

ARR040000 Recertification Notice of Intent for Regulated Small Municipal Separate Storm Sewer Systems (MS4s) General Permit

version 1.17

(Submission #: HQ4-0WVW-RS764, version 1)

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Details

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Submission Reason Renewal

Form Input

Permit Information

Recertification Instruction

Please review all fields carefully for typos or inaccurate information. If the information in the corresponding field is incorrect, please update the corresponding field with the correct information by typing over the existing information.

If the Permittee (Legal Name) changes, you will need to also submit a permit transfer form.

The update SWMP must be submitted in accordance with the permit.

Permittee (Legal Name)

The permittee means any person (an individual, association, partnership, corporation, municipality, state, or federal agency) who has the primary management and ultimate decision-making responsibility over the operation of a facility or activity.

Permit No.
ARR040033

AFIN
88-00856

Permittee (Legal Name)
City of Jonesboro

Site Contact Person

Contact Person Information

First Name **Last Name**
Craig Light

Title
City Engineer

Phone Type **Number** **Extension**
Business 870-932-2438

Email
clight@jonesboro.org

Urbanized/Core Areas

Jonesboro

Receiving Stream

Cache, St. Francis

Is this MS4 identified on the list of the EPA approved Total Maximum Daily Loads (TMDL)?

Yes

From our database, the Responsible Official are listed in the following**Responsible Official First Name**

Harold

Responsible Official Last Name

Copenhaver

Responsible Official Title

Mayor

Did the Responsible Official Change?

No

Please provide the Responsible Official Email Address

hcopenhaver@jonesboro.org

From our database, the Cognizant Official are listed in the following**Cognizant Official First Name**

Craig

Cognizant Official Last Name

Light

Cognizant Official Title

City Engineer

Did the Cognizant Official Change?

No

Please provide the Cognizant Official Email Address

clight@jonesboro.org

Mailing Address

P.O. Box 1845

Jonesboro, AR 72403-1845

Is the invoice address the same as the mailing address?

Yes

Attach Updated SWMP and Updated Storm Sewer System Map

SWMP 2025-2030.pdf - 05/30/2024 03:34 PM

Comment

NONE PROVIDED

Stormwater Management Plan



Municipal Separate Storm Sewer System (MS4) Permit ARR 040033

2025-2029

City of Jonesboro ▪ Engineering Department

P.O. Box 1845 ▪ 300 S. Church St. ▪ Jonesboro, AR 72403 ▪ 870.932.2438

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1.0 Introduction

This Storm Water Management Plan (SWMP) is required under the U.S. Environmental Protection Agency (EPA) Phase II storm water regulations, promulgated under the Federal Clean Water Act. These regulations require the City of Jonesboro to obtain permit authorization to discharge stormwater under the National Pollutant Discharge Elimination System (NPDES). The permit covers storm water discharges associated with the City of Jonesboro Municipal Separate Storm Sewer System (MS4) and requires the City of Jonesboro to develop a SWMP and report annually on the progress.

The Storm Water Phase II Rule extended the coverage of the NPDES storm water program to “small” MS4s and addresses storm water discharges from areas located within the boundaries of an urbanized area serving a population of 100,000 people or less.

Polluted storm water runoff can be transported to MS4s and ultimately discharged into local rivers and streams without treatment. EPA’s Storm Water Phase II Rule establishes an MS4 SWMP that is intended to improve the Nation’s waterways by reducing the quantity of pollutants that stormwater picks up and carries into storm sewer systems during storm events.

Common pollutants include oil and grease from roadways, pesticides from lawns, sediment from construction sites, and carelessly discarded trash, such as cigarette butts, paper wrappers, and plastic bottles. When deposited into nearby waterways through MS4 discharges, these pollutants can impair the waterways, thereby discouraging recreational use of the resource, contaminating drinking water supplies, and interfering with the habitat for fish, other aquatic organisms, and wildlife.

The Arkansas Department of Environmental Quality (ADEQ), in accordance with the provisions of the Arkansas Water and Air Pollution Control Act and the Clean Water Act, regulate small MS4s located within the State of Arkansas. ADEQ authorizes discharges to receiving waters of the United States under a National Pollutant Discharge Elimination System (NPDES) permit number ARR040000.

Program requirements for the City:

- Have National Pollutant Discharge Elimination System (NPDES) permit coverage under general permit number ARR040000.
- Develop a stormwater management program, which includes the six minimum control measures.
- The stormwater public education and outreach program shall include more than one mechanism and target at least five different stormwater themes or messages over the permit term.
- At a minimum, at least one theme or message shall be targeted to the land development community.
- The stormwater public education and outreach program shall reach at least 50% of the population over the permit term.
- Implement the stormwater management program using appropriate storm water management controls, or "best management practices" (BMPs).
- Develop measurable goals for the program and report on them annually.

The ultimate objective of this program is to protect water quality. Jonesboro recognizes the need and responsibility to implement a program that achieves the requirements mandated by NPDES Phase II Final Rule. However, due to limited assets and funding the city may at times not be able to meet all the annual goals set forth in this program due to unforeseen issues and budget restraints from other departments of the city.

The six (6) Minimum Control Measures:

1. Public Education and Outreach

Distributing educational materials and performing outreach to inform citizens about the impacts polluted stormwater runoff discharges can have on water quality.

2. Public Involvement/Participation

Providing opportunities for citizens to participate in program development and implementation, including effectively publicizing public hearings and/or encouraging citizen representatives on a stormwater management panel.

3. Illicit Discharge Detection and Elimination

Implement and enforce a program to detect and eliminate illicit discharges into the storm sewer system.

Maintain and update the storm sewer 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.

4. Construction Site Storm Water Runoff Control

Enforce the program to reduce pollutants in any storm water runoff from construction activities that result in a land disturbance of greater than or equal to one acre, including construction activity disturbing less than one acre that is part of a larger common plan of development or sale.

5. Post-Construction Storm Water Management in New Development & Redevelopment

Developing, Implementing and enforcing the 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. The program must ensure that controls are in place that would prevent or minimize water quality impacts, which could include a combination of structural and/or non-structural controls.

6. Pollution Prevention/Good Housekeeping - Municipal Operations

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. The program to include employee training to prevent and reduce stormwater pollution from activities such as fleet and building maintenance, regular street sweeping, reduction in the use of fertilizers and street salt, new construction or land disturbances, and storm water system maintenance.

2.0 Public Education and Outreach

The City of Jonesboro’s public education program is designed to promote, publicize, and facilitate education of encouraging the public to reduce the discharge of pollutants from entering our stormwater management system. The “public” is defined as all persons who potentially could affect the quality of storm water discharges, including, but not limited to, agricultural operations, businesses, construction operations, industries, residents, pet owners, public employees, etc. The BMPs outlined in this section have a high potential for reaching their target audience and were chosen to reach both the public at large as well as special interests groups that work and live within the city.

