

2021

CITY OF COLUMBUS STORMWATER MANAGEMENT PLAN (SWMP)

PHASE II MS₄ ANNUAL REPORT

Nebraska Department of Environment and Energy

Authorization to Discharge Stormwater

*Under the NPDES Stormwater Phase II Municipal Separate Storm
Sewer System (MS₄) General Permit Number NER310000*

Authorization Number NER 300007

Issued July 1, 2017

For the Reporting Period: 01/01/2021 through 12/31/2021



March 28, 2022

Reuel Anderson

245 Fallbrook Blvd.

Lincoln, NE 68509-8922

RE: City of Columbus NPDES Annual Report 2021

Reuel:

Enclosed is the City of Columbus 2021 NPDES Phase II General Permit NER3000007 Annual Report.

If you need anything, further or have any questions, please feel free to contact me at my office 402-562-4237 or on my cell phone 402-910 6817

Sincerely,

Dave Boswell

Dave Boswell

Engineering Project Manager

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DEFINITIONS

The purpose of the following section is to define some commonly used acronyms found in this Stormwater Management Plan (SWMP). If a term is found in this plan that you are unfamiliar with, please contact the Engineering Project Manager in the City of Columbus Engineering Department at (402) 562-4237.

BMP – A best management practice (BMP) is defined by the NDEE as schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the state. BMP's also include treatment requirements, operating and maintenance procedures, schedules of activities, prohibitions of activities, and other management practices to control plant site runoff, spillage, leaks, sludge or waste disposal or drainage from raw material storage.

Construction Stormwater Program Manual – The Construction Stormwater Program Manual (CSWP Manual) gives detailed descriptions of exactly how the stormwater management plan will be carried out. Unlike the SWMP the IDDE Manual does not contain measurable goals, but rather specific details and protocols for achieving those goals. As of this publication of this SWMP this manual is still in development.

IDDE Program Manual – The Illicit Discharge Detection and Elimination Manual (IDDE Manual) gives detailed descriptions of exactly how the stormwater management plan will be carried out. Unlike the SWMP the IDDE Manual does not contain measurable goals, but rather specific details and protocols for achieving those goals. As of this publication of this SWMP this manual is still in development.

MCM (Minimum Control Measure) – A minimum control measure defines a minimum measure that a municipality must take in order to reduce the risk of stormwater pollution. The NDEE has defined 6 MCM's described in this plan that municipalities must address as part of an overall stormwater management plan.

MS4 – A municipal separate storm sewer system (MS4) is defined by the NDEE as all separate storm sewers that are defined as “large”, “medium”, or “small” municipal separate storm sewers. The City of Norfolk is considered to be a small MS4.

Operations Water Quality Guide – The Operations Water Quality Guide gives detailed descriptions of exactly how the stormwater management plan will be carried out. Unlike the SWMP the IDDE Manual does not contain measurable goals, but rather specific details and protocols for achieving those goals. As of this publication of this SWMP this manual is still in development.

Post Construction Stormwater Program Manual – The Post Construction Stormwater Program Manual (PCSWP Manual) gives detailed descriptions of exactly how the stormwater management plan will be carried out. Unlike the SWMP the IDDE Manual does not contain measurable goals, but rather specific details and protocols for achieving those goals. As of this publication of this SWMP this manual is still in development.

Storm Sewer System – The City of Columbus's storm sewer system consists of all storm sewer infrastructure including pipes, outfalls, culverts, cleanouts, manholes, and inlets.

EXECUTIVE SUMMARY

This Stormwater Management Plan (SWMP) documents commitments by the City of Columbus to implement stormwater management procedures and practices. The City of Columbus is required to maintain compliance with a National Pollution Discharge Elimination System (NPDES) permit issued by the Nebraska Department of Environment and Energy (NDEE) that regulates the quality of stormwater runoff from the community. The Federal Clean Water Act establishes authority and the required compliance that NDEE enforces. Reducing the risk of stormwater pollution in local receiving waters by way of non-point source discharges is the purpose of the NPDES permit. NPDES Permit number NER300000 was issued to the City of Columbus in July of 2005. Updated NPDES Permit number NER 310000 was issued on July 1, 2017.

Procedures have been developed to comply with each of the six Minimum Control Measures (MCM's) stated in the permit. These MCM procedures and activities are reviewed by the NDEE as part of the annual reporting process and are defined as follows:

- ◆ *Public Education and Outreach (MCM #1): was accomplished by using social media, information on the back of water bills. Pamphlets was also handed out at the local Home Builders Show and Hazardous Waste Disposal day as well.*
- ◆ *Public Involvement and Participation (MCM #2): The City of Columbus did not make any changes to the manuals or the Ordinances in 2021. We did maintain our flyers and pamphlets on display in the Engineering Office and on our Web Site as needed. Therefore, we did not feel we needed to have the committee form to hold any meetings.*
- ◆ *Illicit Discharge Detection and Elimination (MCM #3): We remain diligent about talking to our personnel that are out driving around to keep looking for spills that need to be cleaned up. Our numbers of reports have remained the same as 2020. We conducted Outfall Observations on 100% of 36" and larger Outfalls. We also conducted Outfall Observations on 39% of small Outfalls.*
- ◆ *Construction Site Storm Water Runoff Control (MCM #4): We were able to get out and visit the construction sites and do our inspections as required this year. We have been working diligently with our Lucity software to make it more user friendly and more practical, by being able to track non-compliance issues as well.*
- ◆ *Post-Construction (MCM #5): The Manual had a few clerical updates was made. We also had site visits with contractors about the updated material when possible. Also, additional pamphlets was handed out when at the Columbus Home Builders Show and on sites when possible.*
- ◆ *Good Housekeeping & Prevention (MCM #6): We conducted training on IDDE and stormwater runoff to the appropriate personnel this year. Our sweeping efforts are exceeding of what is required. We also updated our Municipal Site Map by identifying which sites do maintenance on them and which do not.*

This SWMP document is organized to communicate required regulatory compliance information to NDEE and EPA. The outline of the document is consistent throughout and is written in a manner to satisfy the specific wording of the NPDES permit. References, Assignments, Frequencies, and Measurable Goals are all clearly documented to successfully achieve the requirements of the NPDES permit.

The SWMP document outlines strategy details that are defined within the program supporting documents. The details in these documents are not included in the SWMP except by reference for each strategy. The content that must be addressed within the supporting documents is clearly outlined by the activities of Program Defining Strategies. These Strategies are intended to provide integration between NPDES Permit requirements, SWMP document content, and Annual Reporting.

In conclusion, this document is made available for the public to view on the City of Columbus Web site as well as in the Engineering Project Managers Office in the Engineering Department. Public understanding of the program and their active participation in it is important to accomplishing all phases of the SWMP document content and Annual Reporting.

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information submitted, this document is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



Tara Vasicek, City Administrator

3/29/2022

Date

MCM #1 PUBLIC EDUCATION AND OUTREACH

PUBLIC EDUCATION AND OUTREACH DECISION PROCESS AND RATIONALE

The purpose of this Minimum Control Measure (MCM) is to educate the public on the benefits of keeping our receiving waters clean of pollutants. An informed public can make a significant reduction in the amount of stormwater pollutants that enter our stormwater systems. Multiple media forms are used to convey this information. Social Media, Websites, Radio, Television, Household Awareness Surveys, and more all play a role in this process.

The City of Columbus informs individuals and households by public awareness surveys. Once the results of the survey are in, a pamphlet of information discussing common household stormwater pollution topics is distributed to each utility customer.

How will the City of Columbus inform individuals and groups on how to become involved in the stormwater program and activities?

The City of Columbus Stormwater Division has a website and email on the City's webpage. Also, on the NebraskaH2O.org website. When events are scheduled, a press release is sent out to the public.

Who is the target audience for the city of Columbus education and outreach program that are likely to have stormwater quality impacts and why are they the target audience?

The City of Columbus has chosen the following target audiences for our education and outreach program that are likely to have stormwater quality impacts: Home Owners, Pet Owners, Lawn and Garden Care, Property Owners, Automobile Dealers/Mechanics/Detailers, Construction Site Operators, Home Builders, Contractors and Engineers/Developers/Realtors. These target audiences were chosen due to the impact of their activities and their availability to be reached.

What are the target pollutant sources the City of Columbus Public Education and Outreach program is designed to address?

The target audiences have been designated to address different types of non-point source pollution through the Public Education and Outreach (PEO) Program. Household hazardous wastes, pet waste, oil and other fluids from automobiles, grass clippings and fertilizers are just some of the examples.

What is the City of Columbus Public Education and Outreach strategy? What mechanisms used to reach the target audience, and how many people are expected to be reached by the program each year?

The City of Columbus's Public Education and Outreach (PEO) Program has the ability to utilize an array of formats to reach the public. Previously, the City of Columbus has collaborated with other Nebraska H2O communities and the UNL Extension Office. Other mechanisms include Radio PSA's, Stormwater Pamphlets, Facebook posts, Press Releases, newspaper articles, and information on the backs of the water and sewer bill. The City has the goal of eventually reaching all age groups and genders utilizing these various media platforms.

Who is responsible for the overall management and implementation of the City of Columbus Public Education and Outreach program and its activities?

The City of Columbus's Engineering Project Manager is responsible for the overall management and implementation of the City's education and outreach program. The Engineering Project Manager's office is in the Engineering Department or maybe reached at 402-562-4237.

How will the City of Columbus evaluate the success of the education and outreach program and how were the measurable goals identified?

The City of Columbus evaluates the success of the education and outreach program by implementing effective measures for each Best Management Practice (BMP) that will be met and acknowledged for each reporting period. These measures are meant to be a guide and measuring stick for each BMP and proof of progress for that item.

This Municipal Separate Storm Sewer Systems (MS4) Public Education and Outreach (PEO) Strategy is a targeted approach to delivering education, training, and public involvement and is tailored to target audiences and groups of individuals that may influence stormwater quality associated with municipal stormwater runoff. The City of Columbus can have a significant influence on the education and training provided to Municipal Employees, Engineering Consultants, Contractors, Subcontractors, and General Public by delivering public education and outreach activities. By focusing on the target audiences described in the PEO Strategy, the City of Columbus can best develop an awareness of stormwater BMP's, increase knowledge about recommended and required BMP's and develop skills for correctly implementing BMP's.

PEO Strategy Goal 1: Educate and train Municipal Employees, Engineering Consultants, Contractors/Sub-Contractors, and General Public to follow recommended and required BMP's and the steps that the targeted audience can take to reduce stormwater pollution.

PEO Strategy Goal 2: Utilize a combination of appropriate strategies to reach target audiences that can implement Stormwater BMP's.

PEO Strategy Goal 3: Inform the public about how to participate in environmental stewardship opportunities, review the SWMP, and report about Illicit Discharges and other municipal stormwater pollution concerns.

PEO Strategy BMP's: The PEO Strategy Goals are supported by the PEO Strategy BMP's described throughout the Stormwater Management Plan (SWMP). The following PEO Strategy BMP's provide details about how the City of Columbus will accomplish the goals.

BMP 1.1: Deliver stormwater education materials that are tailored, current, and relevant to the SWMP.

BMP 1.2: Deliver stormwater training and events that are tailored, current, and relevant to the SWMP.

BMP 1.3: Maintain public review, comment, and input resources that support the SWMP.

BMP 1.4: Support the notification from the target audience about the SWMP and pollution problems impacting stormwater quality.

BMP 3.4: Deliver education about the impact of illicit discharges, common types of illicit discharges and response procedures when illicit discharges are identified.

BMP 4.4: Deliver education about the impact of construction-related stormwater pollution construction site erosion, sediment and, good housekeeping BMP's, enforcement and inspection requirements.

BMP 5.2: Deliver education about planning and design BMP's required to treat stormwater runoff from new and, re development.

