Recertification Notice of Intent (NOI)

Regulated Small Municipal Separate Storm Sewer Systems (MS4's) General Permit ARR040000

You must **complete, certify, and sign this Recertification Notice of Intent (NOI) form** and return it along with the **updated Stormwater Management Program (SWMP)** to the Department in order to continue permit coverage under the General Permit ARR040000. You must submit this form **no later than July 1, 2019.** Please keep a copy of this form for your records once completed and signed.

Permittee Name	Permit Tracking Number	AFIN
City of Alexander	ARR040058	88-01447

If any changes or additions need to be made to the information shown below, please update the new information in the corrections section below and/or attach documentation.

	Current Information in ADEQ's database	Corrections/Additions, If Needed
Small MS4 Physical Address	15605 Alexander Rd.	
County	Pulaski, Saline	
Urbanized/Core Areas	Alexander	
Receiving Stream		
Ultimate Receiving Stream		
Contact Person & Title	Paul Mitchell, Mayor	
Telephone Number	(501) 455-2585	
Cognizant Official & Title	David A. Durham, Street and Parks Supervisor	
Responsible Official & Title	Paul Mitchell, Mayor	

Are the mailing and invoice addresses the same?

(Yes) or No* *If "No," please provide invoice address: _____

_____

_____

Additional Comments: _____

_____

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage 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."

I certify that I have read and will comply with all the requirements of the Regulated Small Municipal Separate Storm Sewer Systems (MS4's) General Permit ARR040000.

Responsible Official Name: Paul Mitchell
Responsible Official Title: Mayor
Responsible Official Signature: Paul Mitchell
Date: 6-17-19

Return the NOI form to the address below or send it electronically to: water.permit.application@adeq.state.ar.us or via ePortal at the following web address: https://eportal.adeq.state.ar.us/

NPDES Permits Section, Office of Water Quality
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118-5317

Stormwater Management Program

City of Alexander, Arkansas

P.O. Box 610
Alexander, Arkansas 72002

Small Municipal Separate Storm Sewer Systems (MS4)
Phase II MS4 Permit No. ARR040058

August 2013
(Updated January 14, 2021)

20-9609

Prepared By:

McClelland Consulting Engineers, Inc.
7302 Kanis Road
Little Rock, AR 72201
(501) 371-0272, Fax (501) 371-9932

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Acronyms

BMP	Best Management Practice
CWA	Clean Water Act
CO	Certificate of Occupancies
DEQ	Division of Environmental Quality (ADEQ)
EPA	Environmental Protection Agency
IDDE	Illicit Discharge Detection and Elimination
MCE	McClelland Consulting Engineers, Inc.
MEP	Maximum Extent Practicable
MCM	Minimum Control Measure
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
OWQ	Office of Water Quality
SWMP	Storm Water Management Program
SW3P	(SWPPP) Stormwater Pollution Prevention Plan

1.0 Background and Context

The Alexander Stormwater Management Program (SWMP) has been developed to provide policy and management guidance for activities affecting stormwater throughout the City of Alexander. It is intended to help fulfill certain State and Federal water quality requirements and to meet local water resources management objectives. With the implementation of the policies and management practices embodied in the SWMP, the City of Alexander first hopes to preserve urban stormwater quality, which would otherwise negatively impact local rivers, streams and lakes. Secondly, the City wishes to develop and preserve the urban drainage infrastructure in a manner that meets the community's needs for years to come.

While the State and Federal regulatory programs place significant emphasis on improving water quality and the health of Arkansas's watersheds, Alexander, as part of the [**Little Fourche Creek-Fourche Creek Watershed and Crooked Creek]**, further emphasizes the need for local management of urban stormwater and waterways. It becomes even more important that management of these resources occur in a manner that minimizes destructive long-term impacts to drainage infrastructure and the natural features that help protect water quality and control flooding.

2.0 Description of the Permit Area

The City of Alexander (The City) currently serves a population of 2,960 people (2011) within the city limits. The geographic boundaries of the MS4 Plan are the City limits and the service area for stormwater planning encompasses approximately 2.2 square miles. The City has authority and responsibility for planning, building, operating, maintaining and regulating the stormwater drainage system within the city limits. Therefore, the MS4 NPDES permit for which this MS4 Plan is submitted covers only the area within the city limits. The area includes [**creeks and tributaries]** that eventually empty into the [**Arkansas River]**. The City's stormwater management practices will be developed to include efficient and cost-effective approaches that reduce or eliminate stormwater pollution and protect the riparian (stream bank) areas of open waterways. These approaches provide natural pollutant removal and stormwater management capacity.

3.0 Purpose, Scope and Areas of Focus

The purposes of the SWMP are threefold. First, the SWMP characterizes the City's entire stormwater drainage system, including both the open and piped systems, their connections to the streams, and the overall condition of the system. This characterization is necessary to address relevant State and Federal regulatory requirements and it provides baseline information on which to develop focused stormwater management strategies.

Second, the SWMP establishes goals, policies and implementation actions that will achieve the City's long-term objectives in a way that is understandable to the public, usable by City staff, and meets regulatory needs. Finally, the SWMP establishes a means for measuring, reporting and adaptively managing the City's water resources, by presenting benchmarks that will ensure meaningful progress, as well as ensuring compliance with applicable laws and permit requirements.

The SWMP addresses stormwater quality management policies and management practices that are, and/or will be implemented in the City. The scope of the SWMP is determined primarily by

the Federal MS4 permit requirements, but is intended to address local water resources issues as well. These areas of focus in the SWMP include:

Pollution incidents and unlawful (illicit) discharges to the City's stormwater drainage system. These discharges can be systematic (recurring) or episodic (occasional or one-time) discharges, and include pollutant runoff from parking lots, discharges from industrial outfalls, accidental spills, poor construction site management, and a variety of ways people dump pollutants into street gutters or catch basin.

On-site management of stormwater to reduce the quantity of stormwater and pollution entering the drainage system. Similar to illicit discharges, events that cause flooding, system surcharges, or ongoing pollutant loading can occur downstream from the city limits, and originate from a variety of causes. These include inadequacies in the type and design of infrastructure, inadequate maintenance, insufficient erosion and/or sediment control practices, and increases in impervious area without provision for on-site infiltration of stormwater into the ground. The City regulates these issues through implementation of the Arkansas Municipal League Code within the city limits, **0-20-10-19-01.**

Reduction and prevention of pollution at City facilities and resulting from City activities and business practices. The City provides services with a potential for creating water pollution, erosion, and sedimentation. These include field activities such as ditch cleaning and excavation/maintenance activities, as well as activities at City facilities, such as vehicle washing and maintenance, painting, and material handling. The Federal NPDES SWMP requires the City to implement pollution prevention practices that reduce or eliminate stormwater pollution from City activities.

Public education geared towards broad community stewardship of water resources. The Federal NPDES SWMP places significant emphasis on public education as part of the long-term solution to stormwater pollution. As such, education is a required element of the SWMP. The long-term success of the City's efforts will hinge on increased awareness and stewardship throughout the community. The SWMP will result in formal, organized educational and outreach efforts that are targeted broadly throughout the City.

Public awareness and involvement in the City's Stormwater Management Program.
Broad awareness and participation in the development and implementation of the SWMP by residents and local area businesses is a key component to ensure effectiveness of the SWMP. The SWMP includes a public involvement component in its development that meets the Federal NPDES program.

Office of Water Quality requires Municipal Separate Storm Sewer System (MS4) Plan elements. The NPDES Stormwater Program requires that the City submit a MS4 plan in order to acquire a MS4 permit to legally discharge stormwater to the waters of the U. S.

The Federal rules and, therefore, ADEQ's permit requirements, direct that the City's MS4 plan address six (6) minimum areas, which are termed "Minimum Control Measures." These areas are broadly titled in the rules as follows:

1. Public Education and Outreach on Stormwater Impacts;
2. Public Involvement/Participation
3. Illicit Discharges Detection and Elimination;

4. Construction Site Stormwater Runoff Control;
5. Post-Construction Stormwater Management in New Development and Redevelopment

Under each of these areas described above, the City's MS4 plan must contain the following information:

- The structural and nonstructural Best Management Practices (BMPs) that the permittee or another entity will implement for each of the stormwater Minimum Control Measures;
- The measurable goals (Benchmarks) for each of the BMPs including, as appropriate, the months and years in which the permittee will undertake required actions, including interim milestones and the frequency of the action; and
- The person or persons responsible for implementing or coordinating the BMPs for the permittee's MS4 plan.

