City of Coeur d' Alene



2012 NPDES ANNUAL REPORT

January 01, 2012 to December 31, 2012
Municipal Separate Storm Sewer System (MS4)
Federal Storm Water
National Pollutant Discharge Elimination System Permit
(IDS-028215)

Submitted To:

United States Environmental Protection Agency NPDES Compliance Unit 1200 6th Avenue, Suite 900 (OCE-133) Seattle, Washington 98101

asi &

Idaho Department of Environmental Quality Coeur d'Alene Regional Office 2110 Ironwood Parkway Coeur d'Alene, Idaho 83814

Submitted By:

City of Coeur d'Alene 710 E. Mullan Avenue Coeur d'Alene, ID 83814

Report Certification

City of Coeur d'Alene NPDES Municipal Separate Storm Sewer System Annual Report for Permit Year 2012

"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."

Gordon Dobler, P.E.

City Engineer

February 7th 2013

TABLE OF CONTENTS

Permit	SWMP Activity Summary	Compliance Date		
Part				
General Req	General Requirements - Summary			
Part II.C	Submit written description of how SWMP actions are targeted to control the discharge of pollutants of concern, and how permittee will evaluate the effectiveness of those actions	One year from permit effective date, update annually thereafter		
Part II.D and IV.C	Conduct an annual review of SWMP implementation and submit an Annual Report to EPA and IDEQ	February 15 of each year, beginning in 2010		
Part IV.A	Develop a Quality Assurance Plan for storm water discharge monitoring, provide written notice to EPA and IDEQ	Within 270 days of permit effective date		
	Begin monitoring	18 months from permit effective date		
Public Educati	on and Outreach (40 CFR §122.34(b)(1))	Pages 1-4		
Part II.B.1	Implement an ongoing public education program to educate the community about the impacts of storm water discharges on local water bodies and the steps that citizens and businesses can take to reduce pollutants in storm water runoff. (II.B.1.a)	Two years from effective date of this permit		
	Distribute storm water educational materials to target audiences (II.B.1.b) Distribute SWMP information to local media (II.B.c)	At least once per year At least once per year		
Public Involve	ment and Participation (40CFR §122.34(b)(2)) Pages 5-6		
	Post all SWMP documentation and Annual Reports on the permittee's website (II.B.2.b)	Two years from permit effective date, ongoing thereafter		
Part II.B.2	Organize and promote Adopt a Street and Litter Pick Up Day(s) (II.B.2.c) Conduct public forum regarding SWMP activities (II.B.2.d)	Once per year, each program At least once annually		
	Create, maintain, and promote a telephone hotline; track complaints (II.B.2.e)	Within three years, ongoing thereafter		
	Organize and conduct a storm drain stenciling program.	Within one year of the effective date of this permit		
	At least 100 storm drains stenciled per year (II.B.2.f)	Within two years of permit effective date, ongoing thereafter		

Illicit Discharge	e Detection and	
) CFR §122.34(b)(3))	Pages 7-11
	Development, implement and enforce a program to detect and eliminate illicit discharges into the MS4 (II.B.3.a)	Two years from the permit effective date
	Adopt an ordinance or other control measure to prohibit illicit discharges to the MS4(s); prohibit any specific non-storm water discharge, if necessary (II.B.3.b & c)	Two years from the permit effective date
Part II.B.3	Develop/update a comprehensive storm sewer system map (II.B.3.d)	Two years from the permit effective date
	Inform public employees, businesses and the general public of hazards associated with illegal discharges and improper disposal of waste (II.B.3.e)	Two years from the permit effective date
	Screen 50% of outfalls for dry weather flows. (II.B.3.f)	No later than permit expiration date
	Inventory the industrial facilities discharging storm water within the Urbanized Area (II.B.3.g)	Three years from the permit effective date
Construction S	ite Storm Water Runoff (40CFR §122.34(b)	
	Implement and enforce a construction site runoff control program for sites disturbing one or more acres of land; review and update the program as necessary (II.B.4.a)	Two years from the permit effective date, ongoing thereafter
	Provide adequate direction to project proponents regarding the EPA Construction General Permit (II.B.4.b)	Upon permit effective date
	Adopt an ordinance or other control measure to require construction site operators to practice erosion, sediment and waste control (II.B.4.c)	Two years from the permit effective date
Part II.B.4	Publish and distribute written requirements for construction site best management practices (II.B.4.d)	Two years from the permit effective date
	Develop, or review/update as necessary, procedures for reviewing pre-construction site plans & accepting public input and complaints (II.B.4.e & f)	Two years from the permit effective date
	Implement site inspection & enforcement procedures. Inspect all construction sites at least once per construction season. (II.B.4.g)	Two years from the permit effective date
	Ensure all permittee-owned construction projects comply with EPA's Construction General Permit (II-B.4.h)	Upon permit effective date
	Conduct at least one training for construction industry (II.B.4.i)	Three years from the permit effective date

Post-Construct	ion Storm Water Management	
(40 CFR §122.	34(b)(5))	Pages 17-18
	Develop and implement a program to address post-construction storm water runoff from new development and redevelopment projects (II.B.5.a)	Three years from the permit effective date
	Adopt an ordinance to address post-construction runoff from new development and redevelopment projects (II.B.5.b)	Three years from the permit effective date
Part II.B.5	Ensure proper long term operation and maintenance of post construction storm water BMPs. (II.B.5.c)	Three years from the permit effective date
	Develop and implement a site plan review process and site inspection program to ensure proper installation and long-term operation and maintenance of post-construction storm water management controls (II.B.5.d)	Four years from the permit effective date
Pollution Preve	ention/Good Housekeeping	
(40 CFR§122.3	34(b)(6))	Pages 19-22
_	Develop and implement an operation and maintenance program intended to prevent or reduce pollutant runoff from municipal operations (II.B.6.a)	Two years from the permit effective date
Part II.B.6	Develop and conduct appropriate training for municipal personnel (II.B.6.b) Prepare storm water pollution prevention plans for the fleet maintenance/street department site and the water treatment plant (II.B.6.c)	Two years from the permit effective date, annually thereafter Two years from the permit effective date
Monitoring Re		Pages 23-24
Part IV.A.2	Evaluate City's compliance with the identified BMP's and progress toward achieving the minimum control measures and document in each annual report	Two years from the permit effective date
	Monitor the quality of storm water discharges from the MS4 / Conduct a storm water discharge monitoring program	18 months from the permit effective date
	Develop a quality assurance plane (QAP) monitoring storm water discharge. Must be submitted for review to EPA and IDEQ	Quality Assurance Project Plan, developed, reviewed, signed, submitted February 09,2010
Appendices		

Summary

Information for Reviewers

This 2012 City of Coeur d'Alene Urbanized Area NPDES MS4 Annual Report is presented in a text format. This text document comprises the majority of the report and discusses each of the required reporting elements for the permit. Copies of the Annual Report will be available through the City of Coeur d'Alene website at www.cdaid.org.

The city annually evaluates the effectiveness of its SWMP activities to control the discharge of the pollutant(s) of concern. The effectiveness is measured by but not limited to such things as number of attendees at events, number of correction notices given, hot line calls and inquiries submitted on line.

Introduction

Region 10 of the U.S. Environmental Protection Agency (EPA) issued a draft National Pollutant Discharge Elimination System (NPDES) permit to the City of Coeur d'Alene Urbanized Area Municipal Storm Sewer Systems (MS4) on February 29, 2008. Following review by the City of Coeur d'Alene and meetings with local Idaho Department of Environmental Quality (DEQ) and Region 10 EPA staff, and a public hearing, a final permit became effective on January 1, 2009.

This report presents and documents the actions required by the permit and taken by the permittee for the Year 4 reporting period (January 1, 2012 – December 31, 2012). Individual requirements of the permit are presented in the order of the permit outline. The report has been certified by the appropriate officials.

Quality Assurance Project Plan for Coeur d'Alene Urbanized Area

Quality Assurance Project Plan - As required by Part IV.A of the permit, the City of Coeur d'Alene developed, reviewed, signed and submitted a Quality Assurance Project Plan (QAPP) on February 09, 2010 for the water quality monitoring requirements of the permit (Part IV). The QAPP is included with our 2009, 2010 annual reports and as a link on our website.

Storm Water Management Program Review

The Coeur d'Alene Urbanized Area Storm Water Management Program (SWMP) review for the reporting year 2009 consists of developing a SWMP. The SWMP is designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable, and to protect water quality in receiving waters. The SWMP actions and activities are outlined in the following pages of this 2012 Annual Report. The SWMP is available with 2009 and 2010 annual reports and on our website. The updated SWMP is being submitted with the 2012 annual report, (Appendix 1) and is available on our website.

Public Education and Outreach		
Part II.B.1	1) Implement an ongoing public education program to educate the community about the impacts of storm water discharges on local water bodies and the steps that citizens and businesses can take to reduce pollutants in storm water runoff. (II.B.1.a)	Two years from effective date of this permit
	2) Distribute storm water educational materials to target audiences (II.B.1.b)	At least once per year
	3) Distribute SWMP information to local media (II.B.c)	At least once per year

1) Within two years of the effective date of this permit, the permittee must develop and implement a public education program to educate the community about the impacts of storm water discharges on local water bodies and the steps that citizens and businesses can take to reduce pollutants in storm water runoff.

<u>CDA TV Channel 19</u> – The mission of CDA TV Channel 19 (Government/Public Education channel for the Greater Coeur d'Alene area) is to enhance the community's public information and communications system, involve the community in local government decision making, and provide useful local government/public education information to general and specialized audiences. The following were featured on our public channel in this permit year:

- Panhandle Erosion Education Program (SEEP) sponsored an 8 minute Public Service Announcement (PSA) to educate the community about the impacts of storm water discharges on Coeur d'Alene Lake and the Spokane River. The SEEP Storm Water Public Service Announcement played an average of 20 times per week and started in May and continued to run through July.
- EPA produced video, "Reduce Runoff: Slow it Down, Spread it Out, Soak it In" was played on our local channel 19 beginning in April and running through June 2012.
- Mayor's Show, March 13, 2012 Stormwater Awareness, Pollution Prevention. (aired twice a day for 30 days)

February 8, 2012

Met with owner of Northwest Pet Resort to educate, promote and distribute to clients our Canines for Clean Water program.

April 22, 2012

Earth Day, Library Community Room: This annual event was well attended. We provided a stormwater educational interactive display and distributed pollution prevention information.

May 8, 2012

Annual Stormwater Best Management Practices Newsletter, distributed to Downtown Business Owners and Operators. The newsletter included basic storm water information, pollution prevention, spill reporting, prevention and cleanup.

May 16 & 17, 2012

Stormwater Presentation at Silverwood Science and Physics Days.

Middle school students from the region attended. Our presentations demonstrated how pollutants can enter our waters and practical everyday things we can all do to prevent pollutants from entering our waters.

May 30, 2012

Developed and mailed 14,000 Stormwater Educational Brochures to single family residences in Coeur d Alene. Funding was made possible with a grant from the Aquifer Protection District. (Appendix 2)

August 15, 2012

Storm drain stenciling, volunteers stenciled approximately 50 drains while picking up trash and distributing pollution prevention flyers.

August 15, 2012

Provided stormwater educational materials to Kootenai Environmental Alliance to distribute at the Coeur d Alene Farmers Market.

September 03, 2012

Storm drain stenciling. Volunteers stenciled approximately 60 drains while picking up garbage and distributing pollution prevention flyers.

October 24, 2012

Hosted the 3rd Annual Environmental Open House. The open house featured several agencies presenting stormwater pollution prevention practices. Our SWMP was made available to participants to review.

November 8, 2012

The City of Coeur d Alene partnered with Kootenai Environmental Alliance to bring a storm water pollution identification and prevention presentation to Sorenson Elementary 5th Grade students. Our intent is to provide this presentation to elementary school students on an on-going basis.

2) At least once per year, the permittee must distribute appropriate storm water educational materials to the target audiences.

The City of Coeur d'Alene Engineering Department worked together with the Panhandle Storm Water Erosion and Sediment Control Education Program (SEEP) to produce a field guide which includes storm water education materials. The guide is available to contractors and the public in our customer service center at city hall.

Our volunteer storm drain stencil groups distributed pollution prevention information in the neighborhoods where they were stenciling.

February 08, 2012

Provided the Northwest Pet Resort with our City of Coeur d'Alene Canines for Clean Water Program information, for distribution to its patrons.

May 16, 2012

Stormwater Presentation, Silverwood Theme Park, 6th-8th grades. Using our enviroscape model we presented a demonstration of how pollutants can enter our waters and how we can prevent pollution. Storm water brochures with pollution prevention tips and reusable bags were distributed. Participants were encouraged to take the "canines for clean water pledge," which encourages pet owners to clean up after their pets.

May 30, 2012

Developed and mailed 14,000 Stormwater Educational Brochures to single family residences in Coeur d Alene. Funding was made possible with a grant from the Aquifer Protection District. (Appendix 2)

May 08, 2012

Annual Stormwater Best Management Practices Newsletter developed and distributed to Downtown Business Owners and Operators with a focus on restaurant waste. The newsletter included basic storm water information, pollution prevention, spill reporting, prevention and cleanup. During this permit year site inspections of downtown businesses were performed in relation to their waste management.

3) At least once per year, the permittee will prepare and distribute appropriate information relevant to the SWMP to the local newspaper and at least one other media outlet.

March 13, 2012

Mayor's Show, Channel 19. Topic, Stormwater Awareness and Pollution Prevention. The show aired twice a day for 30 days.

March 16, 2012

Article in the Coeur d'Alene Press on our stormwater utility.

March 19, 2012

Article in the Coeur d'Alene Press on "Spring Clean Up."

April 03, 2012

EPA produced "Reduce Runoff: Slow it Down, Spread it Out, Soak it In" aired twice a day for 30 days on our channel 19 television station.

Public Invo	lvement and Participation	
	1) Post all SWMP documentation and Annual Reports on the permittee's website (II.B.2.b)	Two years from permit effective date, ongoing thereafter
	2) Organize and promote Adopt a Street and Litter Pick Up Day(s) (II.B.2.c)	Once per year, each program
	3) Conduct public forum regarding SWMP activities (II.B.2.d)	At least once annually
Part II.B.2	4) Create, maintain, and promote a telephone hotline; track complaints (II.B.2.e)	Within three years, ongoing thereafter
	5) Organize and conduct a storm drain stenciling program.	Within one year of the effective date of this permit
	At least 100 storm drains stenciled per year (II.B.2.f)	Within two years of permit effective date, ongoing thereafter

1) The permittee must make all relevant SWMP documents and all Annual Reports required by this permit available to the public. Within two years of the effective date of this permit, all SWMP document and Annual Reports must be posted online through its regularly maintained website (or a website sponsored by the permittee).

The 2009, 2010, 2011 & 2012 Annual Reports, Storm Water Management Program and Quality Assurance Protection Plan are posted on the City of Coeur d'Alene website and are available for review at city hall.

2) At least once per year, the permittee must organize and promote citizen participation in each of its Adopt a Street and Annual Litter Pick-up programs.

The Adopt-A-Street program was authorized by the City Council in August of 2000. The program is a partnership, which includes an adopting group, family, or individual. They pick up the trash, and the City provides signage, vests, and orange litter bags, and also collects the bags the next working day after they have been filled. A quarterly pick up of trash is encouraged with a minimum being twice per year. There are currently 34 Adopt-A-Street volunteer groups. During this permit year, 4.3 tons of trash was removed from our MS4 by our volunteers. Volunteer information for this program is available on the city website "volunteer" tab and on the City of Coeur d'Alene street department web page.