BMP 6.3: Deliver education about the impact of maintenance and facility operations on stormwater, operation BMP's, inspection, and enforcement requirements.

PEO Strategy Defining Activities: The PEO Strategy BMP's are defined by a set of materials and efforts that the City of Columbus maintains. The SWMP tables define each BMP with descriptions, target audiences, messages, methods/resources as well as dates materials were last provided and when they are next due. The defining activity tables follow the same general format shown below.

Description	Target Audience	Messages	Methods/Resources	Last Provided	Due Next
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PEO Strategy Implementation Activities: The PEO Strategy BMP's are measured as a set of goals that the City of Columbus implements. The SWMP table lists the goals for the activity, a measure for evaluation and assessment as well as the reporting for annual performance that is compared against the evaluation and assessment targets. The implementation tables follow the same general format shown below.

Goals:	Evaluation and Assessment	Annual Performance
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PEO Strategy Target Audiences: *The quality of stormwater discharging to the Municipal Separate Storm Sewer System (MS4) can be impacted by a diverse audience that the City of Columbus addresses. Each target audience requires education and outreach techniques that accommodated their unique availability, behaviors, motivations, communication patterns, and liability to the city. Education materials and outreach activities are tailored with each target audience in mind to effectively reduce the risk of stormwater pollution. Educating the target audience is expected to have a positive impact on stormwater quality by reducing the risk of discharging target pollutants.*

The Primary Target Audience is characterized by a high level of responsiveness to the city. The group includes any individual or entity that the City places expectations upon with a high degree of confidence that those expectations will be met. Failure to meet the Cities expectations can have a negative impact upon the Primary Target Audience which increases the potential that education and outreach efforts will be effective. The Primary Target Audiences includes:

- *City Employees*
- *Engineering Consultants*
- *Contractors and Sub Contractors*

The Secondary Target Audience is characterized by a lower level of responsiveness to the City to adopt personal best practices. The group includes any individual or entity that contributes stormwater and pollutants to the storm drain system. The City of Columbus has very little leverage over this group but provides education and outreach to raise awareness and influence perceptions of stormwater management in ways that protect water quality. The Secondary Target Audience includes:

- *Residents*
- *Business Owners*
- *Service Providers*
- *Youth*
- *Community Groups*

MCM#1: BMP 1: DEVELOP, MAINTAIN AND DISTRIBUTE CURRENT EDUCATION MATERIALS

1.1 Coordinate the Public Education and Outreach (PEO) Strategy with updates and maintenance of general stormwater education or outreach materials for distribution to residential, construction, industrial and commercial sources identified as a high priority, community-wide issues related to the impact of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff.

The PE-O Strategy identifies the following:

- Goals, objectives, target messages, and audiences for information.
- Resources used and frequency for distributing information.

Reference				Frequency	
The City of City of Columbus PEO Strategy				Annually	
Description	Target Audience	Messages	Methods/Resources	Last Provided	Next Due
Online Websites	General Public	Stormwater Program Management and BMP topics	City of Columbus Website Nebraska H ₂ O Website	2021	2022
Social Media	General Public	Stormwater Program Management & BMP topics	City of Columbus will use social media such as our Facebook Page, Twitter, and Nebraska H ₂ O Website to educate the public.	2021	2022
Internet Advertisements	General Public	Stormwater Program Management and BMP topics	News Channel Nebraska News Team website	2020	2023
Radio PSA's	General Public	Basic Stormwater Protection Awareness & Prevent pollution	Local Radio Station	2021	2022
Storm Drain Awareness	General Public	Prevent pollution by keeping water draining to inlets, streams, and lakes clean	Storm Drain Design Flyers & Storm Drain Markers	2021	2022
Report:	We will continue updating our web sites information. We will also continue to use social media, and storm drain awareness. We also have made contact with the local radio, to run PSA's for the City of Columbus. As far as internet run advertisements the local radio station site has ran a few banners for us. The NEH ₂ O group is working on a new web site that we are one of the key players in helping with development of the site.				

1.1.2 Distribute general stormwater education and outreach materials related to the impact of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff.

<i>Reference:</i>	<i>Public Education and Outreach</i>		
<i>Responsible:</i>	<i>Engineering Project Manager</i>	<i>Frequency:</i>	<i>Annually</i>
<i>Goals</i>		<i>Evaluation and Assessment</i>	<i>Measure</i>
STORMWATER AWARENESS INFORMATION TO THE GENERAL PUBLIC			
ADMINISTRATION: Resources used with estimated/actual number of public reached.	<i>Recorded</i>	<i>Yes</i>	
EFFECTIVENESS: Use of stormwater program management websites.	<i>Available</i>	<i>Yes</i>	
EFFECTIVENESS: Social Media for stormwater program management and BMP information.	<i>30% of residents</i>	<i>40% of 23,130</i>	
EFFECTIVENESS: Use of storm drain markings for stormwater awareness.	<i>50 storm drains marked or replaced</i>	<i>100</i>	
EFFECTIVENESS: Use of Internet Advertisements for stormwater awareness.	<i>Total produced.</i>	<i>2</i>	
EFFECTIVENESS: Use of Radio Advertisements for stormwater awareness.	<i>Total aired.</i>	<i>10 aired multiple time in a week.</i>	
EFFECTIVENESS: Use of Stormwater program materials for stormwater awareness to visitors at various events, trainings, and activities.	<i>Total distributed at Home Builders Show in Columbus.</i>	<i>130</i>	
SECTOR-SPECIFIC AWARENESS INFORMATION TO THE GENERAL PUBLIC			
ADMINISTRATION: Record of all resources used with the actual number of public reached.	<i>Completed</i>	<i>Yes</i>	
EFFECTIVENESS: Information provided to Household Hazardous Waste generators and collection locations.	<i>Total distributed</i>	<i>800</i>	
EFFECTIVENESS: Information provided to pet owners with information about best practices and recommendations for collecting and disposing of pet waste.	<i>Total distributed</i>	<i>50</i>	
EFFECTIVENESS: Information provided to property owners with BMP practices and for minimizing Lawn and Garden pollutants.	<i>Total distributed</i>	<i>30</i>	
EFFECTIVENESS: Information provided for Best Management Practices on Automobile Dealers, Mechanics, and Detailing Businesses.	<i>Total distributed</i>	<i>15</i>	

Satisfied:

*Yes: x No: Explanation: We feel satisfied with all results for the social media, and radio we also used the backs of our water bills as a way to educate our citizens. The percentages of people that was reached by the media advertisements is an approximate guess due to the media outlets not being able to track how many people viewed/listened. We were also able to be at the Home Builders Show this year and reach out to people and answer any questions they may have.
The City of Columbus is also excited about and involved with the new NEH2O Web Site that is being developed and should be up by the middle of 2022.*

MCM#1: BMP 2: DEVELOP, MAINTAIN AND PROVIDE TOURS AND EVENTS

1.2.1 Coordinate the Public Education and Outreach Strategy with updates and maintenance of general stormwater tours and events that raise awareness for the impact of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff. The Strategy includes for these awareness tours and events:

- Goals, objectives, target messages and audiences
- Resources used and frequency

Reference				Frequency	
The City of City of Columbus PEO Strategy				Annually	
Description	Target Audience	Messages	Methods/Resources	Last Provided	Next Due
Keep Columbus Beautiful	General Public	Community awareness of the impacts of pollution to local waterbodies	Coordination with Chamber Keep Columbus Beautiful and UNL Extension Agency, advertise through and social media	2021	2022
Household Hazardous Waste Disposal Day	General Public	Prevent pollution by disposing of household hazardous waste properly	Advertise through print and social media	2021	2022
Storm Drain Marking Installations	General Public	Provide community awareness to the impacts of pollution to local waterbodies	Coordination with local youth groups, advertise through print and social media	2021	2023
Report:	The city partially funds Keep Columbus Beautiful and did work with Keep Columbus Beautiful by doing a Household Hazardous Waste Disposal Day. The City of Columbus also conducted a free dump day at our Transfer Station. We were not able to work with local youth in placing Stormwater Markers again this year due to lack of interest therefore, Inlets that needed to be marked, was done by City Personnel. There are pamphlets located at City Hall on the second floor about hazardous waste and how to properly dispose of them when needed.				

1.2.2 Provide general stormwater education or outreach tours and events that raise awareness for the impact of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff.

<i>Reference:</i>	<i>Public Education and Outreach</i>		
<i>Responsible:</i>	<i>Engineering Project Manager</i>	<i>Frequency:</i>	<i>Annually</i>
<i>Goals</i>		<i>Evaluation and Assessment</i>	<i>Performance</i>
<i>ADMINISTRATION: Record Stormwater Education & Outreach event.</i>		<i>Recorded</i>	<i>Yes</i>
<i>EFFECTIVENESS: General Public attendance at Keep Columbus Beautiful Education & Outreach event.</i>		<i>Recorded</i>	<i>154</i>
<i>EFFECTIVENESS: Volunteer Youth participants for Storm Drain Marking installations.</i>		<i>1 youth group per year</i>	<i>0</i>
<i>EFFECTIVENESS: Citywide household Hazardous Waste Disposal event.</i>		<i>1 Event</i>	<i>154</i>
<i>Satisfied:</i>	<i>Yes: X No: Explanation: During the year the City of Columbus helped with a city wide Household Hazardous Waste event. It was not attended as well as other years due to a major band competition in town and other community events going on at the same time. The City of Columbus also held a free dump day at our Transfer Station to help clean up the community. Also there are pamphlets on the second floor of City Hall and on the City's web site for Hazardous waste. The City of Columbus did have a booth at the Columbus Homebuilders Show in conjunction with the UNL Extension Agency this year as well.</i>		

MCM 1 & 2: BMP 3: PUBLIC INVOLVEMENT AND PARTICIPATION MATERIALS

1.3.1 Coordinate the Public Education and Outreach Strategy with materials that demonstrate compliance with State and local public notice requirements and involve the public in planning and implementation of programs and activities related to the City of Columbus Stormwater Management Program and NPDES Permit. The PEO Strategy identifies the following:

- Target messages and audiences for public involvement and participation
- Resources used and frequency for providing public involvement and participation

<i>Reference:</i>				<i>Frequency:</i>	
<i>The City of City of Columbus PEO Strategy City of Columbus City Code Chapters 53-54</i>				<i>Annually</i>	
<i>Description</i>	<i>Target Audience</i>	<i>Messages</i>	<i>Methods/Resources</i>	<i>Last Provided</i>	<i>Next Due</i>
<i>MS4 PERMIT</i>	<i>General Public</i>	<i>Regulations and Ordinances are available for the public to use and follow for compliance</i>	<i>Available Upon Request, on the City of Columbus web site and in the Engineering Project Managers Office.</i>	<i>2021</i>	<i>2022</i>
<i>STORMWATER MANAGEMENT PLAN (SWMP)</i>	<i>General Public</i>	<i>Regulations and Ordinances are available for the public to use and follow for compliance</i>	<i>Available Upon Request, on the City of Columbus web site and in the Engineering Project Managers Office.</i>	<i>2021</i>	<i>2022</i>

<p>STORMWATER PROGRAM ORDINANCES FOR:</p> <ul style="list-style-type: none"> • <i>ILLICIT DISCHARGE DETECTION AND ELIMINATION</i> • <i>EROSION AND SEDIMENT CONTROL</i> • <i>POST-CONSTRUCTION STORMWATER TREATMENT</i> 	<p><i>General Public</i></p>	<p><i>Regulations and Ordinances are available for the public to use and follow for compliance</i></p>	<p><i>Available Upon Request, on the City of Columbus web site and in the Engineering Project Managers Office.</i></p>	<p><i>2021</i></p>	<p><i>2022</i></p>
<p><i>Formal Comments for Ordinance Adoption and Revision</i></p>	<p><i>General Public</i></p>	<p><i>Public input helps form public policy and ordinances for protecting water quality</i></p>	<p><i>City Council, Public Notices</i></p>	<p><i>2018</i></p>	<p><i>As Needed</i></p>
<p><i>Report:</i></p>	<p><i>The City of Columbus has made some clerical changes to the SWMP through the course of 2021. We have also made some clerical corrections as well to the other manuals. The City of Columbus did not have any formal comments or the need to have a public hearing for the 2021 year.</i></p>				

1.3.2 Provide public involvement and participation opportunities that demonstrate compliance with State and local public notice requirements and involves the public in the planning and implementation of programs and activities of the SWMP.

