

**STORM WATER MANAGEMENT PLAN**  
for the  
**CITY OF OREGON, OHIO**

5330 Seaman Road  
Oregon, Ohio 43616-2633

Submitted to:  
Ohio Environmental Protection Agency  
March 10, 2003

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City of Oregon  
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Paul Roman, P.E.  
Director of Public Service  
City of Oregon

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## Executive Summary

### ***Background***

The City of Oregon is required to submit a storm water management plan (SWMP) in accordance with 40 CFR Part 122.32 and Ohio Law. The document outlines the City of Oregon program to develop, implement and enforce a storm water management program designed to reduce the discharge of pollutants to the maximum extent practicable, to protect water quality, and to satisfy the appropriate requirements of the Clean Water Act (CWA) in accordance with the Ohio EPA Phase II program. The SWMP addresses the six minimum control measures as required by state regulations. The plan also identifies the city's legal authority to implement the general permit. A copy of the Notice of Intent (NOI) is included in Appendix A.

### ***Legal Authority***

The City of Oregon Ordinance 155-1977 provides the city with authority to control the quality of separate storm water discharge to its storm sewer system. Its authority addresses both industrial and municipal discharges. The City of Oregon has both the fiscal resources and legal authority to fully implement its storm water management plan.

### ***Permit Coverage Area***

The storm water management plan traverses all areas within the city limits. Oregon has a population of 19,355 residents, 149 miles of roadways and 7 storm water outfalls discharging to the waters of the state. The MS4 Drainage Area is 28.8 square miles. (Figure 1, Appendix C)

### ***Reporting Requirements***

The City of Oregon will submit its required report annually during the permit cycle. The report will include the status of compliance with the permit conditions, and assessment of the appropriateness of the Best Management Practices (BMPs) and progress towards achieving the measurable goals for each of the six minimum control measures. This report will also include a summary of the activities the City of Oregon will undertake during the reporting cycle and any changes to BMPs or measurable goals and all relevant data (monitoring) obtained during the reporting period.

## STORM WATER MANAGEMENT PLAN

### *Introduction*

This Storm Water Management Plan is to comply with the Environmental Protection Agency's Phase II requirements. The EPA's storm water program is divided into two phases. The first phase addressed storm water runoff from municipal separate storm sewer systems (MS4s) with a population of 100,000 or more. The second phase of the storm water program addresses storm water runoff from systems serving populations of less than 100,000. The Phase II areas are classified as, urbanized areas, areas that are becoming urbanized, and those which discharge to surface waters with impaired water quality. The City of Oregon is classified as a Small Municipal Storm Sewer System (MS4) qualifying it for the Phase II requirements.

The requirements for an operator of a small MS4 are to design a program to: reduce the discharge of pollutant to the "maximum extent practicable" (MEP), protect the water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act.

To achieve the maximum extent practicable of reduction in pollutants, best management practices (BMPs) are developed to satisfy the six minimum control measures. With the implementation of the minimum controls, significant reductions in the pollutants discharged from the City of Oregon should be achieved. The identified water quality pollutants are nutrients, siltation, grease and oil, and streambank modifications. The six minimum controls will address the identified water quality pollutants.

The six minimum controls are:

- 1) Public Education and Outreach on Storm Water Impacts
- 2) Public Involvement/ Participation
- 3) Illicit Discharge Detection and Elimination
- 4) Construction Site Storm Water Runoff Control
- 5) Post-Construction Storm Water Management in New Development and Redevelopment
- 6) Pollution Prevention/Good Housekeeping for Municipal Operations.

Each measure will be addressed separately in the following pages:

## **PUBLIC EDUCATION and OUTREACH on STORM WATER IMPACTS**

The key to implementing and managing an effective storm water management program begins with the community awareness and involvement. The programs will be designed to give the public a better understanding of why storm water management is essential. The City of Oregon Department of Public Service has structured the best management practices (BMPs) to address the pollutants that impact our area. The public education and outreach programs will work to distribute educational materials and conduct outreach activities to encourage the public to take action in reducing these pollutants. The combined efforts of the community and the Department of Public Service will improve the quality of the area streams and Lake Erie.

The decision process or action to implement the Public Education and Outreach Measure will be based on the BMP and/or strategies following each rationale statement or permit requirement noted in bold italic text.

***How you plan to inform individuals and households about the steps they can take to reduce storm water pollution. What is your outreach strategy, including the mechanisms (e.g., printed brochures, newspapers, media, workshops, etc.) you will use to reach your target audiences, and how many people do you expect to reach by your outreach strategy over the permit term.***

### **BMP 1.1A “Solid Waste Collection Rules and Regulations”**

The City of Oregon currently educates its citizens about solid waste collection with the brochure titled “Solid Waste Collection Rules and Regulations.” This brochure was developed by the Division of Streets and Waste Management to answer questions from citizens in regards to waste collection. However, the brochure also gives many tips for recycling of materials and the disposing of items that contain freon. (Appendix A)

### **BMP 1.1B “Consumer Confidence Reports”**

The City of Oregon currently educates its citizens about drinking water and water conservation with the City’s annual report titled “City of Oregon Water Treatment Plant Water Quality Report.” This report was developed by the City of Oregon Water Treatment Plant and the Water Billing Department to inform citizens about the drinking water quality and to meet the federal requirements for Safe Drinking Water Act (SDWA). The report also gives many tips for water conservation.

### **BMP 1.2 “Give Water a Hand”**

The City of Oregon will educate its residents or property owners with various methods consisting of brochures, storm drain stenciling, a school education program, public meetings, and a website. In cooperation with the Maumee RAP, an educational brochure campaign “Give Water a Hand: You Can Make a Difference” will take place over a fourteen (14) month period. The campaign will combine the distribution of a

designated brochure with a corresponding advertisement in the *Toledo Blade*. The tip cards will be distributed by mailing to the households. The distribution will occur as follows:

<b>DATE</b>	<b>TIP CARD</b>
January 2004	“Conserve Water”
April 2004	“Lawn Care”
July 2004	“Septic Systems & Illicit Discharges”
October 2004	“Streambank Stabilization & Native Plants”
January 2005	“Household Hazardous Waste Disposal”
April 2005	“Storm Drains & Ditches”

All of the above brochures will be sent to all property owners in the City of Oregon (approximately 8,500 households).

### **BMP 1.3 Spring Fest Storm Water Display**

Oregon Spring Fest is held annually in May by the City of Oregon and other civic organizations. The festival provides an opportunity to present many educational and recreational activities and exhibits. The storm water display will include informational displays as to what a property owner can do to improve the quality of the storm water. At the Spring Fest, a guest book will be provided for residents to submit comments. The guest book will also serve as a record of visitors. This program will reach every household.

*How you plan to inform individuals and groups on how to become involved in the storm water program.*

### **BMP 1.4 Storm Drain Stenciling Program**

The City of Oregon Department of Public Service will initiate a storm drain stenciling program. The program will work as follows:

- Interested persons or organizations can sign up to participate in the program. The sign up will take place at the Spring Fest or interested persons can call the Department of Public Service.
- The interested organizations will be contacted.
- A day of training will be conducted for group leaders.
- A notice will be passed out to neighborhoods. The notice will tell the residents about what will occur, why we are painting the message, and to move any vehicles in the stenciling area.
- The groups will stencil the storm drains. The supplies for the project will be provided by the City.
- At the conclusion of the storm drain stenciling, the participants will be invited to the city municipal complex for lunch. They will receive a t-shirt commemorating their participation.



## **BMP 1.5 Storm Water Website**

The City of Oregon will include a section about storm water on its' website. The City of Oregon's current website is [www.ci.oregon.oh.us](http://www.ci.oregon.oh.us). The website will be updated to include important storm water issues. The topics may include, but not limited to; lawn care, storm drains and ditches, septic systems, native plants, saving water, and household hazardous waste. The website will provide links to other websites that can further educate the public. An electronic mail link will be provided to the Department of Public Service for residents to express concerns.

## **BMP 1.6 School Education Program**

A school education program will be developed to teach children about storm water issues. The program will be presented by the Department of Public Service to forth grade science classes. The program will utilize the EnviroScape Nonpoint Source Model.



(See Appendix A) This model will illustrate the human impact on the environment by causing or reducing runoff pollution and erosion. The City of Oregon will supply the model. The science lessons will relate to the forth grade proficiency by addressing:

- Evaluate a simple procedure to carry out an exploration.
- Identify and/or describe the relationship between human activity and the environment.
- Demonstrate an understanding of the basic needs of living things.
- Identify ways in which organisms react to changing environments.

