

Final Report

**National Pollutant Discharge
Elimination System Municipal
Separate Storm Sewer System
(NPDES MS4) Phase II
Stormwater Management Program
for the City of Keizer, Oregon**

March, 2004

Prepared for:



CITY OF KEIZER
930 Chemawa Rd. N.E.
Keizer, Oregon 97303

Prepared by:

URS
111 S.W. Columbia, Suite 900
Portland, Oregon 97201-5814
25695398

CITY OF KEIZER, OREGON
STORMWATER MANAGEMENT PROGRAM (SWMP)
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
INDIVIDUAL PERMIT APPLICATION FOR A SMALL MS4

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 gather and evaluate 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, the information submitted 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.



Rob Kissler
Director of Public Works
City of Keizer
930 Chemawa Road, NE
P.O. Box 21000
Keizer, Oregon 97307-1000

TABLE OF CONTENTS

Section 1	Introduction/Background	1
Section 2	Description of the Permit Area	3
Section 3	Keizer's NPDES SWMP.....	5
	Program Funding	9
	Minimum Measure #1 – Public Education	12
	Minimum Measure #2 – Public Involvement	16
	Minimum Measure #3 – Illicit Discharge Detection and Elimination.....	20
	Minimum Measure #4 – Construction Site Stormwater Runoff Control	26
	Minimum Measure #5 – Post-Construction Stormwater Runoff Control	32
	Minimum Measure #6 – Pollution Prevention in Municipal Operations	37
	Record Keeping and Reporting.....	42

List of Tables

Table 1	Acronyms and Abbreviations	ii
Table 2	Summary of Keizer NPDES SWMP BMPs for Each Minimum Measure.....	7
Table 3	NPDES Phase II SWMP Implementation Schedule.....	47

List of Figures

Figure 1	City of Keizer Surface Water Features	4
Figure 2	City of Keizer Organizational Structure	8

**Table 1
Acronyms and Abbreviations**

1200-C	DEQ Erosion Control Permit for Construction Activities
ACWA	Oregon Association of Clean Water Agencies
BMP	Best Management Practice
CFR	Code of Federal Regulations
CS	Construction Site Standards
CWA	Federal Clean Water Act
DEQ	Oregon Department of Environmental Quality
DS	Development Standards
ESA	Endangered Species Act
FTE	Full Time Equivalent
ID	Illicit Discharges
IDDE	Illicit Discharges Detection and Elimination
MEP	Maximum Extent Practicable
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and Maintenance
OAR	Oregon Administrative Rule
OM	Operations and Maintenance
PE	Public Education
PF	Program Funding
PI	Public Involvement
PY	Permit Year
QA/QC	Quality Assurance and Quality Control
RR	Record Keeping and Reporting
SRF	State Revolving Fund
SWMP	Stormwater Management Program
TMDL	Total Maximum Daily Load
UA	Urbanized Area
UIC	Underground Injection Control
URS	URS Corporation (consultant hired to complete Keizer SWMP)
USEPA	United States Environmental Protection Agency
WPCF	Water Pollution Control Facilities

City of Keizer NPDES MS4 Phase II Stormwater Management Program Submittal

1.0 Introduction/Background

The federal Clean Water Act (CWA) was amended in 1987 to include the requirement that stormwater be regulated as a point source discharge under the National Pollutant Discharge Elimination System (NPDES) program. In 1990, the U.S. Environmental Protection Agency (USEPA) issued regulations specific to stormwater discharges that apply to entities that own and operate municipal separate storm sewer systems (MS4s). Under the NPDES program, these entities are required to obtain NPDES MS4 permits for their stormwater discharges. In Oregon, the USEPA has delegated authority for administering and enforcing program requirements to the Oregon Department of Environmental Quality (DEQ). The program has been implemented in two phases: the Phase I regulations adopted in 1990 address stormwater discharges from medium and large MS4s serving populations of 100,000 or greater; and the Phase II regulations adopted in 1999 address discharges from small MS4s. In Oregon, DEQ used federal guidelines to identify the jurisdictions that would be regulated as small MS4s under the Phase II NPDES program. The City of Keizer was identified as one of these jurisdictions by USEPA and DEQ because it is located within the Urbanized Area (UA) of the City of Salem.

The federal NPDES Phase II stormwater regulations set forth a process for municipal and other entities to apply for MS4 permits. These regulations are described in the Code of Federal Regulations (CFR) under 40 CFR, Part 122.26. The MS4 permit application requires the development of a Stormwater Management Program (SWMP) that addresses the following six minimum control measures:

- Public education and outreach on stormwater impacts.
- Public involvement/participation.
- Illicit discharges detection and elimination.
- Construction site stormwater runoff control.
- Post-construction stormwater management for new development and redevelopment.
- Pollution prevention in municipal operations.

For each minimum control measure, the development and implementation of Best Management Practices (BMPs) is required. The SWMPs are required to do the following: describe the rationale for how and why the BMPs were selected, list the parties responsible for implementing the BMPs, provide a discussion of the rationale for how and why the BMPs were selected, and establish measurable goals for each of the BMPs.

As a result of these NPDES Phase II requirements, the City of Keizer established a citizen's committee to assist in developing the City's stormwater management strategy for reducing pollutants discharged from the MS4 system to the "maximum extent practicable" (MEP), the target specified by the USEPA regulations. The committee includes three City council members, a Chamber of Commerce member, and representation from the following: agriculture, a home builder, a merchant at large, a multiple units housing developer, the City of Salem, Marion County, the Claggett Creek Watershed Council, and two citizens at large. Staff members on the committee include the Public Works Director, the City Engineer, and the Public Works Superintendent. This document provides the resulting NPDES Stormwater Management Program for Keizer. Section 2 provides a brief description of the City and affected waters, and Section 3 provides the contents of the program.

2.0 Description of the Permit Area

The City of Keizer was incorporated in 1982 and currently serves a population of approximately 34,010 people (2002) within the city limits. The City's service area encompasses approximately 7 square miles. The Keizer city limits encompass the area in Marion County roughly bounded on the southwest by the Willamette River, the south by Salem Parkway and east by Interstate 5, and the north by Clear Lake Road. The affected major waterways within the city limits include Claggett Creek, the Labish Ditch, and the Willamette River, as depicted in Figure 1: City of Keizer Surface Water Features. The City of Keizer is located within the Urbanized Area (UA) of the City of Salem.

Under Section 303(d) of the CWA, states are required to identify waters which fail to meet applicable water quality standards, and they are required to develop Total Maximum Daily Loads (TMDLs) to address the specific pollutants contributing to the water quality degradation. DEQ has listed the Keizer reach of the Willamette River as being "water quality limited" on its 2002 303(d) list. Pollutants of concern include temperature and mercury. DEQ is presently in the process of developing TMDLs to address this river reach.

