE REQUIRED ACTIONS					
			ACTIVITY 1	ALTERNATE ACTIVITY 1	ALTERNATE ACTIVITY 2	ALTERNATE ACTIVITY 3	ALTERNATE ACTIVITY 4	
Part V.C.1.a.ii.3.a	In coordination with MCM 4, implement an education program to involve local developers	1 ACTIVITY PER YEAR	BMP	CRM DISTRIBUTION . Distribute Construction Consumable Resource Materials (CRMs) to Developers / Contractors / Subcontractors	EDUCATIONAL EVENTS / PROGRAMS . Provide, Sponsor, or Support Construction Stormwater Education Class / Training / Workshop / Presentation / Project / Video			
			SCHEDULE	Distribute - 125 ANNUALLY OR USE ALTERNATE	ALTERNATE - 1 ANNUALLY			
Part V.C.1.a.ii.3.b	In coordination with MCM 4, implement and enforce procedures for receipt and consideration of information submitted by the public	THIS REQUIREMENT IMPLEMENTED CONTINUOUSLY UTILIZING ONE OR MORE OF THE LISTED BMP ACTIVITIES	BMP	ELECTRONIC INVOLVEMENT . Maintain or Support Stormwater E-Mail / Social Media / Website for receipt of stormwater questions, complaints, or the reporting of construction site illicit discharges				
			SCHEDULE	Maintain or Support - 1 ANNUALLY				
Part V.C.1.a.ii.3.c	In coordination with MCM 4, conduct staff training to address requirements for inspection and enforcement of erosion and sediment control measures	1 ACTIVITY PER YEAR	BMP	MS4 STAFF EDUCATION . Provide, Sponsor, or Support Erosion & Sediment Control Class / Training / Workshop / Presentation / Project / Video for MS4 Staff	CRM DISTRIBUTION . Distribute Illicit Discharge Reporting Consumable Resource Materials (CRMs) to MS4 Staff	ENFORCEMENT . When necessary, issue Warning / Notice of Stormwater Violation Citations	Maintain memberships & other government entity relationships for education & involvement events / resources	
			SCHEDULE	Provide, Sponsor, or Support - 1 ANNUALLY OR USE ALTERNATE	ALTERNATE - DISTRIBUTE 50 ANNUALLY	ALTERNATE - AS NECESSARY / COUNTS TOWARDS CRM TOTAL	ALTERNATE - 1 ANNUALLY	
Part V.C.4.a.i	Implement, and enforce with sanctions, an ordinance or other regulatory mechanism to require erosion and sediment controls.	THIS REQUIREMENT IMPLEMENTED CONTINUOUSLY UTILIZING ONE OR MORE OF THE LISTED BMP ACTIVITIES	BMP	STORMWATER ORDINANCE . Maintain, Review, and Update as Necessary Stormwater Ordinances	CONSTRUCTION ORDINANCE . Maintain, Review, and Update as Necessary Construction Ordinances	WASTE, LITTER, & SILTATION CONTROL ORDINANCES . Maintain, Review, and Update as Necessary Litter and Waste Control Ordinances	EROSION CONTROL ORDINANCE . Maintain, Review, and Update as Necessary Erosion Control Ordinances	
			SCHEDULE	REVIEW ANNUALLY - UPDATE AS NECESSARY	REVIEW ANNUALLY - UPDATE AS NECESSARY	REVIEW ANNUALLY - UPDATE AS NECESSARY	REVIEW ANNUALLY - UPDATE AS NECESSARY	
Part V.C.4.a.ii	Implement and enforce procedures for site plan review which incorporate consideration of potential water quality impacts including erosion and sediment controls, waste control, and other environmental impacts to stormwater.	THIS REQUIREMENT IMPLEMENTED CONTINUOUSLY UTILIZING ONE OR MORE OF THE LISTED BMP ACTIVITIES	BMP	CONSTRUCTION SITE PLAN REVIEW . Site Plan Review	CONSTRUCTION SITE SWP3 REVIEW . Site Plan Review			
			SCHEDULE	WITHIN 1 WEEK OF PLANS RECEIPT	WITHIN 1 WEEK OF SWP3 RECEIPT			
Part V.C.4.a.iii	Implement and enforce procedures for site inspection and enforcement of control measures including enforcement escalation procedures.	THIS REQUIREMENT IMPLEMENTED CONTINUOUSLY UTILIZING ONE OR MORE OF THE LISTED BMP ACTIVITIES	BMP	INSPECT SITES THAT ARE GREATER THAN 40 ACRES . Perform Inspection	INSPECT SITES THAT DISCHARGE WITHIN ONE (1) MILE OF A WATERBODY THAT IS IDENTIFIED AS IMPAIRED . Perform Inspection	INSPECT SITES THAT DISCHARGE WITHIN ONE (1) MILE OF A WATERBODY THAT HAS AN ESTABLISHED TMDL . Perform Inspection	INSPECT SITES THAT HAVE BEEN IDENTIFIED AS A THREAT TO WATER QUALITY OR ARE OPERATED BY REPEAT/RECALCITRANT OFFENDERS . Perform Inspection	
			SCHEDULE	ONCE PER MONTH OF ACTIVE CONSTRUCTION	ONCE PER MONTH OF ACTIVE CONSTRUCTION	ONCE PER MONTH OF ACTIVE CONSTRUCTION	ONCE PER MONTH OF ACTIVE CONSTRUCTION	
			BMP	Perform inspections utilizing STORMWATER CONSTRUCTION INSPECTION FORM and/or STORMWATER COMPLAINT INSPECTION FORM (as necessary). Utilize enforcement procedures and enforcement CRMs when necessary.	Perform inspections utilizing STORMWATER CONSTRUCTION INSPECTION FORM and/or STORMWATER COMPLAINT INSPECTION FORM (as necessary). Utilize enforcement procedures and enforcement CRMs when necessary.	Perform inspections utilizing STORMWATER CONSTRUCTION INSPECTION FORM and/or STORMWATER COMPLAINT INSPECTION FORM (as necessary). Utilize enforcement procedures and enforcement CRMs when necessary.	Perform inspections utilizing STORMWATER CONSTRUCTION COMPLAINT INSPECTION FORM (as necessary). Utilize enforcement procedures and enforcement CRMs when necessary.	
			SCHEDULE	ONCE PER QUARTER OF ACTIVE CONSTRUCTION	AS NECESSARY			
			BMP	Perform inspections following violation and enforcement procedures or as part of rain-event inspections.				

TABLE 16 - MCM 4: CONSTRUCTION SITE STORMWATER RUNOFF CONTROL



OKR04 Part V.C.4.a.i: MCM 4, BMP Requirement Activity 1 – CITY CODES AND ORDINANCES

In conjunction with MCM 1, 3, 5, & 6	
City Code/Ordinance Type**	City Code/Ordinance Numbers
STORMWATER ORDINANCE	The City implemented the following Stormwater City Codes and Ordinances: City Charter and Code of Ordinance - Ordinance 1167, Title 13, Chapter 13.16, 13.20, 13.30 And enforces against violations by utilizing penalties per City Charter and Code of Ordinance – Chapter 1.20.010.9; Ordinance 1167, Title 13, Chapter 13.16, 13.20, 13.30, 16.00-03
CONSTRUCTION ORDINANCE	The City implemented the following Construction City Codes and Ordinances: Ordinance 1167, Title 13, Chapter 13.16, 13.20, 13.30; 12.12.010-12.12.170; 13.12.020; 13.12.030; 16.04-16.99; Ordinance 1399, Title 15, Chapter 15.50, 13.20, 13.30 8.28.020; 8.28.030; 8.28.040; 8.28.050; 8.28.060; 8.28.140; 8.40.060; 8.40.070; 8.40.200; 8.48.10; 9.16.010-180; And enforces against violations by utilizing penalties per City Charter and Code of Ordinance - Ordinance 1167, Title 13, Chapter 13.16, 13.20, 13.30, 16.00-.03; 12.12.180; 8.28.150; 8.36.100; 8.48.050; 8.48.060; 8.40.260; 8.53.050; 8.53.090; 9.16.190; 15.50.120, 16.00-03.
WASTE, LITTER, & SILTATION CONTROL ORDINANCES	The City implemented the following City Codes and Ordinances for waste, litter, and siltation control: Chapter 8.28.020; 8.28.030; 8.28.040; 8.28.050; 8.28.060; 8.28.140; 8.40.060; 8.40.070; 8.40.200; 8.48.10; 9.16.010-180; Penalties per City Charter and Code of Ordinance - Chapter 8.28.150; 8.36.100; 8.48.050; 8.48.060; 8.40.260; 8.53.050; 8.53.090; 9.16.190
EROSION CONTROL ORDINANCE	The City implemented the following Erosion Control City Codes and Ordinances: Ordinance 1399, Title 15, Chapter 15.50, 13.20, 13.30 8.28.020; 8.28.030; 8.28.040; 8.28.050; 8.28.060; 8.28.140; 8.40.060; 8.40.070; 8.40.200; 8.48.10; 9.16.010-180; And enforces against violations by utilizing penalties per City Charter and Code of Ordinance - Chapter 8.28.150; 8.36.100; 8.48.050; 8.48.060; 8.40.260; 8.53.050; 8.53.090; 9.16.190; 15.50.120, 16.00-.03

Table 17 – Part C.C.4.a.i CITY CODES AND ORDINANCES List

** This list is annually reviewed and will be updated as necessary. EXAMPLES ARE SHOWN IN APPENDIX D.

Reason for Selection – The City of Sand Springs has developed ordinances prohibiting the discharge of pollutants and sediment from construction sites and requiring the deployment of adequate sediment and erosion control measures. The codes and ordinances listed in Tables 16 and 17 inform the target audience of both allowable and prohibited construction activities, as well as pollution prevention requirements such as concrete washout and erosion control, local and state permitting requirements, inspection requirements/access, proper construction erosion control installation and maintenance, and the proper storage, use, and safe dispose of chemicals such as heavy metals, solvents, acids, and poisons. Education and inspections will ensure compliance with these ordinances. The MS4’s stormwater coordinator, building inspector, and/or other staff will perform periodic site inspections for compliance with local stormwater codes either as part of required inspections, other construction inspections, and/or in response to complaints from the general public.

Target Audience or Participants – The target audience for this BMP includes Developer & Construction Industry Employees and City Staff/Crews/Employees. The City of Sand Springs considers them most likely to be significant sources of construction stormwater pollutants within the MS4.



Measurable Goal – Table 16, located at the beginning of MCM 4, details the requirement reference, the number of involvement activities required, the available primary and alternative BMP activities that the City can or will utilize to meet the requirement, and how often the BMP activity or alternate activity is required to be implemented. Table 16 above contains the current list of City Codes and Ordinances utilized by the City for this BMP activity. This BMP activity is quantifiably measurable based on the number of ordinances available and the number of penalties enforced. This BMP activity is also qualitatively measurable – Contact from the general public or the target audience via, Email, phone call, fax, City Website, or Social Media, requesting guidance, clarification, or changes to the existing codes and ordinances, and/or for clarification of penalties, can be directly related to this BMP Activity.

The SWMP annual report(s) will list the actual quantitative and qualitative numbers and the effectiveness of each penalty utilized during the reporting period. Revisions to the current list of codes and ordinances will be reported in the annual SWMP report.

Timeline for BMP implementation – Codes and Ordinances are a current BMP activity for the City of Sand Springs and will continue to be implemented by City SWMP staff or by another entity as listed in Table 16.

This BMP Activity is implemented in coordination with MCM 1, 3, 5, and 6

Distribution Schedule – The BMP activity or an alternate activity will be distributed per the schedule shown in Table 16 and updated with the SWMP Annual Report as necessary. As greater compliance with the SWMP is implemented and achieved, the water quality of receiving waterbodies within the MS4 is greatly improved and those areas impacted previously by pollution can be restored to healthy environmental conditions.

Control Techniques & Systems – The codes and ordinances listed must remain “adaptive” to remain updated. The process will require the City of Sand Springs to continue to check the effectiveness of the codes and ordinances and update them as necessary. This approach will ensure compliance with Federal and State regulations while addressing the specific stormwater priorities of the Sand Springs community in the most efficient and effective way possible.

Design and Engineering Methods – The design of all BMP activities and related materials will be the responsibility of the City of Sand Springs and will be specifically SWMP related. There are no Engineering Methods necessary for this BMP activity.

Enforcement, Implementation, and Coordination Responsibilities – Implementation and coordination of this BMP will be the responsibility of the City of Sand Springs and its authorized representatives. The City of Sand Springs and its authorized representatives will be entirely responsible for enforcement.



OKR04 Part V.C.4.a.ii: MCM 4, BMP Requirement Activity 2 – SITE PLAN REVIEW - IMPLEMENTATION & ENFORCEMENT

In conjunction with MCM 1, 3, 5, & 6	
Activity Type	Description
CONSTRUCTION SITE PLAN REVIEW*	Review construction site plans within 1 WEEK of plans receipt. Utilize CONSTRUCTION SITE INFORMATION FORM and CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN REVIEW CHECKLIST to determine if submitted plans meet City ordinance requirements for stormwater and/or OKR10 Permit requirements. Require changes or updates from site plan submitter as necessary.
CONSTRUCTION SITE SWP3 REVIEW*	Review construction site SWP3 within 1 WEEK of receipt. Utilize CONSTRUCTION SITE INFORMATION FORM and CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN REVIEW CHECKLIST to determine if submitted SWP3 meets City ordinance requirements for stormwater and/or OKR10 Permit requirements. Require changes or updates from SWP3 submitter as necessary.

Table 18 – Part V.C.4.a.ii SITE PLAN REVIEW – IMPLEMENTATION AND ENFORCEMENT

**Examples of forms/reports are located in Appendix d*

Reason for Selection – The Construction Site Plan Review is completed by the City of Sand Springs Stormwater Coordinator, Engineering Staff, Planning, Zoning, & Permitting Staff, and Code Enforcement Staff. Additionally, the City of Sand Springs has developed ordinances prohibiting the discharge of pollutants such as waste, litter, and/or siltation from construction sites and requiring the deployment of adequate sediment and erosion control measures. The City will confirm that the site plans and SWP3 account for both allowable and prohibited construction activities, as well as pollution prevention requirements such as concrete washout and erosion control, local and state permitting requirements, inspection requirements/access, proper construction erosion control installation and maintenance, and the proper storage, use, and safe disposal of chemicals such as heavy metals, solvents, acids, and poisons. Education and inspections will ensure compliance with these ordinances.

Target Audience or Participants – The target audience for this BMP includes Developer & Construction Industry Employees and City Staff/Crews/Employees. The City of Sand Springs considers them most likely to be significant sources of construction stormwater pollutants within the MS4.

Measurable Goal – Table 16, located at the beginning of MCM 4, details the requirement reference, the number of involvement activities required, the available primary and alternative BMP activities that the City can or will utilize to meet the requirement, and how often the BMP activity or alternate activity is required to be implemented. Table 18 above contains the current list of BMP activities utilized by the City to meet the requirements of OKR04 Part V.C.4.a.ii. This BMP activity is quantifiably measurable based on the number of site plans and SWP3s reviewed. This BMP activity is also qualitatively measurable – Contact from the general public or the target audience via, Email, phone call, fax, City Website, or Social Media, requesting guidance or site plan requirement clarification and/or for clarification of assessed penalties can be directly related to this BMP Activity.

The SWMP annual report(s) will list the actual quantitative and qualitative numbers and the effectiveness of the review processes during the reporting period. Any necessary revisions will be reported in the annual SWMP report.

Timeline for BMP implementation – Site Plan and SWP3 review is a current BMP activity for the City of Sand Springs and will continue to be implemented by City SWMP staff or by another entity as listed in Table 16.



This BMP Activity is implemented in coordination with MCM 1, 3, 5, and 6

Distribution Schedule – The BMP activity or an alternate activity will be distributed per the schedule shown in Table 16 and updated with the SWMP Annual Report as necessary. As greater compliance with the SWMP is implemented and achieved, the water quality of receiving waterbodies within the MS4 is greatly improved and those areas impacted previously by pollution can be restored to healthy environmental conditions.

Control Techniques & Systems –The review process is part of a check-and-balance system implemented by the City to ensure construction activities meet all Local, State, and Federal requirements while also addressing the specific stormwater priorities of the Sand Springs community in the most efficient and effective way possible.

Procedures for Site Plan Review

- Include in the MS4’s regular site plan review process (Engineering, Planning, Zoning, & Permitting Staff plan reviews), the Stormwater Department will take additional steps to ensure that the draft plans are consistent with local erosion and sediment control requirements;
- The Stormwater Department will require all new development and redevelopment construction plans to consider potential impacts on water quality from construction activities. Areas to be addressed include sediment and erosion control and control of on-site wastes that can impact water quality.
- The Stormwater Department will ensure that the proposed construction plans and activities comply with Federal, State, and Local stormwater and floodplain requirements and/or ordinances.

Design and Engineering Methods – The design of all BMP activities and related materials will be the responsibility of the City of Sand Springs and will be specifically SWMP related. Engineering Methods necessary for this BMP activity are the specific responsibility of the City of Sand Springs Engineering Department and will not be defined or implemented specifically by the Stormwater Department. Stormwater-related BMP activities that have engineering specifications will occur only as a byproduct of the overall site plan review and approval by the Engineering Department.

Enforcement, Implementation, and Coordination Responsibilities –Implementation and coordination of this BMP will be the responsibility of the City of Sand Springs and its authorized representatives. The City of Sand Springs and its authorized representatives will be entirely responsible for enforcement. The MS4 will ensure compliance from site operators through the site inspection and enforcement process. Increasing severity of penalties will result when corrective action has been ignored or not fully achieved.



OKR04 Part V.C.4.a.iii: MCM 4, BMP Requirement Activity 3 – CONSTRUCTION INSPECTIONS

In conjunction with MCM 1, 3, 5, & 6	
Activity Type	Description
INSPECT CONSTRUCTION SITES THAT ARE GREATER THAN 40 ACRES	Perform inspections utilizing STORMWATER CONSTRUCTION INSPECTION FORM and/or STORMWATER COMPLAINT INSPECTION FORM (as necessary). Utilize enforcement procedures and enforcement CRMs when necessary.
INSPECT CONSTRUCTION SITES THAT DISCHARGE WITHIN ONE (1) MILE OF A WATERBODY THAT IS IDENTIFIED AS IMPAIRED	Perform inspections utilizing STORMWATER CONSTRUCTION INSPECTION FORM and/or STORMWATER COMPLAINT INSPECTION FORM (as necessary). Utilize enforcement procedures and enforcement CRMs when necessary.
INSPECT SITES THAT DISCHARGE WITHIN ONE (1) MILE OF A WATERBODY THAT HAS AN ESTABLISHED TMDL	Perform inspections utilizing STORMWATER CONSTRUCTION INSPECTION FORM and/or STORMWATER COMPLAINT INSPECTION FORM (as necessary). Utilize enforcement procedures and enforcement CRMs when necessary.
INSPECT SITES THAT HAVE BEEN IDENTIFIED AS A THREAT TO WATER QUALITY OR ARE OPERATED BY REPEAT/RECALCITRANT OFFENDERS	Perform inspections utilizing STORMWATER CONSTRUCTION INSPECTION FORM and/or STORMWATER COMPLAINT INSPECTION FORM (as necessary). Utilize enforcement procedures and enforcement CRMs when necessary.
INSPECT ALL OTHER CONSTRUCTION SITES	Perform inspections utilizing STORMWATER CONSTRUCTION INSPECTION FORM and/or STORMWATER COMPLAINT INSPECTION FORM (as necessary). Utilize enforcement procedures and enforcement CRMs when necessary.
PERFORM FOLLOW-UP AND RAIN EVENT INSPECTIONS	Perform inspections following violation and enforcement procedures or as part of rain-event inspections.

Table 19 – Part V.C.4.a.iii CONSTRUCTION INSPECTIONS

Reason for Selection – Construction Inspections are completed by the City of Sand Springs Stormwater Coordinator, Engineering Staff, Planning, Zoning, & Permitting Staff, and Code Enforcement Staff. Additionally, City of Sand Springs staff from other Departments can report on construction site stormwater pollution prevention compliance and request additional inspections. The City will ensure, through inspection, compliance with all City pollution prevention codes and ordinances as well as the site’s OKR10 SWP3 requirements - accounting for both allowable and prohibited construction activities, as well as pollution prevention requirements such as concrete washout and erosion control, local and state permitting requirements, proper construction erosion control installation and maintenance, proper waste management, and the proper storage, use, and safe disposal of chemicals such as heavy metals, solvents, acids, and poisons.

Target Audience or Participants – The target audience for this BMP includes Developer & Construction Industry Employees and City Staff/Crews/Employees. The City of Sand Springs considers them most likely to be significant sources of construction stormwater pollutants within the MS4.

Measurable Goal – Table 16, located at the beginning of MCM 4, details the requirement reference, the number of involvement activities required, the available primary and alternative BMP activities that the City can or will utilize to meet the requirement, and how often the BMP activity or alternate activity is required to be implemented. Table 19 above contains the current list of BMP activities utilized by the City to meet the requirements of OKR04 Part V.C.4.a.iii. This BMP activity is quantifiably measurable based on the number of inspections performed. This BMP activity is also qualitatively measurable – Contact from



the general public or the target audience via, Email, phone call, fax, City Website, or Social Media, requesting the completion of additional inspections can be directly related to this BMP Activity.

The SWMP annual report(s) will list the actual quantitative and qualitative numbers and the effectiveness of the inspection processes during the reporting period. Any necessary revisions will be reported in the annual SWMP report.

BMP effectiveness will be demonstrated by keeping records of feedback from individuals and stakeholders in the general public and from agencies and organizations involved with the construction site control program. Feedback from the public, agencies, and organizations (email, phone call, fax, letter, or personal visit) including outputs and outcomes of educational events will be recorded in writing. The City of Sand Springs will record all construction site inspections and pollution abatement episodes as described in the SWMP, including date, location, pollutant, observations, measurements, interviews, photos, field form data, abatement and enforcement steps taken, and results of each investigation. The increased number of pollution discharge quantities removed from the environment over a period of several years of BMP implementation and inspections conducted should demonstrate the effectiveness of this MCM.

Timeline for BMP implementation – Construction Site Inspections are a current BMP activity for the City of Sand Springs and will continue to be implemented by City SWMP staff or by another entity as listed in Table 16.

This BMP Activity is implemented in coordination with MCM 1, 3, 5, and 6

Distribution Schedule – The BMP activity or an alternate activity will be distributed per the schedule shown in Table 16 and updated with the SWMP Annual Report as necessary. As greater compliance with the SWMP is implemented and achieved, the water quality of receiving waterbodies within the MS4 is greatly improved and those areas impacted previously by pollution can be restored to healthy environmental conditions.

Control Techniques & Systems –The inspection process is part of a check-and-balance system implemented by the City to ensure construction activities meet all Local, State, and Federal requirements while also addressing the specific stormwater priorities of the Sand Springs community in the most efficient and effective way possible.

Procedures for Construction Site Inspection

- Construction site inspections for Stormwater compliance will be performed by City staff at the start of construction, when a complaint is received from the public about a stormwater pollution incident, and/or when the stormwater coordinator determines that there is a problem with the pollution prevention or erosion control measures.
- The inspector will utilize a STORMWATER CONSTRUCTION INSPECTION FORM and/or STORMWATER COMPLAINT INSPECTION FORM to document the results of each inspection and note any remedial action needed;
- Inspection data from the forms as well as all follow-up actions, including enforcement, will be entered into a computer and also stored in paper files;
- Escalating Enforcement will be implemented for non-compliance or violations.
- Serious or immediate and significant threats to public health, public safety, or the environment will be immediately enforced against using the best professional judgment of the inspector and/or City management, including police, flood, and fire personnel, as the situation merits. A Notice of Stormwater Violation will be issued notifying the violator that the issue must be remediated immediately. A fine will be issued and a follow-up inspection will be scheduled to confirm compliance and acceptable remediation. ODEQ will be notified as deemed necessary to report the violation for OKR10 enforcement.



Design and Engineering Methods – The design of all BMP activities and related materials will be the responsibility of the City of Sand Springs and will be specifically SWMP related. Engineering Methods necessary for this BMP activity are the specific responsibility of the City of Sand Springs Engineering Department and will not be defined or implemented specifically by the Stormwater Department. Stormwater-related BMP activities that have engineering specifications will occur only as a byproduct of the overall site plan review and approval by the Engineering Department.

Enforcement, Implementation, and Coordination Responsibilities –Implementation and coordination of this BMP will be the responsibility of the City of Sand Springs and its authorized representatives. The City of Sand Springs and its authorized representatives will be entirely responsible for enforcement. The MS4 will ensure compliance from site operators through the site inspection and enforcement process. Increasing severity of penalties will result when corrective action has been ignored or not fully achieved. Enforcement of violations will proceed in the following escalating manner:

- Initial violation or minor violation - verbally encourage remediation by the violator within a reasonable time and schedule a follow-up inspection.
- Failure to comply by follow-up inspection date / and or repeated violation – send an email warning or letter documenting a request for the violator to remediate within a reasonable time and schedule a follow-up inspection.
- Failure to comply to email warning or letter follow-up by inspection date / and or a moderate violation – send a Warning of Stormwater Violation documenting a request for the violator to remediate within a reasonable time and schedule a follow-up inspection.
- Failure to comply with Warning of Stormwater Violation follow-up by inspection date and/or a serious violation – send a Notice of Stormwater Violation documenting a request for the violator to remediate within a reasonable time, issuing a fine, and scheduling a follow-up inspection.
- Serious or immediate and significant threats to public health, public safety, or the environment will be immediately enforced against using the best professional judgment of the inspector and/or City management, including police, flood, and fire personnel, as the situation merits. A Notice of Stormwater Violation will be issued notifying the violator that the issue must be remediated immediately. A fine will be issued and a follow-up inspection will be scheduled to confirm compliance and acceptable remediation. ODEQ will be notified (as deemed necessary) within 24 hours to report the violation for OKR10 enforcement.



MCM 5- POST-CONSTRUCTION MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

References to other State or Federal documents are shown in **green text** and verbatim quotes are shown in *italicized green text*.

Post-construction stormwater management in new development and redevelopment focuses on the implementation of controls and practices that are designed to maintain good water quality conditions after an area has been developed and after construction activities have been completed. OKR04 Part V.C.5 requires the implementation and enforcement of BMPs that *“maintain pre-development [stormwater] runoff conditions and ensure that controls are in place that would prevent or minimize water quality impacts...from new development and redevelopment projects that disturb greater than or equal to one (1) acre, including projects less than one (1) acre [but] are part of a larger common plan of development or sale”*.

The City of Sand Springs has developed the BMP activities listed in Table 20 for addressing the water quality of post-construction stormwater runoff. Each BMP details the requirement reference for MCM 5 activities, the available primary and alternate BMP activities that the City can or will utilize to meet these requirements, and how often the BMP activity or alternate activity is required to be implemented. Requirements for MCM 5 that have been previously detailed elsewhere in this SWMP document are referenced and can be located under the referenced section. For example, MCM 5 education and involvement activities are detailed in MCM 1 of this SWMP document.