In addition to the requirements listed above, the permittee must provide a rationale for how and why each of the BMPs is selected and measurable goals for the permittee's SWMP.

Stormwater Best Management Practices (BMPs) is a *catch-all* term for approaches to managing stormwater that reduce negative impacts of runoff on the receiving streams. While the term has become widely used by the regulatory agencies and throughout the stormwater management industry, it does not imply that each BMP is necessarily the "Best" at achieving a particular stormwater management objective. BMPs are alternatives to practices that reduce the water quality and flow management functions and benefits of the open drainage system such as piping, filling or hardening open drainage ways. BMPs include, but are not limited to:

a. physical structures or created natural features such as wetlands or ponds that improve water quality and/or attenuate flow;
b. maintenance or construction practices that prevent erosion, control sedimentation, and reduce pollution entering runoff;
c. educational strategies that inform the public, developers, business/industry, etc. on stormwater pollution prevention;
d. regulations and enforcement programs that protect water quality;
e. protection of open drainage ways for stormwater treatment and conveyance, and maintaining adjacent (riparian) buffers to provide natural stormwater filtration, cooling and long-term channel stability and other stormwater management functions; and the avoidance of piping, filling, or deteriorating the condition of open drainage ways.

4.0 Overview of Alexander's Stormwater Drainage Systems

The City is responsible for implementing surface water management activities within its boundaries, including the planning, design, construction, operation, and maintenance of the stormwater drainage system. The City performs all operation and maintenance on the public drainage system that is designed and constructed to City standards and located within easements or rights-of-way, or real property that has been conveyed or dedicated to the City.

The City also maintains drainage systems and open channels throughout the city and they outfall to natural streams within the City's jurisdiction. The geographic area covered by this program includes approximately 2.2 square miles inside the Alexander city limits.

5.0 Stormwater Drainage Basin Characterization

The City's stormwater drainage system will use local creeks and their tributaries has major drainage routes. A drainage basin can be described as a geographic area within which stormwater drains from many small systems converge on a larger drainage way, ultimately culminating in outfalls to the major drainage way. The character and condition of the drainage way varies significantly throughout the basins, depending on surrounding land uses and contributing drainages. Many subdivision control stormwater runoff through internal drainage features that include, curb and gutter, curb inlets, drainage piping and outfall to streams.

6.0 Goals, Policies & Implementation Actions

This section provides overall guidance to the City in performing stormwater management activities in a manner consistent with State and Federal laws, while meeting local goals and the long-term outcomes the City hopes to achieve. The following goals are derived from long-term key outcomes that have been reviewed. The policies provide specific direction, consistent with the local goals, and State and Federal requirements. Implementation actions include BMPs discussed in detail in the MS4 plan and other actions needed to achieve local objectives. The work plan for completion of Implementation Actions is in the SWMP Implementation Action Summary.

6.1 Goal 1: Protect citizens and property from flooding

Policies

6.1.1 Maintain surface drainage in the City to reduce the threat of flooding, through proper maintenance of the stormwater drainage system infrastructure, with practices that are protective of water quality.

6.1.2 Through the development review process, ensure that new development incorporates adequate stormwater management infrastructure to avoid downstream capacity and water quality problems.

6.1.3 Preserve open stormwater drainage where feasible, to best accommodate peak storm flows, maintain flood storage capacity, and promote water quality.

6.1.4 Adhere to standards, policies, and practices which comply with Federal Emergency Management Agency (FEMA) Flood Management Program requirements to ensure that the City maintains flood insurance coverage under this program.

Implementation Actions

6.1.5 Continue evaluation of City maintenance practices and implement appropriate BMPs to assure that the City adequately maintains the stormwater drainage system capacity in an environmentally responsible manner.

6.1.6 Evaluate and refine the City’s drainage program, including educational outreach, inspection, and enforcement components to reduce the negative stormwater impacts from land alteration, erosion, sedimentation, and excessive runoff.

6.1.7 Implement BMPs consistent with NPDES Minimum Control Measure #1, Public Education and Outreach on Stormwater Impacts, to ensure that the public is aware of

the importance of preventing pollution from entering the streams and water bodies of the State.

6.1.8 Implement BMPs consistent with NPDES Minimum Control Measure #4, Construction Site Stormwater Control, to minimize or eliminate erosion and sedimentation in the stormwater drainage system.

6.1.9 Implement BMPs consistent with NPDES Minimum Control Measure #5, Post Construction Stormwater Management for New Development and Redevelopment, to ensure that new development is in compliance with flow-regulating management practices, such as detention ponds, on-site stormwater storage, etc.

6.1.10 Implement BMPs consistent with NPDES Minimum Control Measure #6, Pollution Prevention in Municipal Operations, to ensure adequate maintenance of the stormwater system.

6.2 GOAL 2: Improve surface and sub-surface waters for aquatic life and other beneficial uses

Policies

6.2.1 The City will monitor and implement practices and regulatory programs with the objective of improving surface and groundwater quality to, at a minimum, meet State water quality standards, adequately protect threatened and endangered wildlife, and meet the State beneficial use guidelines.

6.2.2 The City will maintain its open channels and waterways in a manner that is protective of their natural stormwater management and habitat functions for the benefit of the citizens of the City, local wildlife, including threatened or endangered species, and future generations.

Implementation Actions

6.2.3 Promote pollution protection educational efforts, including signage, development project review, and public outreach.

6.2.3 Enhance erosion and illicit discharge detection and compliance efforts, including permitting and Code enforcement.

6.2.3 Implement BMPs consistent with NPDES Minimum Control Measure #1, Public Education and Outreach on Stormwater Impacts, to enhance citizens' and businesses' knowledge regarding water quality regulations as well as the benefits to the community from properly functioning waterways.

6.2.3 Implement BMPs consistent with NPDES Minimum Control Measure #3, Illicit Discharges Detection and Elimination, to eliminate or minimize toxic discharges from business and industry.

6.2.4 Implement BMPs consistent with NPDES Minimum Control Measure #4, Construction Site Stormwater Runoff Control, to minimize sedimentation and channel degradation from construction sites.

6.2.5 Implement BMPs consistent with NPDES Minimum Control Measure #5, Post-Construction Stormwater Management for New Development and Redevelopment, to ensure long-term functioning of newly-developed sites.

6.2.6 Implement BMPs consistent with NPDES Minimum Control Measure #6, Pollution Prevention in Municipal Operations, to ensure that the stormwater drainage system is maintained in properly functioning condition.

6.3 GOAL 3: Preserve and maintain surface waters, wetlands, and riparian areas

Policies

6.3.1 Through the development review process, the City will ensure that development is protective of significant open waterways, wetlands, and riparian areas.

6.3.2 The City will implement permitting programs, educational outreach, compliance inspections and enforcement activities as needed to reduce erosion, sedimentation, illicit discharges, and other pollution impacts to the City's waterways.

Implementation Actions

6.3.3 The City will review and refine its drainage program as necessary, which addresses erosion, sedimentation, and the impacts of land alteration, including permitting, inspections, technical educational and outreach, and enforcement.

6.3.4 The City will review development proposals for impacts on open drainage ways, wetlands, and riparian areas, and protect the functions and benefits of these areas as provided for in the Code of Ordinances **20-10-19-01**.

6.3.5 The City will work cooperatively with citizens, businesses, and agencies to protect and improve surface waterways, seek opportunities for stewardship partnerships, further enhance educational opportunities, and continue participation in intergovernmental work groups.

6.3.6 The City will implement and continue to refine/improve BMPs for City activities with potential to impact water quality and/or the functions of waterways, wetlands, and riparian areas.

6.3.7 The City will implement BMPs consistent with NPDES Minimum Control Measure #4, Construction Site Stormwater Runoff Control, to reduce or eliminate sedimentation from construction sites as a contributor to poor water quality and quantity management.

6.3.8 The City will implement BMPs consistent with NPDES Minimum Control Measure #5, Post-Construction Stormwater Management for New Development and Redevelopment, so new development at a minimum maintains the functioning of the stormwater drainage system, and doesn't contribute to future degradation.

6.3.9 The City will implement BMPs consistent with NPDES Minimum Control Measure #6, Pollution Prevention in Municipal Operations, which is critical to maintaining properly functioning wetland and riparian areas and open channels.

