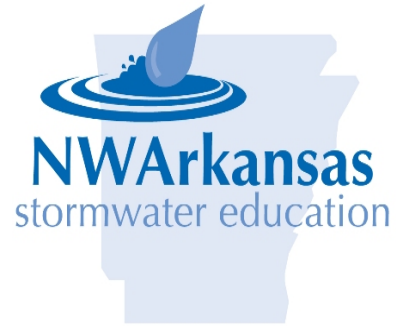


STORMWATER MANAGEMENT PROGRAM



Permit ARR 040050

City of Centerton

Street Department

11509 Hwy 72W

Centerton, Arkansas

June, 2019

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1. Background and Context:

The Centerton Stormwater Management Program (Stormwater Program) has been developed to provide policy and management guidance for activities affecting stormwater throughout the City of Centerton. It is intended to help the City fulfill certain State and Federal water quality requirements, and to meet local water resources management objectives. Through the implementation of the policies and management practices embodied in the Stormwater Program over time, Centerton hopes to preserve urban stormwater quality that negatively impacts local rivers and streams, and 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, Centerton, as part of the Illinois Watershed 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. Description of the Permit Area:

The City of Centerton (The City) currently serves a population of 10,170 people (2012) within the city limits. The geographic boundaries of the MS4 program are the City limits and the service area for stormwater planning encompasses approximately 4 square miles. The City has complete 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 program is submitted covers only the area within the City limits. The City lies within the Illinois Watershed, the Elk Watershed and Lower Neosho Watershed. The City's stormwater management practices have evolved 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. However, the City has never before had a Stormwater Program intended to provide comprehensive stormwater management guidance for the City organization.

3. Purpose, Scope and Areas of Focus:

The purposes of the Stormwater Program are threefold. First, the Stormwater Program 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 Stormwater Program 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 Stormwater Program 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 Stormwater Program addresses stormwater quality management policies and management practices that are, and/or will be implemented in the City. The scope of the Stormwater Program 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 Stormwater Program 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 basins.
- **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 Centerton Municipal Code within the city limits.
- **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 such as street sweeper dumping and processing. The Federal NPDES Stormwater Program requires the City to implement pollution prevention practices that reduce or eliminate stormwater pollution from City activities. Beyond this regulatory motivation, it is important that the City lead by example in areas where similar practices and behaviors from citizens and businesses are required.

- **Public education geared toward broad community stewardship of water resources.** The Federal NPDES Stormwater Program 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 Stormwater Program. The long-term success of the City’s efforts will hinge on increased awareness and stewardship throughout the community.

The Stormwater Program will result in formal, organized educational and outreach efforts that are targeted broadly throughout the metropolitan area. Many of these efforts are most effectively approached on a Northwest Arkansas MS4 basis, through cooperative efforts with the University of Arkansas Extension Service.

- **Public awareness and involvement in the City’s Stormwater management program.** Broad awareness and participation in the development and implementation of the Stormwater Program by residents and local area businesses is a key component to ensure effectiveness of the Stormwater Program. The Stormwater Program includes a public involvement component in its development that meets the Federal NPDES program
- **ADEQ-required Municipal Separate Storm Sewer System (MS4) Program elements.** The NPDES Stormwater Program requires that the City submit a MS4 program 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 program 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 for New Development and Redevelopment;
6. Pollution Prevention in Municipal Operations;

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

- The structural and non-structural 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 program.

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 stormwater management program.

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:

- physical structures or created natural features such as wetlands or ponds that improve water quality and/or attenuate flow;
- maintenance or construction practices that prevent erosion, control sedimentation, and reduce pollution entering runoff;
- educational strategies that inform the public, developers, business/industry, etc. on stormwater pollution prevention;
- regulations and enforcement programs that protect water quality;
- 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. Overview of Centerton'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 open channels throughout the city, and public outfalls to natural streams within the City's jurisdiction.

The City's metropolitan area's stormwater drainage systems also include some private stormwater management facilities that help moderate and reduce the volume and pollutant content of stormwater leaving private property and entering the public stormwater drainage system and/or local streams.