MCM 1: PUBLIC EDUCATION AND INVOLVEMENT

PERMIT REQUIREMENT REFERENCE	PERMIT REQUIREMENT ACTION	PERMIT REQUIREMENT AMOUNT	BMP OPTIONS TO COMPLETE REQUIRED ACTIONS					
			ACTIVITY 1	ALTERNATE ACTIVITY 1	ALTERNATE ACTIVITY 2			
Part V.C.1.a.ii.4	In coordination with MCM 5, implement an education and outreach program for developers and the public about project designs that minimize water quality impacts, including LID strategies	1 ACTIVITY PER YEAR	BMP	IN-PERSON EDUCATIONAL EVENTS / PROGRAMS. Provide, Sponsor, or Support Developer & Construction LID Training Workshop / Presentation / Project / Video for MS4 Staff Class / Training /	CRM DISTRIBUTION. Distribute LID Consumable Resource Materials (CRMs) to Developers / General Public / All Audience Groups - Including All Age, Ethnic, and Socio-Economic Groups	OTHER ENTITY ASSISTANCE. Maintain memberships & other government entity relationships for education & involvement events / resources		
			SCHEDULE	Provide, Sponsor, or Support - 1 ANNUALLY OR USE ALTERNATE	ALTERNATE - DISTRIBUTE 50 ANNUALLY	ALTERNATE - 1 ANNUALLY		
			BMP ITEMS, ACTIONS, EVENTS, OR ACTIVITIES	Erosion Control Lunch and Learn / Resource Management Conference/ LID Workshop/ Post-Construction Workshop / Pollution Prevention Workshop / Drop In the Bucket Stormwater Video / Stormwatch Stormwater Education Video / Rain Check Stormwater Education Video / INCOG Priority Area Inspection Training / Stormwater Inspection Training / Stormwater Enforcement Training / Stream Restoration Design Video / Site-Specific or Issue-Specific Training	Brochures / Pamphlets / Activity Books / Color Books / Activity Pages / Color Pages / Utility Mailers / Survey Slips / Disposable Signage & Banners / Presentation and Training Consumable Resources / Logo Items / Mailers / Enforcement Warnings / Enforcement Citations / Seasonal Hand-outs / Displays / Posters / Kiosks / Stormwater Excellence Awards / Earth Day / Stormwater Volunteer & Service Hours Program / Internship & Seasonal Worker Programs / Seasonal Hand-outs / Displays / Posters / Kiosks	INCOG /GCSA / OFMA / ODOT Stormwater / M.e.T. / IECA / EPA / ODEQ / Home Builders Association of Greater Tulsa / Chandler Nature Center / Tulsa County Conservation Commission		
Part V.C.5.a.i	Implement, and enforce with sanctions, an ordinance or other regulatory mechanism to require the use of BMPs, with highest preference given to LID techniques and practices, to address post-construction runoff from new development and redevelopment projects.	THIS REQUIREMENT IMPLEMENTED CONTINUOUSLY UTILIZING ONE OR MORE OF THE LISTED BMP ACTIVITIES	BMP	STORMWATER ORDINANCE. Maintain, Revise, and Update as Necessary Stormwater Ordinances	CONSTRUCTION ORDINANCE. Maintain, Revise, and Update as Necessary Construction Ordinances	WASTE, LITTER, & SILTATION CONTROL ORDINANCES. Maintain, Revise, and Update as Necessary Litter and Waste Control Ordinances	EROSION CONTROL ORDINANCE. Maintain, Revise, and Update as Necessary Erosion Control Ordinances	POST-CONSTRUCTION EROSION CONTROL ORDINANCE. Maintain, Revise, and Update as Necessary Post-Construction Erosion Control Ordinances
			SCHEDULE	REVIEW ANNUALLY - UPDATE AS NECESSARY	REVIEW ANNUALLY - UPDATE AS NECESSARY	REVIEW ANNUALLY - UPDATE AS NECESSARY	REVIEW ANNUALLY - UPDATE AS NECESSARY	REVIEW ANNUALLY - UPDATE AS NECESSARY
			BMP ITEMS, ACTIONS, EVENTS, OR ACTIVITIES	City Charter and Code of Ordinance - Ordinance 1167, Title 13, Chapter 13.16, 13.20, 13.30 Penalties per City Charter and Code of Ordinance - Ordinance 1167, Title 13, Chapter 13.16, 13.20, 13.30, 16.00-.03	City Charter and Code of Ordinance - Ordinance 1167, Title 13, Chapter 13.16, 13.20, 13.30, 12.12.010-12.12.170; 13.12.020; 13.12.030; 16.04-16.99; Ordinance 1399, Title 15, Chapter 15.50, 13.20, 13.30 8.28.020; 8.28.030; 8.28.040; 8.28.050; 8.28.060; 8.28.140; 8.40.060; 8.40.070; 8.40.200; 8.48.10; 9.16.010-180; Penalties per City Charter and Code of Ordinance - Ordinance 1167, Title 13, Chapter 13.16, 13.20, 13.30, 16.00-.03; 12.12.180; 8.28.150; 8.36.100; 8.48.050; 8.48.060; 8.40.260; 8.53.050; 8.53.090; 9.16.190; 15.50.120, 16.00-.03	City Charter and Code of Ordinance - Chapter 8.28.020; 8.28.030; 8.28.040; 8.28.050; 8.28.060; 8.28.140; 8.40.060; 8.40.070; 8.40.200; 8.48.10; 9.16.010-180; Penalties per City Charter and Code of Ordinance - Chapter 8.28.150; 8.36.100; 8.48.050; 8.48.060; 8.40.260; 8.53.050; 8.53.090; 9.16.190	City Charter and Code of Ordinance - Ordinance 1399, Title 15, Chapter 15.50, 13.20, 13.30 8.28.020; 8.28.030; 8.28.040; 8.28.050; 8.28.060; 8.28.140; 8.40.060; 8.40.070; 8.40.200; 8.48.10; 9.16.010-180; Penalties per City Charter and Code of Ordinance - Chapter 8.28.150; 8.36.100; 8.48.050; 8.48.060; 8.40.260; 8.53.050; 8.53.090; 9.16.190; 15.50.120, 16.00-.03	City Charter and Code of Ordinance - Ordinance 1399, Title 15, Chapter 15.50, 13.20, 13.30 8.28.020; 8.28.030; 8.28.040; 8.28.050; 8.28.060; 8.28.140; 8.40.060; 8.40.070; 8.40.200; 8.48.10; 9.16.010-180; Penalties per City Charter and Code of Ordinance - Chapter 8.28.150; 8.36.100; 8.48.050; 8.48.060; 8.40.260; 8.53.050; 8.53.090; 9.16.190; 15.50.120, 16.00-.03
BMP ITEMS, ACTIONS, EVENTS, OR ACTIVITIES	Request annual reports from housing developments, Businesses, Schools, or Churches that have Retention, Detention, or Reserve areas (including park and playground space)	Erosion Control Lunch and Learn / Resource Management Conference/ LID Workshop/ Post-Construction Workshop / Pollution Prevention Workshop / Drop In the Bucket Stormwater Video / Stormwatch Stormwater Education Video / Rain Check Stormwater Education Video / INCOG Priority Area Inspection Training / Stormwater Inspection Training / Stormwater Enforcement Training / Stream Restoration Design Video / Site-Specific or Issue-Specific Training	Brochures / Pamphlets / Activity Books / Color Books / Activity Pages / Color Pages / Utility Mailers / Survey Slips / Disposable Signage & Banners / Presentation and Training Consumable Resources / Logo Items / Mailers / Enforcement Warnings / Enforcement Citations / Seasonal Hand-outs / Displays / Posters / Kiosks / Stormwater Excellence Awards / Earth Day / Stormwater Volunteer & Service Hours Program / Internship & Seasonal Worker Programs / Seasonal Hand-outs / Displays / Posters / Kiosks	INCOG /GCSA / OFMA / ODOT Stormwater / M.e.T. / IECA / EPA / ODEQ / Home Builders Association of Greater Tulsa / Chandler Nature Center / Tulsa County Conservation Commission				
Part V.C.5.a.ii	Implement and enforce procedures to ensure adequate long-term operation and maintenance of BMPs that are installed during and left in place after the completion of a construction project.	THIS REQUIREMENT IMPLEMENTED CONTINUOUSLY UTILIZING ONE OR MORE OF THE LISTED BMP ACTIVITIES	BMP	LONG TERM MAINTENANCE. Retention, Detention, and Reserve area Inspections for Post-Construction Long Term Maintenance	IN-PERSON EDUCATIONAL EVENTS / PROGRAMS. Provide, Sponsor, or Support Post-Construction Maintenance Training Workshop / Presentation / Project / Video for MS4 Staff Class / Training /	CRM DISTRIBUTION. Distribute Post-Construction Maintenance Consumable Resource Materials (CRMs) to Developers / General Public / All Audience Groups - Including All Age, Ethnic, and Socio-Economic Groups	OTHER ENTITY ASSISTANCE. Maintain memberships & other government entity relationships for education & involvement events / resources	
			SCHEDULE	REVIEW ANNUALLY - UPDATE AS NECESSARY	Provide, Sponsor, or Support - 1 ANNUALLY OR USE ALTERNATE	ALTERNATE - DISTRIBUTE 50 ANNUALLY	ALTERNATE - 1 ANNUALLY	
			BMP ITEMS, ACTIONS, EVENTS, OR ACTIVITIES	Request annual reports from housing developments, Businesses, Schools, or Churches that have Retention, Detention, or Reserve areas (including park and playground space)	Erosion Control Lunch and Learn / Resource Management Conference/ LID Workshop/ Post-Construction Workshop / Pollution Prevention Workshop / Drop In the Bucket Stormwater Video / Stormwatch Stormwater Education Video / Rain Check Stormwater Education Video / INCOG Priority Area Inspection Training / Stormwater Inspection Training / Stormwater Enforcement Training / Stream Restoration Design Video / Site-Specific or Issue-Specific Training	Brochures / Pamphlets / Activity Books / Color Books / Activity Pages / Color Pages / Utility Mailers / Survey Slips / Disposable Signage & Banners / Presentation and Training Consumable Resources / Logo Items / Mailers / Enforcement Warnings / Enforcement Citations / Seasonal Hand-outs / Displays / Posters / Kiosks / Stormwater Excellence Awards / Earth Day / Stormwater Volunteer & Service Hours Program / Internship & Seasonal Worker Programs / Seasonal Hand-outs / Displays / Posters / Kiosks	INCOG /GCSA / OFMA / ODOT Stormwater / M.e.T. / IECA / EPA / ODEQ / Home Builders Association of Greater Tulsa / Chandler Nature Center / Tulsa County Conservation Commission	
Part V.C.5.a.iii	Promote Opportunities to promote LID	THIS REQUIREMENT IMPLEMENTED CONTINUOUSLY UTILIZING ONE OR MORE OF THE LISTED BMP ACTIVITIES	BMP	IN-PERSON EDUCATIONAL EVENTS / PROGRAMS. Provide, Sponsor, or Support Post-Construction Maintenance Training Class /	CRM DISTRIBUTION. Distribute Post-Construction Maintenance Consumable Resource Materials (CRMs) to Developers / General Public / All Audience Groups - Including All Age, Ethnic, and Socio-Economic Groups	OTHER ENTITY ASSISTANCE. Maintain memberships & other government entity relationships for education & involvement events / resources	ALTERNATE ACTIVITY 3. FAST-TRACK PROCESS OF PROJECT PERMITTING. Encourage Post-Construction LID BMP Use	ALTERNATE ACTIVITY 4. FEE WAIVING. Encourage Post-Construction LID BMP Use
			SCHEDULE	Provide, Sponsor, or Support - 1 ANNUALLY OR USE ALTERNATE	ALTERNATE - DISTRIBUTE 50 ANNUALLY	ALTERNATE - 1 ANNUALLY	ALTERNATE - AS NECESSARY	ALTERNATE - AS NECESSARY
			BMP ITEMS, ACTIONS, EVENTS, OR ACTIVITIES	Erosion Control Lunch and Learn / Resource Management Conference/ LID Workshop/ Post-Construction Workshop / Pollution Prevention Workshop / Drop In the Bucket Stormwater Video / Stormwatch Stormwater Education Video / Rain Check Stormwater Education Video / INCOG Priority Area Inspection Training / Stormwater Inspection Training / Stormwater Enforcement Training / Stream Restoration Design Video / Site-Specific or Issue-Specific Training	Brochures / Pamphlets / Activity Books / Color Books / Activity Pages / Color Pages / Utility Mailers / Survey Slips / Disposable Signage & Banners / Presentation and Training Consumable Resources / Logo Items / Mailers / Enforcement Warnings / Enforcement Citations / Seasonal Hand-outs / Displays / Posters / Kiosks / Stormwater Excellence Awards / Earth Day / Stormwater Volunteer & Service Hours Program / Internship & Seasonal Worker Programs / Seasonal Hand-outs / Displays / Posters / Kiosks	INCOG /GCSA / OFMA / ODOT Stormwater / M.e.T. / IECA / EPA / ODEQ / Home Builders Association of Greater Tulsa / Chandler Nature Center / Tulsa County Conservation Commission	Rank projects, with LID or Green Infrastructure design aspects, as "Priority" in the permitting and approval process.	Wave Park and Recreation Fee for projects, with LID or Green Infrastructure design aspects.

TABLE 20 - MCM 5: POST-CONSTRUCTION MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT



OKR04 Part V.C.5.a.i: MCM 5, BMP Requirement Activity 1 – CITY CODES AND ORDINANCES

In conjunction with MCM 1, 3, 4, & 6	
City Code/Ordinance Type**	City Code/Ordinance Numbers
STORMWATER ORDINANCE	The City implemented the following Stormwater City Codes and Ordinances: City Charter and Code of Ordinance - Ordinance 1167, Title 13, Chapter 13.16, 13.20, 13.30 And enforces against violations by utilizing penalties per City Charter and Code of Ordinance – Chapter 1.20.010.9; Ordinance 1167, Title 13, Chapter 13.16, 13.20, 13.30, 16.00-03
POST-CONSTRUCTION ORDINANCE	The City implemented the following Construction City Codes and Ordinances: Ordinance 1167, Title 13, Chapter 13.16, 13.20, 13.30; 12.12.010-12.12.170; 13.12.020; 13.12.030; 16.04-16.99; Ordinance 1399, Title 15, Chapter 15.50, 13.20, 13.30 8.28.020; 8.28.030; 8.28.040; 8.28.050; 8.28.060; 8.28.140; 8.40.060; 8.40.070; 8.40.200; 8.48.10; 9.16.010-180; And enforces against violations by utilizing penalties per City Charter and Code of Ordinance - Ordinance 1167, Title 13, Chapter 13.16, 13.20, 13.30, 16.00-.03; 12.12.180; 8.28.150; 8.36.100; 8.48.050; 8.48.060; 8.40.260; 8.53.050; 8.53.090; 9.16.190; 15.50.120, 16.00-03.
POST-CONSTRUCTION EROSION CONTROL ORDINANCE	The City implemented the following Erosion Control City Codes and Ordinances: Ordinance 1399, Title 15, Chapter 15.50, 13.20, 13.30 8.28.020; 8.28.030; 8.28.040; 8.28.050; 8.28.060; 8.28.140; 8.40.060; 8.40.070; 8.40.200; 8.48.10; 9.16.010-180; And enforces against violations by utilizing penalties per City Charter and Code of Ordinance - Chapter 8.28.150; 8.36.100; 8.48.050; 8.48.060; 8.40.260; 8.53.050; 8.53.090; 9.16.190; 15.50.120, 16.00-03

Table 21 – Part V.C.5.a.i CITY CODES AND ORDINANCES List

** This list is annually reviewed and will be updated as necessary. EXAMPLES ARE SHOWN IN APPENDIX D.

Reason for Selection – The City of Sand Springs has developed ordinances prohibiting the discharge of pollutants and sediment from construction sites and requiring the deployment of adequate sediment and erosion control measures. The codes and ordinances listed in Tables 20 and 21 inform the target audience of required and recommended post-construction activities, pollution prevention requirements, local and state permitting requirements, inspection requirements/access, and proper maintenance of retention/detention/reserve areas. Education and inspections will ensure compliance with these ordinances. The MS4’s stormwater coordinator, building inspector, and/or other staff will perform periodic site inspections for compliance with local stormwater codes either as part of required inspections, other construction inspections, and/or in response to complaints from the general public. As greater compliance with the SWMP is implemented and achieved, the water quality of receiving waterbodies within the MS4 is greatly improved and those areas impacted previously by pollution can be restored to healthy environmental conditions.

Target Audience or Participants – The target audience for this BMP includes Developer & Construction Industry Employees and City Staff/Crews/Employees. The City of Sand Springs considers them most likely to be significant sources of construction stormwater pollutants within the MS4.

Measurable Goal – Table 20, located at the beginning of MCM 5, details the requirement reference, the number of involvement activities required, the available primary and alternative BMP activities that the City can or will utilize to meet the requirement, and how often the BMP activity or alternate activity is required to be implemented. Table 21 above contains the current list of City Codes and Ordinances utilized



by the City for this BMP activity. This BMP activity is quantifiably measurable based on the number of ordinances available, the number of maintenance inspections performed by HOAs and submitted to the City, and the number of penalties enforced for violations. This BMP activity is also qualitatively measurable – Contact from the general public or the target audience via, Email, phone call, fax, City Website, or Social Media, requesting guidance, clarification, maintenance inspections or existing codes and ordinances and/or for clarification of penalties that have been assessed for violations, can be directly related to this BMP Activity.

The SWMP annual report(s) will list the actual quantitative and qualitative numbers and the effectiveness of each ordinance and/or penalty utilized during the reporting period. Revisions to this BMP activity will be reported in the annual SWMP report.

Timeline for BMP implementation – Codes and Ordinances are a current BMP activity for the City of Sand Springs and will continue to be implemented by City SWMP staff or by another entity as listed in Table 20.

This BMP Activity is implemented in coordination with MCM 1, 3, 4, and 6

Distribution Schedule – The BMP activity or an alternate activity will be distributed per the schedule shown in Table 20 and updated with the SWMP Annual Report as necessary.

Control Techniques & Systems – The codes and ordinances listed must remain “adaptive” to remain updated. The process will require the City of Sand Springs to continue to check the effectiveness of the codes and ordinances and update them as necessary. This approach will ensure compliance with Federal and State regulations while addressing the specific stormwater priorities of the Sand Springs community in the most efficient and effective way possible.

Design and Engineering Methods – The design of all BMP activities and related materials will be the responsibility of the City of Sand Springs and will be specifically SWMP related. Engineering Methods necessary for this BMP activity are the specific responsibility of the City of Sand Springs Engineering Department and will not be defined or implemented specifically by the Stormwater Department. Stormwater-related BMP activities that have engineering specifications will occur only as a byproduct of the overall site plan review and approval by the Engineering Department.

Enforcement, Implementation, and Coordination Responsibilities – Implementation and coordination of this BMP will be the responsibility of the City of Sand Springs and its authorized representatives. The City of Sand Springs and its authorized representatives will be entirely responsible for enforcement.



OKR04 Part V.C.5.a.ii: MCM 5, BMP Requirement Activity 2 – LONG TERM MAINTENANCE

In conjunction with MCM 1, 3, 4, & 6	
Activity**	Description
EDUCATION (FROM MCM 1)	SEE MCM 1 FOR LISTS AND SPECIFICATIONS OF EDUCATIONAL ACTIVITIES
INVOLVEMENT (FROM MCM 1)	SEE MCM 1 FOR LISTS AND SPECIFICATIONS OF INVOLVEMENT ACTIVITIES
Retention, Detention, and Reserve area INSPECTIONS	The City requests annual reports from developments that have Retention, Detention, or Reserve areas (including park and playground space)

Table 22 – Part V.C.5.a.ii LONG TERM MAINTENANCE List

** This list is annually reviewed and will be updated as necessary. EXAMPLES ARE SHOWN IN APPENDIX D.

Reason for Selection – Proper maintenance of detention, retention, and reserve areas is essential for providing both proper stormwater pollution prevention and flood prevention. As greater compliance with the SWMP is implemented and achieved, the water quality of receiving waterbodies within the MS4 is greatly improved and those areas impacted previously by pollution can be restored to healthy environmental conditions.

Target Audience or Participants – The target audience for this BMP includes Developer & Construction Industry Employees, Home Owner Associations, Churches/Schools/Businesses, the General Public, and City Staff/Crews/Employees. The City of Sand Springs considers them most likely to be significant sources of construction stormwater pollutants within the MS4.

Measurable Goal – Table 20, located at the beginning of MCM 5, details the requirement reference, the number of involvement activities required, the available primary and alternative BMP activities that the City can or will utilize to meet the requirement, and how often the BMP activity or alternate activity is required to be implemented. Table 22 above contains the current list of BMP activities utilized by the City for this BMP activity. This BMP activity is quantifiably measurable based on the number of ordinances available, the number of maintenance inspections performed by HOAs and submitted to the City, and the number of penalties enforced for violations. This BMP activity is also qualitatively measurable – Contact from the general public or the target audience via, Email, phone call, fax, City Website, or Social Media, requesting guidance, clarification, maintenance inspections or existing codes and ordinances and/or for clarification of penalties that have been assessed for violations, can be directly related to this BMP Activity.

The SWMP annual report(s) will list the actual quantitative and qualitative numbers and the effectiveness of each ordinance and/or penalty utilized during the reporting period. Revisions to this BMP activity will be reported in the annual SWMP report.

Timeline for BMP implementation – Post-Construction Long Term Maintenance is a current BMP activity for the City of Sand Springs. This BMP activity or an alternate activity will continue to be implemented by City SWMP staff or by another entity, as listed in Table 20, and updated with the SWMP Annual Report as necessary.

This BMP Activity is implemented in coordination with MCM 1, 3, 4, and 6

Distribution Schedule – The BMP activity or an alternate activity will be distributed per the schedule shown in Table 20 and updated with the SWMP Annual Report as necessary.

The City of Sand Springs has developed ordinances prohibiting the discharge of pollutants and sediment from construction sites and requiring the deployment of adequate sediment and erosion control measures. The BMP activities listed in Table 20 and the codes and ordinances listed in Table 21 inform the target audience of required and recommended post-construction activities including the proper maintenance of retention, detention, and reserve areas. Education and inspections will ensure compliance



with these ordinances. Until a project is completed, maintenance is the requirement of the builder or developer.

Once a project is completed and reaches the post-construction phase, the majority of builders and developers in Sand Springs transfer maintenance responsibilities to newly formed Home Owner's Associations (HOAs). The City educates HOAs on the proper maintenance of detention/retention, and reserve areas to provide both proper stormwater pollution prevention and flood prevention. HOAs are then required to present the city with an annual Detention / Retention Pond & Reserve Area Maintenance Inspection Checklist, as shown in Appendix E, reporting the conditions and upkeep of those areas.

Churches, schools, and/or businesses that have retention, detention, and reserve areas located on their property may also have long-term maintenance responsibilities transferred to them by the builders or developers once construction is complete. The same Detention / Retention Pond & Reserve Area Maintenance Inspection Checklist that is used by HOAs is utilized by these groups and it is the responsibility of each business to submit the form annually to the City.

The MS4's stormwater coordinator, building inspector, and/or other staff will perform periodic site inspections for compliance with local stormwater codes as part of required inspections and/or in response to complaints from the general public.

Control Techniques & Systems – Post-construction long term maintenance is multi-faceted in that it contains multiple aspects of multiple MCMs and BMPs. The process will require the City of Sand Springs to continue to check the effectiveness of the educational CRMs and classes, to check the codes and ordinances for effectiveness, to check the compliance of Detention / Retention Pond & Reserve Area owners through IDDE inspections, and to update any or all of those aspects as necessary. This approach will ensure compliance with Federal and State regulations while addressing the specific stormwater priorities of the Sand Springs community in the most efficient and effective way possible.

Design and Engineering Methods – The design of all BMP activities and related materials will be the responsibility of the City of Sand Springs and will be specifically SWMP related. Engineering Methods necessary for this BMP activity are the specific responsibility of the City of Sand Springs Engineering Department and will not be defined or implemented specifically by the Stormwater Department. Stormwater-related BMP activities that have engineering specifications will occur only as a byproduct of long term maintenance inspections and approved by the Engineering Department.

Enforcement, Implementation, and Coordination Responsibilities – Implementation of this BMP will be the responsibility of the Detention / Retention Pond & Reserve Area owners. The Coordination of this BMP will be the responsibility of the City of Sand Springs and its authorized representatives. The City of Sand Springs and its authorized representatives will be entirely responsible for enforcement.



OKR04 Part V.C.5.a.iii: MCM 5, BMP Requirement Activity 3 – PROMOTION OF LOW IMPACT DEVELOPMENT (LID) & GREEN INFRASTRUCTURE

In conjunction with MCM 1, 3, 4, & 6	
Program**	Description
EDUCATION (FROM MCM 1)	SEE MCM 1 FOR LISTS AND SPECIFICATIONS OF EDUCATIONAL ACTIVITIES
INVOLVEMENT (FROM MCM 1)	SEE MCM 1 FOR LISTS AND SPECIFICATIONS OF INVOLVEMENT ACTIVITIES
FAST-TRACK PROCESS OF PROJECT PERMITTING	The City ranks projects, with LID or Green Infrastructure design aspects, as “Priority” in the permitting and approval process.
FEE WAIVING	Sand Springs Subdivision Regulation Section 16.20.100 Park and recreation fee or an option to require dedication of park land in-lieu-of payment of a fee. A. As land is developed for residential use, the need for additional park land and improved recreational facilities to serve the community is created. In order to provide funds for this need, a park and recreation fee shall be imposed on each residential building permit. Solely at the option of the city, an option to require dedication of park land in-lieu-of payment of the park and recreation fee shall be imposed as specified in the Appendix. B. The park and recreation fee shall be assessed and paid as follows: 1. Applicability and Amount of Fee. Before a residential building permit is issued to construct any residential dwelling unit the park and recreation fee shall be paid with the building permit application in the following amount: Single-Family Dwellings – with Amenity \$300.00 Single-Family Dwellings – without Amenity \$500.00 Duplex Dwellings - \$500 per Dwelling Unit Multi-Family Units - \$250.00 per Dwelling Unit Mobile Homes - \$250 per Lot or Space a. In the case of mobile homes, the \$250.00 fee per lot or space shall be paid at the platting stage of the development. The appropriate fee will be required to be paid before the final plat is signed and release for recording. b. The total amount of the Park and Recreation Fee shall be determined by the Building Inspector of the City of Sand Springs based upon the plans submitted with the building permit application. If the applicant does not agree with the required fee as determined by the Building Inspector, the decision of the Building Inspector may be appealed to the Board of Adjustment. (Amended by Ord 1390, adopted 03/28/22; eff. 05/05/22) 2. Exemptions From the Park and Recreation Fee. The fees imposed by the above sections shall not apply to the following types of construction: a. Reconstruction of a dwelling unit or portion thereof that has been damaged or destroyed by fire, flood or other causes over which the owner has no control; or b. Expansion, remodeling and/or alteration of a dwelling unit where an additional bedroom is created. c. Redevelopment/Reconstruction of property zoned and approved for residential development that has previously had a residential structure placed on it. (Amended by Ord 1390, adopted 03/28/22; eff. 05/05/22)

Table 23 – Part V.C.5.a.iii LID & GREEN INFRASTRUCTURE PROMOTION Program List

** This list is annually reviewed and will be updated as necessary. EXAMPLES ARE SHOWN IN APPENDIX E.

Reason for Selection – Promoting the use of LID systems and practices that use or mimic natural processes that result in the pre-development runoff conditions, infiltration, evapotranspiration, or recycling of stormwater assists in protecting water quality. As greater compliance with the SWMP is implemented and achieved, the water quality of receiving waterbodies within the MS4 is greatly improved and those areas impacted previously by pollution can be restored to healthy environmental conditions.

Target Audience or Participants – The target audience for this BMP includes Developer & Construction Industry Employees and City Staff/Crews/Employees. The City of Sand Springs considers them most likely to be significant sources of construction stormwater pollutants within the MS4.

Measurable Goal – Table 20, located at the beginning of MCM 5, details the programs and activities performed in conjunction with MCM 1 that promote and educate the target audience – Developer & Construction Industry Employees and City Staff/Crews/Employees - on the use of low-impact development



(LID) practices and Green Infrastructure. The table also lists the number of involvement activities required, the available primary and alternative BMP activities that the City can or will utilize to meet the requirements of MCM 5 (OKR04 Part V.C.5.a.iii & Part V.C.5.a.iv), and how often the BMP activity or alternate activity is required to be implemented. Specifications for the activities completed in coordination with MCM 1 are detailed in MCM 1. Table 23 contains the current list of programs utilized by the City for this BMP activity that are not detailed elsewhere in this SWMP document.

This BMP activity is quantifiably measurable based on the number of educational CRMs distributed, educational classes or events held, the attendance numbers at events or classes, the number of developers and/or builders submitting projects that have park land in-lieu-of payment of a fee to the City, and the number projects that are fast-tracked through the permitting process for having LID or Green Infrastructure design elements. This BMP activity is also qualitatively measurable – Contact from the general public or the target audience via, Email, phone call, fax, City Website, or Social Media, expressing interest in and/or preference for increased LID and Green Infrastructure, can be directly related to this BMP Activity.

The SWMP annual report(s) will list the actual quantitative and qualitative numbers and the effectiveness of each program or activity utilized during the reporting period. Revisions to this BMP activity will be reported in the annual SWMP report.

Timeline for BMP implementation – The promotion of LID and Green Infrastructure is a current BMP activity for the City of Sand Springs and will continue to be implemented by City SWMP staff or by another entity as listed in Table 20.

This BMP Activity is implemented in coordination with MCM 1, 3, 4, and 6

Distribution Schedule – The BMP activity or an alternate activity will be distributed per the schedule shown in Table 20 and updated with the SWMP Annual Report as necessary.

Control Techniques & Systems – The BMPs listed must remain “adaptive” to remain relevant and updated. The process will require the City of Sand Springs to continue to check the effectiveness and update them as necessary. This approach will ensure compliance with Federal and State regulations while addressing the specific stormwater priorities of the Sand Springs community in the most efficient and effective way possible.

Design and Engineering Methods – The design of all BMP activities and related materials will be the responsibility of the City of Sand Springs and will be specifically SWMP related. Engineering Methods necessary for this BMP activity are the specific responsibility of the City of Sand Springs Engineering Department and will not be defined or implemented specifically by the Stormwater Department. Stormwater-related BMP activities that have engineering specifications will occur only as a byproduct of the overall site plan review and approval by the Engineering Department.

Enforcement, Implementation, and Coordination Responsibilities –Implementation and coordination of this BMP will be the responsibility of the City of Sand Springs and its authorized representatives. The City of Sand Springs and its authorized representatives will be entirely responsible for enforcement.



OKR04 Part V.C.5.a.iv: MCM 5, BMP Requirement Activity 4 –BARRIERS TO LOW IMPACT DEVELOPMENT (LID)

The following information details the barriers to LID that the City of Sand Springs has in place and the justification for not removing those barriers.

Low Impact Development (LID) – Barriers and Justifications

IDENTIFIED LID BARRIER – Zoning Code Section 3.01. – Definition of All-Weather Material

• DEFINITION - *All-Weather Material: An asphalt or concrete surface capable, during ordinary use, of withstanding normal weather conditions without substantial deterioration.*

JUSTIFICATION – Justification for not changing this definition and all of the additional definitions, ordinances, and codes that require the use of All-Weather Materials (as defined)

- CODE COMPLIANCE - The City of Sand Springs must remain compliant with American Disabilities Act (ADA) Standards for Accessible Design ([2010 ADA Standards for Accessible Design](#) and [2010ADAStandards prt.pdf](#)), and the Oklahoma Uniform Building Code Commission (OUBCC) building codes ([Oklahoma Uniform Building Code Commission - Adopted Building Codes](#))
- COST - While there are porous pavement options available, material cost is increased by 10-20%. Design and Installation costs are increased by up to 50% for a specialized paving contractor. Maintenance and Repair costs are increased by up to 75% to keep the materials from raveling, clogging, or breaking down to the point that stormwater pooling/sheeting from the surfaces occurs. (Insights & Information for Cost acquired from: °EPA documents: *Stormwater Hydrological Characteristics of Porous and Conventional Paving System, 1984; Storm Water Technology Fact Sheet Porous Pavement, 1999; Porous Pavement. Phase 1. Design and Operational Criteria, 2004.* °CTC & Associates LLC, WisDOT Research & Library Unit document: *Comparison of Permeable Pavement Types: Hydrology, Design, Installation, Maintenance and Cost, 2012*).
- SAFETY – For the safety of the citizens of Sand Springs:
 - Sidewalks must be no less than 3 feet wide and utilize all-weather material so that individuals who are mobile-impaired can safely and conveniently traverse the city.
 - Streets must be constructed in a manner that prevents vehicular accidents by:
 1. Using materials that are made of All-Weather Materials,
 2. Diverting stormwater from pooling on the street surface through the use of concrete curbs
 3. Being wide enough to accommodate the safe movement of vehicles - standard automobiles, street cleaners, trash trucks, delivery trucks, and emergency vehicles
 - Parking areas must be paved to insure proper traffic flow and minimize accidents.
 - Alleyways must be paved to ensure the prevention of potential pollutant runoff from trash containers, oil recycling bins, and vehicles. They must also be paved for permitting the safe ingress and egress of vehicles - standard automobiles, street cleaners, trash trucks, delivery trucks, and emergency vehicles.

ADDITIONAL ZONING CODE DEFINITIONS AFFECTED by SECTION 3.01

Parking Spaces, Off-Street

ZONING CODE AFFECTED



-
- SECTION 2.08.A – MOTORIZED VEHICLES
 - SECTION 2.12.C.2 – YARDS IN R DISTRICTS
 - SECTION 13.28.C.6 – JUNK AND SALVAGE YARDS_USE
 - Additional Justification for not changing this code – Wrecked or damaged vehicles have the potential to leak fluids. Eliminating illicit discharges and the potential to pollute stormwater from these areas are best contained by utilizing non-porous surfaces and storing the vehicles in an Auto Pool facility.
 - SECTION 14.04.D – DESIGN STANDARDS FOR OFF-STREET PARKING AREAS
 - SECTION 14.05.C – DESIGN STANDARDS FOR OFF-STREET LOADING AREAS
 - SECTION 15.08.E – PARKING, LOADING, AND SCREENING NONCONFORMITIES

ENGINEERING STANDARDS/CODES AFFECTED

- SECTION 1.4.3
- SECTION 1.4.7

ADDITIONAL BARRIERS NOT UNDER THE CONTROL OF THE CITY

Per the requirements of the Sand Springs Bid Contract, Supplementary Conditions, ARTICLE 4.0 – AUTHORIZATION TO DISCHARGE, "*CONTRACTOR shall be responsible for complying with the current General Permit OKR10 for Storm Water Discharges from Construction Activities within the State of Oklahoma, ODEQ, Water Quality Division...*" The current OKR10 (Dated October 18, 2022) does not require a permittee to use LID.



MCM 6- POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MS4 OPERATIONS

References to other State or Federal documents are shown in *green text* and verbatim quotes are shown in *italicized green text*.

The “Pollution Prevention / Good Housekeeping For MS4 Operations” Minimum Control Measure (MCM 6) addresses the operation and maintenance (O&M) of the MS4 and municipal facilities and requires the training of municipal employees with the *“ultimate goal of preventing or reducing pollutant runoff from MS4 operations such as streets, roads, highways, parking lots, maintenance and storage yards, fueling areas, waste transfer stations, fleet or maintenance shops, salt/sand storage locations and snow disposal areas.”*

The City of Sand Springs has developed BMP activities for addressing these requirements. Requirements for MCM 6 that have been previously detailed elsewhere in this SWMP document are referenced and can be located under the referenced section. For example, MCM 6 education and involvement activities are detailed in MCM 1 of this SWMP document.



OKR04 Part V.C.6.a.i & Part V.C.6.a.ii: MCM 6, BMP Requirement Activity 1 – FACILITY OPERATION INVENTORY

Table 24 is an inventory of MS4 facility operations that are impacted by the SWMP. Facilities that are “*subject to the OKR05, or individual OPDES or NPDES permit*” are notated with permit authorization numbers.