<i>Reference:</i>	<i>Public Education and Outreach</i>		
<i>Responsible:</i>	<i>Stormwater Coordinator</i>	<i>Frequency:</i>	<i>Annually</i>
<i>Goals</i>		<i>Evaluation and Assessment</i>	<i>Performance</i>
<p>ADMINISTRATION: Provide program reference documents online and make available to the general public for the following:</p> <ul style="list-style-type: none"> • <i>Municipal Separate Storm Sewer (MS4) Permit</i> • <i>Storm Water Management Plan</i> • <i>Illicit Discharge and Connection Ordinance</i> • <i>Erosion and Sediment Control Ordinance</i> • <i>Post-Construction Stormwater Treatment Ordinance</i> 		<i>Provided</i>	<i>Yes</i>
<p>ADMINISTRATION: Provide a public forum to receive input about proposed stormwater compliance plans and ordinances during the Public Property Committee meetings.</p>		<i>Record public attendance and comment numbers.</i>	<p><i>Proposed Changes:</i> <i>No</i></p> <p><i>Attended:</i> <i>o</i></p> <p><i>Comments:</i> <i>o</i></p>
<p>ADMINISTRATION: Make web form and telephone resources available to the public for submitting requests, such as City web report form, and Nebraska H₂O web report form received from public requests related to stormwater information, potential pollution situations, and stormwater program recommendations.</p>		<i>Report all resources utilized</i>	<i>o</i>
<p>EFFECTIVENESS: All proposed changes to regulations and ordinances are posted for review at least one week prior to the decision.</p>		<i>Was any of the proposed changes not made?</i>	<i>N/A</i>
<i>Satisfied:</i>	<p><i>Yes: X No: Explanation: The program reference documents are on the City of Columbus Web Site and available to the public in the Engineering Project Managers Office. In 2021 there was not a need for the public forum as there were no changes to the ordinances.</i></p>		

MCM #2 PUBLIC PARTICIPATION AND INVOLVEMENT

PUBLIC PARTICIPATION AND INVOLVEMENT DECISION PROCESS AND RATIONALE

The purpose of this Minimum Control Measure (MCM) partly goes along with the first MCM, Public Education and Outreach. The idea is to use the informed public to get involved to the point of participating in activities and events. With this enthusiasm, the public will be spreading the idea of stormwater pollution prevention via word of mouth amongst members of the community and beyond.

How does the City of Columbus involve the community in the development and submittal of the MS4 permit application and Stormwater Management Program?

The City of Columbus involves the public in the development and submittal of the MS4 permit application and the Stormwater Management Program by formal comments and public notices of changes to permits, SWMP, and supporting documents during the process of approval of the document and when amended.

What is the plan for actively involving the public in the development and implementation of the City of Columbus Stormwater Management Program?

The City of Columbus also actively involves the public in the development and implementation of the Stormwater Management Program by providing public notices when updating ordinances pertaining to the City of Columbus Stormwater Management Program. The City Council Meetings and work sessions allow the public to ask questions and give comments prior to the approval of any City Ordinance changes.

Who are the target audiences for the City of Columbus's public participation and involvement program?

The City of Columbus actively approaches any group regardless of ethnicity or economic status as it pertains to stormwater pollution. Pollutant source identification is the key component of the City's Stormwater Management Program. Any group, whether industrial, trade, environmental, educational, is approachable.

What are the types of public involvement and participation activities included in the City of Columbus Stormwater Management program?

The types of public involvement and participation activities The City of Columbus uses Rain Garden Tours and demonstrations, storm drain marking, illicit discharge hotline, Water Expo provided by UNL Extension, and community cleanup events.

Who is responsible for the overall management and implementation of the City of Columbus's Public Participation and Involvement Program activities?

The City of Columbus Engineering Project Manager is ultimately responsible for the management and implementation of the City of Columbus Public Participation and Involvement program and finding program activities that the public will participate in. The Engineering Project Manager's office is in the Engineering Department or may be reached at 402-562-4237.

How will the City of Columbus evaluate the success of the participation and involvement program and how were the measurable goals identified?

The City of Columbus evaluates the success of the public participation and involvement activities by implementing several 'effectiveness measures' to measure the successful implementation of each Best Management Practices (BMP). These effectiveness measures are reported annually in our NDEE Annual Report.

MCM #2: BMP 1: PUBLIC INVOLVEMENT AND PARTICIPATION MATERIALS

2.1.1 Coordinate the Public Education and Outreach Strategy with materials that demonstrate compliance with State and local public notice requirements and involve the public in planning and implementation of programs and activities related to the City of Columbus Stormwater Management Program (SWMP) and National Pollution Discharge Elimination System (NPDES) Permit. The Public Education and Outreach (PEO) Strategy identifies the following:

- Target messages and audiences for public involvement and participation.
- Resources used and frequency for providing public involvement and participation.

Reference				Frequency	
The City of Columbus PEO Strategy City of Columbus City Code Chapters 53-54				Annually	
Description	Target Audience	Messages	Methods/Resources	Last Provided	Next Due
MS4 Permit & Stormwater Management Plan	General Public	Regulations and Ordinances are available for the public to use and follow for compliance	Available on City of Columbus Web site. Also, in Engineering Project Managers Office.	2021	2022
Stormwater Program Ordinances for: <ul style="list-style-type: none"> • Illicit Discharge Detection and Elimination • Erosion and Sediment Control • Post-Construction Stormwater Treatment 	General Public	Regulations and Ordinances are available for the public to use and follow for compliance	Available on City of Columbus Web site. Also, in Engineering Project Managers Office.	2021	2022

<i>Columbus Home Builders Show</i>	<i>Construction Companies, Engineers, Developer's, Relators and Lawn & Garden Companies</i>	<i>Instructions on how to complete various stormwater forms for construction, and local building permits. As well as what BMP's are and when to be used.</i>	<i>A stormwater themed booth that is staffed by the Engineering Project Manager and other essential staff.</i>	<i>2019</i>	<i>2023</i>
<i>Stormwater Public Meetings</i>	<i>General Public</i>	<i>Answer questions regarding stormwater changes. Public input helps form policy and ordinances for protecting the water quality.</i>	<i>The City of Columbus provides resources for the public to reach out to the Engineering Project Manager with questions and/or concerns.</i>	<i>2018</i>	<i>As Needed</i>
<i>Public Notice</i>	<i>Construction Companies, Engineers, Developer's, Relators and Lawn & Garden Companies</i>	<i>Major SWPPP updates, policy changes, municipal code revisions, and the opportunity for the public comment</i>	<i>The City of Columbus will publish all public notices in the local paper.</i>	<i>AS NEEDED</i>	<i>AS NEEDED</i>
<i>Report:</i>	<i>We continue to make some small clerical corrections to the SWMP and to the other manuals. They Web Site is updated and we continue to make improvements for easier navigation.</i>				

2.1.2 Provide public involvement and participation opportunities that demonstrate compliance with State and local public notice requirements and involves the public in the planning and implementation of programs and activities of the SWMP.

<i>Reference:</i>	<i>Public Education and Outreach</i>		
<i>Responsible:</i>	<i>Engineering Project Manager</i>	<i>Frequency:</i>	<i>Annually</i>
<i>Goals</i>		<i>Evaluation and Assessment</i>	<i>Performance</i>
<p>ADMINISTRATION: Provide program reference documents on-line and make available to the general public for the following:</p> <ul style="list-style-type: none"> • <i>Municipal Separate Storm Sewer (MS4) Permit.</i> • <i>Storm Water Management Plan (SWMP)</i> • <i>Illicit Discharge and Connection Ordinance.</i> • <i>Erosion and Sediment Control Section of the City Code.</i> • <i>Post-Construction Stormwater Treatment Ordinance.</i> 		<i>Provided</i>	<i>Yes</i>
<p>ADMINISTRATION: Attend the Columbus Home Builders Show and provide informational material to attendees and address any concerns the public may have.</p>		<i>Attended</i>	<i>Yes</i>
<p>ADMINISTRATION: Provide a public forum to receive input about proposed stormwater compliance plans and ordinances.</p>		<i>Record public attendance and comment numbers</i>	<p><i>Proposed Changes: N/A</i></p> <p><i>Number Attended: 0</i></p> <p><i>Comments: None</i></p>
<p>ADMINISTRATION: Make a web form and telephone resources available to the public for submitting requests, such as the Engineering Project Managers phone number and email address, City web report form for receiving public requests related to stormwater information, potential pollution situations, and stormwater program recommendations.</p>		<i>Report all resources utilized</i>	<i>5</i>

<p>EFFECTIVENESS: Distribute a household stormwater awareness survey once during the Permit term to document measures that demonstrate if the public is knowledgeable about the impact of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff.</p>	<p>The number sent and returned.</p>	<p>Sent: {{Number}}</p> <p>Returned: {{Number}}</p>
<p>EFFECTIVENESS: All proposed changes to regulations and ordinances are posted for review at least one week prior to the decision.</p>	<p>100%</p>	<p>None in 2021</p>
<p>EFFECTIVENESS: Coordinate a stormwater committee (or similar group) with community members that will receive information about the City of Columbus Stormwater Program as needed. They would review and comment on the proposed program, policy and ordinance changes as well as make recommendations for program activities included in the SWMP.</p>	<p>The number of participants and meetings.</p>	<p>Citizens: None Meetings: None</p>
<p>Satisfied:</p>	<p>Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> Explanation: We did not make any changes to the manuals or the Ordinances in 2021. Therefore, we did not feel we needed to have the committee form to hold any meetings. The committee that we would use is the same committee that helped adopt our current SWMP and is on an on call basis.</p>	

MCM #3 ILLICIT DISCHARGE DETECTION AND ELIMINATION

ILLICIT DISCHARGE DETECTION AND ELIMINATION DECISION PROCESS AND RATIONALE

The purpose of this MINIMUM CONTROL MEASURE (MCM) is to minimize the effect of illicit discharges within the municipality. An Illicit Discharge Detection and Elimination (IDDE) program is followed by an ordinance has been enacted within the City Code. Dry weather inspections of stormwater outfalls are performed within the community on an annual basis or as needed if detection of Illicit Discharge. Also, a detailed storm sewer map is maintained to track the flow of stormwater and identify affected areas from illicit discharges. Finally, the City of Columbus's website allows the public to acknowledge their concerns regarding all forms of stormwater pollution.

How did the City of Columbus develop a stormwater system map and what information is used to verify outfall locations and make updates?

The City of Columbus developed a stormwater map by consolidating all information gathered by the City of Columbus staff and other entities. This included all outfall points, inlets, storm sewer pipes, open drainage ditches and junction boxes. Maintenance and upkeep of this stormwater map is done when as-built and changes to the system are received by our GIS Department.

How does the City of Columbus effectively prohibit discharges and why was that mechanism chosen?

The City of Columbus effectively prohibits illicit discharges with an active Illicit Detection Discharge and Elimination (IDDE) program that is identified by our Municipal Code Chapter 53, complete with an Enforcement Response Plan (ERP). The city holds violators accountable by implementing appropriate levels of enforcement, based on the nature and circumstances of the illicit discharge. The City of Columbus Municipal Code Chapter 53 defines allowable and prohibited stormwater discharges.