***Who are the target audiences for your education program who are likely to have significant storm water impacts (including commercial, industrial and institutional entities) and why those target audiences were selected.***

The public education and outreach program will use a variety of strategies to reach a diverse audience. The educational brochure campaign "Give Water a Hand: You Can Make a Difference" will be distributed to every household in the city including commercial and industrial property owners. The campaign will reach the Toledo Blade readers with corresponding advertisements. The storm drain-stenciling program will not only reach the participants, but it will also educate the residents of the neighborhoods. The website will be available to anyone with Internet access. The school age children and their parents will benefit from the school education program. Public meetings may be required to reach commercial and industrial property owners. The target audience at these meetings will be maintenance personnel in charge of storm drainage.

**Measurable Goals**

<b><u>Best Management Practices</u></b>	<b><u>BMP Description</u></b>	<b><u>*Implementation Schedule</u></b>	<b><u>Measurable Goals</u></b>
<p>BMP 1.1A “Solid Waste Collection Rules and Regulations” BMP 1.1B “Consumer Confidence Reports”</p>	<p>This brochure was developed by the Division of Streets and Waste Management to answer questions from citizens in regards to waste collection. The “Consumer Confidence Reports” were designed by the Water Treatment Plant to inform the citizens about water quality.</p>	<p>Year 1-5</p>	<p>* Continue providing this information to residents.</p>
<p>BMP 1.2 “Give Water a Hand”</p>	<p>Distribute educational material to residents. The brochures will educate homeowners about various storm water issues.</p>	<p>Year 1-3</p>	<p>* Document the number of brochures sent out.</p>
<p>BMP 1.3 Spring Fest (May) Storm Water Display</p>	<p>Present storm water issues and information at the annual Spring Fest.</p>	<p>Year 1-5</p>	<p>* Document the number of visitors at the display with a guest book. * Provide surveys to gather information about the public and their knowledge of storm water.</p>
<p>BMP 1.4 Storm Drain Stenciling Program</p>	<p>Stencil message “Don’t Dump – Drains to Lake,” on catch basins in an effort to increase awareness and to prevent dumping into the storm drain system.</p>	<p>Year 1  Year 2-5</p>	<p>* Gather information about storm drain stenciling program. * Conduct program sign up at Spring Fest. * Conduct storm drain stenciling by following the established plan, stenciling 200 of the city’s catch basins each year.</p>

<p align="center"><b>BMP 1.5 Storm Water Website</b></p>	<p>Develop a storm water website for the city. The website will include storm water topics. The website will also provide specific information regarding the City's NPDES Phase II storm water management program, opportunities for participation, and links to other pertinent storm water websites.</p>	<p align="center">Year 1-2</p>	<p>* Design the storm water website.</p>
<p align="center"><b>BMP 1.6 School Education Program</b></p>	<p>Purchase the EnviroScape Nonpoint Source Model. Develop school curriculum to correspond with the model. The model will be used to educate the students about pollutants from nonpoint sources.</p>	<p align="center">Year 1</p>	<p>* Purchase the EnviroScape Nonpoint Source Model. * Develop school curriculum.</p>
		<p align="center">Year 2-5</p>	<p>* Conduct school education program. * Document the number of students participating in the school education program.</p>

**\*Note:** Year 1 is March 10, 2003 through February 29, 2004  
Year 2 is March 1, 2004 through February 28, 2005  
Year 3 is March 1, 2005 through February 28, 2006  
Year 4 is March 1, 2006 through February 28, 2007  
Year 5 is March 1, 2007 through February 29, 2008

***Summary***

***Who (person or department) is responsible for overall management and implementation of your storm water public education and outreach program and, if different, who is responsible for each of the BMPs identified for this program. How you will evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs.***

The Department of Public Service will be responsible for the overall management and implementation of the Public Education and Outreach Program. The best management practices were selected to promote educating the citizens about pollutants entering the storm sewer system. The success of this minimum measure will be evaluated by the number of participants active in our programs. A comparison of the number of participants will be conducted each year to determine if the programs are becoming more or less popular.

## **PUBLIC INVOLVEMENT/ PARTICIPATION**

The City of Oregon Department of Public Service has structured the best management practices (BMPs) to address the pollutants that impact our area. To increase the success of the Storm Water Management Plan, an opportunity was provided for the public to assist in the review of our plan. The public involvement/participation programs will conduct outreach activities to encourage the public to become involved in the reduction these pollutants.

The City of Oregon will promote public participation and involvement by including the public in establishing the best management practices, conducting public meetings, organizing a storm drain stenciling program, and including an email link to the storm water website.

The decision process or action to implement the Public Involvement/Participation Measure will be based on the BMP and/or strategies following each rationale statement or permit requirement noted in bold italic text.

***Have you involved the public in the development and submittal of your NOI and SWMP description. What is your plan to actively involve the public in the development and implementation of your program.***

### **BMP 2.1 Public Review and Comment of the SWMP**

Public involvement has started with the opportunity to review and comment on a draft of the storm water management plan and the best management practices on the city's website. This review period was held in January and February 2003. The public was notified of this review period by a public notice published in the *Toledo Blade* and *The Press*. (See Exhibit 1 in Appendix B) Additional review periods will be made available through the various public participation BMPs (listed below) and public meetings. All public comments received will be reviewed for SWMP and BMP improvements, and will be kept on file in the Department of Public Service.

***What are the types of public involvement activities included in your program. Where appropriate, consider the following types of public involvement activities: Citizen representatives on a storm water management panel, Public hearings, Working with citizen volunteers willing to educate others about the program, Volunteer monitoring or stream/beach clean-up activities.***

### **BMP 2.2 Watershed Stakeholder Groups**

The watershed stakeholder groups will be organized. These groups will include interested persons and industrial partners. Participation will begin with a public notice published in the *Toledo Blade* and *The Press* requesting for interested persons to contact the Department of Public Service. Interested participants may also be recruited at the annual Spring Fest. At the same time, a notice will be sent to industrial companies

located in the City of Oregon. The companies will be asked to become apart of the watershed stakeholder group. The companies possessing a NPDES Industrial Storm Water General permit will be requested to be a stakeholder. The stakeholder groups will be organized based upon which watershed they reside in. The purpose of the stakeholder groups will be to:

- Organize stream clean-ups,
- Monitor the water quality, and
- Assist in the storm drain-stenciling program.

The watershed stakeholder meetings will be scheduled quarterly.

### **BMP 2.3 Stream Clean Ups**

The stream clean ups will be organized by the stakeholder groups. Volunteer groups and individuals may also participate in the stream clean ups. The stream clean up will be advertised at the annual Spring Fest and also in the *Toledo Blade* and *The Press*. In the advertisement, the clean up project will be explained. The clean up will be conducted as follows:

- Each participant will attend a safety meeting,
- The participants will be divided into groups, and
- The groups will clean a specified area of a ditch or creek.

At the conclusion, the participants will receive a t-shirt and will be served lunch provided by the city.

### **BMP 1.4 Storm Drain Stenciling**

Public participation will be encouraged for the storm drain-stenciling program. This program is outlined in the Public Education and Outreach minimum control.



### **BMP 1.5 Storm Water Website**

The City of Oregon storm water website will provide an electronic mail link to the Department of Public Service which will allow residents to express concerns or inquire about storm water issues. The storm water website is explained in the Public Education and Outreach minimum control.

***Who is responsible for overall management and implementation of your storm water public involvement/participation program and, if different, who is responsible for each of the BMPs identified for this program.***

The Department of Public Service will be responsible for the overall management and implementation of the Public Involvement/Participation.

