

**City of Hutchinson Stormwater Management Plan
2015 to 2020**



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CITY OF HUTCHINSON STORMWATER MANAGEMENT PLAN

I. BACKGROUND

Regulatory History

EPA promulgated the Final Rule of the NPDES Phase II Stormwater Regulations on December 8, 1999. The regulations required KDHE, as the NPDES permitting authority, to develop criteria for designating small Municipal Separate Storm Sewer Systems (MS4s) to be regulated under the NPDES stormwater discharge control program. There are four methods by which a small MS4 may be designated. Accordingly, KDHE developed criteria as “regulated small MS4s.” Designation method No. 2 is applicable to the City of Hutchinson.

City of Hutchinson Designation Basis

Under designation method No.2 (40 CFR 123.35 (a)(2)) KDHE considered four factors: 1.) population; 2.) location; 3.) population density; and 4) TMDL listing of adjacent stream segments or lakes. All cities with a population greater than 10,000 located outside an urban area must be considered. All cities with populations greater than the four other criteria are met. Hutchinson has a population greater than 25,000 based on the most recent census and is outside an urbanized area; it was therefore designated to be regulated under the Phase II rules. In addition, the TMDL factor applies to the City, since Cow Creek has been identified as impaired due to nutrients and sediment and the Arkansas River has been identified as impaired due to nutrients. MS4s must be designated if they are adjacent to streams or lakes identified in a TMDL as impaired and the municipality meets the location and population density criteria.

Application and Permitting

On March 6, 2003 the City of Hutchinson submitted the required Notice of Intent (NOI) for coverage under the Kansas Water Pollution Control General MS4 permit and Authorization to Discharge under the National Pollution Discharge Elimination System (NPDES). Following approval by the City Council, Item 6 of the NOI, “Outline of Measurable Goals and BMPs” was submitted at a later date (November 4, 2003). On September 24, 2004 the City of Hutchinson was issued a permit effective October 1, 2004 and expiring September 30, 2009. Among the terms and conditions of the permit is the requirement to submit a Stormwater Management Program Document to KDHE for approval no later than October 1, 2005. On January 27, 2014 the City of Hutchinson was issued a permit effective February 1, 2014 and expiring January 31, 2019 that superseded the previous permit. Along with continuing the six minimum control measures and updating the Stormwater Management Program Document this new permit included new TMDL monitoring requirements and parameters along with an updated permit compliance schedule.

II. STORMWATER MANAGEMENT PROGRAM DOCUMENT

A. Format and Contents

The purpose of the SWMP Document is to describe the City’s Stormwater management Program. The document addresses each of the program’s six minimum control measures (MCMs) as well as the Goals/BMPs which will be implemented in order to lessen the discharge of TMDL regulated parameters addressed in the City’s permit. The document includes the following information:

- Purpose of the Minimum Control Measure
- The Goal that will be implemented by the permittee;

- The Plan of Action to implement each goal;
- The responsible party to implement and complete the goal;
- How progress or completion is measured;
- And a deadline for completion.

B. Document Modification

The SWMP Document presented herein will be modified if the City and/or KDHE determines in the future that such modifications are necessary to achieve the goals of the program. The Stormwater Management Plan will be evaluated annually to ensure that the BMPs listed are still pertinent and effective to the City of Hutchinson’s Storm Water Management Program goals. Modifications will be made at that time as needed and reported to KDHE annually.

III. MINIMUM CONTROL MEASURES

A. Public Education and Outreach Goals -

Purpose: Public education is key to the success of a Stormwater Management Plan. We must convey to residents an understanding of how their actions affect stormwater quality and inform them of stormwater quality issues in their community. With this understanding residents may take ownership of the problems and become part of the solution by voluntarily eliminating major sources of pollutants by making small changes to their everyday activities.

GOAL A1 – Continue to improve and add educational materials to the website.

PLAN OF ACTION – With help from IT implement a user friendly eye catching format to be used throughout the stormwater pages for uniformity. Add more eco-friendly living tips, construction site BMP information, kids water learning/activities, event and volunteer opportunities.

IMPLEMENTATION RESPONSIBILITY – Stormwater Management Coordinator with help from the IT Department.

