

STORM WATER MANAGEMENT PROGRAM

2017 ANNUAL REPORT



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City of Post Falls

2017 Annual Report on the Storm Water Program

MS4 Permit IDS-028231

1. INTRODUCTION

Pursuant to the referenced permit, Section IV.C. Reporting Requirements, this report summarizes the City’s storm water program activities from January 1, 2017 to December 31, 2017. The requirements of Section IV.C. are located in Appendix B.

This report is organized into sections addressing various reporting requirements.

The following table summarizes the status of each of the IV.C. reporting requirements and the location of documented data, analysis and discussion that are included in this report.

Item #	Section IV.C. Element	Current Status	Document Location
1	1.a - e	Results of the last 12 months’ monitoring are included in this report	Section 2
6	2.a.	The assessment of program control measures is included in this report	Section 3
7	2.b.	Results of the last 12 months’ monitoring are included in this report	Section 2
8	2.c.	A summary of inspections and enforcement actions is included in this report	Section 4
9	2.d.	A summary of enforcement actions received is included in this report	Section 5
10	2.e.	Copies of permit-related products and materials produced during the reporting period are included in this report	Appendix - A
11	2.f.	An implementation schedule and a summary of planned activities during the next reporting cycle is included in this report	Section 6
12	2.g.	A schedule of implementation and description of additional BMPs that may be needed to comply with water quality standards are included in this report	Section 7
13	2.h.	The City of Post Falls did not rely on another entity for any of its permit obligations during this permit cycle.	None Required

2. MONITORING RESULTS FOR CURRENT PERMIT CYCLE

2010

Stormwater/Events Data Files/Water Quality Data

	PQL	Method
TSS, mg/L	0.17	SM2340
TP, mg/L	0.05	EPA365.3
Lead, mg/L	0.002	SM3113
TN, mg/L	0.05	SM 4500N B/4110
Zinc, mg/L	0.013	SM3120
Hardness, mg/L	0.2	SM2340
PCBs, ug/L	0.2	EPA 8082

Concentration					
	4th Avenue Outfall				
Sample Date	8/12/2009	3/17/2010	5/19/2010	8/11/2010	9/16/2010
TSS, mg/L	63	192	372.00	32	84
TP, mg/L	0.179	0.070	0.573	0.578	0.274
Lead, mg/L	0.006	0.018	0.02	ND	0.011
TN, mg/L	1.01	2.27	3.02	5.19	2.54
Zinc, mg/L	0.061	0.21	0.39	0.193	0.191
Hardness, mg/L	18.2	34.7	97.80	67.8	51.3
PCBs, ug/L	ND	ND	ND	ND	ND
Discharge Volume (cubic feet)	63,538	7,820	20,528	4,888	4,888
Discharge volume (gallons)	475,261	58,494	153,546	36,559	36,559

2010

Stormwater/Events Data Files/Water Quality Data

	PQL	Method
TSS, mg/L	0.17	SM2340
TP, mg/L	0.05	EPA365.3
Lead, mg/L	0.002	SM3113
TN, mg/L	0.05	SM 4500N B/4110
Zinc, mg/L	0.013	SM3120
Hardness, mg/L	0.2	SM2340
PCBs, ug/L	0.2	EPA 8082

Concentration					
	Centennial Trail Outfall				
Sample Date	8/12/2009	3/17/2010	5/19/2010	8/11/2010	9/16/2010
TSS, mg/L	80	545	328	960	76
TP, mg/L	0.202	0.930	0.448	1.11	0.2
Lead, mg/L	0.01	0.03	0.019	0.079	0.009
TN, mg/L	1.11	4.3	2.51	7.68	2.83
Zinc, mg/L	0.176	0.79	0.289	3.05	0.284
Hardness, mg/L	25.9	85.7	49.6	290	38.9
PCBs, ug/L	ND	ND	ND	ND	ND
Discharge Volume (cubic feet)	19,202	2,363	6,204	1,477	1,477
Discharge volume (gallons)	143,631	17,678	46,404	11,049	11,049

2010

Stormwater/Events Data Files/Water Quality Data

Event Pollutant Discharge (lbs)	4th Avenue Outfall				
Sample Date	8/12/2009	3/17/2010	5/19/2010	8/11/2010	9/16/2010
TSS	249.86	93.72	476.66	9.76	25.63
TP	0.71	0.03	0.73	0.18	0.08
Lead	0.024	0.009	0.028	ND	0.003
TN	4.01	1.11	3.87	1.58	0.77
Zinc	0.24	0.10	0.50	0.06	0.06
Hardness	72.18	16.94	125.32	20.68	15.65
PCBs	ND	ND	ND	ND	ND
Discharge Volume (gallons)	475,261	58,494	153,546	36,559	36,559
Event Precip (inches)	0.65	0.08	0.21	0.05	0.04
Inches per year =	30.26	Per USBR AgriMet Station RTHI for calendar year			

*Estimate only, subject to errors and assumptions.

2010

Stormwater/Events Data Files/Water Quality Data

Event Pollutant Discharge (lbs)					
	Centennial Trail Outfall				
Sample Date	8/12/2009	3/17/2010	5/19/2010	8/11/2010	9/16/2010
TSS	95.89	80.40	127.01	88.51	7.01
TP	0.24	0.14	0.17	0.10	0.02
Lead	0.012	0.004	0.007	0.007	ND
TN	1.33	0.63	0.97	0.71	0.26
Zinc	0.21	0.12	0.11	0.28	0.03
Hardness	31.04	12.64	19.21	26.74	3.59
PCBs	ND	ND	ND	ND	ND
Discharge Volume (gallons)	143,631	17,678	46,404	11,049	11,049
Event Precip (inches)	0.65	0.08	0.21	0.05	0.05
Inches per year =	30.26	Per USBR AgriMet Station RTHI for calendar year			

*Estimate only, subject to errors and assumptions.