**Measurable Goals**

<b><u>Best Management Practices</u></b>	<b><u>BMP Description</u></b>	<b><u>*Implementation Schedule</u></b>	<b><u>Measurable Goals</u></b>
BMP 2.1 Public review and comment period	Conduct public review and comment period for the storm water management plan.	Year 1-5	* Document the comments received and review comments for BMP and SWMP improvements.
BMP 2.2 Watershed Stakeholder Groups	Organize stakeholder groups based on watershed. The stakeholder groups will be used to educate, to organize stream clean-ups, and to monitor progress of implementing goals.	Year 1	* Solicit participants for the watershed stakeholder groups.
		Year 2-5	* Conduct quarterly stakeholder meetings. * Document the number of participants.
BMP 1.4 Storm Drain Stenciling Program	Stencil message “Don’t Dump – Drains to Lake,” on catch basins in an effort to increase awareness and to prevent dumping into the storm drain system.	Year 1	* Gather information about storm drain stenciling program. * Develop a plan to stencil all of the catch basins located in neighborhoods or subdivisions by the end of the permit term.
		Year 2-5	* Conduct storm drain stenciling by following the established plan, stenciling 200 of the city’s catch basins each year.
BMP 2.3 Stream Clean-ups	Conduct stream clean-ups. The stakeholder groups will be utilized to organize the stream clean up. The event will be advertised in <i>The Press</i> and at the Spring Fest. Any individual or group may participate in this event.	Year 1	* Organize the stream clean up with the stakeholder groups.
		Year 2-5	* Conduct the clean-up event once per year. * Document the number of participants.
BMP 1.5 Storm Water Website	Develop an electronic mail link for the storm water website.	Year 3-5	* Add an email link to the storm water website. * Document the amount of response the website receives.

***How you will evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs.***

The best management practices were selected to increase awareness of the storm sewer system and to encourage active participation in cleaning the storm sewer system.

The success of this minimum measure will be evaluated by the number of active participants. The overall goal will be to reduce the rate of debris build-up in the system as public awareness increases.

## ILLICIT DISCHARGE DETECTION and ELIMINATION

The illicit discharge detection will involve multiple parties to identify problem areas, trace the source of the problem, and eliminate the source. The parties involved will be the Department of Public Service, the Street Department, the Building and Zoning Inspection Department, the Lucas County Health Department, the Fire Department, the Ohio Environmental Protection Agency, and the United States Coast Guard. An illicit discharge is defined as “...any discharge to an MS4 that is not composed entirely of storm water...’with some exceptions. These exceptions include discharges from NPDES-permitted industrial sources and discharges from fire-fighting activities.” The illicit discharges could relate to industrial/business connections, accidental spills, and construction activity. The final goal is to eliminate illicit discharges from entering the storm sewer system.

The decision process or action to implement the Illicit Discharge Detection and Elimination Measure will be based on the BMP and/or strategies following each rationale statement or permit requirement noted in bold italic text.

***Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and location of all surface waters of the State that receive discharges from those outfalls.***

### **BMP 3.1 Storm Drain System Map**

The storm sewer system will be inventoried using a Geographic Information System (GIS). The location of all the outfalls will be identified and documented. The outfalls will be visually inspected as a part of the Department of Public Service’s annual ditch inspection. This inspection occurs during the winter months to allow for a better view of the ditch/creek. The names and locations of all waters of the United States that receive discharges from the outfalls will be identified on the GIS. This information will be compiled from the City of Oregon Drainage maps and the City of Oregon Storm Sewer and Ditch Survey, November 1974. (Appendix C) Additional information, such as catch basins, culverts, and pipes will also be included on the GIS. (See GIS map in Appendix C) The existing infrastructure will be inventoried using as-built plans. This task will be performed by the Department of Public Service. The annual collection of information will be used to monitor the quality of the system and any improvement of the water quality.

***A storm sewer map showing the locations of all HSTSs connected to your MS4. This map shall include details on the type and size of conduits/ditches in your MS4 that receive discharges from HSTSs, as well as the water bodies receiving the discharges from your MS4.***

### **BMP 3.2 Inventory of all on-site sewage disposal systems.**

An inventory of all on-site sewage disposal systems connected to the MS4 will be conducted. This information will be gathered by the Department of Public Service through the Lucas County Health Department. The locations of the sewage disposal systems will be inventoried with the Geographic Information System (GIS). Included on this map will be:

- The location of all home sewage treatment systems connected to the MS4,
- The type and size of conduits/ditches in the MS4 that receive discharges from the home sewage treatment systems, and
- The water bodies receiving the discharges from the MS4.

***Procedures for locating priority areas, which include areas with higher likelihood of illicit connections or ambient sampling to located impacted reaches.***

Priority areas will be determined by examining the age of sanitary sewers and HSTs through BMP 3.1 and 3.2. Priority areas will then be defined as those areas having the oldest sewers and HSTs. Priority areas will also be defined as areas that have a record of having illicit discharges. The Fire Department maintains records of any discharges or spills. These records will be inventoried with the GIS system. This will help track areas that are affected by discharges or spills.

### **BMP 3.3 Sampling for Impairments**

Sampling of the streams will be conducted to monitor the water quality. The samples will be collected at a location downstream from the outfall to the lake and at specific locations along the streams. The samples will be gathered four times a year at the same location each time. The samples will be tested for nutrient enrichment and toxic substances (oil and grease) per Ohio TMDL Priority List (303d) and Ohio EPA Appendix D1 (305b). (See Appendix C)

### **BMP 3.4 Identify illicit connections**

The visual inspection of the storm sewer system will be performed by the Department of Public Service, the Street Department, the Building and Zoning Inspection Department, and the Lucas County Health Department. The inspection of the creeks and ditches will be performed annually by the Department of Public Service. The outfalls will be inspected during the Department of Public Service's annual ditch and creek inspection. The inspection of the storm sewer, catch basins, and manholes will be conducted annually by the Street Department, during cleaning and maintenance operations. The Lucas County Health Department will inspect HSTs.



Dry weather inspection of the storm drain system will be performed to identify non-storm water flows. Screening will be performed by visual walk throughs or video inspection. Outfalls will be monitored to determine when flows are of a non-storm

nature. The outfalls with potential illicit discharges will be video inspected to identify the origin.

### **BMP 1.2 “Give Water a Hand”**

Illegal dumping is a concern that is not as easily identified. To reduce the amount of illegal dumping the stakeholders and residents will be educated as to what is unacceptable. Information about illegal dumping will be mailed to households, as part of the “Give Water a Hand” brochure campaign. The stakeholder groups will be asked to take an active role in informing the proper authorities of such an action.

### **BMP 3.5 Spill Response and Hazard Assessment**

If an illicit discharge is discovered by inspection, or has occurred due to an accidental incident, the Fire Department is immediately notified of the illicit discharge. The Fire Department assesses the spill or illicit discharge for what material/chemical has been discharged, to what extent the discharge has traveled, by what means it is traveling (i.e. storm sewer, sanitary sewer, ditch, or creek), and what is the origin of the illicit discharge. To locate the origin of the illicit discharge, equipment may be brought in by the Street Department or other agency to help converge on the exact origin.

Prior to tracing the source of an illicit discharge, the discharged material will be contained. Devices for containment could range from socks, booms, mats, and absorbent. The Fire Department will notify the proper agencies to contain the spill or discharge. The Ohio Environmental Protection Agency will be notified immediately of a spill or discharge. Due to the City’s close proximity to Lake Erie, the United States Coast Guard will be notified of any spill or discharge north of State Route 2. A local company will be contacted to assist in containment and cleanup as required.

#### ***Procedures for tracing the source of illicit discharge, including the specific techniques you will use to detect the location of the source.***

The origin of an illicit discharge or spill is located by various methods including visual inspection, dry weather screening, dye testing, smoke-testing, and video inspection. The immediate procedure is to locate an origin by visual inspection. The material/chemical will be traced back to its source by walking the banks of the ditch or creek. If the material/chemical is in the storm sewer, it will be traced with video equipment by the Street Department. If a material/chemical is not identified by visual inspection, locating could require digging or testing of the soil in the area to find the source. This process could involve many parties. Dry weather screening of the storm drain system will be performed to identify non-storm water flows.



#### ***Procedures for removing the source of the illicit discharge.***

### **BMP 3.6 Elimination of Illicit Connections**

Through the applicable tracing procedure, property owners, industry, or businesses will be identified as having an illicit connection. The property owners will be sent a notice of this improper connection. The notice will instruct the property owner of what is expected of them to eliminate the connection.

For a spill, the responsible party will be required to contain the pollutant and clean up any contaminate.

