

# CITY OF KENNETT, MISSOURI

PLANNING DEPARTMENT

JUN 24 2013

COMMUNITY DEVELOPMENT DIVISION

## Stormwater Management Plan

June 4, 2013

# CITY OF KENNETT, MISSOURI

## Definitions

**Stormwater:** The rain water that flows off parking lots, yards, roofs and other hard surfaces into roadside ditches, storm drains, and streams during a rainstorm.

**Municipal Separate Storm Sewer System:** A stormwater sewer (drainage) system that is “separate” from the regular domestic sanitary sewage system. The stormwater sewer system discharge directly to streams without treatment of the rainwater.

**MS4:** An abbreviated term for the phrase “Municipal Separate Storm Sewer System”.

**Regulated MS4:** A Municipal Separate Storm Sewer System that is required to obtain an NPDES permit **and comply with Missouri stormwater regulations.**

**MCM:** An abbreviation term for “Minimum Control Measures”.

**Minimum Control Measures:** One of the six categories, which at a “minimum,” must be addressed in the stormwater management plan. The six categories include Public Information, Public Participation, Illicit Discharges, Construction Site Runoff, and Pollution Prevention/Good House Keeping. Each of these categories is a Minimum Control Measure.

**BMP:** An abbreviated term for “Best Management Practices”.

**Best Management Practice:** A type of management, habit, action, practice, type of construction or other ways of doing things that accomplishes the best result-given (size, budget, other factors) a city must work under.

**MEP: “Maximum Extent Practicable”. Doing your best to the maximum extent that is practical.**



# CITY OF KENNETT, MISSOURI

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June 4, 2013

# CITY OF KENNETT, MISSOURI

## Introduction

Phase II of the National Pollution Discharge Elimination System (NPDES) stormwater permitting programming, a Federal Clean Water Act requirement delegated to the Missouri Department of Natural Resources, requires cities with Municipal Separate Storm Sewer Systems (MS4s) to implement stormwater maintenance and management programs as a means to control polluted discharges.

The City of Kennett has a Municipal Separate Storm Sewer System (MS4) and because the city has a population of over 10,000, it is a Missouri regulated MS4 city and must obtain a NPDES Stormwater Permit. In order to obtain a permit, the city is required to develop a Stormwater Management Plan (SMP). The Stormwater Management Plan will be a dynamic document to be revised over time to better able the city to meet the following objectives:

1. Solve existing flood/drainage problems
2. Prevent future flood/drainage damage
3. Preserve natural and beneficial functions of the existing drainage system
4. Preserve and enhance stormwater quality

In order to to preserve and enhance stormwater quality, the Stormwater Management Plan summarizes the city's intentions to reduce the amount of pollution in it's stormwater runoff by addressing the six mandated categories of concern listed in the permit. These categories are as follows:

1. Public Education and Outreach
2. Public Involvement and participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Control
5. Post-construction Site Runoff Control
6. Pollution Prevention/Good house Keeping

The City has adapted this plan to reflect its own unique situation and intends to review and improve this plan each year. As circumstances change, objectives 1,2 and 3 will also be addressed to better control stormwater. This plan is a foundation on which new and innovative ideas and solutions can be developed to better project the water quality of our local streams.

# CITY OF KENNETT, MISSOURI

## City information

- Name of City: Kennett, Missouri
- Population: 10,932
- Water Supply: (100 to 130 feet deep)
- Waste Water Treatment: AERATED LAGOONS
- Water Shed: Buffalo Ditch, Varney River Ditch, Ragland Slough
- Geologic Setting: Missouri Southeast Lowlands-Bootheel Area
- Average Rainfall: 46 inches per year, subject to occasional thunder storm events of over 3 inches possible.