MEASUREMENT- track the number of hits or views of stormwater pages on the City website.

DEADLINE- Review measurement yearly – continue to build and update the site.

GOAL A2 – Develop seasonal educational campaigns on pollution prevention aimed at homeowners and businesses, examples may include; yard maintenance, backwashing and draining swimming pools, pet waste brochures, car maintenance, rain gardens, rain barrels, etc.

PLAN OF ACTION – develop a seasonal educational campaign for a topic which may include; letters to homeowners or businesses, distribution of brochures via businesses and city organizations, tips and reminders printed on utility bills, ads on Channel 7 TV, website updates, informational door hangers, and participation in community events

IMPLEMENTATION RESPONSIBILITY – Stormwater Management Coordinator with help from the IT Department, Animal Shelter and Utility Billing.

MEASUREMENT- track number of brochures/letters/door hangers distributed, views to website, TV airings, event participation.

DEADLINE- Progress checkup periodically and reported annually.

GOAL A3 – Continue airing of the public education ad on the City’s Channel 7 information channel focusing on the impacts of storm water pollution to local bodies of water.

PLAN OF ACTION – The spot on Channel 7 will air at random times at least once a week.

IMPLEMENTATION RESPONSIBILITY – Stormwater Management Coordinator with help from the IT Department.

MEASUREMENT- track number of airings.

DEADLINE- Review Measurement Yearly

B. Public Involvement and Participation Goals

Purpose: Public Involvement and Participation serves the same purposes that the public education and outreach. A better educated population will be able to make more environmentally conscious choices in their daily activities. This minimum control measure also allows the City to see the success and effectiveness of the plan through interaction with the public.

GOAL B1 - Develop and implement a volunteer storm drain stenciling program.

PLAN OF ACTION – Contact local groups and/or schools with information regarding the program. Put request for volunteers on website and Channel 7 and in community presentations (see A3).

IMPLEMENTATION RESPONSIBILITY – Stormwater Management Coordinator, Sewer Maintenance Crew, Public Works Maintenance Crew

MEASUREMENT- track number of volunteers and stenciled inlets.

DEADLINE- Progress checkup yearly.

GOAL B2 – Establish a separate stormwater “hotline” in order to provide citizens with a method of reporting stormwater pollution or polluting activities.

PLAN OF ACTION –Set up a phone number for reporting illicit discharges with information on the website about available after hours reporting (email, WWTP number, or 911 for hazardous spills).

IMPLEMENTATION RESPONSIBILITY – Stormwater Management Coordinator, IT Department

MEASUREMENT- track number of call in reporting forms filled out and follow-up actions.

DEADLINE- Review measurement yearly.

GOAL B3 - Participation in the annual Reno County Water Festival with a presentation by City staff. In addition, City staff will be available to give presentations as requested on “Eco-friendly Living”, Rain Barrel demonstrations, and rain garden demonstrations.

PLAN OF ACTION – Develop PowerPoint presentation on Eco-friendly living coordinate with Assistant to City Manager as citizens request speakers. List the availability of presentations on stormwater friendly practices on the website (i.e. rainbarrels, raingardens, disconnecting downspouts etc.)

IMPLEMENTATION RESPONSIBILITY – Stormwater Management Coordinator with help from Assistant to City Manager. Parks department Horticulturist for planting recommendations.

MEASUREMENT- track number of presentations given and attendance. Track rain barrels and rain gardens installed.

DEADLINE- Progress checkup yearly.

GOAL B4 - Organize Community Clean ups

PLAN OF ACTION – Organize “stream teams” or similar activities for interested volunteer organizations and groups. Contact local groups and/or schools with information regarding the program. Put request for volunteers on website and Channel 7 and in community presentations (see A3). Provide (or have donated) Bags, gloves and water. Work with City Personnel or local trash haulers to have the collected bags of trash hauled away. Model after “Adopt a Highway”. Invite media to attend to get more people thinking about water quality and get more people involved in progress.

IMPLEMENTATION RESPONSIBILITY – Stormwater Management Coordinator, all city staff to encourage others in the community to get involved.

MEASUREMENT- track number of volunteers and number of bags of trash picked up.