Estimate of Pollutant Load/Inch Precip (lbs/inch)					
	4th Avenue Outfall				
Sample Date	8/12/2009	3/17/2010	5/19/2010	8/11/2010	9/16/2010
TSS	384.40	1171.51	2269.80	195.25	640.67
TP	1.09	0.43	3.50	3.53	2.09
Lead	0.04	0.11	0.13	ND	0.08
TN	6.16	13.85	18.43	31.67	19.37
Zinc	0.37	1.28	2.39	1.18	1.46
Hardness	111.05	211.73	596.74	413.69	391.27
PCBs	ND	ND	ND	ND	ND
Discharge Volume (gallons)	475,261	58,494	153,546	36,559	36,559

*Estimate only, subject to errors and assumptions.

Estimate of Pollutant Load/Inch Precip (lbs/inch)					
	Centennial Trail Outfall				
Sample Date	8/12/2009	3/17/2010	5/19/2010	8/11/2010	9/16/2010
TSS	147.52	1004.98	604.83	1770.24	140.14
TP	0.37	1.71	0.83	2.05	0.37
Lead	0.02	0.06	0.04	0.15	ND
TN	2.05	7.93	4.63	14.16	5.22
Zinc	0.32	1.46	0.53	5.62	0.52
Hardness	47.76	158.03	91.46	534.76	71.73
PCBs	ND	ND	ND	ND	ND
Discharge Volume (gallons)	143,631	17,678	46,404	11,049	11,049

*Estimate only, subject to errors and assumptions.

2010 Average Annual Load, lbs/day*

	4th	Centennial	Total
TSS	77.29	60.81	138
TP	0.18	0.09	0.26
Lead	ND	ND	ND
TN	1.48	0.56	2.05
Zinc	0.11	0.14	0.25
Hardness	28.59	14.98	43.58
PCBs	ND	ND	ND

*Estimate only, subject to errors and assumptions.

2010 Average Annual Load, lbs/year*

	4th	Centennial	Total
TSS	28,212	22,197	50,409
TP	64.35	32.25	96.60
Lead	ND	ND	ND
TN	541.53	205.68	747.21
Zinc	40.39	51.21	91.60
Hardness	10,436	5,469	15,906
PCBs	ND	ND	ND

*Estimate only, subject to errors and assumptions.

2011

Stormwater/Events Data Files/Water Quality Data

	PQL	Method
TSS, mg/L	1	SM2540
TP, mg/L	0.025	EPA365.3
Lead, mg/L	0.01	SM3120
TN, mg/L	0.08	SM 4500N B/4110
Zinc, mg/L	0.013	SM3120
Hardness, mg/L	0.2	SM2340
PCBs, ug/L	0.2	EPA 8082

Concentration					
	4th Avenue Outfall				
Sample Date	3/10/11	5/7/11	5/15/11	7/13/11	9/27/11
TSS, mg/L	135	14	142	173	60
TP, mg/L	0.159	0.052	1.11	0.29	0.354
Lead, mg/L	0.011	ND	0.011	0.014	ND
TN, mg/L	0.75	0.58	4.88	1.19	3.5
Zinc, mg/L	0.13	0.033	0.23	0.21	0.15
Hardness, mg/L	36.5	20.1	72.40	1.36	41.1
PCBs, ug/L	ND	ND	ND	ND	ND
Discharge Volume (cubic feet)	7,820	34,213	74,290	41,055	67,448
Discharge volume (gallons)	58,494	255,910	555,690	307,092	504,508

2011

Stormwater/Events Data Files/Water Quality Data

	PQL	Method
TSS, mg/L	1	SM2540
TP, mg/L	0.025	EPA365.3
Lead, mg/L	0.01	SM3120
TN, mg/L	0.08	SM 4500N B/4110
Zinc, mg/L	0.013	SM3120
Hardness, mg/L	0.2	SM2340
PCBs, ug/L	0.2	EPA 8082

Concentration					
	Centennial Trail Outfall				
Sample Date	3/10/11	5/7/11	5/15/11	7/13/11	9/27/11
TSS, mg/L	260	18	164.00	260	54
TP, mg/L	0.261	0.062	1.02	0.345	0.223
Lead, mg/L	0.018	ND	0.013	0.02	ND
TN, mg/L	1.05	0.76	3.40	1.64	2.8
Zinc, mg/L	0.29	0.11	0.37	0.37	0.33
Hardness, mg/L	55.2	24.6	90.50	2.55	45.2
PCBs, ug/L	ND	ND	ND	ND	ND
Discharge Volume (cubic feet)	2,363	10,340	22,452	12,407	20,384
Discharge volume (gallons)	17,678	77,340	167,938	92,808	152,470

2011

Stormwater/Events Data Files/Water Quality Data

Event Pollutant Discharge (lbs)					
	4th Avenue Outfall				
Sample Date	3/10/11	5/7/11	5/15/11	7/13/11	9/27/11
TSS	65.90	29.90	658.49	443.34	252.61
TP	0.08	0.11	5.15	0.74	1.49
Lead	0.005	ND	0.051	0.036	ND
TN	0.37	1.24	22.63	3.05	14.74
Zinc	0.06	0.07	1.07	0.54	0.63
Hardness	17.82	42.92	335.74	3.49	173.04
PCBs	ND	ND	ND	ND	ND
Discharge Volume (gallons)	58,494	255,910	555,690	307,092	504,508
Event Precip (inches)	0.08	0.35	0.76	0.42	0.69
Inches per year =	26.47	Per USBR AgriMet Station RTHI for calendar year			