Kennett is located in the Missouri Bootheel. Soil samples demonstrate late Tertiary/Quaternary geology. The Bootheel lies in a flood plain between the Mississippi and St Francis Rivers; the land is very flat and is now used for predominantly agricultural purposes, but was mostly abandoned, swampy forestland before the 20<sup>th</sup> century. Between 1893 and 1989, about 85% of the native forest were cut; the entire landscape was transformed into farmland by extensive logging, drainage of the water shed, and the construction of flood control structures. High levees along both courses and an extensive system of drainage ditches, diversion channels, and controlled lakes, pumping stations and cutoffs protect much of the area from flooding.

The city has a number of deteriorated stormwater drains that have been replaced or repaired over the past several years. Due to the purchase of a combination sewer truck for cleaning storm drainage pipes, ponding water in streets and low areas has greatly decreased.

# CITY OF KENNETT, MISSOURI

## 1. Public Education and Outreach

The City of Kennett has a goal of increasing awareness among its citizens of the negative effects of stormwater pollution. The strategy for accomplishing the goal will include measurable efforts to raise public awareness of how stormwater is contaminated and ways individual citizens can help minimize the problem. Outreach seeks to inform people about the following subjects:

1. The proper handling and disposal of solid waste
2. The proper handling and disposal of hazardous wastes
3. The proper handling and application of fertilizers and pesticides on lawns
4. The elimination of illegal dumping of oil and other chemicals into storm drains
5. The importance of erosion control structures on construction sites to prevent sediment from eroding and being carried into storm drains
6. The importance of detention and treatment of stormwater for post-construction structures, to prevent erosion and flooding down stream of new developments

### Actions and Measurable Goals:

**Action 1-1:** Establish a stormwater section on the city's website that discusses the six subjects listed above.

**Measurable Goal 1-1a:** Complete action 1 by one year after the date of issuance of permit.

**Action 1-2:** Make stormwater presentation to the public.

**Measurable Goal 1-2a:** Make 2 presentations per year to various civic groups.

# CITY OF KENNETT, MISSOURI

## 2. Public Involvement and Participation

**Action 2-1:** The Mayor and City Council will adopt a Public Participation Plan.

**Measurable Goal 2-1a:** The City of Kennett will adopt a Public Participation Plan within 1 year following the issuance of the NPDES permit.

**Action 2-2:** The Kennett City Council will discuss stormwater issues.

**Measurable Goal 2-2a:** The City Council will discuss stormwater requirements at least 2 times per year at a public meeting.

**Action 2-3:** The Planning and Zoning Commission will continue to have stormwater issues on their agenda.

**Measurable Goal 2-3a:** The Planning and Zoning Commission will discuss stormwater issues at least 2 times per year at a public meeting.

**Action 2-4:** The City of Kennett will identify local groups that cleanup local streams and drainage ditches.

**Measurable Goal 2-4a:** The City will support at least 1 stream or ditch cleanup per year by providing for the disposal of the collected.

# City of Kennett, Missouri

## 3. Illicit Discharge Detection and Elimination

The City of Kennett will implement measures to reduce and eliminate unauthorized discharges to its storm sewer system.

**Action 3-1:** The City of Kennett will designate someone to visually inspect the stormwater outlets to detect illegal discharges to storm sewers.

**Measurable Goal 3-1a:** The City will visually inspect the stormwater outlets each year and record the inspection date and conditions of the outlet and any stormwater issues observed. The first inspection is to be completed within 6 months of the issuance of the NPDES permit.

**Action 3-2:** The City will place an emergency phone number on the City web site to report any illegal discharges.

**Measurable Goal 3-2a:** The City will publish this phone number within the first year of the issuance of the NPDES permit.

**Action 3-3:** The City will hold public meetings and discussions about establishing an ordinance prohibiting the discharge of oil and other wastes into the City storm sewer.

**Measurable Goal 3-3a:** The City Council will hold public discussions on illegal discharge within 1 year of the issuance of the NPDES permit.

# City of Kennett, Missouri

## 4. Construction Site Runoff Control

The City of Kennett will establish procedures and policies to promote the control of sediment erosion on construction sites. The following actions will be taken.