C:\25695398_Keizer_SWMP\Graphics\WellInformation.dwg, Feb 17, 2004 -- 10:15am

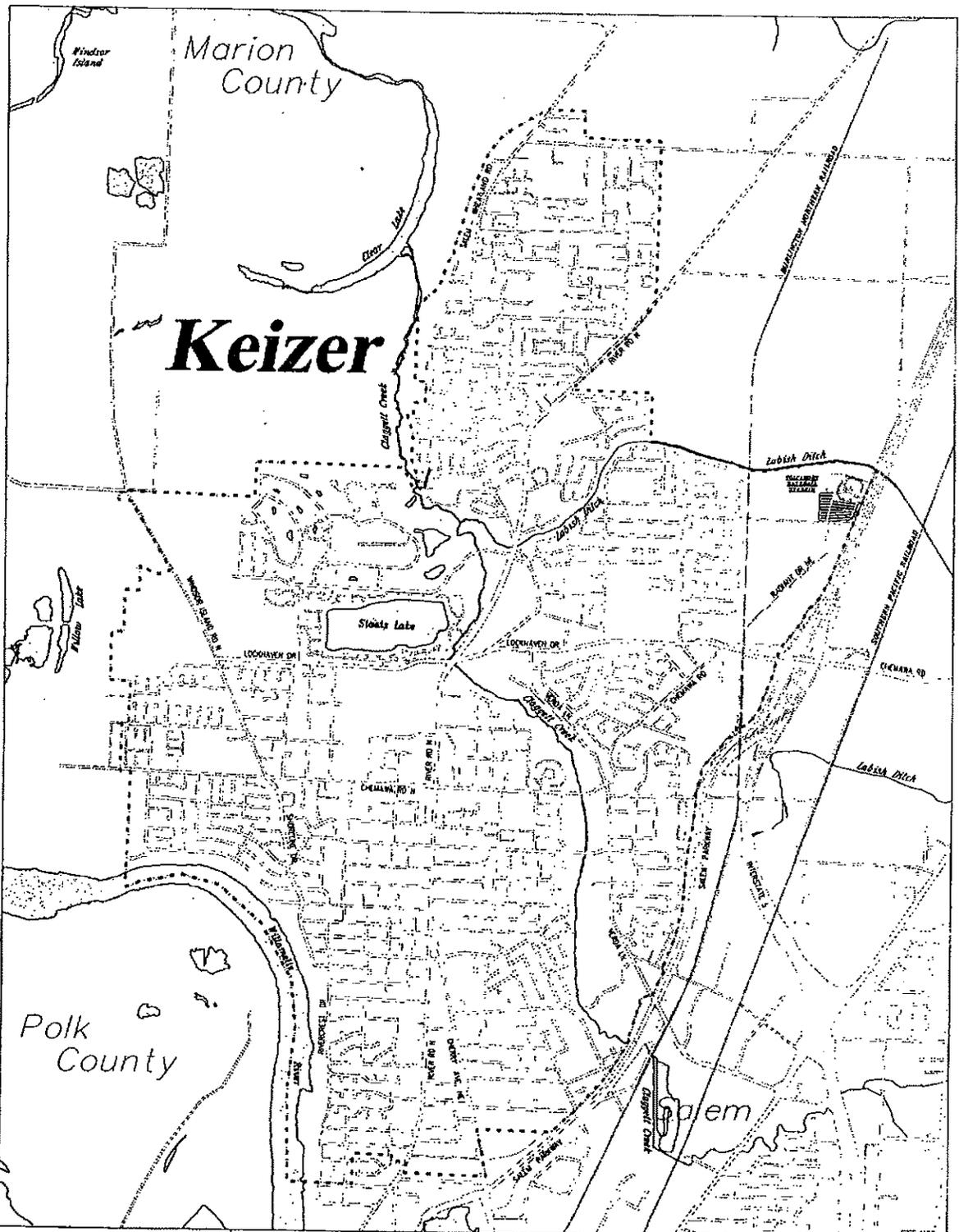


Figure 1:
City of Keizer Surface Water Features

CITY OF KEIZER
 WILLIAM J. PETERSON
 ENGINEERING CONSULTANTS, INC.
Professional Engineer License No. 12345



3.0 Keizer's NPDES SWMP

The City of Keizer's Department of Public Works includes a Water Division, a Utility Division and a Street Division, as illustrated in Figure 2: City of Keizer Organizational Structure. The Water Division is funded through a dedicated funding mechanism and is responsible for maintenance and operation of the City's drinking water system. The Utility Division is responsible for the sewer system. The Street Division is responsible for managing stormwater in the City as well as for maintaining street curbs, sidewalks, street signs, and street surfaces; design review of new streets; and issuing driveway permits. The Street Division includes 2.25 Full Time Equivalent (FTE) staff members, of which 1.0 FTE is dedicated to responding to street maintenance issues such as repairing potholes and installing signage, and 1.25 FTE is dedicated to design review, permitting, limited stormwater management activities and administrative matters.

The Department of Public Works is responsible for implementing the City's surface water management activities within its boundaries, including the planning, design, construction, operation, and maintenance of the stormwater drainage system. In response to the NPDES requirements, the City, with assistance from a citizen's committee, developed an MS4 Stormwater Management Program (SWMP) that addresses each of the required six minimum control measures. Implementation of the SWMP will primarily be the responsibility of the Department of Public Works.

Due to limited existing funding, the City's strategy for implementing its Stormwater Management Program is to spend the first permit year establishing a funding mechanism and conducting any hiring necessary to implement the program in the subsequent permit years. Where proposed BMPs can be accommodated with existing resources, these will also be initiated during the first permit year. The remaining BMPs will be implemented during permit years 2 through 5. The first permit year will begin with the signing of the permit, which will likely take place during the City's fiscal year 2004/2005 (beginning July 1, 2004).

As described in Section 1, the City's SWMP addresses each of the six minimum control measures listed below, as required under the NPDES MS4 permit. The SWMP also describes methods for record keeping and reporting.

NPDES SWMP Six Minimum Control Measures

1. Public education and outreach on stormwater impacts.
2. Public involvement/participation.
3. Illicit discharges detection and elimination.
4. Construction site stormwater runoff control.
5. Post-construction stormwater management for new development and redevelopment.
6. Pollution prevention in municipal operations.

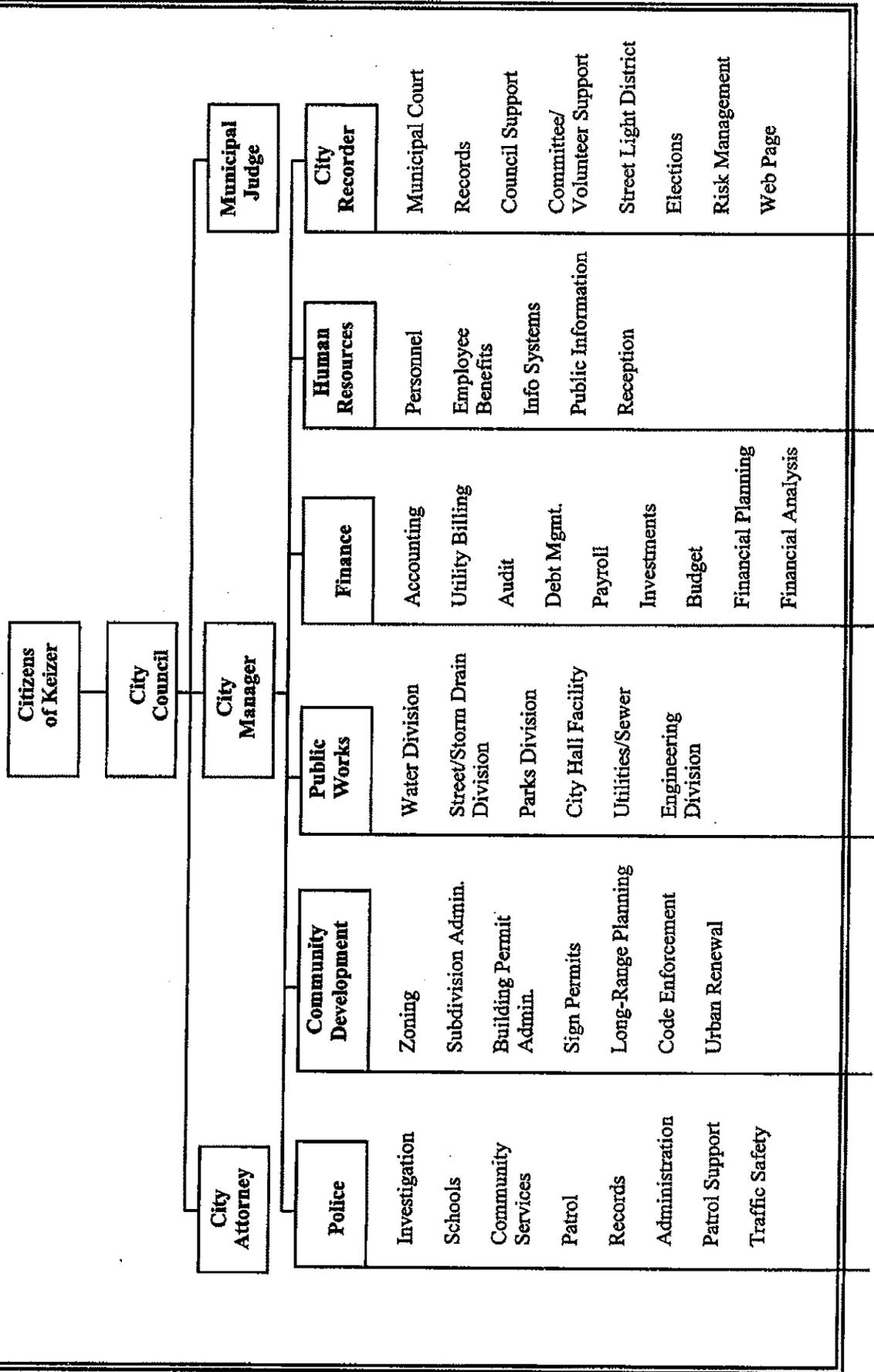
Specific BMPs were developed for each minimum control measure to work toward the goal of reducing MS4 discharges of pollutants to the maximum extent practicable (MEP). Table 3 provides a summary of the selected BMPs. In the pages following Table 3, a

summary sheet is provided for each minimum control measure. Each summary sheet includes the specific minimum requirement from the USEPA regulations, a list of the selected BMPs and the rationale for their selection. Each summary sheet is followed by a set of fact sheets, one sheet for each of the selected BMPs. The BMP fact sheets provide a list of the responsible parties for BMP implementation, existing conditions, a description of the BMP and proposed SWMP activities, measurable goals, and an implementation schedule. Activities outlined in the development/implementation schedule are defined in terms of permit years. The first permit year will begin with the signing of the permit, which will likely take place during the City's fiscal year 2004/2005 beginning July 1 of 2004. An overall implementation schedule is provided in Table 4 at the end of Section 3.