6.4 GOAL 4: To further Citizens, Businesses, and Industries understanding of the need to protect water quality

Policies

6.4.1 The City will develop targeted education and outreach and technical assistance programs regarding practices and obligations for keeping debris and pollutants out of the stormwater

drainage system and train stakeholder groups in appropriate erosion control and sediment prevention practices, as well as stormwater management BMPs.

6.4.2 The City will seek to form partnerships with neighborhoods, adjacent cities, or groups interested in providing stewardship of local waterways.

6.4.3 The City will develop, implement, and enforce appropriate building, design, and Municipal Codes to address water quality compliance issues, including pollution, habitat, and aesthetic issues, to encourage the development of urban waterways that are positive amenities in the community.

Implementation Actions

6.4.4 The City will continue to support outreach and education efforts regarding water quality, riparian and wetland areas, including business, contractor, and developer outreach programs to educate these parties about their impacts on stormwater quality.

6.4.5 The City will continue to maintain enforcement and compliance activities, including inspections, technical assistance, and Code enforcement.

6.4.6 The City will implement BMPs consistent with NPDES Minimum Control Measure #1, Public Education and Outreach on Stormwater Impacts, to engage the public in the efforts to create positive urban amenities.

6.4.7 The City will implement BMPs consistent with NPDES Minimum Control Measure #3, Illicit Discharges Detection and Elimination, to ensure that waterways are safe, meet State water quality standards, and can function as positive amenities.

6.5 Goal 5: Urban drainage ways become community amenities

Policies

6.5.1 The City will conduct education and outreach activities to appropriate target groups to increase understanding of the importance of maintaining safe and clean drainage ways, and to seek volunteers to be caretakers for water features near them.

6.5.2 The City will, through its Code of Ordinances, protect existing significant open waterways and encourage site planning and landscaping that enhances the attractiveness and natural functions of the water features.

6.5.3 The City will maintain urban drainage ways in a manner that provides for safe and attractive conditions within the limits of its fiscal constraints.

Implementation Actions

6.5.4 Enhance the City's erosion control program, including educating developers and the community regarding the positive aspects of open waterways to promote acceptance, and integrating effective compliance and enforcement components.

6.5.5 Provide adequate funding within the City's restraints for public maintenance of the stormwater drainage system, and ensure ongoing maintenance of private stormwater features through development agreements.

6.5.6 Increase educational outreach to schools to increase awareness of children regarding the need to keep litter and pollutants out of urban drainage ways.

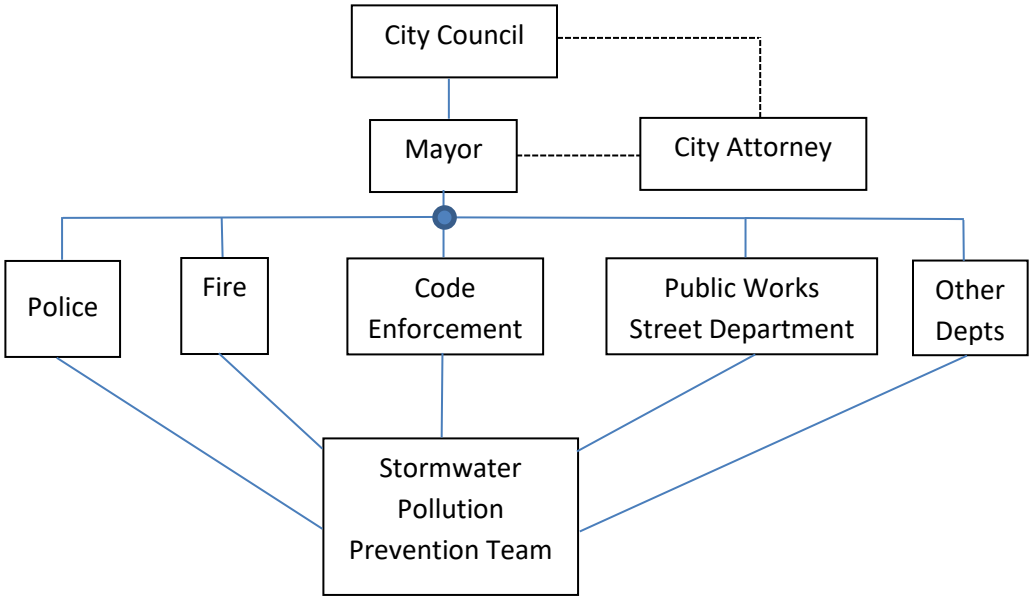
6.5.7 Implement all six (6) of the NPDES Minimum Control Measure BMPs. Implementing all of the provisions of the SWMP will ultimately result in improved water quality and quantity management, improved habitat and resource protection, and, ultimately, enhance urban waterways as desirable community amenities.

7.0 Alexander's NPDES MS4 Program

City Stormwater Management Program Responsible Parties
The City is responsible for implementing surface water management activities within its boundaries, including the planning, design, construction, operation, and maintenance of the stormwater drainage system. In response to the NPDES Phase II stormwater requirements, the City has developed a MS4 plan addressing each of the six (6) required Minimum Control Measures, as specified in the Federal-NPDES Phase II rules.

The City has responsibility for its SWMP. The implementation of the City's MS4 Plan will extend throughout the City organization by implementing a Stormwater Pollution Prevention Team (SPPT) with representatives from each of the City's departments. Each Department is task with recognizing the stormwater issues of their facility, the field work they do, and documenting data for both positive and negative events that are stormwater related that previously went unnoted. Negative findings will be enforced by various Departments of City Enforcement and by Ordinances.

Organization Chart



8.0 NPDES Phase II BMP Requirement

Specific BMPs are proposed for each Minimum Control Measure, which is intended to support the reduction of discharges of pollutants in stormwater runoff to the maximum extent practicable (MEP) as required by the Federal NPDES Phase II rules. In this section, a summary sheet is provided for each Minimum Control Measure, which includes a list of the selected BMPs, the rationale for their development and selection, and a summary of the measurable goals and implementation schedule. The summary sheet is followed by a fact sheet for each of the selected BMPs. Together, the summary sheets and the fact sheets provide the following information in accordance with the Federal rules:

1. A list of the responsible parties for the BMP implementation;
2. A brief description of the BMP;
3. A description of existing conditions;
4. The proposed MS4 plan activities;
5. Measurable goals; and
6. An implementation schedules.

The BMP development/implementation schedule shows when certain activities will be completed on a fiscal year basis. The NPDES Phase II rules provide for a five-year implementation schedule starting from May of 2013, which is when the City submitted its original MS4 permit application materials. Not all BMP were completed during the first five years. A revised schedule is show for the completion of the original BMPs.

9.0 Six Minimum Control Measures

The Federal rules and, therefore, ADEQ's permit requirements, direct that the City's MS4 plan address six minimum areas, which are termed "Minimum Control Measures." These areas are broadly titled in the rules as follows:

1. Public Education and Outreach on Stormwater Impacts;
2. Public Involvement/Participation;
3. Illicit Discharges Detection and Elimination;
4. Construction Site Stormwater Runoff Control;
5. Post-Construction Stormwater Management in New Development and Redevelopment
6. Pollution Prevention/Good Housekeeping for Municipal Operators.

Minimum Control Measure #1 - Public Education and Outreach on Stormwater Impacts

Regulatory Requirements

Regulation 40 CFR 122.34(b)(1): "The permittee must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff."

PUBLIC EDUCATION (PE) SELECTED BMPs

PE-1 A combination of multiple methods will be used to disseminate education information to reach as high of a percentage of the population as possible. The methods may include fact sheets, brochures, posters, displays, press releases, PSAs, bill stuffers, Facebook, and/or website postings as appropriate.

PE-2 Outreach efforts in conjunction with regional partners such as the stormwater education steering committee, the stormwater compliance group, Arkansas Game and Fish Commission, the Saline Watershed Alliance, Home Owner Association, and others groups interested in the protection of Crooked Creek.

PE-3 Educate the public on pollution prevention activities.

PE-4 Target pollutant sources are the proper use and storage of fertilizers; proper use and storage of pesticides; pet waste management; disposal of household hazardous waste, managing yard debris and composting; water conservation; litter prevention; and many others as well as provide training to reduce pollution from construction personnel.

PE-5 Outreach strategy may include printed brochures, social media, workshops, and mailers. All water customers will receive at least one mailer each year.

PE-6 Responsible parties for the overall management and implementation of the stormwater program include Code enforcement personnel and the Mayor's assistant.

PE-7 Evaluation of the success of this minimum measure includes documentation of mailers, social media posts, and restocking of brochures at City Hall.