Public Involvement and Participation

3) At least once per year, the permittee must conduct a public open house or other forum to solicit input from the public on the permittee's implementation of the SWMP activities.

October 24, 2012

The City of Coeur d' Alene hosted our 3rd annual Environmental Open House. The City of Coeur d'Alene partnered with several agencies in presenting stormwater management information, water and energy conservation, recycling and proper hazardous waste disposal. We had approximately 50 attendees with no comments given. The partnering efforts with the open house have allowed other permit holders and area agencies to share information and training tools. Our SWMP was available for review.

4) Within three years of the permit effective date, the permittee will create, maintain, and promote a "hotline" telephone number to receive, track, and respond as necessary to information submitted by the public regarding storm water pollution concerns.

A hotline was established for reporting spills, illegal dumping, or for stormwater questions and concerns. In addition to the hot line the city has an on line reporting tool on our website. The hot line phone number is posted on the city's website and on our educational materials. During the permit year we received 2 hot line calls and 5 emails from citizens through our city web site and 12 reports from employees.

5) The permittee must organize promote and conduct a storm drain stenciling program. Within two years of the effective date of this permit, at least 100 storm drains, catch basins or inlets throughout the permittee's jurisdiction must be stenciled per year.

During this permit year, 110 drains have been stenciled by two volunteer groups. In addition to the stenciling they distributed approximately 200 door hangers in residential areas, providing stormwater education and pollution prevention tips. The volunteer groups also picked up trash in the neighborhoods they were stenciling. The program is promoted at outreach events and on the city's web site under the "volunteer" tab.

Illicit Discha	arge Detection and Elimination	
	1) Development, implement and enforce a program to detect and eliminate illicit discharges into the MS4 (II.B.3.a)	Two years from the permit effective date
	2) Adopt an ordinance or other control measure to prohibit illicit discharges to the MS4(s); prohibit any specific non-storm water discharge, if necessary (II.B.3.b & c)	Two years from the permit effective date
Part II.B.3	3) Develop/update a comprehensive storm sewer system map (II.B.3.d)	Two years from the permit effective date
	4) Inform public employees, businesses and the general public of hazards associated with illegal discharges and improper disposal of waste (II.B.3.e)	Two years from the permit effective date
	5) Screen 50% of outfalls for dry weather flows. (II.B.3.f)	No later than permit expiration date
	6) Inventory the industrial facilities discharging storm water within the Urbanized Area (II.B.3.g)	Three years from the permit effective date

develop and implement a program to detect and eliminate illicit discharges into their MS4, including roadways and associated drainage facilities, ditches, pipes, culverts, catch basins and retention ponds in its jurisdiction. This program must include written spill response procedures to ensure protection of the permittee's MS4. The program must include written procedures for detention, identification of the source, and removal of non-storm water discharges from the MS4. This program must also address illegal dumping into the MS4, and include training for City staff on how to respond to reports of illicit discharges. The permittee must develop an information management database system to track the activities and actions of the program in concert with the hotline required in Part II.B.2.

Our illicit discharge detection and elimination program outline was submitted with our 2010 annual report. Municipal employees have received training in the recognition of and response to illicit discharges.

Spill prevention and containment refreshers are included as part of the annual training for appropriate staff members from Fire, Building, Engineering, Parks, Police, Water, Wastewater, Recreation, and Street Departments.

Information on reported illicit discharges and action taken is kept in our City Track database and with our code enforcement department. The city has developed a written standard operating procedure for prioritizing illicit discharges and stormwater complaints and concerns. All city

Page | 7

Coeur d'Alene Urbanized Area NPDES MS4

Illicit Discharge Detection and Elimination

staff has been directed to code entries into our "city track" database reporting system as "high" priority. Our system will notify designated staff and the appropriate priority ranking of the call will be assigned. This approach enables all city staff to take the calls and appropriate staff to rank the priority.

High Priority (Immediate action is required)

- Spills / Accidents
- Intentional Dumping
- Leaking automotive fluids
- Public Health and Safety Issues

Medium Priority (3-5 day response)

- Cross connection between a sanitary sewer and a storm sewer
- Failing septic system that is causing surface discharge into the storm sewer
- Sanitary waste piping that is directly connected from a home or business to the storm sewer
- Shop floor drain that is connected directly to a storm sewer

Low Priority (5-10 day response)

- Slow draining catch basin*
- Slow draining or plugged grassed infiltration area*

*if flooding is occurring on street or private property that is a safety concern or threat to property damage, upgrade priority to high

2-1) Within two years from the effective date of this permit, the permittee must effectively prohibit non-storm water discharges into the MS4 through an ordinance or other regulatory mechanism to the extent allowable under State or local law. The permittee must implement appropriate enforcement procedures and actions, including a written policy of enforcement escalation procedures for recalcitrant or repeat offenders.

October 5, 2010

Ordinance 3396, amending the municipal code of the City of Coeur d'Alene, Kootenai County, Idaho adopting a new chapter 13.32, entitled Illicit Discharge and Stormwater Sewer Connection, to provide for regulation of all water directly or indirectly entering the city stormwater system, including definitions, discharge regulation, monitoring and reporting requirements, prohibiting illicit connections, and providing that any violation of the chapter is a misdemeanor punishable by a fine of not more than \$1,000.00 or by imprisonment not to exceed 180 days or both. December 04, 2012 adoption of Ordinance No. 3455, Municipal Code 13.32.010-13.32.140, addresses this permit requirement. The complete ordinance is included in Appendix 3.

2-2) Through the ordinance or other regularly mechanism set forth in Section II.B.3.b, the permittee must prohibit any of the non-stormwater flows listed in Part I.C.1.c only if such flows are identified (by EPA or the permittee) as a source of pollutants to the MS4. The permittee must document to EPA in the Annual Report any existing local controls or conditions placed on the types of non-storm water discharges in Part I.C.1.c.

The City of Coeur d'Alene, Ordinance 3455 prohibits all non-storm water discharges to the MS4 with the exception of discharges detailed in our NPDES permit Part 1.C.1.c.

3) Within two years from the effective date of this permit, the permittee must update and complete its comprehensive MS4 map. At a minimum, the map(2) must show jurisdictional boundaries, the location of all City-owned or operated storm sewers, culverts, ditches, and other conveyances, the location of all inlets and outfalls, points at which the permittee's MS4 is interconnected with other MS4s, names and locations of all waters that receive discharges from those outfalls, and locations of all municipally-owned or operated facilities, including all maintenance/storage facilities and public or private snow disposal sites. Locations of all outfalls must also be provided in latitude and longitude, and the diameter of all outfalls must be provided with the map. The maps must be available in electronic or digital format as appropriate. A copy of the completed map(s), as both a report and as an electronic file via Arc GIS format, must be submitted to EPA and IDEQ as part of the corresponding Annual Report.

The City of Coeur d'Alene MS4 map was included with the 2010 annual report. No additional conveyances were added or removed in 2012.

4) Within two years from the effective date of this permit, the permittee must begin an ongoing education program to inform users of the MS4, especially public employees, businesses, and the general public, of hazards associated with illegal discharges and improper disposal of waste. This program must be conducted in concert with the public education requirements outlined in Part II.B.1.

May 8, 2012

Distributed annual stormwater best management practices newsletter to downtown business owners and operators. Information included best management practices for waste, spill prevention and proper cleanup methods with an emphasis on food service waste.

Illicit Discharge Detection and Elimination

May 30, 2012

Utilizing a grant from the Aquifer Protection District, the city developed and mailed 14,000 stormwater educational brochures to city residents. (Appendix 2)

October 24, 2012 Hosted 3rd Annual Environmental Open House

Municipal storm water pollution prevention training, which includes spill containment and illicit discharge detection, was conducted this permit year for appropriate city staff.

begin dry weather field screening for non-storm water flows from all storm water outfalls. By the expiration date of the permit, at least 50% of the permittee's outfalls within the Coeur d'Alene Urbanized Area must be screened for dry weather flows. The screening should include field tests of selected parameters as indicators of discharge sources. Screening level tests may utilize less expensive "field test kids" using test methods not approved by EPA under 40 CFR Part 136, provided the manufacturer's published detention ranges are adequate for the illicit discharge detention purposes. The permittee must investigate any illicit discharge within fifteen (15) days of its detection, and must take action to eliminate the source of the discharge within 45 days of its detention.

August 2011, Dry weather field screening was conducted at 7 of our outfalls. Four of the outfalls were dry and three with trickle flow. Outfalls with flows were investigated upstream of the outfall and flow was determined to be from irrigation. The upstream manhole at one of the outfalls was being used as an ashtray. The debris from this manhole emptied directly into the lake. The owner of the property was contacted and within three days and before the next rain event, drain was cleaned and use stopped.

August & September 2012, Dry weather field screening of all outfalls were conducted. No indication of illicit discharge was discovered.

6) Within three years from the effective date of this permit, the permittee must inventory all industrial facilities that discharge directly to the permittee's MS4 or directly to waters of the United States located within the Coeur d'Alene Urbanized Area and submit this inventory as part of the corresponding Annual Report. The types of industrial facilities that must be inventoried are set forth in 40 CFR §122.26(b)(14)(i-ix) and (xi). This inventory must include the location of the facility, the location of its outfall, and the NPDES permit status for its storm water discharges.

This requirement was met in the 2011 permit year. There was only one business identified that met the criteria of this permitting requirement; 2945 N. Government Way in Coeur d'Alene, Outfall#11. No additional industrial facilities were identified during this permit year.

The research for this program requirement utilized information from our wastewater department, Panhandle Health, Kootenai Environmental Alliance, City of Coeur d Alene building permit data and EPA's NOI site.

Construction	Site Storm Water Runoff	
	1) Implement and enforce a construction site runoff control program for sites disturbing one or more acres of land; review and update the program as necessary (II.B.4.a)	Two years from the permit effective date, ongoing thereafter
	2) Provide adequate direction to project proponents regarding the EPA Construction General Permit (II.B.4.b)	Upon permit effective date
	3) Adopt an ordinance or other control measure to require construction site operators to practice erosion, sediment and waste control (II.B.4.c)	Two years from the permit effective date
Part II.B.4	4) Publish and distribute written requirements for construction site best management practices (II.B.4.d)	Two years from the permit effective date
	5) Develop, or review/update as necessary, procedures for reviewing pre-construction site plans & accepting public input and complaints (II.B.4.e & f)	Two years from the permit effective date
	6) Implement site inspection & enforcement procedures. Inspect all construction sites at least once per construction season. (II.B.4.g)	Two years from the permit effective date
	7) Ensure all permittee-owned construction projects comply with EPA's Construction General Permit (II-B.4.h)	Upon permit effective date
	8) Conduct at least one training for construction industry (II.B.4.i)	Three years from the permit effective date

1) Within two years from the effective date of this permit, the permittee must implement and enforce a program to reduce pollutants in any storm water runoff to the MS4 from construction activities resulting in land disturbance of greater than or equal to one area. This program must also include controls for pollutants in such storm water discharges from activity disturbing less than one acre, if that construction activity is part of a larger common plan of development or sale that disturbs one acre or more.

Ordinance 3397, adopted December 07, 2010, amending the municipal code of the City of Coeur d'Alene, Kootenai County, Idaho, Sections 13.30.010, 13.30.020, 13.30.040, 13.30.050, 13.30.606 and adopting a new section 13.30.075 to the Stormwater Management Ordinance to provide additional definitions, adopting additional standards for erosion, sediment and construction waste control and providing for inspections; repealing all ordinances and parts of ordinances in conflict herewith and providing a severability clause. Complete ordinance is available with the 2010 annual report or in the code section on the City of Coeur d'Alene website.

December 04, 2012 adoption of Ordinance No. 3455, Municipal Code 13.30.010-13.30.130 addresses this permit requirement. The complete ordinance is included in Appendix 3.

2) The permittee must provide appropriate information and direction to representatives of proposed new development and redevelopment construction projects concerning the NPDES General Permit for Storm Water Discharges for Construction Activity in Idaho, #IDR 10-0000 (Construction General Permit).

The "Notice to Contractors" is located on our City of Coeur d'Alene website, is posted in the customer service center at city hall, and has been electronically distributed to the North Idaho Building Contractors Association. The information is also included in all project review packets. The notice is included with the 2009 and 2010 annual reports, available on our website. Also, available in our customer service center is an E.P.A produced brochure, "Does Your Construction Site Need A Stormwater Permit?"

3) Within two years from the effective date of this permit, the permittee must adopt an ordinance or other regulatory mechanism to the extent allowable under state or local law that requires all construction site operators to practice appropriate erosion, sediment and waste control. This ordinance or regulatory mechanism must include sanctions to ensure compliance. The permittee may evaluate any existing procedures, policies, and authorities pertaining to activities occurring on their property that may be used to assist in the development of the required regulatory mechanism.

Ordinance No. 3397, an ordinance amending the municipal code of the City of Coeur d'Alene, Kootenai County, Idaho, amending sections 13.30.010, 13.30.020, 13.30.040, 13.30.050, 13.30.060 and adopting a new section 13.30.075 to the Stormwater Management Ordinance to provide additional definitions, adopting additional standards for erosion, sediment and construction waste control and providing for inspections.

December 04, 2012 adoption of Ordinance No. 3455, Municipal Code 13.30.010-13.30.130 addressed this permit requirement. The complete ordinance is included in Appendix 3.

4) Within two years from the effective date of this permit, the permittee must publish and distribute requirements for construction site operators to implement appropriate erosion and sediment control BMPs and to control waste (such as discarded building materials, concrete truck washout, chemicals, litter and

sanitary waste at a construction site) that may cause adverse impacts to water quality.

October 05, 2010 The City of Coeur d'Alene Resolution No. 10-038 adopting the Idaho Department of Environmental Quality Best Management Practices as the city's BMP's. The information was presented at a public works committee meeting, city council meeting, North Idaho Building Contractors Association, and mailed to builders, contractors, landscapers and architects. The information is also on our website and posted in the customer service center. The information is also made available to permit applicants at project review stage.

The city inspectors, during site inspections, have distributed bmp requirements to the on-site operators.

5-1) Within two years from the effective date of this permit, the permittee must develop procedures for reviewing all pre-construction site plans for potential water quality impacts, including erosion and sediment control, control of other wastes, and any other impacts according to the requirements of the law, ordinance, or other enforceable mechanism created to comply with Part II.B.4.c. These procedures must include provisions for receipt and consideration of information submitted by the public.

Stormwater Management Ordinance 3397 states that storm water management plans are required for all land disturbing building permits with the exceptions listed in Section 3 13.30.040. The plans are reviewed and approved as a condition of issuance of the permits. All required erosion and sediment controls will be included on the stormwater management plans and reviewed and approved by City engineer or his designee. In addition, these plans will be made available to the public for input. In 2012 there were 423 plan reviews that resulted in permit issuance.

Inspection of construction sites will be performed at least once per construction season and after a rain event to ensure placement and proper functioning of required erosion control elements.

During the 2012 construction season all sites were inspected prior to site disturbance, after a storm event, and before the issuance of a certificate of occupancy.

December 04, 2012 adoption of Ordinance No. 3455, Municipal Code 13.32.010-13.32.140 addresses this permit requirement. The complete ordinance is included in Appendix 3.

5-2) Within two years from the effective date of this permit, the permittee must implement a program to receive, track, and review information submitted by the public regarding construction site erosion and sediment control complaints.

