

Information on the Permittee:

Name of the Permittee: Buchanan County, Missouri  
Type of Entity: County  
Total Area (acres): 367.2 square miles  
Mailing Address: 411 Jules Street St. Joseph, Mo 64501  
Primary Contact: William Brinton Jr.  
Phone Number: 816-271-1574

Information on the Municipal Separate Storm Sewer System:

MS4 System Location: Buchanan County, Missouri  
County Permittee Resides: Buchanan, County  
There are no major receiving waters within the permitted area.  
The receiving water is on the latest CWA's list of impaired waters: N/A  
Received certification that their SWMP complies with the requirements of Par 3.1:  
N/A

Information on Adjacent Waterways:

The Permittee is within 100 feet of: Streams,  
The Permittee is within 100 feet of waters classified as major reservoirs: No  
None of the Permittee's area is defined as wetland.  
The Permittee has received a CWA, Section 404 permit from the US Army Corps  
of Engineers: N/A

Information on Critical Areas:

There are threatened or endangered species in the area: See Page 2  
The Permittee has met eligibility criteria for protection of threatened or  
endangered species.  
There are critical habitats in the area: See Page 2  
The Permittee has met eligibility criteria for protection of critical habitats.  
There are no Historic properties in the area.

County	Species	Status	Habitat
Buchanan	Bald Eagle ( <i>Haliaeetus leucocephalus</i> )	Threatened	
Buchanan	Pallid Sturgeon ( <i>Scalphirhynchus Albus</i> )	Endangered	Mississippi and Missouri Rivers

**MCM #1: Public Education and Outreach on Stormwater Impacts**

4.2.1.1 Permit Requirements

Buchanan County plans to implement a public education program by keeping educational materials on hand for the community and conducting outreach activities. The purpose of the materials is to educate the public by discussing the impact of stormwater discharges on water bodies and certain steps that can be taken to reduce pollutants in stormwater runoff.

4.2.1.2 Inform Public on Steps

Buchanan County plans to inform individuals and households in the community about the proper steps they can take to reduce stormwater pollution with the following programs:

	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
Educational Materials:					
Distribute Brochures					
Lawn and Garden Activities	X			X	
Hazardous Waste Disposal		X			X
Pet Waste Management			X		

	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
Public Awareness:					
Issue Press Release Regarding Local Storm Water Issues	X	X	X	X	X
Publish Articles in Local Newspaper	X	X	X	X	X

4.2.1.2.2 How to Become Involved

Buchanan County plans to inform individuals and households on how to become involved in the stormwater program by providing instructions to all materials distributed to the public.

#### 4.2.1.2.3 Target Audiences

The target audiences for the Buchanan County were selected because informing and changing their behavior will have a significant impact on the target pollutants. The target audiences for the public education program are:

1. Citizens (Homeowners)
2. Developers and Home Builders
3. Elected Officials
4. County staff

#### 4.2.1.2.4 Target Pollutant Sources

#### 4.2.1.2.5 Outreach Strategy & Partnerships

The Outreach Strategy of Buchanan County is to implement a variety of methods to reach a greater number of citizens multiple times. The number of people targeted to be reached by the public education and outreach strategy is approximately 5000.

#### 4.2.1.2.6 Person Responsible

The person responsible for overall management and implementation of the permittee's stormwater public education and outreach program is the **Buchanan County Emergency Management Agency Director**. Others may be involved in the execution of each of the individual activities in the programs.

#### 4.2.1.2.7 Measurable Goals Selection

Buchanan County selected BMP's because of the evidence that they will have a positive impact on the target pollutants identified as a concern for Buchanan County. BMPs were also selected with the thought of a limited staff size to carry out the storm water plan. The implementation of BMP's selected will determine the success of the measure of water quality.

### **MCM #2: Public Involvement and Participation**

#### 4.2.2.1 Permit Requirements

Buchanan County will comply with State and Local public notice requirements when implementing the public involvement and participation program.