Facility	Location	Permit Authorization
ANIMAL WELFARE/CONTROL	8620 WEST 21 ST STREET	
WILLIAM R POGUE AIRPORT	3200 AIRPORT ROAD	WQNEC37503
ENVIRONMENTAL COMPLIANCE DEPARTMENT	8700 WEST 21 ST STREET	
FACILITIES & FLEET MAINTENANCE/MANAGEMENT	13101 WEST 46 TH STREET BUILDING 1	
FIRE DEPARTMENT	602 WEST MORROW ROAD AND 4001 SOUTH 113 TH WEST AVENUE	
PARKS DEPARTMENT	1050 WEST WEKIWA ROAD	
POLICE DEPARTMENT	602 WEST MORROW ROAD	
SOLID WASTE DEPARTMENT	13101 WEST 46 TH STREET BUILDING 3	
STREETS/DRAINAGE DEPARTMENT	13101 WEST 46 TH STREET BUILDING 2	
WASTEWATER TREATMENT PLANT	8700 WEST 21 ST STREET	OKR052411
WATER TREATMENT PLANT	303 WEST MORROW ROAD	
WATER TREATMENT/DISTRIBUTION MAINTENANCE AND OPERATIONS DEPARTMENT	13101 WEST 46 TH STREET BUILDING 2	

Table 24 – Part V.C.6.a.i & ii FACILITY OPERATION INVENTORY List



OKR04 Part V.C.6.a.iii: MCM 6, BMP Requirement Activity 2 – STAFF TRAINING

In conjunction with MCM 1, 3, 4, & 5	
Program**	Description
EDUCATION (FROM MCM 1)	SEE MCM 1 FOR LISTS AND SPECIFICATIONS OF EDUCATIONAL ACTIVITIES

Table 25 – Part V.C.6.a.iii STAFF TRAINING AND INVOLVEMENT List

** This list is annually reviewed and will be updated as necessary. EXAMPLES ARE SHOWN IN APPENDIX E.

Reason for Selection – Performing municipal activities carefully and properly prevents or reduces pollutant runoff. Municipal operations addressed by this “Good Housekeeping” MCM include parks and open space maintenance, buildings for storage and maintenance of fleet vehicles and other public works vehicles and equipment, new construction and land disturbances, and stormwater system maintenance. Educating City Staff, through the training activities listed in MCM1 Table 3, allows for City Staff to properly implement and enforce procedures for controlling, reducing, and eliminating discharges of pollutants to the MS4. As greater compliance with the SWMP is implemented and achieved, the water quality of receiving waterbodies within the MS4 is greatly improved and those areas impacted previously by pollution can be restored to healthy environmental conditions.

Target Audience or Participants – The target audience for this BMP is the City of Sand Springs’ municipal facility Staff, Crews, and Employees. The City of Sand Springs considers them most likely to be significant sources of stormwater pollutants within the MS4 from the operation and maintenance (O&M) of municipal facilities.

Measurable Goal – Table 3 located at the beginning of MCM 1, details the programs and activities performed in conjunction with MCM 1 that educate the target audience –City Staff/Crews/Employees - on proper implementation and enforcement procedures for controlling, reducing, and eliminating discharges of pollutants to the MS4. The table also lists the number of activities required, the available primary and alternative BMP activities that the City can or will utilize to meet the requirements of MCM 6, and how often the BMP activity or alternate activity is required to be implemented.

This BMP activity is quantifiably measurable based on the number of educational CRMs distributed, educational classes or events held, and the attendance numbers at events or classes. This BMP activity is also qualitatively measurable – Contact from the general public or the target audience via, Email, phone call, fax, City Website, or Social Media, expressing interest in and/or preference for increased education or comments on MS4 stormwater conditions, can be directly related to this BMP Activity.

The SWMP annual report(s) will list the actual quantitative and qualitative numbers and the effectiveness of each program or activity utilized during the reporting period. Revisions to this BMP activity will be reported in the annual SWMP report.

Timeline for BMP implementation – The education of the City of Sand Springs’ municipal facility Staff, Crews, and Employees is a current BMP activity for the City of Sand Springs and will continue to be implemented by City SWMP staff or by another entity as listed in Table 3.

This BMP Activity is implemented in coordination with MCM 1, 3, 4, and 5

Distribution Schedule – The BMP activity or an alternate activity will be implemented per the schedule shown in Table 3 and updated with the SWMP Annual Report as necessary.

Control Techniques & Systems – The educational activities listed must remain “adaptive” to remain successful. The process will require the City of Sand Springs to continue to assess the educational activities utilized and to update them as necessary. This approach will ensure compliance with Federal and State regulations while addressing the specific stormwater priorities of the Sand Springs community in the most efficient and effective way possible.



Design and Engineering Methods – The design of all BMP activities and related materials will be the responsibility of the City of Sand Springs and will be specifically SWMP related. There are no Engineering Methods required for this BMP.

Enforcement, Implementation, and Coordination Responsibilities –Implementation and coordination of this BMP will be the responsibility of the City of Sand Springs and its authorized representatives. The City of Sand Springs and its authorized representatives will be entirely responsible for enforcement.



OKR04 Part V.C.6.a.iii, iv & vi: MCM 6, BMP Requirement Activity 3 – STAFF INVOLVEMENT

In conjunction with MCM 1, 3, 4, & 5

Activities/Program**	Description
INVOLVEMENT (FROM MCM 1)	SEE MCM 1 FOR LISTS AND SPECIFICATIONS OF INVOLVEMENT ACTIVITIES
SOP (CREATION AND MANAGEMENT)	Staff Maintain SOPs At/For Each Facility
FLOOD – PREVENTION, MANAGEMENT, MITIGATION, & POLLUTION CONTROL	City Staff enforces codes and ordinances for flood management, flood mitigation, flood emergency operating procedures, and flood multi-hazard mitigation.
CODES AND ORDINANCES	SEE MCMs 3, 4, AND 5 FOR LISTS AND SPECIFICATIONS
INSPECTIONS	Inspections are performed once per quarter at MS4 Facilities that are authorized to discharge under an OKR05, OPDES, or NPDES permit. All other MS4 Facilities are inspected annually.
ENFORCEMENT	SEE MCMs 3, 4, AND 5 FOR LISTS AND SPECIFICATIONS
Activities By Department**	Description
STREETS	Street Sweeping and Floatables Reduction; Stormdrain, Waterway, Retention Pond, Detention Pond, Reserve Area, and Outfall Inspection and Maintenance; Snow/Ice Removal; Sediment and Erosion Control Installation, maintenance, and removal; Vegetation Maintenance; Assist in Responding to and Reporting Water Quality Environmental Crimes; Flood Management, Mitigation, and Pollution Prevention; Maintain SOPs
ANIMAL CONTROL	Proper disposal of pet waste; Sweeping and Floatables Reduction.
SOLID WASTE	Trash Removal and Floatables Reduction; Sediment and Erosion Control Disposal; Vehicle Wash Water Management; Assist in Responding to and Reporting Water Quality Environmental Crimes; Flood Management, Mitigation, and Pollution Prevention; Maintain SOPs
PARKS	Stormdrain, Waterway, Retention Pond, Detention Pond, Reserve Area, and Outfall Inspection and Maintenance; Vegetation Maintenance; Assist in Reporting Water Quality Environmental Crimes; Flood Mitigation and Pollution Prevention; Maintain SOPs
POLICE	Enforcement of penalties for code and ordinance violations; Assist in spill clean-up; Assist in Responding to and Reporting Water Quality Environmental Crimes; Flood Management, Mitigation, and Pollution Prevention; Maintain SOPs
FIRE	Hazardous waste/material/spill mitigation; Responding to and Reporting Water Quality Environmental Crimes; Flood Management, Mitigation, and Pollution Prevention; Maintain SOPs
LEGAL/COURT	Enforcement of penalties for code and ordinance violations
WASTEWATER	Reducing or Eliminating the Discharge of Pollutants From Sewage, Sewer Line Breaks, and Septic Overflows/Leaks; Assist in Responding to and Reporting Water Quality Environmental Crimes; Flood Management, Mitigation, and Pollution Prevention; Stormdrain, Waterway, Retention Pond, Detention Pond, Reserve Area, and Outfall Inspection and Maintenance; Maintain SOPs



Activities By Department**	Description
WATER M&O	Reducing or Eliminating the Discharge of Pollutants From Treated Water, Water Line Breaks, or Leaks; Assist in Responding to and Reporting Water Quality Environmental Crimes; Flood Management, Mitigation, and Pollution Prevention; Stormdrain, Waterway, Retention Pond, Detention Pond, Reserve Area, and Outfall Inspection and Maintenance; Maintain SOPs
ENVIRONMENTAL SERVICES	Respond to and Report Water Quality Environmental Crimes; Flood Pollution Prevention; Maintain SOPs
GOLF COURSE	Vegetation Maintenance; Trash Removal and Floatables Reduction; Waterway and Retention Pond, Inspection and Maintenance; Maintain SOPs
FACILITIES & FLEET	Reducing or Eliminating the Discharge of Pollutants From Fleet and Facility Maintenance Activities; Trash Removal and Floatables Reduction; Vehicle Wash Water Management; Assist in Responding to and Reporting Water Quality Environmental Crimes; Maintain SOPs
ENGINEERING	Enforcement of Stormwater Codes and Ordinances for Construction and Post-Construction
STORMWATER	All aspects of the SWMP

Table 26 – Part V.C.6.a.iii, iv, & vi STAFF INVOLVEMENT List

** This list is only a sample of all activities utilized and is annually reviewed/updated as necessary.

Reason for Selection – Performing municipal activities carefully and properly prevents or reduces pollutant runoff. Municipal operations addressed by this BMP include parks and open space maintenance, buildings for storage and maintenance of fleet vehicles and other public works vehicles and equipment, new construction and land disturbances, and stormwater system maintenance.

Target Audience or Participants – The target audience for this BMP is the City of Sand Springs’ municipal facility Staff, Crews, and Employees. The City of Sand Springs considers them most likely to be significant sources of construction stormwater pollutants within the MS4 from the operation and maintenance (O&M) of the MS4 and municipal facilities.

Measurable Goal – Table 3, located at the beginning of MCM 1, contains the current list of Presentations, Workshops, Seminars, Classes, Training, or Programs utilized by the City for this BMP activity, a description of the activity item, and reference to any outside implementer(s). Table 26 details the involvement activities that are performed by the City of Sand Springs’ Staff, Crews, and/or Employees for stormwater management, pollution prevention, and SWMP best management practices. The number of involvement activities required, the available primary and alternative BMP activities that the City can or will utilize to meet the requirements of MCM 6, and how often the BMP activity or alternate activity is required to be implemented are specified in Table 3.

This BMP activity is quantifiably and qualitatively measurable and will be demonstrated by keeping records of feedback from city staff, the general public, and from agencies and organizations using City-owned facilities and impacted by the MS4 system conditions. Feedback from city staff, the public, agencies, and organizations (email, phone call, fax, letter, or personal visit) including outputs and outcomes of involvement activities will be recorded in writing. The City of Sand Springs will record the results of all Good Housekeeping site inspections and structural maintenance and improvements as described in this SWMP, including date, location, affected pollutants, observations, measurements, interviews, photos, field form data, abatement and enforcement steps taken, and results of each investigation and maintenance project.



The SWMP annual report(s) will list the actual quantitative and qualitative numbers and the effectiveness of each program or activity utilized during the reporting period. Revisions to this BMP activity will be reported in the annual SWMP report.

Timeline for BMP implementation – Staff Involvement is a current BMP activity for the City of Sand Springs and will continue to be implemented by City SWMP staff or by another entity as listed in Tables 3 and 26.

This BMP Activity is implemented in coordination with MCM 1, 3, 4, and 5

Distribution Schedule – The BMP activity or an alternate activity will be implemented per the schedule shown in Tables 3 and 26 and updated with the SWMP Annual Report as necessary.

Control Techniques & Systems – The educational programs and activities listed must remain “adaptive and innovative” to remain current and applicable to the needs of the City of Sand Springs. The process will require a constant review of available BMP activities. This approach will ensure compliance with Federal and State regulations while addressing the specific stormwater priorities of the Sand Springs community in the most efficient and effective way possible.

Inspections: The City of Sand Springs will take the following actions to reduce or eliminate pollutants from the MS4 and MS4 Facilities by performing inspections of its facilities to determine potential pollutant sources via stormwater into the MS4. Where possible, all exposed materials will be moved under removable covers (e.g., tarps) or inside a building to prevent contact with stormwater runoff. For those materials that cannot be sheltered, structural BMPs will be used where feasible to control contaminated runoff from the storage areas. This will include the use of silt fencing, grassy swales, sediment ponds, and/or other measures as deemed appropriate. Inspection of these areas will occur as listed to ensure that the BMPs and storage controls are deployed properly and working.

New Flood Management Projects: The City of Sand Springs will ensure that all municipally-owned new flood management projects are assessed for impacts on water quality. The City’s Floodplain Administrator, Stormwater Coordinator, and other Public Works staff will evaluate each proposed new municipal project for potential water quality impacts during the technical review of the proposed project plans and specifications. If it is feasible and cost-effective to add water quality protection features to the project design, a recommendation will be made to incorporate the features before final plans are developed.

BMP Maintenance: Structural BMP maintenance will be according to the need and availability of funds and resources. High maintenance priority will be given to structures that have the greatest potential to improve water quality and have high feasibility of success using available funds. Maintenance will be scheduled upon acquisition of funds and materials, and when manpower and necessary permits are obtained. Projects that have a low chance of improving water quality after maintenance will be considered for replacement or decommissioned. The City of Sand Springs will make every effort to address maintenance issues identified in the BMP inspection program. Non-structural BMP maintenance, such as assessing ordinance effectiveness, will be made annually.

BMP Inspections: The City of Sand Springs will inspect structural BMPs annually or within 24 hours after a report of a stormwater contamination problem at a municipal facility. Inspections of structural BMPs will rely upon visual indicators, such as accumulation of trash and debris, breaks and cracks, misalignments of headwalls and inflow and outflow devices, excessive accumulation of sediment, excessive erosion of slopes, failure of fencing and other public safety features, etc. Inspections of non-structural BMPs will consist of annual reviews of stormwater programs and the corresponding codes and ordinances, and annual inspections of natural features within the MS4 such as riparian areas along creeks and natural swales and infiltration areas.



Results of all inspections and maintenance will be reported to the Stormwater Coordinator and recorded in computer and paper files. The Annual Report will include a summary of these activities.

Design and Engineering Methods – The design of all BMP activities and related materials will be the responsibility of the City of Sand Springs and will be specifically SWMP related. The City of Sand Springs Engineering Department is responsible for any engineering methods necessary for this BMP activity. The Stormwater Department will facilitate in providing appropriate educational materials to the Engineering Department.

Enforcement, Implementation, and Coordination Responsibilities –Implementation and coordination of this BMP will be the responsibility of the City of Sand Springs and its authorized representatives. The City of Sand Springs and its authorized representatives will be entirely responsible for enforcement.



MCM 7- OPTIONAL PERMIT REQUIREMENTS FOR MUNICIPAL CONSTRUCTION ACTIVITIES

References to other State or Federal documents are shown in *green text* and verbatim quotes are shown in *italicized green text*.

OKR04 Part VIII states that *“Small MS4s that choose to develop this option will be authorized...to discharge stormwater and certain non-stormwater from construction activities where the small MS4s [is] the “construction site operators.”* Otherwise, MS4s, acting as “construction site operators”, *must: submit an NOI and seek coverage under the OKR10 permit”* for each construction project. The City of Sand Springs has elected not to develop optional MCM 7 Part VIII of OKR04. The City understands that they must seek permit coverage under the OKR10 permit for municipal construction activities within the MS4 where the City of Sand Springs is listed as the construction site operator.



VII. APPENDICES

VII.A APPENDIX A – OTHER GOVERNMENT ENTITIES

Type**	Description of Purpose	Planned or Potential Impact Numbers	Number/Schedule
Chandler Nature Center	<p>In 1958, Claude Chandler donated 100 acres of his quarry to Tulsa County for a west-side park. This area was called the Lost City Park area for years before a park. In 1961, the area is renamed Chandler Park and officially becomes the county's second park. It was mainly used as a picnic area until the late 1960s, when a miniature golf course, baseball diamonds, and tennis courts were added. Today it has 192 acres of wooded area, several features and amenities that include amazing panoramic views of Tulsa and Sand Springs, OK. For historical literature related to Chandler Park, see Washington Irving: Tour of the Prairies and Samuel Washington Woodhouse: A Naturalist in Indian Territory. In 2010, the 16,000sf Chandler Park Community Center opened. Solar panels were installed with a grant from the U.S. Department of Energy in 2011. The Center accommodates sporting events, camps, and a variety of classes for all ages. https://www.facebook.com/chandlerparktulsa & https://www2.tulsacounty.org/parks/parks-facilities/chandler-park/community-center/</p>	OPEN - Numbers impacted can be referenced from CRM Distribution and Event Attendance.	Continuous
EPA Water Finance– Government Entity Relationship	<p>The EPA's Water Finance Center provides financing information to help local decision-makers make informed decisions for drinking water, wastewater, and stormwater infrastructure to protect human health and the environment. https://www.epa.gov/waterfinancecenter</p>	OPEN - Numbers impacted can be referenced from CRM Distribution and Staff Training Attendance.	Continuous
Green Country Stormwater Alliance (GCSA) – Government Entity Relationship	<p>The Green Country Stormwater Alliance (GCSA) is a coalition of Phase I and II stormwater-permitted cities and counties in northern Oklahoma. Founded in 2005 by INCOG, GCSA Members represent about half of all municipal stormwater permittees in Oklahoma. Membership is voluntary, with annual dues supporting all of INCOG's professional stormwater services. The GCSA website provides stormwater information and resources for businesses and the general public, as well as technical resources for stormwater permittees. http://www.stormwaterok.net/</p>	OPEN – Numbers impacted can be referenced from CRM Distribution, Event Attendance, and Staff Training Attendance.	Continuous



Type**	Description of Purpose	Planned or Potential Impact Numbers	Number/Schedule
International Erosion Control Association (IECA) – Paid Membership	<p>The International Erosion Control Association (IECA) is a non-profit educational organization serving the worldwide erosion and sediment control industry. IECA is supported by individual memberships as well as corporate sponsors. Erosion control is a young industry, one that is evolving as a significant player in the environmental arena. And as the industry is maturing, so too is IECA. Today IECA is keeping pace with the demand for fast, convenient communications and technology transfer. Important announcements, documents, and schedules can be easily retrieved by visiting IECA’s website where membership applications, training course schedules, calendar of events, scholarship details, conference programs, and useful industry and association news can be accessed. A searchable Member Directory links problems to solutions via the extensive expertise network of IECA. Members can also communicate with IECA using email, fax and phone. Improved member management databases will enable IECA to link members to each other to solve specific problems. Technology sections will provide topic-specific information and benefits. Specialized conferences will be held that focus on issue-oriented topics—erosion control economics, performance standards, new regulations, design technology, and more. Regional meetings will become more common including Chapter conferences and even regular conferences on all major continents. A greater range of professional development courses are available, driven by member and industry needs. Training will occur internationally and offer multi-lingual education. A greater emphasis will also be placed on developing college-level curriculums, field schools, and research centers. Performance standards will become a reality providing greater consistency and utility of erosion control technology for design professionals, manufacturers, regulators, and contractors. A foundation for member-directed research and scholarship will shape future leaders and technology. A market reporting system will enable IECA to better profile the industry and provide valuable information for IECA business leaders. IECA has pledged its continued compliance with the International Association for Continuing Education and Training (IACET) standard. This is a huge step for IECA’s education and development. The goal is to eventually have all IECA education, including online training, vetted through the process and eligible for CEU credit.</p> <p>https://ieca.org/ieca</p>	OPEN – Numbers impacted can be referenced from CRM Distribution, Event Attendance, and Staff Training Attendance.	Continuous



Type**	Description of Purpose	Planned or Potential Impact Numbers	Number/Schedule
Indian Nations Council of Governments (INCOG) – Paid Membership and Government Entity Relationship	<p>The Indian Nations Council of Governments (INCOG) is a voluntary association of local and tribal governments in the Tulsa metropolitan area in northeast Oklahoma. Established in 1967, INCOG is one of 11 Councils of Governments in the State of Oklahoma and one of several hundred regional planning organizations across the country. INCOG provides planning and coordination services to assist in creating solutions to local and regional challenges in such areas as comprehensive planning, transportation, community and economic development, environmental quality and energy programs, public safety, and services for older adults. INCOG serves Creek, Osage, Rogers, Tulsa, and Wagoner counties, more than 50 cities and towns located in those counties, and the Cherokee, Muscogee, and Osage Nations. INCOG works with state and federal governmental agencies to implement clean water, air quality, and energy programs for the region. INCOG provides extensive mapping and GIS capabilities for member government needs as well as INCOG programs. Map products are also available to the public for a fee. INCOG advocates for and monitors legislation that impacts member governments through the Coalition of Tulsa Area Governments (CTAG).</p> <p>https://www.incog.org/</p>	OPEN – Numbers impacted can be referenced from CRM Distribution, Event Attendance, and Staff Training Attendance.	Continuous
Metropolitan Environmental Trust (The M.e.t.) – Paid Membership and Government Entity Relationship	<p>The Metropolitan Environmental Trust (The M.e.t.) is a non-profit governmental trust that promotes environmental responsibility by providing environmental education to the public and hosting awareness and special collection events. It also collaborates with member communities to develop, deliver, and support environmental programs and services that follow regulatory compliance, teach sound environmental practices, and reduce the solid waste stream. The M.e.t. got its start in 1987 as a committee charged with looking into alternatives to landfilling Tulsa’s trash. After completing studies, the Trust decided it was necessary to begin recycling operations. In 1993, The M.e.t. opened its first recycling center and now has 10 recycling centers in operation. The M.e.t. operates in cooperation with 11 member governments. As a governmental trust authority, The M.e.t. receives funding from these governments to operate residential recycling drop-off locations and provide hazardous waste disposal for residents of these communities. The 10 recycling centers accept a variety of recyclables, including aluminum cans, #1 and #2 plastic bottles, glass bottles, newspapers, office paper, magazines, oil, antifreeze, phone books, and batteries. These centers not only provide recycling, but also jobs. The M.e.t. employs 75 people with disabilities to staff recycling centers and sort recyclables. The M.e.t. implemented a voucher program for member communities to have access to hazardous waste collection events and the Household Pollutant Collection Facility - which collects and properly disposes of thousands of pounds of toxins, chemicals, fertilizers, medications, mercury and other waste. The M.e.t. produces educational resources for member governments, schools and non-profits. The M.e.t. also publishes an annual recycling directory, listing all local recyclers and companies that provide recycling services. https://metrecycle.com/</p>	OPEN – Numbers impacted can be referenced from CRM Distribution, Event Attendance, and Staff Training Attendance.	Continuous



Type**	Description of Purpose	Planned or Potential Impact Numbers	Number/Schedule
National Watershed Coalition (NWC)	<p>The National Watershed Coalition (NWC) was formed in 1989, succeeding the older Watershed Congress, which traced its roots back to about 1951.</p> <p>The NWC is a nonprofit 501(c)(3) Coalition (<i>F.E.I.N. no. 84-1142882</i>) (<i>Dun & Bradstreet Number, DUNS, 09-053-1299</i>) made up of national, regional, state, and local organizations, associations, and individuals, that advocate dealing with natural resource problems and issues using watersheds as the planning and implementation unit. The NWC advocates using total resource management principals in planning and believes the USDA-assisted small watershed programs are among the best planning and implementation vehicles available for wise water and land management. The NWC represents the concerns and needs of watershed project sponsors at the national level.</p> <p>Offers assistance on watershed planning when requested, and sponsors biennial national watershed conferences and other specialty resource conferences,</p> <p>Provides resource testimony before Congress on watershed programs and policy, and believes proper care of our nation’s natural resources a top national priority.</p> <p>https://watershedcoalition.org/about-us/</p>	OPEN – Numbers impacted can be referenced from CRM Distribution, Event Attendance, and Staff Training Attendance.	In process / Continuous
Oklahoma Floodplain Managers Association (OFMA) – Government Entity Relationship	<p>Oklahoma Floodplain Managers Association (OFMA) was officially organized in November 1990, with the intent of bringing together those individuals who have a common interest in floodplain management. Today, the objectives of OFMA are to promote interest in flood damage abatement, improve cooperation among various related local, state and federal agencies and to encourage innovative approaches to managing the nation’s floodplains, watersheds, and stormwater. https://okflood.org/</p>	OPEN – Numbers impacted can be referenced from CRM Distribution, Event Attendance, and Staff Training Attendance.	Continuous
Presto Geosystems University – Free Stormwater Educational Training Membership	<p>Presto Geosystems offers a wide array of ‘Webinar Learning’ courses for the civil, industrial, stormwater and construction industries. Each webinar educates students on innovative, eco-friendly, and economical ways to solve challenging soil stability and stormwater challenges.</p> <p>https://www.prestogeo.com/webcasts/</p>	OPEN – Numbers impacted can be referenced from CRM Distribution, Event Attendance, and Staff Training Attendance.	Continuous



Type**	Description of Purpose	Planned or Potential Impact Numbers	Number/Schedule
Oklahoma Association for Environmental Education (OKAEE)	<p>The mission of the Oklahoma Association for Environmental Education (OKAEE) is to support Oklahoma educators and promote, in formal and non-formal settings, environmental literacy through communication, resource sharing, skill building, and recognition of excellence.</p> <ul style="list-style-type: none"> ● Create a networking system to facilitate discussion and resource sharing among Oklahoma environmental educators. ● Encourage, promote, and assist in the development and dissemination of environmental education. <p>Conduct and support environmental education programs in the state.</p> <p style="text-align: center;">https://okae.com/</p>	OPEN – Numbers impacted can be referenced from CRM Distribution, Event Attendance, and Staff Training Attendance.	Continuous
Tulsa Home Builders Association		OPEN – Numbers impacted can be referenced from CRM Distribution, Event Attendance, and Staff Training Attendance.	Continuous
Tulsa County Conservation District – Government Entity Relationship	<p>Tulsa County Conservation District (TCCD) provides leadership in a partnership effort to help people conserve, maintain, and improve natural resources and the environment. Conservation districts are the only local unit of government charged with the responsibility of conserving natural resources. The purpose of the Tulsa County Conservation District is to conserve, protect, restore, and improve Tulsa County’s natural resources for the citizens of Tulsa County. TCCD’s conservation education programs help children, young adults, and adults understand the importance of our natural resources and the ever-growing need for conserving them. TCCD also hosts conferences such as the Resource Management Conference.</p> <p>http://tulsaccd.org/</p>	OPEN – Numbers impacted can be referenced from CRM Distribution, Event Attendance, and Staff Training Attendance.	Continuous



VII.B APPENDIX B- AGREEMENTS WITH OTHER GOVERNMENT ENTITIES



Regional Partners — Regional Solutions

2 West Second Street Suite 800 | Tulsa, OK 74103 | 918.584.7526 | www.INCOG.org

February 12, 2018

INCOG Services To Green Country Stormwater Alliance (GCSA) Members

The following is a summary of INCOG services performed annually on behalf of its GCSA Members. INCOG does not implement Minimum Control Measures (MCMs) as defined in the ODEQ stormwater permit (OKR04). The table identifies services as either program support activities or Best Management Practices (BMPs). This letter should satisfy OKR04's Annual Report requirement in Part V.C.1.g to provide a "written agreement" with "another government entity" if the permittee is relying on them "to satisfy some of your permit obligations".

INCOG Activity	BMP or Support	Support Service Description
Co-host water quality and stormwater conferences	Support	Works with other agencies as co-host. Assists with conference planning, and often presents on a variety of topics.
Employee training workshops	BMP	Organizes and holds workshops on technical issues and all OKR04-required employee education topics.
Education materials	Support	Develops, acquires and makes available to GCSA members. Posts downloadable files on GCSA website.
Research legal and technical issues	Support	Researches many technical and legal issues important to GCSA members. Reports via emails, news bulletins and workshops.
Maintain GCSA website	BMP	Annual refresh of website materials, updated as needed.
Prepare documents, templates	Support	Prepares a variety of technical documents for member support.
News Bulletins, Fact Sheets	Support	Prepares frequent GCSA News Bulletins and Fact Sheets on important stormwater topics for GCSA members.
LID education support	Support	Speaks at conferences, prepares documents on LID, and co-hosts events on LID issues. Prepares annual summary for GCSA.
Mapping	Support	Prepares regional and MS4 maps for members, provides variety of map data and GIS layers upon request.
Screening inspections	Support	Develops field forms; trains members on equipment use, sampling procedures and field safety; assists with inspections upon request.
GCSA member meetings	Support	Hosts member meetings annually on a variety of technical issues.

OKR04-Required Certification Statement:

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.



 INCOG Deputy Director

Date 2/12/18



AGREEMENT FOR THE PROVISION OF SERVICES

THIS AGREEMENT is entered into between the Sand Springs Municipal Authority (Sand Springs) and The Metropolitan Environmental Trust (M.e.t.) a public trust, having twelve area jurisdictions as its beneficiaries including Sand Springs.

I. RECITATIONS

Sand Springs, in conjunction with its comprehensive approach to solid waste management, desires to provide for its citizens a waste reduction-recycling program, public education concerning responsible solid waste disposal, and household hazardous waste collection.

The M.e.t. has the ability and facilities in place to continue to operate a recycling program at its depot located within the jurisdictional boundaries of Sand Springs. The M.e.t. also has the expertise and the existing relationships to provide public education and to facilitate the collection of household hazardous waste on a regional basis.

The City of Tulsa, Oklahoma, has created a household pollutant collection facility (Facility) for Tulsa citizens to dispose of certain hazardous waste, which is deleterious to the environment if disposed of incorrectly. The facility is located at 4502 S. Galveston. The City of Tulsa desires to make the facility available to area jurisdictions in a manner that is beneficial to the local environment, and consistent with Oklahoma Department of Environmental Quality MS4 water permits.

In consideration of the foregoing, as well as, mutual promises and covenants contained in this agreement, the parties agree as follows:

II. M.e.t. DUTIES

Recycling Collection

1. The M.e.t. agrees to provide recycling services at the recycling depot located within the jurisdictional boundaries of Sand Springs as specified in this agreement. The M.e.t. will provide equipment, materials, and management of operations for recycling services at the depot location. The M.e.t. will be responsible for and will pay for electricity charges at the depot location.
2. The parties reserve the right to change the location of the existing depot or to add depots upon mutual agreement reduced to writing and signed by each.
3. The M.e.t. shall maintain records showing the types and quantities of materials recycled at the depot, the expenditures for the operation of the M.e.t. depot program, revenue and cost generated from the sale of recyclable materials and any other



record, which is required by local ordinance, state law, federal law or regulation. Reports shall be made available at the M.e.t. monthly board meetings or upon request and reasonable notice at the M.e.t.'s place of business during normal business hours.

4. It is understood by the parties that the M.e.t. will enter into contracts with organizations that provide employment opportunities for adults with disabilities to staff the recycling depot. The hours of operation and the number of workers present at each depot will be dependent upon the contract with the organization and the volume of the stream of recyclables at the depot.

Public Education

5. The M.e.t. will promote the responsible disposal of solid waste and hazardous materials through messages to the public on television, radio, newspaper and social media; speeches to civic groups; information booths at public events, promotion of green businesses located within Sand Springs; anti-littering campaigns; and the importance of composting to divert green waste from the public waste stream.

6. The M.e.t. will conduct a one-time event for the collection of tires, fire extinguishers, or other items not otherwise routinely collected by the M.e.t., at a regional location designed to attract citizens of Sand Springs.

7. The M.e.t. will conduct the EnviroExpo event, or a similar event, that promotes area businesses and organizations dedicated to recycling and environmental responsibility.

III. HOUSEHOLD HAZARDOUS WASTE COLLECTION

8. The M.e.t. will field requests via telephone or email, screen, and provide vouchers at the Tulsa Facility to hazardous household waste from citizens of Sand Springs.

9. Vouchers will be made available using the system agreed to between the M.e.t. and Tulsa, the M.e.t. will enter the name of the citizen, address, and the type of materials to be delivered. The M.e.t. will educate the citizen on the existence of the local recycling depot and items they can take there rather than at Tulsa's Household Pollutant Collection (HHP) Facility including the convenience and its reduction in the weight at the HHP facility. The M.e.t. will instruct citizens to bring with them valid identification that will match the name shown on the voucher and prove residency in the area jurisdiction. The M.e.t. will instruct the citizen as to the consequences of including poundage exceeding 45 pounds, or different items than permitted by the voucher.