Estimated Load/Inch Precip (lbs/inch)					
	4th Avenue Outfall				
Sample Date	3/10/11	5/7/11	5/15/11	7/13/11	9/27/11
TSS	823.72	85.42	866.43	1055.58	366.10
TP	0.97	0.32	6.77	1.77	2.16
Lead	0.07	ND	0.07	0.09	ND
TN	4.58	3.54	29.78	7.26	21.36
Zinc	0.79	0.20	1.40	1.28	0.92
Hardness	222.71	122.64	441.76	8.30	250.78
PCBs	ND	ND	ND	ND	ND
Disch Vol (gals.)	58,494	255,910	555,690	307,092	504,508

2011

Stormwater/Events Data Files/Water Quality Data

Event Pollutant Discharge (lbs)					
	Centennial Trail Outfall				
Sample Date	3/10/11	5/7/11	5/15/11	7/13/11	9/27/11
TSS	38.36	11.62	229.84	201.36	68.71
TP	0.04	0.04	1.43	0.27	0.28
Lead	0.003	ND	0.018	0.015	ND
TN	0.15	0.49	4.76	1.27	3.56
Zinc	0.04	0.07	0.52	0.29	0.42
Hardness	8.14	15.88	126.83	1.97	57.51
PCBs	ND	ND	ND	ND	ND
Discharge Volume (gallons)	17,678	77,340	167,938	92,808	152,470
Event Precip (inches)	0.08	0.35	0.76	0.42	0.69
Inches per year =	26.47	Per USBR AgriMet Station RTHI for calendar year			

Estimated Load/Inch Precip (lbs/inch)					
	Centennial Trail Outfall				
Sample Date	3/10/11	5/7/11	5/15/11	7/13/11	9/27/11
TSS	479.44	33.19	302.42	479.44	99.58
TP	0.48	0.11	1.88	0.64	0.41
Lead	0.03	ND	0.02	0.04	ND
TN	1.94	1.40	6.27	3.02	5.16
Zinc	0.53	0.20	0.68	0.68	0.61
Hardness	101.79	45.36	166.88	4.70	83.35
PCBs	ND	ND	ND	ND	ND
Disch Vol (gals.)	17,678	77,340	167,938	92,808	152,470

2011 Average Annual Load, lbs/day*			
	4th	Centennial	Total
TSS	46	19	65
TP	0.17	0.05	0.22
Lead	0.00319	0.00136	0.00
TN	0.96	0.18	1.15
Zinc	0.07	0.03	0.10
Hardness	15.17	4.62	19.80
PCBs	ND	ND	ND
*Estimate only, subject to errors and assumptions.			

2011 Average Annual Load, lbs/year*			
	4th	Centennial	Total
TSS	16,926	6,853	23,779
TP	63.5	16.5	80.0
Lead	1.16	0.50	1.66
TN	352.09	66.87	418.96
Zinc	24.3	11.1	35.5
Hardness	5,538	1,687	7,226
PCBs	ND	ND	ND
*Estimate only, subject to errors and assumptions.			

2012

Stormwater/Events Data Files/Water Quality Data

4th Avenue Outfall

	PQL	Method
TSS, mg/L	1	SM2540
TP, mg/L	0.025	EPA365.3
Lead, mg/L	0.01	SM3120
TN, mg/L	0.08	SM 4500N B/4110
Zinc, mg/L	0.013	SM3120
Hardness, mg/L	0.2	SM2340
PCBs, ug/L	0.2	EPA 8082

Concentration					
	4th Avenue Outfall				
Sample Date	3/12/12	4/4/12	5/2/12	7/15/12	10/15/12
TSS, mg/L	208	80	30	74	120
TP, mg/L	0.27	0.14	0.09	0.26	0.21
Lead, mg/L	0.016	ND	ND	ND	ND
TN, mg/L	1.25	2.90	2.80	1.19	0.98
Zinc, mg/L	0.23	0.13	0.05	0.08	0.34
Hardness, mg/L	65.60	36.60	19.80	15.70	18.80
PCBs, ug/L	ND	ND	ND	ND	ND
Discharge Volume (cubic feet)	31,280	33,235	16,618	90,908	49,853
Discharge Volume (gallons)	233,975	248,598	124,299	679,989	372,897
Event Precip (inches)	0.32	0.34	0.17	0.93	0.51
Inches per year =	33.2	Per USBR AgriMet Station RTHI for calendar year.			

2012

Stormwater/Events Data Files/Water Quality Data

Centennial Trail Outfall

	PQL	Method
TSS, mg/L	1	SM2540
TP, mg/L	0.025	EPA365.3
Lead, mg/L	0.01	SM3120
TN, mg/L	0.08	SM 4500N B/4110
Zinc, mg/L	0.013	SM3120
Hardness, mg/L	0.2	SM2340
PCBs, ug/L	0.2	EPA 8082

Concentration					
	Centennial Trail Outfall				
Sample Date	3/12/12	4/4/12	5/2/12	7/15/12	10/15/12
TSS, mg/L	304	75	134	378	120
TP, mg/L	0.33	0.13	0.16	0.65	0.21
Lead, mg/L	0.020	ND	ND	0.021	ND
TN, mg/L	1.66	2.80	3.80	1.86	0.98
Zinc, mg/L	0.56	0.15	0.25	1.23	0.34
Hardness, mg/L	135.00	26.00	20.20	34.20	18.80
PCBs, ug/L	ND	ND	ND	ND	ND
Discharge Volume (cubic feet)	9,453	10,044	5,022	27,474	15,066
Discharge Volume (gallons)	70,711	75,130	37,565	205,502	112,695
Event Precip (inches)	0.32	0.34	0.17	0.93	0.51
Inches per year =	33.2	Per USBR AgriMet Station RTHI for calendar year.			