Table 3
Summary of Keizer NPDES SWMP BMPs for Each Minimum Measure

BMP #	BMP Title
Program Funding	
PF-1	Develop Program Funding Mechanism
Minimum Measure #1 - Public Education & Outreach	
PE-1	Implement Stormwater Educational Activities
PE-2	Use the Local Cable Channel and the City's Website to Address Stormwater Issues
PE-3	Participate in Claggett Creek Watershed Council
Minimum Measure #2 - Public Involvement/Participation	
PI-1	Public Participation in Establishment of Utility
PI-2	Public Participation in Ordinance Development
PI-3	Storm Drain Markers/Door Hangers
Minimum Measure #3 - Illicit Discharge Detection and Elimination (IDDE)	
ID-1	Develop Ordinance to Prohibit Illicit Discharges
ID-2	Develop Illicit Discharges Detection and Elimination Plan
ID-3	Train City Employees to Implement the IDDE Plan
ID-4	Implement Illicit Discharges Detection and Elimination Plan
Minimum Measure #4 - Construction Site Runoff Control	
CS-1	Develop Ordinance to Control Construction Site Runoff
CS-2	Train City Employees re: Construction Site Controls
CS-3	Conduct Plan Reviews, Inspections, Enforcement for Construction Sites
CS-4	Establish Hotline to Receive Complaints from the Public
Minimum Measure #5 - Development Standards (Post-construction Runoff Control)	
DS-1	Develop Ordinance to Control Runoff from New and Re-Development
DS-2	Train City Employees re: New Development Standards
DS-3	Conduct Plan Reviews, Inspections, Enforcement for New Development
Minimum Measure #6 - Operations and Maintenance (O&M) (Pollution Prevention/Good Housekeeping)	
OM-1	Develop a Water Quality Sensitive O&M Program
OM-2	Train City Employees re: Revised O& M Practices
OM-3	Conduct Catch Basin Cleaning
OM-4	Conduct Street Sweeping
Record Keeping and Reporting	
RR-1	Track Compliance/Prepare Annual Reports
RR-2	Link SWMP Information with GIS

Figure 2: City of Keizer Organizational Structure



Program Funding

Permit Requirements:

The NPDES Phase II permit does not address program funding issues for municipal SWMP development and implementation.

Applicable City of Keizer BMPs:

PF-1: Develop Program Funding Mechanism

Rationale:

When the Stormwater Task Force citizen's committee first began to meet, the hope was that the City's NPDES program costs could be accommodated within existing resources. However, after going through the details of the requirements, selecting best management practices (BMPs) for implementation, and considering additional underground injection control (UIC) requirements, it was clear that additional resources would be required. The committee determined that establishing a revenue source (for example a dedicated fund or a stormwater utility) will be necessary to fund the program.

Therefore, the City's strategy for implementing its Stormwater Management Program is to spend the first permit year establishing a funding mechanism and conducting any hiring necessary to implement the program in the subsequent permit years. Where proposed BMPs can be accommodated within existing resources, these will also be initiated during the first permit year. The remaining BMPs will be implemented during permit years 2 through 5.

BMP PF-1

BMP Name: Develop Program Funding Mechanism

Responsible Parties: Department of Public Works, City Council

Existing Conditions: The NPDES MS4 Phase II program is an unfunded federal mandate, meaning that the United States Congress has not established a fund to finance implementation of the NPDES Phase II program although municipalities are required by law to comply with the program. Several federal financing programs could potentially be utilized by the City, although competition for funding from these programs is high and it could be very difficult to secure funding from these programs during the permit schedule. The federal financing programs include the Clean Water State Revolving Fund (SRF) program, which provides low-cost loans for water quality infrastructure projects; the Water Quality Cooperative Agreements under the CWA section 104(b)(3); Water Pollution Control Program grants to States; and the Transportation Equity Act for the 21st Century. In addition, CWA Section 319 funds may be used to fund any urban stormwater activities that are not specifically required by an NPDES permit but this funding is limited and is allocated in a highly competitive process for specific projects. It is unlikely that these federal financing programs could be used to fully fund implementation of Keizer's SWMP.

Existing funding for the management of Keizer's storm drainage system is currently very limited. Street sweeping is conducted monthly and financed out of the street fund (i.e., supported by gas tax revenues). Limited funds are also available from the street fund for storm system maintenance. However, such funds are only sufficient to respond to complaints and cover approximately 10% of the annual system maintenance requirements. Implementation of Keizer's NPDES SWMP will require the development of a program funding mechanism.

BMP Description and Proposed Activities: This BMP will be initiated at the beginning of the first permit year. The City may hire a financial consultant to identify potential funding sources for the stormwater program and evaluate the City's funding needs to implement the SWMP. The financial consultant would work with the Stormwater Task Force citizen's committee to evaluate the funding options available to the City, choose a funding strategy, and implement a funding mechanism. The City will also conduct any hiring necessary to implement the program in the following permit years.

Measurable Goals: During the first permit year, a stormwater program funding mechanism will be developed that will provide the City with the financial resources to implement the SWMP.

Development/Implementation Schedule:

PY1	PY2	PY3	PY4	PY5
Develop funding mechanism to implement SWMP	Sustain funding for SWMP implementation			

Minimum Measure #1 - Public Education

Permit Requirements:

According to the federal NPDES MS4 Phase II rules and the DEQ draft 1200-MS4 permit, the Phase II MS4 permittee must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff.

Applicable City of Keizer BMPs:

PE-1: Implement Stormwater Educational Activities

PE-2: Use the Local Cable Channel and the City's Website to Address Stormwater Issues

PE-3: Participate in Claggett Creek Watershed Council

Rationale:

Keizer selected the above three BMPs to cover a wide range of audiences and to experiment with different methods for educating residents and businesses.

- PE-1 represents the major component of this minimum measure. This BMP will be supported by establishing a fund that will be devoted to implementing a different stormwater quality educational activity once each year. The first year effort will include distribution of an educational insert in an annual mailing to all City households (such as the drinking water Consumer Confidence Report). Subsequent year efforts will be focused on students and other educational media (e.g., fact sheets, newspaper ads).
- PE-2 will involve developing materials that will allow Keizer to take advantage of existing educational opportunities associated with the local cable channel and the City's website.
- PE-3 will involve developing materials and strategies that will ensure that stormwater quality issues are addressed/considered in local watershed council meetings.

BMP PE-1

BMP Name: Implement Stormwater Educational Activities

Responsible Parties: Department of Public Works

Existing Conditions: Public school students in the City of Keizer attend the Salem-Keizer School District. The City of Salem Community Development Department Natural Resources Program funds a watershed education program in the Salem-Keizer School District schools. The program includes classroom presentations by City of Salem staff on topics related to stormwater, water quality, natural resources, and the Endangered Species Act, as well as field trips, community service project coordination, and numerous educational videos on water quality and natural resources topics.

BMP Description and Proposed Activities: This BMP will be initiated in the second permit year and will include the development of a stormwater educational insert into the water bill for mailing. The insert will address stormwater issues associated with underground injection control (UIC) requirements in addition to NPDES requirements. In following permit years, other educational activities will be considered for implementation including: school education programs, newspaper ads, and stormwater fact sheets for counter displays. A dedicated source of funding and staff time will be provided each year for this BMP.

Measurable Goals: During the second permit year, the City will mail educational inserts in water bills to approximately 12,500 residences (representing approximately 95% of Keizer residents). During following years, measurable goals will depend on the educational activity that is selected. However, measurable goals will focus on effectively reaching the most people and/or businesses and providing them with the most relevant educational messages in terms of potential activities that would reduce pollutant sources.

Development/Implementation Schedule:

PY1	PY2	PY3	PY4	PY5
	Prepare an educational insert for an annual mailing.	Identify and implement an educational activity.	Identify and implement an educational activity.	Identify and implement an educational activity.