The City of Coeur d'Alene Drainage System Utility established a stormwater hotline and an online communication link. The hotline number is included in our educational handouts, on our website, included in our municipal training, and has been included in several newspaper articles. The reporting and tracking program includes an online reporting form and database to track and Page | 14

Coeur d'Alene Urbanized Area NPDES MS4

save information. If a complaint is called in or given in person, the staff member taking the information will enter it into our "City Track" system for appropriate action and documentation. No construction site erosion and sediment control complaints were received from the public in 2012.

6) Within three years from the effective date of this permit, the permittee must develop and implement procedures for site inspection and enforcement of control measures established as required in Parts II.B.4.c and d, including a written policy of enforcement escalation procedures for recalcitrant or repeat offenders. The permittee must inspect all construction sites in their jurisdiction for appropriate erosion/sediment/waste control practices as least once per construction season.

Storm water Management, Ordinance 3397 Section 6 13.30.075 Inspections

December 04, 2012 adoption of Ordinance No. 3455, Municipal Code 13.30.080-13.30.120 addresses this permit requirement. The complete ordinance is included in Appendix 3.

Prior to site inspection, plans are reviewed to confirm storm water management plan requirements. During on-site inspection, all bmp's are evaluated to ensure proper installation and functionality.

Any bmp's that are found to be incorrectly installed or missing will be noted and a correction notice given to the person in charge at the site. If no one is available on site, a correction notice will be left and a call will be placed to the permit applicant. The correction notice will state the amount of time allowed for permittee to comply. An additional inspection will be made to ensure corrections have been addressed. If compliance is not achieved a stop work order is issued.

During this permit year, 492 erosion/sediment control inspection were completed. Of those inspections 12 correction notices were issued with no stop work orders being issued. All construction sites in the city were inspected a minimum of two times; prior to site disturbance and on final inspection before the issuance of a certificate of occupancy. Sites were also inspected after a storm event.

7) The permittee must comply with the Construction General Permit and all relevant local requirements for erosion, sediment and onsite materials control on public construction projects. The permittee must ensure that all contractors working on behalf of the permittee are complying with the Construction General Permit and all relevant local requirements for erosion, sediment, and onsite materials control on construction projects. The permittee must incorporate specific language in all contracts ensuring appropriate storm water management on all public construction projects.

It is the City of Coeur d'Alene policy that all projects disturbing over 1 acre of ground must obtain an NPDES general permit and comply with the permits requirements for erosion, sediment and on site materials control. Additionally, it is the City's policy that all projects disturbing any ground must implement and be inspected for erosion, sediment control and material handling and storage BMP's.

8) Within three years from the effective date of this permit, the permittee must develop and conduct at least one training session for the local construction/design/engineering audience related to the construction ordinance and BMP requirements referenced in Parts II.B.4.c and d.

In 2011, the city hosted a development forum which provided best management practices and requirements for construction sites. EPA produced educational handout, "How Do I Get Stormwater Permit Coverage for My Construction Site" is available in our customer service center.

The City of Coeur d'Alene will host another development forum in 2013.

Post-Construction Storm Water Management in New Development and		
Redevelopm	ent	
	1) Develop and implement a program to address post-construction storm water runoff from new development and redevelopment projects (II.B.5.a)	Three years from the permit effective date
	2) Adopt an ordinance to address post- construction runoff from new development and redevelopment projects (II.B.5.b)	Three years from the permit effective date
Part II.B.5	3) Ensure proper long term operation and maintenance of post construction storm water BMPs. (II.B.5.c)	Three years from the permit effective date
	4) Develop and implement a site plan review process and site inspection program to ensure proper installation and long-term operation and maintenance of post-construction storm water management controls (II.B.5.d)	Four years from the permit effective date

1) Within three years from the effective date of this permit, the permittee must implement and enforce a program to address post-construction storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre (including projects less than one acre that are part of a larger common plan of development or sale) and that result in discharge into the permittee's MS4. The program must ensure that controls are enacted that will prevent or minimize water quality impacts from newly developed or redeveloped areas.

Storm water Management, Ordinance 3397 addresses all items listed in this required action.

December 04, 2012 adoption of Ordinance No. 3455, Municipal Code 13.32.010-13.32.140 addresses this permit requirement. The complete ordinance is included in Appendix 3.

2) Within three years from the effective date of this permit, the permittee must adopt an ordinance or other regulatory mechanism to the extent allowable under State or local law to address post-construction runoff from new development and redevelopment projects. If such requirements do not currently exist, development and adoption of an ordinance is required. The permittee may evaluate existing procedures, policies, and authorities pertaining to activities occurring on their property that may be used to assist in the development of the required regulatory mechanism.

Storm water Management, Ordinance 3397

December 04, 2012 adoption of Ordinance No. 3455, Municipal Code 13.32.010-13.32.140 addresses this permit requirement. The complete ordinance is included in Appendix 3.

Post-Construction Storm Water Management

3) Within three years from the effective date of this permit, the permittee must ensure proper long term operation and maintenance of all permanent storm water management controls located within its jurisdiction.

As part of the City's storm water facilities and conveyances maintenance plan, inspections are performed annually. The results are used to plan and implement the appropriate measures necessary to ensure proper long term operation.

4) Within four years from the effective date of this permit, the permittee must develop and implement a process for pre-construction plan review of permanent storm water management controls and inspection of such controls to ensure proper installation and appropriate long-term operation and maintenance.

The City of Coeur d Alene has utilized a pre-construction plan review process since the early 1980's. In relation to stormwater management controls and inspections, the following is our procedure:

- A stormwater management plan is required with the plan submission.
- The City engineering staff will review, with final approval by the City Engineer.
- Site inspection
- The applicant is required to submit a percolation test and a letter signed by the design professional stating that the swales were constructed in accordance with their recommendations.

Pollution Prevention and Good Housekeeping for Municipal Operations

Pollution Prevention and Good Housekeeping for Municipal Operations		
	1) Develop and implement an operation and maintenance program intended to prevent or reduce pollutant runoff from municipal operations (II.B.6.a)	Two years from the permit effective date
Part II.B.6	2) Develop and conduct appropriate training for municipal personnel (II.B.6.b)	Two years from the permit effective date, annually thereafter
	3) Prepare storm water pollution prevention plans for the fleet maintenance/street department site and the water treatment plant (II.B.6.c)	Two years from the permit effective date

develop and implement an operation and maintenance program intended to prevent or reduce pollutant runoff from municipal operations. This program must address municipal activities occurring within the permittee's jurisdiction with potential for negative storm water related water quality impacts, including: the use of sand and road deicers; fleet maintenance and vehicle washing operations; street cleaning and maintenance; grounds/park and open space maintenance operations; building maintenance, solid waste transfer activities; water treatment plant operations; storm water system maintenance; and snow disposal site operation and maintenance. Examples of other municipal activities which may also be evaluated as relevant to the jurisdiction include, but are not limited to: materials storage; hazardous materials storage; used oil recycling; spill control and prevention measures for municipal refueling facilities; municipal golf course maintenance; municipal new construction and land disturbances; and snow removal practices.

During this permit year the City of Coeur d'Alene has utilized the following best management practices for the operations and activities of the departments with the potential for negative storm water quality impacts. Our focus is to identify and evaluate our existing best management practices in our municipal operations and activities to determine areas for improvement.

2012 Storm Water Work Plan Progress:

Video of Storm Lines 12545 feet Catch Basins Cleaned 2122 Street Sweeping 2183 center miles Tonnage of debris removed from sweeping and catch basin cleaning 3099 tons Swale Inlet Maintenance 63

Pollution Prevention and Good Housekeeping for Municipal Operations

Existing Best Management Practices for Pollution Prevention

Water Department:

Employee training in storm water basics, pollution prevention, spill prevention and response, illicit discharge detection, and reporting

Supervisor performs storm water pollution potential evaluation on site prior to commencement of operations, repair, or maintenance projects

BMP's applied to water line construction, repair, and maintenance activities

Spill Kits in vehicles

Street Department:

Maintains aggressive street sweeping program to improve air and water quality

City wide Leaf Pickup

CSB to enhance salt brine de-icer, which results in less salt used on roadways.

Snow storage practices; snow is stored on permeable surface away from storm conveyance

BMP's applied to construction and repair projects

Spill Kits in vehicles

Annual training includes storm water basics, pollution prevention, spill prevention and response, illicit discharge detection, and reporting

Five department employees have completed a SEEP training class (Storm water Erosion Education Program)

Partners with Urban Forestry in the tree trimming program, for enhanced sweeping clearance

Vehicle wash water discharges to sanitary sewer. Drain is equipped with an oil water separator that is cleaned yearly

Parks Department:

Promotion and organization of Community Bike to Work Week

Employee training in storm water basics, pollution prevention, spill prevention and response, illicit discharge detection, and reporting

Page | 20

Coeur d'Alene Urbanized Area NPDES MS4

Pollution Prevention and Good Housekeeping for Municipal Operations

7 Employees have a Professional Applicators License issued by the Idaho Department of Agriculture to handle and apply pesticides and herbicides

Soil sampling before fertilizer application

Water Conservation Irrigation Systems

Installation of Pet Waste Dispensers

Trash pick-up along all City managed bike paths and hiking trails year round (except when snow is on the ground). Trash is picked up 3 times a week in the summer, two times a week in the colder seasons, and once a week in the winter

Public trees planted in 2012: 876 trees and 35 seedlings (within the right of way or in parks)

All trails are mowed and tree limbs trimmed up regularly in the spring, winter, and fall. The Parks Department promotes an educational program to encourage increased use of the trail system

Parks / Cemetery Shop were issued a Critical Materials Compliance Certificate from Panhandle Health District's Aquifer Protection Program

Waste Water Department

Employee training in storm water basics, pollution prevention, spill prevention and response, illicit discharge detection, and reporting

All on-site storm water is processed with the sanitary sewer before discharge

Treatment Plant operates under NPDES permit ID-002285-3

Treatment Plant has a Critical Materials Compliance Certificate, issued by Panhandle Health District's Aquifer Protection Program

Fire Department

The Fire Department incorporates storm water pollution prevention in their Standard Operation Procedures.

S.O.P NO. 8-05 Haz-Mat Response Process

S.O.P NO. 8-01 Haz Mat Incident, Basic Operations

2) Within two years from the effective date of this permit and annually thereafter, the permittee must develop and conduct appropriate training for municipal employees related to optimum maintenance practices for protection of water quality. This training must be conducted at least once annually and address the activities specified in Part II.B.6.a.

Individual departments address best management practices in relation to their job tasks as a standing topic in their staff meetings. Appropriate city staff receive annual refresher courses on spill control & containment and illicit discharge detection. Engineering staff continually utilize the EPA website for training in relation to the permit components. During this permit year city staff have attended presentations from EPA representatives on the Construction General Permit requirements.

3) Within two years from the effective date of this permit, the permittee must prepare and implement storm water pollution prevention plans for the permittee's fleet maintenance/street department site and waste water treatment plant.

The Street / Fleet Maintenance Department are not located on or near the storm water conveyance system. Although not located near the conveyance system, our street department has developed best management practices in relation to pollution prevention. Routine maintenance and vehicle washing on site is performed indoors and any discharge from these activities goes to the sanitary sewer. The street department is inspected by the Panhandle Health District Aquifer Protection Program and was issued a Critical Materials Compliance Certificate.

The City's Waste Water Treatment Plant captures all on-site storm water and processes it as it does sanitary sewer. The plant operates under their own NPDES permit number ID-002285-3, which was issued May 13, 2004 and has been administratively extended by EPA Region 10. The plant is also inspected by the Panhandle Health District Aquifer Protection Program and was issued a Critical Materials Compliance Certificate.

Monitoring R	equirements	
	Evaluate City's compliance with the identified BMP's and progress toward achieving the minimum control measures and document in each annual report	Two years from the permit effective date
Part IV.A.2	Monitor the quality of storm water discharges from the MS4 / Conduct a storm water discharge monitoring program	18 months from the permit effective date
	Develop a quality assurance plane (QAP) monitoring storm water discharge. Must be submitted for review to EPA and IDEQ	Quality Assurance Project Plan, developed, reviewed, signed, submitted February 09,2010

- 1) Within 1 year from the effective date of this permit, the permittee must develop a monitoring plan that includes the quality assurance requirements defined in Part IV.A.6. The permittee must develop and implement a monitoring program to:
 - a) estimate the pollutant loading currently discharged from the MS4
 - b) assess the effectiveness and adequacy of control measures implemented through this permit; and
 - c) identify and prioritize those portions of the MS4 requiring additional controls

Monitoring results and analysis (Appendix 4)

During this permit year twelve samples were taken, six at each of our stations. Additional sampling years are needed to assess the effectiveness and adequacy of the control measures implemented in the permit. Additional data collection / evaluation are necessary to determine the need for additional control actions and to determine the priority of actions.

Storm Water Monitoring Requirements

- 2) No later than 18 months from the effective date of this permit, the permittee must conduct a storm water discharge monitoring program which meet the following minimum requirements:
 - a) the permitee must sample at least one storm water outfall discharging to the Spokane River, and at least one storm water outfall discharging to Lake Coeur d'Alene, each representing the largest or highest flow discharges from the MS4
 - b) the permitee must monitor the storm water discharges for the pollutants as identified in Table IV.A. (appendix, page 3)

This is year three of our monitoring program. The City began our program with the installation of two automatic monitoring sites. Station 1, discharges to Lake Coeur d Alene and Station 2, discharges into the Spokane River. During this permit year twelve samples were taken, six at each station.

Monitoring Results and Analysis (Appendix 4)



STORM WATER MANAGEMENT PLAN

TABLE OF CONTENTS

Introduction

Storm water System Map

Public Education and Outreach

Public Involvement / Participation

Illicit Discharge, Detection, and Elimination

Construction Site Storm Water Runoff Control

Post-Construction Storm Water Management in New Development and Redevelopment

Pollution Prevention and Good Housekeeping for Municipal Operations

Storm water Discharge Monitoring

Annual Reports

Discharge Permit

Quality Assurance Plan

Maintenance and Operation Plan for Municipal Operations

Idaho Construction General Permit

Best Management Practices

Ordinances

INTRODUCTION

The City of Coeur d'Alene was issued a discharge permit by EPA, effective January 1, 2009. The permit allows the City to discharge storm water into Lake Coeur d'Alene and the Spokane River with certain requirements and restrictions. The permit covers all areas within the Coeur d'Alene Urbanized Area served by the municipal separate storm sewer system (MS4) owned or operated by the City.

In order to fulfill the requirements of that permit, the City has developing and implementing a Storm Water Management Program (SWMP) that is designed to reduce the discharge of pollutants from the municipal storm sewer system to the maximum practicable, and to protect the water quality of Lake Coeur d'Alene and the Spokane River. The SWMP includes Best Management Practices (BMP's), system design, engineering methods, and other provisions appropriate to control discharge of pollutants from the storm sewer system.

The SWMP activities and actions are identified in the minimum control measures and monitoring measures outlined in this document. The goal of the SWMP is to provide the following;

- ▶ BMP's that are selected, implemented, maintained, and updated to ensure, to the maximum extent practicable, that storm water discharges do not cause or contribute to an exceedance of State water quality standards, as described in IDAPA 58.01.02; and
- Measurable goals, including interim milestones, for each BMP. The City will define how SWMP actions are targeted to control the discharge of pollutants of concern, and evaluate the effectiveness of those actions.

An annual review of the SWMP implementation will be conducted by the City and a report submitted to EPA and IDEQ. The annual review is due February 15th of every year, beginning in 2010.