2012

Event Pollutant Discharge (lbs)					
4th Avenue Outfall					
Sample Date	3/12/12	4/4/12	5/2/12	7/15/12	10/15/12
TSS	406.12	165.96	31.12	419.91	373.42
TP	0.52	0.28	0.09	1.48	0.66
Lead	0.03	ND	ND	ND	ND
TN	2.44	6.02	2.90	6.75	3.06
Zinc	0.45	0.27	0.05	0.44	1.06
Hardness	128.09	75.93	20.54	89.09	58.50
PCBs	ND	ND	ND	ND	ND
Discharge Volume (gallons)	233,975	248,598	124,299	679,989	372,897
Event Precip (inches)	0.32	0.34	0.17	0.93	0.51
Inches per year =	33.2	Per USBR AgriMet Station RTHI for calendar year			
Estimated Load/Inch Precip (lbs/inch)					
4th Avenue Outfall					
Sample Date	3/12/12	4/4/12	5/2/12	7/15/12	10/15/12
TSS	1269	488	183	452	732
TP	1.62	0.84	0.54	1.59	1.30
Lead	0.10	ND	ND	ND	ND
TN	7.63	17.69	17.08	7.26	6.00
Zinc	1.40	0.79	0.31	0.47	2.07
Hardness	400.3	223.3	120.8	95.8	114.7
PCBs	ND	ND	ND	ND	ND
Disch Vol (gals.)	233,975	248,598	124,299	679,989	372,897

2012

Event Pollutant Discharge (lbs)					
	Centennial Trail Outfall				
Sample Date	3/12/12	4/4/12	5/2/12	7/15/12	10/15/12
TSS	179.38	47.02	42.01	648.24	112.85
TP	0.19	0.08	0.05	1.12	0.20
Lead	0.01	ND	ND	0.00	ND
TN	0.98	1.76	1.19	3.19	0.93
Zinc	0.33	0.09	0.08	2.11	0.32
Hardness	79.66	16.30	6.33	58.65	17.68
PCBs	ND	ND	ND	ND	ND
Discharge Volume (gallons)	70,711	75,130	37,565	205,502	112,695
Event Precip (inches)	0.32	0.34	0.17	0.93	0.51
Inches per year =	33.2	Per USBR AgriMet Station RTHI for calendar year			

Estimated Load/Inch Precip (lbs/inch)					
	Centennial Trail Outfall				
Sample Date	3/12/12	4/4/12	5/2/12	7/15/12	10/15/12
TSS	561	138	247	697	221
TP	0.61	0.23	0.30	1.20	0.39
Lead	0.04	ND	ND	0.01	ND
TN	3.06	5.16	7.01	3.43	1.81
Zinc	1.03	0.28	0.46	2.27	0.63
Hardness	248.94	47.94	37.25	63.06	34.67
PCBs	ND	ND	ND	ND	ND
Disch Vol (gals.)	70,711	75,130	37,565	205,502	112,695

2012 Average Annual Load, lbs/day*			
	4th	Centennial	Total
TSS	56.83	29.89	86.72
TP	0.11	0.04	0.15
Lead	0.00	0.00	0.0025
TN	1.01	0.34	1.35
Zinc	0.09	0.07	0.17
Hardness	17.37	7.23	24.60
PCBs	ND	ND	ND
*Estimate only, subject to errors and assumptions.			

2012 Average Annual Load, lbs/year*			
	4th	Centennial	Total
TSS	20,744	10,910	31,653
TP	39.1	15.6	54.7
Lead	0.65	0.28	0.93
TN	369.7	123.9	493.6
Zinc	33.5	26.8	60.3
Hardness	6341	2637	8978
PCBs	ND	ND	ND
*Estimate only, subject to errors and assumptions.			

2013

Stormwater/Events Data Files/Water Quality Data

4th Avenue Outfall

	PQL	Method
TSS, mg/L	1	SM2540
TP, mg/L	0.025	EPA365.3
Lead, mg/L	0.01	SM3120
TN, mg/L	0.08	SM 4500N B/4110
Zinc, mg/L	0.013	SM3120
Hardness, mg/L	0.2	SM2340
PCBs, ug/L	0.2	EPA 8082

Concentration					
	4th Avenue Outfall				
Sample Date	3/12/13	5/13/2013	7/8/2013	9/4/2013	
TSS, mg/L	208	407	550	100	
TP, mg/L	0.27	0.79	0.89	0.18	
Lead, mg/L	0.016	0.029	0.049	0.009	
TN, mg/L	1.25	5.23	3.61	1.95	
Zinc, mg/L	0.23	0.55	0.05	0.12	
Hardness, mg/L	66	82	54	24	
PCBs, ug/L	ND	ND	ND	ND	
Discharge Volume (cubic feet)	31,280	33,235	16,618	90,908	
Discharge Volume (gallons)	233,975	248,598	124,299	679,989	
Event Precip (inches)	0.08	0.60	0.28	0.15	
Inches per year =	22.51	Per USBR AgriMet Station RTHI for calendar year.			

2013

Stormwater/Events Data Files/Water Quality Data

Centennial Trail Outfall

	PQL	Method
TSS, mg/L	1	SM2540
TP, mg/L	0.025	EPA365.3
Lead, mg/L	0.01	SM3120
TN, mg/L	0.08	SM 4500N B/4110
Zinc, mg/L	0.013	SM3120
Hardness, mg/L	0.2	SM2340
PCBs, ug/L	0.2	EPA 8082

Concentration					
	Centennial Trail Outfall				
Sample Date	3/12/13	5/13/2013	7/8/2013	9/4/2013	
TSS, mg/L	304	550	840	353	
TP, mg/L	0.33	1.18	1.58	0.52	
Lead, mg/L	0.020	0.037	0.070	0.023	
TN, mg/L	1.66	9.81	5.92	2.55	
Zinc, mg/L	0.56	1.04	2.20	0.49	
Hardness, mg/L	135	190	122	71	
PCBs, ug/L	ND	ND	ND	ND	
Discharge Volume (cubic feet)	9,453	10,044	5,022	27,474	
Discharge Volume (gallons)	70,711	75,130	37,565	205,502	
Event Precip (inches)	0.08	0.60	0.28	0.15	
Inches per year =	22.51	Per USBR AgriMet Station RTHI for calendar year.			