5. Stormwater Drainage Basin Characterization:

The City's stormwater drainage systems are split into three major drainage basins and are part of the headwaters of each: Illinois River, Lower Neosho and the Elk. The City is further broken down into several separate catchments for tributaries to these major drainage basins. A drainage basin can be described as a geographic area within which stormwater drains from many small systems converging on a larger drainage way. The character and condition of the drainage ways varies significantly throughout the basins, depending on surrounding land uses and contributing drainages. There is one area for concern for the City, portions of Little Osage Creek are listed on EPA's 303(d)'s List for impaired water bodies. The impairment listed for the creek is Pathogens and Nutrients. No TMDL has been developed to address this issue.

6. 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, State and Federal requirements. Implementation actions include BMPs discussed in detail in the MS4 program and other actions needed to achieve local objectives. The work plan for completion of Implementation actions is in the Stormwater Program Implementation Action Summary.

GOAL 1: *Protect citizens and property from flooding.*

Policies

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

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

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

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

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

1. b. 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.

1. c. 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.

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

1. e. 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.

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

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

Policies

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.

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

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

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

2. c. 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.

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

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

2. f. 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.

2.g. 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.

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

Policies

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

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

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

3. b. 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 Development Code and Engineering Design Standards.

3. c. 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.

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

3. e. 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.

3. f. 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.

3. g. 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.

GOAL 4: *Citizens, businesses, and industries understand the need to protect water quality.*

Policies

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.

4.2 The City will seek to form partnerships with neighborhoods or groups interested in providing stewardship of local waterways.

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

4. a. 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.

4. b. Continue to maintain enforcement and compliance activities, including inspections, technical assistance, and Code enforcement.

4. c. 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.

4. d. 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.

GOAL 5: *Urban drainage ways become community amenities.*

Policies

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 willing to be caretakers for water features near them.

5.2 The City will, through the 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.

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

5. a. 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.

5. b. 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.

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

5. d. Implement all six of the NPDES Minimum Control Measure BMPs. Implementing all of the provisions of the MS4 program 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. Centerton'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 program addressing each of the six required Minimum Control Measures, as specified in the Federal-NPDES Phase II rules. The City's stormwater management program is the responsibility of

the City Administration. However, the implementation of the City's MS4 program will extend throughout the City organization and MS4 coordinator by implementing the City's Stormwater's policies and procedures for all departments. Each Department's task would be recognizing stormwater issues of their facility and the field work they do and logging data for any event that is stormwater related. Public Education and Involvement would be encouraged with their fellow crew members, families and neighbors.

City Organization Chart



8. NPDES Phase II BMP Requirements:

Specific BMPs are proposed for each Minimum Control Measure, which are 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. The tables to follow provide a summary of the selected BMPs and the associated implementation schedule. 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 BMP 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 program activities;
- (5) Measurable goals; and
- (6) An implementation schedule.

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 March of 2014, which is when the City submitted its original MS4 permit application materials. Therefore, the BMP implementation schedule lays out a five-year schedule starting with fiscal year 2019-2024.

A. Minimum Control Measure #1: Public Education and Outreach on Stormwater Impacts

Permit 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.”

Decision Process

The City of Centerton participates in monthly meetings of the NWA Stormwater Compliance Group and has representation on the NWA Regional Stormwater Education Steering Committee. We also have representation on the Stormwater Education Steering committee (public membership comprised of diverse backgrounds/interests) convenes at least once each year to review and evaluate program accomplishments and plan next steps. Both groups provide the localized input used to identify critical stormwater issues and target audiences and program methods and public relations strategies.

Applicable City of Centerton BMPs

Public Education (**PE**):

PE#1

Develop and distribute electronic and printed educational materials

Input from both the MS4 Stormwater Compliance Group and Education Steering Committee guides the emphases of electronic and printed educational materials. Once topics have been identified, fact sheets, podcasts, e-learning modules, website content, newsletters, press releases, and PSAs will be developed, adapted, and/or gathered for distribution at public meetings, in support of presentations, and with educational displays.

Measureable Goals:

- A minimum of 20 electronic and printed educational materials will be developed.
- The number of educational materials distributed will be documented.
- MS4 Stormwater Compliance Group and Education Steering Committee meetings attendance will be documented.