PUBLIC EDUCATION AND OUTREACH

The City of Coeur d'Alene has developed and implemented a public education and outreach program. The different program components are customized to educate target groups within the community about the impacts of storm water discharges on local water bodies and the steps that citizens and businesses can take to reduce pollutants in storm water runoff.

Key components of this program include the following;

- > Research and develop educational and outreach partnerships with other local, state and private agencies
- > Placing educational advertisements in the local newspaper
- > Periodic press releases highlighting relevant storm water prevention activities
- > Providing flyers and brochures to the public
- > Distributing educational materials to the local schools
- > Providing pollution prevention presentations to elementary schools
- > Placing TV and radio public service announcements
- > Showing educational videos on the Cities public television channel
- Making all education materials available on the City's website

Education and outreach have targeted the following audiences and subjects.

1) General Public

- Impacts of storm water discharges into local water bodies
- Impacts from impervious surfaces
- Best management practices (BMP's) and environmental stewardship actions relating to pet waste, vehicle maintenance, and application of pesticides, herbicides, and fertilizers.

2) Businesses

- BMP's for use and storage of chemicals, hazardous cleaning supplies, carwashes and waste
- Impacts of illicit discharges
- 3) Developers, Engineers, Contractors.
 - Standards for storm water and erosion control plans
 - Low impact development techniques
 - Maintenance of BMP's

Public education and outreach activities, such as the type and amount of materials distributed, the number and nature of complaints, will be tracked and documented in the annual report.

PUBLIC INVOLVMENT AND PARTICIPATION

Public involvement in storm water management can provide a sense of ownership and responsibility for the health of the watershed. The City's SWMP includes ongoing opportunities for public involvement through stewardship programs, environmental activities, and other similar activities. These programs and activities target the general public and include the following;

Volunteer Opportunities
Organize and promote an Adopt a Street
Promotion of Litter Pickup Day
Public Forums on SWMP activities, open house and stormwater workshops
Maintaining a telephone hotline and tracking complaints
Organize and conduct a storm drain stenciling program and track results

In addition, the City will make the SWMP, annual reports, and all other submittals required by the discharge permit available on its website. Data such as the number of groups participating and the number of events, how many road miles in the program, pounds of debris collected, number of complaints received and action taken, and the number of forums conducted and attendance, is tracked and documented in the annual report.

ILLICIT DISCHARGE, DETECTION, AND ELIMINATION

Illicit discharge, detection and elimination (IDDE) is an important part of the overall SWMP and is a requirement of the discharge permit. The goal of IDDE is to detect, remove and prevent illicit connections, discharges, and improper disposal, including spills, into the storm water system, thereby reducing pollutant discharge. Our IDDE program contains the following elements.

Storm water collection system inventory and mapping.

The City continually updates the map of the storm water drainage system. This includes all the City owned and operated storm sewers, culverts, ditches, and other conveyances, inlets, outfalls (including diameter and latitude and longitude), connection points with other systems, and all City maintenance and storage facilities. The map is available in digital format.

Prohibition of non-storm water discharges.

The City has adopted an ordinance that prohibits non-storm water discharges into the storm water collection system. The ordinance includes enforcement procedures and penalties for violations. It lists the types of discharges that are permitted and which are not.

Discharge detection and elimination program.

The City has developed a program to detect and eliminate illicit discharges into the storm water conveyance system. The program has several components including the following;

- Procedures for detection, source identification, and removal of illicit discharges
- Training for City staff on proper response to reports of illicit discharges
- Procedures for addressing illegal dumping into the storm water system
- Prioritizing reports of illegal dumping and spills
- Procedures for response to spills
- Use of "city track" database management system to track actions related to IDDE program

Public Education.

Informing and educating the public about the hazards associated with illegal discharges is another component of the IDDE program. This includes public employees, businesses, students and the general public. The City is continually developing public service announcements, press releases, flyers, and other methods to inform the public.

Dry weather outfall screening.

Screening of the outfalls during periods of dry weather is another component of the IDDE program. This will facilitate detection of non-storm water discharges. Field tests for selected parameters will be performed on outfall discharges. Because these tests are simple indicators of illicit discharges, it is not necessary to follow the same rigorous procedures as the storm water sampling. Our outfalls are screened annually. Any illicit discharges will be investigated within 15 days of detection and action taken by the City to eliminate the discharge within 45 days of detection.

Inventory of industrial discharges.

Industrial facilities that discharge into the storm water collection system or into Lake Coeur d' Alene or the Spokane river are required to obtain a separate Industrial Discharge Permit from the EPA. As part of the IDDE program, these facilities have been inventoried and the status of their permits verified. This information was forwarded to the EPA in the Annual Report.

The effectiveness of the program is measured by collecting and tracking the data on the each portion (i.e. number of illegal connections removed, complaints received, type and number of materials distributed, etc.) and documenting these in the annual report.

CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

The City of Coeur d'Alene has developed a program to reduce the discharge of polluted storm water runoff from construction sites. The program is applicable to all construction sites that disturb one acre or more, or less than one acre if they are a part of larger common plan of development. The program also includes municipal projects and public works projects.

In addition to the City's requirements, construction site operators are required to satisfy the requirements of EPA's Construction General Permit. That information has been distributed to developers and contractors. City public works projects are also required to comply with the requirements of EPA's Construction General Permit. These records are kept on file at the City and are available to the public.

Control of erosion, sediment, and waste construction products on construction sites is a key element of the construction site runoff program. Therefore, the City has adopted and implemented an ordinance requiring construction site operators to implement measures to control these elements at their construction sites. These requirements have been published and distributed to the appropriate building permit applicants.

Storm water management plans are currently required for all land disturbing building permits. These plans are reviewed and approved as a condition of issuance of the permits. All required erosion and sediment controls will be included on the storm water management plans and reviewed and approved by City staff. In addition, these plans will be made available to the public for input.

Inspection of construction sites are performed at least once per construction season to ensure placement and proper functioning of required erosion control elements. Our city track database program allows us to receive and track public complaints related to storm water.

As a part of the public education element of the SWMP, at least one training session will be held for local contractors, engineers, and architects to review the requirements for erosion and sediment control and Best Management Practices.

Data such as number of reviews, permits, inspections, violations, and enforcement actions is tracked and documented in the annual report.

POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

The City's Storm water Management Ordinance sets forth strict requirements for post construction storm water management in new development and we are currently developing standards and requirements for redevelopment projects. The purpose of these requirements is to reduce the amount of pollutants discharged from private developments.

The following are the highlights of the ordinance requirements.

- All new development is required to retain storm water runoff on-site, treat the runoff with approved BMP's and then discharge it to a shallow injection well.
- Grassed swales are the only allowed treatment at this time. This is controlled by Idaho Department of Water Resources who has jurisdiction over shallow injection wells over the aquifer.
- Owners are required to operate and maintain their BMP's.
- Each development is required to submit a storm water management plan for review and approval by the Engineering Department, prior to issuance of a building or site development permit.
- Prior to issuance of a Certificate of Occupancy, each development is inspected by the City and the Project Engineers are required to submit a letter of conformance to the plans and specifications.

The number of plan reviews, certificates of occupancy, existing connections removed, and impervious area removed, will be tracked and documented in the annual report.

POLLUTION PREVENTION AND GOOD HOUSEKEEPING FOR MUNICPAL OPERATIONS

Many of the maintenance activities performed by the City have a direct or indirect impact on the water quality for storm water runoff covered under our discharge permit. The City has an evolving maintenance and operation plan that addresses processes and procedures meant to minimize the impact of our maintenance operations on water quality. These include;

- The use of sand and road de-icers
- Fleet maintenance and vehicle washing operations
- Street cleaning and maintenance repairs
- Grounds, Park, and open space maintenance operations
- Building maintenance
- Storm water system maintenance
- Snow disposal site operation and maintenance
- Materials storage

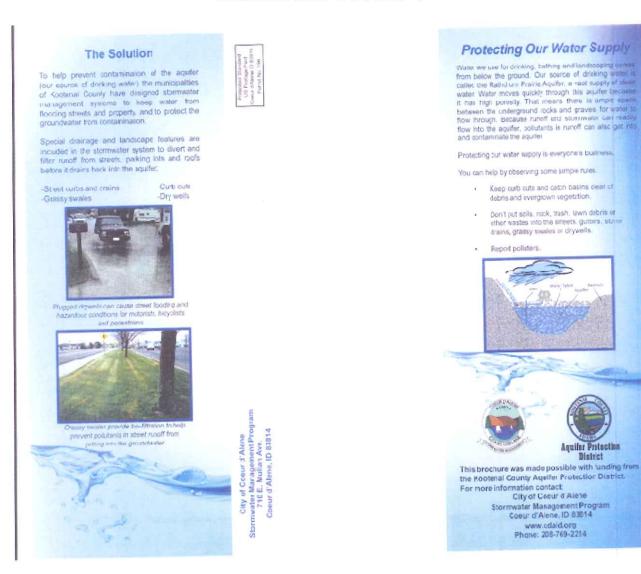
In addition to identifying processes and procedures, there is a training component designed to familiarize the appropriate staff with these required maintenance procedures. Training is conducted annually.

Data such as the number and type of maintenance repairs completed, number of catch basins and manholes cleaned, tons of debris and dirt cleaned, road miles swept, and the amount and type of pesticide or herbicide applied, is tracked and documented in the annual report.

DISCHARGES TO LAKE COEUR D'ALENE, SPOKANE RIVER, AND ASSOCIATED TRIBUTARIES

The City has established two outfall monitoring stations in order to assess whether the storm water system discharges and pollutants of concern, either directly or indirectly, into Lake Coeur d'Alene, the Spokane River, or any of their associated tributaries. One station samples discharges into Lake Coeur d'Alene and one samples discharges into the Spokane River. The City intends to add additional monitoring stations as funding allows. The EPA has established the pollutants of concern as metals (lead and zinc), nutrients (phosphorus, and nitrogen), sediment, dissolved oxygen, total polychlorinated biphenyls (PCB), and temperature. Samples are taken a minimum of four times a year, assuming the minimum flow criteria are met, with one sample collected during each of the following periods; March-April, May-June, July-August, and September-October. A Quality Assurance Plan outlining the sampling procedures and protocols has been developed and approved by the EPA and Idaho DEO.

APPENDIX 2 Stormwater Brochure



District

Pollutants

Pollutants in stormwater runoff from roads and parking lots include pet waste, motor oil, gasoline, tire dust, and fertilizer from landscaped areas. Disposal of household and industrial chemicals, anti-freeze, pesticides, paint, and gasoline must mot be put into swales, drywells, gutters or storm drains. Remember this water enters the lake and river UNTREATED.

City of Coeur d'Alene HOTLINE NUMBER 208-676-7405

Hazardous waste placed on the ground, streets or gutters can get in our drinking water. lakes and streams, harming aquatic life and public health. For household hazardous waste disposal information visit:

www.kcgov.us/departments/solidwaste/ or call 208-446-1430

THANK YOU FOR KEEPING OUR WATER SAFE

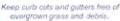
Stormwater Regulations

National environmental laws require cities to control sources of pollution that could contaminate lakes, streams and rivers. The U.S. Environmental Protection Agency (EPA) has issued a stormwater discharge permit to the City of Coeur d'Alene. The stormwater permit requires the City to inform the public about stormwater pollution and to regulate construction and industrial sites to keep pollution out of the streets, storm drainage systems and waterways. In turn, the city has adopted regulations to require developers and property owners to install and maintain stormwater management features. These features include street curbs, grassy swales, dry wells, storm drains and storm sewers. Violation of stormwater rules have serious legal consequences, including fines and incarceration.

For more clean water tips visit: www.cdaid.org, www.kcgov.us or deq.idaho.gov

Keep swales and drywells free of debris. Polluting swales and drywells is against the law.







ORDINANCE NO. 3455 COUNCIL BILL NO. 12-1026

AN ORDINANCE AMENDING THE MUNICIPAL CODE OF THE CITY OF COEUR. D'ALENE, KOOTENAI COUNTY, IDAHO, REPEALING CHAPTERS 13.30, 13.32 AND 13.35 AND ADOPTING NEW CHAPTERS 13.30, 13.32 AND 13.35 TO ESTABLISH STORMWATER MANAGEMENT REGULATIONS, CONTROL ILLICIT DISCHARGE AND ESTABLISH A DRAINAGE UTILITY: PROVIDING DEFINITIONS AND PURPOSE STATEMENTS; REQUIRING STORMWATER MANAGEMENT PLANS; ESTABLISHING PERFORMANCE STANDARDS AND DESIGN CRITERIA; REQUIRING A GUARANTEE OF STORMWATER SYSTEM INSTALLATION AND REQUIRING INSPECTIONS; AUTHORIZING ADOPTION OF ADDITIONAL POLICIES, PROCEDURES, BEST MANAGEMENT PRACTICES AND OTHER SUPPLEMENTAL MATERIALS; REQUIRING SYSTEM MAINTENANCE; ESTABLISHING REGULATIONS GOVERNING DISCHARGE TO THE DRAINAGE SYSTEM AND PROHIBITING ILLICIT CONNECTIONS AND DISCHARGES TO THE DRAINAGE SYSTEM; AUTHORIZING ACCESS TO REGULATED FACILITIES: REQUIRING NOTIFICATION OF SPILLS; ESTABLISHING A DRAINAGE SYSTEM UTILITY AND APPROVING ADMINISTRATION OF THE UTILITY; AUTHORIZING A DRAINAGE SYSTEM UTILITY FEE AND ESTABLISHING A FROCESS TO APPEAL THE AMOUNT OF FEE; REQUIRING THAT DRAINAGE SYSTEM FIRES BE SEGREGATED FROM THE GENERAL FUND AND ONLY EXPENDED ON DRAINAGE SYSTEM COSTS; ESTABLISHING ENFORCEMENT PROVISIONS AND PENALTIES FOR NON-PAYMENT OF FEES; PROVIDING THAT VIOLATIONS OF THE STORMWATER MANAGEMENT AND ILLICIT DISCHARGE AND DRAINAGE SYSTEM CONNECTION ORDINANCES ARE MISDEMEANORS PUNISHABLE BY A FINE OF NOT MORE THAN \$1,000 DOLLARS OR BY IMPRISONMENT NOT TO EXCEED 180 DAYS OR BOTH; REPEALING ALL ORDINANCES AND PARTS OF ORDINANCES IN CONFLICT HEREWITH; PROVIDING A SEVERABILITY CLAUSE; PROVIDE FOR THE EUBLICATION OF A SUMMARY OF THIS ORDINANCE AND AN EFFECTIVE DATE HEREOF.

WHEREAS, after public hearing on the hereinafter provided amendments, the Mayor and City Council make the following findings;

A. Authority.

The city has authority to:

- 1. Make and enforce sanitary and other regulations within the City that are not in conflict with the general laws of the state.
- 2. Prevent the flooding of the city or to secure its drainage, to assess the cost thereof to the property benefited, and for such purpose make any improvement or perform any labor on any stream or waterway, either within or without the city limits, when necessary to protect the safety of life and property of the city.