The City's authority to regulate discharges and inspect private properties is authorized through the following Codified Ordinances of Oregon, Ohio:

- 925.27 Allowable Discharge of Unpolluted Water “ Stormwater and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as storm drain or to a natural outlet approved by the Director of Public Service and other regulatory agencies. Unpolluted industrial cooling water or process waters may be discharged on approval by the Director to a storm sewer, or natural outlet. (Ord. 155-1977. Passed 8-8-77.)”
- 925.03 Discharge of Polluted Waste to Natural Outlet Prohibited “No person shall discharge to any natural outlet within the City or in any area under the jurisdiction of the City, any sanitary sewage, industrial wastes or other polluted waters, except where suitable treatment has been provided in accordance with subsequent provisions of this chapter. (Ord. 155-1977. Passed 8-8-77.)”
- 925.42 Right to Enter. “Employees of the City, duly authorized by the Director and bearing proper credentials and identification shall be permitted to enter all properties for the purpose of inspection, observation, measurement sampling and testing pertinent to discharge to the wastewater treatment works in accordance with the provisions of this chapter. (Ord. 155-1977. Passed 8-8-77.)”
- 925.43 Right to Process Information “The authorized employees of the City are authorized to obtain information concerning industrial or commercial process information which have a direct bearing on the kind and source of discharge to the wastewater treatment works. The owner may withhold process information considered confidential. The owner must establish that the revelation to the public of the information in question might result in an advantage to competitors. (Ord. 155-1977. Passed 8-8-77.)”

Additional ordinances may be adopted to supplement the above ordinances. Codified ordinances 925.42 and 925.43 will be amended to provide right of entry for storm water inspection purposes.

***How you plan to inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste. Include in***

*your description how this plan will coordinate with your public education minimum measure and your pollution prevention/good housekeeping minimum measure programs.*

**BMP 3.7 Educational Program**

The education of the public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste is essential for the SWMP to be implemented. The public employees from the Department of Public Service will be educated through a seminar format. The topics that will be included in the seminars are: detecting illicit discharges, methods to detect, and why we are eliminating illicit discharges. The public employees will be required to attend an educational seminar, which will occur every two years. New employees will be required to view a video of the seminar. The businesses will be educated using informative brochures. Brochures will be designed to target various types of businesses. The types of businesses that will be targeted in the City of Oregon, but not limited to, will be; restaurants, service stations, and car washes. The brochures will encourage participation in the elimination of illicit discharges. The majority of the industry in the City of Oregon is active in the Emergency Management Agency (EMA). The EMA conducts monthly meetings to discuss and prepare for incidents. These meetings could be used to get information to industry. The goal is to make the public aware of illicit discharges and to encourage participation in eliminating improper connections.

*Who is responsible for overall management and implementation of your storm water illicit discharge detection and elimination program and, if different, who is responsible for each of the BMPs identified for this program.*

The overall management and implementation of the storm water illicit discharge detection and elimination program will be under the direction of the Director of Public Service. A breakdown of responsibilities is as follows:

<b>Department or Agency</b>	<b>Responsibility</b>
Public Service Engineering Department	<ul style="list-style-type: none"> <li>• Inventory</li> <li>• Inspection (Public Right of Way (ROW), Ditches and Creeks)</li> <li>• Tracing</li> <li>• Elimination</li> <li>• Education</li> </ul>
Building and Zoning Inspection Department	<ul style="list-style-type: none"> <li>• Inspection (Outside Public ROW, Mainly Construction Sites)</li> <li>• Elimination</li> </ul>
Street Department	<ul style="list-style-type: none"> <li>• Inspection (As required to assist Engineering and Fire</li> </ul>

	<ul style="list-style-type: none"> <li>Departments)</li> <li>• Containment (As required to assist Engineering and Fire Departments)</li> <li>• Tracing (As required to assist Engineering and Fire Departments)</li> </ul>
Fire Department	<ul style="list-style-type: none"> <li>• Spill Response and Hazard Assessment</li> <li>• Containment</li> </ul>
Lucas County Health Department	<ul style="list-style-type: none"> <li>• Inspection (HSTSs only)</li> <li>• Tracing (HSTSs only)</li> <li>• Elimination (HSTSs only)</li> </ul>
Ohio Environmental Protection Agency United States Coast Guard	<ul style="list-style-type: none"> <li>• To provide direction, as required, for containment, tracing, and elimination.</li> </ul>

**Measurable Goals**

<b><u>Best Management Practices</u></b>	<b><u>BMP Description</u></b>	<b><u>*Implementation Schedule</u></b>	<b><u>Measurable Goals</u></b>
BMP 3.1 Storm Sewer System Map	Map outfalls, pipes, streams, and waters of the state on GIS.	Year 1-5	* Input 25% of the information (location and size) into the GIS system each year.
BMP 3.2 Inventory of all on-site sewage disposal systems.	Gather an inventory of all on-site sewage disposal systems and enter that information into the GIS.	Year 1-5	* Gather information about HSTSs from Lucas County Health Department and enter 25% of this information into GIS each year.
BMP 3.3 Sampling for Impairments	Quarterly sampling of the streams will be conducted to monitor the water quality.	Year 1	* Gather information about sampling for impairments. * Establish program for conducting annual monitoring.
		Year 2-5	* Conduct annual monitoring. * Assess the samples for impairments.

BMP 3.4 Identify illicit connections	Conduct visual dry weather screenings and video inspection of storm water outfalls.	Year 1	* Develop dry weather screening procedures and train the appropriate personnel.
		Year 2-5	* Conduct visual inspections of the storm water outfalls during sampling and annual ditch inspections. Video inspection will be made during routine maintenance of storm sewers. * Document the information found through the inspections.
BMP 1.2 “Give Water a Hand”	Distribute educational material to residents. The brochures will educate homeowners about various storm water issues.	Year 1-3	* Document the number of brochures sent out.
BMP 3.5 Spill Response and Hazard Assessment	Continue the existing spill response procedures and training.	Year 1-5	* Continue the existing spill response procedures and training. (Attached in Appendix C)
BMP 3.6 Elimination of Illicit Connections	Eliminate illicit connections.	Year 1-2	* Amend existing ordinances, as required, for Right of Entry for storm inspections. * Develop Notification and Elimination Procedures.
BMP 3.7 Educational Program	The City Employees will be educated about Illicit Discharges. A seminar will include the topics of detecting illicit discharges, methods to detect, and why we are eliminating illicit discharges.	Year 1	* Develop a seminar to educate the public employees about illicit discharges.
		Year 2-5	* Conduct the educational seminar every two years.

**Summary**

***How you will evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs.***

The purpose of detecting and eliminating illicit connections is to reduce the amount of pollutants entering the storm sewer system. It is our goal to reduce the number of illicit connections within our system. We plan to evaluate the success of this measure through quarterly sampling results.

***Procedures for program evaluation and assessment.***

The program effectiveness will be measured by the number of occurrences reported and then the documentation of what process was taken to eliminate the problem. The occurrences should decrease as awareness of an illicit discharge increases. The program will also be assessed by the monitoring of storm sewer outfalls. The water quality at these outfalls will be measured for siltation, oil and grease, nutrient enrichment, and organic enrichment.

## CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

The construction process creates a significant amount of silt and sediment in a short period of time. The goal of this minimum control is to reduce pollutants in any storm water runoff. This requirement is applicable for construction activities that result in a land disturbance of greater than or equal to one acre. Also included in the requirements is any construction activity disturbing less than one acre if the construction activity is part of a larger common plan of development of sale that would disturb one acre or more.

The erosion and sediment control plan will be adopted as an ordinance, including enforcement, requirements, and inspection. The enforcement will occur similarly to other building violations.

The decision process or action to implement the Construction Site Storm Water Runoff Control Measure will be based on the BMP and/or strategies following each rationale statement or permit requirement noted in bold italic text.

***An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State or local law.***

### **BMP 4.1 Erosion and Sediment Control Plan**

The City of Oregon will develop an Erosion and Sediment Control Plan. This plan will be developed by the Department of Public Service. This plan will then be implemented by ordinance as a standard for architects, engineers, and developers. The development of an Erosion and Sediment Control Plan will occur in the first year of the five-year implementation schedule. Once the Plan is developed it will be reviewed by our stakeholder groups and developers. The plan will then be adopted by ordinance in the second year of the implementation schedule. (See attached Storm Water Management Standards Manual, Appendix D)

***Your plan to ensure compliance with your erosion and sediment control regulatory mechanism, including the sanctions and enforcement mechanisms you will use to ensure compliance. Describe your procedures for when you will use certain sanctions. Possible sanctions include non-monetary penalties (such as stop work orders), fines, bonding requirements, and/or permit denials for non-compliance.***

### **BMP 4.2 Site Inspection and Enforcement**

To ensure compliance of our Erosion and Sediment Control Plan construction sites will be inspected. Each construction site will be inspected weekly to verify that control standards are being met. If the standards are not met, the contractor will be notified immediately of the deficiencies. The contractor will be required to promptly correct the deficiency. If



the deficiency is not corrected sanctions will be placed on the project. This process will occur similarly to any sanctions placed on other construction activities.