PE#2

Create displays and staff educational booths

Displays highlighting the annual topics of emphasis will be created and set up/staffed at libraries, banks, schools, local festivals, county fairs, etc.

Measureable Goals:

- Stormwater displays will be created and used at a minimum of 3 events/locales

PE#3

Conduct stormwater programs for adult audiences

Educational presentations will be given to illustrate stormwater dynamics, identify potential pollutants and pathways, describe techniques to reduce stormwater pollution and encourage voluntary BMP implementation according to the annual topic/audience emphases outlined in the SWMP.

Measureable Goals:

- At least 5 stormwater education programs will be conducted for adult audiences

PE#4

Conduct hand-on youth stormwater/water quality education programs

Educational programs for school youth will focus on the water cycle, watersheds, stormwater dynamics, water quality and pollution prevention using the EnviroScape surface runoff model, groundwater simulator, hands-on exercises from Project WET, Project WILD, and Project Learning Tree and Creekside classrooms. Programs conducted will support the Arkansas State Frameworks required curriculum.

Measureable Goals:

- At least 5 stormwater education programs will be conducted for youth audiences

Responsible Party

The Northwest Arkansas Regional Planning and the University of Arkansas Cooperative Extension Service has contracted with the municipality to be responsible for the development and implementation of the public education efforts. A copy of that agreement is included in this plan.

Performance Standard:

Urban stormwater outreach/education programs will reach at least 8500 residents (50% of the urbanized area population).

Minimum Control Measure #1: 5 Year Implementation Schedule

BMP#	PERMIT YEAR				
	YR 19-20	YR 20-21	YR 21-22	YR 22-23	YR 23-24
PE1	Utilize education steering committee to plan outreach/education methods, measurable goals, and evaluate program impacts. The Stormwater Coordinator to continue to find ways to help educate the public and keep City staff educated and informed.				
	Continue meeting with the stormwater compliance group on a monthly basis to receive feedback on educational efforts and regional training needs				
PE2	Use multiple outreach methods reach the general public highlighting season-specific and media-driven stormwater management and pollution prevention topics				
PE3	<i>Program Theme & Target Pollutant:</i> Sediment & Erosion Control, LID, and Green Infrastructure	<i>Program Theme & Target Pollutant:</i> Landscape stormwater management and water conservation	<i>Program Theme & Target Pollutant:</i> Storm drain dumping and cooking oil disposal	<i>Program Theme & Target Pollutant:</i> Pet waste pick-up	<i>Program Theme & Target Pollutant:</i> Proper use, handling, and disposal of household hazardous wastes
	<i>Target Audiences:</i> Construction community and municipal staff (consulting engineers, project managers, contractors, developer, and MS4 personnel)	<i>Target Audiences:</i> Green Industry (landscape architects, and landscaping companies, and lawn care professionals) and homeowners	<i>Target Audience:</i> Current and future local restaurants	<i>Target Audience:</i> MS4 residents	<i>Target Audience:</i> Industrial and commercial businesses and households

	<i>Rationale:</i> Conducting multi-state erosion control conference and EPA Green infrastructure Workshop in NWA provides national training opportunities to local construction community and stormwater personnel	<i>Rationale:</i> Green Industry needs to understand and work with stormwater as a resource (rain barrels, cisterns, rain gardens and using native plants), instead of a liability	<i>Rationale:</i> <i>With increased local restaurants. The City must be diligent in making sure all businesses are informed and educated about proper disposal and the impact on the environment.</i>	<i>Rationale:</i> Recent newsletters, displays and presentations have revealed an ignorance of the volume and impact of pet waste pollutants on urban stormwater quality	<i>Rationale:</i> Misuse and improper disposal (in sink, toilet, storm drain, and ditch) continue to be a source of stormwater pollution
PE4	Conduct hands-on activities with youth through school enrichment, library, and camp programs				

**B. Minimum Control Measure #2:
 Public Involvement/Participation**

Permit Requirements: The permittee must, at a minimum, comply with State and local public notice requirements when implementing a public involvement/participation program.