- 3. Operate and maintain a stormwater drainage system and to prescribe and collect rates, fees, tolls or charges, including the levy or assessment of such rates, fees, tolls or charges against governmental units, departments or agencies, including the state of Idaho and its subdivisions, for the services, and facilities furnished by the drainage system and to provide methods of collections and penalties, including denial of service for nonpayment of such rates, fees, tolls or charges.
- 4. Construct, acquire, improve, equip, maintain custody, operate and maintain a drainage system and to collect revenues for the service rendered thereby.
- 5. Issue bonds, when necessary, under authority of the Idaho Revenue Bond Act, and to prescribe and collect reasonable rates, fees, tolls or charges for the services and facilities furnished by the drainage system and shall revise such rates, fees, tolls or charges from time to time, to provide that the drainage system shall be and always remain self-supporting.
- 6. Incorporate the State of Idaho's ground water quality protection plan into the city's programs provided that the implementation is consistent with the ground water protection plan.
- 7. Exercise all powers and perform all functions of local self-government as are not specifically prohibited by or in conflict with the general laws or the constitution of the State of Idaho.
- 8. Impose fees for those services provided by the City that would otherwise be funded by property tax revenue so long as the fees are reasonably related, and do not exceed, the cost of providing the service.

B. MS4 Permit Compliance.

- 1. In order to manage and protect the persons and property within the city's boundaries the city has constructed various drainage appurtenances which are a part of its drainage system. Private property owners have been allowed to connect to this system for drainage services. A portion of the system drains to outfalls which discharge into the receiving waters of the United States (Lake Coeur d'Alene and the Spokane River) and other associated waters of the United States within the Coeur d'Alene urbanized area.
- 2. In compliance with the provisions of the Clean Water Act, 33 USC section 1251 et seq., as amended by the Water Quality Act of 1987, PL 100-4 (the "act"), Region 10 of the Environmental Protection Agency (EPA) has authorized the city to discharge from its drainage system (municipal separate storm sewer system or MS4) into the receiving waters of the United States in accordance with the conditions and requirements of the permit. These conditions and requirements are a regulatory cost associated with the city's provision of drainage services to its customers.
- 3. The permit has many requirements, which include:

- a. Develop, implement and enforce a stormwater management program which is to include best management practices (BMPs), system design, engineering methods, and other provisions appropriate to control discharges of pollutants from the city's drainage system;
- b. Develop, implement and report on public education and involvement programs concerning the impacts of stormwater discharges on city water bodies including steps that citizens and businesses can take to reduce pollutants in stormwater runoff;
- c. Develop and implement a plan to detect and eliminate illicit discharges into the city's drainage system, including roadways and associated ditches, pipes, culverts, catch basins, retention ponds, and any other drainage facilities in the city's jurisdiction;
- d. Develop and implement ordinances or other regulatory mechanisms to prohibit nonstormwater discharges into the city's drainage system including the implementation of appropriate enforcement procedures and actions, including a written policy of enforcement escalation procedures for recalcitrant or repeat offenders;
- e. Map the city's drainage system;
- f. Implement dry weather field screening and testing of all the city's drainage outfalls for non-stormwater flows;
- g. Inventory and report to the EPA all industrial facilities that discharge directly to the city's drainage system or directly to waters of the United States located within the city's jurisdiction;
- h. Implement and enforce a program to reduce pollutants from construction activities in any stormwater runoff to the city's drainage system;
- i. Implement and enforce programs to address and regulate post-construction stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre;
- j. Develop and implement an operation and maintenance program intended to prevent or reduce pollutant runoff from city operations;
- k. Conduct discharge monitoring and reporting for the city's drainage system; and
- 1. Develop and implement the monitoring, recordkeeping, reporting, training and education requirements of the permit.
- 4. Failure by the city to comply with the requirements of the permit subject the city to civil and criminal penalties under federal law which would place the city's resources and staff at financial and criminal risk and subject the taxpayers to additional tax burdens.
- C. Compliance with Idaho statutes and administrate requirements for discharging stormwater over the Spokane Valley Rathdrum Prairie Aquifer.

- 1. A portion of the city's drainage system drains stormwater leaving individual properties in the city into a system of curbs, gutters ditches, swales, dry wells and other appurtenances that disposes the drainage over the Spokane Valley Rathdrum Prairie Aquifer (Aquifer).
- 2. The aquifer is the sole source of drinking water for residents of the city.
- 3. The Idaho Department of Environmental Quality (IDEQ) and Idaho Department of Water Resources (IDWR) regulate stormwater drainage over the aquifer.
- 4. Under the Ground Water Quality Rule (IDAPA 58.01.11), the aquifer is designated a Sensitive Resource, which is the highest level of protection under the groundwater quality rule. Discharges into a Sensitive Resource are subject to numerical limits established by IDEQ as well as a narrative standard that the aquifer not be degraded as a result of point source or non-point source activity.
- 5. Under the Ground Water Quality Rule, drainage of stormwater over the aquifer must comply with Best Management Practices and Best Available Methods to prevent degradation of the aquifer.
- 6. Additionally, IDWR has adopted Rules and Minimum Standards for the Construction and Use of Injection Wells (IDAPA 37.03.03), which regulates the use of dry wells and shallow injection wells for disposing of stormwater below ground surface via artificial openings or excavations.
- 7. Failure of the city to comply with the requirements of the Ground Water Quality Rule or the Rules and Minimum Standards for the Construction and Use of Injection Wells will subject the city to potential for enforcement proceedings which would place the city's resources at risk and subject the taxpayers to additional tax burdens.

E. The Lewiston Case.

- 1. In November 2011, the Idaho Supreme Court issued a decision in *Lewiston Independent School Dist. et al v. City of Lewiston*, 151 Id 800, 264 P.3d 907 (2011), which struck down a stormwater utility created by the City of Lewiston. The Supreme Court found that because the stormwater utility created by the City of Lewiston was primarily a revenue generating enterprise, rather than a regulatory enterprise, the fee charged by the city was a tax that must be legislatively authorized.
- 2. In reaching its decision the Court noted that:
 - a. Lewiston charged a fee to all properties with impervious surface regardless of whether they actually drained to the city's system;
 - b. It was unclear whether Lewiston adopted a distinct utility structure other than the Street Maintenance Department;

- c. Lewiston commingled the monies generated by its stormwater fee with its general fund;
- d. Lewiston paid for street maintenance/repair with stormwater fees;
- e. Lewiston's ordinance, by its own terms, was for revenue generation and did not contain any regulation;
- f. Determination of how to spend stormwater funds was left to the discretion of the Streets Maintenance Manager leaving no control over how stormwater revenue was spent; and
- g. Lewiston did not proceed under the Revenue Bond Act; as such the Court did not address the act and the other potential sources of legislative authority because those statues were not supported by argument.
- 3. To address the concerns raised by the Court in the Lewiston Case, the proposed ordinance does the following:
 - a. The fee proposed by the ordinance only applies to properties actually draining to the city's drainage system and provides for an administrative appeal process for customers to challenge their connection to the system or their rate;
 - b. The fee proposed by the ordinance is calculated to recover costs to the city in providing the drainage service including the costs of maintaining the system and complying with all applicable regulations;
 - c. Establishes a distinct utility structure under the direction of the city administration on par with the other city utilities;
 - d. Prohibits commingling drainage system fees with the general fund;
 - e. Prohibits using the drainage system fee for non-drainage system functions and uses;
 - f. Establishes that the Drainage System Utility is a regulatory enterprise charged with administering and enforcing the city's Stormwater Management and Illicit Discharge and Drainage System Connection ordinances;
 - g. Provides for specific guidance for how drainage system fees are expended and approved;
 - h. Relies on the authority contained in the Idaho Revenue Bond Act, and the other sources of authority cited herein, to provide constitutional and statutory authority for the fee authorized by the proposed ordinance.

WHEREAS, based on the findings made above, it is deemed by the Mayor and City Council to be in the best interests of the City of Coeur d'Alene that the following amendments be adopted; NOW, THEREFORE,

BE IT ORDAINED, by the Mayor and City Council of the City of Coeur d'Alene:

SECTION 1. That Coeur d'Alene Municipal Code Chapters 13.30, 13.32 and 13.35 are hereby repealed.

SECTION 2. That a new Chapter 13.30, entitled Stormwater Management Ordinance, is hereby added to the Coeur d'Alene Municipal Code as follows:

13.30.010: TITLE AND PURPOSE:

- A. Title and Intent: This chapter will be known as the STORMWATER MANAGEMENT ORDINANCE. The intent of these regulations is to require implementation of stormwater management techniques, which rely upon natural on site treatment, and recycling of stormwater as opposed to collection and conveyance of untreated stormwater into groundwater sources or into surface bodies of water.
- B. Purpose: The underlying purposes to be achieved by implementation of these regulations include:
 - a. The protection of groundwater quality through pretreatment of stormwater prior to infiltration;
 - b. The protection of surface and subsurface water resources from the effects of contaminants, erosion, sedimentation, and construction waste from land disturbing activities;
 - c. The provision of adequate drainage of stormwater;
 - d. The protection of properties from increased runoff and flooding;
 - e. The provision of stormwater drainage at the lowest possible cost;
 - f. The creation of a stormwater management system and a drainage system utility.

13.30.020: DEFINITIONS:

Unless a provision states otherwise, the following terms and phrases used in this chapter, have the following meanings:

ADMINISTRATOR or DRAINAGE UTILITY ADMINISTRATOR: The person appointed by the city to serve as the Drainage Utility administrator under chapter 35 of this title or his or her designee (See section 13.35.030).

AS BUILT DRAWINGS: Design plans that have been revised to reflect all changes to the plans that occurred during construction. These plans must be signed and stamped by the responsible qualified, licensed professional.

BEST MANAGEMENT PRACTICES (BMPs): Schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or stormwater collection systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

CITY: The City of Coeur d'Alene.

CLEAN WATER ACT: The federal Water Pollution Control Act (33 USC section 1251 et seq.), and any subsequent amendments thereto.

CLEARING: The removal of vegetation, trees, structures, pavement, etc., by manual, mechanical, or chemical methods.

CONVEYANCE: A mechanism for transporting water from one point to another, including pipes, ditches, and channels.

CONVEYANCE SYSTEM: The drainage facilities, both natural and manmade, which collect, contain, and provide for the flow of stormwater.

DESIGN STORM: A rainfall event of specific return frequency and duration that is used to calculate the runoff volume and peak discharge rate.

DETENTION: A temporary storage of storm runoff in a BMP, which is used to control the peak discharge rates, and which provides for gravity settling of pollutants and sediments.

DISCHARGE: Any addition or introduction of any pollutant, stormwater, or any other substance whatsoever into the drainage system, waters of the state, or into waters of the United States.

DISCHARGER: Any person who causes, allows, permits, or is otherwise responsible for a discharge, including, without limitation, any operator of a construction site or industrial facility.

DRAINAGE SYSTEM OR SYSTEM: The drainage utility maintained system of ditches, channels, creeks, ponds, intake structures, curbs, gutters, diversion structures, levies, storm sewers, pump stations, force mains, buildings, easements, machinery, equipment, connections and all other appurtenances necessary, useful or convenient for the collection, treatment and disposal of any surface runoff or stormwater.

EROSION: The wearing away of the land surface by running water, wind, ice, or other geological agents, including such processes as gravitational creep.

EROSION/SEDIMENT CONTROL: Any temporary or permanent measures taken to reduce erosion, control siltation and sedimentation.

GROUNDWATER: Water in a saturated zone or stratum beneath the land surface or a surface water body.

HAZARDOUS MATERIAL: Any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

ILLICIT CONNECTION: Either of the following: Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the drainage system including, but not limited to, any conveyances which allow any non-stormwater discharge including sewage, process wastewater, and wash water to enter the drainage system and any connections to the drainage system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by an authorized enforcement agency or, any drain or conveyance connected from a commercial or industrial land use to the drainage system which has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.

ILLICIT DISCHARGE: Any discharge to a storm drain that is not composed entirely of stormwater except discharges pursuant to an NPDES permit.

IMPERVIOUS SURFACE: Has the same meaning as that given at subsection 17.02.070A of this code.

INDUSTRIAL ACTIVITY: Activities subject to NPDES industrial permits as defined in 40 CFR 122.26(b)(14).

INFILTRATION: The downward movement of water through the soil. Infiltration capacity is expressed in terms of inches per hour.

INFILTRATION BASIN: Depressions created by excavation or berms to provide for short term ponding of surface runoff until it percolates into the soil through the basin's floor and sides.

INTERMITTENT STREAM: A stream or portion of a stream that flows only seasonally. Typically it is dry for several months of a year.

LAND DISTURBING ACTIVITY: Any activity that results in a change in the existing soil cover (both vegetative and non-vegetative) and/or the existing topography. Land disturbing activities include, but are not limited to, demolition, construction, clearing, grading, filling, and excavation.

NPDES (NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT): A permit issued by the U.S. EPA, in compliance with the federal Clean Water Act for the discharge of pollutants from any point source into the waters of the United States.

NON-STORMWATER DISCHARGE: Any discharge that is not entirely composed of stormwater.

NUTRIENTS: Essential chemicals needed by plants or animals for growth. Excessive amounts of nutrients can lead to degradation of water quality and algae blooms. Some nutrients can be toxic at high concentrations.

POLLUTANT: Anything which causes or contributes to pollution. Pollutants may include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; nonhazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind or as defined by the federal Water Pollution Control Act (also known as the Clean Water Act).

QUALIFIED, LICENSED PROFESSIONAL: A registered civil engineer or registered landscape architect who is licensed in the state of Idaho.

RETENTION: The holding of runoff in a basin without release except by means of evaporation, infiltration, or emergency bypass.

RUNOFF: Stormwater that does not infiltrate into the soil, but remains on the surface and travels over land to either natural or manmade collection facilities.

SECURITY: A surety bond, cash deposit or escrow account, assignment of savings, irrevocable letter of credit or other means acceptable to or required by the city to guarantee that work is completed in compliance with the project's drainage plan and in compliance with all local government requirements.

SEDIMENT: Material that originates from weathering and erosion of rocks or unconsolidated deposits, and is transported by, suspended in, or deposited by water.

SEDIMENTATION: The deposition of sediment usually in basins or watercourses.

STORM FREQUENCY: The time interval between storms of predetermined intensity, e.g., a 2-year, 25-year, or 100-year storm.

STORMWATER: Any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.

STORMWATER MANAGEMENT PLAN: A document which describes the best management practices and activities to be implemented by a person or business to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to stormwater, stormwater conveyance systems, the drainage system and/or receiving waters to the maximum extent practicable.

SWALE: A shallow infiltration basin with relatively gentle side slopes.

TREATMENT AND DETENTION BMP: A BMP that is intended to detain runoff and remove pollutants from stormwater. A few examples of treatment and detention BMPs are detention ponds, oil/water separators, bio-filtration swales, and constructed wetlands.

UNDEVELOPED STATE: The natural soils and vegetation in place prior to the start of any construction or clearing activity on the site.

13.30.030: APPLICABILITYAND ADMINISTRATION:

- A. Unless otherwise exempted under this chapter, this stormwater management ordinance shall apply to all land disturbing activities including, but not limited to, grading, site development, parking lot paving, or street improvement.
- B. This chapter will be applied in a manner consistent with the procedures set forth in the city's subdivision, zoning, drainage system utility and building code ordinances and such other ordinances as the city may enact to regulate the use and development of land within the city pursuant to authority granted by Idaho Code title 67, chapter 65.
- C. This chapter will be administered by the Drainage System Utility Administrator.

13.30.040: STORMWATER MANAGEMENT PLAN:

A. Stormwater Management Plan Required: Any activity regulated by this chapter shall require the development of a comprehensive stormwater management plan meeting the requirements of sections 13.30.050 and 13.30.060 of this chapter. Stormwater management plans shall be approved by a qualified, licensed professional and submitted to the city for review.