#### 4.2.2.2 Decision Process

The following is the documentation for Buchanan County's decision process and rationale statement for the development of a stormwater public involvement and

participation program. It documents the overall program and in individual BMP's, measurable goals, and responsible part for the program.

4.2.2.2.1 Involving the Public in Developing the Submittal

4.2.2.2.2 Involving the Public in Program Implementation

Buchanan County will hold a public meeting to discuss with citizens of the process of the storm water plan.

4.2.2.2.3 Target Audiences to Involve in Program

The target audiences for the permittee's public involvement program are:

1. Citizens
2. Mass media
3. Local Elected Officials
4. Civic Organizations

4.2.2.2.4 Public Involvement Activities

Buchanan County plans will involve the public through the activities described below:

	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
Conduct Attitude Survey	X				X
Hold Public Meetings Yearly	X	X	X	X	X

4.2.2.2.4 Person Responsible

The person responsible for the overall management and implementation of the permittee's stormwater public involvement/participation program is the **Buchanan County Emergency Management Agency Director**. Others will be involved in the execution of each of the individual activities in the programs.

4.2.2.2.5 Goal Selected

Buchanan County selected the measurable goals for each of the BMPs after reviewing EPA research on the effectiveness of certain BMPs. The BMPs selected were chosen because of the evidence that they will have a positive impact on pollutants that concern Buchanan County with a limited staff in the decision process. The implementation of BMPs selected will determine the success of the measure on water quality.

**MCM #3: Illicit Discharge Detection and Elimination**

4.2.3.1 Permit Requirement

4.2.3.1.1 Overview

Buchanan County will develop, implement and enforce a program to detect and eliminate illicit discharges (as defined in 10 CSR 20-6.200) into the MS4.

4.2.3.1.2 Enforcement

Buchanan County will effectively prohibit non-storm water discharges into the storm water system of Buchanan County’s storm water system via the following ordinances and regulation. Each ordinance/regulation is enforceable by Buchanan County with appropriate procedures and consequential actions.

4.2.3.1.3 Methods to Detect

Buchanan County will implement a plan using the following methods to detect and address non-stormwater discharges, including illegal dumping to the stormwater system:

	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
Visual Inspection		X			X
Visual Screening		X			X

4.2.3.1.4 Informing the Public

Buchanan County will inform public employees, businesses and the general public of hazards associated with illegal discharges and improper disposal of waste using the following methods:

	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
Educational Programs:					
Distribute Literature	X	X	X	X	X

#### 4.2.3.1.5 Not Significant Contributors

Buchanan County has not identified any of the following categories of non-stormwater discharges or flows (i.e. illicit discharges) as significant contributors of pollutants to their small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration, uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, springs, water from crawl space pumps, footing drains, lawn watering, flows from riparian habitats and wetlands, and street wash water.

#### 4.2.3.1.6 Occasional Incidental Non-Stormwater Discharges

Buchanan County's illicit discharge ordinance does not include a list of other similar occasional incidental non-stormwater discharges (e.g. non-commercial or charity car washes, etc.) that will not be addressed as illicit discharges because they are not reasonably significant sources of pollutants to the MS4. Should these occasional or incidental non-stormwater discharges be identified in the future, those entities responsible for discharging will be prohibited or conditions placed on them so as to minimize their discharge of pollutants.

#### 4.2.3.2.1 Sources for Mapping Mo-Kan Regional Council and/or Buchanan County

#### 4.2.3.2.2 Regulatory Mechanism

Buchanan County will use the following mechanism to effectively prohibit illicit discharges to the MS4:

1. County Ordinance
2. Inspection by information of the public

The ordinance establishes legal authority: to regulate the contribution of pollutants to the municipal separate storm sewer system (MS4) of stormwater discharges by any use; to prohibit illicit connections and discharges to the MS4; and to establish legal authority to carry out all inspections, surveillance and monitoring procedures necessary to ensure compliance.