Decision Process

The City of Centerton participates in monthly meetings of the NWA Stormwater Compliance Group and has representation on the NWA Regional Stormwater Education Steering Committee. We also have representation on the Stormwater Education Steering committee (public membership comprised of diverse backgrounds/interests) convenes at least once each year to review and evaluate program accomplishments and plan next steps. Both groups provide the localized input used to identify critical stormwater issues and target audiences and program methods and public relations strategies.

Applicable City of Centerton BMPs

Public Involvement (PI):

PI#1

Engage Residents in Stormwater Policy Development

Input from both the MS4 Stormwater Compliance Group and Education Steering Committee guides the emphases of electronic and printed educational materials. Once topics have been identified,

fact sheets, podcasts, e-learning modules, website content, newsletters, press releases, and PSAs will be developed, adapted, and/or gathered for distribution at public meetings, in support of presentations, and with educational displays. Information will be included through multiple outlets (website, newsletters, press releases, etc.) to encourage public input/involvement as MS4 stormwater management policy evolves. (This item to be tracked and documented within PE#1)

Measureable Goals:

- The number of educational/announcements materials distributed will be documented. (see PE#1)
- MS4 Stormwater Compliance Group and Education Steering Committee meetings attendance will be documented. (see PE#1)

PI#2

Train and Utilize Volunteer Educators

“Train-the-trainer” processes will be used to engage public volunteers and educators in teaching stormwater and pollution prevention (e.g. Benton and Washington County Master Gardeners, Master Naturalists, LakeSmart Leaders, etc.)

Measureable Goals:

- At least 1 train-the-trainer program will be conducted.

PI#3

Conduct Public Participation/Involvement Events

Citizen and youth groups will participate in public involvement events (litter pick up, establishing demonstration rain gardens, planting riparian vegetation, stenciling storm drain inlets, etc.).

Measureable Goals:

- At least 1 public participation event will be coordinated.

Responsible Parties

The jurisdiction is responsible for the development and implementation of the public involvement and participation efforts, utilizing the services of the University of Arkansas Cooperative Extension Service (contracted through the Northwest Arkansas Regional Planning Commission).

Performance Standard

At least 5 public participation and involvement activities will be conducted.

Minimum Control Measure #2: Public Involvement and Participation

BMP#	PERMIT YEAR				
	YR 19-20	YR 20-21	YR 21-22	YR 22-23	YR 23-24
PI1	Utilize education steering committee to plan outreach/education methods, measurable goals, and evaluate program impacts. Identify and implement public involvement activities in implementing Stormwater Policies, implementation actions and BMPs.				
	Continue meeting with the stormwater compliance group on a monthly basis to receive feedback on educational efforts and regional training needs				
PI2	Incorporate stormwater pollution prevention into annual Master Gardener training and use trained volunteers for further public outreach, education, and involvement programs (PE2 and PI2)				
PI3	<i>Program Theme:</i> Use volunteers to plant native tree seedlings to enhance urban riparian buffers. Offer free trees to help support local citizens and help stabilize water banks.	<i>Program Theme:</i> Engage Master Gardeners to help conduct rain barrel workshops and low-input landscaping programs	<i>Program Theme:</i> Coordinate citizen volunteers for storm drain stenciling	<i>Program Theme:</i> Partner with the Beaver Water District to conduct citizen-based water quality monitoring	<i>Program Theme:</i> Partner with the Illinois River Watershed Partnership stream clean-ups
	<i>Target Audiences:</i> Urban creekside landowners and local citizens.	<i>Target Audiences:</i> Urban homeowners	<i>Target Audience:</i> General public and High School art students. One has been awarded and installed. Three more planned in upcoming years.	<i>Target Audience:</i> Builder/contractor associations, MS4 residents.	<i>Target Audience:</i> Industrial and commercial businesses and youth organizations