Best Management Practices (BMPs) are schedules of activities, prohibitions of practices, maintenance procedures, and other management practices designed to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw sewage. BMPs may include structural devices or nonstructural practices.

Minimum Control Measure Five Year Implementation Schedule

2025	2026	2027	2028	2029
Topic: Storm Drain Awareness	Topic: Yard & Garden Management	Topic: Litter/Trash Management	Topic: Construction Stormwater Management	Topic: Septic System/Pool Maintenance
Audience: General Public	Audience: Homeowners/Lawn Care Businesses	Audience: General Public	Audience: Land developers and homebuilders	Audience: General Public
Rationale: Anything that enters a storm drain is discharged directly into water bodies	Rationale: Improperly disposed of yard waste can clog drains	Rationale: Improper handling of litter/trash can allow it to enter storm drain impacting water quality	Rationale: The effects of sediment discharge from construction sites impact on stormwater quality.	Rationale: Malfunctioning septic systems, improper handling / disposal of pool chemicals and emptying chlorinated pool water can impact stormwater quality.

2.1 Stormwater Educational Materials

2.1.1 General Description

The City of Jonesboro will distribute booklets, pamphlets, fact sheets, and broadcast public service announcements with information on the impact of storm water discharges and the steps that the public can take to reduce pollutants in storm water runoff.

2.1.2 BMP Goals and Objectives

The main objective for distributing stormwater educational materials is to educate and inform the public of the city's Stormwater Management Program and ways to prevent storm water pollution. Educational materials will be distributed at special events, such as Earth Day, at public schools, by mail, by radio broadcast, through enforcement activities, and by request. The City will also air stormwater related information daily on local cable T.V. Channel 24, which reaches approximately 86% of Jonesboro's residents and businesses.

2.2 Website Information

2.2.1 General Description

The City of Jonesboro will maintain a website, <https://www.jonesboro.org/139/Engineering>, with information specifically on the city's MS4 program, and related Stormwater Management issues.

2.2.2 BMP Goals and Objectives

The main objective for providing a website under public outreach and education is to inform the public of all regulations, design procedures, and permit processes that the City of Jonesboro enforces to protect water quality and quantity. The website will also solicit public involvement and participation for any special event or meeting that will be scheduled at future times.

2.3 Youth Public Education and Outreach

2.3.1 General Description

The City of Jonesboro will coordinate with local schools in order to educate students on water pollution, its causes, and prevention techniques that affect the environment. Best management practices will also be demonstrated to show the steps that can be taken to help reduce the discharge of pollutants.

2.3.2 BMP Goals and Objectives

The main objective for youth public education and outreach is to educate students on the many sources of water pollution, how they affect water quality and the environment. The materials used will be pamphlets, slide presentations, movies, and/or an EnviroScape Watershed / Nonpoint source Model that graphically demonstrates stormwater runoff patterns. As funds permit, we will distribute promotional materials such as pencils, erasers, rulers, and bookmakers, bearing anti-pollution messages. The city's goal is to reach out to at least two (2) elementary or middle schools whose students live within the city limits yearly.

2.4 Land Development Education and Outreach

2.4.1 General Description

The City of Jonesboro will educate the local land development industry on all requirements of land development activities that impact stormwater. This program will target developers, builders, and engineers to engage their interest in new effective Best Management Practices and to improve their knowledge of stormwater management techniques and related issues.

2.4.2 BMP Goals and Objectives

The main objective for land development education and outreach is to educate the land development industry and related fields on all federal, state and local requirements that impact stormwater using slide presentations, videos, booklets, and handouts. The city's goal is to attend informal meetings with the Northeast Arkansas Homebuilders Association, local professional engineers, contractors, and / or other related people working in the construction industry yearly.

2.5 News Articles

2.5.1 General Description

The City of Jonesboro will strive to keep the overall public informed of the City's status and progress on drainage projects and storm water related issues and events through newspaper articles as well as television news interviews. Requests are routinely made of city staff to air and publish "hot topics" related to stormwater through local media sources.

2.5.2 BMP Goals and Objectives

The main objective for news article releases is to inform the public of storm water related issues and events. The local newspapers and television stations routinely conducts interviews, publish articles, report on current stormwater related projects, and upcoming meetings and events. In addition to these media publications, the City will use these media resources to announce and encourage community participation for all community involvement activities.

The City of Jonesboro Engineering Department is responsible for the overall management and implementation of all stormwater Public Education and Outreach activities. Information such as activity surveys will be gathered and evaluated for all applicable BMPs. All data and recommendations collected will be used to improve program effectiveness. Implementation of existing BMPs will be modified, as needed, and measurable goals will be adjusted accordingly. The basis of any changes will be reported in subsequent annual reports.

3.0 Public Involvement and Participation

Public involvement and participation play a major role in achieving and implementing goals of a community's SWMP. Community education and involvement allows for broader public support, and a broader base of expertise and economic benefit. In addition, it provides a conduit to other programs, as citizens involved in the stormwater program development process provide important cross-connections and relationships with other community and government programs. The Public Involvement and Participation BMPs outlined below were chosen to enable the public at large to participate in city policy development and assist in making the City of Jonesboro a safe and environmental friendly community.

3.1 Storm Water Website & Telephone Hotline

3.1.1 General Description

The City of Jonesboro will maintain a website that will provide users the ability to notify city engineering staff of any stormwater related issues at any address or parcel of land within the city limits. The website address is <https://www.jonesboro.org/139/Engineering>. The Engineering Department will maintain a dedicated telephone line that allows the public to address any complaints and/or concerns pertaining to stormwater management. All telephone complaints and concerns may be placed at 870-932-2438.

3.1.2 BMP Goals and Objectives

The main objective for providing a stormwater website and telephone hotline is to allow the public to report any non-emergency pollution issues and to enable the public to view the City of Jonesboro's vast and diverse stormwater management infrastructure.

3.2 Ad hoc Citizen Involvement

3.2.1 General Description

The City of Jonesboro will encourage youth groups, neighborhood associations, local environmental groups to organize, monitor, meet, report, and conduct special trash cleanup projects or other related activities that will protect or cleanup stormwater pollution. In addition, the city will host public meetings to allow citizens to discuss various viewpoints and provide input concerning appropriate storm water management policies and BMPs.

3.2.2 BMP Goals and Objectives

The main objective for ad hoc citizen involvement is to coordinate and share resources between the city and citizen involvement groups that want to promote a cleaner and safer environment. The city's goal is to provide the information and support to local groups to assist in projects and stormwater related activities.

3.3 Storm Drain Identification

3.3.1 General Description

The City will utilize a storm drain cover design for the marking of the city's storm drains. The City of Jonesboro Stormwater cover with the message "No Dumping, All Water Flows to Creek" will be utilized in construction projects throughout the city.