2013

Event Pollutant Discharge (lbs)*					
	4th Avenue Outfall				
Sample Date	3/12/13	5/13/13	7/8/13	9/4/13	
TSS	406.12	844.34	570.50	567.45	
TP	0.52	1.63	0.92	1.01	
Lead	0.03	0.01	0.01	0.01	
TN	2.44	10.85	3.74	11.07	
Zinc	0.45	1.15	0.05	0.68	
Hardness	128.09	169.28	55.81	135.62	
PCBs	ND	ND	ND	ND	
Discharge Volume (gallons)	233,975	248,598	124,299	679,989	
Event Precip (inches)	0.08	0.60	0.28	0.15	
Inches per year =	22.51	Per USBR AgriMet Station RTHI for calendar year			
*Estimate only, subject to errors and assumptions.					

Estimated Load/Inch Precip (lbs/inch)*					
	4th Avenue Outfall				
Sample Date	3/12/13	5/13/13	7/8/13	9/4/13	
TSS	5,077	1,407	2,038	3,783	
TP	6.49	2.72	3.28	6.73	
Lead	0.39	0.01	0.02	0.05	
TN	30.51	18.08	13.37	73.77	
Zinc	5.61	1.92	0.18	4.54	
Hardness	1601.1	282.1	199.3	904.1	
PCBs	ND	ND	ND	ND	
Disch Vol (gals.)	233,975	248,598	124,299	679,989	0
*Estimate only, subject to errors and assumptions.					

2013

Event Pollutant Discharge (lbs)*					
	Centennial Trail Outfall				
Sample Date	3/12/13	5/13/13	7/8/13	9/4/13	
TSS	179.38	344.83	263.32	605.37	
TP	0.19	0.74	0.50	0.88	
Lead	0.01	0.00	0.00	0.01	
TN	0.98	6.15	1.86	4.37	
Zinc	0.33	0.65	0.69	0.84	
Hardness	79.66	119.12	38.24	121.24	
PCBs	ND	ND	ND	ND	
Discharge Volume (gallons)	70,711	75,130	37,565	205,502	
Event Precip (inches)	0.08	0.60	0.28	0.15	
Inches per year =	22.51	Per USBR AgriMet Station RTHI for calendar year			
*Estimate only, subject to errors and assumptions.					

Estimated Load/Inch Precip (lbs/inch)*					
	Centennial Trail Outfall				
Sample Date	3/12/13	5/13/13	7/8/13	9/4/13	
TSS	2,242	575	940	4,036	
TP	2.43	1.23	1.77	5.90	
Lead	0.15	0.01	0.01	0.03	
TN	12.24	10.25	6.63	29.15	
Zinc	4.13	1.09	2.46	5.61	
Hardness	995.7590	198.5371	136.5876	808.2982	
PCBs	ND	ND	ND	ND	
Disch Vol (gals.)	70,711	75,130	37,565	205,502	0
*Estimate only, subject to errors and assumptions.					

2013 Average Annual Load, lbs/day*			
	4th	Centennial	Total
TSS	151.8	96.1	247.9
TP	0.24	0.14	0.38
Lead	0.01	0.00	0.0083
TN	1.67	0.72	2.39
Zinc	0.15	0.16	0.32
Hardness	36.84	26.39	63.22
PCBs	ND	ND	ND
*Estimate only, subject to errors and assumptions.			

2013 Average Annual Load, lbs/year*			
	4th	Centennial	Total
TSS	55,394	35,085	90,479
TP	86.6	51.0	137.6
Lead	2.13	0.89	3.02
TN	611.1	262.4	873.4
Zinc	55.1	59.8	115.0
Hardness	13,446	9,631	23,076
PCBs	ND	ND	ND
*Estimate only, subject to errors and assumptions.			

2014

Stormwater/Events Data Files/Water Quality Data

4th Avenue Outfall

	PQL	Method
TSS, mg/L	1	SM2540
TP, mg/L	0.007	EPA365.3
Lead, mg/L	0.01	SM3120
TN, mg/L	0.04	SM 4500N B/4110
Zinc, mg/L	0.01	SM3120
Hardness, mg/L	0.2	SM2340
PCBs, ug/L	0.2	EPA 8082

Concentration					
	4th Avenue Outfall				
Sample Date	3/8/14	5/4/2014	7/22/2014	9/3/2014	
TSS, mg/L	143	145	133	90	
TP, mg/L	0.21	0.27	0.45	0.23	
Lead, mg/L	0.009	0.019	0.010	0.008	
TN, mg/L	0.97	2.46	5.34	2.40	
Zinc, mg/L	0.17	0.24	0.33	0.18	
Hardness, mg/L	60	41	93	43	
PCBs, ug/L	ND	ND	ND	ND	
Discharge Volume (cubic feet)	29,325	3,910	6,843	25,415	
Discharge Volume (gallons)	219,351	29,247	51,182	190,104	
Event Precip (inches)	0.30	0.04	0.07	0.26	
Inches per year =	27.58	Per USBR AgriMet Station RTHI for calendar year.			