RATIONALE

In order to cover a wide range of audiences including government staff, the general public, and youth, multiple outreach genres and methods must be used (booths and materials at local festivals, newspaper articles, school programs, etc.). In addition to the stormwater education steering committee, the stormwater compliance group, the Saline Watershed Alliance, and schools, the City may also partner with the University of Arkansas Cooperative Extension Service and/or other regional stormwater organizations or committees (Partnerships) to use available advertising, promotional materials and sponsor public outreach programs.

Alexander's strategy for developing and distributing the public education materials is to start with information such as the most typical sources of pollutants in stormwater runoff and the impacts associated with those pollutants, and make this information available as educational handouts, flyers, and mailings.

Future activities may include outreach presentations, advertisements, and workshops for the

public, businesses, industry, and various other stakeholders, to educate them on impacts that the City's stormwater management program may have, and what they can do to improve stormwater quality. Outreach presentations, advertisements, and workshops can target development businesses to utilize new technology methods for stormwater runoff control and encourage Low Impact Development (LID) within development planning. Numerous topics can be covered by these outreach methods and may include recommendations for topics of interest via steering committees. By utilizing multiple partners, venues, and materials the City hopes to reach at least 50% of the population of the MS4 areas.

Responsible Parties

The City of Alexander is to be responsible for the development and implementation of the public education efforts.

Summary of Measurable Goals

The City of Alexander along with any Partners with which it may engage for purposes of the SWMP, may use public events, periodic neighborhood surveys, and consultation with community and citizen group leaders to solicit feedback on specific education/outreach efforts. Any specific goals identified will be described in detail on the annual report.

Public Education and Outreach on Stormwater Impacts

<table>
<tr><td rowspan="2">BMP #</td><td colspan="5">PERMIT YEAR</td></tr>
<tr><td>YR 2019</td><td>YR 2020</td><td>YR 2021</td><td>YR 2022</td><td>YR 2023</td></tr>
<tr><td rowspan="2">PE-1</td><td colspan="5">Plans to Inform individuals and households. Use multiple venues to reach the public highlighting season-specific topics as well as media-driven topics. (ongoing)</td></tr>
<tr><td colspan="5"></td></tr>
<tr><td rowspan="2">PE-2</td><td colspan="5">Continue meeting with the stormwater team regularly to receive feedback on educational efforts as well as ideas for regional training needs. The City plans to inform individuals and households about the steps they can take to reduce stormwater pollution through print media, social media, and web site posting.</td></tr>
<tr><td>Utilize the education outreach team to develop specific topics. (See PE-4 for topics)</td><td>Utilize the education outreach team to develop specific topics. (See PE-4 for topics)</td><td>Utilize the education outreach team to develop specific topics. (See PE-4 for topics)</td><td>Utilize the education outreach team to develop specific topics. (See PE-4 for topics)</td><td>Utilize the education outreach team to develop specific topics. (See PE-4 for topics)</td></tr>
<tr><td>PE-3</td><td colspan="5">Target Audiences
Education programs are those that are likely to have significant impacts on stormwater include residential, commercial, industrial, and land development.</td></tr>
</table>

	Schools Realtors Civic Groups Public events like fairs, Earth Day City Council	Schools Realtors Civic Groups Public events like fairs, Earth Day City Council	Schools Realtors Civic Groups Public events like fairs, Earth Day City Council	Schools Realtors Civic Groups Public events like fairs, Earth Day City Council	Schools Realtors Civic Groups Public events like fairs, Earth Day City Council
PE-4	Target Pollutants Common behaviors may include: littering, disposing of trash, overuse of lawn chemicals, washing cars in streets, changing motor-oil, and disposing of leftover paint and chemical in ditches.				
	Soil Erosion Construction Activities Fertilizers Herbicides insecticides Household Chemicals Hazardous Chemicals Automotive Fluids Restaurant Wastes Litter Cigarette Butts	Soil Erosion Construction Activities Fertilizers Herbicides insecticides Household Chemicals Hazardous Chemicals Automotive Fluids Restaurant Wastes Litter Cigarette Butts	Soil Erosion Construction Activities Fertilizers Herbicides insecticides Household Chemicals Hazardous Chemicals Automotive Fluids Restaurant Wastes Litter Cigarette Butts	Soil Erosion Construction Activities Fertilizers Herbicides insecticides Household Chemicals Hazardous Chemicals Automotive Fluids Restaurant Wastes Litter Cigarette Butts	Soil Erosion Construction Activities Fertilizers Herbicides insecticides Household Chemicals Hazardous Chemicals Automotive Fluids Restaurant Wastes Litter Cigarette Butts
PE-5	Outreach Strategy The City includes print media, social media, workshops, and web-based media. Over the permit term, the City expects to reach over 50% of the population. The City's outreach strategy includes four different mechanisms, or Best Management Practices (BMP's).				
	Add flyer to Water Bills once a year Send out Facebook post about stormwater-related issues Pots stormwater information on City's web site	Add flyer to Water Bills once a year Send out Facebook post about stormwater-related issues Pots stormwater information on City's web site	Add flyer to Water Bills once a year Send out Facebook post about stormwater-related issues Pots stormwater information on City's web site	Add flyer to Water Bills once a year Send out Facebook post about stormwater-related issues Pots stormwater information on City's web site	Add flyer to Water Bills once a year Send out Facebook post about stormwater-related issues Pots stormwater information on City's web site

	Flyer about storm drain marking	Flyer on stream and creek clean up	Flyer on car wash and how to do them correctly	Flyer on the disposal of household chemicals	Flyer on recycling
PE-6	Responsible Parties The stormwater team is responsible for content. Mayor's assistant will be responsible for flyers and posting information on a web-based site.				
PE-7	Evaluation Evaluation and measurement of outreach efforts				
	One flyer each year via water bill Four Facebook post a year One updated Post to City's Web Site	One flyer each year via water bill Four Facebook post a year One updated Post to City's Web Site	One flyer each year via water bill Four Facebook post a year One updated Post to City's Web Site	One flyer each year via water bill Four Facebook post a year One updated Post to City's Web Site	One flyer each year via water bill Four Facebook post a year One updated Post to City's Web Site

Minimum Control Measure #2 – Public Involvement/Participation

Regulatory Requirements
Regulation 40 CFR 122.34(b)(2): The permittee shall, at a minimum, comply with State and local public notice requirements when implementing a public involvement/ participation program.

PUBLIC INVOLVEMENT (PI) SELECTED BMPs

PI-1 Public Involvement/Participation in the development and submittal of NOIs and SWMPs.

PI-2 A plan to actively involve the public in the development and implementation of the program

PI-3 Target audiences for public involvement programs, including a description of the types of groups to be engaged.

PI-4 Types of public involvement activities included in the program.

PI-5 Who is responsible for the overall management and implementation of the stormwater public involvement and participation program?

PI-6 How will public involvement and participation be evaluated for success?

RATIONALE
The City selected the above four BMPs to address the Public Involvement/Participation Minimum Control Measure #2 and complement its public education efforts. PI-1 details the public involvement and participation required under the NPDES program.

The City is working through local neighborhood groups and its Partnerships to continue a public involvement/participation program addressing PI-2, PI-3, PI-4, PI-5, and PI-6. Components of this program will include organizing citizen participation in periodic creek cleanup efforts, storm drain stenciling, or assisting with educational or interpretive events.

Responsible Parties
The City and (Stormwater Team) is responsible for the development and implementation of public involvement and participation efforts and may utilizing neighborhood groups and Partnership to achieve its goals.

Summary of Measurable Goals
The City will provide opportunities for public input on the stormwater management program on an annual basis in various forms, including surveys and/or public events. Additionally, the administration will be periodically updated on the stormwater plan and efforts to meet State water quality standards. Feedback from the administration on annual progress will guide modifications to the stormwater plan as appropriate. The City will track these activities on an annual basis. In addition, the City will utilize local neighborhood groups, schools, and community volunteers for creek cleanups, storm drain stenciling, and assisting with programs.