DEADLINE- Progress checkup yearly.

C. Illicit Discharge Detection and Elimination Goals

Purpose: To eliminate illicit discharges into the public storm sewer system and our waterways. An illicit discharge is defined as any discharge into the storm sewer system that is not composed entirely of clean water or stormwater. Most flow during dry weather can be considered an illicit discharge.

GOAL C1 - Continue dry weather flow inspection program

PLAN OF ACTION – Continue annual dry weather flow inspection program involving visual inspection of all stormwater outfalls from the City of Hutchinson to waters of the United States (Cow Creek and Arkansas River). Program to include outfall inspection reports entered into City of Hutchinson’s asset management program to be kept on file for a

minimum of three years. Develop and implement Standard Operating procedures and train inspection employees.

IMPLEMENTATION RESPONSIBILITY – Stormwater Management Coordinator, Sewer Maintenance Employees.

MEASUREMENT- track number of inspections and results of inspections using reports generated in City of Hutchinson's asset management program.

DEADLINE- ½ of outfalls inspected Annually.

GOAL C2 - Publicize and encourage use of existing Reno County Household Hazardous Waste Program

PLAN OF ACTION – Provide information promoting Reno County HHWP by inclusion in website and Channel 7 information and other forms of media and community outreach events when available (Reno County Water Festival).

IMPLEMENTATION RESPONSIBILITY – Stormwater Management Coordinator, Information Technology Department

MEASUREMENT- track number hits to website and get usage statistics from Reno County Landfill.

DEADLINE- Progress checkup yearly.

GOAL C3 – Develop a program to efficiently collect City's Household Hazardous Waste and transport them to the waste disposal site.

PLAN OF ACTION – Collect information about the needs of the City. Establish a disposal timeline for all City facilities and arrange for collection and transportation.

IMPLEMENTATION RESPONSIBILITY – Stormwater Management Coordinator, Coordination with all City Facilities

MEASUREMENT- Track pounds of waste disposed.

DEADLINE- Review measurement yearly.

GOAL C4 – Continue to implement procedures for correcting or eliminating illicit discharges

PLAN OF ACTION – Provide City Personnel with knowledge for correcting/eliminating the discharge. Procedures include provisions for notification of violations, follow-up inspections and penalties for non-compliance. Develop SOPs for investigation and penalty procedures.

IMPLEMENTATION RESPONSIBILITY – Stormwater Management Coordinator, Coordination with City Inspectors and Sewer Maintenance Employees

MEASUREMENT- Track notifications, violations, follow-up and penalties in the City of Hutchinson's asset management program.

DEADLINE- Reports evaluated yearly.

GOAL C5 – Continue to implement procedures for spill prevention and response.

PLAN OF ACTION – When a spill occurs in the community the fire department is notified and they have a standard response procedure that includes preventing the spill from reaching the storm system. When the spill is contained and cleaned up they complete a report. Copies of these reports are delivered to the engineering department on a quarterly basis for review and record keeping. Standard Operating Procedures should be developed for City Facilities and employees trained on spill prevention and response.

IMPLEMENTATION RESPONSIBILITY – Stormwater Management Coordinator, Fire Department, Engineering Department.

MEASUREMENT- keeps records of all spills requiring fire department response

DEADLINE- Progress evaluated quarterly.

D. Construction Site Stormwater Runoff Control Goals

Purpose: During construction activity, vegetation and topsoil can be stripped away, making the area vulnerable to erosion and sediment reaching our waterways. Construction sites also generate large amounts of other wastes that may find their way to our waterways.

GOAL D1 – Enforce construction site runoff control ordinance.

PLAN OF ACTION – Implement standard procedures for ensuring compliance and inspecting Construction Site Stormwater Runoff. Develop inspection training manual. Procedures include provisions for notification of violations, follow-up inspections and penalties for non-compliance.

IMPLEMENTATION RESPONSIBILITY – Stormwater Management Coordinator, Coordination with City Inspectors

MEASUREMENT- Number of Inspectors trained. Track inspections, notifications, violations, follow-up and penalties.

DEADLINE- Evaluate yearly and compare to previous years.