	<p><i>Rationale:</i></p> <p>Support green infrastructure educational emphasis promoting urban greenways for stormwater management. It attempts to slow down localized erosion.</p>	<p><i>Rationale:</i></p> <p>Master Gardeners have participated in rain barrel workshops and demonstration rain garden projects and are committed to volunteer hours sharing their expertise</p>	<p><i>Rationale:</i></p> <p>Storm drain stenciling continues to support the “storm drain dumping” educational priority from 2012. It not only beautifies storm drains, it involves our local high school art students.</p>	<p><i>Rationale:</i></p> <p>Connects construction runoff, over-fertilization, and pet waste with stormwater turbidity, nutrients and bacteria</p>	<p><i>Rationale:</i></p> <p>Improper containment and disposal of trash continues to be a source of stormwater pollution</p>
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**C. Minimum Control Measure #3:
 Illicit Discharges Detection and Elimination**

Permit Requirements: The permittee must:

1. Develop, implement and enforce a program to detect and eliminate illicit discharges [as defined in 40 CFR §122.26(b)(2)] into the permittee’s small MS4;
2. Develop a storm sewer system map, showing the location of all outfalls and the names and location of all waters of the state that receive discharges from those outfalls;
3. To the extent allowable under State or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into the permittee’s storm sewer system and implement appropriate enforcement procedures and actions. Possible sanctions include non-monetary penalties (such as stop work orders), fines, bonding requirements, and/or permit denials for non-compliance.
4. Develop and implement a program to detect and address non-storm water discharges, including illegal dumping, to the permittee’s system;
5. Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste; and
6. Address the following categories of non-stormwater discharges or flows (illicit discharges) if the permittee identifies them as significant contributors of pollutants to the permittee’s small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR §35.2005(20)), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, de-chlorinated swimming pool discharges, and street wash water. Discharges or flows from fire fighting activities are excluded from the effective prohibition.
7. The permittee must also develop a list of other similar occasional incidental non-storm water discharges (e.g. non-commercial or charity car washes) that will not be addressed

as illicit discharges. These non-storm water 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 have 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 storm water management program any local controls or conditions placed on the discharges. The permittee must include a provision prohibiting any individual non-storm water discharge that is determined to be contributing substantial amounts of pollutants to the permittee's MS4.

8. The permittee must develop a process to respond to and document complaints relating to illicit discharges.

Applicable City of Centerton BMPs

Illicit Discharge Detection and Elimination (IDDE):

IDDE1 -- Illicit Discharges Reporting and Tracking System

IDDE2 -- Illicit Discharges Response and Enforcement

IDDE3 – Storm sewer Inventory and Mapping

IDDE4 -- Citywide Illicit Discharge Detection and Elimination

IDDE5 -- Non-Stormwater Discharge Assessment

IDDE1 Illicit Discharges Reporting and Tracking System

- Maintain current ordinances and develop or change the ordinances in accordance with industry standards.
- City Staff to report any concerns observed while completing their daily responsibilities
- Public Reports or complaints phoned or emailed in to the City
- All reports are documented and a file created for investigation and resolution.

Measureable Goals:

- Compile ordinance for review and include in this SWMP
- Continued Development of current programs in place.
- Create standard forms and procedures

IDDE2 Illicit Discharges Response and Enforcement

- Investigation of all reports is implemented based on priority.
- Investigation includes notification to responsible party and plan of resolution.

- Report and investigative responses are filed.
- Severe incidents will be reported to the appropriate state or federal agency.

Measureable Goals:

- Number of complaints received and investigated
- Number of enforcement actions taken

IDDE3 Storm Sewer Inventory and Mapping

- All outfall mapping is complete, new outfalls added when completed.
- Inventory mapping of street, inlets, piping and tie-ins is scheduled within the five year plan.

Measureable Goals:

- Storm sewer outfall map completed and updated as needed
- Complete mapping of the storm sewer system

IDDE4 Citywide Illicit Discharge Detection and Elimination

- Detection
 - City Staff to report any concerns observed while completing their daily responsibilities
 - Public reports or complaints phoned in to City
 - All reports are documented and a file created for investigation and resolution.
- Elimination
 - Implemented through Public education BMPs such as Clean Water In to Storm Curb Drain and Door Hangers.
 - Education of City staff and area businesses.

Measureable Goals:

- Number of outfalls dry-weather screened.
- Number of dry-weather flows identified.

IDDE5 Non-Stormwater Discharge Assessment

- City to assess discharges once identified.
- City to determine if discharge is detrimental to storm water system
- Appropriate ordinances and management will be created to regulate the impacts.