BMP PE-2

BMP Name: Use the Local Cable Channel and the City's Website to Address Stormwater Issues

Responsible Parties: Department of Public Works

Existing Conditions: The public access cable channel in the City of Keizer (Channel 23) broadcasts coverage of City proceedings such as City Council meetings and public education programs such as "Cop Talk." Keizer currently has a website for the City that describes the City's history, charter, services, etc. Information on the website does not currently exist with respect to the City's stormwater management planning efforts or related stormwater quality issues.

BMP Description and Proposed Activities: The City will utilize the public access cable channel to distribute information about Keizer's storm drainage system and water quality issues to the public. The City may broadcast videos from outside sources that address these subjects or the City may create its own materials to broadcast, depending on the resources that are available to the City. In addition, information regarding the City's NPDES required stormwater management program and related stormwater quality issues will be added to the City's website.

Measurable Goals: The City will develop stormwater-related education information to broadcast over the local cable access channel during the first permit year and broadcast stormwater-related educational information over the local access channel two to four times per year in subsequent permit years. The City will include stormwater-related educational information on the City's website by the end of the first permit year. Information on the website will be updated as needed on an annual basis.

Development/Implementation Schedule:

PY1	PY2	PY3	PY4	PY5
On an annual basis, proactively take advantage of opportunities for using Channel 23 to provide stormwater quality related education.				
Add stormwater-related information to the City's website.	Update stormwater related information on the website annually.			

BMP PE-3

BMP Name: Participate in Claggett Creek Watershed Council

Responsible Parties: Department of Public Works

Existing Conditions: A City staff member currently attends monthly Claggett Creek watershed council meetings. The Claggett Creek watershed includes portions of Keizer, Salem and Marion County and the Claggett Creek watershed council meetings are attended by residents and City/County staff from all of these areas. The purpose of the watershed council meetings is to address water quality issues in Claggett Creek, evaluate potential problems associated with proposed streamside development, and develop wetland mitigation projects. The City's participation to date has included reviewing land use actions along Claggett Creek and Labish Ditch in Keizer, Salem, and Marion County and providing comments to each jurisdiction about potential water quality and quantity impacts of the proposed actions. The City also participated in a wetlands mitigation project implemented by the watershed council in a City park along Claggett Creek.

BMP Description and Proposed Activities: The City will continue to attend Claggett Creek watershed council meetings. Where relevant, the City will proactively provide information related to the City's stormwater quality management program and objectives and ensure watershed projects consider stormwater quality issues.

Measurable Goals: The City will attend and proactively participate in monthly watershed council meetings on an on-going basis.

Development/Implementation Schedule:

PY1	PY2	PY3	PY4	PY5
Attend and participate in Claggett Creek watershed council meetings. Ensure stormwater quality issues are considered and addressed when relevant.				

Minimum Measure #2 - Public Involvement

Permit Requirements:

According to the federal NPDES MS4 Phase II rules and the DEQ draft 1200-MS4 permit, the Phase II MS4 permittee must at a minimum, comply with State, Tribal, and local public notice requirements when implementing a public involvement/participation program.

Applicable City of Keizer BMPs:

PI-1: Public Participation in Establishment of Funding Source

PI-2: Public Participation in Ordinance Development

PI-3: Storm Drain Markers/Door Hangers

Rationale:

Keizer is planning to devote the first permit year to establishing a funding source for BMP implementation. A committee will be used to assist in development of the funding source (i.e., a stormwater utility). Use of a committee in the establishment of this fund will involve representatives of the public and will include education regarding the need for the program. Once funding has been established, this committee will continue to assist the City in development of ordinances that will include standards and enforcement mechanisms for their illicit discharges elimination program and their construction/post-construction site runoff control programs. When conducting citizen's meetings, the City will comply with all relevant public notice requirements. The City will also involve the public (most likely students, scout groups, etc.) in applying storm drain markers that indicate dumping of materials is not allowed and is harmful to streams. When storm drain markers are applied, door hangers will also be distributed to educate adjacent residents regarding the storm drain marking program. This BMP will involve the public in a stormwater quality related educational activity.

BMP PI-1

BMP Name: Public Participation in Establishment of Funding Source

Responsible Parties: Department of Public Works

Existing Conditions: A citizen's advisory committee was established to provide oversight and assistance in the development of Keizer's NPDES required stormwater management program. The committee includes three City council members, a Chamber of Commerce member, and representation from a home builder, a merchant at large, a multiple units housing developer, the City of Salem, Marion County, agriculture, the Claggett Creek Watershed Council, and two citizens at large. Staff members on the committee include the Public Works Director, the City Engineer, and the Public Works Superintendent.

BMP Description and Proposed Activities: The City will continue with the existing citizen's committee or establish a new one with broad representation to assist in developing a funding mechanism for implementing the NPDES stormwater management program (SWMP). The City will coordinate and facilitate the committee meetings and provide opportunities for public comments.

Measurable Goals: The City's goal is to complete the public involvement process necessary to establish a funding mechanism within the first permit year. It is estimated that the City will facilitate 8 citizen's committee meetings to meet this goal.

Development/Implementation Schedule:

PY1	PY2	PY3	PY4	PY5
Establish committee to oversee establishment of funding source. Facilitate 8 monthly committee meetings.				

<p>BMP PI-2</p> <p>BMP Name: Public Participation in Ordinance Development</p>
--

Responsible Parties: Department of Public Works

Existing Conditions: As described in the fact sheet for BMP PI-1, a citizen’s advisory committee was established to provide oversight and assistance in the development of Keizer’s NPDES required stormwater management program. The committee includes three City council members, a Chamber of Commerce member, and representation from a home builder, a merchant at large, a multiple units housing developer, the City of Salem, Marion County, agriculture, the Claggett Creek Watershed Council, and two citizens at large. Staff members on the committee include the Public Works Director, the City Engineer, and the Public Works Superintendent.

BMP Description and Proposed Activities: The City will continue with the existing citizen’s committee or establish a new one with broad representation to assist in developing new City ordinance language necessary for the illicit discharges elimination program (BMP ID-1) and for the construction/post-construction site runoff control programs (BMPs CS-1 and DS-1). The City will coordinate and facilitate the committee meetings and provide opportunities for public comments.

Measurable Goals: The City’s goal is to complete the public involvement process necessary to establish an ordinance for the illicit discharges elimination program and the construction site runoff control program in permit year 2 and to complete the public involvement process necessary to establish an ordinance for new development standards in permit year 3. It is estimated that the City will facilitate 8 citizen’s committee meetings in each of permit years 2 and 3 to meet this goal.

Development/Implementation Schedule:

PY1	PY2	PY3	PY4	PY5
	Establish committee and facilitate meetings to oversee establishment of an ordinance for the IDDE program and the construction site runoff control program.	Establish committee and facilitate meetings to oversee establishment of an ordinance for stormwater quality-related standards for new development.		

<p>BMP PI-3 BMP Name: Storm Drain Markers/Door Hangers</p>

Responsible Parties: Department of Public Works

Existing Conditions: In early 1990's the City assisted an Eagle Scout troop in conducting storm drain stenciling. This included the stenciling of approximately 50 catchbasins.

BMP Description and Proposed Activities: On an annual basis, the City will involve public groups (i.e., students, scout troops, etc.) in marking storm drains with messages such as "dump no waste, drains to stream". In conjunction with this program, educational door hangers will be printed for groups to distribute to residents located adjacent to the storm drains that are marked. The City will encourage groups to participate in the program and provide them with storm drain marking kits, door hangers, and City staff instruction and assistance.

Measurable Goals: The goal will be to involve enough groups to mark 100 storm drains/year and to distribute educational materials such as door hangers or flyers at 250 residents per year beginning in the second year of the permit. With this goal, it is estimated that all of the storm drains will be marked by the end of the permit period. On an annual basis, the City will track the number of citizens involved in conducting the storm drain marking program, the number of storm drains that are marked and the number of educational door hangers that are distributed.

Development/Implementation Schedule:

PY1	PY2	PY3	PY4	PY5
	Involve public groups to implement storm drain marking program on an annual basis.			