PUBLIC INVOLVEMENT / PARTICIPATION

BMP#	PERMIT YEAR				
	YR 2019	**YR 2020**	**YR 2021**	**YR 2022**	**YR 2023**
PI-1	Public Involvement Involve the public in the development and submittal of the NOI an SWMP during the permit term.				
	The City will post on their Web site about the NOI and SWMP and make copies available for review at City Hall.				
PI-2	Plan to involve the Public Activities to involve the public may include presentations at schools, civic clubs, fairs, or other gatherings where multiple people can be reached in a single day.				
	Partner with neighborhood groups and schools to conduct citizen-based water quality monitoring.	Partner with neighborhood groups and schools to conduct stream cleans ups.	Partner with neighborhood groups and schools to conduct citizen-based water quality monitoring.	Partner with neighborhood groups and schools to conduct stream cleans ups.	Partner with neighborhood groups and schools to conduct citizen-based water quality monitoring.
	Conduct hands-on activities with youth through school enrichment programs. (ongoing)				
PI-3	Target Audience Target Audience for Public Involvement and Participation will be youth, parents, school, and civic groups				
PI-4	Types of Activities Activates include fair, school presentations, classroom handouts, booths at the lumber store. The biology teacher can use flyers as a teaching tool.				
PI-5	Responsible Parties The Stormwater Pollution Prevention Team will be responsible for the material and delivery of programs.				
PI-6	Evaluation The evaluation of the success of the Public Involvement will be measured by the number of people present at each activity.				

Minimum Control Measure #3 – Illicit Discharge Detection and Elimination

REGULATORY REQUIREMENTS

Regulation 40 CFR 122.34(b)(3): The permittee must:

IDDE-1 Enforcement Program

Develop, implement, and enforce a program to detect and eliminate illicit discharges [as defined at 40 CFR 122.26(b)(2)] into the permittee's small MS4. The City has developed, implemented, and is enforcing a program to detect and eliminate illicit discharges. "Illicit Discharge" shall be defined as any discharge to a municipal separate storm sewer that is not composed entirely of stormwater except discharges pursuant to an NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from emergency firefighting activities.

IDDE-2 Storm Sewer Map

The City has developed a stormwater system map, showing the location of all outfalls and the names and location of all waters of the United States that receive discharges from those outfalls.

Under the new permit, the stormwater system map will be updated periodically to include any newly constructed stormwater facilities.

IDDE-3 Prohibit Illicit Discharges

To the extent allowable under State or local law, effectively prohibit, through an ordinance, or other regulatory mechanism, non-stormwater discharges into the permittee's storm sewer system and implement appropriate enforcement procedures and action. Possible sanctions include non-monetary penalties (such as stop-work orders), fines, bonding requirements, and/or permit denials for non-compliance. The City has adopted Code of Ordinances **20-10-19-01** that gives the City the authority and regulations to enforce Construction Site Runoff Controls.

3.1 Develop and implement a plan to detect and address non-stormwater discharges, including illegal dumping, to the permittee's system. This is accomplished by regular inspection of outfalls and continuous observations by all City employees.

3.2 Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.

3.3 Except for individual car washing, the categories listed in 40 CFR 35.2005(20) have not been identified as significant contributors of pollutants to the City, therefore have are not being addressed in the SWMP. Individual car washing and mobile car washing are being addressed with a flyer.

3.4 The permittee must also develop a list of other similar occasional incidental non-stormwater discharges (e.g. non-commercial or charity car washes) that will not be addressed as illicit discharges. These non-stormwater discharges must not be reasonably expected (based on information available to the permittees) to be significant sources of pollutants to the MS4, either because of the nature of the

discharges or conditions the permittee has established for allowing these discharges to the permittee's MS4 (e.g., a charity car wash with appropriate controls on frequency, proximity to sensitive water bodies, BMPs on the wash water). The permittee must document in the permittee's stormwater management program plan any local controls or conditions placed on the discharges. The permittee must include a provision prohibiting any individual non-stormwater discharge that is determined to be contributing substantial amounts of pollutants to the permittee's MS4.

3.5 The permittee must develop a process to respond to and document complaints relating to illicit discharges. All complaints are logged and addressed by the Code Enforcement official.

IDDE-4 Storm sewer system and Outfall Map

The City will develop a storm sewer system map, showing the location of all outfalls and the names and location of all surface waters of the State that receive discharges from those outfalls. They are continuing to maps catch basins, pipes, ditches, as funds are available. Should the MS4s with coverage area increases resulting from the 2020 census, the updated mapping will be completed by the next permit renewal**.**

IDDE-5 Enforcement

The permittee shall to the extent allowable under State or local law, effectively prohibit, through an ordinance or other regulatory mechanism, illicit discharges into the storm sewer system and implement appropriate enforcement procedures and actions.

5.1 Code of Ordinances **20-10-19-01**.was adopted by the City Board and signed by the Mayor and gives the City the authority to write a warning ticket or issue a fine.

5.2 All enforcement actions either warnings or fines are documented in a logbook.

IDDE-6 Plan to Detect and Eliminate Illicit Discharges

The City developed a plan to detect and address illicit discharges to the MS4 system, including discharges from illegal dumping and spills. The plan shall include dry weather field screening for non-stormwater flows and ADEQ recommends field tests of selected chemical parameters as indicators of discharge sources. *All outfalls will be screened at least once during dry-weather for the permit term.*

a. Procedures for locating priority areas which include areas with a higher likelihood of illicit connections (e.g., areas with older sanitary sewer lines, for example) or ambient sampling to locate impacted reaches. Identify the location and contact Fire Department, Police Department. Once the discharge is confirmed, deploy resources to stop the migration. Notify DEQ if the flow cannot be quickly eliminated. ei, broken liquid gas line, or fuel spill.

b. Procedures for tracking the source of an illicit discharge, including the specific techniques that will be used to detect the location of the source. Using the storm sewer map, tract the contamination upstream to the source. Identify the source and stop the flow. Notify DEQ if the flow cannot be quickly eliminated.

c. Procedures for removing the source of the illicit discharge. Log booms, hay bales, covered rock ditch checks, or pump truck.
d. Procedures for program evaluation and assessment. Should a discharge be discovered, documentation of the event will be recorded.

RATIONALE

Alexander has selected the above five BMPs to address Minimum Control Measure #3. BMPs IDDE-1 and IDDE-2 describe the City's processes that respond to and document complaints regarding water quality, including illicit discharges, in fulfillment of Requirements 1, 3 and 8 above. BMP IDDE-1 will provide methods for reporting and tracking of presumed illicit spills, sightings and discharges.

Most of the City's personnel, while doing their daily jobs, will report potential illicit problem areas to the SPPT. In addition, the public will have the opportunity to report potential illicit problem areas to City Hall. The reported problem area will be investigated soon or immediately depending on the situation.

The public phone calls received and the reports submitted by City personnel will be tracked within Illicit Complaint files. BMP IDDE-2 will provide methods for the response to reported potential illicit discharges and any necessary enforcement. Minor infractions will be brought to the owner's attention, followed up on, and a complete investigation report will be included in the Illicit Complaint files with pictures and the investigation results. Larger incidents within water bodies (such as fish kills with unknown circumstances) will be reported to the State Fish and Wildlife and/or the DEQ for their expertise and water quality measurement capabilities. These two BMPs include a phone number for complaints and protocols for the most efficient and effective follow-up actions in response to calls. BMP IDDE-2 will be enforced, as necessary, with the use of the City Code of Ordinances.

Minor infractions will be brought to the owner‘s attention, followed up on, and a complete investigation report will be included in the Illicit Complaint files with pictures and the investigation results. Larger incidents with in water bodies (such as fish kills with unknown circumstances) will be reported to the State Fish and Wildlife and/or the DEQ for their expertise and water quality measurement capabilities. These two BMPs include a phone number for complaints and protocols for the most efficient and effective follow-up actions in response to calls. BMP IDDE-2 will be enforced, as necessary, with the use of the City Code of Ordinances.

BMP IDDE-3 consists of a comprehensive program to detect and eliminate illicit discharges throughout the City and addresses Requirement 4. This will include performing dry inspections of approximately 20% of the storm sewer outfalls per year over the next five years. This BMP will be implemented in conjunction with BMP IDDE-5 which will provide an inventory of all outfalls within City limits. Any outfalls which are discovered to have potential illicit discharges will be investigated as follows: 1-Note the location; 2-Contact Stormwater Team and or Fire Department; 3-Install flow control devices or absorbents; 4-Follow discharge upstream to locate the source; 5-Stop the source; 6-Contact the owner; 7-Clean up the spills.