How does the City of Columbus plan to ensure that the illicit discharge ordinance, procedures, and actions are implemented?

The City of Columbus ensures that the illicit discharge ordinance, procedures, and actions are implemented through proper and consistent education of City employees to be able to recognize illicit discharges. The City of Columbus has a protocol along with an ERP that identifies the procedure(s) to follow based on the severity of non-compliance.

How does the City of Columbus detect and address illicit discharges to the storm sewer system, including illegal dumping and spills?

The Illicit Detection Discharge and Elimination (IDDE) Program defines a protocol for reporting the requirement to investigate trace and remove potential illicit discharges, including illegal dumping or spills. Using the appropriate City contact information (via phone or website), a citizen can identify to a responsible party what they saw. The citizen has the option to remain anonymous or not. The discharge is addressed and tracked until the issue is cleaned up and/or a party is found responsible.

How does the City of Columbus inform public employees, businesses, and the general public about the hazards to water quality from illegal discharges and disposal of waste?

The City of Columbus informs public employees, businesses, and the general public about the hazards to water quality from illegal discharges and improper disposal of waste through training videos, posters, bulletins, website updates and press releases. As the Illicit Detection Discharge and Elimination (IDDE) Program continues to develop, additional materials or educational effort would include flyers, additional website content, social media, and providing more presentation materials for training purposes.

Who is responsible for the overall management and implementation of the City of Columbus Illicit Discharge Detection and Elimination program and program activities?

The City of Columbus Engineering Project Manager along with the Public Works Director are responsible for the overall management and implementation of the Illicit Detection Discharge and Elimination (IDDE) Program and its activities.

How will the City of Columbus evaluate the success of the Illicit Discharge Detection and Elimination program and how are the measurable goals identified?

The City of Columbus evaluates the success of the Illicit Detection Discharge and Elimination (IDDE) Program through effectiveness measures to be met on a regular basis. The measures are acknowledged at each annual report to show the measure of success for the Illicit Detection Discharge and Elimination (IDDE) Program.

MCM #3: BMP 1: DISCHARGE INVESTIGATION AND REMOVAL

3.1.1 Coordinate updates and maintenance of discharge record-keeping, investigation, removal and enforcement information in the MS4 Illicit Discharge Detection and Elimination (IDDE) Program, which references and defines the following:

- *State and/or local regulatory mechanism(s) that effectively define allowable non-stormwater discharges and prohibit non-stormwater discharges into the storm sewer system related to illicit discharges (including on-site sewage disposal systems, spills, discharges, connections, and dumping).*
- *Internal spill, dump, discharge, connection procedures, departmental staff responsibilities, contact information (including NDEE for occurrence believed to be an immediate threat to human health or the environment), and equipment used to investigate illicit discharges.*
- *Enforcement response protocol used to remove illicit discharges that occur within the MS4.*
- *Data collected, the database used, and data export procedures for records of investigation, removal and enforcement efforts, enforcement status and outcomes for illicit discharges.*
- *Protocol for reporting the requirement to investigate and remove potential illicit discharges that flow into the MS4 from adjacent MS4 operators and property owners.*

<i>Reference</i>	<i>Frequency</i>
<i>City of Columbus Ordinance Chapter 53 Illicit Discharge Detection and Elimination (IDDE) Operation Manual Chapters 4 & 5</i>	<i>Review: Annually</i>
<i>Report:</i>	<i>The Engineering Project Manager and the Public Works Director met to review the Illicit Discharge Detection and Elimination (IDDE) manual, they determined that the procedures for the program, are still viable. We feel that the public and the city employee education is working as the number of incidents are have increased over the years which means there is an increasing awareness about IDDE.</i>

3.1.2 Investigate, remove or cause the responsible party to remove spills, illegal discharges, and illicit connections within and into the MS4.

Reference:	IDDE Program		
Responsible:	Public Works Director & Engineering Project Manager	Frequency:	Annually
Goals	Evaluation and Assessment	Measure	
ADMINISTRATION: Record dates of all notifications of potential illicit discharges, stakeholders involved, investigation and communication efforts, status, and final resolution taken for potential illicit discharges.	Record discharge information required.	Yes	
EFFECTIVENESS: Initiate an investigation of potential illicit discharges and/or contact adjacent MS4 operator within two days of notification.	100%	100% of 10	
EFFECTIVENESS: Once a source is determined, initiate notification to the responsible party of potential illicit discharges within one working day of notification.	100%	100% of 10	
EFFECTIVENESS: Open records are updated once a week with status and any new information until the issue is resolved.	100%	Yes	
EFFECTIVENESS: Summarize all instances that were closed without resolution including who made the determination to close the record and why the instance could not be resolved.	Record instances closed without resolution	0	
Satisfied:	Yes: X No: Explanation: There was one less than the previous year but we feel the City personnel and the public has a better understanding for Illicit Discharges and how to report them. A special emphasis on training the personal has paid off. As the awareness has increased so has number of reports and questions. All of the reported instances was resolved in a timely manner.		

MCM #3: BMP 2: DRY WEATHER SCREENING

3.2.1 Coordinate updates and maintenance of Dry Weather Screening Inspection and data collection information in the MS4 Illicit Discharge Detection and Elimination (IDDE) Program, which defines the following:

- Basis for selecting outfall locations used to screen for the presence of illicit discharges to the MS4 considering likelihood of illicit connections or ambient sampling.*
- Frequency used to screen major and minor outfalls for the presence of illicit discharges to the MS4.*
- Current policies, staff, contact information, equipment, and known impairments or TMDL pollutants of concern used to conduct dry weather screening for the presence of illicit discharges to the MS4.*
- Field tests of selected chemical parameters, evaluation methods, and sample concentration action levels for pollutants during dry weather screening that trigger determination to investigate flow as a potential illicit discharge to the MS4.*
- Data properties collected, geo-database used, illicit discharge identification and tracking database used, and data export procedures for reporting dry weather screening conducted to determine the presence of illicit discharges to the MS4.*

<i>Reference</i>	<i>Frequency</i>
<i>IDDE Manual Chapter 7 and Appendix “B” & “C”</i>	<i>Review: Annually</i>
<i>Report:</i>	<i>In 2021 we visited 100 percent of all known large outfalls (36” or greater). We also visited at least 33 percent of the smaller outfalls (35” or smaller). There were new outfalls added to the list in 2021, from new construction. Pollutant test were taken if there was a possibility of pollution or contamination. Appendix “B” will only be used as a backup from now on as we are now using our Computerized Maintenance Management System (Lucity) to record all inspections, attach photos, water tests and any other information to the record.</i>

3.2.2 Conduct Dry Weather Screening Inspections and record all results in the stormwater outfall geodatabase.

<i>Reference:</i>	<i>Dry Weather Screening</i>		
<i>Responsible:</i>	<i>Engineering Project Manager</i>	<i>Frequency:</i>	<i>Annually (Late Summer or Early Fall)</i>
<i>Goals</i>	<i>Evaluation and Assessment</i>		<i>Measure</i>
ADMINISTRATION: <i>Conduct and record outfall inspections in the outfall geodatabase within the calendar year.</i>	<i>Input all records.</i>		<i>110</i>
EFFECTIVENESS: <i>Screen each major outfall (36" or larger) annually.</i>	<i>100%</i>		<i>100% of 40</i>
EFFECTIVENESS: <i>Investigate each minor outfall every three years</i>	<i>33%</i>		<i>39%</i>
<i>Satisfied:</i>	<i>Yes: X No: Explanation: During this year I went through all of the outfalls and made some omissions and corrections to the list. I also removed the ones that were not discharging into Waters of the Stat/United States. All of the major outfalls were checked inspected and verified with our geodatabase. We conducted inspections on 39% of the minor outfalls with the intent to get back on track of doing 33% for 2022. We conducted 100% of all major outfalls this year. Our Stormwater map will be updated as well.</i>		

MCM #3: BMP 3: STORM SEWER SYSTEM MAPPING

3.3.1 Coordinate updates and maintenance of MS4 area maps and stormwater outfall location information in the MS4 Illicit Discharge Detection and Elimination (IDDE) Program, which defines and references the following:

- Internal procedures, frequencies, municipal staff responsibilities, contact information, and equipment used to capture and verify existing and future stormwater outfall location information.*
- How outfall locations are described, the minimum size of outfall required to be mapped, smaller size outfalls that may be mapped, and justifications for mapping smaller outfalls.*
- Sources of information used for the maps listing land use types, waters of the state, outfall locations, storm drain infrastructure, collection systems, and structural stormwater treatment BMPs.*
- Latest version of the outfall map with receiving waters.*

<i>Reference</i>	<i>Frequency</i>
<i>IDDE Program Chapter 6 City of Columbus GIS</i>	<i>Annually</i>
<i>Report:</i>	<i>We continue to update our Lucity and GIS software. Also adding more information for outfall locations and storm sewer pipes as they are constructed or repaired. We are also continually improving our forms that are now filled out electronically and stored on our Lucity software. As we update the map it is also uploaded to our web site.</i>

3.3.2 Maintain map, to the extent required by the permit, of current geographic locations of all stormwater outfalls, the approximate boundary of their drainage area that discharge to State-designated receiving waters in the MS4, dry weather field screening locations, storm drain infrastructure, collection system, and structural stormwater treatment locations.

Reference:	City of Columbus GIS As-built Records		
Responsible:	GIS Supervisor & Engineering Project Manager	Frequency:	Annually
Goals		Evaluation and Assessment	Measure
ADMINISTRATION: Maintain all outfall attribute updates in geo-database of stormwater outfall information currently available for major and minor outfalls.		Maintained.	Major: 44 Minor: 66
ADMINISTRATION: Update estimated drainage boundary attributes with existing and future land use at a minimum of five years for all outfalls that discharge to State-designated receiving waters in the MS4.		Maintained.	Yes
EFFECTIVENESS: All outfall, storm drain infrastructure, collection system, and storm water treatment geo-reference attributes are updated in the geo-database within one year of a new construction or 30 days following routine outfall dry weather screening.		100%	100% of 3
Satisfied:	Yes: X No: Explanation: During the course of 2021 we have evaluated the number of outfalls and as a result we were able to reduce the number of outfalls within the City of Columbus. Also City of Columbus accepted 3 new subdivisions. We will continue to assess all outfalls on an annual basis. Also our map is updated with the most current information and posted to our web site.		

**MCM #3: BMP 4: ILLEGAL DISCHARGE AND IMPROPER WASTE DISPOSAL
EDUCATION**

3.4.1 Coordinate updates and maintenance of educational and training information for distribution related to the hazards associated with illegal discharges and improper disposal of waste in the Public Education and Outreach Strategy, which establishes the following:

- Training program with at least one target message related to identification and reporting of illicit discharges and connections for a sector of Public Employees involved in Operation and Maintenance activities every reporting year.
- At least one target message and distribution method for a sector of Public Employees not involved in Operation and Maintenance every reporting year.
- At least one target message and distribution method for a sector of Commercial/Industrial Businesses within the MS4 every reporting year.
- At least one target message and distribution method for at least one sector of the General Public within the MS4 every reporting year.