2014

Stormwater/Events Data Files/Water Quality Data

Centennial Trail Outfall

	PQL	Method
TSS, mg/L	1	SM2540
TP, mg/L	0.007	EPA365.3
Lead, mg/L	0.01	SM3120
TN, mg/L	0.04	SM 4500N B/4110
Zinc, mg/L	0.01	SM3120
Hardness, mg/L	0.2	SM2340
PCBs, ug/L	0.2	EPA 8082

Concentration					
	Centennial Trail Outfall				
Sample Date	3/8/14	5/4/2014	7/22/2014	9/3/2014	
TSS, mg/L	282	88	107	26	
TP, mg/L	0.30	0.18	0.50	0.01	
Lead, mg/L	0.031	0.014	0.010	0.004	
TN, mg/L	1.32	1.92	9.82	2.31	
Zinc, mg/L	0.38	0.25	0.82	0.35	
Hardness, mg/L	66	43	129	66	
PCBs, ug/L	ND	ND	ND	ND	
Discharge Volume (cubic feet)	8,862	1,182	2,068	7,681	
Discharge Volume (gallons)	66,291	8,839	15,468	57,452	
Event Precip (inches)	0.30	0.04	0.07	0.26	
Inches per year =	27.58	Per USBR AgriMet Station RTHI for calendar year.			

2014

Event Pollutant Discharge (lbs)*					
	4th Avenue Outfall				
Sample Date	3/8/14	5/4/14	7/22/14	9/3/14	
TSS	261.76	35.39	56.81	142.78	
TP	0.38	0.07	0.19	0.37	
Lead	0.02	0.00	0.00	0.00	
TN	1.78	0.60	2.28	3.81	
Zinc	0.31	0.06	0.14	0.28	
Hardness	110.01	9.93	39.76	68.53	
PCBs	ND	ND	ND	ND	
Discharge Volume (gallons)	219,351	29,247	51,182	190,104	
Event Precip (inches)	0.30	0.04	0.07	0.26	
Inches per year =	27.58	Per USBR AgriMet Station RTHI for calendar year			
*Estimate only, subject to errors and assumptions.					

Estimated Load/Inch Precip (lbs/inch)*					
	4th Avenue Outfall				
Sample Date	3/8/14	5/4/14	7/22/14	9/3/14	
TSS	873	885	812	549	
TP	1.27	1.63	2.76	1.42	
Lead	0.06	0.02	0.01	0.01	
TN	5.94	15.01	32.58	14.64	
Zinc	1.02	1.46	2.01	1.07	
Hardness	366.7	248.3	568.1	263.6	
PCBs	ND	ND	ND	ND	
Disch Vol (gals.)	219,351	29,247	51,182	190,104	0
*Estimate only, subject to errors and assumptions.					

2014

Event Pollutant Discharge (lbs)*					
	Centennial Trail Outfall				
Sample Date	3/8/14	5/4/14	7/22/14	9/3/14	
TSS	156.00	6.49	13.81	12.47	
TP	0.17	0.01	0.06	0.01	
Lead	0.02	0.00	0.00	0.00	
TN	0.73	0.14	1.27	1.11	
Zinc	0.21	0.02	0.11	0.17	
Hardness	36.62	3.14	16.65	31.45	
PCBs	ND	ND	ND	ND	
Discharge Volume (gallons)	66,291	8,839	15,468	57,452	
Event Precip (inches)	0.30	0.04	0.07	0.26	
Inches per year =	27.58	Per USBR AgriMet Station RTHI for calendar year			
*Estimate only, subject to errors and assumptions.					

Estimated Load/Inch Precip (lbs/inch)*					
	Centennial Trail Outfall				
Sample Date	3/8/14	5/4/14	7/22/14	9/3/14	
TSS	520	162	197	48	
TP	0.55	0.33	0.91	0.02	
Lead	0.06	0.00	0.00	0.00	
TN	2.43	3.54	18.11	4.26	
Zinc	0.71	0.46	1.52	0.65	
Hardness	122.0727	78.5543	237.8758	120.9663	
PCBs	ND	ND	ND	ND	
Disch Vol (gals.)	66,291	8,839	15,468	57,452	0
*Estimate only, subject to errors and assumptions.					

2014 Average Annual Load, lbs/day*			
	4th	Centennial	Total
TSS	47.1	14.0	61.1
TP	0.11	0.03	0.13
Lead	0.00	0.00	0.0023
TN	1.03	0.43	1.46
Zinc	0.08	0.05	0.13
Hardness	21.86	8.45	30.32
PCBs	ND	ND	ND
*Estimate only, subject to errors and assumptions.			

2014 Average Annual Load, lbs/year*			
	4th	Centennial	Total
TSS	17,198	5,116	22,315
TP	39.1	10.1	49.1
Lead	0.49	0.35	0.84
TN	376.0	156.3	532.4
Zinc	30.7	18.4	49.1
Hardness	7,980	3,086	11,066
PCBs	ND	ND	ND
*Estimate only, subject to errors and assumptions.			

2015

Stormwater/Events Data Files/Water Quality Data

4th Avenue Outfall

	PQL	Method
TSS, mg/L	1	SM2540
TP, mg/L	0.007	EPA365.1
Lead, mg/L	0.01	SM3120
TN, mg/L	0.04	SM 4500N B/4110
Zinc, mg/L	0.01	SM3120
Hardness, mg/L	0.2	SM2340
PCBs, ug/L	0.2	EPA 8082

Concentration					
	4th Avenue Outfall				
Sample Date	3/14/15	5/13/2015	7/11/2015	9/5/2015	
TSS, mg/L	254	75	26	5	
TP, mg/L	0.31	0.29	0.55	0.08	
Lead, mg/L	0.014	0.005	0.005	0.001	
TN, mg/L	1.38	2.00	13.00	0.57	
Zinc, mg/L	0.25	0.12	0.27	0.03	
Hardness, mg/L	46	33	88	26	
PCBs, ug/L	ND	ND	ND	ND	
Discharge Volume (cubic feet)	19,550	25,415	8,798	11,730	
Discharge Volume (gallons)	146,234	190,104	65,805	87,740	
Event Precip (inches)	0.20	0.26	0.09	0.12	
Inches per year =	Per USBR AgriMet Station PSFI for calendar year.				