Requirements 6 and 7, addressing non-stormwater discharges, will require that the City assess these discharges, and determine if they adversely impact the stormwater system. If they are found to cause an adverse impact, appropriate management practices or regulations will be used or developed and implemented with BMP IDDE-4. Non stormwater runoff such as street sweeping or application of salt on roadways does not occur within Alexander. All City facilities have secondary containment and/or chemicals and fuels are stored where spills are unlikely. All areas are cleanup weekly. All waste including rash dredged spoils, accumulated sediments and other debris is taken to County Landfill.

Requirement 5 to inform the public regarding the hazards of illicit discharges is implemented through several of the public education BMPs such as Clean Water Into Storm Curb Drain and Door Hangers.

Requirement 8 is covered by public knowledge of phone numbers of City Hall and Police Dispatch. Complaints phoned in regarding an incident are forwarded to the appropriate City personnel that can address the particular type of situation. Several of the public education BMPs as well as IDDE-1 will also help educate the public about illicit discharges and provide the phone numbers to report illicit discharges.

BMP IDDE-5 will meet Requirement 2 above by completing the mapping and inventory of the City's storm sewer system including all outfalls. This map will be updated with any new storm sewer systems and/or outfalls that are created through development.

RESPONSIBLE PARTIES

Public Works/Street Department -Coordinate Management and Implementation of the IDDE Control Measures, respond and investigate citizen complaints and tips, assess and enforce as necessary.

Police – Respond to accidental illicit discharges (car accidents or other spills on or near public streets and public places). Report discharge to appropriate department for enforcement/cleanup.

Fire- Respond to accidental illicit discharges (car accidents or other spills on or near public streets and public places). Report discharge to appropriate department for enforcement/cleanup.

SUMMARY OF MEASURABLE GOALS

The measurable goals of the illicit discharges program will include:

1. Monitor the number and document the type of calls received and the actions taken in response to illicit discharges each year.
2. Create storm sewer maps for areas within city limits. Document an annual review of maps to ensure they are up-to-date.

3. Monitor the number of illicit discharges that are encountered and document enforcement procedures that are conducted.
4. Track the number of commercial/industrial uses assessed for possible illicit discharges and document resolution of illicit discharges identified.
5. Complete an assessment of non-stormwater discharges as required by Minimum Control Measure #3, Requirement 6 and 7, along with implementing local controls where they are identified as being needed.

Illicit discharge Detection and Elimination

	PERMIT YEAR				
BMP#	**YR 2019**	**YR 2020**	**YR 2021**	**YR 2021**	**YR 2023**
IDDE-1	Operate, publish and promote phone number, and document calls received each year within Illicit Discharge file.	Implement program improvements as warranted.	Monitor and revise as necessary	Monitor and revise as necessary	Monitor and revise as necessary
IDDE-2	Update per inspections required for IDDE-3	Verify outfalls and update storm sewer map per inspections required for IDDE-3.	Verify outfalls and update storm sewer map per inspections required for IDDE-3.	Verify outfalls and update storm sewer map per inspections required for IDDE-3.	Verify outfalls and update storm sewer map per inspections required for IDDE-3.
IDDE-3	Conduct dry inspections of existing outfalls, covering 20% of the total number. Identify and inspect new outfalls as they are constructed or found. Add new inlets & outfalls to storm sewer maps	Conduct dry inspections of existing outfalls, covering an additional 20% each year until all are inspected by the end of the permit. Identify and inspect new outfalls as they are constructed or found. Add new outfalls to storm sewer maps. Add last year's developments or revisions as additions to storm sewer maps for each year's update.			

IDDE-4	Develop storm sewer system and outfall map.	Add new information to storm sewer map as subdivisions are completed **Continue to add features to the map**	Add new information to storm sewer map as subdivisions are completed **Continue to add features to the map**	Add new information to storm sewer map as subdivisions are completed **Continue to add features to the map**	Add new information to storm sewer map as subdivisions are completed **Continue to add features to the map**
IDDE-5	Implement protocols for responding to complaints annually, and document within Illicit Discharge file. **Ordnance 20-10-19-01**	Monitor and revise as necessary	Monitor and revise as necessary	Monitor and revise as necessary	Monitor and revise as necessary
IDDE-6	Assess impact of non-stormwater discharges. If impact is significant create & implement program to address	Continue ongoing program assessment, implementation and revisions.	Continue ongoing program assessment, implementation and revisions.	Continue ongoing program assessment, implementation and revisions.	Continue ongoing program assessment, implementation and revisions.

Minimum Control Measure #4 - Construction Site Stormwater Runoff Control

Regulatory Requirements

Regulation 40 CFR 122.34(b)(4*):*

The permittee shall develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. For stormwater discharges associated with small construction activity in accordance with 40 CFR 122.26(b)(15)(i), the permittee will develop, implement, and enforce a program to reduce pollutant discharges from such sites. The permittee's program must include the development and implementation of, at a minimum:

An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State, or local law; Requirements for construction site operators to implement appropriate erosion and sediment control best management practice. Code of Ordinances **20-10-19-01**. **provides for enforcement. See Appendix A.**

Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality; Procedures for site plan review which incorporate consideration of potential water quality impacts; Procedures for receipt and consideration of information submitted by the public, and Procedures for site inspection and enforcement of control measures.

CONSTRUCTION SITE WASTE (CSW) SELECTED BMPs

- **CSW-1** Erosion and Sediment Control Regulations
- **CSW-2** City Staff Erosion Control Training
- **CSW-3** Land Drainage Program
- **CSW-4** Inspections and Enforcement

Rationale

The City selected the above BMPs to address each component of the construction site runoff minimum control measures. The regulatory authority for BMP CSW-1 is currently provided for in the Drainage Regulation chapter (11.06) of the City's Code of Ordinances. This ordinance helps to satisfy Requirements 1, 2 and 3 by providing regulatory authority for implementation and enforcement of the erosion and sediment control measures for construction or redevelopment of sites disturbing, greater than one acre.

Specific requirements for construction site operators will be addressed during the development approval process as well as the issuance of Building Permits. The Drainage Regulations Ordinance will require the development of erosion and sediment control plans and will be updated to include future regulatory requirements. The Drainage Regulations Ordinance will detail the procedures for development approval including Technical plan Review. Taken together, the Ordinances and programs will fulfill Requirements 1 through 4 described above.

BMP CSW-2 involves the training of City staff to recognize and correct erosion problems on construction sites and to enforce the provisions of the City's adopted ordinances. This BMP is a critical component of the stormwater management program. This is being addressed through the implementation of the City Stormwater Pollution Prevention Team. This program is intended to address Requirement 6. The City anticipates that at least one employee will obtain certification as a "Stormwater Site Inspector".

During the development approval process, BMP CSW-3 will be implemented by the systematic review of plans with the use of checklists and/or other methods to ensure that the Drainage Regulations Ordinance and all ADEQ requirements have been met. These checklists will ensure that minimum control measures such a construction entrances, concrete washouts, silt fence and others are included in the plans. The long-term stability of storm water improvements will also analyzed during plan review.

After construction has started, BMP CSW-4 will be implemented with the initiation of regular site inspections by City personnel. These inspections will be documented, as well as any violations that are observed. If necessary, City Ordinances will be used for any enforcement actions.

Requirement 5 is covered by public knowledge of phone numbers of City Hall and Police Dispatch. Complaints phoned in regarding an incident are forwarded to the appropriate City personnel that can address the particular type of situation. Several of the public education BMPs will help educate the public about illicit discharges and provide the phone numbers to report any violations.

Enforcement could range from a simple verbal warning to written warnings and/or fines.

Responsible Parties

The City has responsibility for implementation, enforcement and monitoring of these programs, in coordination with the Office of the City Attorney, if necessary.

Summary of Measurable Goals

Staff will review Ordinances related to erosion control and construction site runoff during the permit period and revise as necessary. The measurement of success of the program will be based on tracking of compliance and avoidance of impacts to water quality from land alteration and construction.

BMP#	PERMIT YEAR				
	YR 2019	YR 2020	YR 2021	YR 2022	YR 2023
CSW-1	Implement Drainage Regulation Ordinance for erosion and construction site runoff control effectiveness	Review, modify and enforce ordinance provisions as necessary.	Review, modify and enforce ordinance provisions as necessary.	Review, modify and enforce ordinance provisions as necessary.	Review, modify and enforce ordinance provisions as necessary.
CSW-2	Conduct staff training on an ongoing basis; update as needed.		Evaluate the effectiveness of the training and update/improve as warranted.		
CSW-3	Implement the land drainage and alteration program on an ongoing basis.	Conduct land drainage and alteration program training as needed.	Track land drainage and alteration compliance and impacts to water quality on an annual basis.	Evaluate Ordinances and develop amendments as needed to achieve compliance with EPA.	Program review and assessment.
CSW-4	Conduct inspections on an ongoing basis.	Implement existing Code authority on an ongoing basis.	Review and amend the Ordinance as appropriate.	Review and amend the Ordinance as appropriate.	Review and amend the Ordinance as appropriate.