**Action 4-1:** The City will develop an informational brochure on proper erosion control measures and attach a copy to construction permits issued by the City.

**Measurable Goal 4-1a:** The informational brochures will be attached to the construction permits within the first year after issuance of the NPDES permit.

**Action 4-2:** The City's Planning and Zoning Commission will hold a public discussion about drafting an erosion control ordinance. The ordinance would require a permit and erosion control plan for all construction sites of 1 acre or more. The ordinance would specify examples of BMP's that could be used on construction sites.

**Measurable Goal 4-2a:** The Commission will begin discussion of an erosion control ordinance within 1 year of the issuance of the NPDES permit.

**Action 4-3:** The Building Inspector will inspect erosion control measures on construction sites.

**Measurable Goal 4-3a:** Building Inspector will conduct regular inspections of erosion control measures on construction sites following adoption of an erosion control ordinance.

# CITY OF KENNETT, MISSOURI

## 5. Post- Construction Site Runoff Control

The City of Kennett will establish policies and procedures to control post-construction site runoff. The City will implement the following actions:

**Action 5-1:** The Planning and Zoning Committee will begin discussions about requiring infiltration stormwater control measures for large impervious areas such as large shopping centers and large subdivisions. These are to prevent flooding and contamination down stream.

**Measurable Goal 5-1a:** The Planning and Zoning Commission will publicly discuss requirements for infiltration stormwater control measures within 1 year after the issuance of the NPDES permit.

**Action 5-2:** During the review of plans for a construction project the City will require to integrate green infrastructure into projects that include a large impervious area.

**Measurable Goal 5-2a:** Green infrastructure will be required to be integrated into large impervious sites by 2 years after issuance of the NPDES permit.

**Action 5-3:** The City will adopt an ordinance outlining the requirements and standards for green infrastructure.

**Measurable Goal 5-3a:** The City will begin discussions for develop of an ordinance governing green infrastructure within 1 year after issuance of the NPDES permit.

**Measurable Goal 5-3b:** The city will adopt an ordinance governing green infrastructures within 2 years after the issuance of the NPDES permit

# CITY OF KENNETT, MISSOURI

## 6. Pollution Prevention/Good House Keeping

The City of Kennett will establish policies and procedures to reduce the potential for pollution of stormwater by city operations. The following actions will be implemented:

**Action 6-1:** City department heads will meet with their employees to discuss good house keeping BMPs. The training will include proper handling and disposal of solid and liquid waste and hazardous wastes.

**Measurable Goal 6-1a:** Department heads will meet with their employees to discuss good house keeping practices within 6 months of issuance date of NPDES permit.

**Measurable Goal 6-1b:** Department meetings will be held at least once every 6 months to refresh personnel on environmental regulations and Best Management Practices (BMPs).

**Action 6-2:** City employees who handle pesticides will be instructed in the proper use of BMPs on city property and city operated construction sites.

**Measurable Goal 6-2a:** City employees who handle pesticides will be instructed in proper use of BMPs on City property and City operated construction sites every 6 months after issuance of the NPDES permit.

JUN 24 2013

ORDINANCE NO. 2924

**AN ORDINANCE ADOPTING A STORMWATER MANAGEMENT PLAN FOR THE CITY OF KENNETT.**

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**BE IT ORDAINED BY THE CITY COUNCIL OF KENNETT, MISSOURI, AS FOLLOWS, TO WIT:**

**Section 1.** The "Stormwater Management Plan", a copy of which is attached hereto and made a part hereof by reference, is hereby adopted as the stormwater management plan for the City of Kennett.

**Section 2.** All ordinances or parts of ordinances in conflict herein are herein expressly repealed.

**Section 3.** This ordinance shall be in full force and effect from and after the date of its passage and approval.

**READ TWO TIMES, PASSED, APPROVED AND ADOPTED THIS 18<sup>TH</sup> DAY OF JUNE, 2013.**

Attest:  
  
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**Brenda S. Privett, City Clerk**

  
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**Jake Crafton, Mayor**