2015

Stormwater/Events Data Files/Water Quality Data

Centennial Trail Outfall

	PQL	Method
TSS, mg/L	1	SM2540
TP, mg/L	0.007	EPA365.1
Lead, mg/L	0.01	SM3120
TN, mg/L	0.04	SM 4500N B/4110
Zinc, mg/L	0.01	SM3120
Hardness, mg/L	0.2	SM2340
PCBs, ug/L	0.2	EPA 8082

Concentration					
	Centennial Trail Outfall				
Sample Date	3/14/15	5/13/2015	7/11/2015	9/5/2015	
TSS, mg/L	350	111	34	6	
TP, mg/L	0.42	0.34	0.69	0.08	
Lead, mg/L	0.016	0.007	0.006	0.001	
TN, mg/L	2.02	2.58	17.90	0.65	
Zinc, mg/L	0.52	0.40	0.98	0.28	
Hardness, mg/L	60	41	112	21	
PCBs, ug/L	ND	ND	ND	ND	
Discharge Volume (cubic feet)	5,908	7,681	2,659	3,545	
Discharge Volume (gallons)	44,194	57,452	19,887	26,516	
Event Precip (inches)	0.20	0.26	0.09	0.12	
Inches per year =	0	Per USBR AgriMet Station PSFI for calendar year.			

2015

Event Pollutant Discharge (lbs)*					
	4th Avenue Outfall				
Sample Date	3/14/15	5/13/15	7/11/15	9/5/15	
TSS	309.96	118.98	14.28	3.66	
TP	0.38	0.45	0.30	0.06	
Lead	0.02	0.00	0.00	0.00	
TN	1.68	3.17	7.14	0.42	
Zinc	0.30	0.18	0.15	0.02	
Hardness	55.89	52.03	48.21	19.26	
PCBs	ND	ND	ND	ND	
Discharge Volume (gallons)	146,234	190,104	65,805	87,740	
Event Precip (inches)	0.20	0.26	0.09	0.12	
Inches per year =	20.15	Per USBR AgriMet Station PSFI for calendar year			
*Estimate only, subject to errors and assumptions.					

Estimated Load/Inch Precip (lbs/inch)*					
	4th Avenue Outfall				
Sample Date	3/14/15	5/13/15	7/11/15	9/5/15	
TSS	1,550	458	159	31	
TP	1.92	1.75	3.33	0.51	
Lead	0.09	0.00	0.00	0.00	
TN	8.42	12.20	79.32	3.46	
Zinc	1.51	0.71	1.62	0.19	
Hardness	279.5	200.1	535.7	160.5	
PCBs	ND	ND	ND	ND	
Disch Vol (gals.)	146,234	190,104	65,805	87,740	0
*Estimate only, subject to errors and assumptions.					

2015

Event Pollutant Discharge (lbs)*					
	Centennial Trail Outfall				
Sample Date	3/14/15	5/13/15	7/11/15	9/5/15	
TSS	129.08	53.22	5.64	1.33	
TP	0.15	0.16	0.12	0.02	
Lead	0.01	0.00	0.00	0.00	
TN	0.74	1.24	2.97	0.14	
Zinc	0.19	0.19	0.16	0.06	
Hardness	22.28	19.47	18.59	4.67	
PCBs	ND	ND	ND	ND	
Discharge Volume (gallons)	44,194	57,452	19,887	26,516	
Event Precip (inches)	0.20	0.26	0.09	0.12	
Inches per year =	20.15	Per USBR AgriMet Station PSFI for calendar year			
*Estimate only, subject to errors and assumptions.					

Estimated Load/Inch Precip (lbs/inch)*					
	Centennial Trail Outfall				
Sample Date	3/14/15	5/13/15	7/11/15	9/5/15	
TSS	645	205	63	11	
TP	0.77	0.63	1.28	0.14	
Lead	0.03	0.00	0.00	0.00	
TN	3.72	4.76	33.01	1.19	
Zinc	0.97	0.73	1.80	0.51	
Hardness	111.3775	74.8663	206.5278	38.9084	
PCBs	ND	ND	ND	ND	
Disch Vol (gals.)	44,194	57,452	19,887	26,516	0
*Estimate only, subject to errors and assumptions.					

2015 Average Annual Load, lbs/day*			
	4th	Centennial	Total
TSS	30.3	12.8	43.1
TP	0.1	0.0	0.14
Lead	0.0	0.0	0.0018
TN	1.4	0.6	2.02
Zinc	0.1	0.1	0.11
Hardness	16.2	6.0	22.19
PCBs	ND	ND	ND
*Estimate only, subject to errors and assumptions.			

2015 Average Annual Load, lbs/year*			
	4th	Centennial	Total
TSS	11,065	4,654	15,719
TP	37.8	14.2	52.0
Lead	0.48	0.16	0.65
TN	520.9	215.0	735.9
Zinc	20.3	20.2	40.5
Hardness	5,923	2,175	8,098
PCBs	ND	ND	ND
*Estimate only, subject to errors and assumptions.			

2016

Stormwater/Events Data Files/Water Quality Data 4th Avenue Outfall

	Units	PQL	Method
TSS	mg/L	1	SM2540D
TP	mg/L	0.01	EPA365.1
Lead	µg/L	0.03	SM3120B
TN	mg/L	0.09	SM 4500NORG B
Zinc	µg/L	0.03	SM3120B
Hardness	mg/L	0.2	SM2340
PCBs	µg/L	0.2	EPA 8082

Concentration						
	4th Avenue Outfall					
Analyte	Unit	3/3/2016	5/9/2016	7/8/2016	9/2/2016	
Temperature	°C	4	14	18	18	
TSS	mg/L	62	147	72	69	
TP	mg/L	0.14	0.47	0.29	0.32	
Lead	mg/L	0.004	0.008	0.006	0.007	
TN	mg/L	0.56	4.01	2.54	3.24	
Zinc	mg/L	0.06	0.19	0.17	0.18	
Hardness	mg/L	26	64	34	47	
PCBs	µg/L	ND	ND	ND	ND	
Discharge Volume	cubic feet	9,775	21,505	13,685	32,258	
Discharge Volume	gallons	73,117	160,858	102,364	241,286	
Event Precip	inches	0.10	0.22	0.14	0.33	
Inches per year =		23.49	Per USBR AgriMet Station PSFI for calendar year.			