<i>Reference</i>	<i>Frequency</i>
<i>The City of Columbus PEO Strategy</i>	<i>Annually</i>
<i>Report:</i>	<i>The City of Columbus did purchase updated training material and informational handouts last year. We did try to reach out to the different sectors of Commercial/Industrial to do some education and was turned away as they did not have spare time, not a full staff etc. but, was told they will work with us in the coming year. As part of the target message for the General Public a flyer went out on the back of the water bills that was seasonal.</i>

<i>Reference</i>				<i>Review</i>	
<i>The City of Columbus PEO Strategy</i>				<i>Annually</i>	
<i>Description</i>	<i>Target Audience</i>	<i>Messages</i>	<i>Methods/Resources</i>	<i>Last Provided</i>	<i>Next Due</i>
<i>Water Quality Brochure: Illicit Discharge Resource & References</i>	<i>Municipal Staff involved with O&M</i>	<i>Identify, report, investigate and remove Illicit Discharges and Connections.</i>	<i>Available at O&M Facility</i>	<i>2021</i>	<i>2022</i>
<i>Water Quality Brochure: Household Hazardous Waste</i>	<i>General Public</i>	<i>Prevent pollution by disposing of household hazardous waste properly.</i>	<i>Downloadable from the website. Available in the Engineering Lobby.</i>	<i>2021</i>	<i>2022</i>
<i>Water Quality Brochure: Pet Waste</i>	<i>General Public</i>	<i>Prevent pollution from pet waste by collecting and disposing of it properly.</i>	<i>Downloadable from the website. Also, available at local Veterinarians office.</i>	<i>2021</i>	<i>2022</i>
<i>Water Quality Brochure: Lawn and Garden Care</i>	<i>General Public</i>	<i>Prevent pollution by controlling lawn and garden waste and chemicals from leaving your property.</i>	<i>Downloadable from the website. Available in the Engineering Lobby.</i>	<i>2021</i>	<i>2022</i>
<i>Water Quality Brochure: Automotive Repair</i>	<i>Business Sector: Automotive Repair</i>	<i>Prevent pollution from automotive maintenance activities.</i>	<i>Downloadable from the website. Distributed to businesses conducting automotive maintenance. Available in the Engineering Lobby.</i>	<i>2021</i>	<i>2022</i>
<i>Water Quality Brochure: Outdoor Landscaping</i>	<i>Business Sector: Outdoor Landscaping</i>	<i>Prevent pollution from landscape maintenance activities</i>	<i>Downloadable from the website. Available in the Engineering Lobby.</i>	<i>2021</i>	<i>2022</i>

<i>Brochure for Restaurants</i>	<i>Business Sector: Restaurants</i>	<i>Prevent pollution from waste materials, oils and grease from restaurants.</i>	<i>Downloadable from the website. Distributed to restaurants. Available in the Engineering Lobby.</i>	<i>2021</i>	<i>2022</i>
<i>IDDE training</i>	<i>City staff</i>	<i>Identify, report, and remove illicit discharges and connections.</i>	<i>Illicit Discharge Detection & Elimination Guide & references.</i>	<i>2021</i>	<i>2022</i>
<i>Brochure for Concrete Delivery</i>	<i>Concrete Companies</i>	<i>Prevent pollution due to improper washout of truck.</i>	<i>Water Quality Brochure: Concrete Delivery distributed to businesses.</i>	<i>2021</i>	<i>2022</i>
<i>Report:</i>	<i>The City of Columbus was able to get some of the full time personnel trained and all of the seasonal help on the effects of IDDE as well as what to look for as some of them are out driving on the streets helping with maintenance. In regards to visiting businesses we were able to visit a few of them as they have staffing issues and not having time to discuss the material I left it and said that I would come back at a better time. Some were still a bit cautious of the COVID Virus and the different strains and did not want to tak.</i>				

3.4.2 Distribute information related to the hazards associated with illegal discharges and improper disposal of waste to Public Employees, Businesses, and the General Public.

<i>Reference</i>	<i>Education and Outreach Strategy</i>		
<i>Responsible</i>	<i>Engineering Project Manager</i>	<i>Frequency</i>	<i>Annually</i>
<i>Goals</i>		<i>Evaluation and Assessment</i>	<i>Performance</i>
ADMINISTRATION: <i>Water Quality brochure for household hazardous waste distributed matches the current PEO Strategy.</i>		<i>Material is current</i>	<i>Yes</i>
ADMINISTRATION: <i>Water Quality brochure for pet waste distributed matches the current PEO Strategy.</i>		<i>Material is current</i>	<i>Yes</i>
ADMINISTRATION: <i>City Employees, who as part of their normal job responsibilities, may come into contact with or observe an illicit discharge or illicit connection to the MS4 completed training.</i>		<i>Number of Trained</i>	<i>125</i>
EFFECTIVENESS: <i>At least seventy-five percent (75%) of the estimated target audience sector of Business Owners had information made available to them in the reporting year.</i>		<i>75%</i>	<i>Yes</i>
EFFECTIVENESS: <i>At least fifty percent (50%) of the estimated target audience sector of the General Public had information made available to them in the reporting year.</i>		<i>50%</i>	<i>Yes</i>
EFFECTIVENESS: <i>All City employees at maintenance facilities responsible for maintaining MS4 areas, who as part of their normal job responsibilities, may come into contact with or observe an illicit discharge to the MS4, receive training every three years.</i>		<i>100%</i>	<i>100%</i>
Satisfied:	<i>Yes: X No: Explanation: In 2021 we continued to place information on the back side of water bills hoping that the community will look at it. We also, continued to work with our Human Resource Department in regards to Illicit Discharge Detection and Elimination by having all new and seasonal personnel read a flyer about IDDE. We are working with Excal Video to see if there are some other training information they could provide for us for 2022.</i>		

MCM #4 CONSTRUCTION STORMWATER MANAGEMENT

CONSTRUCTION STORMWATER MANAGEMENT DECISION PROCESS AND RATIONALE

The purpose of this MCM is to reduce pollutants in stormwater runoff from construction activities that result in land disturbance. In accordance with NDEE Administrative Code 119.10.002.12D, Nebraska Small MS4 General Permit NER310000 IV.B.3, and City of Columbus Municipal Ordinance CHAPTER 54, the Construction Stormwater Program includes and adheres to the following elements:

- 1. Construction Stormwater Ordinance*
- 2. Operator Requirements to Implement Sediment & Erosion Control, Waste, and Stormwater Controls*
- 3. Construction Sediment & Erosion Control and Site Plans*
- 4. Construction Site Inspection and Enforcement Procedures*
- 5. Construction Stormwater Education.*

Construction Stormwater Design standards meeting the NDEE and NPDES Permit requirements are available on the City website. Construction site operators for sites disturbing one acre or more, or less than one acre if part of a larger common plan of development or sale, are required to enact Erosion and Sediment Controls.

How does the City of Columbus require erosion and sediment control measures on construction sites in the City of Columbus and why were those mechanisms chosen?

The City of Columbus requires erosion and sediment control measures on construction sites via City Code (CHAPTER 54). The ordinance language ensures every construction project within the City Limits requires proper Erosion and Sediment Controls, as well as inspection and evaluation methods.

How does the City of Columbus enforce erosion and sediment control requirements when there is non-compliance with requirements?

The City of Columbus has an Enforcement Response Plan (ERP) for the Erosion & Sediment Control Program which defines the level of enforcement based on the level of non-compliance. The ERP was created to address all levels of non-compliance. The City will follow through on issues of non-compliance until resolved. Communication with the violator can vary from a phone call to a formal notice of violation to the enforcement of Civil Penalties.

What types of waste materials are construction site operators required to manage onsite with Best Management Practices?

The City of Columbus has a defined list of pollutants, including solid waste and hazardous materials, which construction site operators are required to manage onsite with Best Management Practices in City Ordinance CHAPTER 54. Waste materials include construction activity trash from building materials, equipment and vehicle track out, and potential sanitary waste.

What procedures does the City of Columbus follow for selecting and completing site plan review when applications for construction are submitted for approval?

The City of Columbus requires an Erosion and Sediment Control plan meeting the NDEE and NPDES Permit requirements for review by City staff. For sites greater than an acre, and those less than an acre but part of a larger common plan of development or sale, a Stormwater Pollution Prevention Plan (SWPPP) is required to be followed. For Sites smaller than an acre and not part of a larger common plan of development a Small Lot Notice of Intention and Small Lot SWPPP must be completed.

Who is responsible for the overall management and implementation of the City of Columbus Construction Stormwater Program and program activities?

The City of Columbus Engineering Project Manager and the City Engineer are ultimately responsible for the management and overall implementation of the Construction Stormwater Program.

How will the City of Columbus evaluate the success of the Construction Stormwater Program and how are the measurable goals identified?

The City of Columbus has multiple effectiveness measures implemented to ensure the BMP's are being utilized correctly. Each annual report sent into the NDEE will address these effectiveness measures and how to interpret them.

*MCM #4: BMP 1: MAINTENANCE, IMPLEMENTATION, AND ENFORCEMENT OF
EROSION AND SEDIMENT CONTROL AUTHORITY*

4.1.1 Coordinate maintenance of enforceable authority and escalation procedures in the MS4 Construction Stormwater Operations Guide (CSW) Program Guidance Document, which references local regulatory mechanisms that:

- Defines and enables municipal enforcement.*
- Defines and requires construction erosion and sediment control implementation.*
- References local regulatory mechanism(s) that effectively defines waste control implementation.*
- References local regulatory mechanism(s) that effectively defines and establishes a range of penalty options and when they will be used to ensure compliance.*

<i>Reference</i>	<i>Frequency</i>
<i>City Ordinance CHAPTER 54 Construction Stormwater Operations Guide (CSW) Chapter 2</i>	<i>Annually</i>
<i>Report:</i>	<i>After our review process for the Construction Stormwater Operations Guide with the City Engineer there were no changes to be made for 2021.</i>

4.1.2 Conduct procedures to investigate, remove, and enforce each instance of construction stormwater non-compliance for observed non-compliance of the municipal ordinance.

Reference:	<i>Construction Stormwater Enforcement</i>		
Responsible:	<i>Engineering Project Manager</i>	Frequency:	<i>Annually</i>
Goals	Evaluation and Assessment	Measure	
ADMINISTRATION: Record dates of all notifications of potential construction stormwater program non-compliance. Record stakeholders involved, investigation efforts, communication efforts, interim steps of enforcement if taken to resolve, and final resolution taken for potential construction stormwater program non-compliance.	100%	100% of 31	
EFFECTIVENESS: Initiate an investigation of potential construction stormwater program non-compliance within two working days of notification or identification.	100%	100% of 6	
EFFECTIVENESS: Open records are updated once a week with status and any new information until the issue is resolved.	The total number of instances:	0	
Satisfied:	Yes: x No: Explanation: Our numbers of noncompliance with the permits have a greater number than in the past due to utilizing and understanding Lucity and building the correct forms/screens. When the contractors are notified of an issue it is resolved in a timely manner and any questions they may have are answered promptly.		

MCM #4: BMP 2: CONSTRUCTION SITE PLAN REVIEW

4.2.1 The City will coordinate maintenance of site plan review procedures in the MS4 Construction Stormwater Operations Guide (CSW) Program, which references local regulatory mechanisms that define the following:

- Authority to conduct construction site plan reviews for all land development and building projects that will disturb at least one acre of soil surface alone or as part of a larger common plan of development or sale.*
- Minimum requirements for site plan submittals to address construction erosion, sediment and waste control best management practices.*
- Minimum standards by reference for the design of construction erosion, sediment and waste control best management practices.*
- Basis for selecting certain sites for site plan review.*
- Current policies, staff, contact information, and required procedures for construction site plan review.*

<i>Reference</i>	<i>Frequency</i>
<i>City ordinance 54.08 Construction Stormwater Operations Guide (CSW) Chapter 3</i>	<i>Annually</i>
<i>Report:</i>	<i>After reviewing the Construction Operations Guide the Engineering Project Manager and the City Engineer there were no updates needed for the manual. At the time of the review for the manual they went over the City ordinance 54.08 and felt that the ordinance did not require any changes as well.</i>

4.2.2 The City will conduct and record site plan reviews for all land development and building projects that will disturb at least one acre of soil surface alone or as part of a larger common plan of development or sale.