10. Tulsa will receive, weigh, and process the materials presented at the facility by citizens that have a voucher. Tulsa reserves the right to reject any materials that do not appear as acceptable on Exhibit A. Tulsa will not receive materials from any



citizen of Sand Springs that does not have a voucher.

11. Tulsa will charge the M.e.t. a fee for disposal of up to 45 lbs. The Sand Springs citizen will be responsible for any additional fees for materials exceeding 45 lbs.; provided that, automobile, boat and lawn equipment batteries will be accepted, but will not be included in the weight.

12. The M.e.t. will pay Tulsa for the vouchers out of the funds provided to it under this agreement.

13. Sand Springs authorizes the M.e.t. to make **10** vouchers available for its citizens to use the Tulsa facility plus any carryover vouchers from FY 21/22. Additional vouchers may be authorized in writing upon receiving notice and agreed to arrangement for payment from Sand Springs.

14. The M.e.t. will deliver to Sand Springs at the M.e.t. Board meeting, a monthly itemization showing the total number of vouchers. The poundage of and types of waste received, as well as, the unanticipated items and excess poundage that were paid for by the citizen will be made available upon request.

Excess Poundage, Unanticipated Products, Excess Number of Visits

15. The parties anticipate that citizens may arrive at the facility with different poundage or different products than they disclosed when obtaining the voucher. The parties also anticipate that it may have more participation than anticipated and budgeted in this agreement.

16. In the event that the citizen has materials in excess of 45 pounds excluding batteries, Tulsa will require that the citizen pay Tulsa for the overage at the time they appear at the facility. The M.e.t. will not be responsible and will not pay for materials in excess of 45 pounds delivered by a citizen during a voucher appointment. The M.e.t. will instruct the citizen as to the consequences of including more poundage, prior to arrival at the facility.

17. If the citizen includes materials routinely accepted at the M.e.t., such as motor oil, batteries, cooking oil and grease, the M.e.t. will direct the citizen to deposit those materials at the M.e.t. recycling depot.

IV. PAYMENT

18. Sand Springs will pay the M.e.t. a total of **\$34,066** payable in monthly installments within 30 days after the receipt of invoices from the M.e.t. In the event that Sand Springs authorizes vouchers at the Tulsa Facility in excess of the number agreed to above, Sand Springs will pay the M.e.t. in advance for an additional number of



vouchers at the rate of \$40 per voucher or by monthly invoices for vouchers completed. Unused vouchers shall roll over to the next contract year.

V. TERM

19. The term of this Agreement shall commence on **July 1, 2022** and conclude on **June 30, 2023**. This agreement may be renewed for a period equal to the initial term upon written agreement to the extension, signed by both parties. In no event shall an extension term be longer in duration than 1 year.

VI. TERMINATION

20. This agreement may be terminated by either party for cause after notice and an opportunity has been given to present reasons why such action should not be taken. Grounds constituting cause include but are not limited to failure to comply with the provisions of this agreement, any applicable laws, ordinances or material regulations or guidelines; one party has been unduly dilatory in executing its duties under this agreement; or non-payment. In the event of termination, the M.e.t. shall be entitled to payment for otherwise valid and allowable obligations incurred in good faith prior to notice of termination. The M.e.t. shall make all necessary efforts to mitigate the damages caused by the termination.

21. Neither forbearance nor payment by either party shall constitute waiver of any remedies for any default or breach that exists then or occurs later.

VII. DISCLAIMER OF AGENCY

22. In the performance of this agreement, the parties shall be deemed to be and shall be independent contractors and, as such, neither shall be entitled to any benefits applicable to employees of the other. Neither party is authorized or empowered to act for the other for any purpose and shall not on behalf of the other enter into any contract, warranty and/or representation as to any matter. Neither shall be bound by the acts or conduct of the other except as expressly set out in this agreement.

VIII. AMENDMENT

23. This agreement may be amended only in writing signed by all parties.

IX. SEVERABILITY

24. If any provision under this agreement, or its application to any person or circumstance is held invalid by any court of competent jurisdiction, such invalidity does not affect any other provision of this contract or its application that can be given effect without the invalid provision or application.



X. ENTIRETY OF THE AGREEMENT & VENUE

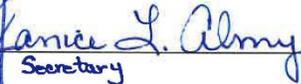
25. This Agreement sets forth the entire understanding of the parties and supersedes any oral agreements. The terms of this agreement shall be interpreted and construed under the laws of the State of Oklahoma.

THIS AGREEMENT may be executed in several counterparts, each of which shall be deemed the original, but all of which shall constitute one and the same instrument.

Sand Springs Municipal Authority

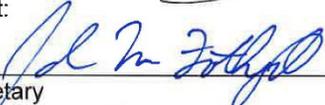
The M.e.t.



(title) Chairman
Attest:


Clerk Secretary
Date: 06-27-22
(seal)



(title)
Attest:


Secretary
Date: 6-9-22

Approved as to form:

Approved as to form:



Attorney



The seal is circular with a rope-like border. The text inside the seal reads: "SAND SPRINGS MUNICIPAL AUTHORITY" at the top, "CORPORATE" at the top, "SEAL" in the center, "OKLAHOMA" at the bottom, and "SAND SPRINGS, OK" at the bottom.



Attorney



Exhibit A – Accepted and Non Accepted Household Hazardous Waste

The waste list below is to be accepted by Tulsa from outside jurisdictions through services provided by The M.e.t.

- Fluorescent and CFL Light Bulbs
- Oil Based Paints and Paint Thinner
- Latex Paint*
- Flammable Liquids
- Lawn Chemicals
- Automotive Fluids
- Cooking Oil/Grease
- Aerosols
- Household and Car Batteries
- Household Cleaners
- Pool Chemicals

The listed wastes below are not accepted by Tulsa.

- Industrial or Commercially Generated Waste (including non-hazardous waste)
- Medical or Biomedical Waste
- Asbestos
- Food or Organic Waste
- Radioactive Material
- Ammunition/Explosives
- Electronics
- Tires
- Compressed Gas Cylinders
- Unknown Materials or Substances

**Since latex paint is not harmful to the environment and due to budgetary concerns, M.e.t. staff encourages Sand Springs citizens to dry out their latex paint and not bring it to the facility.*



VII.C APPENDIX C – SOP LOCATION LIST

LIST AND LOCATIONS OF CITY OF SAND SPRINGS STANDARD OPERATING PROCEDURES FOR STORMWATER POLLUTION PREVENTION, SPILL CLEANUP/MANAGEMENT, & HAZARDOUS MATERIALS MANAGEMENT		
SOP	MAINTAINED BY	LOCATION*
FACILITIES MANAGEMENT & PARKS MAINTENANCE SPILLS & HAZARDOUS MATERIALS MANAGEMENT	PARKS DEPARTMENT	1060 WEST WEKIWA RD.
FIRE DEPARTMENT SPILLS & HAZARDOUS MATERIALS MANAGEMENT	CSS FIRE DEPARTMENT	602 W. MORROW RD
FLEET MAINTENANCE SPILLS & HAZARDOUS MATERIALS MANAGEMENT	FLEET MAINTENANCE DEPARTMENT	13101 WEST 46TH ST., BUILDING 1
GOLF COURSE SPILLS	CANYONS AT BLACKJACK RIDGE	1801 N. MCKINLEY AVE.
AIRPORT SPILLS & HAZARDOUS MATERIALS	WILLIAM R. POGUE AIRPORT	3200 N. AIRPORT RD.
SOLID WASTE SPILLS & HAZARDOUS MATERIALS MANAGEMENT	SOLID WASTE DEPARTMENT	13101 WEST 46TH ST., BUILDING 3
STREETS & DRAINAGE SPILLS & HAZARDOUS MATERIALS MANAGEMENT	STREETS DEPARTMENT	13101 WEST 46TH ST., BUILDING 2
WASTEWATER & WWTP SPILLS & HAZARDOUS MATERIALS MANAGEMENT	WWTP	8700 W. 21ST ST.
WATER DISTRIBUTION MAINTENANCE SPILLS & HAZARDOUS MATERIALS MANAGEMENT	WATER DISTRIBUTION MAINTENANCE DEPARTMENT	13101 WEST 46TH ST., BUILDING 2

* COPIES OF ALL SOPs FOR ALL FACILITIES ARE AVAILABLE FOR VIEWING AT THE PUBLIC WORKS FACILITY LOCATED AT 13101 W. 46TH ST.



VII.D APPENDIX D – EXAMPLES
EDUCATIONAL CRM EXAMPLE – GENERAL PUBLIC

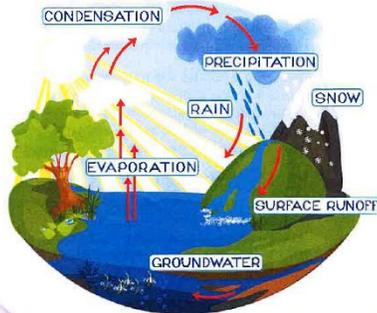
OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY



Stormwater

What is stormwater?

Stormwater is water generated from precipitation events such as rain, snow and ice melt. During a typical rain event (in natural settings), stormwater can infiltrate into the soil to recharge groundwater or be stored on the surface to evaporate. Stormwater runoff is the water that has not infiltrated into the soil and flows downhill to surface waters such as lakes, rivers, and streams. In urban settings, the large areas of impervious surfaces increase stormwater runoff.



Why is protecting the quality of our stormwater important?

Stormwater that flows over impervious surfaces such as paved streets, parking lots, driveways, and rooftops does not get an opportunity to infiltrate into the soil. When stormwater flows over these surfaces it picks up many pollutants (litter, chemicals, sediment, etc.). The stormwater runoff eventually flows into a surface water body depositing all the pollutants it has collected, causing harm to water quality and local wildlife.

Isn't stormwater treated?

No. In Oklahoma stormwater flows directly to local surface waters and does not go to a facility for treatment. Anything that goes into the storm drain will eventually make its way to a river or lake.

For more information, contact:

**Oklahoma Department of Environmental Quality
 Water Quality Division
 707 North Robinson
 PO Box 1677
 Oklahoma City, OK 73101-1677
 Phone: 405-702-8100
 Fax: 405-702-8101**



This publication is issued by the Oklahoma Department of Environmental Quality, authorized by Scott A. Thompson, Executive Director. Copies have been prepared at a cost of \$6,108 each. Copies have been deposited with the publications repositories of the Oklahoma Department of Libraries. #Fact Sheet: WQDWatIs Stormwater, ver. 10/2019

Stormwater

to at home?

rm drains in your neighborhood. If you see evidence of trash, paint cans, or other hazardous materials, local municipality or DEQ via our 24-hour **complaint Hotline** at (800) 522-0206, or our online <https://www.deq.ok.gov/environmental-complaints/>.

o help by using rain barrels or cisterns, building n picking up litter and pet waste. While these m to have an effect at the household level, the use practices throughout Oklahoma can have a stormwater quality and quantity.

d Cisterns

s are a great way for homeowners to harvest g your downspout to a rain barrel, rather than to flow into the street, you can collect that will reduce the amount of water settling around me. Additionally, the collected water can be tion, rinse garden tools or water your compost lp reduce the amount of pollution ending up it will also help lower your water bill.



Rain gardens divert stormwater into an attractive garden that allows stormwater to percolate slowly into the surrounding soil. Rain gardens are specifically designed to collect, filter and absorb stormwater runoff from impervious surfaces such as your roof or driveway. Rain gardens can be customized with a variety of decorative grasses and drought resistant plants to match your taste and existing lawn. In addition, they can provide valuable habitat for birds, pollinators and other beneficial wildlife. Rain gardens should be designed to infiltrate water within 24

Pet Waste

Pet waste may seem like a fairly innocuous byproduct of our furry friends but it has the potential to cause serious issues in our waterways. As it decomposes, pet waste can add harmful bacteria and nutrients to stormwater runoff and subsequently our local surface waters. Excess bacteria and nutrients can make waters unswimmable or unfit for consumption causing human illness or causing excessive algae and weed growth. Excess nutrients can also make waters murky, green or smelly. The solution is as simple as carrying around baggies to pick up your pet's waste for proper disposal.



Ponga de su parte: conozca SepticSmart:
Lo que sí puede hacer y lo que no puede hacer para su sistema séptico

Siga estos pasos sencillos para proteger su casa, su salud, el medio ambiente y el valor de su propiedad.

Protéjalo e inspecciónelo:

- Si:**
- Contrate a un contratista licenciado para que inspeccione el sistema séptico en su totalidad cada tres años y bombee el tanque (si es necesario) generalmente cada 3-5 años.

Piense en el fregadero:

- No:**
- Eche grasa para cocinar por el fregadero o el inodoro.
 - Eche restos de café por el fregadero.
 - Eche productos químicos de uso casero por el fregadero o el inodoro.
- Si:**
- Elimine o limite el uso del triturador de desperdicios.
 - Deseche correctamente los restos de café y de comida.
 - Antes de tirar la grasa en la basura, póngala a que se solidifique en un recipiente.

No sobrecargue el inodoro:

- No:**
- Eche en el inodoro productos no degradables, como productos de higiene femenina preservativos, hilo dental, pañales, colillas de cigarrillos, arena sanitaria para gatos, toallas de papel, medicamentos.
- Si:**
- Deseche estos artículos en la basura!

Proteja el área:

- No:**
- Se estacione ni conduzca por el área de drenaje. El peso puede dañar la tubería.
 - Siembre árboles ni arbustos demasiado cerca del área de drenaje: las raíces pueden crecer sobre el sistema y obstruirlo.
- Si:**
- Consulte con un profesional de servicios sépticos para que le diga cuál es la distancia correcta para plantar árboles y arbustos, dependiendo de la ubicación del tanque séptico.

No ponga a prueba su drenaje :

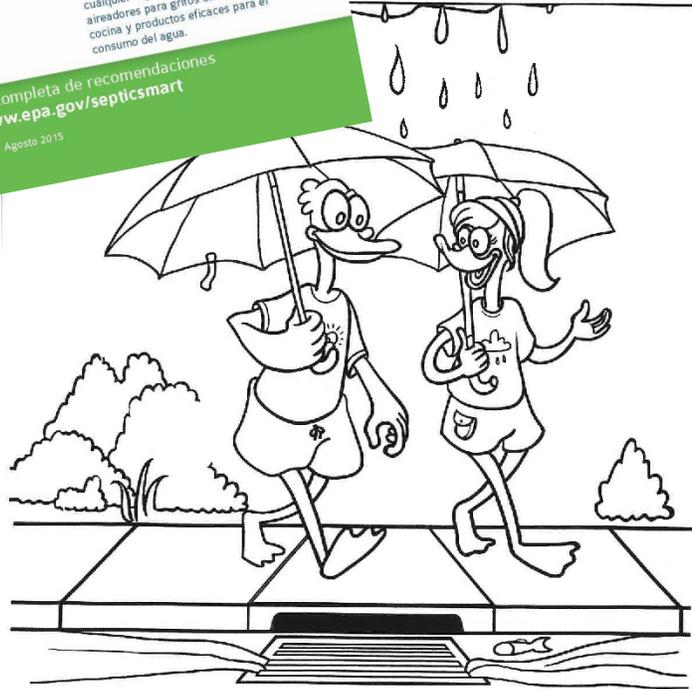
- No:**
- Concentre el uso de agua usando el lavaplatos, la ducha, la lavadora y el inodoro al mismo tiempo. Toda esa agua extra puede sobrecargar el sistema séptico.
- Si:**
- Use los aparatos que usan agua a distintas horas. Esto puede ser muy útil si el sistema no se ha bombeado por mucho tiempo.
 - Use el **agua con más eficiencia**: repare cualquier fuga y considere instalar aireadores para grifos en el baño y la cocina y productos eficaces para el consumo del agua.

Para obtener una lista completa de recomendaciones SepticSmart, visite www.epa.gov/septicmart

EPA EPA-832-R-13-002 • Agosto 2015



**EL AGUA DEBE IR A LOS
 CAJONES PLUVIALES.
 LAS VÍAS FLUVIALES
 DEBEN SER LIMPIAS.**



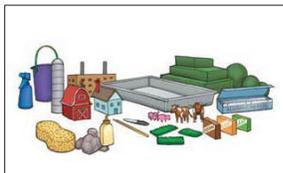
HOW TO: BUILD A MODEL WATERSHED

SIMPLE PROJECTS FOR CONSERVATION

IZAAK WALTON LEAGUE OF AMERICA

It's a simple matter of gravity. Water runs downhill. This model watershed offers a clear visual demonstration of how water picks up sediment and pollutants as it flows – and that simple measures can reduce the amount of polluted runoff that ends up in your watershed.

This is a good project for talking with school children about water pollution and what they can do to prevent it. It's also a great indoor conservation project and travels well to expos and county fairs.



Materials

- Disposable aluminum cake pan or a plastic bin
- Florist foam
- Aluminum foil
- Model farm animals (cows, pigs)
- Small models of barns, houses, industrial buildings
- Permanent markers (e.g., a Sharpie®)
- Watering can or spray bottle
- Chocolate pudding/hot chocolate mix
- Lime gelatin mix
- Orange gelatin mix
- Straw
- Small pieces of artificial turf
- Craft glue
- Plain modeling clay (colored clay will run when wet)
- Sponges
- Bucket

REQUEST TO READERS

If you build a project based on this or other Outdoor America articles, or if you have an idea for a good conservation project, please e-mail us at INFO@iwa.org.

ILLUSTRATIONS BY BOB DRY/WWW.BOBDRY.COM



Three-step landscaping: Sculpt foam inside a cake pan, cover it with foil, and outline a river and lake.

1. **Develop Land:** Create your landscape inside the cake pan using green florist foam (available at craft stores). Buy blocks and round pieces of foam and arrange them to represent two tall mountains on the outer edges of the pan. A river should run between the mountains down to a lake. Make a shallow depression for the lake to hold water.
2. **Cover Ground:** Cover the entire landscape with a large piece of aluminum foil. Start from the middle and gently press the foil into the hills, valleys, and waterways. Fold the foil over the edge of the pan to help hold everything in place. You may need multiple sheets of foil.
3. **Run a River Through:** With a permanent marker, draw the outline of the river running through the middle of the mountains and the lake at the bottom.
4. **Build:** Put in land-use areas by placing model homes, barns, factories, and animals around the watershed, from the hills to the lakeside. You may need craft glue to hold these in place. Draw roads, fields, and other landscapes to tie the community together.
5. **Pollute:** Sprinkle chocolate pudding/hot chocolate mix near animals to show manure and/or near construction sites to show exposed



gelatin mixes give kids joint source pollution.

- Cut small pieces of sponge to place near pollution areas and in low spots where water may gather. These serve as wetlands, which filter runoff by trapping and breaking down pollutants.
- Cut small pieces of artificial turf to place along the banks of the river to represent a buffer of stream-side trees and shrubs to slow runoff and trap pollutants.

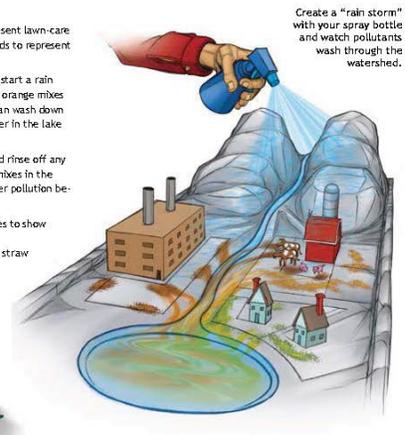
8. **Rain Again:** Use the spray bottle or watering can to create a second rainfall. The water that ends up in the lake should be much less colorful because you took multiple steps to keep pollutants out of the runoff.

dirt. Sprinkle lime gelatin mix near houses to represent lawn-care chemicals. Sprinkle orange gelatin mix on farm fields to represent agricultural chemicals (pesticides, fertilizers).

6. **Rain!** Use the spray bottle or watering can to start a rain shower in the mountains. The chocolate, lime, and orange mixes will color the water to show how water pollution can wash down through the watershed, ending with very dirty water in the lake that demonstrates a high level of pollution.

7. **Remediate:** Dump the water into a bucket and rinse off any residue. Sprinkle the chocolate, lime, and orange mixes in the same spots, taking additional steps to prevent water pollution before the next rainfall.

- Use smaller amounts of the lime and orange mixes to show more careful use of chemicals.
- Cover chocolate mix near construction sites with straw to prevent rain from washing away exposed soil.
- Use clay to build barriers around the areas of manure, which will hold runoff water until it can be cleaned.
- Cut small pieces of artificial turf and glue them down between the river and the orange and lime mixes on the farm. These turf pieces represent contour plantings and grass buffer strips, which help filter pesticides and fertilizers from agricultural runoff.



Create a "rain storm" with your spray bottle and watch pollutants wash through the watershed.

A Few Talking Points

- A watershed is an area of land that drains water, sediment, and pollutants into a common body of water. For example, the Chesapeake Bay watershed is thousands of square miles of land and waterways that all eventually drain into the Chesapeake Bay. A watershed can also be a very small area that drains into a local pond or stream.
- Pollution on land in the watershed eventually ends up in the water. Fertilizer, pesticide, and manure run-off from farms and yards can put potentially harmful chemicals and pathogens in rivers and lakes. Incorrect disposal of household and industrial chemicals can lead to deadly chemicals in waterways. Excess sediment from construction sites can wash into streams, smothering fish eggs and the bottom-dwelling bugs fish eat.
- Healthy watersheds and clean water are important to protect the rivers, streams, and lakes we use for drinking water, recreation, and fishing.



Keeping pollutants from food facilities out of the storm drain

helps the environment. Everything that washes into storm drains is untreated and ultimately ends up in our creeks and rivers.

Food waste in storm drains creates odors and also sustains populations of cockroaches, flies and rats. Detergents, cleaners and grease are harmful to aquatic life. Even "biodegradable" cleansers can be harmful when poured down the storm drain.

It is important to never put wastes from equipment cleaning, dumpsters, mop buckets, & grease bins into the storm drain.



Food facilities such as restaurants, cafeterias, bakeries, coffee shops and grocery stores that send wastewater, grease and other materials into the storm drain are likely to be violating their local ordinances and codes.

Additional Resources

Visit the **Green Country Stormwater Alliance (GCSA)** website listed below for more details about stormwater protection, including Best Management Practices (BMPs) and other pollution reduction strategies.



Contact Information:

For information about Green Country Stormwater Alliance, contact INCOG at 918-584-7526 or by email at stormwater@incoo.org. For local information, contact your city or county stormwater coordinator.

For more information about stormwater protection, contact the Oklahoma Department of Environmental Quality (DEQ) Water Quality Division at 405-702-8100 or visit the DEQ web site at <https://www.deq.ok.gov/water-quality-division/stormwater/>

For stormwater related complaints, call the DEQ statewide hotline at 1-800-522-0206. This number is answered 24-7. Citizens may fill out an online complaint form at the DEQ web site at <https://www.deq.ok.gov/environmental-complaints/> and submit it electronically to DEQ. The site also provides contact links to DEQ.

Brochure Rev. February 2020



A Food Service Guide to Waste Disposal



A Closer Look at
Food Service Industry Waste

Food Service Pollutants

Food service employees should be trained to keep food pollutants out of storm drains. Employees should be aware of the harmful effects of wastewater and food waste on water quality. Important tips to remember:

Mops

- Never empty mop buckets into a storm drain. Always use the mop sink.
- Keep the mop sink accessible. Don't use it to store materials or equipment.

Outdoor Cleaning & Washing

- Clean floor mats, garbage cans and equipment at a mop sink or floor drain.
- For large items that cannot be cleaned indoors, consider the following:
 - Construct a permanent wash pad that is connected to a sanitary sewer.
 - Use a temporary containment area (see **"Steam Cleaning Equipment"** in the phone book).
 - Hire a cleaning service with the right equipment to collect and dispose of wastewater.
- Wastewater from outside wash areas should be discharged to the sanitary sewer or properly disposed of without letting it flow into the storm drains.

- Use dry cleanup methods to clean outside areas whenever possible.
- Restaurants that use outside companies to do their outside washing are still responsible if wastewater is improperly disposed of into the storm drain.

Outdoor Spills

- For outdoor spills, use a mop, rag or absorbent material (such as kitty litter) to clean spills.
- Always keep used absorbent material out of the storm drain. Don't let the absorbent material get saturated. Dispose of it by placing it in a sealed plastic bag and place it in the Dumpster.

Cleaning Fluids

- Store cleaning fluids indoors so leaks and spills can't reach storm drains.

Grease

- Always use grease bins to dispose of oils and greases.
- Minimize spills when transferring oil and grease to grease bins by using containers of adequate size that are equipped with spouts.
- Clean up spills as soon as possible using dry absorbents such as cat litter.
- Maintain grease traps to prevent overflows. Hire a professional service for proper grease hauling and disposal.

Dumpster Management

- Never dispose of liquids in a Dumpster. Keep the Dumpster drain closed and inspect it for leaks on a regular basis.
- Keep the Dumpster lid locked (if possible) to keep out rain and scavengers.
- When the Dumpster needs cleaning, call your waste hauler for cleaning or replacement.
- Use garbage bags to contain the waste, then throw the bags into the Dumpster. Do not throw loose waste into a Dumpster.

Storm Drains vs. the Sanitary Sewer

Storm drains and sanitary sewers have two distinct functions. It is important to understand the difference.

Storm drains are intended to collect and transport runoff from rainfall. Storm drain systems do not remove pollutants from water before it is discharged into streams and rivers. Generally, these are the drains found in streets and in parking lots.

Sanitary sewers collect wastewater from indoor plumbing such as toilets, sinks, washing machines and floor drains. The wastewater flows to a sewage treatment plant. The treatment plant removes pollutants from wastewater before it is discharged to the receiving stream.



EDUCATIONAL CRM EXAMPLE – CONSTRUCTION

Basic Erosion Controls

Best management practices (BMPs) control erosion at construction sites:

- Preserve existing trees and grass.
- Re-vegetate as soon as possible.
- Use silt fences on downslopes.
- Place soil piles away from waterways.
- Install diversions around stockpiles.
- Use rock off-tracking at entries.
- Clean sediment from streets.
- Use downspout extenders on roofs.

Consequences of Erosion

The consequences of not controlling erosion include:

Taxes: The expense of sediment removal is paid by taxpayers.

Road maintenance costs: Removing sediment adds costs to local government budgets.

Property values: Neighboring property values are damaged.

Fishing: Sediment smothers fish feeding and spawning areas and causes injury.

Weeds and algae: Sediment carries fertilizers that fuel algae and weed growth.

Site safety: Erosion can create unstable and unsafe worksite conditions.

Additional Resources

Visit the **Green Country Stormwater Alliance (GCSA)** website listed below for more details about stormwater protection, including Best Management Practices (BMPs) and other pollution reduction strategies.



Contact Information:

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Brochure Rev. February 2020



A Homebuilder's Guide to Erosion Control



A Closer Look At Some Suggested Erosion Control Methods

Consult local codes and OKR10 for compliance requirements.

Silt Fence

- Install prior to soil disturbance.
- Install on downslopes and parallel to the contour of the land.
- Extend the ends upslope to pond runoff.
- Bury 8 inches of silt fabric in trench.
- Drive silt fence stakes 1 to 2 feet deep.
- Leave no gaps in silt fence.
- Inspect once a week and repair as needed.
- Remove sediment deposits that reach half the fence height.
- Maintain until grass cover is established.

Soil Piles

- Cover with plastic and place away from streets, drains or waterways.
- Use temporary seed such as annual rye or winter wheat for topsoil piles.

Access Drive

- Use large aggregate at entrances.
- Stone should be deep enough to capture dislodged dirt from vehicles.
- Use to prevent tracking dirt onto the road by vehicles.
- Maintain throughout construction.
- Use geotextile under the stone.

Sediment Cleanup

- Remove tracked soil from streets daily.
- Remove soil from streets after a storm.

Stormdrain Inlet Protection

- Protect stormdrain inlets with wattles, silt fence or other measures.
- Remove sediment deposits after storms.

Downspout Extenders

- Install when gutters and downspouts are completed to prevent erosion.
- Use plastic drainage pipe to route water to a grassed or paved area.

Preserving Existing Vegetation

- Preserve existing trees and vegetation.
- Protect trees marked for preservation.
- Use mesh barriers around trees to protect the roots below branches.

Revegetation

- Seed, sod or mulch bare soil.
- Comply with OKR10's site stabilization requirements.

Seeding and Mulching

- Use topsoil when needed.
- Fertilize and lime if needed according to soil test, and water as needed.
- Seed with an appropriate mix for the site.

- Rake lightly to cover seed and roll **lightly**.
- Anchor mulch by punching into the soil, watering, or by using netting.
- Water enough to keep soil moist. Water less once grass is established.

Sodding

- Use topsoil when needed.
- Fertilize and lime if needed according to soil test and water the sod to establish.
- Tamp or roll sod lightly after laying.
- Peg sod in place from the bottom of a slope to the top in a brickwork pattern.
- Wet soil thoroughly with the initial watering. Keep soil moist until established.
- Sod and seed in early fall or spring.

Concrete Wash Water

- Deposit onto soil away from waterways.
- Dispose of remaining cement. Concrete wash water can kill vegetation.

De-Watering

- Place de-watering water away from entry into stormdrains and surface waters.

Material Storage

- Properly store chemicals and materials to avoid contamination of runoff.
- Comply with all requirements of the site's SWP3 and OKR10 permit.





Soil Constraints and Low Impact Development

Careful Planning Helps LID Work in Clay Soils

LID Barrier Busters Fact Sheet Series

Low impact development (LID) practices, also referred to as green infrastructure, include natural or man-made swales, depressions and vegetated areas that are designed to capture, filter and infiltrate runoff using soils and vegetation. When selecting and designing LID practices, the type of soil underlying the area must be factored into the design process. Designers often incorrectly assume that LID practices should not be sited on clay soils because they are concerned that the clay soils lack sufficient infiltration capacity to manage the runoff and that ponding might occur.

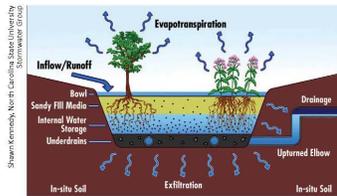
LID practices can be sited on clay soils if the appropriate conditions are present and the infiltrative capacity of the soils has not been significantly altered. Drainage problems tend to occur when the pore spaces in clay soils have been disturbed and compacted by construction activities or previous land uses. In such situations, surficial ponding might occur if the infiltration rate of the clays is too low. Designers should anticipate the challenges that can occur in soils with high clay content. By analyzing the infiltration rates of soils on the site, designers can select the best locations for LID practices and/or identify specific areas that would need remediation (e.g., adding soil amendments) to ensure adequate infiltrative capacity. Compacted soils should be mechanically de-compacted and/or amended to provide the requisite infiltrative capacity that can retain the desired design volume.

Practices That Work With Clay Soils

LID practices such as rain gardens, permeable pavements, and bioretention cells can perform well on sites with clay soils if the practices are sized appropriately, proper drainage is provided, and they are constructed and designed to minimize clogging. Suggested design elements include:

- Design the practice to retain a prescribed volume (e.g., 1 inch of rainfall) that can be infiltrated and/or evapotranspired within a given time frame (e.g., 48 hours) as determined by the capacity of the soils and plants.
- Use soil amendments where necessary to improve soil infiltration rates.
- Design and place overflow, bypass and underdrain systems to prevent ponding and clogging.
- Select plant species that facilitate ongoing infiltration through root structures.
- Include a margin of safety to ensure the system will perform as designed, even with some degree of clogging.

Note: If a practice is designed as a retention/filter system that retains a design volume and filters excess volume, additional design elements such as underdrains, orifice controls and inverted elbows can be incorporated. In high-clay soils, rapid drying can cause the formation of linear cracks in the clay which can reduce the effective retention volume of the practice, especially in designs that include underdrains. Incorporating inverted or upturned elbows in the design of the discharge pipe, as depicted in the figure (above, right), helps to ensure that the requisite design volume is retained and infiltrated.



This bioretention system has an underdrain with an upturned elbow.