Buchanan County will develop and implement the following mechanisms to effectively prohibit illicit discharges to the MS4 on the respective schedule:

	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
County Ordinance	X				
Inspection		X	X	X	X

4.2.3.2.3 Enforcement

Buchanan County will set forth in the ordinance enforcement procedures intended to remove the source of illicit discharge detected.

Buchanan County will ensure implementation of the mechanisms described in 4.2.3.2.2 above with the following enforcement actions:

	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
Civil Penalties		X	X	X	X

4.2.3.2.4 Detection

Buchanan County will detect and address illicit discharges to the MS4, including discharges from illegal dumping and spills by help from the public. Buchanan County program will address on-site sewage disposal systems and leaky septic systems that flow into the MS4.

4.2.3.2.3.1 Identify Priority Areas

Buchanan County will use maps along with other data to identify priority areas with the likelihood of illicit connections.

4.2.3.2.4.2 Trace the Source  
N/A

4.2.3.2.4.3 Removal

Buchanan County will follow the ordinance adopted and the enforcement mechanisms detailed in the ordinance including those legal actions described in 4.2.3.1.3 above to enforce the removal of an identified illicit connection.

4.2.3.2.4.4 Program Evaluation

The success of the described program will be evaluated annually by analyzing the number of illicit connections discovered and eliminated.

4.2.3.2.5 Public Information

Buchanan County will inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste through the following methods:

	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
Educational Programs:					
Distribute Literature	X	X	X	X	X

Where applicable the information distributed through these means will coordinate with information distributed in the Public Education minimum control measure (e.g., consistent/coordinated messages in the literature).

4.2.3.2.5 Responsible Party

The **Buchanan County Emergency Management Agency Director** will be responsible for overall management and implementation of the Buchanan County storm water illicit discharge detection and elimination program. Others will be involved in the execution of each of the individual activities in the programs.

4.2.3.2.7 Measurable Goals

Buchanan County will evaluate the success of the program based on:  
 The number of illicit connections found and eliminated.  
 Buchanan County selected the measurable goals for each of the BMPs after reviewing possible BMPs that could be obtained with a limited staff size. The BMPs selected were chosen because of the evidence that they will have a positive impact the target pollutants identified as a concern for Buchanan County. The implementation of BMPs selected will determine the success of the measure on water quality.

**MCM #4: Construction Site Storm water Runoff Control**

4.2.4.1 Permit Requirements

Buchanan County plans to develop, implement, and enforce a program to reduce pollutants in storm water runoff from construction activities that result in disturbance of greater than or equal to one acre. Buchanan County also plans to reduce pollutants in storm water runoff from construction activities that disturb an area less than one acre if the site is part of a larger common plan of development or sale.

#### 4.2.4.1.1 Regulatory Mechanism

Buchanan County will draft an ordinance or other regulatory mechanism with the required erosion and sediment controls, as well as sanctions to ensure compliance.

#### 4.2.4.1.2 Best Management Practices (BMP)

Buchanan County will require construction site operators to implement the appropriate erosion and sediment control Best Management Practices (BMP's).

#### 4.2.4.1.3 Wastes to Be Controlled

Buchanan County will require construction site operators to control wastes that may cause adverse impacts to water quality such as:

1. Discarded Building Materials
2. Concrete Truck Washout
3. Chemicals
4. Sediment
5. Litter or Trash
6. Sanitary Waste

#### 4.2.4.1.4 Site Plan Review

Buchanan County will implement procedures in their site plan review, which will incorporate consideration of potential water quality impacts.

#### 4.2.4.1.5 Receipt & Consideration of Public Comment

Buchanan County will implement procedures in their ordinance for receipt and consideration of information submitted by the public.

#### 4.2.4.1.6 Site Inspection

Buchanan County will implement procedures in their ordinance for site inspection and enforcement of erosion and sediment control measures.

#### 4.2.4.2 Decision process

The following is the rationale statement for the development of Buchanan County overall construction site storm water runoff control program. It documents the individual BMPs, measurable goals, and responsible party for their program.