<i>Reference:</i>	<i>Construction Stormwater Plan Review</i>		
<i>Responsible:</i>	<i>City Engineer</i>	<i>Frequency:</i>	<i>Annually</i>
<i>Goals</i>		<i>Evaluation and Assessment</i>	<i>Measure</i>
ADMINISTRATION: Complete construction stormwater site plan review form for every land development and building project that will disturb at least one acre of soil surface alone or as part of a larger common plan of development or sale.		100%	100% of 10
EFFECTIVENESS: Record when construction stormwater site plan submittal requirements were not satisfied, required revision and resubmittal.		100%	9
<i>Satisfied:</i>	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> Explanation: The review process was updated in 2019 and this year there was some revisions the process to make it more productive and easier to track.		

MCM #4: BMP 3: CONSTRUCTION SITE INSPECTIONS

4.3.1 The City will coordinate the review and maintenance of site inspection procedures in the Construction Stormwater Operations Guide (CSW), which references local regulatory mechanisms that define the following:

- Local regulatory mechanism(s) that effectively defines and enables authority to conduct site inspections
- Minimum standards by reference for installation and maintenance of construction erosion, sediment control best management practices.
- Minimum standards by reference for installation and maintenance of waste control best management practices.
- Current policies, staff, contact information, frequency, and required procedures for routine municipal inspections of public and private construction projects.
- Minimum required frequency and information for construction operator self-inspections.

<i>Reference</i>	<i>Frequency</i>
<i>City Ordinance Chapter 54</i> <i>Construction Stormwater Operations Guide (CSW) Chapter 4</i>	<i>Annually</i>
Report:	<i>After the Engineering Project Manager and the City Engineer reviewed the procedures there was no changes were made this year to this section and no additions or changes to our City Ordinance. However we continue to refine the use of our Lucity software program to better suit our needs as well as the contractors.</i>

4.3.2 Conduct site inspections for construction projects to document construction stormwater installation and maintenance compliance.

<i>Reference:</i>	<i>Construction Stormwater Plan Review</i>		
<i>Responsible:</i>	<i>Engineering Project Manager</i>	<i>Frequency:</i>	<i>Annually</i>
<i>Goals</i>	<i>Evaluation and Assessment</i>		<i>Measure</i>
ADMINISTRATION: Record the total number of active construction site inspections conducted during the reporting period.	Total Number conducted		38
EFFECTIVENESS: Private building lot and land development received municipal oversight inspection for erosion and sediment control an average of quarterly (routine) during the period of active construction.	75%		68% of 58
EFFECTIVENESS: Every public project with an NPDES permit completes routine stormwater inspections on a frequency required in the permit authorization.	100%		100% of 4
EFFECTIVENESS: All active construction projects that have non-compliance with local construction stormwater requirements receive a follow-up inspection within one week.	100%		100% of 3
EFFECTIVENESS: All information provided from the public about stormwater management of an active construction site leads to an inspection or a documented reason why an inspection was not conducted.	100%		100% of 0
EFFECTIVENESS: Record soil stabilization conditions and if unresolved non-compliance exists for the project at the time of all close-out inspections required before municipal approval is given.	100%		100% of 0
<i>Satisfied:</i>	<i>Yes: x No: Explanation: In 2020 inspections were conducted and corrections of discrepancies was resolved in the appropriate time frame. Once COVID-19 reached levels in our community we stopped doing inspections on a regular basis. If there was a complaint about a project we addressed it with the contractor by visually seeing the problem then a phone call to inform them of the issue which was effective.</i>		

MCM #4: BMP 4: CONSTRUCTION STORMWATER EDUCATION

4.4.1 Coordinate updates and maintenance of educational and training information for distribution related to impacts of construction stormwater pollution in the Public Education and Outreach Strategy, which references the following:

- Establishment of a training program and distribution method with at least one target message related to Construction Stormwater Program Requirements (i.e., erosion and sediment controls, soil stabilization, dewatering, pollution prevention, prohibited discharges, surface outlets, plan submittal, site inspection, and enforcement) every reporting year.
- Defines training that municipal staff primarily responsible for permitting, plan review, construction site inspections, and enforcement receive.
- Defines the resources used and frequency for distributing information related to construction stormwater pollution.

Reference				Frequency	
The City of Columbus PEO Strategy				Annually	
Description	Target Audience	Messages	Methods/Resources	Last Provided	Next Due
Required Standards	Municipal Staff and Public	Minimize water quality impacts from development. Nothing but stormwater in the drains.	Construction Stormwater Program and Approved Stormwater Design Manual, is available in the Lobby of the Engineering Department.	2020	Ongoing
Construction Stormwater BMP Pocket Guide	Engineers, Developers, and Designers	Minimize water quality impacts from development. Nothing but stormwater in the drains.	Available in City Hall	2020	2021
Construction Stormwater Training (Employees)	Municipal Staff	Training on all aspects of the Stormwater Program.	Presentations or training videos	2020	Ongoing
Report:	The list of Contractor, Plumbers, Fence Companies, General Contractors, Developers, Lawn and Landscape Companies, Food Service Companies, Automobile/Mechanical Maintenance Companies, is kept and updated. These trades were not visited this year due to COVID-19 but, they were monitored and if problems arose it was usually taken care of by a phone call.				

4.4.2 Distribute education and training information related to construction stormwater pollution.

<i>Reference:</i>	<i>Education and Outreach Strategy</i>		
<i>Responsible:</i>	<i>Engineering Project Manager</i>	<i>Frequency:</i>	<i>Annually</i>
	<i>Goals</i>	<i>Evaluation and Assessment</i>	<i>Performance</i>
	ADMINISTRATION: Construction site operators can obtain information about BMPs and requirements for minimizing pollutants discharged from construction sites each year.	The total number of pocket guides distributed.	2
	EFFECTIVENESS: Distribute training information to all (100%) Municipal Employees responsible for permitting, plan review, construction site inspections, and enforcement.	100%	100%
	EFFECTIVENESS: Target audience sector of Construction Site Operators had educational information made available to them in the reporting year.	100%	100%
	EFFECTIVENESS: Construction Site Operators had training offered during even calendar years.	100%	Offered to: 100% Attended: 2
<i>Satisfied:</i>	Yes: x No: Explanation: The Construction Site Operator training was offered and completed on 2 of the projects going on in the city before COVID-19. The Supervisors of the projects was trained and material was offered for the remainder of crews that did not get training. The Construction Sites that did receive training was given the pocket guide for their reference. In addition, we did training with the municipal staff that would be involved in issuing the building permits for small lots.		

MCM #5 POST-CONSTRUCTION STORMWATER MANAGEMENT

POST-CONSTRUCTION STORMWATER MANAGEMENT DECISION PROCESS AND RATIONALE

The purpose of this MCM is to ensure the quality of water leaving a previously completed construction site remains continuously treated before leaving the property. With the implementation of specifically required Stormwater Treatment Facilities (STF's), the quality of water will have the best chance of remaining clean before entering receiving waters. These STF's will be monitored and maintained based on official Maintenance Agreements signed by the owner and the City.

How will the City of Columbus require post-construction stormwater runoff from new development to be treated in the city?

The City of Columbus requires post-construction stormwater runoff from new development and redevelopment to be treated through different Stormwater Treatment Facilities (STF's). Rain gardens, Bioswales, sediment Forebays, and Regional Detention Facilities will all be acceptable STF's within the City Limits. These were chosen based on their performance, accessibility, and aesthetics.

How will the City of Columbus enforce post-construction stormwater runoff treatment when there is non-compliance with the requirements?

The City of Columbus has created an ordinance as it relates to Post-Construction Stormwater. This ordinance refers to a "Post Construction Stormwater Management Program" and there are penalties of different severity upon non-compliance. These were chosen due to their positioning within the Municipal City Code.

What do the terms New Development and Re-Development mean and what sites are exempt from the Post-Construction Program requirements?

The term "New Development" refers to any new construction project that has been platted after September 1st, 2017. The term "Re-development" refers to any construction on the existing property that affects more than one acre of impervious surface area. The sites that are exempt from the Post-Construction Program Requirements are those that were platted prior to 2010.

What procedures will the City of Columbus follow for selecting and completing the Post-Construction site plan review when construction applications are submitted for approval?

The City of Columbus Post Construction Stormwater Program provides a submittal checklist that describes the required information on each Site for proper selection and completion of a Post-Construction site plan review when construction applications are submitted for approval. This checklist will be made available online, at the Engineering Department upon the developer's introduction of the plan to the City. Once the proper specifications have been implemented, then the site plans are up for review on a department by department basis. The Engineering Project Manager will observe the Post-Construction specifications and site plan.

What procedures will the City of Columbus follow when information is submitted by phone or the City of Columbus web site?

The City of Columbus will require a series of inspections of the constructed Stormwater Treatment Facilities to ensure proper functionality of the Stormwater Treatment Facilities. These inspections will be performed by a licensed engineer in the State of Nebraska or by a delegated person by the engineer prior to completion of the development project. The City Ordinance outlines requirements for these STF's to function appropriately in perpetuity.

What procedures and prioritization will the City of Columbus follow to inspect and enforce Post-Construction stormwater treatment facilities?

The prioritization and procedures for inspection and enforcement for Post Construction STF's are identified in the Post-Construction Stormwater Management Program. Enforcement will be conducted through maintenance agreements, and inspections are allowed by the owner whenever the City wishes to perform them.

Who is responsible for the overall management and implementation of the City of Columbus Post- Construction Stormwater program and program activities?

The City of Columbus Engineering Project Manager is responsible for the implementation of the Construction Stormwater Program. It is the Engineering Project Manager who creates and inspects the Stormwater Pollution Prevention Plans (SWPPP) for Municipal projects greater than one acre. The Engineering Project Manager communicates directly with the developers and contractors as needed to resolve non-compliant issues.

How will the City of Columbus evaluate the success of the Post-Construction Stormwater program and how were the measurable goals identified?

The City of Columbus has implemented "Effectiveness Measures," found throughout the Post Construction Stormwater MCM, to evaluate the success of the Program. These 'Effectiveness Measures' are tabulated each year and identified within each Annual Report submitted to NDEE.

MCM #5: BMP 1: POST-CONSTRUCTION STORMWATER CONTROL AUTHORITY

5.1.1 Coordinate maintenance of enforceable authority and escalation procedures in the MS4 Post-Construction Stormwater (PCSW) Program, which references the following local regulatory mechanism(s) that effectively:

- Defines and enables municipal enforcement for permanent stormwater quality treatment facilities.
- Defines and requires permanent stormwater quality treatment facility implementation for new development and redevelopment projects and the effective date of the requirement.
- Defines and establishes a range of penalty options and when they will be used to ensure compliance.

Reference	Frequency
Post-Construction Stormwater (PCSW) Program Procedures City of Columbus Chapter 54	Annually
Report:	After the review process, there were no changes made to Chapter 54 and the Post Construction Storm Water Program Manual. There was no meetings with the Public Property Committee in 2020.