- Under similar soil conditions, rain gardens planted with prairie species had significantly greater median infiltration rates than those planted with turf grass.
- Comparing soil types, the median infiltration for sand was nearly 5 to 9 times greater than the infiltration rates of clay, depending on vegetation type.
- Soil and root investigations indicate that clay soil planted with prairie grass had deeper root growth and appeared well-drained relative to the turf grass, which had limited root growth and a perched water table.

Source: Selbig, W.R., and Balster, Nicholas. 2010. Evaluation of turf-grass and prairie-vegetated rain gardens in a clay and sand soil, Madison, Wisconsin, water years 2004–08. U.S. Geological Survey Scientific Investigations

Roadside Bioretention, Toledo, Ohio

In 2009 the city of Toledo installed nearly 800 feet of residential roadside bioretention areas and permeable sidewalks on a site with clay soils to help reduce the occurrence of combined sewer overflows during heavy rainfall events. The bioretention areas were designed with an engineered sandy loam soil and included underdrains to help drain the system if needed. Plants were chosen by the residents adjacent to the bioswales based on how much maintenance they were willing to do in front of their homes. Most chose turf grass, but some chose native plants. Underground water storage was provided beneath the permeable sidewalk. Flow monitors were installed before and after construction to assess the effectiveness of the system.

Results

- Monitoring results comparing pre-construction to post-construction LID implementation indicate greater reductions in peak and total volumes when the underdrain valve is closed as opposed to open (see table at right).
- Long-term modeling for the closed underdrain system indicates an annual average stormwater volume reduction of about 64 percent and peak flow reductions of 60–70 percent.

Source: Tetra Tech. 2009. City of Toledo, OH, Maywood Avenue Stormwater Volume Reduction Project Construction Plan Set. Table shows follow-up monitoring conducted in 2010–2011.

United States Environmental Protection Agency • Office of Wetlands, Oceans, and Watersheds
1200 Pennsylvania Avenue, NW, Washington, DC 20460
841-R-14-004A • October 2014

FAQ

Don't clay-rich soils prevent water infiltration needed for LID?

Barrier Busted!

LID practices can work in clay-rich soils when designed to ensure adequate infiltration.

EPA's LID Barrier Busters fact sheet series... helping to overcome misperceptions that can block adoption of LID in your community



Roof water drains to this rain garden.



our rain gardens next plant type on the rain s were installed in sandy For each soil type, one tive prairie grasses. 5:1 contributing eas between 100 to s were not equipped ns for 4 years, t transpiration amounts.



Roof stormwater drains to these monitored rain gardens in Madison, Wisconsin.

ns were tormwater

Estimated Median Infiltration Rates (Inches/Hour) for Each Garden across All Water Years (2004–2008)

Rain Garden Type	Soil Texture Type	Median Infiltration Rate
Turf-sand	Silt loam, sandy clay loam and sandy loam	2.50
Prairie-sand		4.20
Turf-clay	Sandy loam to clay-loam, heavily compacted	0.28
Prairie-clay		0.88



Stormwater from the road and sidewalks flows into this bioretention system on Maywood Avenue in Toledo.

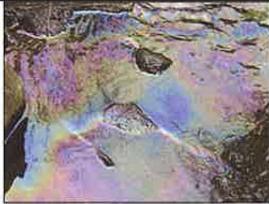
Average Percent Reductions between Pre- and Post-construction Flows (2010–2011)

Underdrain Status	Open	Closed
Total Flow Volume	-10%	57%
Peak Flow	51%	71%



EDUCATIONAL CRM EXAMPLE – MS4 STAFF/EMPLOYEES

Recognizing stormwater pollution:

SUDS		
 <p>Natural Foam Note: Suds only associated with high flows at the "drop off" Do not record.</p>	 <p>Low Severity Suds Rating: 1 Note: Suds do not appear to travel; very thin foam layer</p>	 <p>High severity suds Rating: 3 Sewage</p>
OIL SHEENS		
 <p>Low Severity Oil Sheen Rating: 1</p>	 <p>Moderate Severity Oil Sheen Rating: 2</p>	 <p>High Severity Oil Film Rating: 3</p>
		<p>ALGAE</p> 
 <p>Bacterial growth at this outfall indicates nutrient enrichment and a likely sewage source.</p>	 <p>This bright red bacterial growth often indicates high manganese and iron concentrations. Surprisingly, it is not typically associated with illicit discharges.</p>	 <p>Sporalitis filamentous bacteria, also known as "sewage fungus" can be used to track down sanitary sewer leaks.</p>
 <p>Algal mats on lakes indicate eutrophication. Several sources can cause this problem. Investigate potential illicit sources.</p>	 <p>Illicit discharges or excessive nutrient application can lead to extreme algal growth on stream beds.</p>	 <p>The drainage to this outfall most likely has a high nutrient concentration. The cause may be an illicit discharge, but may be excessive use of lawn chemicals.</p>
		 <p>This brownish algae indicates an elevated nutrient level.</p>



INVOLVEMENT CRM EXAMPLE – GENERAL PUBLIC



CHIPPER DAYS

Located behind the Animal Shelter at 8670 W. 71st St. from 7am-3pm the *1st Saturday of every month OR the 2nd Saturday following a holiday. Bring a utility bill showing Sand Springs residency.

January 7th, 2023	July 8th, 2023*
February 4th, 2023	August 5th, 2023
March 4th, 2023	September 9th, 2023*
April 1st, 2023	October 7th, 2023
May 6th, 2023	November 4th, 2023
June 3rd, 2023	December 2nd, 2023

Big Spring CLEAN

9:00 am to 3:00 pm

West Corner of The Fairgrounds
(West of The Golden Driller)

Bags
Batteries
Cardboard
Shredding
E-Waste*
Tires
Fire Extinguishers
Ammunition
Medication
Sharps (in sealed hard container)

Questions? Contact The M.e.t.
918-584-0584
met@metrecycle.com

* Processing Fee:
TV \$26, CRT \$10

The met
The Metropolitan Environmental Trust
One West Third Street, Suite 110 | Tulsa, Oklahoma 74103 | 918-584-0584 | MetRecycle.com

AMERICAN DOCUMENT SHREDDING & DISINFECTING
CMG
NeWo Solutions



INVOLVEMENT CRM EXAMPLE – SCHOOL AGE



Stormwater Volunteer & Community Service Hours Program

Students seeking to meet the qualifying volunteer and/or community service hour requirements for clubs such as the National Junior Honor Society, National Honor Society, and Scouts, or who wish to diversify their portfolio of activities for college and scholarship application purposes, can apply to the **Sand Springs Stormwater Volunteer & Community Service Hours Program** to receive credits. In addition to recognition from the City, each volunteer will receive training and education on stormwater pollution prevention and assist the Sand Springs Stormwater Coordinator in one or more of the following tasks:

Students Kindergarten through 7th Grade**

- Walking along stormwater conveyances to remove small debris and trash.
- Making lists of stormwater conveyances/drains that have large debris and need to be cleared by the City.
- “Testing” new stormwater educational materials and tools

8th through 10th grade**

- Affixing stormdrain medallions
- Walking along stormwater conveyances to remove small debris and trash.
- Making lists of stormwater conveyances/drains that have large debris and need to be cleared by the City.
- Distributing/restocking stormwater brochures and educational materials

11th and 12th grade

- Using a GPS unit to mark locations of missing stormdrain medallions
- Performing stormwater monitoring and/or testing tasks using a YSI testing unit
- Performing TMDL required sample collection tasks
- Affixing stormdrain medallions
- Distributing/restocking stormwater brochures and educational materials
- Assisting in stormwater education classes for the public

Students, classes, or groups wishing to sign up for the Sand Springs Stormwater Volunteer & Community Service Hours Program will need to contact the Sand Springs Coordinator at stormwater@sand Springsok.org for more information. There is no limit by the City on the number of hours individual students can accumulate through the volunteer program!

All students will be required to fill out the standard Volunteer/Community Service Agreement, wear safety and field-appropriate clothing/footwear, follow the instruction and direction of the Stormwater Coordinator, be timely, and be respectful. Students will need to provide their own drop-off/pick-up transportation.

**Unless accompanied by a teacher or parent/guardian, younger student groups will consist of no more than 4 volunteers.

INVOLVEMENT CRM EXAMPLE – BUSINESS/RETAIL/RESTAURANT



INVOLVEMENT CRM EXAMPLE – CONSTRUCTION

Sand Springs Stormwater Environmental Excellence Award

The Stormwater Environmental Excellence Award will be presented annually to two (first and second place) outstanding individuals, clubs/organizations, schools, companies, businesses, subcontractors, or builders who have demonstrated a high level of distinction in stormwater compliance, green infrastructure, stormwater innovations, and/or stormwater projects.

Purpose:

To recognize outstanding individuals, clubs/organizations, schools, companies, businesses, subcontractors, or builders for their Stormwater Excellence and the benefit they provide to the environment and local citizenry of Sand Springs.

Timelines and Deadlines:

The award winner selection will occur at the convenience of the City Council and/or City Manager between the first week of November and the last week of December.

Judging and Criteria:

Award nominations may be made in one of two categories:

- **Program Excellence** - Sustained demonstration of excellence in stormwater management and stormwater pollution prevention at a worksite, construction site, retail development area, business development area, or industrial complex.
- **Project Excellence** - Successful implementation or outstanding innovations by a public entity in one or more areas of stormwater infrastructure creation, stormwater ordinance compliance, stormwater quality improvement, employee stormwater education, or stormwater pollution prevention.

Nominations will be reviewed and two to three finalists will be selected by the Stormwater Coordinator. The finalist will be presented to the City Council for approval if necessary.

Announcements and Presentations:

Announcements of finalists will be made during the "current award year" and awards will be presented during the first week of February of the following year.

Awards will be presented at a City Council meeting by the City Manager, City Mayor, and/or the Stormwater Coordinator, Developers, Builders, or Subcontractors on a date to be determined by the City Manager, City Mayor, and/or the Stormwater Coordinator.

Sand Springs Stormwater Environmental Excellence Award

How to Apply:

Please contact the City of Sand Springs Stormwater Coordinator at (918)246-2589, stormwater@cityofsandsspringsok.org, or mail nominations to:

City of Sand Springs
Stormwater Excellence Award Nominations
Attn: Stormwater Coordinator
13101 W. 46th St.
Sand Springs, OK 74063

Provide the following information:

1. Your Name and Contact Information (Optional): _____
2. Name of the individual/company being nominated: _____
3. Contact Information: _____
4. Select one of the following options for nomination:

Program Excellence - Sustained demonstration of excellence in stormwater management and stormwater pollution prevention at a worksite, construction site, retail development area, business development area, or industrial complex.

Project Excellence - Successful implementation or outstanding innovations by a public entity in one or more areas of stormwater management projects, including stormwater infrastructure creation, stormwater ordinance compliance, stormwater quality improvement, employee stormwater education, or stormwater pollution prevention.

5. List the reasons why you feel the company/individual deserves to be nominated in 500 words or Less):





Detention Pond Maintenance Inspection Checklist

(Due October 31st, Every Year. Email completed form to stormwater@sandsspringsok.org.)

Date: _____ Inspected by: _____ Type of Inspection: Routine Storm Event
Pond: _____ (# days since event)

General Observations:

Is Water flowing? Yes No Standing Water? Yes No Depth: _____ Inches / Feet (circle one)

Any evidence of obstructions or erosion in vicinity of the pond that could affect performance? Yes No

Is there evidence of encroachment into the pond or improper use of the pond? Yes No

Comments / Notes: _____

Pond Conditions:

Does the pond sides/slopes/bottom show signs of settling, cracking, sloughing or, other problems? Yes No

Do the embankments, emergency spillway (if applicable), or side slopes show any erosion or instability? Yes No

Is there evidence of animal burrowing or other activity that could contribute to instability or erosion? Yes No

Do vegetated areas need mowing? Yes No Will schedule for (date) _____

Are there areas that need to be re-vegetated? Yes No Will schedule for (date) _____

Do vegetated areas need thinning? (i.e., Cattails, willows, trees?) Yes No Will schedule for (date) _____

Is there any accumulation of trash, debris, or litter to be removed? Yes No Will schedule for (date) _____

Any signs of vandalism or other activity that could affect the performance of the pond? Yes No

Any visible pollution? Yes No Erosion at high water mark? Yes No

Abnormally high water level? Yes No _____ (Abnormally high water may indicate obstruction at orifice, or trash rack; Verify outlet structure is operating properly)

Unusual Algae blooms? Yes No _____ (Unusual Algae blooms may indicate nutrients in runoff such as dog waste and grass clippings; Distribute educational materials on proper waste disposal and monitor)

Structural Components:

Are the pipes/inlets going into or out of the pond clogged or obstructed? Yes No _____

Is the outfall channel from the pond functioning appropriately? Yes No _____

Is the inflow trickle channel working properly? Yes No _____

Is the orifice and/or trash rack obstructed? Yes No _____

Is the outfall channel, trickle channel or other conveyance in need of repair? Yes No _____

Are the manholes, frames, and covers associated with the outfall channel in appropriate condition? Yes No

Do any safety features, such as fences, gates or locks need repair or replacement? Yes No _____

Plan of Action:

If answered **YES** to any of the above, the following is an anticipated Maintenance Needs Action List:

Total Number of concerns: _____

_____ Need more monitoring (Anticipated schedule to re-visit, identify what will trigger "Yes Answers" action)

_____ Need routine repair (Approximate schedule for repairs; date of follow-up to re-inspect)

_____ Need of immediate repair (Take action if correct equipment on site; or contact supervisor)

Printed Name

Signature





STORMWATER COMPLAINT INSPECTION REPORT

DATE	
COMPLAINT FILED BY	
ADDRESS	
PHONE	
EMAIL	

VIOLATION / ISSUE LOCATION	
VIIATOR / REPONSIBLE PARTY INFORMATION	
PHONE	
EMAIL	
MAILING ADDRESS	
ISSUE REPORTED	



INSPECTION DATE	
INSPECTION TIME	
INSPECTION WEATHER CONDITIONS	
INSPECTION FINDINGS	
RESOLUTION	
FOLLOW UP	Y / N DATE:
WRITTEN WARNING ISSUED	Y / N DATE: NUMBER:
CITATION ISSUED	Y / N DATE: NUMBER:



IDDE / GOOD HOUSEKEEPING EXAMPLE - SPILL INCIDENT REPORT

SANDSPRINGS

Incident List by Alarm Date/Time

Alarm Date Between {01/01/2021} And {12/22/2021}
and Incident Type In "411 ", "413 ", "422 "

Incident-Exp#	Alm Date	Alm Time	Location	Incident Type
21-0000822-000	04/03/2021	22:14:02	14016 W 31 ST	413 Oil or other combustible liq
21-0001546-000	06/29/2021	20:27:59	S HWY 97 & W MORROW RD	411 Gasoline or other flammable
21-0002677-000	10/28/2021	18:06:50	13706 W HWY 51	411 Gasoline or other flammable
21-0002896-000	11/24/2021	14:38:24	4100 S HWY 97	413 Oil or other combustible liq

Total Incident Count 4

DWFS & IDDE EXAMPLE – SAMPLE TESTING CHAIN OF CUSTODY REPORT



Environmental Health Services Lab
5051 S. 129th E. Ave. Tulsa, OK 74134
918-595-4200

Page ____ of ____
Paid _____

ID:	County:	Bill to:
Results to:		Bill to address:
Results to address:		Bill to phone:
		Bill to fax:
Results to phone:		Bill to e-mail:
Results to fax:		Attention:
Results to e-mail:		PO:
Attention:		
Project/sampled for:		(circle ↓)
Sampled by:		FREE

ANALYSES										
ANALYSES	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)

Copy for...

Micro

Chem

Lab-assigned Sample ID#

Collection site address or location code	Grab Time (or *Composite Start)		(*Composite End)		TOTAL Chlorine	#Containers	SampleType	ANALYSES												
	Date	Time	Date	Time				1)	2)	3)	4)	5)	6)	7)	8)	9)	10)			
1)																				
2)																				
3)																				
4)																				
5)																				
6)																				
7)																				
8)																				
9)																				
10)																				

Sample Types: DW=Drinking Water WW=Waste Water GW=Ground Water SL=Sludge SO=Soil LT=Line Test O=Other

Transfers	Relinquished by	Date	Time	Received by	Remarks
1					
2					
3					

Composite start/end times refer only to autosampler composited samples; fill out Grab Time for all else



DWFS & IDDE EXAMPLE - OUTFALL RECONNAISSANCE WORK SHEET

Sand Springs Outfall Reconnaissance & Illicit Discharge Work Sheet

Site Information		
Outfall ID:	Date:	Time:
Latitude (N):	Longitude (W):	
Investigators:		
Dominant Watershed Land Use (1=Primary use, 2=Secondary use):		
<input type="checkbox"/> Suburban Residential <input type="checkbox"/> Industrial <input type="checkbox"/> Open Space <input type="checkbox"/> Urban Residential		
<input type="checkbox"/> Commercial <input type="checkbox"/> Unknown <input type="checkbox"/> Other:		
Receiving Stream:		
Access Instructions:		

Outfall/Conveyance		
Type	Material	Shape
<input type="checkbox"/> Closed Pipe <input type="checkbox"/> Box Culvert Dimensions:	<input type="checkbox"/> Concrete <input type="checkbox"/> Poly <input type="checkbox"/> Steel <input type="checkbox"/> Other	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple
<input type="checkbox"/> Open Channel Width: Top _____ Bottom _____	<input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Concrete	<input type="checkbox"/> Rectangle <input type="checkbox"/> Parabolic <input type="checkbox"/> Trapezoid
<input type="checkbox"/> Manhole <input type="checkbox"/> Catch Basin <input type="checkbox"/> Natural Flowage/ Creek <input type="checkbox"/> Other:		

Flow Estimation	
Flow Present: <input type="checkbox"/> Yes <input type="checkbox"/> No	Standing Water Present: <input type="checkbox"/> Yes <input type="checkbox"/> No
Amount: <input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial	Estimated Flow:
Width At Water Surface:	Depth Of Water:
Approximate Flow Velocity:	Calculated Flow Rate:

Environmental Conditions		
Cloud Cover (%):	Air Temp. (°C):	Wind:
Last Rain Event: <input type="checkbox"/> <48 Hours <input type="checkbox"/> 48 to 72 Hours <input type="checkbox"/> >72 Hours Amount:		

Analytical Results			
Samples Collected From: <input type="checkbox"/> Flow <input type="checkbox"/> Pool		Date:	Time:
		Initials:	
Parameter	Results	Parameter	Results
Water Temperature	°C	Color	Color Units
pH	s.u.	Copper	mg/l
Conductivity	µmhos/cm	Detergents	mg/l
Dissolved Oxygen	mg/l	Fluoride	mg/l
Dissolved Oxygen	% Sat.	Hardness	mg/l
Ammonia	mg/l	Phenols	mg/l
Chlorine	mg/l	Turbidity	NTU
Were Samples Collected For The Laboratory: <input type="checkbox"/> Yes <input type="checkbox"/> No			





Tulsa County Clerk - EARLENE WILSON
Doc # 2008117749 Page(s): 21
Recorded 11/19/2008 at 01:23 PM
Receipt # 116820 Fee \$53.00

CITY OF SAND SPRINGS, OKLAHOMA
ORDINANCE NO. 1167

M

AN ORDINANCE RELATING TO TITLE 13 – PUBLIC SERVICES; ADOPTING A NEW SECTION OF LAW DENOTED AS “STORMWATER DISCHARGE REGULATIONS” AND CODIFYING SAME AS CHAPTER 13.20 – STORMWATER DISCHARGE REGULATIONS, TO THE CODE OF ORDINANCES OF THE CITY OF SAND SPRINGS, OKLAHOMA; AND DECLARING AN EMERGENCY.

WHEREAS the City of Sand Springs has been mandated to implement stormwater regulations pertaining to illicit discharges, construction activities and best management practices by federal and state laws, rules and regulations – including the federal *Clean Water Act*, 33 U.S.C. § 1251, *et seq.*, the *Oklahoma Environmental Quality Act*, 27A O.S.2001, § 1-1-101, *et seq.*, and stormwater regulations contained in 40 CFR Part 122, *EPA Administered Permit Programs: the National Pollutant Discharge Elimination System* (NPDES), and OAC § 252:606, *ODEQ Administered Permit Programs: the Oklahoma Pollutant Discharge Elimination System* (OPDES), and amendments thereto;

WHEREAS it is necessary to regulate the contribution of pollutants into the City’s Municipal Separate Storm Sewer System through illicit discharges, spills, construction activities, dumping or other activities by users thereof as a necessary protection of the public’s health, safety and welfare; and

WHEREAS the City of Sand Springs must adopt and implement inspection, surveillance and monitoring procedures necessary to determine compliance and noncompliance with this ordinance and applicable federal and state laws, rules and regulations;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF SAND SPRINGS, OKLAHOMA, THAT:

Section One: A new section of law denoted as “Stormwater Discharge Regulations” is created and codified to Title 13 – Public Services, as Chapter 13.20 – Stormwater Discharge Regulations, to the Code of Ordinances of the City of Sand Springs, Oklahoma, as follows, to wit:

RT

CITY OF SAND SPRINGS
FINANCE DEPT.
P. O. BOX 338
SAND SPRINGS, OKLA 74063

21



Chapter 13.20 – Stormwater Discharge Regulations.

Section 13.20.010 Authority and Scope.

The introduction and contribution of pollutants or other materials into the City's Municipal Separate Storm Sewer System within the city limits of the City of Sand Springs shall be regulated by the City of Sand Springs, Oklahoma, in compliance with all applicable federal and state laws, rules and regulations. Specifically, the City of Sand Springs, or agents thereof, shall regulate and/or administer:

(A) Contribution of pollutants into the City's Municipal Separate Storm Sewer System through the stormwater discharges of any user.

(B) Introduction into the City's Municipal Separate Storm Sewer System of spills, dumping, or the disposal of materials other than stormwater.

(C) Prohibition of illicit discharges into the City's Municipal Separate Storm Sewer System.

(D) Inspections, surveillance and monitoring procedures necessary to determine compliance and noncompliance with this ordinance.

(E) Compliance with conditions of the City's Stormwater Discharge Permit and/or permits issued by federal and/or state agencies, as well as any other federal or state law, rule or regulation pertaining to stormwater quality.

Section 13.20.020 – Illicit Discharges Prohibited.

(A) It shall be unlawful and an offense against the Code of Ordinances of the City of Sand Springs, Oklahoma, for any person to willfully, knowingly or otherwise through neglect or foreseeable circumstance, to cause or permit, directly or indirectly, any contribution or introduction of pollutants through illicit discharges into the City's Municipal Separate Storm Sewer System.

(B) The Public Works Director, or designees thereof, shall be authorized to regulate, monitor and enforce all municipal ordinances, rules and regulations regarding illicit discharges of pollutants into the City's Municipal Separate Storm Sewer System.



Section 13.20.030 – Definitions and Abbreviations.

(A) As used in this chapter, the following terms, phrases and words shall have the meanings given below:

Act: The Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 U.S.C. § 1251, et seq., and all future amendments or successions thereto.

Best Management Practice: The best available practices or devices that, when used singularly or in combination, eliminate or reduce the contamination of surface waters, ground waters, or both. Best Management Practices shall be divided into the following categories:

(1) Nonstructural Best Management Practices: Those practices which require modified or additional operational or behavior practices, such as sweeping a parking lot or having spill response equipment on site.

(2) Structural Best Management Practices: Those practices which require the construction of a structure or other physical modification on the site.

City: The City of Sand Springs, Oklahoma, a municipal corporation, and its duly authorized officers, agents and employees.

Composite Sample: A sample of stormwater runoff, resulting from the combination of individual samples taken at selected intervals, based on an increment of either flow or time.

Director: The Public Works Director of the City of Sand Springs, Oklahoma, or his or her authorized designees, including employees and agents thereof.

Discharge: Any addition or introduction of any pollutant, stormwater, or any other substance whatsoever into the City’s Municipal Separate Storm Sewer System, or into waterways within or affecting the city limits of the City of Sand Springs, Oklahoma.

Environmental Protection Agency: The United States Environmental Protection Agency or, where appropriate, the term may also be used as a designation for the Regional Water Management Division Director or other duly authorized official of said agency.



Floatable: Any buoyant or semi-buoyant, organic or inorganic, water-borne waste material such as litter, paper, Styrofoam, grass, leaf litter, cigarette butts and other debris.

Grab Sample: A sample of stormwater runoff which is taken on a one-time basis, without regard to the flow and consideration of time.

Illicit Discharge: Any person who willfully, knowingly or otherwise through neglect or foreseeable circumstance, causes or permits, directly or indirectly a discharge to the City's Municipal Separate Storm Sewer System that is not composed entirely of stormwater, except discharges pursuant to Section 13.20.040 of this chapter, or discharges resulting from allowable firefighting activities.

Industrial Activity: Any activity which is directly related to manufacturing, processing or raw materials storage areas at an industrial facility. The term includes, but is not limited to, industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the industrial facility; sites where material handling activities are performed; refuse sites; sites used for the applications or disposal of process waste waters; sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage or disposal; shipping and receiving areas; manufacturing buildings; storage areas, including tank farms, for raw materials, and intermediate and finished products.

Industrial Facility or Industry: Any premises whose function is classified in the latest edition of the federal Standard Industrial Classification Manual, also known as the SIC code manual.

Material Handling Activities: The storage, loading and unloading, transportation or conveyance of any raw material, intermediate product, finished product, by-product or waste product.

Monitoring: The performance of stormwater flow measurements, stormwater sampling, sample analysis and like procedures necessary to determine compliance with stormwater discharge activity.



Municipal Separate Storm Sewer System: A conveyance or system of conveyances, including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, storm drains and all other manner of structures, facilities or appurtenances that are owned or otherwise operated or controlled by the City of Sand Springs, Oklahoma, and are designed or used for collecting or conveying stormwater.

OPDES Storm Water Discharge Permit: The most current "Multi-Sector General Permit for Storm Water Discharge Associated with Industrial Activities for the State of Oklahoma," or the most current "General Permit for Storm Water Discharge Associated with Construction Activities within the State of Oklahoma," with provisions under the Oklahoma Administrative Code (OAC), § 252:606, incorporating by reference 40 CFR Part 122.26, as issued by the Oklahoma Department of Environmental Quality (ODEQ), or any other named state agency charged with administering same, or any revision thereof or amendment thereto.

Outfall: A point source as defined in this chapter.

Overburden: Any material of any nature, consolidated or unconsolidated, that overlies a mineral deposit, excluding topsoil or similar naturally occurring surface material that are not disturbed by mining operation.

Person: An individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity or any other legal entity, or their lawful representatives, agents or assignees. This definition shall include all federal, state, and local governments.

Point Source: Any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged.

Pollutant: Any dredge spoil, solid waste, incinerator residue, oil, grease, sewage, garbage, sewage sludge, munitions, medical waste, chemical waste, industrial waste, biological materials, radioactive materials, heat, wrecked or discharged equipment, rock, sand, cellar dirt, agricultural waste, municipal waste and the characteristics of the wastewater including but not limited to, pH, temperature, TSS, turbidity, color, BOD, COD, toxicity and odor.



Premises: Any plot or tract of ground, regardless of size or plat, that is owned by a person or used by a person, and any contiguous plots.

Significant Materials: Any raw materials, fuels, materials such as solvents, detergents, and plastic pellets, finished materials such as metallic products, raw materials used in food processing or production, hazardous substances.

Spill: Any release that has negatively or has the potential to negatively impact the quality of water within, or discharges from, the City's Municipal Separate Storm Sewer System, or causes damaging or deleterious effects to the City's Municipal Separate Storm Sewer System, including all structures or appurtenances, or creates any violation of this chapter.

Stormwater: Any rainwater runoff, surface runoff and drainage related to storm events or snow melt.

Stormwater Pollution Prevention Plan: A document approved by the Oklahoma Department of Environmental Quality or successor agency that specifies practices, facilities and other applicable measures intended to mitigate contributions of pollutants into the City's Municipal Separate Storm Sewer System from a premises where construction activity is occurring or ongoing.

Stormwater Discharge Associated with Industrial Activity: Stormwater from areas of industrial activity or areas where industrial activity has taken place in the past and significant materials remain and are exposed to stormwater.

User: Any source of direct or indirect discharge into the City's Municipal Separate Storm Sewer System.

(B) As used in this chapter the following abbreviations shall have the meanings given below:

- BAT** - Best Available Technology
- BMP** - Best Management Practices
- BOD** - Biochemical Oxygen Demand
- CFR** - Code of Federal Regulations
- COD** - Chemical Oxygen Demand
- EPA** - United States Environmental Protection Agency
- OAC** - Oklahoma Administrative Code
- NOI** - Notice of Intent
- NOV** - Notice of Violation
- NPDES** - National Pollutant Discharge Elimination System



- ODEQ** - Oklahoma Department of Environmental Quality
- OPDES** - Oklahoma Pollutant Discharge Elimination System
(See Oklahoma Administrative Code (OAC), Title 252,
Chapter 606, § 252:606-1-1 et seq., as amended)
- RCRA** - Resource Conservation and Recovery Act of 1976
(Pub.L. 94-580, Oct. 21, 1976, 90 Stat. 2795, as
amended)
- RQ** - Reportable Quantities
- SARA** - Superfund Amendments and Reauthorization Act of
1986 (Pub.L. 99-499, Oct. 17, 1986, 100 Stat. 1613,
as amended)
- SWDA** - Solid Waste Disposal Act (Pub.L. 89-272, Title II, Oct.
20, 1965, 79 Stat. 997, 42 U.S.C. § 6901, *et seq.* as
amended)
- USC** - United States Code

Section 13.20.040 – Allowable Discharges.

A. The following types of discharges shall not be prohibited discharges unless the Director determines that the type of discharge, whether singularly or in combination with others, causes contamination of surface water, stormwater or groundwater; causes overload or damage to the City’s Municipal Separate Storm Sewer System or has the potential to endanger public health, safety and welfare; or causes the City to violate any federal and/or state stormwater permits:

- (1) Waterline flushing
- (2) Landscape irrigation
- (3) Diverted stream flows
- (4) Rising ground waters
- (5) Residential building wash water without detergents
- (6) Uncontaminated pumped groundwater
- (7) Uncontaminated groundwater infiltration
- (8) Discharges from potable water sources
- (9) Foundation drains
- (10) Air conditioning condensate
- (11) Irrigation water
- (12) Springs
- (13) Water from crawl space pumps
- (14) Footing drains
- (15) Lawn watering
- (16) Individual residential car washing



-
- (17) De-chlorinated swimming pool discharges
 - (18) Street wash water
 - (19) Fire hydrant flushing
 - (20) Non-commercial or charity car washes
 - (21) Discharges from riparian areas and wetlands
 - (22) Discharges in compliance with a separate OPDES or NPDES permit.
 - (23) Discharges or flows from emergency firefighting activities provided that the incident commander, fire chief or other on-scene firefighting official in charge makes an evaluation regarding potential releases of pollutants from the scene and summons a hazardous material response if pollutants are suspected.
 - (24) Discharges or flows from firefighting training activities authorized as allowable discharges by the Director.

(B) Dye testing shall be an allowable discharge, but shall require verbal notification to the Director prior to testing. The City and its agents shall be exempt from this requirement.

(C) Any discharge that has a current NPDES discharge permit with the EPA or has a current OPDES discharge permit with the ODEQ shall be an allowable discharge, with the following exceptions:

- (1) A discharge that results in the City violating its OPDES Municipal Storm Water Discharge Permit.
- (2) A discharge the Director determines causes contamination of surface water, stormwater or groundwater within the City.
- (3) A discharge that could block or damage the City's Municipal Separate Storm Sewer System.

(D) Stormwater that is not associated with and/or intermingled with stormwater that is associated with industrial activity required to obtain a "NPDES Stormwater Discharge Permit" as defined in 40 CFR Part 122, before the point source discharge to the City's Municipal Separate Storm Sewer System.

(E) Any stormwater that is associated with industrial activity and has had pollutants removed by structural or nonstructural BMPs to a level considered satisfactory by the Director.