Measureable Goals:

- Schedule for elimination of illicit connections.

Responsible Parties

Planning Department.

Performance Standard

The successful implementation of a tracking and elimination program that includes complete mapping of the storm sewer system, standard forms and procedures, and the ability to track progress of events such as screenings, inspections, and enforcement

**Minimum Control Measure #3:
 5 Year Implementation Schedule**

BMP#	PERMIT YEAR				
	YR 19-20	YR 20-21	YR 21-22	YR 22-23	YR 23-24
IDDE1	Publish and promote phone number, and document calls received each year. Develop tracking program	Implement program improvements as warranted.	Monitor and revise as necessary	Monitor and revise as necessary	Monitor and revise as necessary
IDDE2	Implement protocols for responding to complaints annually, and maintaining complaint and enforcement data base.	Monitor and revise as necessary	Monitor and revise as necessary	Monitor and revise as necessary	Monitor and revise as necessary
IDDE3	Conduct dry weather inspection to identify and map existing storm sewer infrastructure. And update the storm sewer outfall map as needed. Approximately 90% of City Area	Conduct dry weather inspection to identify and map existing storm sewer infrastructure. And update the storm sewer outfall map as needed. Approximately 90%-100% of City Area per permit year.			

IDDE4	Conduct dry inspections of existing outfalls, covering 100% of the total number.	Conduct dry inspections of existing outfalls, covering an additional 100% each year until all are inspected by the end of the permit.			
	Identify and inspect new outfalls as they are constructed or found.	Identify and inspect new outfalls as they are constructed or found.			
IDDE5	Add new inlets & outfalls to previously developed maps.	Add new outfalls to previously developed paper maps.			
	Continued monitoring and developing current system in place.	Monitor and revise as necessary	Monitor and revise as necessary	Monitor and revise as necessary	Monitor and revise as necessary

**D. Minimum Control Measure #4:
Construction Site Stormwater Runoff Control**

Permit Requirements: The permittee must develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to the permittee’s small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of stormwater discharges from construction activity disturbing less than one acre must be included in the permittee’s 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:

1. Grading Permit 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;
2. Requirements for construction site operators to implement appropriate erosion and sediment control Best Management Practices;
3. Requirements for construction site operators to prevent or control waste that may cause adverse impacts to water quality such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site;
4. Procedures for site plan review and land division that incorporate measures to prevent or control potential water quality impacts;
5. Procedures for receipt and consideration of information submitted by the public; and
6. Procedures for site inspection and enforcement of control measures.

Applicable City of Centerton BMPs

Construction Site Waste (CSW):

CSW1 -- Stormwater Drainage Ordinance

CSW2 -- Erosion and Sediment Control Regulations

CSW3 -- Inspections and Enforcement

CSW1 Stormwater Drainage Ordinance

- Continued development of ‘Stormwater Management Manual’ - Stormwater Discharges from Construction Activities details the cities mechanism used to require erosion and sediment controls at all construction and residential sites.

Measureable Goals:

- Continued education in the related field. Working with surrounding cities for best applied practices.
- Enforcement shall be overseen by City’s MS4 Coordinator or Public Works Director.
- Continued development of City’s grading permit process.

CSW2 Erosion and Sediment Control Regulations

- Ordinances’ concerning Stormwater Runoff is in place to require new developments to follow good engineering practices with regard to stormwater and drainage.
- Prior to construction, all projects are reviewed by City staff for compliance with Ordinances, BMPs are to be installed and a preconstruction meeting is held to discuss maintenance of BMP’s during construction.
- Specific requirements for construction site operators are addressed in Ordinances and are shown on the erosion control plan which is required by Ordinance. Erosion and sediment control are shown on the erosion control plan as well as measure to control waste. Such waste includes discarded building materials, concrete truck washouts, chemicals, litter, and sanitary waste.

Measureable Goals:

- Number of applicable sites in the MS4 jurisdiction.
- Number of pre-construction site plan reviews preformed.

CSW3 Inspections and Enforcement

- Adoption by Ordinance of ‘Stormwater Management Manual’ - Stormwater Discharges from Construction is the cities mechanism used to enforce compliance with erosion and sediment control.