#### 4.2.4.2.1 Regulatory Mechanism

Buchanan County will draft an ordinance that will require the use of erosion and sediment controls on construction sites. An ordinance will outline the requirements for designers and contractors before, during and after the construction activities. The ordinance will provide enforcement measures for those designers and contractors who do not follow the ordinance.

Other mechanisms that will be available to anyone involved in design and construction of erosion and sediment control activities. Those mechanisms include:

	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
Design Methodologies		X			
Construction Specifications		X			
Standard Details		X			
Ordinance		X			

#### 4.2.4.2.2 Enforcement

Buchanan County will ensure compliance with developed ordinance by including an enforcement section in the ordinance detailing the sanctions and enforcement mechanisms. Buchanan County will use the following sanctions:

1. Fines
2. Permit Denial for Non-Compliance
3. Ordinance

#### 4.2.4.2.3 Implementation of Proper Controls

Buchanan County will require construction site operators to control wastes that may have adverse impacts on water quality including;

	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
Implementation of Proper Erosion and Sediment Controls	X	X	X	X	X

#### 4.2.4.2.4 Pre-Construction Site Plan Review

Buchanan County will implement procedures for site plan review, including the review of pre-construction plans, which will look at the potential water quality impacts. Buchanan County will implement procedures and rationale for those sites that do not require site plan review. The estimated percentage of sites that will have a pre-construction site plan review is 100%.

	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
Review of Construction Plans	X	X	X	X	X

#### 4.2.4.2.5 Public Input on Submittals

Buchanan County will not implement procedures for receipt and consideration of information submitted by the public.

#### 4.2.4.2.6 Site Inspection & Enforcement

Buchanan County will implement procedures for site inspection and enforcement of control measures. The sites will be inspected using a priority rating system. The site with the most potential risk to the community will top on the priority list.

	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
Site Inspection and Enforcement	X	X	X	X	X

#### 4.2.4.2.7 Person Responsible

The person responsible for overall management and implementation of the permittee's storm water public education and outreach program is the **Buchanan County Emergency Management Agency Director**. Others will possibly be involved in the execution of each of the individual activities in the programs.

#### 4.2.4.2.8 Measurable Goals

Buchanan County selected the measurable goals for each of the BMPs after reviewing certain BMPs that can have a positive impact with a limited staff number. The BMPs selected were chosen because of the evidence that they will have a positive impact on the target pollutants identified for Buchanan County. The implementation of BMPs selected will determine the success of the measure on water quality.

## **MCM #5: Post-Construction Storm water Management in the New Development and Redevelopment**

### 4.2.5.1 Permit Requirement

#### 4.2.5.1.1 Overview

Buchanan County will develop, implement, and enforce a program to address storm water 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 safe.

#### 4.2.5.1.2 Strategies

Buchanan County will develop and implement strategies, which will include a combination of structural and/or non-structural Best Management Practices (BMP), appropriate for the community.

#### 4.2.5.1.3 Ordinance

Buchanan County will 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.

#### 4.2.5.1.4 Long-Term Operation and Maintenance

Buchanan County will ensure adequate long-term operation and maintenance of BMP's.

### 4.2.5.2 Decision Process

The following is the rationale statement for the development of a post-construction storm water management program. It documents the BMP's, measurable goals, and responsible party for the program.

#### 4.2.5.2.1 Priority Areas

Buchanan County will implement regulatory procedures to address storm water runoff from new development and redevelopment projects. There are no areas identified as a priority for regulatory procedures.

#### 4.2.5.2.2 Regulatory Procedures

Buchanan County will implement regulatory procedures that will be specifically tailored for the community, minimize water quality impacts, and attempt to maintain pre-development runoff conditions.

	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
Ordinance	X				
Inspection and Maintenance of Long-Term Controls		X	X	X	X

#### 4.2.5.2.3 Non-Structural Best Management Practices (BMP's)

##### 4.2.5.2.3.1 Policies & Ordinances

Buchanan County will implement policies and ordinances that will help minimize water quality impacts.