Section 13.20.050 – Prohibited Discharges.

(A) It shall be unlawful and an offense for any person to willfully, knowingly or otherwise through neglect or foreseeable circumstance, to cause or permit, directly or indirectly, any contribution or introduction of pollutants through illicit discharges into the City's Municipal Separate Storm Sewer System.

- (1)** All non-stormwater discharges except those classified as an allowable discharge in Section 13.20.040 of this ordinance.
- (2)** Any stormwater from any activity required to obtain an "NPDES Stormwater Discharge Permit" as defined in 40 CFR Part 122.26(b)(14), unless the discharge is authorized by a valid "NPDES Stormwater Discharge Permit."
- (3)** Any spilled pollutants, unless it can be demonstrated that failure to allow the discharge will result in a greater imminent peril or hazard to the health, safety and welfare of the public.
- (4)** Any material that is disposed of or dumped in such a manner that causes pollutants to be discharged.

(B) It shall be unlawful and an offense for any person to place, store or locate any material in such a manner that causes pollutants to be transported directly or indirectly by wind, rain or other atmospheric conditions into the City's Municipal Separate Storm Sewer System.

(C) Any point source discharge into the City's Municipal Separate Storm Sewer System that either singularly or in conjunction with other discharges causes the City to violate its OPDES Municipal Stormwater Discharge Permit shall be prohibited.

(D) It shall be unlawful and an offense for any person to directly or indirectly dispose of grass, dirt, leaves, trash or other pollutants into the City's Municipal Separate Storm Sewer System.

(E) No person shall deposit, drain or divert, whether directly or indirectly, into or upon any public highway, street, sidewalk, alley, parking lot, paving, drainage ditch, storm drain, sewer, gutter, creek, stream, river, lake, pond or lagoon, any oil or oily liquid with petroleum content, grease, mud, rotary mud, sand, salt water, sewer waste or industrial waste; or in any manner permit by seepage, overflow or otherwise, any of such substances to escape from any property owned, leased or controlled by such person; nor shall any person allow such substances to flow upon any public highway, street, sidewalk, alley, parking lot, paving, drainage ditch, storm drain, sewer, gutter, creek, stream, river, lake, pond or lagoon within the city limits.



(F) Any illicit discharge, except those allowable pursuant to provisions of this ordinance, shall be prohibited.

Section 13.20.060 – Spills.

Spills that have the potential to enter or have entered the City's Municipal Separate Storm Sewer System shall be contained, and remediation activity shall be commenced, as soon as possible. In case of vehicle accident, all spillage shall be properly contained, cleaned and stored with the accident vehicle. Any person identified as the source of any spill into the City's Municipal Separate Storm Sewer System shall be required to remediate, remove and properly dispose of spilled materials. Remediation activities shall only be considered complete when the cleanup is deemed satisfactory by the Director. The required reporting or notification for such spills shall be completed as specified in Section 13.20.100(C) of this ordinance.

Section 13.20.070 – Pavement Wash Waters.

Discharges to the City's Municipal Separate Storm Sewer System resulting from the cleaning of driveways, parking lots and other paved surfaces shall be deemed allowable upon the fulfillment of the following requirements:

(A) The person conducting the cleaning shall employ BMPs, including but not limited to absorbent materials, which prevent the discharge of pollutants into the City's storm sewer;

(B) Prior to any washing, floatables shall be removed from the surface that is about to be cleaned;

(C) The discharge shall not result in a violation of the City's OPDES Municipal Stormwater Discharge Permit; and

(D) The discharge, based upon the determination of the Director, shall not cause contamination of surface water, stormwater or groundwater within the city limits.



Section 13.20.080 – Construction Activities.

(A) All construction activities, including the development, excavation, grading, regrading, paving, landfilling, berming and diking of land, shall be conducted in such a manner as to minimize erosion and prevent the discharge of pollutants, including but not limited to rock, sand and soil, into the City's Municipal Separate Storm Sewer System. Persons conducting the construction shall implement and maintain adequate structural and/or nonstructural BMPs for controlling the discharge of pollutants. In the case of ten (10) acres or more of land draining to one discharge point, a sediment basin or adequate alternate measures shall be implemented. The adequacy of any BMP shall be based upon the fulfillment of the following requirements:

- (1)** The discharge shall not result in a violation of the City's OPDES Municipal Stormwater Discharge Permit.
- (2)** The discharge, based upon the determination of the Director, shall not cause contamination of surface water, stormwater or groundwater within the city limits.
- (3)** The discharge, based upon the determination of the Director, does not transport sediment into the City's Municipal Separate Storm Sewer System.

(B) Erosion control shall be provided during the construction phase on all construction sites as necessary to prevent impacts to offsite areas and/or public rights-of-way. The primary goal of erosion control and BMPs is to minimize erosion and sedimentation during all phases of construction activities until final grading, landscaping and storm sewer structures are in place. BMPs include but are not limited to seeding, sodding, sprigging, silt fences, straw bale dikes, earth dikes or swales, temporary stream crossings, storm sewer inlet protection, temporary sediment basins and stabilized construction entrances. Failure to provide sediment and erosion control protection can result in suspension of earth change, stormwater and building permits. A violation of this Section by the failure to comply with any of its requirements shall constitute an offense. Each lot upon which such violation occurs shall constitute a separate offense, and each day on which a violation occurs or is allowed to remain shall constitute a separate offense. The imposition of administrative and/or criminal penalties shall not prevent the City of Sand Springs, or agents thereof, from taking any lawful action as is necessary to remediate or correct a violation – including actions to prevent future violations that would adversely impact the City's Municipal Separate Storm Sewer System or the public's health, safety and welfare.



(C) No person shall place, spill or allow the flow of concrete or similar construction materials on any public road, alley, highway or sidewalk, except as may be required for the construction or the maintenance of the public road, street, highway or sidewalk.

(D) Construction debris shall not be allowed to blow off the site of origin. Trash containers of sufficient size shall be located on each construction site at all times when waste materials are being generated. The Director shall determine whether such container is of sufficient size.

(E) For purposes of regulation and enforcement, any person with overall responsibility for construction, including but not limited to the general contractor or facility operator, shall be jointly responsible with the premises owner or the person at whose direction the construction is conducted for assuring compliance with this Section.

Section 13.20.090 – Record Keeping.

(A) Every person and industry shall retain and make available to the Director for inspection and copying, at the person’s or industry’s expense, all records and information required to be retained under this ordinance, or order issued hereunder. The person or industry shall retain these records for a period of no less than five (5) years. This retention period shall be automatically extended for the duration of any litigation concerning compliance with this ordinance, or where the industry or person has been specifically notified of a longer retention period by the Director or a court of competent jurisdiction.

(B) Reports and other documents required to be submitted or maintained under this ordinance, or order issued hereunder, shall be subject to the provisions of 18 USC § 1001, regarding fraud or false statements and the provisions of § 309c(4) of the Act, as amended, governing false statements, representations or certifications.

Section 13.20.100 – Reporting Requirements.

(A) Any industry that performs an industrial activity that is required by 40 CFR Part 122.26 to obtain an “NPDES Stormwater Discharge Permit” from the EPA must submit a copy of that application and permit, a Stormwater Pollution Prevention Permit, as well as any written correspondence with any federal, state or local agency regarding the aforementioned permit, to the Director within fifteen (15) days of request.



(B) Any permits, pollution prevention plans or other documents regarding an industry's or construction site's OPDES Storm Water Discharge Permit shall be made available to the Director upon request.

(C) Any person or industry shall, at the earliest possible time, but in any case no later than one (1) hour from discovery, orally report to the Director a spill, release, dumping or other situation that has contributed or is likely to contribute pollutants into the City's Municipal Separate Storm Sewer System. This notification shall include the location, type, concentration and volume, if known, and corrective actions being taken for each spill, release, etc. If the spill is contained, notification of containment shall be made verbally to the Director on the next business day. A written report of the spill and containment actions shall be made to the Director within five (5) days of the discovery of the spill. These reporting requirements shall be in addition to, and not in lieu of, any other reporting requirements imposed under federal, state or local laws, rules or regulations.

(D) All persons or industrial facilities may be required to provide other reports deemed necessary by the Director to monitor, maintain and ensure compliance with this ordinance.

Section 13.20.110 – Compliance Monitoring Requirements.

(A) When the Director requires that a sample of a storm event be obtained, the following criteria must be met:

- (1)** The depth of the rainfall must be greater than one-tenth (0.1) inch or its equivalent.
- (2)** The sample storm event must be preceded by at least seventy-two (72) hours of less than one-tenth (0.1) inch of rainfall.
- (3)** All point sources from the premises or industry required to sample must be sampled, unless otherwise specified.

(B) When the Director has reason to believe that any person or industrial facility is violating this ordinance, the person or industrial facility may be required to obtain either a grab or composite sample and analyze any discharge, stormwater, groundwater and/or sediment at its expense, and provide a copy of the analysis to the Director for review.



(C) When the Director has cause to believe that any stormwater discharge is an illicit discharge, the Director may obtain either a grab or composite sample and analyze the discharge. If the Director determines that the discharge is an illicit discharge, then the Director may fully recover all costs of sampling and analysis from the person or industrial facility. When the discharge is likely to contain illicit discharges on a recurring basis, the person or industrial facility may be required by the Director to conduct monitoring activities at its expense.

(D) Upon completion of sample collections and documentation, a written record of the chain-of-custody must be completed. The chain-of-custody record is an accurate step-by-step documentation of the sampling path from origin through analysis. It must contain the following information:

- (1)** Name of the person(s) collecting the sample.
- (2)** Sample ID numbers.
- (3)** Date and time of sample collection.
- (4)** Location of sample collection.
- (5)** Name(s) and signature(s) of all persons handling the sample in the field and in the laboratory.
- (6)** Type of sampling equipment used.
- (7)** Type of preservation.
- (8)** Certification of sample authenticity.

A copy of the chain-of-custody will remain with all sample analyses sent to the Director for review.

(E) When a person or industry is required to sample a storm event and that person or industry has two or more point sources with substantially identical effluents, the person or industry may petition the Director to allow the sampling of only one point source and report that the data apply to the substantially identical point source(s).

(F) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, or amendments thereof, unless other test procedures have been specified by the Director.



Section 13.20.120 – Requirements for Best Management Practices.

(A) If the Director determines that a stormwater discharge into the City's Municipal Separate Storm Sewer System is, or has the potential of, contributing to water quality degradation, has potential to cause any violation of this ordinance, or causes a violation of the City's OPDES Municipal Stormwater Discharge Permit, a BMP shall be implemented. The type and number of BMPs shall be addressed individually, with the initial implementation of nonstructural BMPs followed by structural BMPs. The Director may require additional BMPs to be implemented for any discharge from a commercial, residential or industrial source.

(B) All persons and industrial facilities shall take measures to prevent spills or any other accidental introduction of pollutants into the City's Municipal Separate Storm Sewer System. These measures shall take the form of BMPs.

Section 13.20.130 – Inspection and Sampling.

(A) The Director, or the Director's authorized agent bearing credentials, shall be permitted to gain access to such premises as may be necessary for the purpose of inspecting, observing, measuring, sampling and testing, as often as may be necessary, to determine compliance with the provisions of this ordinance.

(B) The Director, or the Director's authorized agent bearing credentials, shall have the right to perform inspections at any industrial facility or any other premises that discharges or has the potential to discharge stormwater into the City's Municipal Separate Storm Sewer System. Whenever an inspection of such premises is made, the findings shall be recorded and a copy of the inspection report made available to the owner or person in charge of such premises, after finalization of the inspection report.

Section 13.20.140 – Plan Review

(A) Applications for building permits under the jurisdiction of the City involving disturbance of soils by construction activities shall be reviewed by the Director for compliance with provisions of this ordinance – including but not limited to a review of a person's or industry's Notice of Intent application to ODEQ.



(B) The fee for a stormwater compliance plan review shall be established by motion or resolution of the City Council.

Section 13.20.150 – Administration and Enforcement.

The following enforcement provisions are intended to achieve compliance with this chapter.

(A) The Director may, upon good cause, investigate any premises where there is reason to believe that there may be a failure to comply with the requirements of this ordinance.

(B) Whenever the Director determines that a violation of this ordinance has occurred or is occurring, the Director may issue a Notice of Violation (NOV) to the person or industry. This NOV shall include the nature of the violation and provide a reasonable time for correction. The Director may require, within fifteen (15) days of the receipt of this NOV, a written explanation of the violation and a plan for satisfactory correction and prevention, including specific required actions. Submission of this plan shall in no way relieve the person or industry of liability for any violation(s) occurring before or after receipt of the NOV. Issuance of a NOV shall not preclude any other enforcement action.

(C) Upon determination that a violation of this ordinance has occurred and actions are necessary by the person or industry for remediation and/or prevention, the Director may issue an administrative order:

(1) Consent Orders. The Director is empowered to enter into consent orders, assurances of voluntary compliance or other similar documents establishing a consensus with any person or industry for noncompliance. Such an order shall include specific action to be taken by the violator to correct the noncompliance within a time period specified in the order. Consent orders shall be judicially enforceable.

(2) Compliance Orders. When the Director finds that a person or industry has violated or continues to violate this ordinance or orders issued hereunder, the Director may issue an order to the violator directing that compliance be obtained within a specified time period. If compliance is not achieved within the time period, water service or sewer service, or both services may be discontinued; applicable City permits may be suspended, canceled or revoked; or other lawful actions taken; unless adequate BMPs or other related appurtenances are installed and properly operated. Compliance orders may also contain other



requirements addressing noncompliance, including additional self-monitoring. A compliance order shall not extend the deadline for compliance established by a federal or state standard or requirement, nor shall a compliance order release the violator from liability for any violation, including any continuing violation. Issuance of a compliance order shall not preclude any other enforcement action.

(3) Cease and Desist Orders. When the Director finds that a person or industry is violating provisions of this ordinance, or any order issued hereunder, or that past violations are likely to recur, the Director may issue an order directing the violator to cease and desist all such violations or activities likely to cause a recurrence, and to:

- (a)** Immediately comply with all requirements.
- (b)** Take such appropriate remedial or preventive actions as may be necessary to properly address a continuing or threatened violation, including halting operations or terminating the discharge.

Issuance of a cease and desist order shall not preclude other action against the violator.

Administrative orders may be revised by the Director at any time, upon notice to the affected person or industry, to assure compliance with this ordinance.

(D) When the Director finds that a user has violated or continues to violate any provision of the ordinance, or order issued hereunder, the Director upon good cause shown may impose an administrative penalty against such user in an amount determined by motion or resolution of the City Council. Each day that each violation exists shall constitute a separate cause for administrative penalty. Notice of an administrative penalty shall be served upon the premises owner and, if applicable, person responsible for the activity causing the violation by certified mail, return receipt requested. Payment of the penalty fee shall be received by the Director within fifteen (15) days after such notice is served. The premises owner shall have responsibility to assure payment. Issuance of an administrative penalty shall not preclude any other action by the City, including but not limited to concurrent criminal and civil remedies.



(E) Notwithstanding any other provision of this ordinance, the Director may require any person and/or industry found to have violated any provision of this ordinance, or order(s) issued hereunder, to reimburse the City for services and/or materials used to remove pollutants from and/or to prevent further discharge of pollutants into the City's Municipal Separate Storm Sewer System; and shall become liable to the City for any expense, loss or damages experienced by the City as a result of a violation. The City may pursue its right of action to recover all such costs by utilizing any and all lawful and reasonable methods.

(F) Whenever a person has violated, or continues to violate any provision of this ordinance, or orders issued hereunder, water and/or sewer service may be discontinued by the City. Service shall only recommence, at the violator's expense, after the violator has satisfactorily demonstrated an ability to comply and actual compliance.

(G) Provisions of this ordinance, including but not limited to implementation of administrative penalties and issuance of criminal penalties through the Municipal Court of the City, shall be enforceable by the Director, or other City employees as designated by the Director or City Manager.

(H) In addition to any administrative penalties or other actions prescribed herein, violations of this ordinance shall constitute a Class C municipal offense punishable by the penalties prescribed for such in Chapter 1.20 of the City's Code of Ordinances. Recurring violations involving the same premises or activity, or willful disregard for any NOV, order or administrative penalty issued by the Director, shall constitute a Class A municipal offense punishable by the penalties prescribed for such in Chapter 1.20 of the City's Code of Ordinances.

Section 13.20.160 – Appeals.

(A) Any person aggrieved by any NOV, order or administrative penalty issued by the Director pursuant to this ordinance may appeal the action in writing to the City Manager within fifteen (15) days of the date of the NOV, order or administrative penalty. The written notice of appeal shall specify the action appealed, detail why the action is in error and specify any provision of City ordinances or state or federal laws, rules or regulations supporting such an appeal.



(B) Upon receipt and substantiation of a notice of appeal, the City Manager shall within 30 days hold a hearing where the appellant shall show cause why the provisions of the NOV, order or administrative penalty shall not be imposed or enforced. At the conclusion of the hearing, the City Manager shall affirm, modify, reverse or remand to the Director, the NOV, order or administrative penalty. Any ruling, requirement or decision by the City Manager shall be final and binding, unless appealed to the City Council.

(C) Any person aggrieved by an appeal decision of the City Manager may forward in writing an appeal to the City Council by filing an appeal with the City Clerk within fifteen (15) days from the date of the City's Manager's appeal decision. Such written notice of appeal shall detail why the City Manager's decision was in error and specify any provision of City ordinances or state or federal laws, rules or regulations supporting such an appeal. Council shall hold a hearing on the appeal, based solely upon the record of the City Manager's action, within thirty (30) days from the date the notice of appeal was filed with the City Clerk. The City Council shall affirm, modify or reverse the action of the City Manager. Any ruling, requirement or decision of the Council shall be final and binding, provided that any right of appeal to the courts shall not be abrogated.

(D) Should the City Manager summarily determine the information supporting the notice of appeal is inadequate to substantiate such, including a determination that the appeal is patently frivolous or filed only for purposes of delay, the City Manager may deny the appeal without a hearing. The appellant shall be notified in writing of the denial and the grounds for such. Any further appeal with the City shall cease.

(E) The City Manager may designate another regular employee of the City as a hearing officer to act in his or her capacity.

(F) Any appeal properly filed shall serve to stay any enforcement action(s) by the City upon any person or industry alleged to be in violation of this ordinance. Provided, however, that such a stay shall be lifted by the Director and/or City Manager upon finding that such action would create an imminent hazard to the person's, industry's or public's health, safety or welfare. Such a finding shall be in writing and shall be provided to the person or industry alleged to be in violation upon lifting of the stay of enforcement action(s).

(G) Any appeal does not preclude the City or any other aggrieved party from pursuing any civil or criminal actions or penalties – including injunctive relief from a court of competent jurisdiction.



Section 13.20.170 – Confidential Information.

Information and data regarding a person, industrial facility or industrial activity obtained from reports, surveys, OPDES stormwater discharge permit applications or permits, monitoring programs, inspections and sampling activities may be available to the public in accordance with the Oklahoma Open Records Act (51 O.S.2001, § 24.A.1, et seq.), or to other government agencies, unless the person or industry can demonstrate in writing to the Director's satisfaction that the release of such information would divulge information regarding trade secrets which is entitled to protection under applicable state law. If the Director determines that the information and data requested may disclose trade secrets or secret processes, then the information or data will not be made available.

Section Two: The provisions of this ordinance shall supercede all previous ordinances, resolutions or actions by the City Council of the City of Sand Springs, Oklahoma, that are in conflict with same.

Section Three: If any provision of this ordinance or the application thereof, to any person or circumstance, is held invalid by a court of competent jurisdiction, the invalidity shall not affect other provisions or applications of the ordinance which can be given effect without the invalid provision or application, and to this end, the provisions of this ordinance are severable.

Section Four: By reason of the need to regulate discharges into the City of Sand Springs' Municipal Separate Storm Sewer System, an emergency is hereby declared to exist whereby the provisions of the ordinance shall take effect at 12:01 a.m. on December 1, 2008.



PASSED AND APPROVED this 17th day of November, 2008, with the
Emergency Clause passed upon and approved separately.



ATTEST:

CITY OF SAND SPRINGS, OKLAHOMA

Handwritten signature of Robert L. Walker in cursive script.

Robert L. Walker, Mayor

Handwritten signature of Bruce Ford in cursive script.

Bruce Ford, City Clerk

APPROVED AS TO FORM:

Handwritten signature of David Weatherford in cursive script.

David Weatherford, City Attorney

CITY OF SAND SPRINGS
FINANCE DEPT.
P. O. BOX 338
SAND SPRINGS, OKLA 74063

(11/10/08 - AWT)





Tulsa County Clerk - Michael Willis
Doc # 2017072218 Page(s): 2
08/03/2017 04:26:54 PM
Receipt # 17-43462
Fee: \$ 15.00

2

ORDINANCE NO. 1305

AN ORDINANCE AMENDING SECTION 4 OF THE SUBDIVISION REGULATIONS OF THE CITY OF SAND SPRINGS, ADDING UNDER SECTION 4.10.3 AN ADDITIONAL EXEMPTION TO BE REFERRED TO AS 4.10.3.c, REPEALING ALL PRIOR CONFLICTING ORDINANCES, AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Title 11 of Oklahoma Statutes provides for notice of public hearings before the Board of Adjustment and Planning Commissions.

WHEREAS, the Planning Commission has reviewed proposed changes to the Subdivision Regulations dated July 17, 2017, regarding Section 4, and has recommended approval;

WHEREAS, approval of these revisions to the Subdivision Regulations is in the best interest of the residents of the City of Sand Springs.

THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF SAND SPRINGS, OKLAHOMA, THAT THE SUBDIVISION REGULATIONS OF THE CITY OF SAND SPRINGS ARE HEREBY AMENDED AS FOLLOWS:

Section One: The Subdivision Regulations are hereby amended, in Section 4.10, to provide as follows:

3. Exemptions from the Park and Recreation Fee

The fees imposed by the above sections shall not apply to the following types of construction:

- a. Reconstruction of a dwelling unit or portion thereof that has been damaged or destroyed by fire, flood or other causes over which the owner has no control; or
- b. Expansion, remodeling and/or alteration of a dwelling unit where an additional bedroom is created.
- c. Redevelopment/Reconstruction of property zoned and approved for residential development that has previously had a residential structure placed on it.**

Section Two: All ordinances in conflict with this ordinance are hereby repealed.

Section Three: This ordinance shall become effective within the time limits set by state law upon publication.



PASSED AND APPROVED at a regular meeting of the City Council of Sand Springs, Oklahoma, held the 24th day of July, 2017.

CITY OF SAND SPRINGS, OKLAHOMA



Janice L. Almy
Janice L. Almy, City Clerk

APPROVED AS TO FORM:

David L. Weatherford
David L. Weatherford, City Attorney

Mike Burdge
Mike Burdge, Mayor

City of Sand Springs
Attn: City Clerk
P. O. Box 338
Sand Springs, OK 74063





Owasso Reporter • Sand Springs Leader
Skiatook Journal • Wagoner County American-Tribune
Tulsa Business & Legal News

OKLAHOMA WEEKLY GROUP
P.O. BOX 1770
TULSA, OK 74102-1770

Account Number

1047212

Date

August 02, 2017

CITY OF SAND SPRINGS/LEGALS
P.O. BOX 338
100 EAST BROADWAY
SAND SPRINGS, OK 74063

Date	Category	Description	Ad Size	Total Cost
08/02/2017	Legal Notices	ORDINANCE NO. 1305	2 x 80.00 CL	102.40

Proof of Publication

I, of lawful age, being duly sworn, am a legal representative of Sand Springs Leader of Sand Springs, Oklahoma, a Weekly newspaper of general circulation in Tulsa, Oklahoma, a newspaper qualified to publish legal notices, advertisements and publications as provided in Section 106 or Title 25, Oklahoma Statutes 1971 and 1982 as amended, and thereafter, and complies with all other requirements of the laws of Oklahoma with reference to legal publications. That said notice, a true copy of which is attached hereto was published in the regular edition of said newspaper during the period and time of publication and not in a supplement, on the DATE(S) LISTED BELOW

08/02/2017

Newspaper reference: 0000395010

m. Marshall
Legal Representative

Sworn to and subscribed before me this date:

8-2-17
[Signature]
Notary Public

My Commission expires: 1-9-18

³⁹⁵⁰¹⁰
Published in the Sand Springs Leader, Sand Springs, Tulsa County, Oklahoma, August 2, 2017.

ORDINANCE NO. 1305

AN ORDINANCE AMENDING SECTION 4 OF THE SUBDIVISION REGULATIONS OF THE CITY OF SAND SPRINGS, ADDING UNDER SECTION 4.10.3 AN ADDITIONAL EXEMPTION TO BE REFERRED TO AS 4.10.3.c, REPEALING ALL PRIOR CONFLICTING ORDINANCES, AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Title 11 of Oklahoma Statutes provides for notice of public hearings before the Board of Adjustment and Planning Commissions.

WHEREAS, the Planning Commission has reviewed proposed changes to the Subdivision Regulations dated July 17, 2017, regarding Section 4, and has recommended approval;

WHEREAS, approval of these revisions to the Subdivision Regulations is in the best interest of the residents of the City of Sand Springs.

THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF SAND SPRINGS, OKLAHOMA, THAT THE SUBDIVISION REGULATIONS OF THE CITY OF SAND SPRINGS ARE HEREBY AMENDED AS FOLLOWS:

Section One: The Subdivision Regulations are hereby amended, in Section 4.10, to provide as follows:

3. Exemptions from the Park and Recreation Fee

The fees imposed by the above sections shall not apply to the following types of construction:

- a. Reconstruction of a dwelling unit or portion thereof that has been damaged or destroyed by fire, flood or other causes over which the owner has no control; or
- b. Expansion, remodeling and/or alteration of a dwelling unit where an additional bedroom is created.

c. Redevelopment/Reconstruction of property zoned and approved for residential development that has previously had a residential structure placed on it.

Section Two: All ordinances in conflict with this ordinance are hereby repealed.

Section Three: This ordinance shall become effective within the time limits set by state law upon publication.

PASSED AND APPROVED at a regular meeting of the City Council of Sand Springs, Oklahoma, held the 24th day of July, 2017.

CITY OF SAND SPRINGS, OKLAHOMA

/s/ Mike Burdge
Mike Burdge, Mayor

ATTEST:

/s/ Janice L. Almy
Janice L. Almy, City Clerk

APPROVED AS TO FORM:

/s/ David L. Weatherford
David L. Weatherford, City Attorney





Tulsa County Clerk - Michael Willis

Doc # 2022088342 Page(s): 3

08/29/2022 12:18:24 PM

Receipt # 22-57784

Fee: \$ 22.00

CITY OF SAND SPRINGS
SAND SPRINGS, OKLAHOMA

ORDINANCE No. 1399

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SAND SPRINGS, OKLAHOMA, AMENDING TITLE 15, BUILDINGS AND CONSTRUCTION, CHAPTER 15.50, EARTH CHANGES AND EROSION CONTROL, SECTION 15.50.050 OF THE CODE OF ORDINANCES OF THE CITY OF SAND SPRINGS, REPEALING ORDINANCES IN CONFLICT HERewith, APPROVING AN EMERGENCY CLAUSE AND AUTHORIZING RECODIFICATION.

WHEREAS, the City of Sand Springs currently includes a section of ordinances dealing with the Stormwater Discharge Regulations, and a separate ordinance concerning Earth Changes and Erosion Control; and,

WHEREAS, an update to the erosion control ordinances is necessary to comply with current state and federal regulations; and

WHEREAS, amendment of the City's current ordinances as set forth herein is in the best interest of the residents of the City of Sand Springs.

NOW, THEREFORE BE IT ORDAINED by the City Council of the City of Sand Springs, Oklahoma, as follows:

Section One: The City Ordinances of the City of Sand Springs are hereby amended by the amendment of Section 15.50.050, as set forth below:

TITLE 15

BUILDINGS AND CONSTRUCTION

15.50 EARTH CHANGES AND EROSION CONTROL

Section 15.50.050 Permits and Plans Required

5.1 Earth Change Permit. Unless specifically exempted, an Earth Change Permit, as defined and regulated by this ordinance, shall be obtained from the City Engineer prior to the commencement of any excavating; grading; regrading; filling; constructing retaining walls, berms, dikes, and erosion control measures on land within the City of Sand Springs; a separate permit shall be required for each site or lot. Prior to granting any earth change permit, the City Engineer shall attach such conditions thereto as he may deem reasonable and necessary to prevent damage to public or private property resulting from the blockage, obstruction, alteration, or impairment of any storm sewer drain or surface water course and to prevent the work thereby authorized from being conducted in a manner hazardous to life or property, or otherwise likely to create a public nuisance. Such



conditions may include but are not limited to: submission of grading plans showing natural and finished grade contours; installation of public and private retaining walls, drains, detention facilities or other drainage facilities; specific erosion control measures; furnishing any necessary public easements; and specifications of methods for performing the work thereby authorized. When a structure is to be constructed on a site or lot for which an earth change permit has been obtained, the structure shall not be used or occupied until the facilities or measures required by the earth change permit have been completed and approved by the City Engineer.

5.2 Grading Plan. Prior to the City Engineer's approval of any earth change permit, the City Engineer shall determine whether a grading plan should be required and may require such plan in such instances where the same is necessary to meet the purposes of this ordinance.

5.3 OPDES Permit Submittal. The State of Oklahoma requires that an Oklahoma Pollution Discharge Elimination System (OPDES) permit be issued for development activities that will disturb an area of land greater than equal to or greater than one (1) acre, including sites that include the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb land equal to or greater than one acre. If the proposed development requires an OPDES permit, copies of the Storm Water Pollution Prevention Plan (SWP3), Notice of Intent (NOI), Permit Number and Notice of Termination (NOT) must be filed with the City.

Section Two: All ordinances or parts of ordinances in conflict are repealed to the extent of the conflict only.

Section Three: By reason of the timely need for adoption to protect the public's health, safety and welfare, an emergency is hereby declared to exist for which the ordinance shall become effective upon publication as provided by law.

Section Four: Pursuant to 11 O.S. §14-108, the City Clerk is authorized to include this ordinance in the official Code of Ordinances for the City of Sand Springs, it being the intent to authorize recodification with the inclusion of this ordinance upon approval.

Approved the 22nd day of August, 2022, with a separate vote on the emergency clause.

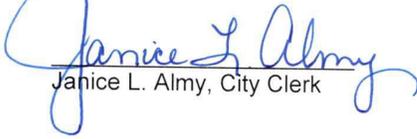
CITY OF SAND SPRINGS, OKLAHOMA



James O. Spoon, Mayor



ATTEST:


Janice L. Almy, City Clerk



Approved as to Form:


David L. Weatherford, City Attorney

City of Sand Springs
Attn: City Clerk
P. O. Box 338
Sand Springs, OK 74063





Owasso Reporter • Sand Springs Leader
Skiatook Journal
Wagoner County American-Tribune

OKLAHOMA WEEKLY GROUP
P.O. BOX 1770
TULSA, OK 74102-1770

Account Number

1047212

Date

August 31, 2022

CITY OF SAND SPRINGS
P.O. BOX 338
SAND SPRINGS, OK 74063

SEP 06 2022

Date	Category	Description	Ad Size	Total Cost
08/31/2022	Legal Notices	ORD 1399	2 x 37.00 CL	47.36

Affidavit of Publication

773726
Published in the Sand Springs Leader, Sand Springs, Tulsa County, Oklahoma, August 31, 2022

CITY OF SAND SPRINGS
SAND SPRINGS, OKLAHOMA

ORDINANCE No. 1399

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SAND SPRINGS, OKLAHOMA, AMENDING TITLE 15, BUILDINGS AND CONSTRUCTION, CHAPTER 15.50, EARTH CHANGES AND EROSION CONTROL, SECTION 15.50.050 OF THE CODE OF ORDINANCES OF THE CITY OF SAND SPRINGS, REPEALING ORDINANCES IN CONFLICT HERewith, APPROVING AN EMERGENCY CLAUSE AND AUTHORIZING RECODIFICATION.