GOAL D2 – Develop and implement procedures for site plan and SWPPP review which incorporate consideration for potential water quality impacts.

PLAN OF ACTION – Develop SOPs for review of site plans and Stormwater Pollution Prevention Plan (SWPPP), in order to determine potential water quality impacts prior to construction.

IMPLEMENTATION RESPONSIBILITY – Stormwater Management Coordinator, Engineering Department

MEASUREMENT- track number of site plans and SWPPPs reviewed.

DEADLINE- Progress evaluated yearly to see where improvements could be made.

GOAL D3 – Educate Contractors and City Staff on the provisions of the construction site runoff control ordinance and common BMP solutions.

PLAN OF ACTION – Create an educational pamphlet to be distributed with building permit to contractors. Add information for contractors to the website. Staff will be available for training requests or questions. Inspectors trained to be knowledgeable enough to answer questions.

IMPLEMENTATION RESPONSIBILITY – Stormwater Management Coordinator, Coordination with City Inspectors

MEASUREMENT- track inspections, notifications, violations, follow-ups, penalties, and number of people trained and education pamphlets distributed

DEADLINE- Progress evaluated yearly to see where training/education needs improvement.

E. Post-Construction Stormwater Management Goals

Purpose: Development has a significant effect on water quality, during the course of development, natural landscapes are often replaced by impermeable roads, parking lots, sidewalks, roofs and other impervious surfaces that lead to increases in the volume and flow rate of stormwater runoff. This increase leads to flooding and erosion that carries sediments and pollution to our waterways. This minimum control measure is to prevent or minimize water quality impacts.

GOAL E1 – Develop and adopt an ordinance or resolution requiring new developments and redevelopments that disturb more than one acre to implement post-construction best management practices.

PLAN OF ACTION – Develop and adopt ordinance outlining specific requirements for post-construction stormwater management from new and redevelopment projects including mechanisms and penalties, and mechanisms for ensuring long term maintenance of BMPs. Use the City of Hutchinson’s Post-Construction Best Management Practices Manual as a guide.

IMPLEMENTATION RESPONSIBILITY – Stormwater Management Coordinator, Law Department

MEASUREMENT- Approval of Ordinance for City Code by City Council.

DEADLINE- December 24, 2010. Ordinance passed December 21st, 2010; no further action required for this goal.

GOAL E2 – Enforce post-construction site runoff control ordinance.

PLAN OF ACTION – Implement standard procedures for ensuring compliance and inspecting Post-Construction Site Stormwater Runoff. Procedures include provisions for notification of violations, follow-up inspections and penalties for non-compliance.

IMPLEMENTATION RESPONSIBILITY – Stormwater Management Coordinator, Coordination with City Inspectors

MEASUREMENT- Track number of post construction BMPs installed, inspections, violations, follow-up and penalties in the City of Hutchinson’s asset management program.

DEADLINE- Progress evaluated yearly.

GOAL E3 – Develop and implement procedures for site plan and operations and maintenance manual review of post-construction BMPs.

PLAN OF ACTION – Develop checklist for review of site plans and operations and maintenance manual, in order to determine potential water quality impacts post construction.

IMPLEMENTATION RESPONSIBILITY – Stormwater Management Coordinator, Engineering Department

MEASUREMENT- performance of BMPs keeping stormwater on the site via inspections, violations and complaints, number of checklists completed tracked in City of Hutchinson’s asset management program.

DEADLINE- Progress evaluated yearly.

GOAL E4 – Develop a long term program to verify operation and maintenance for Post Construction BMPs.

PLAN OF ACTION – Develop inspection and maintenance tracking list for installed BMPs. Create timeline and Standard operating procedures for maintenance. Enter all inspection reports into City of Hutchinson’s asset management program to track progress, inspections, and violations.

IMPLEMENTATION RESPONSIBILITY – Stormwater Management Coordinator

MEASUREMENT- number of BMPs inspected verifying maintenance every 2 years.

DEADLINE- Progress evaluated yearly.

F. Pollution Prevention/Good Housekeeping for Municipal Operations Goals

Purpose: Many opportunities exist in our own City operations to prevent stormwater pollution. Altering daily activities that have the potential to contribute pollutants to stormwater can have positive effects on water quality.