***Your procedures for site inspection and enforcement of control measures, including how you will prioritize sites for inspection.***

The site inspection will occur weekly at every site. The inspector will have a standard checklist, which will contain the erosion and sediment controls. Each of the controls will be inspected. The larger developments will be inspected by the Department of Public Service. The individual small lots, part of a larger development, will be inspected by the Building and Zoning Inspection Department. Both departments will use the same standards.

***Requirements for construction site operators to implement appropriate erosion and sediment control BMPs. Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality.***



A construction site operator will be required to follow the Erosion and Sediment Control Plan. Included in the City of Oregon plan will be requirements and standards addressing waste at a construction site. The compliance will have the same sanctions and enforcement mechanisms as the erosion and sediment control regulatory mechanism. These requirements will be addressed at a mandatory pre-construction meeting.

***Procedures for site plan review which incorporate consideration of potential water quality impacts.***

**BMP 4.3 Site Plan Review**

Currently, the Department of Public Service performs a site plan review on all development (see attached Site Plan Review Requirements, Appendix D) and requires an erosion and sediment control plan. With the addition of the City Standard Erosion and Sediment Control Plan, developers will be required to include this plan in their specifications or plan documents.

***Procedures for receipt and consideration of information submitted by the public.***

**BMP 4.4 Receipt and Consideration of Information from Public**

A construction concerns logbook will be maintained to document procedures that are of concern to the public. This log will be maintained by the Department of Public

Service in conjunction with the Building and Zoning Inspection Department. The public can also express their concerns through the email link on the City of Oregon website.

***Who is responsible for overall management and implementation of your construction site storm water control program and, if different, who is responsible for each of the BMPs identified in this program.***

The Department of Public Service will be responsible for the development of the Erosion and Sediment Control Plan. The inspection of construction sites will be performed by the Department of Public Service and the Building and Zoning Inspection Department.

***Measurable Goals***

<b><u>Best Management Practices</u></b>	<b><u>BMP Description</u></b>	<b><u>*Implementation Schedule</u></b>	<b><u>Measurable Goals</u></b>
<p style="text-align: center;">BMP 4.1 Erosion and Sediment Control Plan</p>	<p>Develop and implement an Erosion and Sediment Control Plan.</p>	<p style="text-align: center;">Year 1</p>	<p>* Develop the Erosion and Sediment Control Plan.</p>
		<p style="text-align: center;">Year 2</p>	<p>* Review of the Erosion and Sediment Control Plan with developers and stakeholder groups. * Adopt the plan by ordinance.</p>
		<p style="text-align: center;">Year 3-5</p>	<p>*Require compliance with the Erosion and Sediment Control Plan.</p>
<p style="text-align: center;">BMP 4.2 Site Inspection and Enforcement</p>	<p>Establish the mechanisms to assure compliance of the Erosion and Sediment Control Plan.</p>	<p style="text-align: center;">Year 2</p>	<p>* Develop inspection checklists to verify compliance. * Train inspectors. * Establish mechanisms to enforce compliance of the Erosion and Sediment Control Plan.</p>
		<p style="text-align: center;">Year 3-5</p>	<p>* Perform routine inspections of construction sites. * Measure the amount of silt at a location downstream from the construction activity.</p>

<b>BMP 4.3 Site Plan Review</b>	The City of Oregon currently reviews all development. The review is conducted with the current Site Plan Review Requirements. (Attached in Appendix D)	Year 1	* Review current Site Plan Review Requirements and revise if necessary.
		Year 2-5	* Conduct site plan reviews on all development.
<b>BMP 4.4 Receipt and Consideration of Information from Public</b>	Develop and implement a program for the receipt and consideration of public comments regarding erosion control.	Year 1	* Develop a system for receiving, considering, and tracking comments from the public regarding the City's Erosion and Sediment Control Plan.
		Year 2-5	* Implement program.

***Describe how you will evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs.***

The success of this minimum control measure will be evaluated by the response of the general public. The general public should notice a reduction in the amount of dust and dirt on the streets. The main measure of success will be the reduction of debris removed from the storm sewer by the Street Department. The turbidity will be measured at various locations downstream from a construction site to monitor whether or not a control is effective. The measurable goals were selected to reduce the amount of silt entering our storm sewer system.

## POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

The post-construction storm water management in areas undergoing new development or redevelopment is important to the City of Oregon because the increase in sediment creates adverse effects on our storm sewer system and water treatment process. The post-construction impacts typically occur in two forms. The first impact resulting from new development is an increase of storm water runoff rates due to an increase in impervious area. The second impact is the process of pollutants being transported by storm water runoff. The concern for the first impact is storm water quantity or capacity, and the concern for the second impact is storm water quality. This control measure will combine structural and non-structural best management practices (BMPs) to improve the storm sewer system and reduce pollutants entering the system.

The decision process or action to implement the Post-Construction Storm Water Management in New Development and Redevelopment Measure will be based on the BMP and/or strategies following each rationale statement or permit requirement noted in bold italic text.

***Your program to address storm water runoff from new development and redevelopment projects. Include in this description any specific priority areas for this program.***

### **BMP 5.1 Develop and implement a storm water design manual.**

The City of Oregon will adopt non-structural and structural best management practices to address storm water runoff. The city is planning to adopt the “Storm Water Management Standards Manual” by The Maumee River Regional Storm Water Coalition and The Maumee River RAP Urban Runoff Action Group, 1<sup>st</sup> Edition, March 2002 contingent on the approval by the City of Oregon Council and/or amendment. The city currently has Storm Drainage Requirements for new development. (See attached interoffice memorandum dated July 7, 1998, Appendix D)

***How your program will be specifically tailored for your local community, minimize water quality impacts, and attempt to maintain pre-development runoff conditions.***

The use of on-site detention will be the main BMP to reduce sediment entering the storm sewer system and to maintain pre-development runoff conditions. The goal of the City of Oregon is to efficiently utilize existing storm capacity and reduce the amount of sediment and pollutants entering the storm sewer system.

### **BMP 5.2 Non-structural BMPs**

A non-structural BMP is defined as management measures that prevent degradation of water resources by preventing pollution at the source, rather than treating polluted runoff. The City of Oregon will include in its’ Storm Drainage Requirements, design standards to help minimize water quality impacts.

The City of Oregon performs expected routine maintenance. The routine maintenance that is performed includes:

- Manhole and catch basin inspection and cleaning,
  - The cleaning will be logged and the amount of sediment collected will be recorded.
  - The cleaning will occur once or twice per year depending on need.
- Ditch inspection and removal of debris and blockages,
  - The ditch inspection will be performed yearly by the Department of Public Service.
  - The removal will take place after the inspection by the Street Department or by volunteers.
- Ditch bank mowing, and
  - The maintenance of the ditch bank will be performed throughout the spring, summer, and fall by the Street Department.
- Sediment removal
  - Either the Street Department or an outside contractor will perform dredging, as necessary.
- Street Sweeping
  - As defined in the Pollution Prevention/Good Housekeeping for Municipal Operations Minimum Control Measure.

The Street Department or an outside contractor will perform non-routine maintenance. This type of maintenance will occur as an emergency situation. These repairs will include, but not limited to, catch basin failures, storm sewer collapses, and ditch bank regrading.

### **BMP 5.3 Structural BMPs**

A structural BMP is defined as “Treatment BMPs” referring to physical structures designed to remove pollutants from storm water runoff, reduce downstream erosion, provide flood control, and promote groundwater recharge. The City of Oregon will be adopting the “Storm Water Management Standards Manual” by The Maumee River Regional Storm Water Coalition and The Maumee River RAP Urban Runoff Action Group, 1<sup>st</sup> Edition, March 2002, contingent on the approval by the City of Oregon Council and/or amendment. This manual will address storage practices, filtration practices, infiltration practices, and vegetative practices.