All Construction site will be inspected on a monthly basis.

- Ordinance review to be completed - Stormwater Discharges from Construction is the cities mechanism to sanction non-compliance of the erosion and sediment control provisions.
- Any reports of non-compliance of BMPs on any construction site within the City are received by the planning department and are dealt with in a timely manner. The reports and subsequent inspection reports will be tracked using the same tracking system as illicit discharges.

Measureable Goals:

- Ordinance creation for enforcement and sanctions.
- Number and frequency of site inspections.
- Number of violation letters issued.
- Number of enforcement actions taken.
- Number of complaints received and number followed up.

Responsible Parties

The City's Planning Department maintains the City Code of Ordinances related to construction and coordinates the Site Plan and Drainage Review process. The Planning Department staff and/or their designated representative are responsible for implementation and inspection of approved land alteration and development projects for overall development criteria as well as erosion and sediment control and construction site runoff controls. Enforcement of these areas of the City's Codes is conducted in coordination with the Office of the City Attorney if necessary.

Performance Standard

The successful creation and implementation of an ordinance detailing the permitting, inspection and enforcement of construction site stormwater runoff control measures.

**Minimum Control Measure #4:
 5 Year Implementation Schedule**

BMP#	PERMIT YEAR				
	YR 19-20	YR 20-21	YR 21-22	YR 22-23	YR 23-24
CSW1	Review existing Municipal Code and Development Code for erosion and construction site runoff control effectiveness.	Review, modify and enforce provisions as necessary.	Review, modify and enforce provisions as necessary.	Review, modify and enforce provisions as necessary.	Review, modify and enforce provisions as necessary.
CSW2	Review newly submitted projects to ensure compliance with drainage ordinance.	Track land drainage and alteration compliance and impacts to water quality on an annual basis.	Track land drainage and alteration compliance and impacts to water quality on an annual basis.	Evaluate Municipal Code and develop amendments as needed to achieve compliance with CWA and ESA.	Program review and assessment.
CSW3	Conduct inspections on an ongoing basis.	Implement existing Code authority on an ongoing basis.	Review and amend the Code as appropriate.	Review and amend the Code as appropriate.	

**E. Minimum Control Measure #5:
Post-Construction Stormwater Management in
New Development and Redevelopment**

Permit Requirements: The permittee must:

1. Develop, implement, and enforce a program to ensure reduction of pollutants in storm water runoff to the maximum extent practicable (MEP) from new development and redevelopment projects that disturb one acre or more, or less than one acre if they are part of a larger common plan of development or sale, and discharge into the permittee's small MS4. The permittee's program must ensure that controls are in place that would prevent or minimize water quality impacts.
2. Develop and implement strategies that include a combination of structural or non-structural BMPs appropriate for the permittee's community.
3. 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.
4. Ensure adequate long-term operation and maintenance of BMPs; and ensure adequate enforcement of ordinance or alternative regulatory program.

Applicable City of Centerton BMPs

Development Standards (DS):

DS1 -- City Code of Ordinances and BMP Manual

DS2 -- Post Construction Stormwater System Maintenance Inspections and Compliance

DS3 -- LID

DS1 City Code of Ordinances and BMP Manual

- The City will conduct a review of ordinances to address post-construction runoff from new developments and redevelopments such that pollutants from stormwater runoff are reduced to the maximum extent practicable, in partial compliance with the requirements of this Minimum Control Measure.
- Non-structural BMP's in the program include Title 14 Zoning, of the Centerton Municipal Code
- Structural BMP's for post construction runoff have not been incorporated into the city code. A code review will be conducted.

Measureable Goals:

- Code review to include post construction runoff control

DS2 Post Construction Stormwater System Maintenance Inspections and Compliance

- Provides for the development of a long-term inspection and enforcement program, which is still needed to fulfill all the requirements noted above. This program will be tracked with the illicit discharge system

Measureable Goals:

- Code review to include post construction Stormwater system maintenance inspections and compliance

DS3 LID

- City will conduct a review of Ordinances

Measureable Goals:

- Code review to include possible LID ordinances

Responsible Parties

The City's Street Department and MS4 program maintains the City Code of Ordinances related to construction and coordinates the Site Plan and Drainage Review process.