Approved the 22nd day of August, 2022, with a separate vote on the emergency clause.

CITY OF SAND SPRINGS, OKLAHOMA

//s/ James O. Spoon
James O. Spoon, Mayor

ATTEST:

//s/ Janice L. Almy
Janice L. Almy, City Clerk

Approved as to Form:

//s/ David L. Weatherford
David L. Weatherford, City Attorney

I, Brenda Brumbaugh, of lawful age, being duly sworn, am a legal representative of the Sand Springs Leader of Sand Springs, Oklahoma, a weekly newspaper of general circulation in Tulsa County, Oklahoma, a legal newspaper qualified to publish legal notices, as defined in 25 O.S. § 106 as amended, and thereafter, and complies with all other requirements of the laws of Oklahoma with reference to legal publication. That said notice, a true copy of which is attached hereto, was published in the regular edition of said newspaper during the period and time of publication and not in a supplement, on the DATE(S) LISTED BELOW

08/31/2022

Newspaper reference: 0000773726

Brenda Brumbaugh
Legal Representative

Sworn to and subscribed before me this date:

8/31/22
[Signature]
Notary Public

NOTARY PUBLIC - STATE OF OKLAHOMA
MY COMMISSION EXPIRES SEP. 11, 2023
COMMISSION # 19009197

My Commission expires:



STORMWATER ENFORCEMENT EXAMPLE – OFFICIAL WARNING

White – Violation Original; Canary – Enforcement Official/Audit Copy

WARNING OF STORMWATER VIOLATION



WARNING # **000001**

DATE: / /

VIOLATOR/COMPANY NAME:	PHONE NUMBER: () -
VIOLATOR/COMPANY ADDRESS:	
VIOLATION ADDRESS/LOCATION:	

	ORDINANCE NUMBER	POTENTIAL FINE
STORMWATER ORDINANCE VIOLATION (DAILY FEE)	1167; TITLE 13	\$ 271.00
CLASS "A" VIOLATION (\$750 MAXIMUM)	1.20.010.9 / 13.30.150.H / 15.50	\$ 750.00
CLASS "C" VIOLATION (\$500 MAXIMUM)	13.30.150-H / 15.50.120-12.3	\$ 500.00
BLOCKING ALLEY OR DRIVEWAY (DAILY FEE)	8.28 / 8.36 / 8.40 / 8.52 /	\$ 60.00
CONTAMINATION OF PROPERTY (DAILY FEE)	8.40 / 8.53 / 13.30	\$ 271.00
DAMAGING OR INJURING PUBLIC PROPERTY (\$271 MINIMUM)	12.24 / 13.12	\$ 271.00
PUBLIC NUISANCE (DAILY FEE)	8.36	\$ 271.00
DISOBEYING A LAWFUL ORDER (\$171 MINIMUM)	9.08.140 / 12.24.040.19	\$ 171.00
ILLEGAL ENTRY ON PRIVATE PROPERTY (PER INCIDENT)	10.16.090	\$ 171.00
LITTERING (PER INCIDENT)	8.28	\$ 171.00
TRESPASSING - CITY PROPERTY (PER INCIDENT)	9.16.190	\$ 271.00
RIGHT-OF-WAY ENCROACHMENT (DAILY FEE)	13.20.050	\$ 50.00
SILTATION OF STREETS OR SIDEWALKS (PER INCIDENT)	8.40 / 8.52 / 13.30	\$ 271.00
UNLAWFUL INTRUSION/SQUATTING (PER INCIDENT)	9.16.050	\$ 271.00
ILLICIT DISCHARGE TO STORM SEWER SYSTEM (PER INCIDENT)	12.24 / 13.20 / 13.30 / 15.50	\$ 50.00

ADDITIONAL FINES & FEES ASSOCIATED WITH CITATION

Civil and criminal remedies are available to seek code compliance. Through ordinances and statutes, the City can enter onto private property to abate violations. All costs for doing such work can be assessed as a lien against the property. Each abatement includes an additional administrative fee. Municipal Court citations can also be issued to property owners or tenants with maximum fines of **\$500 for each day a violation continues**.

ADDITIONAL FEE ASSESSED	ORDINANCE NUMBER	FINE
ABATEMENT ADMINISTRATIVE FEE	1.20.010 / 8.36 / 8.48	\$ -
COURT COSTS - ASSESSED WITH FINE (PER DAY - PER FINE)	1.20	\$ 25.00
COURT COSTS - DISMISSAL	1.20	\$ 30.00
FAILURE TO APPEAR WARRANT	2.32.260	\$ 25.00
FAILURE TO PAY WARRANT SERVED	1.20	\$ 25.00
STREET SWEEPING (PER HOUR - 2 HOUR/\$350 MINIMUM)	1.20	\$ 175.00
MUNICIPAL COURT CITATION (\$500 DAILY MAXIMUM)	1.20	\$ 500.00

INFORMATION REGARDING THIS WARNING

- THIS WARNING SERVES AS NOTICE THAT THE ABOVE LISTED HAS BEEN NOTIFIED OF VIOLATING THE CITY OF SAND SPRINGS' ODEQ ISSUED OKR04 M54 PHASE II PERMIT FOR STORMWATER. AN INSPECTION FOR COMPLIANCE/REMEDIATION WILL BE PERFORMED WITHIN _____ DAY(S).
- FAILURE TO COMPLY WITH THIS WARNING WILL RESULT IN THE ISSUANCE OF A VIOLATION TICKET AND POSSIBLE COURT ACTION. ALL FINES LISTED ABOVE, IN ADDITION TO ANY ADDITIONAL ORDINANCE VIOLATION FINES NOTATED DURING THE INSPECTION, WILL BE LEVIED UPON ISSUANCE OF A VIOLATION TICKET; ALL FINES WILL BEGIN COMPOUNDING DAILY AND BACK-DATED TO THE ISSUANCE OF THIS WARNING.
- VIOLATION TICKET CITATIONS WILL NOT BE CANCELED OR RESCINDED ONCE ISSUED.

ENFORCEMENT OFFICIAL:	VIOLATOR PRINTED NAME:
BADGE/CERTIFICATION NO.:	
SIGNATURE OF ENFORCEMENT OFFICIAL:	VIOLATOR SIGNATURE:



STORMWATER ENFORCEMENT EXAMPLE – OFFICIAL CITATION

White – Violation Original; Canary – Abstract of Court Record;
 Pink – Police Copy; Gold – Enforcement Official/Audit Copy



NOTICE OF STORMWATER VIOLATION

TICKET# **000001**

TICKET DATE: / /

VIOLATION(S) START DATE: / /

VIOLATOR/COMPANY NAME: _____ PHONE NUMBER: () -

VIOLATOR/COMPANY ADDRESS: _____

VIOLATION LOCATION/ADDRESS: _____

VIOLATION	ORDINANCE NUMBER	FINE
STORMWATER ORDINANCE VIOLATION (DAILY FEE)	1167; TITLE 13	\$ 271.00
CLASS "A" VIOLATION (\$750 MAXIMUM)	1.20.010.9 / 13.30.150.H / 15.50	\$ 750.00
CLASS "C" VIOLATION (\$500 MAXIMUM)	13.30.150-H / 15.50.120-12.3	\$ 500.00
BLOCKING ALLEY OR DRIVEWAY (DAILY FEE)	8.28 / 8.36 / 8.40 / 8.52 /	\$ 60.00
CONTAMINATION OF PROPERTY (DAILY FEE)	8.40 / 8.53 / 13.30	\$ 271.00
DAMAGING OR INJURING PUBLIC PROPERTY (\$271 MINIMUM)	12.24 / 13.12	\$ 271.00
PUBLIC NUISANCE (DAILY FEE)	8.36	\$ 271.00
DISOBEYING A LAWFUL ORDER (\$171 MINIMUM)	9.08.140 / 12.24.040.19	\$ 171.00
ILLEGAL ENTRY ON PRIVATE PROPERTY (PER INCIDENT)	10.16.090	\$ 171.00
LITTERING (PER INCIDENT)	8.28	\$ 171.00
TRESPASSING - CITY PROPERTY (PER INCIDENT)	9.16.190	\$ 271.00
RIGHT-OF-WAY ENCROACHMENT (DAILY FEE)	13.20.050	\$ 50.00
SILTATION OF STREETS OR SIDEWALKS (PER INCIDENT)	8.40 / 8.52 / 13.30	\$ 271.00
UNLAWFUL INTRUSION/SQUATTING (PER INCIDENT)	9.16.050	\$ 271.00
ILLCIT DISCHARGE TO STORM SEWER SYSTEM (PER INCIDENT)	12.24 / 13.20 / 13.30 / 15.50	\$ 50.00

ADDITIONAL FINES & FEES ASSOCIATED WITH CITATION

ADDITIONAL FEE ASSESSED	ORDINANCE NUMBER	FINE
ABATEMENT ADMINISTRATIVE FEE	1.20.010 / 8.36 / 8.48	\$ -
COURT COSTS - ASSESSED WITH FINE (PER DAY - PER FINE)	1.20	\$ 25.00
COURT COSTS - DISMISSAL	1.20	\$ 30.00
FAILURE TO APPEAR WARRANT	2.32.260	\$ 25.00
FAILURE TO PAY WARRANT SERVED	1.20	\$ 25.00
STREET SWEEPING (PER HOUR -2 HOUR/\$350 MINIMUM)	1.20	\$ 175.00
MUNICIPAL COURT CITATION (\$500 DAILY MAXIMUM)	1.20	\$ 500.00

INFORMATION REGARDING THIS CITATION TICKET

- THIS TICKET SERVES AS NOTICE THAT THE ABOVE LISTED HAS BEEN NOTIFIED AND TICKETED OF VIOLATING THE CITY OF SAND SPRINGS' ODEQ ISSUED OKR04 MS4 PHASE II PERMIT FOR STORMWATER. PAYMENT FOR THIS 1-DAY VIOLATION IS DUE PER THE COURT DATE BELOW. COMPLIANCE/REMEDATION MUST ALSO BE ACHIEVED TO THE SATISFACTION OF THE CITY OF SAND SPRINGS (CSS) AND AN INSPECTION FOR COMPLIANCE/REMEDATION WILL BE PERFORMED WITHIN THREE (3) DAYS OF THE TICKET DATE. FAILURE TO COMPLY WILL RESULT IN COURT ACTION & ADDITIONAL FEES; BOTH CIVIL AND CRIMINAL REMEDIES ARE AVAILABLE TO SEEK COMPLIANCE.
- FINES STARTING AFTER THE VIOLATION START DATE ARE ASSESSED EACH DAY (COMPOUNDING DAILY) AND WILL NOT STOP UNTIL COMPLIANCE/REMEDATION HAS BEEN ACHIEVED TO THE SATISFACTION OF THE CSS, CSS MUNICIPAL COURT, AND/OR ODEQ AND ALL EXISTING FINES HAVE BEEN PAID. PAYMENT CAN BE MADE IN PERSON AT THE MUNICIPAL COURT: 602 W. MORROW RD., SAND SPRINGS, OK 74063 OR ONLINE: <https://www.municipalonlinepayments.com/sandspringsok>. FAILURE TO PAY WILL RESULT IN COURT ACTION; BOTH CIVIL AND CRIMINAL REMEDIES ARE AVAILABLE TO SEEK COMPLIANCE.
- THROUGH ORDINANCES AND STATUTES, THE CITY CAN ENTER ONTO PRIVATE PROPERTY TO ABATE VIOLATIONS. ALL COSTS FOR DOING SUCH WORK CAN AND WILL BE ASSESSED AS A LIEN AGAINST THE PROPERTY. EACH ABATEMENT INCLUDES AN ADDITIONAL ADMINISTRATIVE FEE AND WILL BE ASSESSED AT THE TIME OF ABATEMENT. MUNICIPAL COURT CITATIONS CAN ALSO BE ISSUED TO PROPERTY OWNERS, TENANTS, AND CONTRACTORS/SUBCONTRACTORS WITH MAXIMUM FINES OF \$500 FOR EACH DAY A VIOLATION CONTINUES.
- CITATIONS WILL NOT BE CANCELED OR RESCINDED.

ENFORCEMENT OFFICIAL:	COURT DATE:
BADGE/CERTIFICATION NO.:	
SIGNATURE OF ENFORCEMENT OFFICIAL:	VIOLATOR SIGNATURE:



STOP WORK

ALL PERSONS PERFORMING STRUCTURAL CONSTRUCTION, ALTERATIONS OR REPAIRS ARE HEREBY ORDERED TO CEASE AND DESIST FROM SUCH ACTIVITY UPON THESE PREMISES:

VIOLATION ADDRESS _____

FOR VIOLATION OF THE CODE OF ORDINANCES OF THE CITY OF SAND SPRINGS, OKLAHOMA:

13.20.080 (B) – FAILURE TO PROVIDE SUFFICIENT EROSION CONTROL MEASURES WITH BEST MANAGEMENT PRACTICES.

All persons acting contrary to this order are subject to criminal prosecution under penalties as administered by the Municipal Court of the City of Sand Springs, Oklahoma. This Notice shall remain affixed to the premises until removed by authorized persons of the City of Sand Springs, Oklahoma.

Issue Date: _____

Issuing Official: _____

Issuing Official Badge/Certification No.: _____



CONSTRUCTION EXAMPLE –PERMIT APPLICATION _STORMWATER FORM

Project: _____
Total Combined Acres: _____

Construction Site Information

Company/Organization Name	
Company/Organization Contact Name	
Company/Organization Contact Address	
Company/Organization Contact Phone	(____) ____ - _____
Company/Organization E-mail	
SAND SPRINGS Project Site Location/Address	
Project Site SWP3 Compliance Contact Name	
Alternate	
Project Site SWP3 Compliance Contact Name	
Project Site SWP3 Compliance Contact Phone	(____) ____ - _____
Project Site SWP3 Compliance Contact E-mail	

Stormwater Permit Information

<p><small>* Place N/A and Code Reason # from below if Not Applicable</small> Project/Site Notice of Intent (NOI) Submittal Date</p>	
Project/Site Issued OKR10 Permit Number	
Project/Site Notice of Termination (NOT) Submittal Date	____/____/____

* NPDES/OKR10 Permit Not Applicable (N/A) **but ALL local ordinances still apply** reason codes:

1. **WR** (Written Agreement) – Construction activities are covered by a Larger Common Plan of Development (LCPD) OKR10 Permit and subject to requirements of existing SWP3. (List LCPD permit number). WR AND LCPD’s NOI, Permit, & SWP3 must be on file with the City for this option to be valid.
2. **Non-LCPD** (Non Larger Common Plan of Development) - Less than 1 total combined acre remains of a previous LCPD and does not require an OKR10 permit.
3. **SCA** (Small Construction Activity) - Smaller project where only a small portion (less than five but more than one TOTAL acre) of the original LCPD remains undeveloped and there has been a period of time where there are no ongoing construction activities – i.e. all other areas have undergone final stabilization – and does not require a OKR10 permit because:
 - a. The planned construction activity has received a permit waiver from DEQ.
 - b. Construction will be performed on a combined total of less than 1 acre of the remaining LCPD parcels and does not require an OKR10 permit. **NOTE:** Multiple LCPD parcel purchases made by the same party within a period of 3 years will have each purchase counted towards



Project: _____
Total Combined Acres: _____

their combined total. If the final purchase causes the combined total to exceed 1 acre of planned construction activity AND the purchases do not qualify as DPs (see definition below), an OKR10 permit and SWP3 will be required.

4. **SPD** (Separate Plan of Development) - Initial LCDP/Individual construction activity for a particular parcel is completed and does not require a OKR10 permit because:
 - a. It is a **reconstruction of a previously existing fully built and occupied structure** that disturbs less than 1 acre;
 - b. It is an **addition to an existing fully built and occupied structure** that disturbs less than 1 acre;
 - c. It is a **new structure being built on an existing fully built-on and occupied site** that disturbs less than 1 acre (i.e. a barn, pool, storage building, etc.)
5. **DP** (Discrete Project) – DPs are projects within a LCDP or Sale that are located at least 1/4 mile apart and the area between the projects is not being disturbed. Each individual project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same common plan **is not concurrently being disturbed**. For example, if an individual contractor company is performing construction activities with a larger LCDP that are located more than 1/4 mile apart, the two projects are considered separate projects and do not require an OKR10 permit.
6. **MD** (Maintenance Disturbance) – Earth Disturbance is a normal part of post-construction property use/routine maintenance and not part of “active construction” – i.e. Re-grading/repaving/re-graveling a road without clearing, grading or excavating new or surrounding areas; Cleaning out a roadside ditch to maintain “as-built” state.
7. **PW** (Permit Waiver) – This project has been issued a NPDES/OKR10 permit Waiver.

THIS AREA FOR OFFICIAL USE ONLY

NOTES:



ROUTING SLIP
FOR
BUILDING PERMITS

CITY OF SAND SPRINGS, OK
PLANNING & INSPECTIONS DEPARTMENT

ADDRESS: _____

OWNER: _____

DATE PLANS RECEIVED: _____

PLANNING: **Date In:** _____ **BY:** _____

Date Out: _____ **BY:** _____

INSPECTIONS: **Date In:** _____ **BY:** _____

Date Out: _____ **BY:** _____

FIRE: **Date In:** _____ **BY:** _____

Date Out: _____ **BY:** _____

PUBLIC WORKS: **Date In:** _____ **BY:** _____

Date Out: _____ **BY:** _____

ENVIRONMENTAL COMPLAINE: **Date In:** _____ **BY:** _____

Date Out: _____ **BY:** _____

STORMWATER: **Date In:** _____ **BY:** _____

Date Out: _____ **BY:** _____

Special Notes: _____



CONSTRUCTION EXAMPLE – SWP3 REVIEW FORM

SWP3 - POLLUTION PREVENTION PLAN REVIEW CHECKLIST

Name of Project		
-----------------	--	--

Date of Review		
----------------	--	--

- Site Description
- Construction Sequence Description
- Disturbed Area Temporary Cover in 14 Days Statement
- Offsite Vehicle Tracking Mitigation
- Construction Materials Storage Procedures
- Waste Disposal Procedures
- Spill Prevention and Response Procedures
- Sediment Control Measures Maintenance Description
- Inspection Plan of Sediment Control Measures
- Completed Notice of Intent
- Engineer’s Certification (Optional)
- Location Map
- Erosion Control Measures Site Plan

Size of Disturbed Area		
Total Const. Site Area		
Name of Receiving Waters		
Project Contact		
Project Contact email		
SWP3 Contact		
SWP3 Contact email		

General Comments
<p>LOCATION:</p> <p>PROJECT DATE: TO</p> <p>ISSUES NOTED BY CSS SWC: YES / NO (IF YES, SEE ATTACHMENT FOR DETAILS.)</p>



POST-CONSTRUCTION EXAMPLE – STORMWATER INSPECTION FORM

CITY OF SAND SPRINGS
 STORMWATER DEPARTMENT
 13101 W. 46TH STREET
 SAND SPRINGS, OK 74063



Post-Construction ESC Inspection Checklist

Objective: Post-construction inspections should verify full site stabilization and proper removal of temporary erosion and sediment control (ESC) best management practices (BMPs).

Project Information

Project Name: _____	Project/Permit Number: _____
Location: _____	
Property Owner Information Owner Name: _____ Owner Phone Number: _____ Owner Email Address: _____	Inspection Information Inspector Name: _____ Date of Inspection: _____ Time of Inspection: _____
Contractor Information Contractor Name: _____ Lead Contact Name: _____ Lead Phone Number: _____ Lead E-mail Address: _____	Certified Erosion and Sediment Control Lead (CESCL) CESCL Name: _____ CESCL Certification Expiration Date: _____ CESCL Phone Number: _____ CESCL E-mail Address: _____
Has the required documentation been submitted to the City prior to formal project turnover? <input type="checkbox"/> Yes <input type="checkbox"/> Action required <input type="checkbox"/> Unknown	
Date that the Stormwater Drainage System was last cleaned: _____	
Upcoming Inspections <input type="checkbox"/> Permanent bioretention or permeable pavement facilities with infiltration testing requirements <input type="checkbox"/> Stormwater Performance and Maintenance Bond estimated inspection date: _____ <input type="checkbox"/> N/A	

Are any of the following BMPs present? Bioretention/Rain Gardens Permeable Pavement

See Post-Construction Verification of Permanent Stormwater BMPs/Facilities Inspection Checklist.

Item #	Inspection Item	Status
5A	Is the site fully stabilized?	<input type="checkbox"/> Yes, proceed with inspection <input type="checkbox"/> No, stop inspection; provide feedback on additional stabilization needs
5B	Is vegetation (e.g., grasses, sod, trees) protected, well-established and meet the landscaping design specifications?	<input type="checkbox"/> Yes <input type="checkbox"/> Action required <input type="checkbox"/> N/A
9A	Have waste and demolition materials been removed?	<input type="checkbox"/> Yes <input type="checkbox"/> Action required <input type="checkbox"/> N/A
13	Have LID BMPs (infiltration and dispersion) been protected from: <ul style="list-style-type: none"> • Siltation • Compaction 	<input type="checkbox"/> Yes <input type="checkbox"/> Action required <input type="checkbox"/> N/A



CITY OF SAND SPRINGS

STORMWATER DEPARTMENT
 13101 W. 46TH STREET
 SAND SPRINGS, OK 74063



Item #	Inspection Item	Status
Have all temporary ESC BMPs been removed or have BMPs/facilities been restored/maintained as needed for long-term protection?		
1	Flagging or fencing	<input type="checkbox"/> Yes <input type="checkbox"/> Action required <input type="checkbox"/> N/A
2	Stabilized construction entrance/exit and wheel wash	<input type="checkbox"/> Yes <input type="checkbox"/> Action required <input type="checkbox"/> N/A
3	Permanent flow control facilities used for flow control during construction	<input type="checkbox"/> Yes <input type="checkbox"/> Action required <input type="checkbox"/> N/A
4	Perimeter sediment control BMPs (e.g., silt fence, wattles, etc.)	<input type="checkbox"/> Yes <input type="checkbox"/> Action required <input type="checkbox"/> N/A
6	Slope protection BMPs (e.g., seeding, mulching, pipe slope drains, etc.)	<input type="checkbox"/> Yes <input type="checkbox"/> Action required <input type="checkbox"/> N/A
7	Temporary drain inlet protection (e.g., filter sock, berm, etc.)	<input type="checkbox"/> Yes <input type="checkbox"/> Action required <input type="checkbox"/> N/A
8	Conveyance channels and outlets stabilization BMPs (e.g., channel lining, nets and blankets, etc.)	<input type="checkbox"/> Yes <input type="checkbox"/> Action required <input type="checkbox"/> N/A
9B	Concrete washout area	<input type="checkbox"/> Yes <input type="checkbox"/> Action required <input type="checkbox"/> N/A

Notes/Comments:

Summary of Corrective Actions

Are corrective actions needed? Yes, see following table No, none required

Item#	Description and Location	Action Required	Completion Date	Initials





Detention / Retention Pond & Reserve Area Maintenance Inspection Checklist

(Due October 31st, Every Year. Email completed form to stormwater@sandsspringsok.org.)

Date: _____ Inspected by: _____ Type of Inspection: Routine Storm Event
Pond: _____ (# days since event)

General Observations:

Is Water flowing? Yes No Standing Water? Yes No Depth: _____ Inches / Feet (circle one)

Any evidence of obstructions or erosion in vicinity of the pond that could affect performance? Yes No

Is there evidence of encroachment into the pond or improper use of the pond? Yes No

Comments / Notes: _____

Pond Conditions:

Does the pond sides/slopes/bottom show signs of settling, cracking, sloughing or, other problems? Yes No

Do the embankments, emergency spillway (if applicable), or side slopes show any erosion or instability? Yes No

Is there evidence of animal burrowing or other activity that could contribute to instability or erosion? Yes No

Do vegetated areas need mowing? Yes No Will schedule for (date) _____

Are there areas that need to be re-vegetated? Yes No Will schedule for (date) _____

Do vegetated areas need thinning? (i.e., Cattails, willows, trees?) Yes No Will schedule for (date) _____

Is there any accumulation of trash, debris, or litter to be removed? Yes No Will schedule for (date) _____

Any signs of vandalism or other activity that could affect the performance of the pond? Yes No

Any visible pollution? Yes No

Erosion at high water mark? Yes No

Abnormally high water level? Yes No _____ (Abnormally high water may indicate obstruction at orifice, or trash rack; Verify outlet structure is operating properly)

Unusual Algae blooms? Yes No _____ (Unusual Algae blooms may indicate nutrients in runoff such as dog waste and grass clippings; Distribute educational materials on proper waste disposal and monitor)

Structural Components:

Are the pipes/inlets going into or out of the pond clogged or obstructed? Yes No _____

Is the outfall channel from the pond functioning appropriately? Yes No _____

Is the inflow trickle channel working properly? Yes No _____

Is the orifice and/or trash rack obstructed? Yes No _____

Is the outfall channel, trickle channel or other conveyance in need of repair? Yes No _____

Are the manholes, frames, and covers associated with the outfall channel in appropriate condition? Yes No

Do any safety features, such as fences, gates or locks need repair or replacement? Yes No _____

Plan of Action:

If answered **YES** to any of the above, the following is an anticipated Maintenance Needs Action List:

Total Number of concerns: _____

_____ Need more monitoring (Anticipated schedule to re-visit, identify what will trigger "Yes Answers" action)

_____ Need routine repair (Approximate schedule for repairs; date of follow-up to re-inspect)

_____ Need of immediate repair (Take action if correct equipment on site; or contact supervisor)

Printed Name

Signature



GOOD HOUSEKEEPING EXAMPLE – STREET SWEEPING WORK ORDER

WF0189873 / 001 City of Sand Springs PAGE 1

REQ. DATE: 05/17/23 05/17/23 16:06:40
 GEN. LOC.: 05/17/23
 REQ DEPT: COMP DATE: 05/17/23 16:06:40
 REQUESTOR: WILL PRIORITY: Medium
 REQ USER: SDSPMLC AUTH USER:SDSPMLC ORIGIN: Customer Call
WRK TYPE:Routine

=====

PRIMARY CONTACT INFORMATION
 WILL (636)368-7397 () () ()
Clean intersection

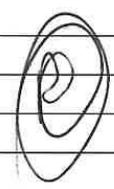
=====

JOB ORDER GENERAL INFORMATION
 CATEGORY: Streets 5220
 TASK: Street - Sweeping 0012 **READY**
 DEPT: Streets 5220
 SCHED START: 05/17/23 SCHED COMPLETION: 05/17/23
 HWY 97 & HWY 51 - STREET SWEEP

=====

START DATE: 5/17/23 COMPLETION DATE: 5/17/23
 START TIME: _____ COMPLETION TIME: _____

DATE	LABOR		EQUIPMENT		MATERIAL		
	EMPLOYEE	HRS	NUMBER	HRS	ITEM	QTY	COST
<u>5/17</u>	<u>JEFF</u>	<u>.15</u>	<u>212</u>	<u>.15</u>			



GOOD HOUSEKEEPING EXAMPLE – STORM DRAIN MAINTENANCE/REPAIR WORK ORDER

WF0190056 / 001 City of Sand Springs PAGE 1
 REQ. DATE: 05/24/23 05/24/23 14:01:15
 SCHED START: 05/24/23 SCHED COMPLETION:
 GEN. LOC.: COMP DATE: 05/24/23
 REQ DEPT: PRIORITY: Medium
 REQUESTOR: HOLLY BROWN ORIGIN: Employee Request
 REQ USER: SDSPMLC AUTH USER: SDSPMLC WRK TYPE: Routine
 TRIBUTARY UNDER 10TH ST INTO RAY BROWN PARK - CLOGGED INLET & OUTLET

=====

DETAIL DESCRIPTION
 HOLLY SAYS THE INLET ON THE NORTH SIDE & OUTLET ON THE SOUTH SIDE BOTH HAVE DEBRIS, VEGETATION, ETC.

=====

PRIMARY CONTACT INFORMATION
 HOLLY BROWN () () () ()
Removed Debris From.

=====

Category: Good Housekeeping GOODH
 TRIBUTARY UNDER 10TH ST INTO RAY BROWN PARK - CLOGGED INLET & OUTLET
 TASK: Investigation INV: READY
 DEPT: Storm Water INV: 9820
 SCHED START: 05/24/23 SCHED COMPLETION: 05/24/23

=====

START DATE: 5/24/23 COMPLETION DATE: 5/24/23
 START TIME: _____ COMPLETION TIME: _____

DATE	LABOR		EQUIPMENT		MATERIAL		COST
	EMPLOYEE	HRS	NUMBER	HRS	ITEM	QTY	
	Bradley	1	241	1			
	Aaron	1					



GOOD HOUSEKEEPING EXAMPLE – STORMWATER MAINTENANCE /REPAIR TRACKING LIST

Assigned Department	Request Priority	Request Number	Request Date	Request Category	Short Description	Status
9820	2	WFO184967	10/24/2022	9820	506N BIRCH AVE - CHECK DRAIN	Completed
9820	2	WFO184713	10/12/2022	9820	7TH & ROOSEVELT - CLEARED DRAIN	Completed
9820	2	WFO184712	10/12/2022	9820	5 ST & GARFIELD - RESET DRAIN	Completed
9820	2	WFO184284	09/26/2022	9820	4TH & WILSON - STORMWATER DRAIN	Completed
9820	2	WFO183988	09/13/2022	9820	1103 N HICKORY AVE - CHECK CRE	Completed
9820	2	WFO183949	09/12/2022	9820	21 ST & WOODLAND DR - REPAIR B	Completed
9820	2	WFO183800	09/07/2022	9820	W 34 ST & ROLLING OAKS - STORMWATER DRAIN	Completed
9820	2	WFO183799	09/07/2022	9820	FOREST & CEDAR - 3 CLOGGED STORMWATER DRAIN	Completed
9820	2	WFO183798	09/07/2022	9820	1206 N 10 PL - 1 CLOGGED STORMWATER DRAIN	Completed
9820	2	WFO183797	09/07/2022	9820	9TH & LAKE - 3 CLOGGED STORMWATER DRAIN	Completed
9820	2	WFO183796	09/07/2022	9820	500 W 1 ST - 2 CLOGGED STORMWATER DRAIN	Completed
9820	2	WFO183795	09/07/2022	9820	5TH & GRANT - 2 CLOGGED STORMWATER DRAIN	Completed
9820	2	WFO183794	09/07/2022	9820	6TH & GRANT - 2 CLOGGED STORMWATER DRAIN	Completed
9820	2	WFO183793	09/07/2022	9820	9TH & ROOSEVELT - 4 CLOGGED STORMWATER DRAIN	Completed
9820	2	WFO183792	09/07/2022	9820	10TH & WASHINGTON - 4 CLOGGED STORMWATER DRAIN	Completed
9820	2	WFO183791	09/07/2022	9820	4TH & WILSON - 4 CLOGGED STORMWATER DRAIN	Completed
9820	2	WFO183790	09/07/2022	9820	7TH & WILSON - 4 CLOGGED STORMWATER DRAIN	Completed
9820	2	WFO183789	09/07/2022	9820	11TH & ROOSEVELT - 2 CLOGGED STORMWATER DRAIN	Completed
9820	2	WFO183623	08/29/2022	9820	501 E 11 ST - PLEASE CLEAR DEBRIS FROM STORMWATER DRAIN	Completed
9820	2	WFO183515	08/25/2022	9820	4703 S 129 W AVE - CULVERT IN	Completed
9820	2	WFO183272	08/16/2022	9820	5TH ST IN COUNTRY MEADOWS - STORMWATER DRAIN	Completed
9820	2	WFO183149	08/10/2022	9820	601/603 W PEPPERMINT DR - CLEAN STORMWATER DRAIN	Completed
9820	2	WFO183068	08/08/2022	9820	7TH & WASHINGTON - REMOVE TREE	Completed
9820	2	WFO183025	08/05/2022	9820	3501 S REDBUD DR - ROCKS WASHED INTO STORMWATER DRAIN	Completed
9820	2	WFO183005	08/04/2022	9820	601 W 35 PL - REMOVE BUSHES &	Completed
9820	2	WFO182755	07/28/2022	9820	501 E 11 ST - CUL-DE-SAC NOT D	Completed
9820	2	WFO182576	07/21/2022	9820	1702 E HOLLY AVE - TREES & SHR	Completed
9820	2	WFO182503	07/19/2022	9820	101 W 38 ST - CULVERT UNDER DR	Completed
9820	2	WFO182045	07/05/2022	9820	ROLLING OAKS ADDITION - INSPECT STORMWATER DRAIN	Completed



VII.E APPENDIX E – ACRONYMS AND DEFINITIONS

The following definitions and acronyms are used in both this SWMP and the OKR04 Permit and are copied directly from OKR04 Part I.