3.3.2 BMP Goals and Objectives

The main objective for using storm drain cover identification program is to encourage participation from all citizens in protecting and promoting a clean environment and to get involved with making the community a cleaner and safer place to live. The city's goal is to ensure that the storm drain covers are utilized during construction activities in all subdivisions.

3.4 Public Stormwater Management Board Meetings

3.4.1 General Description

The City of Jonesboro Stormwater Management Board (SWMB) will hold bi-monthly meetings to review storm water policy and implementation of its program and encourage involvement from the public on future policy changes. The SWMB is composed of local professional, contractors, and members of the public interested in stormwater related issues.

3.4.2 BMP Goals and Objectives

The main goal for forming a public stormwater management board and holding public stormwater meetings is to involve the public with current stormwater issues and allow public input and recommendations on city policy changes. The SWMB meets the third Wednesday of every odd month at 300 S. Church St., Jonesboro, Arkansas 72401.

The City of Jonesboro Engineering Department is responsible for the overall management and implementation of all Public Involvement and Participation activities listed above. Information gathered from each of the above activities will be reviewed and summarized in the city's annual report. Implementation of existing BMPs will be modified, as needed, and measurable goals will be adjusted as appropriate and the basis of any changes will be reported in subsequent annual reports. Feedback from the SWMB meetings and other sources will be used to improve implementation of all six minimum control measures.

4.0 Illicit Discharge Detection and Elimination

The term “illicit discharge” is defined in EPA’s Phase II storm water regulations as “any discharge to a municipal separate storm sewer that is not composed entirely of storm water, except discharges pursuant to an NPDES permit and discharges resulting from fire-fighting activities.” Illicit discharges can be categorized as either direct or indirect.

Examples of direct illicit discharges:

- sanitary wastewater piping that is directly connected from a home to the storm sewer
- materials (e.g., used motor oil) that have been dumped illegally into a storm drain catch basin
- a shop floor drain that is connected to the storm sewer
- a cross-connection between the municipal sewer and storm sewer systems.

Examples of indirect illicit discharges:

- an old and damaged sanitary sewer line that is leaking fluids into a cracked storm sewer line
- a failing septic system that is leaking into a cracked storm sewer line or causing surface discharge into the storm sewer.

The result of illicit discharges is contributor of high levels of pollutants, including heavy metals, toxics, oil and grease, solvents, nutrients, viruses and bacteria to receiving water bodies. Pollutant levels from these illicit discharges have been verified in published studies to be high enough to significantly degrade receiving water quality and threaten aquatic, wildlife and human health. To prevent and detect possible illicit discharges the City of Jonesboro has implemented several BMPs, which are described below.

4.1 Illicit Discharge Detection and Elimination

4.1.1 General Description

The City of Jonesboro will implement and enforce a program to detect and eliminate illicit discharges into its MS4 by monitoring construction activity and performing dry weather screening of outfalls. The City performs random inspections on new development and remodeling activities to identify possible illicit connections to the storm sewer system and has adopted an ordinance that prohibits illicit discharges and connections to its stormwater management system. The City of Jonesboro will notify ADEQ of any violations that are discovered to insure compliance with its SWMP.

4.1.2 Procedures for Locating Priority Areas

The City of Jonesboro will train employees on the recognition and reporting of suspected problems, perform periodic visual screening during dry weather, perform follow-up inspections of suspect outfalls and require evaluation of

samples from suspect outfalls and discharges from leaking septic systems. See Appendix D for Illicit Discharge Reporting & Response Charts.

4.1.3 BMP Goals and Objectives

The main objective for the illicit discharge detection program is to detect and eliminate non-stormwater discharges from entering the city's storm sewer system. This program will use volunteer monitoring and other city and community resources to identify suspicious discharges. In addition, during the dry weather periods, inspections of outfalls will be made. The city's goal will be to inspect all identified outfalls at least yearly.

4.2 **GIS Stormwater Management System Mapping**

4.2.1 General Description

The City of Jonesboro will maintain a GIS map of its stormwater management system showing all drainage channels, drainage pipes, drainage structures, and outfall locations. All GIS data was gathered by a local engineering and surveying firm, Associated Engineering and Testing, through grants made available by the Arkansas State Highway and Transportation Department.

4.2.2 BMP Goals and Objectives

The main objective for building a stormwater management system map is to help identify sources of pollution and where cleanup needs to occur if a contaminant enters our stormwater management system. The city's goal is to continuously update this map, by using as-built plan submittals supplied from local professionals that include any infrastructure that is located within city easements and/or street rights-of way.

4.3 **Non-Stormwater Discharges and Illegal Dumping**

4.3.1 General Description

Illegal dumping is the disposal of waste in an unpermitted area, such as the back area of a yard, a stream bank, or some other off road area. It can also be the disposing of liquid wastes and trash down storm drains. The City has adopted an ordinance that prohibits the illegal dumping of any waste or non-stormwater discharges that will impair water quality and the environment. With assistance of the Stormwater Inspector and Code Enforcement Officers, the City of Jonesboro will monitor all city infrastructures and handle complaints that are made known from the public or turned in by other city staff.

4.3.2 BMP Goals and Objectives

The main objective for the non-stormwater discharges and illegal dumping program is to detect and eliminate illegal dumping, safeguard the public,

protect property, and prevent damage to the environment. High target areas such as ditches and other off road areas will be monitored regularly by Engineering Department inspectors and Street Department maintenance workers.

4.4 Non-Stormwater Discharges into Impaired Waters

4.4.1 General Description

The 303(d) impaired waters list is developed by ADEQ every two years under provisions of Section 303(d) of the Federal Clean Water Act. ADEQ assesses water quality monitoring data from numerous locations around the state and utilizes a comprehensive assessment methodology to determine which waters are not meeting their designated uses or water quality standards as listed in the Arkansas Water Quality Standards (Regulation 2 of the Arkansas Pollution Control and Ecology Commission). The City has three listed waterbodies on the 2016 303(d) Impaired Waters list, L'Anguille River (*Pathogens, Turbidity*), Big Creek (*Copper*) and Lost Creek (*Chloride*). Although the L'Anguille River starts outside of Jonesboro City Limits, approximately 4 square miles of the city drains into the 973 square mile L'Anguille Watershed. Lost Creek runs through northern Jonesboro and joins Big Creek at the city limits west of I-555. In compliance with NPDES permit requirements the City must include progress report on program implementation reducing the discharge of pollutants of concern.