Minimum Measure #3 – Illicit Discharge Detection and Elimination

Permit Requirements:

According to the federal NPDES MS4 Phase II rules and the DEQ draft 1200-MS4 permit, Keizer, as the Phase II MS4 permittee, must:

1. Develop, implement and enforce a program to detect and eliminate illicit discharges [as defined in 40 CFR §122.26(b)(2)] into the permittee's small MS4.
2. Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and location of all waters of the United States and/or the State of Oregon that receive discharges from those outfalls.
3. To the extent allowable under State or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-stormwater discharges into the permittee's storm sewer system and implement appropriate enforcement procedures and actions. Possible sanctions include non-monetary penalties (such as stop work orders), fines, bonding requirements, and/or permit denials for non-compliance.
4. Develop and implement a plan to detect and address non-stormwater discharges, including illegal dumping, to the permittee's system.
5. Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.
6. Address the following categories of non-stormwater discharges or flows (illicit discharges) if the permittee identifies them as substantial contributors of pollutants to the permittee's small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR §35.2005(20)), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water. Discharges or flows from fire fighting activities are excluded from the effective prohibition against non-stormwater and need only be addressed where they are identified as substantial sources of pollutants to waters of the United States and the State of Oregon.
7. The permittee must also develop a list of other similar occasional incidental non-stormwater discharges (e.g. non-commercial or charity car washes) that will not be addressed as illicit discharges. These non-stormwater discharges must not be reasonably expected (based on information available to the permittees) to be substantial sources of pollutants to the MS4, either because of the nature of the discharges or conditions the permittee have established for allowing these discharges to the permittee's MS4 (e.g., a charity car wash with appropriate controls

on frequency, proximity to sensitive waterbodies, BMPs on the wash water). The permittee must document in the permittee's Stormwater Management Program (SWMP) plan any local controls or conditions placed on the discharges. The permittee must include a provision prohibiting any individual non-stormwater discharge that is determined to be contributing substantial amounts of pollutants to the permittee's MS4.

8. The permittee must develop a process to respond to and document complaints relating to illicit discharges.

Applicable City of Keizer BMPs:

ID-1: Develop Ordinance to Prohibit Illicit Discharges

ID-2: Develop Illicit Discharge Detection and Elimination (IDDE) Plan

ID-3: Train City Employees to Implement IDDE Plan

ID-4: Implement Illicit Discharge Detection and Elimination Plan

Rationale:

Keizer selected the above four BMPs to address all of the requirements listed above with the exception of requirements v. and viii. Item v. requires the City to inform the public of hazards associated with illegal discharges and improper disposal of waste. This requirement will be met under the education and public involvement minimum measures; specifically BMPs PE-1 (implement stormwater educational activities) and PI-3 (storm drain markers/door hangers). Item viii. requires the City to develop a process to respond to and document complaints relating to illicit discharges. This requirement will be met under the construction site controls minimum measure; specifically BMP CS-4 (establish hotline to receive complaints from the public).

BMP ID-1

BMP Name: Develop Ordinance to Prohibit Illicit Discharges

Responsible Parties: Department of Public Works

Existing Conditions: The City currently relies on assistance from DEQ to address illicit discharges because the City does not have an ordinance to prohibit illicit discharges.

BMP Description and Proposed Activities: As specifically stated in the requirements, the City will develop an ordinance to effectively prohibit non-stormwater discharges into the storm sewer system and to provide for appropriate enforcement procedures and actions. The City will establish and work with a citizen's committee to assist in the development of this ordinance as described in BMP PI-2.

Measurable Goals: Develop an ordinance to support the illicit discharges detection and elimination program by the end of permit year 2.

Implementation Schedule:

PY1	PY2	PY3	PY4	PY5
	Develop ordinance to support the illicit discharges elimination program.			

BMP ID-2

BMP Name: Develop Illicit Discharge Detection and Elimination (IDDE) Plan

Responsible Parties: Department of Public Works

Existing Conditions: The City has initiated the task of developing a map of its stormwater outfalls. Approximately eighty outfalls have been identified as part of this exercise. Field reconnaissance is still needed to verify some of the outfall locations and to identify any unmapped outfalls. The City currently addresses non-stormwater discharges to the system on a complaint driven basis.

BMP Description and Proposed Activities: The City will conduct field reconnaissance activities necessary to complete the City's outfall inventory and map. The City will also develop an illicit discharge detection and elimination (IDDE) plan to investigate outfalls for flows during dry weather. The plan will include methods for tracking flows to their source, sampling flows, and for documenting investigations (e.g., inspection forms, etc.) and follow-up activities to eliminate flows.

Measurable Goals: Develop an IDDE Plan by the end of permit year 1. Complete the outfall inventory and map by the end of permit year 2.

Implementation Schedule:

PY1	PY2	PY3	PY4	PY5
Develop an IDDE Plan.	Complete outfalls inventory and map.			

BMP ID-3

BMP Name: Train City Employees to Implement the IDDE Plan

Responsible Parties: Department of Public Works

Existing Conditions: The City does not currently have an IDDE Plan.

BMP Description and Proposed Activities: The City will conduct training for employees responsible for implementation of the illicit discharges detection and elimination plan. Training will include investigation, investigative sampling, and documentation/reporting methods.

Measurable Goals: In permit year 2, conduct one training session for appropriate City employees on methods for implementation of the IDDE plan.

Implementation Schedule:

PY1	PY2	PY3	PY4	PY5
	Train employees to implement the IDDE Plan.			

BMP ID-4

BMP Name: Implement Illicit Discharge Detection and Elimination Plan

Responsible Parties: Department of Public Works

Existing Conditions: As stated in BMP ID-2, the City currently addresses non-stormwater discharges to the system on a complaint driven basis.

BMP Description and Proposed Activities: The City will implement the IDDE Plan as prepared under BMP ID-2.

Measurable Goals: Investigate all City stormwater outfalls for illicit discharges by the end of the five year permit period. In association with these investigations, the City will document the number of outfalls having flows, the identification of the source of these flows, any sampling results that apply, and actions taken to eliminate the flows. This documentation will help to refine the program for continued future implementation and future goal setting.

Implementation Schedule:

PY1	PY2	PY3	PY4	PY5
	Implement the IDDE Plan.			

Minimum Measure #4 – Construction Site Stormwater Runoff Control

Permit Requirements:

According to the federal NPDES MS4 Phase II rules and the DEQ draft 1200-MS4 permit, the Phase II MS4 permittee must develop, implement, and enforce a program to reduce pollutants in any runoff that can drain to the permittee's MS4 drainage system from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of stormwater discharges from a construction activity that disturbs less than one acre must be included in the permittee's program, if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. If Oregon DEQ waives requirements for stormwater discharges associated with small construction activity in accordance with 40 CFR &122.26(b)(15)(i), the municipal permittee is not required to develop, implement, or enforce a program to reduce pollutant discharges from such sites. The permittee's program must include the development and implementation of, at a minimum:

1. 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.
2. Requirements for construction site operators to implement appropriate erosion and sediment control best management practices.
3. Requirements for construction site operators to prevent or control waste that may cause adverse impacts to water quality such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site.
4. Procedures for site plan review that incorporate measures to prevent or control potential water quality impacts.
5. Procedures for receipt and consideration of information submitted by the public.
6. Procedures for site inspection and enforcement of control measures.

Applicable City of Keizer BMPs:

CS-1: Develop Ordinance to Control Construction Site Runoff

CS-2: Train City Employees Regarding Construction Site Controls

CS-3: Conduct Plan Reviews, Inspections, and Enforcement for Construction Sites

CS-4: Establish Hotline to Receive Complaints from the Public

Rationale:

The City of Keizer selected the above four BMPs to address all of the requirements listed above.

BMP CS-1

BMP Name: Develop Ordinance to Control Construction Site Runoff

Responsible Parties: Department of Public Works

Existing Conditions: Although not regulated by the City, owners of construction sites that are larger than one acre are currently required to obtain an NPDES 1200C permit from DEQ. This permit requires an erosion prevention and sediment control plan to be developed and implemented. In addition the City currently relies on its nuisance abatement ordinance when the City needs to deal with non-stormwater discharges to the municipal storm drainage system. However, the nuisance abatement ordinance is only enforceable for non-stormwater discharges coming from street obstructions that are traffic hazards (e.g., a pile of fill dirt in the street). Enforcement of the nuisance abatement ordinance can be a lengthy process and discharges may continue until a resolution is reached. Construction site runoff problems need to be corrected more immediately because pollutants could be washed into the system and ultimate receiving water body during the enforcement process and the damage would already be done by the time a resolution is reached.

BMP Description and Proposed Activities: As specifically stated in the DEQ requirements, for construction sites that are greater than one acre, the City will develop a municipal ordinance that includes the following:

- requirements for erosion prevention and sediment controls
- requirements for the prevention or control of other construction-related waste that could impact water quality, and
- enforcement mechanisms/sanctions to ensure compliance.

The City will establish and work with a citizen's committee to assist in the development of this ordinance, as described in BMP PI-2. The committee will also consider the need for and potential methods of addressing impacts from construction sites that are smaller than one acre. In association with development of the ordinance, the City will review existing erosion control guidance manuals from other regional jurisdictions and select a manual that will be most appropriate for Keizer with minimal modifications. The City will evaluate the potential opportunity to establish a Memorandum of Agreement (MOA) with DEQ that would allow Keizer to take on administration of the State's NPDES 1200C permitting program for construction erosion control within the City.