1. Exceptions:

- a. Stormwater management plans for new single-family residential structures or additions to single-family residential structures are not required to be designed by a qualified, licensed professional unless required by the city under subsection A(1)(b) of this section.
- b. The administrator may require that the stormwater management plan be signed by a registered civil engineer if he or she determines that off-site drainage or adjacent property rights are affected by the plan.
- B. General Plan Requirements: Each stormwater management plan must contain the following general elements:
- 1. The necessary maintenance system, including an acceptable plan for sustained functioning of the collection and treatment system. Unless the plan identifies another responsible party, the parties identified in section 13.30.090 of this chapter shall be responsible for maintenance of all

elements of the stormwater collection and treatment system. Maintenance activities shall include (but not be limited to), watering, mowing and fertilizing of infiltration basins, sod renovation of infiltration basins (unless otherwise provided in this chapter), sediment and debris removal from detention basins, debris removal and cleaning of all inlets, piping, outlet structures, slope protection, etc.

- 2. The easements necessary to provide continued maintenance of the system.
- 3. Clearly identified stormwater facilities including, but not limited to, pipes, inlets, catch basins, infiltration basins, basins, and swales.
- C. Required Stormwater Plan Elements: In addition to the general plan requirements required by subsection B of this section, stormwater management plans must contain the following parts:
- 1. Design Calculations: The plan shall present all pertinent calculations necessary to determine the required size of elements of the system. These elements include, but are not limited to, off site drainage onto the property, pre and post development runoff, infiltration basins, detention and/or retention facilities, pipes, swales, culverts, ditches, and catch basins.
- 2. Site Plan: The site plan shall include the following:
- a. Property boundaries and all existing natural and manmade features and facilities within fifty feet (50') of the site, including streets, utilities, easements, topography, structures, and drainage channels.
- b. Final contours.
- c. Location of all proposed improvements, including paving, structures, utilities, landscaped areas, flat work, and stormwater control facilities.
- d. Proposed drainage patterns including ridgelines and tributary drainage areas.
- e. Stormwater control facilities, including invert elevations, slopes, length, cross sections, and sizes. Construction details shall be shown for infiltration basins, and/or detention/retention/construction waste facilities.
- f. Existing and proposed drainage/stormwater easements.
- g. Location of all BMPs, temporary and permanent.
- h. Final vegetation, landscape, and permanent stabilization measures.
- 3. Erosion, Sediment And Construction Site Waste Control Standards: The design, testing, installation, and maintenance of erosion, sediment and construction site waste controls shall be in accordance with city approved best management practices (BMPs). An erosion, sediment and construction waste control plan shall be submitted and approved prior to initiation of any site

clearing, excavation, and grading or other development activity. Both temporary and permanent erosion, sediment and construction waste control measures shall be included. The plan shall represent the minimum requirements for the site. Additional measures may be required by the city in the event of unexpected storm occurrences, repair or maintenance of existing systems, or replacement of nonfunctioning systems.

a. The permit holder and owner of the property are responsible for maintenance and upkeep of both temporary and permanent erosion, sediment and construction waste control measures unless the erosion, sediment and construction waste control plan identifies another person or entity as the responsible party.

13.30.050: PERFORMANCE STANDARDS:

The following performance standards are applicable to all design, construction, implementation, and maintenance of stormwater management systems pursuant to this chapter:

- A. All activities subject to the requirements of this chapter shall be carried out in a manner that ensures that runoff of storm or other natural surface waters shall not be accelerated, concentrated, or otherwise conveyed beyond the exterior property lines or project boundaries of the project in question. Existing and/or proposed off site public street drainage shall be detained separately from the on-site drainage. All stormwater facilities and BMPs required for the project must be constructed within the project boundary or property lines.
- 1. Exceptions: Runoff of storm or other surface waters may be conveyed beyond the exterior property lines or project boundaries if:
- a. Done in accordance with the provisions of a joint stormwater management agreement approved in writing by the city; or
- b. The downstream property received drainage prior to development. In this case, flow may not be concentrated onto downstream properties where sheet flow previously existed. In no event will there be a measurable increase in the peak rate of runoff from the site after development when compared with the runoff rate in the undeveloped state for a 25-year storm.
- c. Runoff may be conveyed beyond property lines on to public rights of way where necessary to obtain site access via driveways, curb cuts or other access points.
- B. Erosion, sediment, or discharge of pollutants, resulting from construction activities, which enter onto public property or private property not controlled by the permit holder, shall be eliminated to the maximum extent practicable unless otherwise permitted or exempted under this chapter.
- C. All construction activity commenced pursuant to an approved stormwater management plan or site development permit must at all times comply with the conditions of the plan or permit. The permit holder is responsible for ensuring their contractor(s), subcontractor(s), utility trenching subcontractor(s), and all other persons entering the site abide by the conditions of the

permit. The permit holder's signature or that of his authorized agent on the permit shall constitute an agreement by the permit holder to accept responsibility for meeting the conditions of the permit.

- D. No construction activity shall take place without a valid stormwater management plan. If a permit has been suspended or revoked, or has expired, all work covered by the plan shall cease until a new plan is issued.
- E. All necessary action shall be taken to minimize the depositing and tracking of mud, dirt, sand, gravel, rock or debris on or onto the public right of way. The owner of the site of the construction activity or the permit holder with respect to the construction site shall be responsible for any cleanup of the public rights of way or private property not under the permit holder's control necessitated from any tracking or depositing of mud, dirt, sand, gravel, rock or debris, or shall reimburse the city for any expenses incurred by the city to effectuate the cleanup. At a minimum, all public rights of way shall be cleaned curb to curb on a weekly basis.
- F. Construction ramps shall be constructed of material that will not erode or deteriorate under adverse conditions, and shall not be placed in a manner as to interfere with or block the passage of stormwater runoff.
- G. No debris, dirt, aggregate or excavated materials, or construction supplies, shall be placed on the public right of way unless specifically permitted by the city in writing. In addition, public sidewalks shall not be removed, blocked, or otherwise rendered unusable by construction activity, equipment or materials, or portable toilets, unless a safe, usable alternate walkway, as approved by the city, is placed on the same side of the right of way by the contractor.
- H. No owner or lessee of real property shall allow the property to be unoccupied, unused, vacant or undeveloped after the topsoil has been disturbed or the natural cover removed, unless control measures are undertaken to prevent mud, sand, dirt and gravel, or other material from migrating off site and entering the public right of way or a stormwater system.
- I. All temporary erosion/sediment and construction waste control measures shall be removed after final site stabilization. Trapped sediment and other disturbed soil areas resulting from the removal of temporary measures shall be permanently stabilized within twenty one (21) days from removal of the temporary measures.
- J. Channels which collect or concentrate stormwater shall be protected against erosion and contain energy dissipation measures to prevent erosion on adjoining lands. Existing unprotected channels shall be protected against further erosion in the course of site development. Any site development or construction shall preserve the existing stormwater management improvements.
- K. Sediment resulting from erosion of disturbed soils shall be detained on site. Sediment shall either be stabilized on site or removed in an approved manner.

- L. Any and all collected stormwater runoff shall be directed to infiltration basins or to an approved BMP. Permanent treatment of stormwater runoff shall be accomplished by directing all runoff to an infiltration basin or to an approved BMP.
- 1. Exceptions: Runoff may be discharged directly into dry wells or other overflow structures under the following circumstances:
- a. When the increase in impervious surface, resulting from new construction or addition to existing structures, is less than three thousand (3,000) square feet.
- b. Runoff from roofs.
- M. When existing streets are widened or otherwise improved, runoff from the new impervious surface may be directed into existing storm drain facilities if the existing storm drain facility has sufficient capacity to accommodate the increased runoff.

13,30,060: DESIGN STANDARDS:

- A. General Standards: All stormwater facilities shall incorporate the following design standards:
- 1. All conveyance facilities shall be designed to accommodate a 25-year storm event.
- 2. When on-site facilities must accommodate drainage from off-site, such conveyance facilities shall be designed to accommodate a 50-year storm event.
- 3. Peak flows shall be calculated by the rational method for areas ten (10) acres or less. Peak flows shall be calculated by the Soil Conservation Service (SCS) method TR-55, for areas greater than ten (10) acres. Other methods may be approved by the city.
- 4. The intensity-duration curves from the Idaho Transportation Department shall be used for the rational method.
- B. Erosion, Sediment And Construction Site Waste Control: The design, testing, installation, and maintenance of erosion, sediment and construction site waste controls, as detailed in the stormwater management plan, shall be in accordance with city BMPs.
- C. Infiltration Basins: All infiltration basins shall incorporate the following design standards:
- 1. Infiltration basins shall be designed either to retain and treat a volume equal to one-half inch (1/2") of runoff over the tributary impervious area, including roofs or to infiltrate a storm event of 0.1 inches per hour.
- 2. Infiltration basins designed to detain the treatment volume shall be a maximum of six inches (6") from the lowest point of the swale to the inlet of the overflow structure.
- 3. Infiltration basins shall have a minimum infiltration rate of 0.5 inches per hour.

- 4. Infiltration basins shall be planted and maintained with grass and/or other vegetative cover approved by the city. An encroachment permit issued by the city pursuant to title 12, chapter 12.44 of this code must be obtained before starting any landscaping work in infiltration basins located in city rights of way.
- 5. Infiltration basins must be renovated when they do not meet the minimum infiltration rate or when the vegetative cover dies.
- 6. Infiltration basins shall contain dry wells, or an equivalent approved by the city engineer, to accommodate overflow.
- 7. Where infiltration basins will be located between curb and sidewalk, both curb and sidewalk shall be considered an integral part of the storm management system and shall be installed with the infiltration basin.

13.30.070: GUARANTEE OF INSTALLATION:

- A. No building permit, final plat approval, or other discretionary approval shall be granted until the stormwater management plan has been approved by the city.
- B. Except as allowed by chapter 16.24 of this code, no building permit will be issued for new subdivisions until the stormwater management system, including infiltration basins, curb and sidewalks, has been constructed for the developed portion and will accept the flow of stormwater as designed. For all other cases, no certificate of occupancy will be issued until the stormwater management system has been installed and will accept the flow of stormwater as designed.
- 1. Exception: If, in the judgment of the administrator, project occupancy can be achieved without harm to the environment or potential occupants, occupancy may proceed upon receipt of an acceptable guarantee of financial surety, pursuant to section 15.08.075 of this code, to complete installation when weather conditions or other variables allow but in no event more than six (6) months after occupancy. In no case shall such guarantee be allowed if the incomplete improvements would result in increased erosion, sedimentation, or other damage to the development, public improvements, surface or subsurface waters, the proposed stormwater management system or otherwise endanger the public health or safety.
- C. At any time, the city may stop work on the installation of subdivision improvements, withhold further issuance of building permits in a development, stop work on any individual building or development of any individual building site, or otherwise take steps necessary to ensure that the development meets the requirements of this chapter.

13.30.080: INSPECTIONS: -

All construction activities which require a permit or have the potential to impact stormwater discharge or create a discharge to the stormwater collection system shall be subject to the inspection provisions of this section.

A. The city maintains the right to inspect any site of construction activity that has been issued a permit or is required to have a permit issued.

B. Sites shall be required to undergo and pass a city inspection upon completion of the installation of temporary erosion, sediment and construction waste controls, and upon completion of the final grading and/or the permanent drainage and erosion control facilities. The permit holder shall be responsible for scheduling these inspections through the city building department. Inspections must be requested at least forty eight (48) hours prior to the desired time of inspection. Additional inspections may also occur as deemed necessary by the city.

C. When an inspection is required under this chapter, no work shall proceed until completion of the inspection and approval from the authorized city agent conducting the inspection.

13.30.090: ADOPTION OF SUPPLEMENTAL MATERIALS AND BEST MANAGEMENT PRACTICES:

The city may, by resolution, adopt additional design standards, definitions of terminology, administrative procedures, stormwater best management practices, etc., intended to implement the general requirements and performance standards set forth in this chapter. Changes in the design standards, best management practices or other adopted materials may be accomplished by subsequently adopted resolution. Adopted design standards may be complied with in alternative ways that will contribute to rational achievement of the general requirements and performance standards set forth in this chapter.

13.30.100: MAINTENANCE RESPONSIBILITY:

- A. Unless other provisions are made in the process of development review and approval, the owner of the property is responsible to maintain all stormwater system elements required for on-site stormwater collection and treatment and the owner of the abutting property is responsible for maintaining infiltration basins contained within city rights of way or drainage easements for street drainage.
- B. For infiltration basins contained within city rights of way or drainage easements the maintenance responsibility created by this section shall include mowing, and otherwise maintaining the grass or other approved vegetative cover in a healthy condition capable of meeting the retention and treatment requirements of this chapter. The city's Drainage System Utility will renovate the infiltration basin upon expiration of its service life.
- C. Any violation of these maintenance requirements shall constitute a violation of this chapter.

13.30.110: PROHIBITED CONDUCT:

No person shall damage, harm, fail to install, complete, or maintain, or otherwise impair the functioning of infiltration basins or the future functioning of areas designed as an infiltration basin or approved methods of transmission of stormwater to an infiltration basin or any portion of a stormwater management system installed pursuant to this chapter.

13.30.120: ENFORCEMENT:

Provisions of this chapter may be enforced in one or more of the following manners:

- A. Any person violating any of the provisions or failing to comply with any of the mandatory requirements of this chapter is guilty of a misdemeanor and shall be punished as provided by chapter 1.28 of this code.
- 1. Each such person is guilty of a separate offense for each and every day during which any violation of any provision of this chapter is committed, continued, or permitted by any such person, and he shall be punished accordingly.
- B. By civil action to compel performance and completion of, or maintenance of, facilities installed pursuant to this chapter.
- C. Denying, revoking, or suspending building permits or certificates of occupancy, as the case may be.
- D. By any other method or remedy allowed by law.

13.30.130: VARIANCE:

A variance from the requirements of this chapter or from the design standards adopted pursuant to this chapter may be granted only upon a showing of undue hardship due to unique site characteristics. A variance may only be granted by the city council in such circumstances if the approval of the variance would not otherwise impair achievement of the standards or purposes of this chapter, would not impose an additional burden upon adjoining or downstream lands or landowners, or otherwise disrupt the scheme of stormwater management in the community. Any person requesting a variance under this section must provide data showing that the proposed alternative methods of stormwater handling will produce comparable efficacy of the stormwater management measures required by this chapter. No variance will be issued unless all elements of this section are met.

SECTION 3. That a new Chapter 13.32, entitled Illicit Discharge and Drainage System Connection Ordinance, is hereby added to the Coeur d'Alene Municipal Code as follows:

13.32.010: TITLE:

This chapter will be known as the ILLICIT DISCHARGE AND DRAINAGE SYSTEM CONNECTION ORDINANCE.

13.32.020: PURPOSE:

The purpose of this chapter is to comply with the requirements of the city's national pollutant discharge elimination system (NPDES) permit, the federal Clean Water Act, and to provide for the health, safety, and general welfare of the citizens of Coeur d'Alene through the regulation of

non-stormwater discharges to the drainage system as required by federal and state law. This chapter establishes methods to control the introduction of pollutants into the drainage system in order to meet the following objectives:

- A. To regulate the contribution of pollutants to the drainage system by stormwater discharges by any user.
- B. To prohibit illicit connections and discharges to the drainage system.
- C. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance of this chapter.
- D. To establish penalties associated with violations of this chapter.