- Storage Practice: Storage or detention BMPs control storm water by gathering runoff in wet ponds, dry basins, or multichamber catch basins and slowly releasing it to receiving waters or drainage systems. These practices both control storm water volume and settle out particulates for pollutant removal.
- Infiltration Practice: Infiltration BMPs are designed to facilitate the percolation of runoff through the soil to ground water, and, thereby, result in reduce storm water quantity and reduced mobilization of pollutants.
- Vegetative Practice: Vegetative BMPs are landscaping features that, with optimal design and good soil conditions, enhance pollutant removal,

maintain/improve natural site hydrology, promote healthier habitats, and increase aesthetic appeal.

***What are the mechanisms (ordinance or other regulatory mechanisms) you will use to address post-construction runoff from new developments and redevelopments and why you chose that mechanism. If you need to develop a mechanism, describe your plan and a schedule to do so. If your ordinance or regulatory mechanism is already developed, include a copy of the relevant sections with you program.***

***How you will ensure the long-term operation and maintenance (O&M) of your selected BMPs. Options to help ensure that future O&M responsibilities are clearly identified include an agreement between you and another party such as the post-development landowners or regional authorities.***

The operation and maintenance of BMPs will be the responsibility of the City of Oregon Street Department for all public drainage systems. Property owners will be responsible for the O&M of non-public or on-site drainage systems accordingly.

***Who is responsible for overall management and implementation of your post-construction SWMP and, if different, who is responsible for each of the BMPs identified in this program.***

The Department of Public Service will be responsible for the development and implementation of the Storm Water Management Standards Manual. The inspection of construction sites will be performed by the Department of Public Service and the Building and Zoning Inspection Department.

**Measurable Goals**

<b><u>Best Management Practices</u></b>	<b><u>BMP Description</u></b>	<b><u>*Implementation Schedule</u></b>	<b><u>Measurable Goals</u></b>
BMP 5.1 Develop and implement a storm water design manual.	Develop and implement a Storm Water Design Manual. This manual will be used for any development or redevelopment.	Year 1-2	* Review the “Storm Water Management Standards Manual” * Adopt and/or amend this manual.
		Year 3-5	* Require compliance w/Storm Water Design Manual.
BMP 5.2 Non-Structural BMPs	A non-structural BMP is defined as management measures that prevent degradation of water resources by preventing pollution at the source, rather than treating polluted runoff.	Year 1	* Organize a program to inspect and clean public storm system.
		Year 2-5	* Perform routine inspections and maintenance on storm system. * Document the frequency of inspection and maintenance activities. * Document the number of problems identified by the annual inspection.
BMP 5.3 Structural BMPs	On-site detention and other sediment removal techniques as addressed in the Storm Water Design Manual.	Year 1-2	* Review the “Storm Water Management Standards Manual” * Adopt and/or amend this manual.
		Year 3-5	* Require compliance w/Storm Water Design Manual.

***How you will evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs.***

The success of this measure will be evaluated by monitoring the turbidity in the quarterly samples taken at specific locations along the streams or at the major outfalls.

## POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

The Pollution Prevention/Good Housekeeping Minimum Control Measure is targeted towards municipal operations. The measure requires the municipality to look into the operations that are conducted and reduce the amount of pollutants entering the storm sewer system.



The municipal operations will be controlled by the operation and maintenance program. This program will institute controls to prevent or reduce pollutant runoff from the municipal operations. The program will also utilize controls that have already been instituted.

The decision process or action to implement the Pollution Prevention/Good Housekeeping for Municipal Operations Measure will be based on the BMP and/or strategies following each rationale statement or permit requirement noted in bold italic text.

***Your operation and maintenance program to prevent or reduce pollutant runoff from your municipal operations. Your program must specifically list the municipal operations that are impacted by this operation and maintenance program.***

The municipal operations that are impacted by the operation and maintenance program are:

<b><u>Location</u></b>	<b><u>Responsible Personnel</u></b>
Municipal Complex 5330 Seaman Road	Street Department
Water Treatment Plant 951 North Curtice Road	Water Treatment Plant
Low Service Pump Station 10735 Poacher's Highway	Water Treatment Plant
Wastewater Treatment Plant 1570 Dupont Road	Wastewater Treatment Plant
Willow Cemetery 1961 Pickle Road	Street Department
North Oregon Cemetery 600 Otter Creek Road	Street Department
South Shore Park 5700 Bayshore Road	Department of Parks and Recreation
Pullman Park 3201 Pullman Avenue	Department of Parks and Recreation
Park 1111 Earlwood Avenue	Department of Parks and Recreation
East Hampton Park East Hampton Drive	Department of Parks and Recreation

Park 2033 Quincy Street	Department of Parks and Recreation
Fire Station #1 5002 Seaman Road	Fire Department
Fire Station #2 1102 South Wheeling Street	Fire Department
Fire Station #3 4409 Bayshore Road	Fire Department

***You must also include a list of industrial facilities you own or operate that are subject to Ohio EPA’s Industrial Storm Water General Permit or individual NPDES permits for discharges of storm water associated with industrial activity that ultimately discharge to your MS4. Include the Ohio EPA permit number or a copy of the Industrial NOI form for each facility.***

The City of Oregon Wastewater Treatment Plant NPDES Permit Number is OH 52914. The City of Oregon Water Plant NPDES Permit Number is 2IW00220\*DD.

***Any government employee training program you will use to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance. Describe any existing, available materials you plan to use. Describe how this training program will be coordinated with the outreach programs developed for the public information minimum measure and the illicit discharge minimum measure.***

### **BMP 6.1 Training Program for Maintenance Personnel**

The employee-training program will be designed by the Department of Public Service in coordination with the Street Department.

***Maintenance activities, maintenance schedules, and long-term inspection procedures for controls to reduce floatables and other pollutants to your MS4.***

### **BMP 6.2 Storm Sewer Cleaning**

The City of Oregon Street Department maintains our storm sewer system. They annually clean the storm sewer, catch basins, and manholes. Storm sewers will also be video inspected to monitor any deficiencies. The maintenance schedules and records of the video inspections are maintained by the Street Department. These practices will continue with this storm water management plan.

***Controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, and salt/sand storage locations and snow disposal areas you operate.***

### **BMP 6.3 Street Sweeping**

The City of Oregon currently conducts street sweeping to remove pollutants from streets and roads. The street sweeping is performed only on curbed streets and on streets with bikelanes. At a minimum, major curbed streets will be swept twice a year between the spring and fall months. The curbed subdivision streets will be swept at least one time per year between the spring and fall months. Street sweeping is also performed on an as needed basis determined by visual inspection or an excess of debris buildup.

### **BMP 6.4 Salt Application and Storage**

The City of Oregon has equipped the snowplow trucks with computerized salt spreaders. The computerized salt spreaders will aid in the proper application rate of the salt. The City of Oregon will continue the practice of using computerized salt spreaders to maintain the amount of salt applied. The Street Department will maintain a file recording the snow removal practices and the training provided. In the education of the public employees, it will be stressed to be aware of the amount of salt applied.

The City of Oregon has maintained the discharge of pollutants from its' salt storage by constructing a salt dome. The addition of the salt dome has confined any runoff from salt storage by protecting the salt from the elements. The salt storage runoff is collected by a sumped catch basin. This will be inspected annually by the Street Department. The inspection will be documented. The City of Oregon will continue using a salt dome to protect its' salt storage.

### **BMP 6.5 Vehicle Maintenance Shops**

The vehicle maintenance shops are equipped with controls to reduce the amount of pollutants discharged to the storm sewer system. The majority of the maintenance garages are equipped with grease and sand interceptors with the exception of two garages. Those two garages will be updated in the second year of the five-year implementation schedule.

The City of Oregon Fire Department maintains spill prevention. The Fire Department is informed of spills and they organize any clean up.

***Procedures for the proper disposal of waste removed from your MS4 and your municipal operations, including dredge soil, accumulated sediments, floatables, and other debris.***

The waste removed from the storm sewer system is dewatered at the wastewater treatment plant. The water is then treated at the wastewater treatment plant. The waste is disposed of by proper methods, which could include depositing the debris in a dumpster.

***Procedures to ensure that new flood management projects are assessed for impacts on water quality and existing projects are assessed for incorporation of additional water quality protection devices or practices.***

New Flood Management projects will be in accordance to the storm water design manual. Existing flood management projects (example: storm pump stations) will be inspected in typical rain events to assess impacts on water quality. Improvements for water quality will be made accordingly.