All definitions contained in section 502 of the CWA (33 U.S.C. § 1362) and 40 CFR § 122.2 shall apply to this permit and are incorporated herein by reference. For convenience, simplified explanations of some regulatory/statutory definitions have been provided, but in the event of a conflict, the definition found in the Statute or Regulation takes precedence.

I.A. Aquatic Resource of Concern (ARC) is a waterbody corridor which contains habitat for federally listed (by the U.S. Fish and Wildlife Service) or state listed (by the Oklahoma Department of Wildlife Conservation) endangered or threatened aquatic species.

I.B. Best Management Practice (BMP) is the schedule of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the state. BMPs also include treatment requirements, operating procedures, and practices to control runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

I.C. Construction Site Operator means, for the purpose of this permit and in the context of stormwater associated with construction activity, any party or parties associated with a construction project that meets either of the following criteria:

1. The party must have operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications (e.g., owner of the site).
2. The party must have day-to-day operational control of those activities at a project that are necessary to ensure compliance with a Stormwater Pollution Prevention Plan (SWP3) for the site or other permit conditions (e.g., general contractor of the project).

In addition, “owner” refers to the party that owns the structure being built. Ownership of the land where construction is occurring does not necessarily imply the property owner is an operator (e.g., a landowner whose property is being disturbed by construction of a gas pipeline or a landowner who allows a mining company to remove dirt, shale, clay, sand, gravel, etc. from a portion of his property). This definition is provided to inform permittees of DEQ's interpretation of how the regulatory definitions of “operator” and “facility or activity” are applied to discharges of stormwater associated with construction activity.

I.D. Control Measure refers to any BMP or other method used to prevent or reduce the discharge of pollutants to waters of the state.

I.E. Clean Water Act (CWA) [33 U.S.C. 1251 et seq.] (Formerly referred to as the Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended, Pub. L. 95-211, Pub. L. 95-576, Pub. L. 96-483 and Pub. L. 97-117.

I.F. Director means the Executive Director, chief administrator or an authorized representative of the Department of Environmental Quality.

I.G. Discharge, when used without a qualifier, refers to “discharge of a pollutant” as defined at 40 CFR §122.2.

I.H. Illicit Discharge is defined at 40 CFR §122.26(b)(2) and refers to any discharge to a municipal separate storm sewer that is not composed entirely of stormwater, except discharges authorized under an OPDES or NPDES permit (other than the OPDES permit for discharges from the MS4) and discharges resulting from firefighting activities.



I.I. Impaired Water is a water which does not meet one or more of its beneficial uses due to not attaining applicable narrative or numeric water quality standards. Impaired waters are identified in the CWA section 303(d) listing from Appendix C of the most recent Integrated Report. Impaired waters include both waters with approved or established TMDLs, and those for which a TMDL has not yet been approved or established.

I.J. Large Common Plan of Development or Sale means an area where multiple separate and distinct land disturbing activities may be taking place at different times, on different schedules, but under one proposed plan. This plan consists of many small construction projects that collectively add up to one or more acres of total disturbed land. For example, an original common plan of development of a residential subdivision might lay out the streets, house lots, and areas for parks, schools and commercial development that the developer plans to build or sell to others for development. All these areas would remain part of the common plan of development or sale until the intended construction is completed.

I.K. Low Impact Development (LID) is an approach to land development (or re-development) that works with nature to manage stormwater as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treats stormwater as a resource rather than a waste product.

I.L. Maximum Extent Practicable (MEP) is the technology-based discharge standard for Municipal Separate Storm Sewer Systems (MS4s) to reduce pollutants in stormwater discharges that was established by section 402(p) of the CWA, 33 U.S.C. § 1342. Maximum extent practicable for this permit is detailed in Part V.C.

I.M. Municipal Separate Storm Sewer System (MS4) is used to refer to either a Large, Medium, or Small Municipal Separate Storm Sewer System. The term is used to refer to either the system operated by a single entity or a group of systems within an area that are operated by multiple entities (e.g., the Oklahoma City MS4 includes MS4s operated by Oklahoma City, the Oklahoma Department of Transportation, and others). The term MS4 is defined at 40 CFR § 122.26(b)(8) and means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that is/are:

1. owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;
2. Designed or used for collecting or conveying stormwater;
3. Not a combined sewer; and
4. Not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR § 403.3(q).

I.N. Newly Regulated Small MS4 refers to a small MS4 newly designated as a result of US census data or other new information, and thus required to be covered under an OPDES permit.

I.O. Notice of Intent (NOI) is the mechanism used to “register” for coverage under a general permit.

I.P. Non-traditional MS4 means state and federal prisons, office complexes, hospitals, state transportation agencies, universities, public housing authorities, schools and other special districts.



I.Q. Notice of Termination (NOT) is the mechanism used to terminate coverage under a general permit.
I.R. Outstanding Resource Waters (ORW) are designated as such in Oklahoma's Water Quality Standards under OAC 785:45-3-2(a).

I.S. Pollutant of Concern (POC) is a pollutant which causes or contributes to a violation of a water quality standard, including a pollutant which is identified as causing an impairment in the latest 303(d) list, a TMDL report, or watershed plan.

I.T. Quality Assurance Project Plan (QAPP) is a document that outlines the procedures that those who conduct a monitoring project will take to ensure that the data they collect and analyze meets project requirements.

I.U. Small MS4 is defined at 40 CFR §122.26(b)(16) and refers to all separate storm sewers that are owned or operated by the United States, a state, city, town, county, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the state, but is not defined as a "large" or "medium" municipal separate storm sewer system. This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

I.V. Small MS4 Newly Designated after the Date of Permit Issuance refers to a small MS4 newly designated by EPA or DEQ after the date of this permit issuance.

I.W. Stabilization is the process of covering exposed ground surfaces with vegetative or non-vegetative practices that reduce erosion and prevent sediment discharge from occurring.

I.X. Stormwater is defined at 40 CFR §122.26(b)(13) and means stormwater runoff, snow melt runoff, and surface runoff and drainage.

I.Y. Stormwater Management Program (SWMP) refers to a comprehensive program to manage the quality of stormwater discharged from the municipal separate storm sewer system (MS4).

I.Z. Total Maximum Daily Load (TMDL) refers to the sum of the individual wasteload allocations (WLAs) for point sources, safety, reserves, and loads from nonpoint sources and natural background.

I.AA. Urbanized Area (UA) is defined by the U.S. Census Bureau. The Census Bureau's urban areas represent densely developed territory, and encompass residential, commercial, and other nonresidential urban land uses. The Census Bureau delineates urban areas after each decennial census by applying specified criteria to decennial census and other data. The Census Bureau identifies an urbanized area as an area with 50,000 or more people.

I.BB. "You" or "Your," as used in this permit, is intended to refer to the permittee, operator or discharger, as the context indicates, and that party's responsibilities (e.g., the city, the county, the flood control district, the U.S. Air Force, etc.).

I.CC. Waters of the State means all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, irrigation systems, drainage systems, storm sewers and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, which are contained within, flow through, or border upon this state or any portion thereof, and shall include under all circumstances the waters of the United States which are contained within the boundaries of, flow through, or border upon this state or any portion thereof. Provided waste treatment systems, including treatment ponds or lagoons designed to meet federal and state requirement other than cooling ponds as defined in the



CWA or rules promulgated thereto, and prior converted cropland are not waters of the state [27A O.S. 1-1-201(20)].

I.DD. Wasteload Allocation (WLA) is the fraction of the total pollutant load apportioned to all point sources, and includes stormwater discharges regulated as point sources which are identified in the TMDL as WLA_MS4.

The following list of acronyms was compiled by INCOG and include terms involved with specific activities, such as assessing laboratory data and technical reports from other agencies.

%Sat	Percent saturation of dissolved oxygen in a water sample.
303(d)	Section 303(d) of the Clean Water Act requiring biannual assessment of beneficial uses.
BMP	Best Management Practice, particularly regarding pollution controls.
BOD	Biochemical oxygen demand; a test of potential for a water sample to use up oxygen.
BUMP	Beneficial Use Monitoring Program; OWRB’s sampling program to support USAP.
°C	Degrees centigrade or Celsius; the most common unit of measure for temperature.
CBOD5	Carbonaceous BOD, incubated 5 days; common NPDES permit requirement for WWTPs.
CBOD20	CBOD incubated 20 days; equivalent to “ultimate” (maximum) CBOD in a water sample.
COE	US Army Corps of Engineers.
col/100mL	Colonies per 100 milliliters of water sample; a unit of quantification for bacteria samples.
COSWA	Central Oklahoma Storm Water Alliance.
CPP	Continuing Planning Process; a standards and procedures summary document.
CWA	Clean Water Act; more formally the Federal Water Pollution Control Act.
Diurnal	24 hour cycle, particularly related to how DO changes over a 24 hour period.
DMR	Discharge Monitoring Report; ODEQ’s form for filing sampling results.
DO	Dissolved oxygen.
EA / EIS	Environmental Assessment / Environmental Impact Statement.
EPA	US Environmental Protection Agency.
FWS	US Fish and Wildlife Service.
GCSA	Green Country Stormwater Alliance; INCOG’s coalition of stormwater permittees.
GIS	Geographic Information System; computer system that relates map features to data.
GPS	Global Positioning System; measuring x and y coordinates (location) from satellites.
HUC	Hydrologic Unit Code, used to classify watershed sizes.
INCOG	Indian Nations Council of Governments; 5-county Tulsa area sub-state planning agency.
LA	Load Allocation; nonpoint source numerical discharge quantity in a TMDL.
MCM	Minimum Control Measure; six categories of permit actions under EPA/ODEQ rules.
mg/L	Milligrams per liter; approximately equivalent to parts per million.
MS4	Municipal Separate Storm Sewer System; also used to designate a stormwater permittee.



NH3-N	Ammonia nitrogen; amount of nitrogen as ammonia.
NO2-N	Nitrite nitrogen; amount of nitrogen as nitrite.
NO3-N	Nitrate nitrogen; amount of nitrogen as nitrate.
NOI	Notice of Intent; application form and process to apply for stormwater permit coverage.
NPDES	National Pollutant Discharge Elimination System; federal discharge permit program.
NWI	National Wetlands Inventory by the US Fish and Wildlife Service
OAC	Oklahoma Administrative Code
OCC	Oklahoma Conservation Commission.
ODEQ	Oklahoma Department of Environmental Quality.
OKR04	ODEQ's stormwater general permit for small MS4s.
OKR05	ODEQ's stormwater general permit for industrial activities.
OKR10	ODEQ's stormwater general permit for construction activities.
OPDES	Oklahoma Pollutant Discharge Elimination System; the state discharge permit program.
OWRB	Oklahoma Water Resources Board.
QAPP	Quality Assurance Project Plan; formal documentation about ensuring data integrity.
RCRA	Resource Conservation and Recovery Act; for control of hazardous substances.
SOP	Standard Operating Procedure; description of repetitive tasks such as inspections.
s.u.	Standard Unit for pH measurements.
SWMP	Stormwater Management Program document required by stormwater permits.
SWP3	Stormwater Pollution Prevention Plan; required by construction stormwater permit.
TDS	Total dissolved solids; reflects on presence of salts and conductivity in a water sample.
TKN	Total Kjeldahl Nitrogen; amount of organic nitrogen plus ammonia in a water sample.
TMDL	Total Maximum Daily Load; study accounting for all point and nonpoint sources.
TP	Total phosphorus.
TRI	Toxics Release Inventory; national database of releases of over 650 chemical types.
ug/L	Micrograms per liter; approximately equivalent to parts per billion.
USAP	Use Support Assessment Protocol; methods used in 303(d) assessments.
USGS	United States Geological Survey.
WBID	Waterbody Identification; Oklahoma's system of classifying streams.
WLA	Wasteload allocation; point source numerical quantity in a TMDL and discharge permits.
WQS	Water quality standards.
WWTP	Wastewater treatment plant; also referred to as POTW (publicly owned treatment works).



VIII. STORMWATER PROGRAM QUICK REFERENCE

VIII.A – SWMP INFORMATION

Annual Report Conditions	Activity Description
Fiscal Year or Calendar Year	Program data is compiled on a Calendar Year basis - January 1 st through December 31 st .
Governmental Entities Used	The City of Sand Springs is a member of INCOG's Green Country Stormwater Alliance (GCSA) and the M.e.T. Other entities such as OFMA, ODOT, ODEQ, and EPA have provided educational resources and training that have been utilized to complete BMP requirements.
SWMP Review	The SWMP Will be reviewed annually as part of the City of Sand Springs' SWMP Annual Reporting (AR) process.
Changes Planned for Next Year	TMDL SWMP Review and Evaluation.
Program Funding Sources	All program funding is provided by the City of Sand Springs. The budget report for each reporting period is available for viewing, upon request, from the City Clerk, Janice Almy. Requests should be made in-person at 100 East Broadway, Sand Springs, OK 74063.
TMDL Watersheds in MS4	The Arkansas River has a TMDL that was approved on June 1, 2022. The City of Sand Springs currently developing a BMP program to address the requirements of this TMDL.
Aquatic Resources of Concern (ARC) for Protected Species	There are no listed ARC within the City of Sand Springs' MS4
Outstanding Resource Waters (ORW)	There are no ORW listed within the City of Sand Springs' MS4



VIII.B – SWMP CONTACT INFORMATION

MS4 SWMP Coordinator and Inspector Contact Information:

- Name: Holly Brown
- Title: Project Administrator 1/Stormwater Coordinator/OWRB ARPA Grant Admin.
- Phone: (918) 246-2589 ● E-mail: hlbrown@sandspringsok.org

MS4 Contact Information:

- Name: Derek Campbell
- Title: City Engineer & Public Works Director
- Phone: (918) 246-2579 ● E-mail: dbcampbell@sandspringsok.org

MS4 City Manager Contact Information:

- Name: Michael S. Carter
- Title: City Manager
- Web Link: [City Manager | Sand Springs, OK - Official Website \(sandspringsok.org\)](http://City Manager | Sand Springs, OK - Official Website (sandspringsok.org))
- Phone: (918) 246-2502 ● Email: mscarter@sandspringsok.org

MS4 City Mayor Contact Information:

- Name: James “Jim” Spoon
- Title: At Large/Mayor
- Web Link: [Jim Spoon | Sand Springs, OK - Official Website \(sandspringsok.org\)](http://Jim Spoon | Sand Springs, OK - Official Website (sandspringsok.org))
- Phone: (918) 246-2503 ● Email: ssatlarge15@sandspringsok.org

MS4 Fire Department & Hazard Mitigation Plan Assistant Manager Contact Information:

- Name: Jeremy Wade
- Title: Fire Chief
- Phone: (918) 246-2549 ● E-mail: jdwade@sandspringsok.org

MS4 Flood Plain Administrator Contact Information:

- Name: Jeff Westfall
- Title: Fire Chief
- Phone: (918) 246-7912 ● E-mail: jnwestf@sandspringsok.org

MS4 Police Department & Hazard Mitigation Plan Manager Contact Information:

- Name: John Mars
- Title: Police Chief / Emergency & Hazard Mitigation Plan Manager
- Phone: (918) 246-2534 ● E-mail: jemars@sandspringsok.org

MS4 Water & Waste Water Contact Information:

- Name: Ken Boswell
- Title: Water & Waste Water Division Supervisor
- Phone: (918) 246-2692 ● E-mail: kwboswell@sandspringsok.org

MS4 William R. Pogue Airport Contact Information:

- Name: Ken Madison
- Title: Airport Supervisor
- Phone: (918) 246-2605 ● E-mail: klmadis@sandspringsok.org

MS4 City Parks Contact Information:

- Name: Joe Medlin
- Title: Parks and Recreation Director
- Phone: (918) 246-2562 ● E-mail: jamedlin@sandspringsok.org

MS4 City Fleet & Facilities Management Contact Information:

- Name: Ivan Hughart
- Title: Division Supervisor
- Phone: (918) 246-2630 ● E-mail: idhugha@sandspringsok.org



VIII.C APPENDIX C – NOI

<p>DEQ FORM 605-R04</p> <p>April 30, 2021</p>		<p>Oklahoma Department of Environmental Quality Notice of Intent (NOI) for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) under the OPDES General Permit OKR04</p>	
<p>Submission of this NOI constitutes notice that the parties identified in Sections I and II of this form intend to be authorized by DEQ for stormwater discharges associated with MS4s. Becoming a permittee obligates such dischargers to comply with the terms and conditions of the OKR04 permit. To obtain an authorization from DEQ, this form must be complete with all the pertinent information.</p> <p>All necessary information must be provided on this form. See instructions for completing the NOI on page 3 of this form. All associated fees must be submitted with this NOI.</p>			
<p><input type="checkbox"/>-NEW APPLICATION <input type="checkbox"/>-MODIFICATION or <input checked="" type="checkbox"/>-RENEWAL of current permit, authorization number: OKR04 <u>0034</u></p>			
<p>I. MS4 Information Your MS4 jurisdiction shall cover the entire area within the corporate boundaries of the municipality if your city is not located entirely within an Urbanized Area.</p>			
<p>Name of MS4: <u>City of Sand Springs</u></p>		<p>Legal status of the operator of MS4: <input type="checkbox"/>-Federal <input type="checkbox"/>-State <input type="checkbox"/>-Private <input checked="" type="checkbox"/>-Municipal (public other than federal or state)</p>	
<p>Address: <u>100 East Broadway, P.O. Box 338</u></p>			
<p>City: <u>Sand Springs</u></p>	<p>State: <u>OK</u></p>	<p>Zip Code: <u>74063-7639</u></p>	<p>County: <u>Tulsa & Osage</u></p>
<p>Latitude: <u>36.139429</u></p>	<p>Longitude: <u>-96.108586</u></p>	<p>Approximate area (sq. miles) of MS4: <u>20.85</u></p>	
<p>II. MS4 Contact Information</p>			
<p>Responsible Party: <u>Mike Carter</u></p>		<p>Phone: <u>(918) 246-2502</u></p>	
<p>Title: <u>City Manager</u></p>		<p>Email: <u>mscarter@sandspringsok.org</u></p>	
<p>Address: <u>100 East Broadway, P.O. Box 338</u></p>		<p>City: <u>Sand Springs</u></p>	<p>State: <u>OK</u> Zip Code: <u>74063</u></p>
<p>Stormwater Program Manager: <u>Holly Brown</u></p>		<p>Phone: <u>(918) 246-2589</u></p>	
<p>Title: <u>Project Administrator I</u></p>		<p>Email: <u>hlbrown@sandspringsok.org</u></p>	
<p>Address: <u>13101 W. 46th Street</u></p>		<p>City: <u>Sand Springs</u></p>	<p>State: <u>OK</u> Zip Code: <u>74063</u></p>
<p>Permit Fee Billing Contact: <u>Nadine Rogers</u></p>		<p>Phone: <u>(918) 246-2519</u></p>	
<p>Title: <u>Accounts Payable Specialist</u></p>		<p>Email: <u>nlrogers@sandspringsok.org</u></p>	
<p>Address: <u>100 E. Broadway - P.O. Box 338</u></p>		<p>City: <u>Sand Springs</u></p>	<p>State: <u>OK</u> Zip Code: <u>74063</u></p>
<p>III. Co-Permittee Information</p>			
<p>Are you co-permitting with another entity? <input checked="" type="checkbox"/>-No <input type="checkbox"/>-Yes, complete the following:</p>			
<p>Co-Permittee: _____</p>		<p>Legal status of the operator of co-permittee: <input type="checkbox"/>-Federal <input type="checkbox"/>-State <input type="checkbox"/>-Private <input type="checkbox"/>-Municipal (public other than federal or state)</p>	
<p>Mailing Address: _____</p>			
<p>City: _____</p>	<p>State: _____</p>	<p>Zip Code: _____</p>	<p>County: _____</p>
<p>Latitude: _____</p>	<p>Longitude: _____</p>	<p>Certification by the co-permittee is required in Section IX.</p>	
<p>Stormwater Program Manager: _____</p>		<p>Phone: _____</p>	
<p>Title: _____</p>		<p>Email: _____</p>	



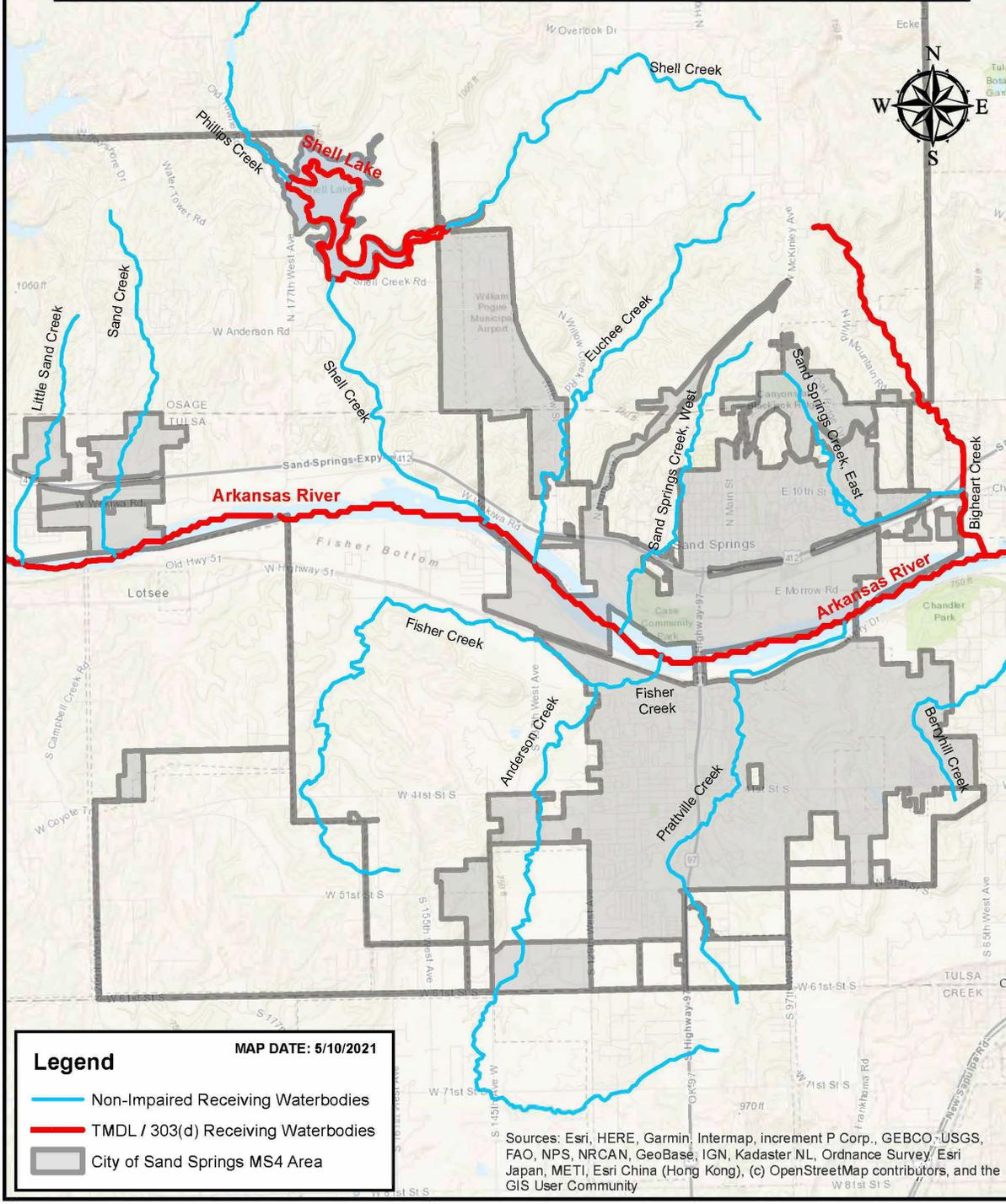
Receiving Waterbody Name	WBID (1)	Type	303(d) WB Category	303(d) (2)	ORW (3)	TMDL (4)	ARC (5)	Impaired?	Bacterial Indicator (6)	Standards	# Of Bacterial Samples	TURBIDITY	GeoMean (cfu/100ml)	TMDL WATER BODYMILES	MS4 WATERBODY MILES	TMDL #	TMDL DATE(s)	TMDL PRIORITY	% REDUCTION RATE			WQM STATION LOCATION	NOTES/COMMENTS
																			CHL	EC	ENT		
Anderson Creek	OK120420010210_00	Creek	3										8.35										
Arkansas River	OK120420010130_00	River	5a	X	X			X	ENT	33	22		36	12.65		42564	9/1/2012	2		7.2	14-19N-11E	TMDL Required	
Berryhill Creek	OK120420010120_00	Creek	3										4.28										
Bigheart Creek*	OK120420010140_00	Creek	5a	X				X	EC				4.28										TMDL Pending, Added by ODEQ
Brush Creek	OK120420010310_00	Creek	3										5.56										
Euche Creek	OK120420010220_00	Creek	3										7.99										
Fisher Creek	OK120420010200_00	Creek	3										2.83										
Little Sand Creek	OK120420010300_00	Creek	3										2.51										
Phillips Creek	OK120420010260_00	Creek	3										10										
Phillips Lake	OK120120010270_00	Lake	3										5.63										
Prattville Creek	OK120420010180_00	Creek	3										4.07										
Sand Creek	OK120420010290_00	Creek	3										2.66										
Sand Springs Creek - East	OK120420010150_00	Creek	3										3.85										
Sand Springs Creek - West	OK120420010190_00	Creek	3										14										
Sand Springs Lake	OK120420010160_00	Lake	3										3.62										
Shell Creek (Lower)	OK120420010230_00	Creek	3										4.82										
Shell Creek (Upper)	OK120420010240_00	Creek	3																				
Shell Lake	OK120420010250_00	Lake	5a	X				X	CHL						573								TMDL Pending

- (1) WBID = Waterbody ID identifier, used by ODEQ and other agencies in Oklahoma.
- (2) 303(d) = Waterbody is on the 2014 303(d) list of impaired waterbodies.
- (3) ORW = Waterbody is listed by the OWRS as an Outstanding Resource Water.
- (4) TMDL = Waterbody has a completed and EPA/ODEQ approved TMDL study.
- (5) ARC = Aquatic Resources of Concern; see OKR04 Exhibit 1.ARC list and map.
- (6) Bacterial Indicator = ENT - Enterococci; EC - Esherichia Coli; CHL - Chlorophyll-a; DO - Dissolved Oxygen

*Sand Springs was notified that Bigheart Creek is impacted by the Sand Springs MS4 due to proximity. While outside of the City of Sand Springs MS4 boundary and not included in the City's OKR04 Permit, BMP efforts must still be focused on preventing pollution to this waterbody.



CITY OF SAND SPRINGS 2021 MS4 AREA & RECEIVING WATERS MAP



Legend MAP DATE: 5/10/2021

- Non-Impaired Receiving Waterbodies
- TMDL / 303(d) Receiving Waterbodies
- City of Sand Springs MS4 Area

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO -USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community



VIII.D – SWMP PERMIT AUTHORIZATION

**Oklahoma Department of Environmental Quality
Authorization to Discharge Stormwater under the OPDES General Permit OKR04
from Phase II Small Municipal Separate Storm Sewer System**

Authorization No. OKR040017

In compliance with the Oklahoma Pollution Discharge Elimination System (OPDES) Act, 27A O.S. §2-6-201, the rules of the Department of Environmental Quality (DEQ), and in reliance on the certified statements and representations heretofore made in its application,

**City of Sand Springs MS4
100 E Broadway St., PO Box 338
Sand Springs, OK 74063**

is authorized to discharge stormwater from a small municipal separate storm sewer system (MS4) located in Tulsa County at the approximate geographical location: Latitude 36° 8' 21.9", Longitude -96° 6' 30.9".

The receiving bodies of waters are Berryhill Creek, Arkansas River, Sand Springs Creek, East, Prattville Creek, Sand Springs Creek, West, Fisher Creek, Anderson Creek, Euchee Creek, Shell Creek, Shell Lake, Phillips Creek, Sand Creek, and Little Sand Creek. This facility discharges into a 303(d) listed stream.

The OPDES permit requires permittee to have a Stormwater Management Program (SWMP) which must include appropriate Best Management Practices (BMPs) addressing six minimum control measures to reduce discharge of pollutants in stormwater to the maximum extent practicable to protect water quality, with implementing BMPs, monitoring, and possible reporting requirements. All applicable requirements of the Permit are subjected to DEQ's inspections and audits. The SWMP must be available and implemented at your small MS4.

The authorization shall become effective **October 1, 2021** and will expire at midnight May 31, 2026. All terms and conditions of the OPDES Stormwater General Permit OKR04, which become effective June 1, 2021, shall apply to the recipient of this authorization.



Michael B Moe, P.E., Engineering Manager
Municipal Discharge and Stormwater Permits Section
Water Quality Division



VIII.E – SWMP STORMWATER INSPECTOR CERTIFICATIONS



Let it be recognized to all that

Holly Brown

Has successfully completed all prescribed requirements and is hereby awarded the professional designation

Certified Stormwater Inspector

Under the National Pollution Discharge Elimination System
Municipal Stormwater Permit and is recognized as a

“QUALIFIED PERSON”

In Witness whereof, I have inscribed my signature
Issued September 2, 2022 Expires September 2, 2027
Certification Number 17251 CEU's .7



Laurie Murphy, SWTC President, National Certifier



CERTIFICATE OF COMPLETION

presented to

HOLLY BROWN

who has successfully completed EPA's Construction General Permit (CGP) Site Inspector Training Course and passed the final exam



Chris Kloss, Water Permits Division Director



Date Certified: 3/10/2023

Expiration Date: May 17, 2027

By completing this course and passing the final exam, HOLLY BROWN has complied with the CGP Part 6.3.a training requirements for conducting construction inspections under the 2022 CGP.



VIII.F – SWMP TABLE OF REVISIONS

The City of Sand Spring has prepared this Stormwater Management Program (SWMP) document to address the provisions and requirements of the 2021 OKR04 stormwater general permit. OKR04 **Part V.D.1** requires each permitted MS4 to “*conduct a review of your SWMP, at least annually, in conjunction with the preparation of the annual report required under Part VI(C)*”. The following table records the dates of reviews and revisions as well as a brief description of the types of changes made to the SWMP during each permit year, if any.

SWMP Review Year	Review Completion Date	Revision(s) Made (YES/NO)	Revision and Notification to ODEQ (via Annual Report) Submittal Date	Note(s) / Brief Description of Changes
2021	12/31/2021	YES	2/7/2022	Revisions were made to the 2017-2021 SWMP to meet the requirements of both the previous and the newly issued OKR04 permits.
2022	12/31/2022	YES	4/28/2023	Revisions were made to the 2022-2026 SWMP document reflecting the current requirements of the 2021 issued OKR04. The 2022-2026 SWMP will become effective once approved by ODEQ and following Public Review.
2023	5/31/2023	YES	6/1/2023	Completion of the 2022-2026 SWMP; This document will become effective once approved by ODEQ and following Public Review.
2024				
2025				
2026				

Copies of this Stormwater Management Program (SWMP) and all related documents are available for review by ODEQ representatives and the general public on the City of Sand Springs website: (<http://www.sandspringsok.org/387/Stormwater-Management-Program>). Signed original document(s) are maintained and made available for review upon request at the City of Sand Springs Public Works Department located at 13101 W. 46th Street, Sand Springs, OK 74063.