13.32.030: DEFINITIONS:

Unless a provision states otherwise, the following terms and phrases used in this chapter have the provided meanings. In the event of a dispute or discrepancy regarding the definition of a term used in this chapter, the definition contained in the federal water pollution control act (33 USC section 1251 et seq.), also known as the clean water act, and any subsequent amendments thereto, are the controlling authority.

ADMINISTRATOR or UTILITY ADMINISTRATOR: The person appointed by the city to serve as the Drainage Utility administrator under chapter 35 of this title or his or her designee (See section 13.35.030).

AS BUILT DRAWINGS: Has the same meaning as that given at subsection 13.30.020 of this code.

BEST MANAGEMENT PRACTICES (BMPs): Has the same meaning as that given at subsection 13.30.020 of this code.

CITY: Has the same meaning as that given at subsection 13.30.020 of this code.

CLEAN WATER ACT: Has the same meaning as that given at subsection 13.30.020 of this code.

CONVEYANCE: Has the same meaning as that given at subsection 13.30.020 of this code

CONVEYANCE SYSTEM: Has the same meaning as that given at subsection 13.30.020 of this code.

DISCHARGE: Has the same meaning as that given at subsection 13.30.020.

DISCHARGER: Has the same meaning as that given at subsection 13.30.020 of this code.

DRAINAGE SYSTEM OR SYSTEM: Has the same meaning as that given at subsection 13.30.020 of this code.

HAZARDOUS MATERIALS: Has the same meaning as that given at subsection 13.30.020 of this code.

ILLICIT CONNECTION: Has the same meaning as that given at subsection 13.30.020 of this code.

ILLICIT DISCHARGE: Has the same meaning as that given at subsection 13.30.020 of this code.

INDUSTRIAL ACTIVITY: Has the same meaning as that given at subsection 13.30.020 of this code.

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4): Those portions of the city drainage system that discharge to the waters of the United States and are subject to the city's NPDES stormwater discharge permit.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER DISCHARGE PERMIT: Has the same meaning as that given at subsection 13.30.020 of this code.

NON-STORMWATER DISCHARGE: Has the same meaning as that given at subsection 13,30,020 of this code.

NOTICE OF INTENT (NOI): Electronic or written notice completed under provisions of the federal construction general permit and filed with the EPA in accordance with current requirements.

PERSON: Any individual, firm, association, club, organization, corporation, partnership, business trust, company or other entity which is recognized by law as the subject of rights or duties.

POLLUTANT: Has the same meaning as that given at subsection 13.30.020 of this code.

POLLUTANTS OF CONCERN: Objects and materials identified in the Clean Water Act 303(d) are: sediment, oil and grease, coliform bacteria (E. coli), nitrogen, phosphorus, metals and temperatures.

PREMISES: Any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.

STORMWATER: Has the same meaning as that given at subsection 13.30.020 of this code.

STORMWATER MANAGEMENT: The process of collection, conveyance, storage, treatment, and disposal of stormwater to ensure control of the magnitude and frequency of runoff and to

minimize the hazards associated with flooding. Also includes implementing controls to reduce the discharge of pollutants including management practices, control techniques and systems, design and engineering methods.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP): A document which describes the best management practices and activities to be implemented by a person to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to stormwater, stormwater conveyance systems, and/or receiving waters to the maximum extent practicable.

WASTEWATER: Any water or other liquid, other than uncontaminated stormwater, discharged from a facility.

WATERCOURSE: Any natural or artificially managed channel through which water flows on a regular or routine basis.

WATERS OF THE UNITED STATES: Those waters described in the context of wetlands and interstate commerce described at 33 CFR 328.

13.32.040: APPLICABILITY:

This chapter applies to all water directly or indirectly entering the drainage system that is generated on any developed or undeveloped lands unless explicitly exempted by the city or an authorized enforcement agency.

13.32.050: ADMINISTRATION:

The administrator will administer, implement, and enforce the provisions of this chapter.

13.32.060: DISCLAIMER:

The standards established by this chapter are minimum standards. As such compliance by any person with this chapter does not guarantee that there will be no contamination, pollution, or unauthorized discharge of pollutants. This chapter does not create liability on the part of the city, any agent or employee thereof for any damages that result from reliance on this chapter or any administrative decision lawfully made thereunder.

13.32.070: DISCHARGE REGULATIONS:

No person shall directly or indirectly discharge non-stormwater to the drainage system except where such discharges satisfy one of the following three (3) conditions:

A. The non-stormwater discharges are in compliance with a separate NPDES permit, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted by the city for any discharge to the storm drain system.

- B. The non-stormwater discharges result from a spill and are the result of an unusual and severe weather event where reasonable and prudent measures have been taken to minimize the impact of such discharge; or consist of emergency discharges required to prevent imminent threat to human health or severe property damage, provided that reasonable and prudent measures have been taken to minimize the impact of such discharges.
- C. The non-stormwater discharges satisfy all of the following conditions:
- 1. The discharges consist of uncontaminated water line flushing; potable water sources; landscape irrigation (provided all pesticides, herbicides and fertilizer have been applied in accordance with the manufacturer's instructions); flows from riparian habitats and wetlands; diverted stream flows; springs; rising groundwater; uncontaminated groundwater infiltration (as defined at 40 CFR 35.2005(20)) to separate storm sewers; uncontaminated pumped groundwater or spring water; foundation and footing drains (where flows are not contaminated with process materials such as solvents); uncontaminated air conditioning or compressor condensate; water from crawl space pumps; individual residential car washing; dechlorinated swimming pool discharges; routine external building wash down which does not use detergents; street and pavement wash waters, where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed); fire hydrant flushing; dye testing: or flows from emergency firefighting activities; and
- 2. The discharges are not sources of pollution to waters of the United States, as described in IDAPA 58.01.02.200. For purposes of this provision, a discharge is considered a source of pollution to waters of the United States if it:
- a. Contains hazardous materials in concentrations found to be of public health significance or to impair beneficial uses in receiving waters. (Hazardous materials are those that are harmful to humans and animals from exposure, but not necessarily ingestion.);
- b. Contains toxic substances in concentrations that impair designated beneficial uses in receiving waters. (Toxic substances are those that can cause disease, malignancy, genetic mutation, death, or similar consequences.);
- c. Contains deleterious materials in concentrations that impair designated beneficial uses in receiving waters. (Deleterious materials are generally substances that taint edible species of fish, cause taste in drinking waters, or cause harm to fish or other aquatic life.);
- d. Contains radioactive materials or radioactivity at levels exceeding the values listed in 10 CFR part 20 in receiving waters;
- e. Contains floating, suspended, or submerged matter of any kind in concentrations causing nuisance or objectionable conditions or in concentrations that may impair designated beneficial uses in receiving waters;
- f. Contains excessive nutrients that can cause visible slime growths or other nuisance aquatic growths that impair designated beneficial uses in receiving waters;

- g. Contains oxygen demanding materials in concentrations that would result in anaerobic water conditions in receiving waters; or
- h. Contains sediment above quantities specified in IDAPA 58.01.02.250.02(e) or in the absence of specific sediment criteria, above quantities that impair beneficial uses in receiving waters; or
- i. Contains material in concentrations that exceed applicable natural background conditions in receiving waters (IDAPA 58.01.02.200.09). Temperature levels may be increased above natural background conditions when allowed under IDAPA 58.01.02.401.

13.32.080: PROHIBITION OF ILLICIT CONNECTIONS:

- A. The construction, use, maintenance or continued existence of illicit connections to the drainage system is prohibited.
- B. This prohibition expressly includes, without limitation, illicit connections made prior to the enactment of this chapter, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.
- C. A person is considered to be in violation of this chapter if the person connects a line conveying sewage or other non-stormwater discharges to the drainage system, or allows such a connection to continue, without written approval from the city.

13.32.090: SUSPENSION OF MUNICIPAL SEPARATE STORM SEWER SYSTEM ACCESS:

- A. Suspension Due to Illicit Discharges in Emergency Situations: The city may, without prior notice, suspend drainage system access to a person or entity when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, or to the health or welfare of persons, or to the drainage system or waters of the United States. If the violator fails to comply with a suspension order issued in an emergency, the city may take such steps as deemed necessary to prevent or minimize damage to the drainage system or waters of the United States, or to minimize danger to persons.
- B. Termination Due to the Detection of Illicit Discharge: Any person discharging to the drainage system in violation of this chapter may have their drainage system access terminated if such termination would abate or reduce an illicit discharge. The city will notify the violator of the proposed termination of its drainage system access. Notification will be made in writing by certified mail to the owner of the property from which the illicit discharge is being made at the last known mailing address of said property owner on record with the Kootenai County assessor. The notice will include a description of the violation and set forth the time allowed for compliance.

C. Written Approval Required For Reinstatement: Written approval from the city must be obtained prior to reinstating or reconnecting any access to the drainage system that was terminated as authorized under this section.

13.32.100: INDUSTRIAL OR CONSTRUCTION ACTIVITY DISCHARGES:

Any person subject to an industrial or construction activity NPDES stormwater discharge permit must comply with all provisions of such permit. Proof of compliance with the permit may be required by the city prior to allowing of discharges to the drainage system.

13.32.110: MONITORING OF DISCHARGES:

A. Applicability: This section applies to all facilities that have stormwater discharges associated with commercial, industrial activity and/or construction activity.

B. Access to Facilities:

- 1. The administrator must be permitted to enter and inspect facilities subject to regulation under this chapter as often as may be necessary to determine compliance with this chapter. If a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger must make the necessary arrangements to allow access to the administrator.
- 2. Facility operators must allow the administrator ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records that must be kept under the conditions of an NPDES permit to discharge stormwater, and the performance of any additional duties as defined by state and federal law related to said discharges.
- 3. The city has the right to set up on any permitted facility such devices as are necessary in the opinion of the administrator to conduct monitoring and/or sampling of the facility's stormwater discharge.
- 4. The city has the right to require the discharger to install monitoring equipment as necessary. The facility's sampling and monitoring equipment must be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure stormwater flow and quality must be calibrated as required by the manufacturer's operation manual to ensure their accuracy.
- 5. Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled must be promptly removed by the operator at the written or oral request of the administrator and may not be replaced. The costs of clearing such access will be borne by the operator.
- 6. Unreasonable delays in allowing the administrator access to a permitted facility is a violation of a stormwater discharge permit and of this chapter.

7. If the administrator has been refused access to any part of the premises from which stormwater is discharged, and he/she is able to demonstrate probable cause to believe that there may be a violation of this chapter, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this chapter or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, he or she may seek issuance of a search warrant from any court of competent jurisdiction.

13.32.120: NOTIFICATION OF SPILLS:

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation, has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into stormwater, the drainage system or waters of the U.S., that person must take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of a release of hazardous materials that person must immediately notify emergency response agencies and the Idaho Department of Environmental Quality of the occurrence via emergency dispatch services. In the event of a release of nonhazardous materials, the person must notify the authorized enforcement agency in person or by phone or facsimile no later than the next business day. Notifications in person or by phone shall be confirmed by written notice addressed and mailed to the city engineer within three (3) business days of the phone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of the establishment must also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records must be retained for at least three (3) years from the date of the discharge.

13.32.130: VIOLATIONS CONSTITUTE MISDEMEANORS:

The knowing violation of any provision or failure to comply with any requirement of this chapter shall constitute a misdemeanor punishable as provided in chapter 1.28 of this code.

13.32.140: ACTS RESULTING IN VIOLATION OF FEDERAL LAWS AND REGULATIONS:

Any person who violates any provision of this chapter, or discharges any pollutant or causes pollution, may also be in violation of federal laws or regulations, and may be subject to the sanctions of those laws or regulations, including civil or criminal penalties, notwithstanding any legal action taken by the city.

SECTION 4. That a new Chapter 13.35, entitled Drainage System Utility, is hereby added to the Coeur d'Alene Municipal Code as follows:

13.35.010: AUTHORIZATION:

This chapter is enacted pursuant to the authority vested in the city by Article XII, Section 2 of the Idaho Constitution, the Idaho Revenue Bond Act (I.C. 50-1027 – 50-1042) and Idaho Code Sections 50-301, 50-333 and 63-1311.

13.35.020: PURPOSE:

The purposes of this chapter are:

- 1. To equitably allocate the operation and maintenance expenses of the drainage system to those served by the system in relation to the service received from the system, including meeting all mandated retention and treatment standards for stormwater.
- 2. To provide for the establishment of system service fees and charges and provide that the fees and charges collected are set aside and designated solely for use for the maintenance, operations, improvements, regulatory requirements, and program costs of the system.
- 3. To provide that all services mandated or authorized by this chapter be furnished at the lowest possible cost.
- 4. To establish and enforce regulations and implement programs necessary and/or convenient to comply with the requirements of the city's NPDES discharge permit as well as the rules governing collection, treatment, detention and disposal of stormwater over the Spokane Valley-Rathdrum Prairie Aquifer.
- 5. To establish a drainage system utility to operate and maintain the city's drainage system and to regulate stormwater and drainage issues within the city.

13.35.030: DEFINITIONS:

For purposes of this chapter the following terms and acronyms shall have the meaning herein set forth unless the text of the use of the term clearly requires otherwise:

ADMINISTRATOR or DRAINAGE UTILITY ADMINISTATOR: The person serving under the direction of the deputy city administrator who is charged with supervising and overseeing the drainage system utility and its regulatory functions.

DRAINAGE SYSTEM or SYSTEM: Has the same meaning as that given at subsection 13.30.020 of this code.

IMPERVIOUS SURFACE: has the same meaning as that given at subsection <u>17.02.070A</u> of this code.

PERMIT: The current national pollutant discharge elimination system (NPDES) permit issued to the city by the environmental protection agency in compliance with the provisions of the clean water act, 33 USC section 1251 et seq., as amended by the water quality act of 1987, PL 100-4, for stormwater discharges from small municipal separate storm sewer systems also known and referred to as an MS4 permit.

UTILITY: The drainage system utility created by this chapter.

13.35.040: APPLICABILITY:

All property within the corporate limits of the city containing impervious surfaces that drains stormwater into the city's drainage system is subject to this chapter.

13.35.050: DRAINAGE SYSTEM UTILITY CREATED:

- A. Utility Created: There is hereby created and established a drainage system utility for the city. The utility will have regulatory authority and responsibility for planning, design, construction, maintenance, administration, operation of and the services provided by the city's drainage system.
- B. Utility's Regulatory Functions: The drainage system utility is charged with administering and enforcing the city's Stormwater Management (Municipal Code Chapter 13.30) and Illicit Discharge and Drainage System Connection (Municipal Code Chapter 13.32) ordinances, which should be referenced in conjunction with this chapter.

13.35.060: UTILITY ADMINISTRATION:

- A. Drainage System Utility Administration: The utility shall be administered under the direction of the city administration. The drainage system utility will be administered in a manner consistent with the city's water and wastewater utilities.
- B. Utility Administrator: The utility shall be under the supervision of the drainage system utility administrator who shall serve in such capacity under the direction of the deputy city administrator.
- C. Annual Reports: In order for the city council to exercise its authority under I.C. 50-1031, the utility shall provide the city council with an annual report of the activities of the utility during the preceding year and a projection of the upcoming year's priorities.

13.35.070: POLICIES AND PROCEDURES:

The administrator is authorized to establish and update, from time to time, written policies and procedures to implement the provisions of this chapter.

13.35.080: UTILITY FEE:

- A. Drainage System Utility Fee: The city may establish a system of periodic utility fees and charges proportionate to the costs of providing services to a property in accordance with the costs of the operation and maintenance of the city's system, including administrative, regulation, and enforcement costs and for any redemption of bonds that are used to finance any system improvement.
- B. Fee Established by Resolution: The fee authorized by this chapter will be set by resolution of the city council.