***Who is responsible for overall management and implementation of your pollution prevention / good housekeeping program and, if different, who is responsible for each of the BMPs identified for this program.***

The Department of Public Service with the Street Department will be responsible for the development of the operation and maintenance program. In this program, an employee training program will be included to instruct our employees on the importance of reducing the amount of pollutants entering the storm sewer system. The training program will educate our employees on what best management practices we are implementing to reduce pollutants. The Street Department will be performing the maintenance on the storm sewer system.

***Measurable Goals***

<b><u>Best Management Practices</u></b>	<b><u>BMP Description</u></b>	<b><u>*Implementation Schedule</u></b>	<b><u>Measurable Goals</u></b>
BMP 6.1 Training Program for Maintenance Personnel	Develop and implement a training program for maintenance personnel.	Year 1	* Develop a pollution prevention/good housekeeping employee-training program.
		Year 2-5	* Conduct bi-yearly training. Document the number of participants. * Train new employees within three months of the employee's start date.

BMP 6.2 Storm Sewer Cleaning	Remove floatables, debris, sediment, etc. from inlets and pipes as needed to maintain capacity and to reduce storm water pollution.	Year 1	<ul style="list-style-type: none"> <li>* Develop a schedule for conducting a visual inspection of the City’s storm sewer inlets.</li> <li>* Develop a system to monitor and track storm sewer cleaning activities.</li> <li>* Begin implementing the inspection schedule. Clean inlets as necessary.</li> <li>* Clean system as needed in response to complaints or reported problems.</li> </ul>
		Year 2-5	<ul style="list-style-type: none"> <li>* Continue the inspection schedule.</li> <li>* Clean system as needed in response to complaints or reported problems.</li> </ul>
BMP 6.3 Street Sweeping	Continue existing street sweeping program.	Year 1-5	<ul style="list-style-type: none"> <li>* Perform sweeping on major curbed streets at least twice a year during the spring through fall seasons.</li> <li>* Perform sweeping on curbed subdivision streets at least once a year during the spring through fall seasons.</li> </ul>
BMP 6.4 Salt Application and Storage	Continue existing practice of applying and storing the salt.	Year 1-5	<ul style="list-style-type: none"> <li>* Maintain the salt storage as to not allow runoff from the storage to enter the storm sewer system. Continue to use computerized salt spreaders.</li> </ul>
BMP 6.5 Vehicle Maintenance Shops	Continue existing practices of vehicle maintenance.	Year 1 -5	<ul style="list-style-type: none"> <li>* Document the BMPs performed.</li> </ul>

***How you will evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs.***

The BMPs were selected to improve activities that are performed through the City of Oregon. By maintaining records of the activities performed by the Street Department, progress can be documented.

## STORM WATER MANAGEMENT PLAN

### *Conclusion*

The Storm Water Management Plan is to comply with the Environmental Protection Agency's Phase II requirements. The plan will be reviewed, updated and revised each year, as necessary to maintain the goals of: reducing the discharge of pollutant to the "maximum extent practicable" (MEP), protecting the water quality, and satisfying the appropriate water quality requirements of the Clean Water Act.

The best management practices (BMPs) will be reviewed each permit cycle in December and January to verify the measurable goals are being met. At that time, if a measurable goal is not being met, the BMP will be improved to better meet our goals. The improvement to the SWMP or to any BMP will be included in the annual report. The change of the BMP will be made to increase the effectiveness of the measurable goals. All additions or revisions will be submitted to the Ohio EPA.

To comply with the permit requirements a copy of the NPDES permit, the Storm Water Management Plan, and the NOI will be kept on file at the City of Oregon Department of Public Service Office.

Each permit cycle will be summarized in an annual report. The annual report is required to include the status of our compliance with the permit conditions, an assessment of the appropriateness of the identified BMPs, progress toward achieving the statutory goal of reducing the discharge of pollutants to the MEP, and the measurable goals for each of the minimum control measures. Also required in the annual report are the results of information collected and analyzed, including monitoring data used to assess the success of the program at reducing the discharge of pollutants to the maximum extent practicable. The annual report will also include a summary of the storm water activities the city plans to undertake during the next reporting cycle.

The goals of reducing the discharge of pollutant to the "maximum extent practicable" (MEP), protecting the water quality, and satisfying the appropriate water quality requirements of the Clean Water Act depends on the success of the Storm Water Management Plan.

## TIMETABLE FOR IMPLEMENTING STORM WATER MANAGEMENT PLAN

Year 1 - March 2003 to February 2004

Activity	2003												2004	
	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Jan	Feb
<b>BMP 1.2</b> Participate in the educational brochure campaign "Give Water a Hand."														
<b>BMP 1.3</b> Display storm water topics at Spring Fest.														
<b>BMP 1.4</b> Gather information about the storm drain-stenciling program.														
<b>BMP 1.5</b> Develop a storm water website for the city.														
<b>BMP 1.6</b> Develop school curricula.														
<b>BMP 1.6</b> Purchase the EnviroScape Nonpoint Source Model.														
<b>BMP 2.3</b> Gather information about stream clean up.														
<b>BMP 2.2</b> Organize watershed stakeholder groups.														
<b>BMP 3.1</b> Begin mapping storm sewer system on GIS														
<b>BMP 3.2</b> Gather information about HSTSSs.														
<b>BMP 3.3</b> Gather information about sampling for impairments.														
<b>BMP 3.4</b> Develop dry weather screening procedures.														
<b>BMP 3.4</b> Document the number of illicit discharges or spills detected and eliminated. This information will be obtained through existing Fire Department records.														
<b>BMP 3.5</b> Continue the existing spill response.														
<b>BMP 3.6</b> Amend existing ordinances, as required, for right of entry for storm inspections.														
<b>BMP 3.7</b> Develop a seminar to educate the public employees about illicit discharges.														
<b>BMP 4.1</b> Develop the Erosion and Sediment Control Plan														
<b>BMP 4.3</b> Develop procedures for erosion control site plan review.														
<b>BMP 4.4</b> Develop a system for receiving, considering, and tracking public comments.														
<b>BMP 5.1</b> Review the "Storm Water Management Standards Manual".														
<b>BMP 5.2</b> Develop strategies to implement non-structural BMPs.														
<b>BMP 5.3</b> Review the "Storm Water Management Standards Manual"														
<b>BMP 6.1</b> Develop an employee-training program.														
<b>BMP 6.2</b> Develop a plan to inspect and clean the storm sewer system														
<b>BMP 6.3</b> Perform annual street sweeping.														
<b>BMP 6.4&amp;6.5</b> Perform inspection of maintenance BMPs such as salt storage and vehicle maintenance. Document the condition found.														

## Year 2 - March 2004 to February 2005

Activity	2004												2005	
	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Jan	Feb
<b>BMP 1.2</b> Participate in the educational brochure campaign "Give Water a Hand."														
<b>BMP 1.3</b> Display storm water topics at Spring Fest (May).														
<b>BMP 1.4</b> Conduct sign up for storm drain stenciling. (Spring Fest)														
<b>BMP 1.4</b> Conduct first phase of storm drain stenciling. Stencil 200 of the City's catch basins.														
<b>BMP 1.5</b> Develop a storm water website. (Review and Upgrade)														
<b>BMP 1.6</b> Conduct first school education program. Document the number of students participating.														
<b>BMP 2.2</b> Begin stakeholder quarterly meetings. Document the number of attendees.														
<b>BMP 2.3</b> Conduct the stream clean up. Document the number of participants.														
<b>BMP 3.1</b> 25% of the storm sewer system mapped.														
<b>BMP 3.2</b> 25% of HSTs identified and mapped on GIS.														
<b>BMP 3.3</b> Conduct sampling for impairments.														
<b>BMP 3.4</b> Inspect outfalls. During sampling, document the information found through the inspections.														
<b>BMP 3.5</b> Continue the existing spill response.														
<b>BMP 3.6</b> Develop Notification and Elimination Procedures														
<b>BMP 3.7</b> Conduct training seminars for public employees.														
<b>BMP 4.1</b> Review of the Erosion and Sediment Control Plan with developers and stakeholder groups. Adopt, by ordinance, the Erosion and Sediment Control Plan.														
<b>BMP 4.2</b> Establish mechanisms to enforce compliance of the Erosion and Sediment Control Plan														
<b>BMP 4.2</b> Develop procedures for site inspection.														
<b>BMP 4.2</b> Train inspectors.														
<b>BMP 4.3</b> Conduct erosion control site plan review on every development.														
<b>BMP 4.4</b> Implement program for receipt of public comments.														
<b>BMP 5.1</b> Adopt and/or amend the Storm Water Design Manual														
<b>BMP 5.2</b> Document the frequency of inspection and maintenance of the structural and non-structural BMPs.														
<b>BMP 5.2</b> Document the number of problems that were identified by the annual inspection.														
<b>BMP 5.3</b> Adopt and/or amend the Storm Water Design Manual														
<b>BMP 6.1</b> Conduct maintenance personnel training. Document the number of participants.														
<b>BMP 6.2</b> Perform annual maintenance and cleaning on the storm sewer system.														
<b>BMP 6.3</b> Perform street sweeping and document the frequency.														
<b>BMP 6.4&amp;6.5</b> Perform inspection of maintenance BMPs. Document the condition found.														