4.4.2 BMP Goals and Objectives

Complying with the permit requirements the city will monitor the data collected by ADEQ through AquaView and investigate any abnormalities. ADEQ monitors Lost Creek, Station ID #WHI0172 on Lacy Drive approximately 1 mile from city limits. Big Creek only runs through Jonesboro starting at monitoring Station ID #WHI0196 on SR91/Dan Ave and running approximately 1.5 miles before ending west of I-555. A monitoring Station ID #WHI0026 located on Highway 226 and Big Creek Ditch outside of the city limits accounts for the approximately twelve square miles of the city that drains into the Bayou DeView Watershed. The city will report the findings on annual reports from the monitoring stations data. The City also continues outfall dry weather-screenings to assist in locating non-stormwater discharges and identifying the discharged material(s) if present.

The City of Jonesboro Engineering Department is responsible for the overall management and implementation of all Illicit Discharge and Elimination activities. However, the Engineering Department will coordinate with Code Enforcement, Building Inspections and Street Departments daily to ensure that illicit discharges are detected and eliminated. The effectiveness of each BMP will be gauged and evaluated regularly and adjusted, as needed, and any changes will be included in the subsequent annual reports.

5.0 Construction Site Storm Water Runoff Control

Construction site storm water runoff has been the target of the two-tiered regulatory system mandated by the EPA. Under the NPDES Phase I storm water program, operators of construction activities that disturb five (5) or more acres are required to obtain coverage under a Construction Storm Water Permit. Pursuant to the NPDES Final Phase II storm water program for MS4s, the minimum area of construction sites required to obtain coverage under the construction storm water permit was reduced to one (1) acre.

The City has an established process to obtain grading permits and to develop and implement Storm Water Pollution Prevention Plans (SWPPPs) for each eligible construction site. The City requires a copy of all ADEQ permits for construction activities in support of ADEQ's NPDES Phase II program, along with other submitted documents. Before and during construction, developers and builders are responsible for implementing the SWPPP and making changes as necessary to meet the requirements of the NPDES Phase II regulations. The City has implemented the below BMPS to control construction site stormwater runoff.

5.1 Erosion Control Manual

5.1.1 General Description

The City has developed and implemented an erosion control manual "Land Disturbance & Erosion and Sediment Control Standards" providing guidance to the proper installation and maintenance procedures for best management practices pertaining to erosion and sediment control.

5.1.2 BMP Goals and Objectives

The main objective for publishing an erosion control manual is to educate the construction industry on the proper installation and design of best management practices that will hopefully reduce erosion and prevent sediment from entering the City's stormwater management system.

5.2 Storm Water Drainage Design Manual

5.2.1 General Description

The City has developed and implemented Stormwater Regulations and a Storm Water Drainage Design Manual for guiding, regulating, and controlling the design, construction, use, and maintenance of any development or other activity that disturbs land within the City of Jonesboro. All regulations and design manuals may be viewed and downloaded at the following web-address, <https://www.jonesboro.org/139/Engineering>.

5.2.2 BMP Goals and Objectives

The main objective for publishing stormwater regulations and a stormwater drainage design manual is to ensure that all federal, state, and local water

quality and water quantity standards are properly regulated and to keep environmental impacts caused from construction activities to a minimum.

5.3 Inspections

5.3.1 General Description

The City has a full-time Stormwater Inspector who performs random inspections of construction sites to gauge overall compliance with the local stormwater regulations.

5.3.2 BMP Goals and Objectives

The main objective for having a full time stormwater inspector is to ensure that local land development activities stay in compliance with all federal, state and local programs and regulations. Inspections are made daily on random active construction sites and additional inspections are scheduled when the public calls in complaints or concerns.

The City of Jonesboro Engineering Department is responsible for the overall management and implementation of all Construction Site Stormwater Runoff Control activities. The information gathered from each of the activities will be reviewed and summarized in the City's annual report. Implementation of existing BMPs will be modified, as needed, and measurable goals will be adjusted as appropriate and the basis of any changes will be reported in subsequent annual reports.

6.0 Post-Construction Storm Water Management in New Development & Redevelopment

In areas undergoing new development or redevelopment, post-construction stormwater management is necessary because runoff from these areas has been shown to significantly impact receiving water bodies. Many studies indicate that planning and design for the minimization of pollutants in post-construction storm water discharges is the most cost-effective approach to storm water quality management.

There are generally two forms of substantial impacts of post-construction runoff. The first is caused by an increase in the type and quantity of pollutants in storm water runoff. As runoff flows over areas altered by development, it conveys harmful sediment, detrimental chemicals such as oil and grease, pesticides, heavy metals, and nutrients (e.g., nitrogen and phosphorus). These pollutants often become mixed with runoff and are carried to receiving waters, such as lakes, ponds, and streams. Once deposited, these pollutants can enter food chains through small aquatic life, eventually entering the tissues of fish and humans.

The second type of post-construction runoff impact occurs by increasing the quantity of water delivered to the water body during storms. Increased impervious surfaces interrupt the cycle of gradual percolation of water through vegetation and soil. Instead, water is collected from surfaces such as asphalt and concrete and routed to drainage systems where large volumes of runoff quickly flow to the nearest receiving water. The effects of this process include stream bank scouring and downstream flooding, which often lead to a loss of aquatic life and damage to property. Outlined below are the city's BMPs for Post-Construction Storm Water Management in New Development & Redevelopment.

6.1 Storm Water Drainage Design Manual

6.1.1 General Description

The City has developed and implemented Stormwater Regulations and a Storm Water Drainage Design Manual for guiding, regulating, and controlling the design, construction, use, and maintenance of any development or other activity that disturbs land within the City of Jonesboro. All regulations and design manuals may be viewed and downloaded at the following web-address; <https://www.jonesboro.org/139/Engineering> .

6.1.2 BMP Goals and Objectives

The main objective for publishing stormwater regulations and a stormwater drainage design manual is to ensure that all federal, state, and local water quality and water quantity standards are properly controlled and to keep environmental impacts caused from construction activities to a minimum.

6.2 Long-term Operation and Maintenance of Stormwater Management Facilities

6.2.1 General Description

The City will ensure the long-term operation and maintenance of stormwater management facilities that contribute to water quantity and quality through a Stormwater Management Facility Agreement.

6.2.2 BMP Goals and Objectives

The main goal for having a Stormwater Management Facility Agreement is to ensure that stormwater management facilities and BMPs appropriately function and are properly maintained to adapt to changing demands upon stormwater quantity and quality.

6.3 Inspections

6.3.1 General Description

The City has a full-time Stormwater Inspector who performs random inspections of construction sites to gauge overall compliance with the local stormwater regulations.

6.3.2 BMP Goals and Objectives

The main objective for having a full time stormwater inspector is to ensure structural developments from land development activities stay in compliance with all federal, state and local programs and regulations. Inspections made randomly on all post-construction stormwater management facilities to make sure they are functioning properly. Special inspections made in response to public complaints, concerns and other stormwater issues.