Minimum Control Measure #5 - Post Construction Stormwater Management in New Development and Redevelopment

Regulatory Requirements

Regulation 40 CFR 122.34(b)(5): The permittee must:

A. *Develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the small MS4. The program must ensure that controls are in place that would prevent or minimize water quality impacts.*

B. *Develop and implement strategies which include a combination of structural and/or non-structural best management practices (BMPs) appropriate for the community.*

C. *Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State or local law; and*

D. *Ensure adequate long-term operation and maintenance of BMPs.*

Development Standard (ds) Selected BMPs

DS-1 Implementation of City Code of Ordinances and Development of BMP Manual

DS-2 Post Construction Stormwater System Maintenance Inspections and Compliance

DS-3 Encourage developers to utilize green spaces, conservation areas, reforestation, and rooftop disconnection, grass swales, native plants, rain gardens and alternative to concrete/asphalt pavement

DS-4 Code Enforcement will check to ensure all Post-Construction measures are completed prior to a Certificate of Occupancy and that they are maintained.

DS-5 The owner of the property is responsible for maintaining all Post-Construction BMPs.

Successful completion of Post-Construction BMPs by the developer or contractor and issuance of a Certificate of Occupancy (CO) for new houses and developments will be documented each year.

Rationale

The City selected the above BMPs to meet the post-construction Minimum Control Measure requirements. The City's Drainage Regulations Ordinance requires that new developments incorporate stormwater management BMPs to reduce the impacts associated with stormwater runoff generated at the site. BMP DS-1 provides for maintenance of the appropriate Code of ordinances such that pollutants from stormwater runoff from new development are reduced to the maximum extent practicable, in partial compliance with the requirements of this Minimum Control Measure. In addition, the City will develop a BMP Manual which details available BMPs and indicates the best place for their use.

BMP DS-2 provides for the development of a long-term inspection and enforcement program, which is still needed to all the requirements noted above. The Code Enforcement and Public Works Official will receive their certification as "Stormwater Site Inspectors." They are currently

performing the stormwater inspections and will continue to perform Post–Construction System Maintenance Inspections to ensure compliance.

Responsible Parties

The City has responsibility for implementation and monitoring of these programs. Specifically, the Public Works (Street Department).

Summary of Measurable Goals

The regulatory framework for control of post-construction stormwater runoff is contained in the City's Code of Ordinances. This framework will be refined and expanded as needed to improve the City's capability to achieve reductions in stormwater pollution from new developments through periodic evaluations and updates to the Codes. Measurable goals will include to:

1. Monitor Technical Plat Review and Land Division approvals for adequacy of stormwater quality management.
2. Monitor Stormwater Pollution Plans for adequacy of stormwater quality management.
3. Monitor compliance achieved in private maintenance of Stormwater management systems required in the development approval process.
4. Monitor as needed any new stormwater drainage infrastructure that incorporates stormwater quality improvement facilities where practicable.
5. Successful completion of Post-Construction BMPs by the developer or contractor and issuance of a CO for new houses and developments will be documented each year.

Summary of Post Construction Controls

	PERMIT YEAR				
BMP#	**YR 2019**	**YR 2020**	**YR 2021**	**YR 2022**	**YR 2023**
PC-1	The City will continue to require Construction Site Permits for all new sits. **Site > 1ac will need to fill out an NOI** **Sites >5ac will need to fill out a complete SWPPP and fill with DEQ.**	Continue enforcing existing Codes and monitor/analyze effectiveness at achieving BMPs that comply with pollutant reduction MEP requirement and update as needed.	Continue enforcing existing Codes and monitor/analyze effectiveness at achieving BMPs that comply with pollutant reduction MEP requirement and update as needed.	Continue enforcing existing Codes and monitor/analyze effectiveness at achieving BMPs that comply with pollutant reduction MEP requirement and update as needed.	Continue enforcing existing Codes and monitor/analyze effectiveness at achieving BMPs that comply with pollutant reduction MEP requirement and update as needed.

PC-2	Require all construction site to use the Erosion Control BMPs list and update weekly **See Appendix B**	Require all construction site to use the Erosion Control BMPs list and update weekly **See Appendix B**	Require all construction site to use the Erosion Control BMPs list and update weekly **See Appendix B**	Require all construction site to use the Erosion Control BMPs list and update weekly **See Appendix B**	Require all construction site to use the Erosion Control BMPs list and update weekly **See Appendix B**
PC-3	Maintain inspection and compliance activities and monitor/analyze program effectiveness and success/failure of BMPs observed over time	Maintain inspection and compliance activities and monitor/analyze program effectiveness and success/failure of BMPs observed over time	Maintain inspection and compliance activities and monitor/analyze program effectiveness and success/failure of BMPs observed over time	Maintain inspection and compliance activities and monitor/analyze program effectiveness and success/failure of BMPs observed over time	Maintain inspection and compliance activities and monitor/analyze program effectiveness and success/failure of BMPs observed over time
PC-4	Begin the Development a BMP Manual	BMP Manual will be completed and submitted during the permit cycle or before July 31, 2024 and noted on the Annual Report for the year completed.			
PC-5	Low Impact Development will be encouraged	Low impact development may include use of native plants, dry detention ponds, water gardens, rain barrels, alternatives to concrete drives			

Minimum Control Measure #6 - Pollution Prevention /Good Housekeeping for Municipal Operations

Regulatory Requirements

Regulation 40 CFR 122.34(b)(6): The permittee must:

A. *Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.*

B. *Using training materials that are available from EPA, DEQ, other organizations, or developed in-house, the program must include employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance.*

Operation and maintenance (OM) BMPs

OM-1 Develop an Operation and maintenance program for City owned facilities.

OM-2 Develop a Training Program for City employees to include prevention and reduction of stormwater pollution in parks, open spaces, fleet and building maintenance, new construction, land development and stormwater system maintenance.

OM-3 The City will document the development of the good housekeeping program and procedures for preventing or reducing floatables and other pollutants.

OM-4 Performance Standard is the Annual Inspection of City Owned Facilities

Rationale

Provide training at least once a year on MS4s. The training will use materials made available to the City from the EPA, ADEQ and other sources. This training will be used to implement operation and maintenance programs for City facilities and specific operations. Jurisdictional-specific ordinances, policies, and mandates will also be addressed during these trainings and specific system maintenance as departmentally appropriate. Training will stress how the employees are the "eyes and ears" of the City and that they should learn to recognize signs of illicit discharge and how to properly report these instances.

In addition, City personnel may participate in the occasional MS4 orientated webinars offered by the EPA.

BMP CONTROLS

Controls for reducing or eliminating the discharge of pollutants from streets, roads, municipal parking, maintenance, storage yards, City Offices and Parks.

1. Monthly inspection of City Owned facilities
2. Silt fencing or straw waggles may be used to contain sand, gravel, or salt being stored. Covers are recommended for salt.
3. City facilities shall be inspected for floatables and other pollutants. Cleaning and/or removal of debris that could clog drainage structures shall be complete as needed.
4. Fire Chief and Publics Work staff shall inspect road department and Fire station for fuels, oils for chemical leaks on a monthly basis.

5. All waste will be removed by the Public Works staff and disposed of according to State regulations. Limbs and debris will be collected and hauled to the landfill. Oil, grease and gas will be collected by a Recycling company.
6. Floodplain projects will be address individually and reported annually.

SUMMARY OF MEASURABLE GOALS

The City has implemented the operation and maintenance program, as described above to prevent or reduce pollutant runoff from municipal operations. Departments that are impacted by this program include Parks, sanitation, utilities, streets, fire, and administration.

1. The City will reduce pollutants caused by municipal operations without creating the need for additional equipment and personnel.
2. Street crews will maintain ditches and facilities annually and document cracks or other need for repairs.
3. Trash, debris, and other solid wastes will be removed from City facilities, ditches and streets and disposed of at a sanitary landfill.
4. Conduct annual inspections of City Owned facilities
5. Conduct annual training for City employees.