	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
Site Based Local Controls		X			

##### 4.2.5.2.3.2 Infill Development

N/A

##### 4.2.5.2.3.3 Other Non-Structural Measures

N/A

#### 4.2.5.2.4 Structural BMP's

Buchanan County will implement the following structural BMP's:

	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
Detention/Retention	X	X	X	X	X
Filtration Practices	X	X	X	X	X

#### 4.2.5.2.5 Regulatory Mechanism

Buchanan County will implement an ordinance or other regulatory mechanism to address post-construction runoff from new developments and redevelopments. These mechanisms will help to not only recommend proper practices, but will help enforce the proper use of the practices under certain circumstances. They include:

	Year 2009	Year 2010	Year 2011	Year 2012	Year 2012
Ordinance	X				
Inspection and Maintenance of Long-Term Controls		X			
Publication of BMPs		X			

Buchanan County will ensure compliance with developed ordinance by way of sanctions and enforcement mechanisms. Buchanan County will implement the following sanctions in their ordinance:

1. Fines
2. Permit Denial for Non-Compliance
3. Ordinance

#### 4.2.5.2.6 Long-Term Operation and Maintenance

Buchanan County will implement options to help ensure the long-term operation and maintenance of their selected BMPs. These options will help ensure that future operator and maintenance responsibilities are clearly identified.

#### 4.2.5.2.7 Responsible Party

The person responsible for overall management and implementation of the permittee's storm water public education and outreach program is the **Buchanan County Emergency Management Agency Director**.

#### 4.2.5.2.8 Measurable Goals

Buchanan County selected the measurable goals for each of the BMPs after reviewing the effectiveness of certain BMPs with such a limited staff. The BMPs were selected because of the evidence that they will have a positive impact on the target pollutants identified as a concern for Buchanan County. The implementation of BMPs selected will determine the success of the measure on water quality.

### **MCM #6: Pollution Prevention/Good Housekeeping for Municipal Operations**

#### 4.2.6.1 Permit Requirement

##### 4.2.6.1.1 Overview

Buchanan County will develop and implement an operation and maintenance program that includes a training component and has the goal of preventing or reducing pollutant runoff from county operations.

4.2.6.1.2 Training

Using materials that are available from EPA, State and other organizations, Buchanan County will include employee training to prevent and reduce storm water pollution from activities. Buchanan County will address leaky septic systems complaints with help from the Buchanan County Health Department. Buchanan County will also hold street sweeps and cleanups to help prevent trash and other pollutants reaching stormwater.

4.2.6.2 Pollution Prevention & Good Housekeeping Measures

Buchanan County will implement pollution prevention and good housekeeping measures in the following county activities:

	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
Street Sweeps and Cleanups	X	X	X	X	X
Employee Training	X	X	X	X	X

4.2.6.2.2 Employee Training

Buchanan County will familiarize county workers in the following areas so as to prevent and reduce storm water pollution from the following activities:

	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
Street Sweeps and Cleanups	X	X	X	X	X
New Construction and Land Disturbances			X		

These activities will be coordinated with the outreach programs developed for the public information and illicit discharge minimum control measures so that a consistent message is presented throughout Buchanan County's program.

4.2.6.2.3 Activities

Buchanan County's program will address the following areas:

4.2.6.2.3.1 Pollutant Locations

Buchanan County would like to reduce or eliminate the discharged pollutants from the following location:

1. Streets
2. County Parking Lots
3. Maintenance and Storage Yards

4.2.6.2.4 Responsible Party

The **Buchanan County Emergency Management Agency Director** will be responsible for overall management and implementation of the pollution prevention and good housekeeping program for Buchanan County. Others might be involved in the execution of each of the individual activities in the programs.

4.2.6.2.5 Program Evaluation

Buchanan County will evaluate the success of the pollution prevention/good housekeeping minimum control measure by tracking the progress of each measure against the implementation schedule. Each one of the measures described in the permit was chosen based on its implement ability by Buchanan County's small staff and impact on water quality.

Signature William Birtm g Date 11/13/07