The City of Jonesboro Engineering Department is responsible for the overall management and implementation of all Post-Construction Storm Water Management in New Development & Redevelopment activities. Information gathered from each of the activities will be reviewed and summarized in the city's annual report. Implementation of existing BMPs will be modified as needed and measurable goals will be adjusted as appropriate and the basis of any changes will be reported in the next annual report.

6.4 Land Use Plan

6.4.1 General Description

The City has adopted by ordinance a Land Use Plan to regulate the development of land located within the authority of the city to guide long range planning.

6.4.2 BMP Goals and Objectives

The Land Use Plan which may include, but shall not be limited to:

- The reservation of open spaces
- The preservation of natural and historical features, sites and monuments
- The existing uses to be retained without change
- The existing uses proposed for change
- The areas proposed for new development

The plan may include areas proposed for redevelopment, rehabilitation, renewal and similar programs.

7.0 Pollution Prevention/Good Housekeeping for Municipal Operations

The Pollution Prevention/Good Housekeeping minimum control measure is a key element of the small MS4 Storm Water Management Program. This measure requires the small MS4 operator to examine and modify their own actions to help ensure a reduction in the amount and type of pollution that:

- Collects on streets, parking lots, open spaces, storage and vehicle maintenance areas and is discharged into local waterways; and
- Results from actions such as environmentally damaging land development and floodplain management practices or poor maintenance of storm sewer systems.

While this measure is meant primarily to accomplish the goal of improving or protecting the quality of receiving water by altering the performance of operations, it can also result in a cost savings for the City, since proper and timely maintenance of storm sewer systems can help avoid repair costs from damage caused from age and neglect. Below are BMPs the City has implemented for Pollution Prevention/Good Housekeeping for Municipal Operations.

7.1 Maintenance Program & Procedures Assessment

7.1.1 General Description

The City will implement an annual employee training program which addresses such areas as storm water management, pollution prevention, and pollution reduction from all municipal activities. All eligible employees will be taught through:

- 1) Posters, employee meetings, courses, and bulletin boards about storm water management, potential contaminant sources, and prevention of contamination in surface water runoff,
- 2) Field training programs that show areas of potential storm water contamination and associated pollutants, followed by a discussion of site-specific BMPs by trained personnel, and other agencies about storm water management at various levels of government.

7.1.2 BMP Goals and Objectives

All training programs are intended to help employees and staff realize how their work might impact our stormwater management systems. City staff and employees will work together to improve and/or make changes to existing operations to limit stormwater pollution.

7.2 PHF Application and Storage

7.2.1 General Description

The City of Jonesboro will implement BMPs to reduce the discharge of pollutants related to the storage and application of pesticides, herbicides, and

fertilizers (PHFs) applied in public right-of-ways and at municipal facilities. The City will use its public education program to promote the proper use, handling, storage, and disposal of PHFs. In addition, the City will apply only minimum PHF application rates on public property and right-of-ways and will study current municipal PHF usage to determine the effectiveness and feasibility of using alternatives to PHFs.

7.2.2 BMP Goals and Objectives

The main goal of the PHF application and storage program is to reduce pollutants associated with the application of pesticides, herbicides, and fertilizer.

7.3 Municipal Outdoor Operations

7.3.1 General Description

The City will promote environmental welfare in connection with its various outdoor operations including storm drain cleaning, street maintenance, facilities management, ditch maintenance, solid waste pick-up, and recycling programs. The City will maintain and promote an unobstructed storm drain system and prevent sediment from entering a stream to the maximum extent practicable. The City will minimize pollutants, including sediment, debris, trash, and road salt from entering surface waters by maintaining a street sweeping program. The City also provides trash, green waste, and recycling pickup services.

7.3.2 BMP Goals and Objectives

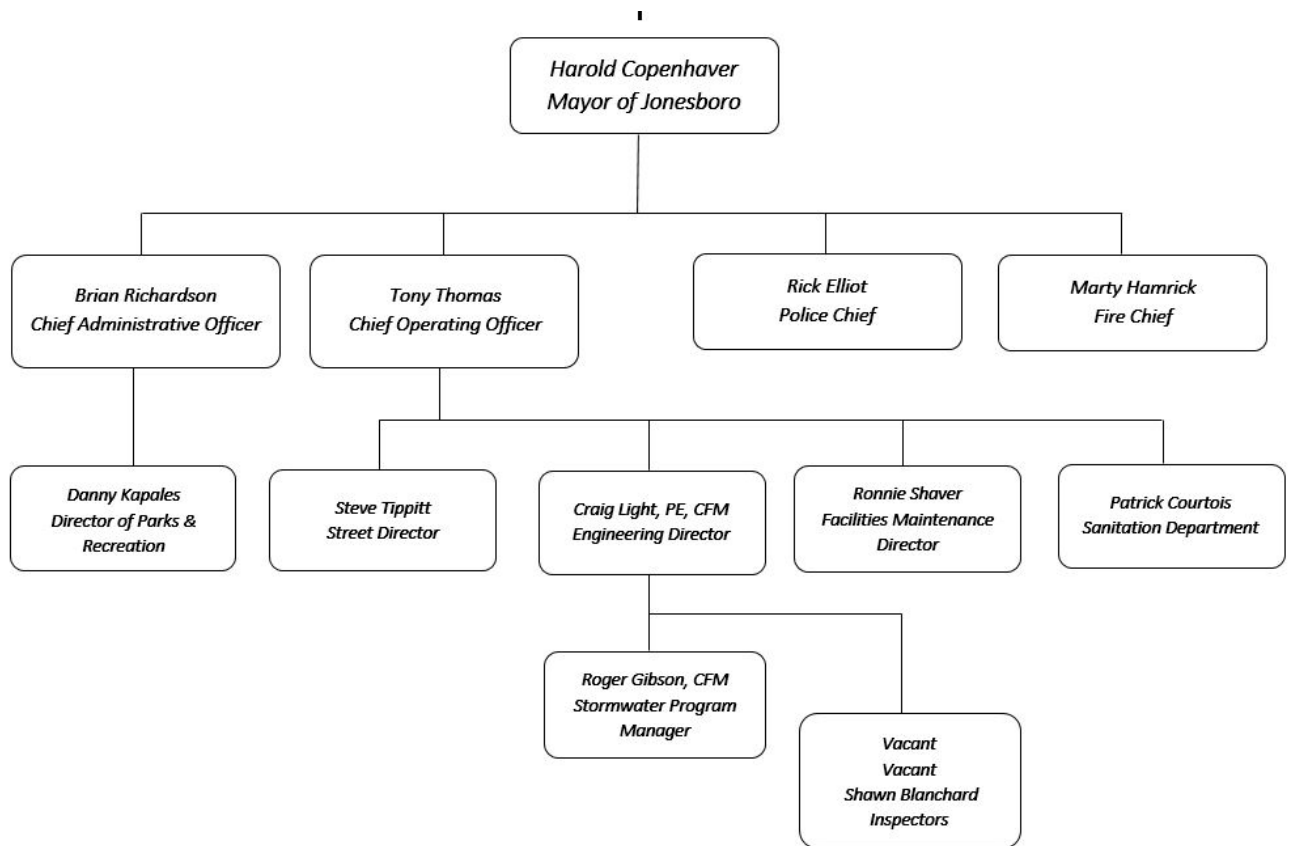
The main goal for providing outdoor operations is that they collect and remove significant quantities of pollutants that have the potential of entering storm sewer systems and harming the environment.