- C. Basis of Fee: The fee authorized by this chapter will be based on the service a drainage system utility customer receives. Such service shall be determined by the contribution of stormwater runoff into the drainage system. Contribution to the system will be determined by stormwater runoff from any impervious surface area on the property that drains into the city's drainage system.
- D. Exemption from Fee: Properties that retain all stormwater runoff on site or that do not receive any drainage services from the system are exempt from the fee authorized by this chapter.
- E. Additional Development of Property: The utility will recalculate the fee for each property, including reviewing whether the property is exempt, each time additional development occurs on the property that would either increase or decrease the amount of the fee. The recalculation of the fee will be triggered by application for a building or site development permit.
- F. Request to Recalculate Fee: A person subject to the drainage system fee who believes that a particular assigned fee is based on an incorrect calculation, that the subject property does not receive any drainage services from the system or is included in an incorrect fee zone or category, may submit a written request that the utility recalculate the fee within thirty (30) days after the fee is established or increased. The request must identify the basis for disagreement with the assessed fee and be accompanied by relevant supporting documentation. The utility shall recalculate the fee and notify the requestor, in writing, no later than thirty (30) calendar days following receipt of the completed written request for recalculation whether the fee will be adjusted.
- G. Appeal of Fee Recalculation: A person dissatisfied with the utility's recalculation of their fee allowed under subsection F of this section may appeal the utility's determination to the city council by submitting a written appeal to the city clerk within thirty (30) calendar days after the utility issues its decision. The request must identify the error(s) committed by the utility in recalculating the fee and any other basis for claim of incorrect calculation and be accompanied by relevant supporting documentation. The city council will not hold a public hearing on the appeal but will meet and review all submitted information during a properly noticed public meeting and make a determination on the appeal. A final written decision from the council will be issued by the city council no later than thirty (30) calendar days following receipt of the completed written request for recalculation unless the appellant agrees to an extension.
- H. Refund of Overpayment: The city will refund any drainage system fee overpayment within thirty (30) calendar days if either the utility or the City Council determines that a drainage system fee was improperly calculated as allowed by this section.

13.35.090: UTILITY BILLING:

All billings for utility charges assessed under the provisions of this chapter will be billed and collected in the same manner as sewer charges under chapter 13.08 of this code as it relates to utility billing, payment, delinquency and penalty provisions.

13.35.100: DRAINAGE SYSTEM UTILITY FUND AND EXPENDITURES:

- A. Segregation of Funds: All fees and charges received and collected under authority of this chapter shall be deposited and credited to a special fund to be designated as the drainage system fund.
- B. Accounting of Receipts and Expenditures: The accounts of the fund created by this section shall show all receipts and expenditures for the maintenance, construction, operation, upkeep and repair of the city's drainage system, including the payment of any system bonds issued by the city, which, from time to time, may be outstanding.
- C. Expenditure on System Expenses Only: All funds generated by this chapter will only be expended on the operation, maintenance and other expenses, including regulatory compliance, of the drainage system. No general street maintenance such as filling potholes, repaving, striping, winter sanding or other general fund expenditures may be charged to the drainage system fund. However, repair and replacement of curbs and gutters and removal of pollutants from the drainage system via sweeping or other methods is authorized in order to maintain the integrity of the drainage system and comply with applicable regulations. The drainage system administrator and the finance director are charged with adopting additional policies and guidelines to ensure that drainage system funds are only spent on valid drainage system expenses.
- D. Availability of Deposited Funds: As provided by law, when budgeted and appropriated, the funds and credits to the account of the drainage system utility fund shall be available for the payment of the requirements for the maintenance, operation, repairs, and upkeep of the system, compliance with the permit, and to the extent legally available for payment into a sinking fund established for the payment of the principal of and interest of any general obligation system bonds which shall from time to time be outstanding.
- E. Independence from the General Fund: The drainage system utility shall operate independently of the city's general fund and shall have the same relationship to the city as other city utilities. Upon creation of the utility, the city's drainage facilities and assets, other than streets, shall be transferred to the utility in accordance with governmental accounting standards board (GASB) financial reporting principles.
- **SECTION 5.** All ordinances and parts of ordinances in conflict with this ordinance are hereby repealed.
- SECTION 6. Neither the adoption of this ordinance nor the repeal of any ordinance shall, in any manner, affect the prosecution for violation of such ordinance committed prior to the effective date of this ordinance or be construed as a waiver of any license or penalty due under any such ordinance or in any manner affect the validity of any action heretofore taken by the City of Coeur d'Alene City Council or the validity of any such action to be taken upon matters pending before the City Council on the effective date of this ordinance.

SECTION 7. The provisions of this ordinance are severable and if any provision, clause, sentence, subsection, word or part thereof is held illegal, invalid, or unconstitutional or inapplicable to any person or circumstance, such illegality, invalidity or unconstitutionality or inapplicability shall not affect or impair any of the remaining provisions, clauses, sentences, subsections, words or parts of this ordinance or their application to other persons or circumstances. It is hereby declared to be the legislative intent that this ordinance would have been adopted if such illegal, invalid or unconstitutional provision, clause sentence, subsection, word, or part had not been included therein, and if such person or circumstance to which the ordinance or part thereof is held inapplicable had been specifically exempt therefrom.

SECTION 8. After its passage and adoption, a summary of this Ordinance, under the provisions of the Idaho Code, shall be published once in the official newspaper of the City of Coeur d'Alene, and upon such publication shall be in full force and effect.

Passed under suspension of rules upon which a roll call vote was duly taken and duly enacted an ordinance of the City of Coeur d'Alene at a regular meeting of the City Council on December 4, 2012.

APPROVED, ADOPTED and SIGNED this 4th day of December, 2012.

Sandi Bloem, Mayor

ATTEST:

Susan K. Weathers, City Clerk

SUMMARY OF COEUR D'ALENE ORDINANCE NO. 3455 Title 13.30 Stormwater Management Ordinance

AN ORDINANCE AMENDING THE MUNICIPAL CODE OF THE CITY OF COEUR D'ALENE, KOOTENAI COUNTY, IDAHO, REPEALING CHAPTERS 13.30, 13.32 AND 13.35 AND ADOPTING NEW CHAPTERS 13.30, 13.32 AND 13.35 TO ESTABLISH STORMWATER MANAGEMENT REGULATIONS, CONTROL ILLICIT DISCHARGE AND ESTABLISH A DRAINAGE UTILITY; PROVIDING DEFINITIONS AND PURPOSE STATEMENTS; REQUIRING STORMWATER MANAGEMENT PLANS; ESTABLISHING PERFORMANCE STANDARDS AND DESIGN CRIFERIA; REQUIRING A GUARANTEE OF STORMWATER SYSTEM INSTALLATION AND REQUIRING INSPECTIONS; AUTHORIZING ADOPTION OF ADDITIONAL POLICIES, PROCEDURES, BEST MANAGEMENT PRACTICES AND OTHER SUPPLEMENTAL MATERIALS; REQUIRING SYSTEM MAINTENANCE; ESTABLISHING REGULATIONS GOVERNING DISCHARGE TO THE DRAINAGE SYSTEM AND PROHIBITING ILLICIT CONNECTIONS AND DISCHARGES TO THE DRAINAGE SYSTEM; AUTHORIZING ACCESS TO REGULATED FACILITIES; REQUIRING NOTIFICATION OF SPILLS; ESTABLISHING A DRAINAGE SYSTEM UTILITY AND APPROVING ADMINISTRATION OF THE UTILITY: AUTHORIZING A DRAINAGE SYSTEM UTILITY FEE AND ESTABLISHING A PROCESS TO APPEAL THE AMOUNT OF FEE; REQUIRING THAT DRAINAGE SYSTEM FEES BE SEGREGATED FROM THE GENERAL FUND AND ONLY EXPENDED ON DRAINAGE SYSTEM COSTS; ESTABLISHING ENFORCEMENT PROVISIONS AND PENALTIES FOR NON-PAYMENT OF FEES; PROVIDING THAT VIOLATIONS OF THE STORMWATER MANAGEMENT AND ILLICIT DISCHARGE AND DRAINAGE SYSTEM CONNECTION ORDINANCES ARE MISDEMEANORS PUNISHABLE BY A FINE OF NOT MORE THAN \$1,000 DOLLARS OR BY IMPRISONMENT NOT TO EXCEED 180 DAYS OR BOTH; REPEALING ALL ORDINANCES AND PARTS OF ORDINANCES IN CONFLICT HEREWITH; PROVIDING A SEVERABILITY CLAUSE. THE ORDINANCE SHALL BE EFFECTIVE UPON PUBLICATION OF THIS SUMMARY. THE FULL TEXT OF THE SUMMARIZED ORDINANCE NO. 3455 IS AVAILABLE AT COEUR D'ALENE CITY HALL, 710 E. MULLAN AVENUE, COEUR D'ALENE, IDAHO 83814 IN THE OFFICE OF THE CITY CLERK.

Susan K. Weathers, City Clerk

Publish December 12, 2012

STATEMENT OF LEGAL ADVISOR

I, Warren J. Wilson, am a Deputy City Attorney for the City of Coeur d'Alene, Idaho. I have examined the attached summary of Coeur d'Alene Ordinance No. 3455, Title 13.30 Stormwater Management Ordinance, and find it to be a true and complete summary of said ordinance which provides adequate notice to the public of the context thereof.

DATED this 4th day of December, 2012.

Warren J. Wilson, Chief Deputy City Attorney

MONITORING ANALYSIS Appendix 4

CITY OF COEUR D'ALENE STORMWATER MONITORING ANALYTICAL REPORT FOR 2012 SAMPLES STATION 1 - 19TH STREET

SAMPLE DATED RESULTS (SDR)

UNIT 1-Feb-12 21-Mar-12 26-Apr-12 13-Jun-12 21-Aug-12 15-Oct-12

9.0000 7.3000 7.0600 4.9900 33.2000 15.3000 mg/L Calcium 0.0159 0.0099 0.0191 0.0152 <0.0075 < 0.0075 Lead mg/L 4.6400 mg/L 2.9100 1.8000 2.8900 1.7000 2.3200 Magnesium 0.0719 0.0641 <.01 0.0758 mg/L 0.1550 0.0872

25.6000 29,6000 19.5000 102.0000 47.9000 Hardness (as CaCO3) mg/L 34.5000 11.1000 0.5010 0.6360 0.6740 2.2700 2.6400 Total Nitrogen mg/L 922.0000 12.0000 83.0000 41.0000 46.0000 7.0000 Total Susp. Solids mg/L 0.2020 0.6470 0.5620 Phosphorus mg/L 1.6900 0.4640 0.7090 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 PCB mg/L

Note: If the sample result shows 0, the result is less than the reporting limit.

POLLUTANT

TOTAL POLLUTANT LOADING - LBS

MONTH	FLOW Flow-m ³	Calcium	Lead	Magnesium	Zinc	Hardness	Total Nitrogen	Total Susp Solids	Phosphorus	PCB
JANUARY	8208	162.86	0.29	52.66	2.80	624.30	200.86	1501.93	30.58	0.00
FEBRUARY	41871	673.86	0.91	166.16	6.64	2363.13	46.25	3784.70	18.65	0.00
MARCH	15640	251.71	0.34	62.06	2.48	882.70	17.27	1413.69	6.97	0.00
APRIL	6962	108.36	0.29	44.36	1.34	454.32	9.76	14151.39	7.12	0.00
MAY	29756	327.35	1.00	111.52	4.21	1279.21	44.21	3017.63	46.51	0.00
JUNE	19129	210.44	0.64	71.69	2.70	822.36	28.42	1939.92	29.90	0.00
JULY	3341	244.54	0.00	34.18	0.00	751.30	16.72	88.39	4.77	0.00
AUGUST	2023	148.07	0.00	20.69	0.00	454.92	10.12	53.52	2.89	0.00
SEPTEMBER	10534	355.32	0.00	53.88	1.76	1112.41	61.31	162.56	13.05	0.00
OCTOBER	31905	1076.18	0.00	163.19	5.33	3369.21	185.69	492.37	39.53	0.00
NOVEMBER	32129	1083.73	0.00	164.33	5.37	3392.87	187.00	495.83	39.81	0.00
DECEMBER	32106	1082.96	0.00	164.21	5.37	3390.44	186.86	495.47	39.78	
TOTAL	233604	5725.38	3.47	1108.93	37.99	18897.15	994.49	27597.41	279.55	0.00

APPENDIX 4

CITY OF COEUR D'ALENE STORMWATER MONITORING ANALYTICAL REPORT FOR 2012 SAMPLES STATION 2 - BELLERIVE

SAMPLE DATED RESULTS (SDR)

POLLUTANT	UNIT 1-Feb-12		21-Mar-12	26-Apr-12	13-Jun-12	21-Aug-12	15-Oct-12	
Calcium	mg/L	16.8000	7.1600	5.1600	5.6900	40.8000	12.8000	
Lead	mg/L	0.0245	0.0080	0.0075	0.0093	0.0301	0.0076	
Magnesium	mg/L	9.1200	2.0500	1.7800	2.0000	11.0000	2.8400	
Zinc	mg/L	0.3190	0.0917	0.0789	0.0802	0.6380	0.1810	
Hardness (as CaCO3)	mg/L	79.4000	26.3000	20.2000	22.4000	147.0000	43,7000	
Total Nitrogen	mg/L	11.1000	<0.500	<0.500	0.9380	10.0000	2.3300	
Total Susp. Solids	mg/L	263.0000	117,0000	230.0000	69.0000	103.0000	28.0000	
Phosphorus	mg/L	0.5460	0.1830	0.3080	0.2820	0.8530	0.4230	
PCB	mg/L	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	

Note: If the sample result shows 0, the result is less than the reporting limit.

TOTAL POLLUTANT LOADING - LBS

MONTH	FLOW Flow-m ³	Calcium	Lead	Magnesium	Zinc	Hardness	Total Nitrogen	Total Susp Solids	Phosphorus	PCB
JANUARY	5405	200.19	0.29	108.67	3.80	946.13	132.27	3133.90	6.51	0.00
FEBRUARY	29602	467.27	0.52	133.79	5.98	1716.37	0.00	7635.56	11.94	0.00
MARCH	10394	164.07	0.18	46.98	2.10	602.66	0.00	2681.04	4.19	0.00
APRIL	5420	61.66	0.09	21.27	0.94	241.37	0.00	2748.28	3.68	0.00
MAY	20814	261.10	0.43	91.77	3.68	1027.87	43.04	3166.20	12.94	0.00
JUNE	10114	126.87	0.21	44.60	1.79	499.47	20.92	1538.53	6.29	0.00
JULY	1939	174.41	0.13	47.02	2.73	628.39	42.75	440.30	3.65	0.00
AUGUST	712	64.04	0.05	17.27	1.00	230.74	15.70	161.68	1.34	0.00
SEPTEMBER	10386	293.08	0.17	65.03	4.14	1000.61	53.35	641.12	9.69	0.00
OCTOBER	21284	600.62	0.36	133.26	8.49	2050.54	109.33	1313.85	19.85	0.00
NOVEMBER	16705	471.40	0.28	104.59	6.67	1609.39	85.81	1031.19	15.58	0.00
DECEMBER	16694	471.09	0.28	104.52	6.66	1608.33	85.75	1030.51	15.57	
TOTAL	149469	3355.80	2.99	918.77	47.99	12161.88	588.91	25522.18	111.22	0.00

APPENDIX 4