Measurable Goals: Develop an ordinance to support a construction site runoff control program by the end of permit year 2. Evaluate opportunity to develop MOA with DEQ for 1200C permits.

Implementation Schedule:

PY1	PY2	PY3	PY4	PY5
	Develop construction site runoff control ordinance. Select a guidance manual.			

BMP CS-2

BMP Name: Train City Employees Regarding Construction Site Controls

Responsible Parties: Department of Public Works

Existing Conditions: The City does not currently have a construction site runoff control program and therefore does not conduct inspections of construction sites to evaluate runoff issues. Marion County inspects construction sites to ensure compliance with the Uniform Building Code, and a City staff member inspects construction sites to ensure permitted driveways and sidewalks meet the Americans with Disabilities Act sloping requirements.

BMP Description and Proposed Activities: The City will conduct training for employees who are responsible for implementation of the construction site runoff control program. Training will include review of requirements, review of applicable best management practices (i.e., the selected guidance manual) and appropriate implementation methods, plan review procedures, inspection procedures, and documentation/reporting procedures.

Measurable Goals: In permit year 2, conduct one training session for appropriate City employees regarding the procedures and activities necessary to adequately implement the City's construction site runoff control program. Conduct training updates or refresher sessions as needed in permit years 3 through 5.

Implementation Schedule:

PY1	PY2	PY3	PY4	PY5
	Train City employees regarding implementation of the construction site runoff control program.	Conduct training updates or refresher sessions as needed.		

BMP CS-3

BMP Name: Conduct Plan Reviews, Inspections, and Enforcement for Construction Sites

Responsible Parties: Department of Public Works

Existing Conditions: Currently, developers attend a pre-application conference with the City of Keizer Planning Department. These conferences typically include a discussion of stormwater issues but they do not specifically address construction-related BMPs since the City does not currently have an ordinance requiring construction site runoff controls.

BMP Description and Proposed Activities: Conduct site plan review for construction sites that are regulated by the new ordinance developed under BMP CS-1. Site plan reviews will be conducted to ensure that the planned use of BMPs is appropriate, given site conditions and planned construction activities. Once construction commences, the City will conduct inspections to ensure that appropriate BMPs are properly implemented. Inspections by the City will be routine and carried out on a regular basis. Inspections will also be conducted based on complaints received from the public (see BMP CS-4 – Stormwater Hotline). As will be specified in the City's new ordinance, enforcement activities will be conducted as necessary.

Measurable Goals: Beginning in permit year 3, conduct plan review, inspection, and enforcement actions necessary to implement the ordinance developed under BMP CS-1. At a minimum, the City's goal will be to conduct plan reviews and at least one inspection for all construction sites larger than one acre.

Implementation Schedule:

PY1	PY2	PY3	PY4	PY5
		Implement the construction site runoff control program and conduct plan reviews, inspections, and enforcement activities as specified in the ordinance developed under BMP CS-1.		

BMP CS-4

BMP Name: Establish Hotline to Receive Complaints from the Public

Responsible Parties: Department of Public Works

Existing Conditions: The City currently forwards public complaints about construction site erosion and runoff to DEQ because the City does not have staff available to address these complaints and the City does not have an ordinance requiring construction site runoff controls. The City responds to public complaints about drainage problems such as clogged storm drain catchbasins and pipes as staff time allows. Response to drainage complaints may include conducting a site inspection, assessing the problem for City action, taking action or determining that no action is needed, and conducting a follow-up call to the complainant to discuss the action.

BMP Description and Proposed Activities: Establish a hotline for receiving storm system related complaints from the public. The City also will develop a process for documenting calls and making determinations regarding follow-up actions.

Measurable Goals: Establish and begin operation of a hotline by the end of permit year 1.

Implementation Schedule:

PY1	PY2	PY3	PY4	PY5
Establish and begin operation of hotline.	Operate the hotline and follow up on calls as necessary.			

Minimum Measure #5 – Post-Construction Stormwater Runoff Control

Permit Requirements:

According to the federal NPDES MS4 Phase II rules and the DEQ draft 1200-MS4 permit, the Phase II MS4 permittee must:

1. Develop, implement, and enforce a program to ensure reduction of pollutants in stormwater runoff to the maximum extent practicable (MEP) from new development and redevelopment projects that disturb one acre or more, or less than one acre if they are part of a larger common plan of development or sale, and if they discharge into the permittee's MS4 drainage system. The permittee's program must ensure that controls are in place that would prevent or minimize water quality impacts.
2. Develop and implement strategies that include a combination of structural and/or non-structural BMPs appropriate for the permittee's community, and
 - a. Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State or local law;
 - b. Ensure adequate long-term operation and maintenance of BMPs; and
 - c. Ensure adequate enforcement of ordinance or alternative regulatory program.

Applicable City of Keizer BMPs:

DS-1: Develop Ordinance to Control Runoff from New and Re-Development

DS-2: Train City Employees Regarding New Development Standards

DS-3: Conduct Plan Reviews, Inspections, Enforcement for New Development

Rationale:

The City of Keizer selected the above three BMPs to address all of the requirements listed above.

BMP DS-1

BMP Name: Develop Ordinance to Control Runoff from New and Re-Development

Responsible Parties: Department of Public Works

Existing Conditions: Currently, developers attend a pre-application conference with the City of Keizer Planning Department. These conferences typically include a discussion of stormwater issues. If a land use change is requested, the Department of Public Works provides comments on infrastructure issues to a Hearings Officer or to the City Council when building permits are considered. The Department of Public Works can make recommendations or require conditions to be met related to infrastructure. These recommendations/conditions are usually adopted into the building permit but a developer can contest them. If the property is zoned correctly, the Public Works Department's opportunities for attaching conditions are more limited. Developers also attend a pre-design conference with City staff and these conferences typically include a discussion of stormwater issues. Stormwater detention for flood control is usually required for new development projects based on Keizer and Marion County design standards. Stormwater treatment to control water quality is minimally addressed in the City Development Code, but is encouraged during the pre-application conference and site plan review.

BMP Description and Proposed Activities: As specifically stated in the DEQ's requirements, for new and re-development projects that disturb one acre or more, the City will develop an ordinance that will include the following:

- requirements for implementation of BMPs that prevent or minimize water quality impacts,
- requirements for adequate long-term operation and maintenance of the BMPs,
- and enforcement mechanisms/sanctions to ensure compliance.

The City will establish and work with a citizen's committee to assist in the development of this ordinance as described in BMP PI-2. The committee will also consider the need for and potential methods of addressing impacts from new and re-development projects that are smaller than one acre. In association with development of an ordinance, the City will review existing new development water quality guidance manuals from other regional jurisdictions and select a manual that will be most appropriate for Keizer with minimal modifications.

Measurable Goals: Develop an ordinance to prevent or minimize pollutants in runoff from new and re-development by the end of permit year 3.

Implementation Schedule:

PY1	PY2	PY3	PY4	PY5
		Develop ordinance to prevent or minimize pollutants from new and re-development projects.		

BMP DS-2

BMP Name: Train City Employees Regarding New Development Standards

Responsible Parties: Department of Public Works

Existing Conditions: As described in BMP DS-1, the City Planning Department meets with developers for a pre-application conference and a pre-design conference, and these conferences typically include a discussion of stormwater issues. Although stormwater treatment to control water quality is encouraged during the pre-application and pre-design conferences and permitting site plan review, City employees are not trained to evaluate proposed designs according to a water quality BMP guidance manual.

BMP Description and Proposed Activities: The City will conduct training for employees who are responsible for implementation of the program requiring water quality standards for new and re-development projects. Training will include review of requirements, review of applicable best management practices (i.e., the selected guidance manual) and appropriate implementation methods, plan review procedures, inspection procedures, and documentation/reporting procedures.

Measurable Goals: In permit year 3, conduct one training session for appropriate City employees regarding the procedures and activities necessary to adequately implement the City's program that requires water quality standards for new and re-development projects. Conduct training updates or refresher sessions as needed in permit years 4 and 5.

Implementation Schedule:

PY1	PY2	PY3	PY4	PY5
		Train City employees regarding implementation of the water quality development standards program.	Conduct training updates or refresher sessions as needed.	