The City of Jonesboro Engineering Department is responsible for the overall management and implementation of all Pollution Prevention/Good Housekeeping for Municipal Operations activities listed. However, the Engineering Departments coordinates heavily with the supporting departments listed in Appendix B to carry out daily activities.

The City of Jonesboro will regularly evaluate both current conditions and BMP effectiveness and may change BMPs and measurable goals for each minimum control measure to achieve the objective of reducing the discharge of stormwater pollutants to maximum extent practical. The city will update this SWMP according to the procedures outlined in the Arkansas General Permit No. ARR040000.

8.0 Appendices

8.1 Appendix A – City Organization Chart



8.2 Appendix B – Supporting Departments and Resources

Fire Department

Spill prevention and response is a requirement in Jonesboro's MS4 permit ARR150000. The City of Jonesboro Fire Department along with Craighead County Emergency Management works to prevent, contain and respond to spills that have a potential to pollute the City's MS4. The spill response program includes a combination of spill response by each permittee and legal requirements for private entities within the permittees municipal jurisdiction.

Mayor and City Council

The Mayor and Jonesboro City Council approve ordinances, changes to ordinances, contracts, fees and annual budgets.

Street Department

The Street Department works to sweep the streets, clean and maintain ditches, and clean stormwater drains and inlets.

Parks & Recreation Department

Parks employees maintain all City facilities including landscaped areas where pesticides, herbicides and fertilizers are used. The Parks Department provides pet waste disposal sites in city parks, properties and along trails.

Sanitation Department

The Sanitation Department provides the citizens with weekly household trash pickup and biweekly recycle pickup. The department operates an onsite incinerator to dispose of accepted yard waste.

Planning Department

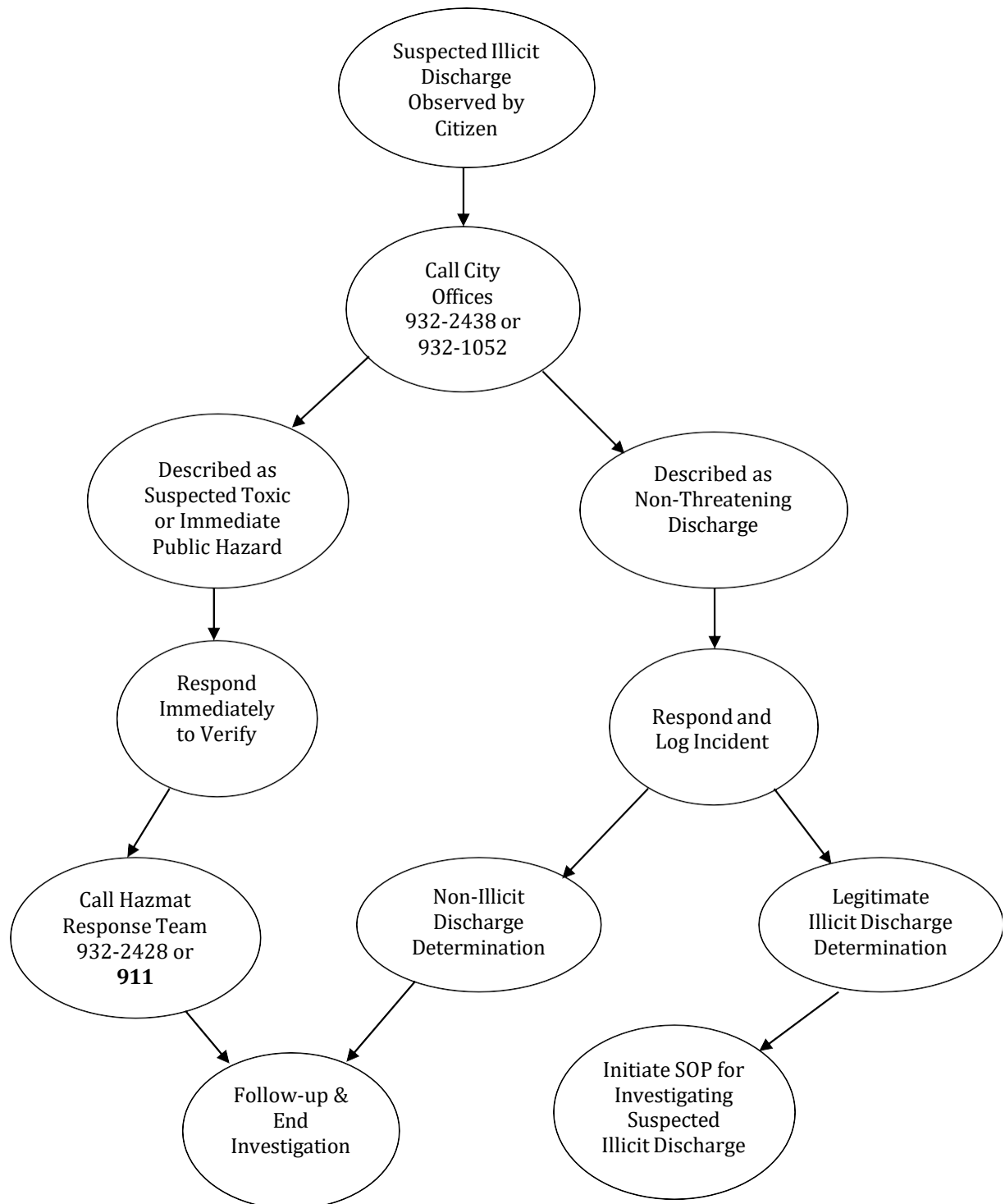
The Planning Department places a high priority on implementing new and innovative environment friendly development techniques to protect sensitive public and private water supplies.