5.1.2 Conduct enforcement procedures for permanent Stormwater Treatment Facility non-compliance.

<i>Reference:</i>	<i>Post-Construction Stormwater Treatment Facility (STF) Enforcement Tracking Form</i>		
<i>Responsible:</i>	<i>Engineering Project Manager</i>	<i>Frequency:</i>	<i>Annually</i>
<i>Goals</i>		<i>Evaluation and Assessment</i>	<i>Measure</i>
ADMINISTRATION: Record of the responsible party, date enforcement initiated, the reason for non-compliance or violation, status, enforcement steps taken to resolve, and final resolution of each instance of potential non-compliance with post-construction stormwater treatment.		Total Number of instances recorded.	0
EFFECTIVENESS: Initiate Enforcement Response Plan investigation within seven days of identification of potential non-compliance		100%	100% of 0
EFFECTIVENESS: Open records are updated once a week with the current status and any new information until the issue is resolved.		100%	100% of 0
<i>Satisfied:</i>	<i>Yes: No: X Explanation: With this program still being new to the City of Columbus we are working with the NDEE on the implementation of this into our community. During our NDEE inspection in 2020 this was addressed, the NDEE said they will research this and give us some direction later in the year. The City of Columbus is still waiting for some direction for the issue in 2021 and will contact the NDEE in 2022.</i>		

MCM #5: BMP 2: STORMWATER TREATMENT PLAN REVIEW

5.2.1 Coordinate maintenance of site plan review procedures in the MS4 Post-Construction Stormwater (PCSW) Program, which references and defines the following:

- Local regulatory mechanism(s) that effectively defines and enables the authority to conduct stormwater treatment plan reviews.*
- Minimum treatment volume with calculation method, volume treatment design criteria, and stormwater treatment practice design standards by reference for the design of permanent stormwater treatment practices.*
- Maximum allowable impervious cover by land use zone.*
- Minimum requirements for post-construction stormwater treatment plan submittals to satisfy structural and non-structural stormwater treatment standards.*

<i>Reference</i>	<i>Frequency</i>
<i>Columbus City Code Chapter 54 Post Construction Stormwater (PCSW) Program Procedures Appendix “D”</i>	<i>Annually</i>
<i>Report:</i>	<i>After the review process, there was a few clerical changes to be made to the Post Construction Storm Water Program Manual. The City of Columbus is also in the process of adopting a Drainage Criteria Manual.</i>

5.2.2 Conduct a site plan review for stormwater treatment design compliance.

<i>Reference:</i>	<i>Post-Construction Stormwater Treatment Development Review</i>		
<i>Responsible:</i>	<i>City Engineer and Engineering Project Manager</i>	<i>Frequency:</i>	<i>Annually</i>
<i>Goals</i>	<i>Evaluation and Assessment</i>		<i>Measure</i>
ADMINISTRATION: Complete stormwater treatment design review form for every new development and redevelopment project.	<i>Recorded</i>		<i>9</i>
ADMINISTRATION: Record date of STF Certification and as-built record drawings received with all required information including updated STF design tables if field modifications were made.	<i>Recorded</i>		<i>0</i>
EFFECTIVENESS: Record when STF design requirements for new development and redevelopment projects were not satisfied and required revision and resubmittal.	<i>Recorded</i>		<i>0</i>
EFFECTIVENESS: Complete as-built record drawings are received within one year of municipal approval for project completion.	<i>100%</i>		<i>0% of 0</i>
<i>Satisfied:</i>	<i>Yes: No: X Explanation: During our site inspection with the NDEE in January of 2020, they indicated that they would help with this area of difficulty since the City of Columbus does not typically have Homeowners Associations this makes it difficult to know who will be doing the maintenance on the STF's. The NDEE indicated they would reach out to other communities and provide the City of Columbus some guidance. In the interim, the City of Columbus will inspect and maintain all of the public STF's.</i>		

MCM #5: BMP 3: STORMWATER TREATMENT SITE INSPECTIONS

5.3.1 Establish and review site inspection procedures in the MS4 Post-Construction Stormwater (PCSW) Program, which define and reference the following:

- *Local regulatory mechanism(s) that effectively defines and enables the authority to conduct site inspections.*
- *Minimum standards by reference for installation and maintenance of stormwater treatment practices.*
- *Minimum required timing and information for construction operator self-inspections prior to receiving municipal approval constructed STF's.*
- *Minimum required timing and information for property owner self-inspections following municipal approval of constructed STF's.*
- *Current policies, staff, contact information, frequency, and required procedures for municipal inspections prior to approving STF's constructed for the project.*
- *Minimum required timing and information for municipal inspections following municipal approval of constructed STF's.*

<i>Reference</i>	<i>Frequency</i>
<i>City of Columbus City Code Chapter 54 Post-Construction Stormwater (PCSW) Manual</i>	<i>Annually</i>
<i>Report:</i>	<i>We will make changes to this part when we have received some direction from the NDEE concerning this matter with the issues with private STF's that was stated in 5.2.2.</i>

5.3.2 Conduct site inspections for new development and redevelopment projects to document post-construction Stormwater Treatment Facility (STF) installation and maintenance compliance.

<i>Reference:</i>	<i>Post Construction Stormwater Treatment Facility Inspection</i>		
<i>Responsible</i>	<i>Engineering Project Manager</i>	<i>Frequency</i>	<i>Annually</i>
<i>Goals</i>	<i>Evaluation and Assessment</i>		<i>Measure</i>
ADMINISTRATION: Record the last date of inspection by the <u>Owner</u> of STFs submitted or requested for review.	100%		No
ADMINISTRATION: Record the last date of inspection by <u>Municipality</u> for STFs.	100%		Yes
EFFECTIVENESS: Record modifications made from design plans, engineer name providing certification, and anticipated date as-built record drawings will be submitted to the City.	100%		0% of 0
EFFECTIVENESS: Always record current condition, maintenance planned, and next anticipated applicant inspection date.	100%		0% of 0
EFFECTIVENESS: Self inspections are submitted by the Owner of a project within 90-days following municipal approval of the completed project.	100%		0% of 0
EFFECTIVENESS: Self inspections are submitted by the Owner of a project no longer than three years following the previous self-inspection.	100%		N/A for 2020
EFFECTIVENESS: Always record final constructed condition at the time of inspection, observations, and Annually municipal inspection frequency before municipal approval is given.	100%		0% of 0
EFFECTIVENESS: Always record current condition, maintenance planned, and next anticipated applicant inspection date	100%		0% of 0

<p>EFFECTIVENESS: Inspections are conducted by the City within (14) fourteen days following an information request submitted by the public and/or failure of the Owner to submit a routine self-inspection.</p>	<p>100%</p>	<p>100% of 0 None were submitted</p>
<p>EFFECTIVENESS: All information provided from the public about stormwater management of an approved STF leads to an inspection or a documented reason why an inspection was not conducted.</p>	<p>100%</p>	<p>100% of 0 None were requested</p>
<p>Satisfied:</p>	<p>Yes: No: X Explanation: We will make changes and corrections to this part when we have received some direction from the NDEE concerning this matter with the issues with private STF's that was stated in 5.2.2.</p>	

MCM #6 GOOD HOUSEKEEPING AND POLLUTION PREVENTION

GOOD HOUSEKEEPING AND POLLUTION PREVENTION DECISION PROCESS AND RATIONALE

The purpose of this MCM is to minimize the effect of the municipality's efforts on the contribution of stormwater pollutants into receiving waters. Operations have been identified that have the greatest likelihood to cause pollution to stormwater runoff. The facilitators of these operations are educated and trained in Standard Operating Procedures for reducing pollutants from entering the storm sewer system.

What types of municipal operations and maintenance are managed by the City of Columbus to prevent or reduce impacts to water quality from stormwater and what facilities does this include?

The City of Columbus is responsible for the stormwater pollution that its municipal operations and maintenance activities create. Pollution Prevention activities and procedures such as training, standard operating procedures, and record-keeping help minimize the effect our actions take on the environment. The Operations Water Quality Guide (OWQG) identifies these implemented processes and can be found on the City of Columbus Web Site or in the Engineering Project Managers Office.

What types of training are provided to the City of Columbus staff to help them prevent and reduce impacts on water quality from stormwater runoff?

The City of Columbus has different departments that create stormwater pollution. Several formats of training have been given to the members of these departments. Presentations and training videos are given to the employees regarding Stormwater Pollution Prevention. The Operations Water Quality Guide has a description of all training provided to City staff.

How does the City of Columbus document policies and procedures for maintenance activities, schedules, inspections, controls for paved areas, and activities required for operation and maintenance throughout the city disposal of waste and maintenance of stormwater detention and treatment system?

The City of Columbus performs many procedures to document our efforts against stormwater pollution from maintenance activities. There are proper standard operating procedures for street sweeping activities for city employees to follow. These policies and procedures are documented in the Operations Water Quality Guide, which can be found on the City of Columbus Engineering Department web site or in the Engineering Project Managers Office located in the Engineering Department.

Who is responsible for the overall management and implementation of the City of Columbus Good Housekeeping and Pollution Program?

The City of Engineering Project Manager is responsible for the overall management and implementation of the Good Housekeeping and Pollution Prevention Program. It is the responsibility of each Department/Division involved to implement their activities and report to the Engineering Project Manager upon inquiry.

How will the City of Columbus evaluate the success of the Good Housekeeping and Pollution Prevention Program and how was the measurable goal identified?

The City of Columbus has created and installed 'Effective Measures' throughout the Good Housekeeping and Pollution Prevention MCM. These effectiveness measures are identified for all BMP's and reported as a measurable goal through the process of our Annual Report submitted to NDEE.

MCM #6: BMP 1: MUNICIPAL FACILITY MAINTENANCE ACTIVITIES

6.1.1 Coordinate reviews and updates of municipal facility evaluation and maintenance policy information in the Operations Water Quality Guide, defines and describes the following:

- A listing and map of all MS4 facilities, including storage yards, which are subject to maintenance activity best management practice and policies.
- Lists of industrial facilities owned or operated by the City of Columbus subject to NPDES Industrial Storm Water Discharge Permit with Notice of Intent or certificate of No Exposure for each facility attached.
- High Priority risk assessment policies for municipal maintenance facilities.
- Content and purpose of a Facility Runoff Control Plan developed for high priority municipal maintenance facilities.
- Describes building and grounds, vehicles and equipment (including maintenance, fueling, and washing), product materials (including de-icing materials), bulk fluid storage and waste materials (including dredge spoil, accumulated sediments, floatables, debris, salvage products for reuse, and recyclables) best management practice policies for municipal maintenance facilities.
- Current policies, frequency, staff, contact information, and required procedures for municipal facility site inspections, and time period for resolving identified maintenance.

Reference	Frequency
Operations Water Quality Guide Chapters 2 & 3 Facility Runoff Control Plan	Annually
Report:	After the review process between the Engineering Project Manager, GIS Supervisor, and the City Engineer, there was no revisions of the map listing MS4 facilities which are subject to maintenance activities. Some minor changes made to the Operations Water Quality Guide.

6.1.2 Conduct municipal facility maintenance evaluations and record results of maintenance facility activities.

<i>Reference:</i>	<i>Municipal Facility Inspections</i>		
<i>Responsible:</i>	<i>Engineering Project Manager</i>	<i>Frequency:</i>	<i>Annually</i>
<i>Goals</i>	<i>Evaluation and Assessment</i>		<i>Measure</i>
ADMINISTRATION: Record the total number of facility inspections conducted during the reporting period.	Recorded.		Yes
ADMINISTRATION: Record at least one MS4 Oversight inspection per year at each municipal facility with an NPDES Industrial Stormwater Permit authorization (no routine or benchmark monitoring required of the NPDES Industrial Stormwater permit holder.	100%		100% of 1
ADMINISTRATION: Record at least one MS4 Facility Evaluation per five years at each municipal facility with an NPDES Industrial Stormwater Permit No Exposure Certification.	100%		100% of 1
ADMINISTRATION: Record if corrective actions that have been identified, documented, and addressed for every maintenance facility during the reporting period.	100%		100% of 1
ADMINISTRATION: Maintain the current status of each corrective maintenance identified, but not resolved within the recommended 30-day period of time.	Record status.		Yes
EFFECTIVENESS: Record the dates and inspectors for two (2) inspections per year at each high priority maintenance facility.	100%		100% of 1
EFFECTIVENESS: Record the dates and inspectors for one (1) inspection per year at each low priority maintenance facility.	100%		100% of 6