RESPONSIBLE PARTIES

The City is responsible for preparing and providing training to City staff. Each City

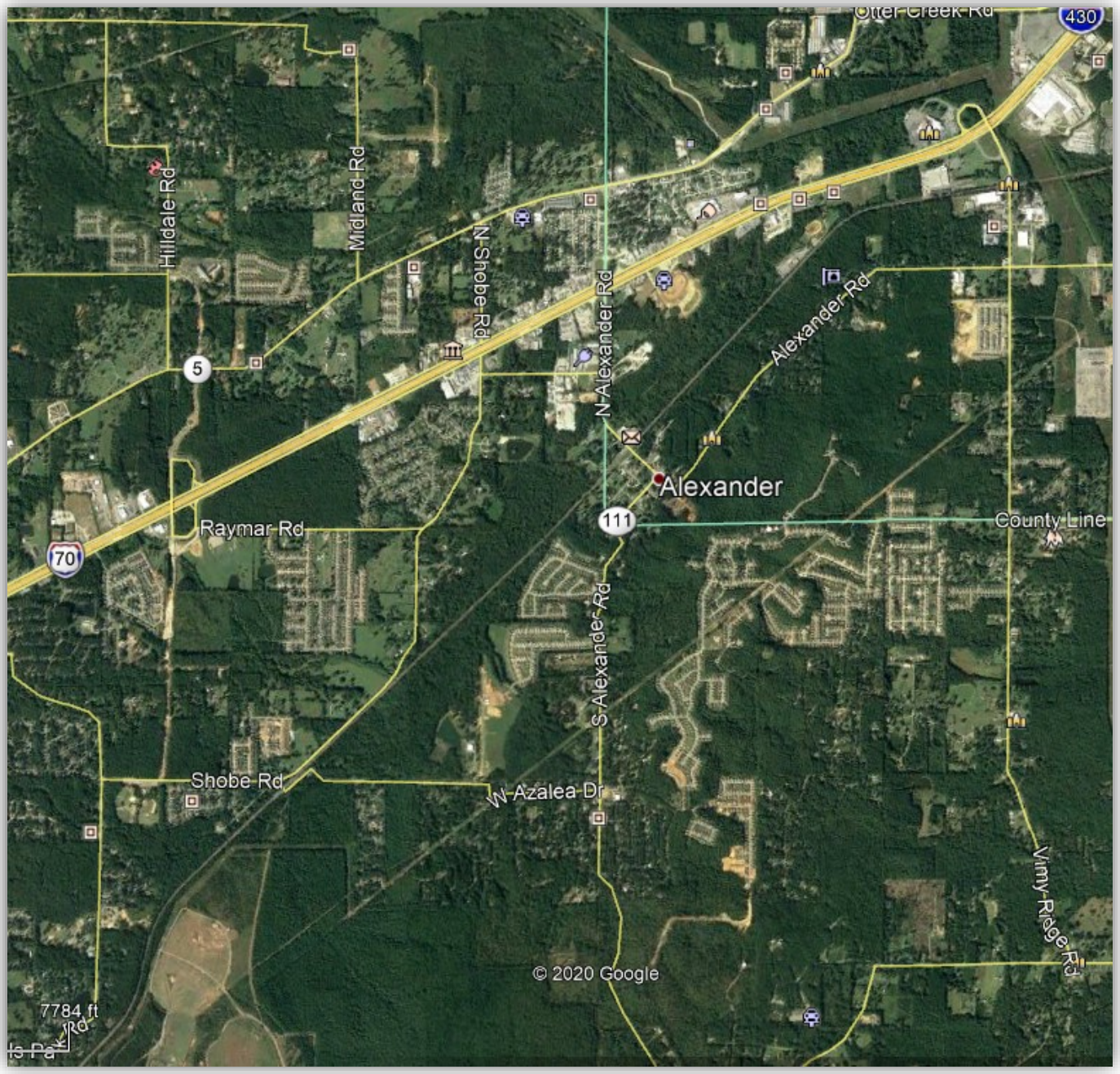
Pollutions Prevention / Good Housekeeping Schedule

	PERMIT YEAR				
BMP#	**YR 2019**	**YR 2020**	**YR 2021**	**YR 2022**	**YR 2023**
OM-1	Develop and implement an operation and maintenance program	Review and update materials	Review and update materials	Review and update materials	Review and update materials
OM-2	Develop In-house training	Obtain training DVD's	Conduct annual training for employees	Conduct annual training for employees	Conduct annual training for employees
OM-3	Document the development of the good housekeeping program and procedures for preventing or reducing floatables and other pollutants	Continue to document training, inspections and measures to prevent stormwater pollution from City Owned Facilities			
OM-4	Annual Inspection of City Owned Facilities	Annual Inspection of City Owned Facilities	Annual Inspection of City Owned Facilities	Annual Inspection of City Owned Facilities	Annual Inspection of City Owned Facilities

10.0 Maps – Aerial Photograph, Watershed Map & Zoning Map

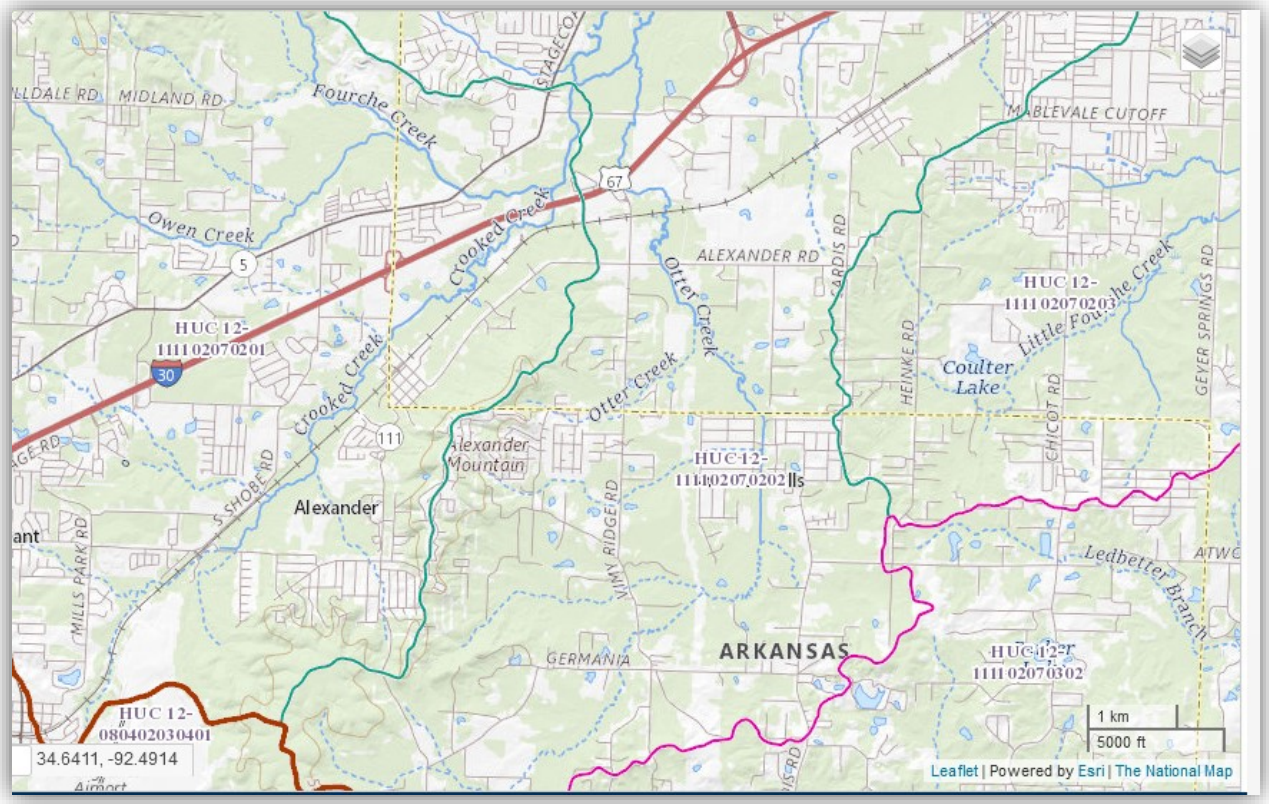
Maps were developed from publicly available sources, including Google Earth, USGS National Map Viewer, and Metro Plan.

Aerial Map of City of Alexander



Source: Google Earth Image - 2020

Watershed Map of City of Alexander



Source: USGS National Map Viewer – Crooked Creek – Otter Creek-Fourche Creek

Zoning Map of City of Alexander