8.3 Appendix C – Stormwater Management Board

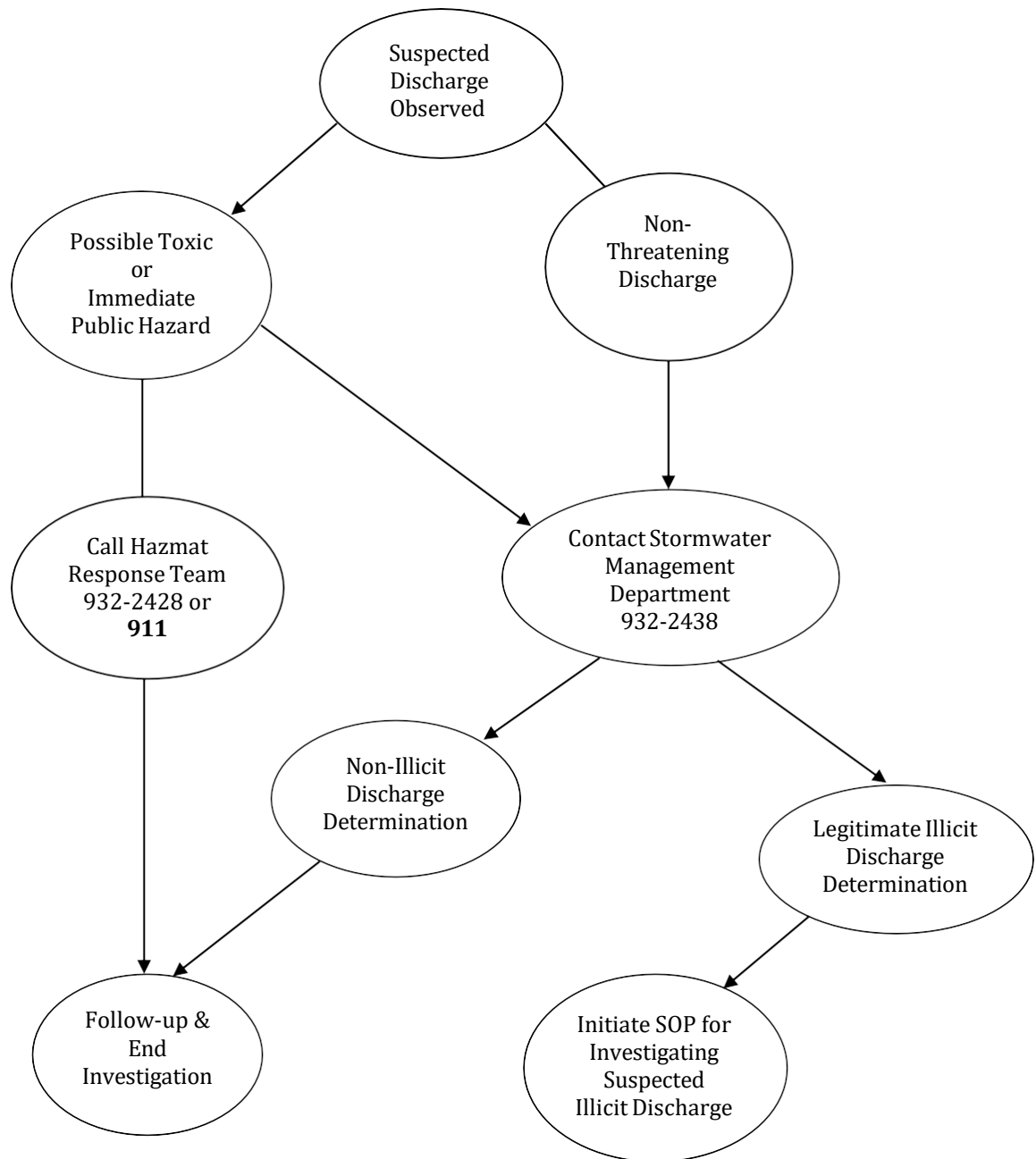
Members:

Rick Wyatt – Chairman
Jeannie Gillis – Vice Chair
Charles Coleman
Jeremy Bevill
Susan Merideth
Janice Porter
David Handwork
Kim Schrantz
Pam Alexander
LaGanzie Kale
Jeff Steiling

8.4 Appendix D – Illicit Discharge Reporting _ Citizen Generated

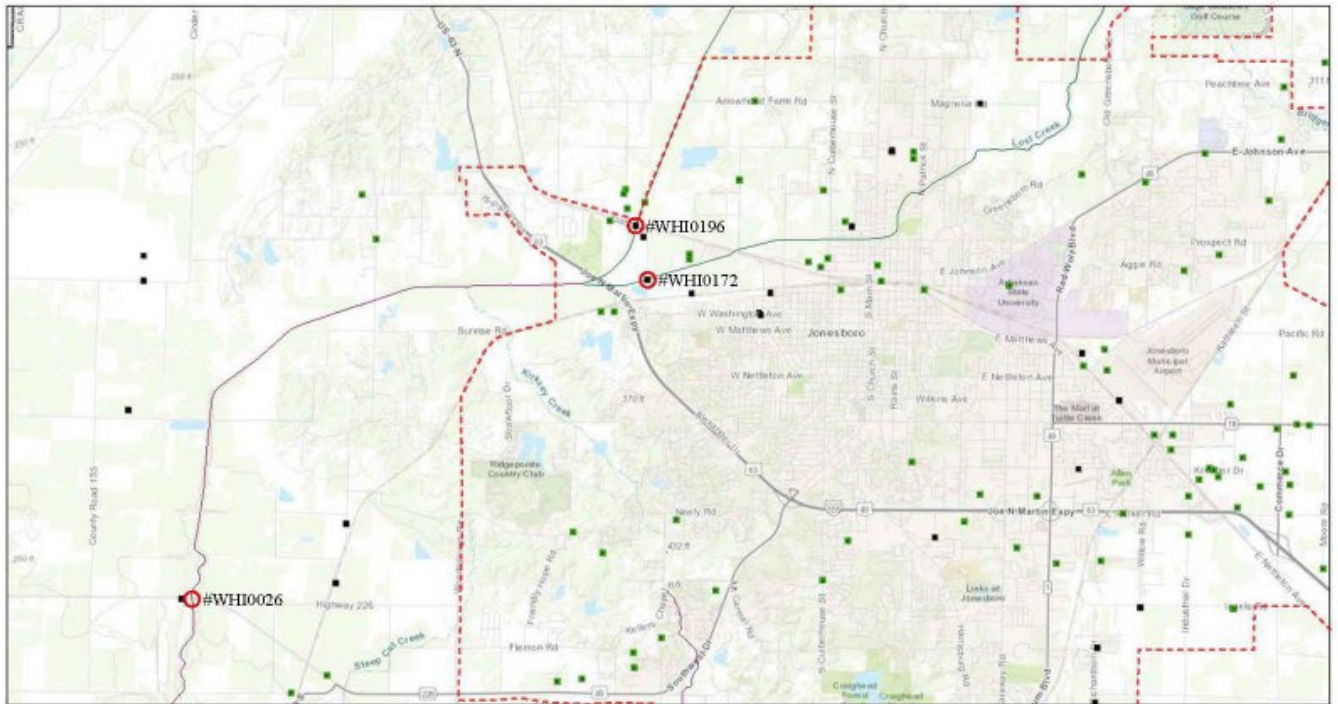


Appendix D – Illicit Discharge Reporting _ City Employee Generated



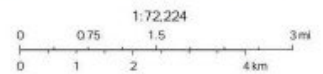
8.5 Appendix E – 303d Impaired Waterbodies Map