**Minimum Control Measure #5:
 5 Year Implementation Schedule**

BMP#	PERMIT YEAR				
	YR 19-20	YR 20-21	YR 21-22	YR 22-23	YR 23-24
DS1	Review Codes and propose amendments as appropriate. Seek City Council approval & adoption of amendments. Review Drainage Ordinance and BMP Manual and amend as needed to reflect Best Management Practices.	Continue enforcing existing Codes/ Drainage Ordinance and monitor/analyze effectiveness at achieving BMPs that comply with pollutant reduction MEP requirement and update as needed.	Continue enforcing existing Codes/ Drainage Ordinance and monitor/analyze effectiveness at achieving BMPs that comply with pollutant reduction MEP requirement and update as needed.	Continue enforcing existing Codes/ Drainage Ordinance and monitor/analyze effectiveness at achieving BMPs that comply with pollutant reduction MEP requirement and update as needed.	Continue enforcing existing Codes/ Drainage Ordinance and monitor/analyze effectiveness at achieving BMPs that comply with pollutant reduction MEP requirement and update as needed.
DS2	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.

DS3	Begin reviewing for LID impediments	Review for LID impediments	Review for LID impediments	Include efforts to identify and remove impediments for LID on report	Monitor and revise as necessary
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**F. Minimum Control Measure #6:
 Pollution Prevention / Good Housekeeping for Municipal Operations**

Permit Requirements: The permittee must:

1. 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.
2. Using training materials that are available from the ADEQ, EPA, or other organizations, the permittee’s program must include employee training to prevent and reduce stormwater pollution from activities including, but not limited to, park and open space maintenance, fleet and building maintenance, new municipal facility construction and related land disturbances, design and construction of street and storm drain systems, and stormwater system maintenance.

Applicable City of Centerton BMPs

Operation and Maintenance (OM):

OM1 -- Operation and maintenance program

OM2 -- Training Program

OM1 Operation and maintenance program

- The city will develop and implement an operation and maintenance program. The Program will include a survey of facilities owned and operated by the city. Stormwater BMPs will be incorporated into these facilities if needed. The program will also include written procedures for municipal operations and procedures.
- All city owned facilities will be inspected at least annually. These inspections will be done by city’s stormwater coordinator, code enforcement or public works inspector. All inspections will be signed by department head of inspected facility.

Measureable Goals:

- List of Municipal Facilities
- Development of BMP's for Facilities as needed
- Procedures written for operations and procedures

OM2 Training Program

- As part of the contract with Northwest Arkansas Regional Planning and the University of Arkansas Cooperative Extension Service, Cooperative Extension service employees will provide training at least once a year to MS4s. The training will use materials provided by ExCal Visuals and others that include information on construction sites, park & open space maintenance, and fleet & building maintenance. 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 “eye and ears” of the city and that they should learn to recognize signs of illicit discharge and how to properly report these instances. Recommendations from the employees are also addressed during the regional stormwater compliance committee’s monthly meetings, and these recommendations help to shape the educational outreach messages.

Measureable Goals:

- Summary of employee training program(s) implemented with the number off employees that attended.

Responsible Departments

- Planning Department
- Street Department
- Police
- Fire
- University of Arkansas Cooperative Extension

**Minimum Control Measure #5:
 5 Year Implementation Schedule**

BMP#	PERMIT YEAR				
	YR 19-20	YR 20-21	YR 21-22	YR 22-23	YR 23-24
OM1	Compile list of facilities and develop BMP's as needed. Facility inspections performed annually	Write up Procedures for operations and maintenance. Facility inspections performed annually	Write up Procedures for operations and maintenance. Facility inspections performed annually	Write up Procedures for operations and maintenance. Facility inspections performed annually	Write up Procedures for operations and maintenance. Facility inspections performed annually
OM2	Conduct annual training for employees.	Conduct training as necessary for new hires.	Conduct annual training for employees.	Conduct training as necessary for new hires.	Conduct annual training for employees.

9. Appendix