BMP DS-3

BMP Name: Conduct Plan Reviews, Inspections, Enforcement for New Development

Responsible Parties: Department of Public Works

Existing Conditions: As described in BMP DS-1, the City Planning Department meets with developers for a pre-application conference and these conferences typically include a discussion of stormwater issues. Stormwater treatment to control water quality is minimally addressed in the City Development Code, but is encouraged during the pre-application conference and permitting site plan review. However, the City does not currently have an ordinance requiring runoff control at new and re-developed projects and therefore site plan reviews during the permitting process do not generally include a detailed assessment of proposed water quality BMPs. The City does not conduct site inspections at the completion of new and re-development projects to evaluate water quality BMP implementation.

BMP Description and Proposed Activities: Conduct site plan review for construction sites that are regulated by the new ordinance developed under BMP DS-1. Site plan reviews will be conducted to ensure that the planned use of BMPs is appropriate. Once construction commences, the City will conduct inspections to ensure that appropriate BMPs are properly installed, operated and maintained.

Measurable Goals: Beginning in permit year 4, conduct plan review, inspection, and enforcement actions necessary to implement the ordinance developed under BMP DS-1. At a minimum, the City's goal will be to conduct plan reviews and at least one inspection for all new and re-development projects that disturb more than one acre.

Implementation Schedule:

PY1	PY2	PY3	PY4	PY5
			Implement the water quality standards for new and re-development and conduct plan reviews, inspections, and enforcement activities as specified in the ordinance developed under BMP DS-1.	

Minimum Measure #6 – Pollution Prevention in Municipal Operations

Permit Requirements:

According to the federal NPDES MS4 Phase II rules and the DEQ draft 1200-MS4 permit, the Phase II MS4 permittee must develop and implement an operations and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. In addition, using training materials that are available from the DEQ, EPA, or other organizations, the permittee's program must include employee training to prevent and reduce stormwater pollution from activities including, but not limited to, park and open space maintenance, fleet and building maintenance, new municipal facility construction and related land disturbances, design and construction of street and storm drain systems, and stormwater system maintenance.

Applicable City of Keizer BMPs:

OM-1: Develop a Water Quality Sensitive Operations and Maintenance (O&M) Program

OM-2: Train City Employees Regarding Revised O&M Practices

OM-3: Conduct Catch Basin Cleaning

OM-4: Conduct Street Sweeping

Rationale:

The City of Keizer selected the above four BMPs to address all of the requirements listed above.

BMP OM-1

BMP Name: Develop a Water Quality Sensitive Operations and Maintenance Program

Responsible Parties: Department of Public Works

Existing Conditions: The City does not currently have funding or staff availability to complete regularly scheduled maintenance on the storm drainage system. Existing City maintenance of the storm drainage system is complaint-driven. The City performs road surface maintenance, drinking water system operation and maintenance, limited sanitary sewer utility system operation and maintenance, and parks operations and maintenance. Many other public works operations and maintenance activities are contracted out, such as street sweeping and road-side vegetation control.

BMP Description and Proposed Activities: The City will review and evaluate its existing public works operations and maintenance practices to look for opportunities to revise the practices to ensure that they are performed in ways that will minimize contamination of stormwater discharges. In reviewing existing practices, consideration will be given to modifying activities, schedules, inspection procedures, documentation procedures, and disposal methods for waste generated by municipal maintenance activities. Consideration will also be given to implementing non-structural BMPs to reduce pollutants in runoff from areas such as roads, parking lots, maintenance facilities, and storage yards.

Measurable Goals: Complete development of a water quality sensitive operations and maintenance program by the end of permit year 2.

Implementation Schedule:

PY1	PY2	PY3	PY4	PY5
	Develop a water quality sensitive operations and maintenance program			

BMP OM-2

BMP Name: Train City Employees Regarding Revised O&M Practices

Responsible Parties: Department of Public Works

Existing Conditions: City staff regularly attend the Oregon Chapter American Public Works Association street maintenance and operations conference/short school training.

BMP Description and Proposed Activities: The City will conduct training for employees who are responsible for implementation of the modified operations and maintenance practices developed under BMP OM-1. Training will include review of revised practices, schedules, inspection procedures, documentation procedures, and waste disposal methods.

Measurable Goals: By the end of year 2, conduct one training session for appropriate City employees regarding the procedures and activities that are necessary to adequately implement the revised operations and maintenance practices. Conduct training updates or refresher sessions as needed in permit years 3 through 5.

Implementation Schedule:

PY1	PY2	PY3	PY4	PY5
	Train City employees regarding implementation of revised operations and maintenance practices.	Conduct training updates or refresher sessions as needed.		

BMP OM-3

BMP Name: Conduct Catch Basin Cleaning

Responsible Parties: Department of Public Works

Existing Conditions: The City does not currently have funding, equipment or staff availability to complete regularly scheduled maintenance on the storm drainage system. Existing City maintenance of the storm drainage system is complaint-driven. As described in BMP CS-4, the City responds to public complaints about drainage problems such as clogged storm drain catchbasins as staff time allows. Response to drainage complaints may include conducting a site inspection, assessing the problem for City action, taking action or determining that no action is needed, and conducting a follow-up call to the complainant to discuss the action. The City currently finances necessary stormwater system maintenance such as catchbasin cleaning out of the Street Fund.

BMP Description and Proposed Activities: Establish a program for routine catch basin cleaning. Initially, the City will attempt to clean all catch basins by the end of the five-year permit period. Based on the experience gained during this cleaning program, some areas may be prioritized for more frequent cleaning and others may need less frequent cleaning. The focus of the cleaning program will be to prevent accumulated debris from discharging into the storm drain system and to dispose of the debris properly.

Measurable Goals: Beginning in permit year 2, clean approximately 25% of surface water discharging catch basins (approximately 400) annually to complete catch basin cleaning for all surface water discharging City catch basins by the end of the five-year permit period.

Implementation Schedule:

PY1	PY2	PY3	PY4	PY5
	Clean 25% of surface water discharging City catch basins annually.			

BMP OM-4
BMP Name: Conduct Street Sweeping

Responsible Parties: Department of Public Works

Existing Conditions: All curbed City streets are currently swept once per month on a contracted basis. The City does not own street sweeping equipment.

BMP Description and Proposed Activities: The City will continue to conduct street sweeping on a monthly basis on a contracted basis. Street sweeping practices and/or schedules may be revised based on the development of a water quality sensitive operations and maintenance program that is developed under BMP OM-1.

Measurable Goals: Sweep all curbed City streets at least once monthly.

Implementation Schedule:

PY1	PY2	PY3	PY4	PY5
Conduct monthly street sweeping for all City streets.				

Record Keeping and Reporting

Permit Requirements:

Minimum Monitoring Requirements

According to the federal NPDES MS4 Phase II rules and the DEQ draft 1200-MS4 permit, the permittee must evaluate program compliance, the appropriateness of identified best management practices, and progress toward achieving identified measurable goals. Monitoring of stormwater discharged from outfalls or monitoring of the quality of receiving water bodies are not requirements of this permit in its currently proposed format. However, if such monitoring is undertaken as part of a permittee's program evaluation efforts, the requirements described in Schedule F, Section C(1) and C(2) must be followed. The types of monitoring information that must be maintained in such cases are specified in Schedule F, Section C(6) of the DEQ draft 1200-MS4 permit.

Record keeping.

The permittee must submit its records to the Department upon request. The permittee must retain a description of the Stormwater Management Program (SWMP) required by this permit at a location accessible to the Department. The permittee must make the records subject to the public records law, including the permit application and the description of its SWMP, available to the public if requested to do so in writing. The permittee must also comply with the records retention requirements in Schedule F, Section C(5) of the DEQ draft 1200-MS4 permit.

Annual Reporting Requirements

The permittee must submit the following to the Department's Water Quality Division using a reporting form approved by the Department:

1. The status of the permittee's compliance with permit conditions, an assessment of the appropriateness of the identified best management practices (using available guidance from DEQ), progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, and the measurable goals for each of the minimum control measures;
2. Results of information collected and analyzed, if any, during the reporting period, including monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP;
3. A summary of the stormwater activities the permittee plans to undertake during the next reporting cycle (including an implementation schedule);
4. Proposed changes to the permittee's Stormwater Management Program, including changes to any BMPs or any identified measurable goals that apply to the program elements;
5. Information on all new annexed areas and any resulting updates required to the SWMP (if applicable);
6. Notice that the permittee is, through an inter-local agreement, relying on another government entity to satisfy some of the permittee's permit obligations (if applicable); and
7. Enforcement actions taken.