303d Waterbodies



8/9/2019, 4:16:56 PM

- NPDES (Active)
- Final 2016 303d list Category 5
- Final 2016 303d list Category 4a
- Counties
- Water Quality Monitoring Station



Sources: Esri, HERE, Garmin, Swiremap, incrementP Corp., GEBCO, USGS, FAO, NPS, NRCAN, Geobase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), Swiremap, OpenStreetMap contributors, and the GIS User Community

Web AppBuilder for ArcGIS
Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, NOAA, EPA, USDA |

8.6 Appendix F – Stormwater Ordinances

- [Chapter 112 - STORMWATER MANAGEMENT](#)
 - [ARTICLE I. - IN GENERAL](#)
 - [Sec. 112-1. - Definitions.](#)
 - [Sec. 112-2. - Violations and penalties.](#)
 - [Sec. 112-3. - Purpose.](#)
 - [Sec. 112-4. - Applicability.](#)
 - [Sec. 112-5. - Interpretation, conflict and severability interpretations.](#)
 - [Sec. 112-6. - Disclaimer of liability.](#)
 - [Sec. 112-7. - Stormwater management plan \(SWMP\) required.](#)
 - [Sec. 112-8. - Stormwater pollution prevention plan \(SWPPP\) required.](#)
 - [Sec. 112-9. - Drainage alterations or modifications permit required.](#)
 - [Sec. 112-10. - Floodplain development permit required.](#)
 - [Sec. 112-11. - Public and private responsibilities.](#)
 - [Sec. 112-12. - Illicit discharge and connection.](#)
 - [ARTICLE II. - ADMINISTRATION AND ENFORCEMENT](#)
 - [DIVISION 1. - GENERALLY](#)
 - [Sec. 112-41. - Amendments.](#)
 - [Sec. 112-42. - Duty of city engineer.](#)
 - [Sec. 112-43. - Inspection.](#)
 - [Sec. 112-44. - Revocation; stop work orders.](#)
 - [ARTICLE III. - PERMIT APPLICATIONS AND CONDITIONS](#)
 - [Sec. 112-103. - General.](#)
 - [Sec. 112-104. - Stormwater management plans \(SWMP\).](#)
 - [Sec. 112-105. - Stormwater pollution prevention plan \(SWPPP\).](#)
 - [Sec. 112-106. - Drainage alterations/modifications.](#)

- [Sec. 112-107. - Floodplain development permit.](#)
- [ARTICLE IV. - DESIGN CRITERIA AND PERFORMANCE STANDARDS](#)
 - [Sec. 112-128. - Design criteria.](#)
 - [Sec. 112-129. - Performance standards.](#)
- [ARTICLE V. - BONDS, MAINTENANCE ASSURANCE, CERTIFICATIONS, NOTIFICATIONS AND FINAL ACCEPTANCE](#)
 - [Sec. 112-157. - Maintenance assurance.](#)
 - [Sec. 112-158. - Performance bond.](#)
 - [Sec. 112-159. - Maintenance bond.](#)
 - [Sec. 112-160. - Certifications.](#)
 - [Sec. 112-161. - Notifications.](#)
 - [Sec. 112-162. - Final acceptance.](#)
- [ARTICLE VI. - ENFORCEMENT](#)
 - [Sec. 112-186. - Generally.](#)
 - [Sec. 112-187. - Violations and penalties.](#)
 - [Sec. 112-188. - Inspection.](#)
 - [Sec. 112-189. - Revocation; stop work orders.](#)

ORD-08:099

AN ORDINANCE TO REPEALING ORDINANCE 3641 AND ADOPTING BY REFERENCE A CERTAIN TECHNICAL CODE ENTITLED THE STORMWATER MANAGEMENT REGULATIONS AND THE STORMWATER DRAINAGE DESIGN MANUAL

ORD-09:008

AN ORDINANCE AMENDING APPENDIX 6, GIS DATABASE SUBMITTALS OF THE STORMWATER DRAINAGE DESIGN MANUAL AND FOR OTHER PURPOSES

ORD-09:009

AN ORDINANCE TO AMEND TITLE 9, STREETS AND SIDEWALKS, OF THE JONESBORO CODE OF ORDINANCES, TO STRIKE AND REPLACE EXISTING CODES THAT ARE IN CONFLICT WITH THE NEW STORMWATER MANAGEMENT REGULATIONS

ORD-09:063

AN ORDINANCE AMENDING THE STORMWATER MANAGEMENT REGULATIONS PROHIBITING ILLICIT DISCHARGE AND CONNECTIONS

ORD-10:046

AN ORDINANCE AMENDING SECTIONS ARTICLE 5 AND ARTICLE 6 OF THE STORMWATER MANAGEMENT REGULATIONS

ORD-10:048

AN ORDINANCE AMENDING SECTION 112-129 PERFORMANCE STANDARDS OF THE STORMWATER MANAGEMENT REGULATIONS

ORD-10:088

AN ORDINANCE AMENDING THE STORMWATER MANAGEMENT REGULATIONS OF THE STORMWATER DRAINAGE DESIGN MANAUL PROHIBITING ILLICIT DISCHARGE

ORD-10:098

AN ORDINANCE AMENDING THE STORMWATER MANAGEMENT REGULATIONS TO INCLUDE ADDITIONAL DEFINITIONS

ORD-10:099

AN ORDINANCE AMENDING SECTION 9.0 OF THE STORMWATER DRAINAGE DESIGN MANUAL

ORD-11:012

AN ORDINANCE AMENDING SECTION 112.7 OF THE JONESBORO MUNICIPAL CODE WITH REGARDS TO SUCCESSIVE PERMIT REQUESTS THAT CUMULATIVELY EXCEED THE EXCEPTION CLAUSE WITHIN A SPECIFIED TIME PERIOD

ORD-11:013

AN ORDINANCE AMENDING SECTION 9.1 OF THE STORMWATER DRAINAGE DESIGN MANUAL WITH REGARDS TO SUCCESSIVE PERMIT REQUESTS THAT CUMULATIVELY CONSTITUTE A SUBSTANTIAL IMPROVEMENT TO A STRUCTURE IN A SPECIAL FLOOD HAZARD AREA

ORD-11:064

AN ORDINANCE AMENDING THE STORMWATER MANAGEMENT REGULATIONS
TO INCLUDE ADDITIONAL DEFINITIONS AND FOR CLARITY PURPOSES

ORD-14:059

AN ORDINANCE AMENDING CHAPTER 112 OF THE JONESBORO MUNICIPAL CODE
AND SECTIONS 2.0 AND 5.0 OF THE STORMWATER DRAINAGE DESIGN MANUAL