GOAL F1 – Develop and implement Standard Operating Procedures that include employee training to prevent and reduce stormwater pollution from municipal operations activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance.

PLAN OF ACTION – Establish standard operating procedures that address improvements to current operations with the intent of preventing possible stormwater pollution. Require necessary employees to read and sign the SOPs. Their signature indicates that they will follow the SOPs and that they have been trained. The Stormwater Management Coordinator will be available for questions and follow-up. Develop and implement training programs, as needed, specific to each applicable department/division that address pollution prevention activities and stormwater compliance requirements specific to that department.

IMPLEMENTATION RESPONSIBILITY – Stormwater Management Coordinator, Coordination with Department Heads

MEASUREMENT- implementation of SOPs and number of people trained

DEADLINE- Progress evaluated yearly.

GOAL F2 – Develop a schedule and tracking system for storm sewer maintenance, street sweeping and ditch clean out.

PLAN OF ACTION – Work with department heads to create tracking system and require updates to the engineering department for record keeping. Develop a schedule and completion goals with the department heads. For example; the sewer maintenance employees will clean out 2 miles of storm sewer pipe each year. Create priority areas that will be addressed more often.

IMPLEMENTATION RESPONSIBILITY – Stormwater Management Coordinator, Coordination with Department Heads

MEASUREMENT- number of feet cleaned, truckloads of debris, man hours devoted to these tasks

DEADLINE- Progress evaluated yearly.

GOAL F3 – Develop and create an updated GIS map and maintenance tracking system for the storm sewer system.

PLAN OF ACTION – complete GIS mapping activities assigning unique identifiers. Once the map is complete, develop a system to track cleaning and other maintenance activities for each inlet. (use the sanitary sewer system as a model for tracking system) Create a priority area list for cleaning and maintenance. This will allow us to schedule and use maintenance personnel's time more efficiently. The maintenance activity information will be provided to engineering for analysis and record keeping.

IMPLEMENTATION RESPONSIBILITY – Stormwater Management Coordinator, Sewer Maintenance Department

MEASUREMENT- amount of storm sewer system mapped, Maintenance efforts (i.e. Linear Feet of pipe cleaned, number of basins cleaned and repaired, man hours worked etc.)

DEADLINE- 2010 1/3 storm sewers mapped
2011 complete storm sewer mapped
2012 Develop a system to track storm sewer maintenance

2012-2013 track activity
2013 create priority list and schedule for employees
2013 and Beyond - ongoing maintenance and evaluation of program

GOAL F4 – Monitor the Arkansas River and Cow Creek to determine the City of Hutchinson’s MS4 contribution

PLAN OF ACTION – In accordance with the NPDES permit issued to the City of Hutchinson, rain event sampling will be conducted a minimum of 4 times a year at a minimum of 4 locations including samples upstream and downstream of the City of Hutchinson for both impaired streams Cow Creek and the Arkansas River. Samples will be collected by trained staff and delivered to a certified lab.

IMPLEMENTATION RESPONSIBILITY – Stormwater Management Coordinator, Coordination with Wastewater Treatment Facility Staff

MEASUREMENT – keep sample results to compare, for permit compliance to be reported to KDHE and to help in the determination of the effectiveness of BMPs

DEADLINE – on-going process and evaluation

G. Implementation of BMPs to attenuate the discharge of TMDL regulated parameters Goals

Purpose: Total Maximum Daily Load or TMDL, is the maximum allowable quantity of a pollutant that can be discharged to a stream system while not exceeding water quality criteria set by KDHE and the EPA. The TMDLs that are regulated for the Arkansas River and Cow Creek are the nutrients Total Phosphorus, Ortho-Phosphorus, Nitrate+Nitrite, Total Kjeldahl Nitrogen, and Total Nitrogen. Also for Cow Creek are the following sediment TMDLs: Total Suspended Solids and Turbidity. The City is required to implement best management practices to attenuate these impairments. These TMDLs are addressed by the following BMPS:

Nutrients: A2, B4, C2, E1, E2, E3, E4, and F1

Sediment: A2, B4, D1, D2, D3, E1, E2, E3, E4, F1, and F2