<p>EFFECTIVENESS: Record during oversight facility inspection of each municipal facility with an NPDES Industrial Stormwater Permit authorization whether the facility is actively managing all Industrial Stormwater Permit requirements and or No Exposure Certification conditions including; training, routine inspections, benchmark monitoring, physical characteristics evaluations, SWPPP information, SWPPP updates, and required reporting criteria.</p>	<p>100%</p>	<p>100% of 1</p>
<p>EFFECTIVENESS: Interim corrective maintenance is implemented when final corrective actions cannot be completed within 30-days of being identified during an inspection or complaint.</p>	<p>100%</p>	<p>100% of 0</p>
<p>EFFECTIVENESS: Summarize the reason(s) corrective maintenance was not resolved within 30-days for each corrective maintenance record and what communication, education, and/or enforcement was used to get the corrective maintenance resolved as soon as possible.</p>	<p>100%</p>	<p>100% of 0</p>
<p>Satisfied:</p>	<p>Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> Explanation: All inspections were performed as outlined. If there was any need for corrective action it was resolved within the appropriate time frame. The number of sites that are low priority maintenance facility has been reduced from 51 to 6. This reduction in number of sites is due to only 6 of the municipal site conduct maintenance on them and the rest are parks, ball fields etc...</p>	

**MCM #6: BMP 2: MUNICIPAL ROADWAY/PARKING LOT MAINTENANCE
ACTIVITIES**

6.2.1 *Coordinate updates and maintenance of municipal roadway/parking lot maintenance policy information in the Operations Water Quality Guide, which describes the following:*

- *Type of roadways (streets, roads, and highways) and which parking lots are impacted by maintenance activity best management practice policies that control floatables and other pollutants to the MS4.*
- *Current policies, frequencies and/or schedule, staff, equipment, contact information, and required procedures for street and parking lot sweeping activities.*
- *Procedures for transportation and disposal of floatables and other pollutants collected as a result of roadway and parking lot maintenance activities.*

<i>Reference</i>	<i>Frequency</i>
<i>Operations Water Quality Guide Chapter 3</i>	<i>Annually</i>
<i>Report:</i>	<i>We have made some minor corrections to the Operations Water Quality Guide. We are also continuing on work on a more economical way to take care of the sweepings and debris that are swept up from the roadways.</i>

6.2.2 Conduct and report municipal roadway and parking lot maintenance within the MS4 area.

<i>Reference:</i>	<i>Municipal Sweeping Operations</i>		
<i>Responsible:</i>	<i>Engineering Project Manager</i>	<i>Frequency:</i>	<i>Annually</i>
	<i>Goals</i>	<i>Evaluation and Assessment</i>	<i>Measure</i>
	ADMINISTRATION: Report hours of equipment usage and the number of lane miles of streets swept.	<i>Recorded</i>	<i>Hours: 1096 Miles: 4272</i>
	ADMINISTRATION: Report number and dates of parking lots swept.	<i>Reported</i>	<i>15 Lots Dates: 2/26 & 11/5/2021</i>
	EFFECTIVENESS: Verify that all public streets listed on the street maintenance plan were swept at least two times during the year.	<i>100%</i>	<i>100%</i>
	EFFECTIVENESS: All parking lots on the parking lot maintenance plan were swept at least once during the year.	<i>100%</i>	<i>100% of 15</i>
	EFFECTIVENESS: Report number of instances that non-routine sweeping was requested and the number of sweeping events provided to address a public complaint or internal identification that non-routine street sweeping was needed.	<i>100%</i>	<i>100% of 0</i>
<i>Satisfied:</i>	<i>Yes: x No: Explanation: All of the requirements have been met for this.</i>		

**MCM #6: BMP 3: MUNICIPAL STORM DRAIN SYSTEM MAINTENANCE
ACTIVITIES**

6.3.1 *Coordinate updates and maintenance of municipal storm drain system maintenance policy information in the MS4 Operations Water Quality Guide, which defines and describes the following:*

- *Procedures for inspecting and cleaning municipally-owned inlets, open channels, and other drainage structures for debris.*
- *Procedure to dispose of materials extracted from inlets so that no stormwater drainage system waste material will re-enter the MS4.*
- *Procedures to document drainage structure maintenance activity.*
- *Procedures for inspecting and sweeping municipally-owned streets.*
- *Procedures to assess existing flood management locations for potential incorporation of water quality protection devices or practices.*
- *Procedure to dispose of materials swept so that waste material will not re-enter the MS4.*
- *Procedures to require any contractors hired by the Municipality to perform maintenance activities.*

<i>Reference</i>	<i>Frequency</i>
<i>Operations Water Quality Guide Chapters 3 & 4</i>	<i>Annually</i>
<i>Report:</i>	<i>We have made some clerical corrections to the Operations Water Quality Guide. The Street Department has a better mower that helps to maintain the open channels. We have been working on getting our Lucity software set so that the reporting of cleanings will be simpler for all of those involved.</i>

6.3.2 Conduct municipal storm drain system maintenance.

<i>Reference:</i>	Municipal Stormwater Operations		
<i>Responsible:</i>	Engineering Project Manager	<i>Frequency:</i>	Annually
<i>Goals</i>	<i>Evaluation and Assessment</i>	<i>Measure</i>	
MUNICIPAL STORM DRAIN INLET MAINTENANCE			
ADMINISTRATION: Report hours of equipment usage and the number of storm drains cleaned.	Recorded	Hours: 100 Number: 225	
EFFECTIVENESS: All storm drain inlets listed on the storm drain system maintenance plan were cleaned once every five (5) years.	100%	10% of 2560	
EFFECTIVENESS: Report number of instances that non-routine storm drain inlet cleaning was requested and the number of storm drain cleaning events provided to address a public information request or internal identification that non-routine storm drain inlet cleaning was needed.	100%	100% of 10	
MUNICIPAL STORM DRAIN PIPE MAINTENANCE			
ADMINISTRATION: Report hours of equipment usage and lineal feet of drainage system cleaned.	Recorded	Hours: 50 Lineal Feet: 4100	
EFFECTIVENESS: All of storm drain pipes listed on the storm drain system maintenance plan were cleaned once every ten (10) years.	100%	10% of 407,350	

<p>EFFECTIVENESS: Report number of instances that non-routine storm drain pipe cleaning was requested and the number of storm drain pipe cleaning events provided to address a public complaint or internal identification that non-routine storm drain pipe cleaning was needed.</p>	<p>100%</p>	<p>100% of 1</p>
<p>MUNICIPAL STORMWATER DETENTION/RETENTION AREA MAINTENANCE</p>		
<p>ADMINISTRATION: Report hours of equipment usage and detention/retention areas cleaned and maintained.</p>	<p>Recorded</p>	<p>Hours: 360 Facilities: 8</p>
<p>EFFECTIVENESS: Verify that all detention/retention areas listed on the storm drain system maintenance plan were cleaned once every ten (10) years.</p>	<p>100%</p>	<p>N/A for 2020</p>
<p>EFFECTIVENESS: Report number of instances that non-routine detention/retention area cleaning was requested and the number of detention/retention cleaning events provided to address a public complaint or internal identification that non-routine detention/retention cleaning was needed.</p>	<p>100%</p>	<p>0% of None reported</p>
<p>Satisfied:</p>	<p>Yes: No: x Explanation: We did not reach our goal of cleaning all storm sewer pipes for this year. This was due to lack of manpower, inaccurate documenting of all of the cleanings that took place due to different people doing some of the work that does not usually do this. Also our records in Lucity are still in work to be updated and be completed as soon as possible. Our Street Superintendent, City Engineer and Public Works Director and myself are working on the best way to rectify this continuing problem. Late this year the City of Columbus did purchase a small vacuum trailer to aid in fixing the problem. Our Public Works Director is also planning on hiring a contractor to help with the cleaning of the main lines as well.</p>	

**MCM #6: BMP 4: MUNICIPAL OPERATION AND MAINTENANCE PROGRAM
TRAINING**

6.4.1 Coordinate updates and maintenance of training materials for distribution related to reducing stormwater pollution from municipal operation and maintenance activities in the Public Education and Outreach Strategy, which defines the following:

- Target messages and distribution methods for pollution prevention or reduction training related to municipal operation and maintenance activities.
- At least one target message for Public Employees involved in Parks and Recreation Operation and Maintenance Activities every reporting year.
- At least one target message for Public Employees involved in Transportation and Utilities Operation and Maintenance Activities every reporting year.
- At least one target message for Public Employees involved in Storm Sewer Operation and Maintenance Activities every reporting year.

<i>Reference</i>				<i>Frequency</i>	
<i>The City of Columbus PEO Strategy</i>				<i>Annually</i>	
<i>Description</i>	<i>Target Audience</i>	<i>Messages</i>	<i>Methods/Resources</i>	<i>Last Provided</i>	<i>Next Due</i>
<i>Standard Procedures</i>	<i>City Staff involved with O&M</i>	<i>Prevent pollution from municipal operations throughout the City.</i>	<i>Operations Water Quality Guide</i>	<i>2021</i>	<i>2022</i>
<i>Maintenance Facility Runoff Control Plans</i>	<i>City Staff involved with O&M</i>	<i>Prevent pollution from municipal operations at municipal maintenance facilities.</i>	<i>Facility Runoff Control Plan for Central Maintenance Facility</i>	<i>2021</i>	<i>2022</i>
<i>Supplemental Guides</i>	<i>City Staff involved with O&M</i>	<i>Prevent pollution from municipal operations at municipal maintenance facilities.</i>	<i>City of Columbus Municipal Good Housekeeping Poster (located at each FRCP facility)</i>	<i>2021</i>	<i>2020</i>
<i>Municipal Good Housekeeping Training</i>	<i>City Staff involved with O&M</i>	<i>Prevent pollution from municipal operations throughout the City.</i>	<i>In person training or Video</i>	<i>2020</i>	<i>2022</i>

Report:	All of the required criteria for this section have been met. We will begin in 2022 working in conjunction with Human Resource Manager to coordinate training of Good Housekeeping Training and IDDE Training.
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6.4.2 Deliver training related to pollution prevention and reduction from municipal operation and maintenance activities conducted by Municipal Employees.

Reference:	Education and Outreach Strategy		
Responsible:	Engineering Project Manager	Frequency:	Annually
Goals		Evaluation and Assessment	Performance
ADMINISTRATION: Deliver training to all Municipal Employee sectors identified to receive information for the reporting year.		100%	Yes
EFFECTIVENESS: Management staff for Parks and Open Space, Fleet and Building, Permanent Stormwater Treatment, and Storm Sewer Maintenance and Operation received training every even numbered calendar year.		75%	100% of 0
EFFECTIVENESS: Non-management, non-seasonal staff for Parks and Open Space, Fleet and Building, Permanent Stormwater Treatment, and Storm Sewer Maintenance and received training every odd numbered calendar year.		75%	83% of 30
EFFECTIVENESS: Seasonal staff for Parks and Open Space, Fleet and Building, Permanent Stormwater Treatment, and Storm Sewer Maintenance received training every calendar year.		75%	100% of 150
Satisfied:	Yes: X No: Explanation: Non-management, non-seasonal staff for Parks and Open Space personnel. In 2022 we would like to incorporate training for everyone at our mandatory training with Human Resources.		

MS4 PROGRAM SUPPORTING DOCUMENTS

<i>Construction Stormwater (CSW) Program.....Version II</i>	<i>2020</i>
<i>Post-Construction Stormwater (PCSW) Program.....Version IV</i>	<i>2020</i>
<i>Operations Water Quality Guide (OWQG).....Version IV</i>	<i>2020</i>
<i>Facility Runoff Control Plan (FRCP) Central Maint. Facility.....Version II</i>	<i>2020</i>
<i>Facility Runoff Control Plan (FRCP) Quail Run Golf Course.....Version I</i>	<i>2020</i>
<i>IDDE Enforcement Response Plan.....Version II</i>	<i>2020</i>
<i>Construction Stormwater & Runoff (ERP).....Version II</i>	<i>2020</i>
<i>Post-Construction Management (ERP).....Version II</i>	<i>2020</i>
<i>Outfall Map</i>	<i>2021</i>

All of the above documents may be found on the City of Columbus web site (www.columbusne.us)