Reviewing and Updating Stormwater Management Program (SWMP)

1. *SWMP Review:* The permittee must do an annual review of its SWMP in conjunction with preparation of the annual report.
2. *SWMP Update:* The permittee may change its SWMP during the permit term in accordance with the following procedures:
 - a. Changes adding, but not subtracting or replacing, components, controls, or requirements to the SMWP may be made at any time upon written notification to the Department.
 - b. The permittee must submit a written request to the Department to replace an ineffective or infeasible BMP specifically identified in the SWMP with an alternate BMP. Unless denied by the Department, changes proposed in accordance with the criteria below will be deemed approved and may be implemented 60 days from submittal of the request. If a request is denied, the Department will send the permittee a written response giving a reason for the decision. The permittee's requests to replace BMPs must include the following:
 - i. An analysis of why the BMP is ineffective or infeasible (including cost prohibitive),
 - ii. Expectations on the effectiveness of the replacement BMP, and
 - iii. An analysis of why the replacement BMP is expected to achieve the goals of the BMP to be replaced.
 - c. Change requests or notifications must be made in writing.
 - d. Only those portions of the SWMP specifically required as permit conditions are subject to the modification requirements of 40 CFR §124.5. Addition of components, controls, or requirements by the permittee and replacement of an ineffective or infeasible BMP (that implements a required component of the SWMP) with an alternate BMP expected to achieve the goals of the original BMP are considered minor changes to the SWMP and not modifications to the permit
3. *SWMP Updates Required by the Department:* The Department may require changes to the permittee's SWMP as needed.
 - a. The changes required by the Department may be needed to:
 - i. Address impacts on receiving water quality caused, or contributed to, by discharges from the MS4;
 - ii. Include more stringent requirements necessary to comply with new federal or state statutory or regulatory requirements;
 - iii. Include such other conditions deemed necessary by the Department to comply with the goals and requirements of the federal Clean Water Act or state regulations; or
 - iv. Remove BMPs from the SWMP that are determined to be ineffective.
 - b. Changes requested by the Department will be made in writing, set forth the time schedule for the permittee to develop the changes, and offer the permittee the opportunity to propose alternative program changes to meet the objective of the requested modification. All changes required by the Department will be made in accordance with 40 CFR §124.5, 122.62 or 122.63 as appropriate.

Applicable City of Keizer BMPs:

RR-1: Track Compliance/Prepare Annual Reports

RR-2: Link SWMP Information with GIS

Rationale:

The City of Keizer selected the above BMPs to address the record keeping and reporting requirements of the NPDES MS4 Phase II program and to ensure that information collected during the implementation of the SWMP is accessible to City staff.

BMP RR-1

BMP Name: Track Compliance/Prepare Annual Reports

Responsible Parties: Department of Public Works

Existing Conditions: The City does not currently formally track stormwater management activities or prepare reports that specifically address stormwater management activities.

BMP Description and Proposed Activities: The City will evaluate program compliance, the appropriateness of identified best management practices, and progress toward achieving identified measurable goals annually. The City will submit annual compliance reports to DEQ addressing:

- The status of compliance with permit conditions, an assessment of the appropriateness of the identified best management practices, progress towards achieving the goal of reducing the discharge of pollutants to the Maximum Extent Practicable, and the measurable goals for each of the minimum control measures.
- Results of information regarding stormwater management data collected and analyzed, if any, during the reporting period (including any monitoring results).
- A summary of the stormwater activities the permittee plans to undertake during the next reporting cycle.
- Proposed changes to the City's SWMP.
- Any stormwater-related enforcement actions taken by the City.

Measurable Goals: The City will track implementation of the SWMP and permit compliance on an on-going basis. The City will submit annual compliance reports to DEQ as required.

Implementation Schedule:

PY1	PY2	PY3	PY4	PY5
Track compliance & submit annual reports to DEQ.				

BMP RR-2
BMP Name: Link SWMP Information with GIS

Responsible Parties: Department of Public Works

Existing Conditions: The City currently has limited information regarding the storm drainage system in Geographic Information System (GIS) electronic format.

BMP Description and Proposed Activities: The City will link information gathered during the implementation of the SWMP, such as the location and condition of storm drain outfalls, to the City GIS system.

Measurable Goals: The City will link SWMP information with GIS on an on-going basis.

Implementation Schedule:

PY1	PY2	PY3	PY4	PY5
Link SWMP Information with GIS.				

Table 4: City of Keizer NPDES MS4 Phase II SWMP Best Management Practices (BMP) Implementation Schedule

BMP	Minimum Control Measure	Implementation Schedule			
		Permit Year 1 (2004)	Permit Year 2 (2005)	Permit Year 3 (2006)	Permit Year 4 (2007)
Program Funding					
PF-1	Develop Program Funding Mechanism				
PE-1	Implement Stormwater Educational Activities		Prepare a water bill insert for mailing.	Identify and implement an educational activity.	Identify and implement an educational activity.
PE-2	Use the Local Cable Channel and the City's Website to Address Stormwater Issues	On an annual basis, proactively take advantage of opportunities for using Channel 23 to provide stormwater quality related education. Add stormwater-related information to the City's website.			
PE-3	Participate in Claggett Creek Watershed Council	Attend and participate in Claggett Creek watershed council meetings. Ensure stormwater quality issues are considered and addressed when relevant.			
	Minimum Measure #2 - Public Involvement/Participation				
PI-1	Public Participation in Establishment of Funding Source	Establish committee to oversee establishment of funding source. Facilitate 8 monthly committee meetings.			
PI-2	Public Participation in Ordinance Development		Establish committee and facilitate meetings to oversee establishment of an ordinance for the IDDE program and the construction site runoff control program.	Establish committee and facilitate meetings to oversee establishment of an ordinance for stormwater quality-related standards for new development.	
PI-3	Storm Drain Markers/Door Hangers				
	Minimum Measure #3 - Illicit Discharge Detection and Elimination (IDDE)				
ID-1	Develop Ordinance to Prohibit Illicit Discharges		Involve public groups to implement storm drain marking program on an annual basis.		
ID-2	Develop Illicit Discharges Detection and Elimination Plan		Develop ordinance to support the illicit discharges elimination program.		
ID-3	Train City Employees to Implement the IDDE Plan	Develop an IDDE Plan.	Complete outfalls inventory and map.		
ID-4	Implement Illicit Discharges Detection and Elimination Plan		Train employees to implement the IDDE Plan.		
	Minimum Measure #4 - Construction Site Runoff Control				
CS-1	Develop Ordinance to Control Construction Site Runoff		Develop ordinance to support the IDDE Plan.	Implement the IDDE Plan.	
CS-2	Train City Employees re: Construction Site Controls		Develop construction site runoff control ordinance. Select a guidance manual.		
			Train City employees regarding implementation of the construction site runoff control program.		

Table 4: City of Keizer NPDES MS4 Phase II SWMP Best Management Practices (BMP) Implementation Schedule

BMP	Minimum Control Measure	Implementation Schedule			
		Permit Year 1 (2004)	Permit Year 2 (2005)	Permit Year 3 (2006)	Permit Year 4 (2007)
CS-3	Conduct Plan Reviews, Inspections, Enforcement			Implement the construction site runoff control program and conduct plan reviews, inspections, and enforcement activities as specified in the ordinance developed under BMP CS-1.	
CS-4	Establish Hotline to Receive Complaints from the Public	Establish and begin operation of hotline.	Operate the hotline and follow up on calls as necessary.		
Minimum Measure #5 - Development Standards (Post-Construction Runoff Control)					
DS-1	Develop Ordinance to Control Runoff from New and Re-Development			Develop ordinance to prevent or minimize pollutants from new and re-development projects.	
DS-2	Train City Employees re: New Development Standards			Train City employees regarding implementation of the water quality development standards program.	
DS-3	Conduct Plan Reviews, Inspections, Enforcement				Implement the water quality standards for new and re-development and conduct plan reviews, inspections, and enforcement activities as specified in the ordinance developed under BMP DS-1.
Minimum Measure #6 - Operations and Maintenance (Pollution Prevention/Good Housekeeping)					
OM-1	Develop a Water Quality Sensitive O&M Program		Develop a water quality sensitive operations and maintenance program		
OM-2	Train City Employees re: Revised O&M Practices		Train City employees regarding implementation of revised operations and maintenance practices.		
OM-3	Conduct Catch Basin Cleaning		Clean 25% of surface water discharging City catch basins annually.		
OM-4	Conduct Street Sweeping		Conduct monthly street sweeping for all City streets.		
Record Keeping and Reporting					
RR-1	Track Compliance/Prepare Annual Reports		Track compliance & submit annual reports to DEQ		
RR-2	Link SWMP Information with GIS		Link SWMP Information with GIS		