**Year 3 - March 2005 to February 2006**

Activity	2005												2006		
	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Jan	Feb	
<b>BMP 1.2</b> Participate in the educational brochure campaign “Give Water a Hand.”															
<b>BMP 1.3</b> Display storm water topics at Spring Fest (May).															
<b>BMP 1.4</b> Conduct sign up for storm drain stenciling. (Spring Fest)															
<b>BMP 1.6</b> Conduct school education program. Document the number of students participating.															
<b>BMP 2.2</b> Begin stakeholder quarterly meetings. Document the number of attendees.															
<b>BMP 1.4</b> Conduct second phase of storm drain stenciling. Stencil 200 of the City’s catch basins.															
<b>BMP 2.3</b> Conduct the stream clean up. Document the number of participants.															
<b>BMP 1.5</b> Add an email link to the storm water website. Revise and update the website as needed.															
<b>BMP 3.1</b> 50% of the storm sewer system mapped.															
<b>BMP 3.2</b> 50% of HSTSs identified and mapped on GIS.															
<b>BMP 3.3</b> Conduct sampling for impairments.															
<b>BMP 3.4</b> Inspect outfalls. Document the information found through the inspections.															
<b>BMP 3.5</b> Continue the existing spill response.															
<b>BMP 4.1</b> Require compliance with the Erosion and Sediment Control Plan.															
<b>BMP 4.2</b> Perform routine inspections of construction sites.															
<b>BMP 4.3</b> Conduct erosion control site plan review on every development.															
<b>BMP 4.4</b> Continue program for receipt of public comments.															
<b>BMP 5.1</b> Require compliance with the “Storm Water Management Standards Manual.”															
<b>BMP 5.2</b> Document the frequency of inspection and maintenance of the structural and non-structural BMPs.															
<b>BMP 5.2</b> Document the number of problems that were identified by the annual inspection.															
<b>BMP 5.3</b> Require compliance w/Storm Water Design Manual															
<b>BMP 6.2</b> Perform annual maintenance and cleaning on the storm sewer system.															
<b>BMP 6.3</b> Perform street sweeping and document the frequency and amount of debris collected.															
<b>BMP 6.4&amp;6.5</b> Perform inspection of maintenance BMPs. Document the condition found.															

### Year 4 - March 2006 to February 2007

Activity	2006												2007	
	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Jan	Feb
<b>BMP 1.3</b> Display storm water topics at Spring Fest (May).														
<b>BMP 1.4</b> Conduct sign up for storm drain stenciling. (Spring Fest)														
<b>BMP 1.6</b> Conduct school education program. Document the number of students participating.														
<b>BMP 2.2</b> Continue stakeholder quarterly meetings. Document the number of attendees.														
<b>BMP 1.4</b> Continue storm drain stenciling. Stencil 200 of the City's catch basins.														
<b>BMP 2.3</b> Conduct the stream clean up. Document the number of participants.														
<b>BMP 1.5</b> Revise and update storm water website as needed.														
<b>BMP 3.1</b> 75% of the storm sewer system mapped.														
<b>BMP 3.2</b> 75% of HSTs identified and mapped on GIS.														
<b>BMP 3.3</b> Conduct sampling for impairments.														
<b>BMP 3.4</b> Inspect of the outfalls. Document the information found through the inspections.														
<b>BMP 3.5</b> Continue the existing spill response.														
<b>BMP 3.7</b> Conduct training seminars for public employees.														
<b>BMP 4.1</b> Require compliance with the Erosion and Sediment Control Plan.														
<b>BMP 4.2</b> Perform routine inspections of construction sites.														
<b>BMP 4.3</b> Conduct erosion control site plan review on every development.														
<b>BMP 4.4</b> Continue program for receipt of public comments.														
<b>BMP 5.1</b> Require compliance with the "Storm Water Management Standards Manual."														
<b>BMP 5.2</b> Document the frequency of inspection and maintenance of the structural and non-structural BMPs.														
<b>BMP 5.2</b> Document the number of problems that were identified by the annual inspection.														
<b>BMP 5.3</b> Require compliance w/Storm Water Design Manual.														
<b>BMP 6.1</b> Conduct maintenance personnel training. Document the number of participants.														
<b>BMP 6.2</b> Perform annual maintenance and cleaning on the storm sewer system.														
<b>BMP 6.3</b> Perform street sweeping and document the frequency.														
<b>BMP 6.4&amp;6.5</b> Perform inspection of maintenance BMPs. Document the condition found.														

**Year 5 - March 2007 to February 2008**

Activity	2007												2008	
	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Jan	Feb
<b>BMP 1.3</b> Display storm water topics at Spring Fest (May).														
<b>BMP 1.4</b> Conduct sign up for storm drain stenciling. (Spring Fest)														
<b>BMP 2.2</b> Continue stakeholder quarterly meetings. Document the number of attendees.														
<b>BMP 1.4</b> Continue storm drain stenciling. Stencil 200 of the City's catch basins.														
<b>BMP 2.3</b> Conduct the stream clean up. Document the number of participants.														
<b>BMP 1.5</b> Revise and update storm water website as needed.														
<b>BMP 3.1</b> 100% of the storm sewer system mapped.														
<b>BMP 3.2</b> 100% of HSTSs identified and mapped on GIS.														
<b>BMP 3.3</b> Conduct sampling for impairments.														
<b>BMP 3.4</b> Inspect 25% of the outfalls. Document the information found through the inspections.														
<b>BMP 3.5</b> Continue the existing spill response.														
<b>BMP 4.1</b> Require compliance with the Erosion and Sediment Control Plan.														
<b>BMP 4.2</b> Perform routine inspections of construction sites.														
<b>BMP 4.3</b> Conduct erosion control site plan review on every development.														
<b>BMP 4.4</b> Continue program for receipt of public comments.														
<b>BMP 5.1</b> Require compliance with the "Storm Water Management Standards Manual."														
<b>BMP 5.2</b> Document the frequency of inspection and maintenance of the structural and non-structural BMPs.														
<b>BMP 5.2</b> Document the number of problems that were identified by the annual inspection.														
<b>BMP 5.3</b> Require compliance w/ Storm Water Design Manual.														
<b>BMP 6.2</b> Perform annual maintenance and cleaning on the storm sewer system.														
<b>BMP 6.3</b> Perform street sweeping and document the frequency.														
<b>BMP 6.4&amp;6.5</b> Perform inspection of maintenance BMPs. Document the condition found.														

## REFERENCES

1. United States Environmental Protection Agency, Storm Water Phase II Final Rule Fact Sheet Series, Office of Water, EPA 833-F-00-001 through EPA 833-F-00-010.

Appendix A - Public Education and Outreach on Storm Water  
Impacts

Appendix B - Public Participation/Involvement

Appendix C - Illicit Discharge Detection and Elimination

Appendix D - Construction Site Storm Water Runoff Control

Appendix A  
Public Education and Outreach on Storm Water Impacts

Notice of Intent (NOI)

“Solid Waste Collection Rules and Regulations”

EnviroScape Nonpoint Source Model

Appendix B  
Public Participation/Involvement

Public Notice – Exhibit 1

## Appendix C Illicit Discharge Detection and Elimination

GIS Map of Storm Sewer – Figure 1

City of Oregon Storm Sewer and Ditch Survey Drainage Areas

Ohio EPA-Appendix D1-2000 305(d): Rivers and Streams

Ohio TMDL Priority List for FFY 1999-2000 (303(d) List)

Spill Response and Hazard Assessment Flow Chart

Ordinances

Appendix D  
Construction Site Storm Water Runoff Control

“Storm Water Management Standards Manual”

Storm Drainage Requirements for City of Oregon Improvements

Chapter 1151 Site Plan Review