2016

Stormwater/Events Data Files/Water Quality Data Centennial Trail Outfall

	Units	PQL	Method
TSS	mg/L	1	SM2540D
TP	mg/L	0.01	EPA365.1
Lead	µg/L	0.03	SM3120B
TN	mg/L	0.09	SM 4500NORG B
Zinc	µg/L	0.03	SM3120B
Hardness	mg/L	0.2	SM2340
PCBs	µg/L	0.2	EPA 8082

Concentration						
Centennial Trail Outfall						
Analyte	Unit	3/3/2016	5/9/2016	7/8/2016	9/2/2016	
Temperature	°C	5	11	17	16	
TSS	mg/L	125	180	188	143	
TP	mg/L	0.18	0.58	0.47	0.51	
Lead	mg/L	0.006	0.011	0.012	0.011	
TN	mg/L	0.90	4.58	4.08	5.33	
Zinc	mg/L	0.21	0.41	0.71	0.83	
Hardness	mg/L	28	102	42	63	
PCBs	µg/L	ND	ND	ND	ND	
Discharge Volume	cubic feet	2,954	6,499	4,136	9,749	
Discharge Volume	gallons	22,097	48,613	30,936	72,920	
Event Precip	inches	0.10	0.22	0.14	0.33	
Inches per year =		23.49	Per USBR AgriMet Station PSFI for calendar year.			

2016

Event Pollutant Discharge (lbs)*					
		4th Avenue Outfall			
Sample Date	3/3/2016	5/9/2016	7/8/2016	9/2/2016	
TSS	37.83	197.33	61.50	138.53	
TP	0.08	0.62	0.25	0.64	
Lead	0.00	0.01	0.01	0.01	
TN	0.34	5.38	2.17	6.52	
Zinc	0.04	0.26	0.14	0.37	
Hardness	15.74	85.64	29.13	94.43	
PCBs	ND	ND	ND	ND	
Discharge Volume (gallons)	73,117	160,858	102,364	241,286	
Event Precip (inches)	0.10	0.22	0.14	0.33	
Inches per year =	23.49	Per USBR AgriMet Station PSFI for calendar year			
*Estimate only, subject to errors and assumptions.					

Estimated Load/Inch Precip (lbs/inch)*					
		4th Avenue Outfall			
Sample Date	3/3/2016	5/9/2016	7/8/2016	9/2/2016	
TSS	378	897	439	420	
TP	1	3	2	2	
Lead	0	0	0	0	
TN	3	24	15	20	
Zinc	0	1	1	1	
Hardness	157	389	208	286	
PCBs	ND	ND	ND	ND	
Disch Vol (gals.)	73,117	160,858	102,364	241,286	0
*Estimate only, subject to errors and assumptions.					

2016

Event Pollutant Discharge (lbs)*					
	Centennial Trail Outfall				
Sample Date	3/3/2016	5/9/2016	7/8/2016	9/2/2016	
TSS	23.05	73.02	48.53	87.02	
TP	0.03	0.24	0.12	0.31	
Lead	0.00	0.00	0.00	0.01	
TN	0.17	1.86	1.05	3.24	
Zinc	0.04	0.17	0.18	0.51	
Hardness	0.69	41.38	10.84	38.46	
PCBs	ND	ND	ND	ND	
Discharge Volume (gallons)	22,097	48,613	30,936	72,920	
Event Precip (inches)	0.10	0.22	0.14	0.33	
Inches per year =	23.49	Per USBR AgriMet Station PSFI for calendar year			
*Estimate only, subject to errors and assumptions.					

Estimated Load/Inch Precip (lbs/inch)*					
	Centennial Trail Outfall				
Sample Date	3/3/2016	5/9/2016	7/8/2016	9/2/2016	
TSS	230	332	347	264	
TP	0	1	1	1	
Lead	0	0	0	0	
TN	2	8	8	10	
Zinc	0	1	1	2	
Hardness	7	188	77	117	
PCBs	ND	ND	ND	ND	
Disch Vol (gals.)	22,097	48,613	30,936	72,920	
*Estimate only, subject to errors and assumptions.					

2016 Average Annual Load, lbs/day*			
	4th	Centennial	Total
TSS	34.3	18.9	53.2
TP	0.1	0.1	0.17
Lead	0.0	0.0	0.0035
TN	1.0	0.4	1.46
Zinc	0.1	0.1	0.12
Hardness	16.7	6.3	23.01
PCBs	ND	ND	ND
*Estimate only, subject to errors and assumptions.			

2016 Average Annual Load, lbs/year*			
	4th	Centennial	Total
TSS	12,534	6,887	19,421
TP	43.4	18.8	62.2
Lead	0.85	0.43	1.28
TN	371.0	161.3	532.3
Zinc	21.7	23.4	45.0
Hardness	6,113	2,284	8,397
PCBs	ND	ND	ND
*Estimate only, subject to errors and assumptions.			

2017

Stormwater/Events Data Files/Water Quality Data 4th Avenue Outfall

	PQL	Method
TSS, mg/L	1	SM2540
TP, mg/L	0.007	EPA365.1
Lead, mg/L	0.01	SM3120
TN, mg/L	0.04	SM 4500N B/4110
Zinc, mg/L	0.01	SM3120
Hardness, mg/L	0.2	SM2340
PCBs, ug/L	0.2	EPA 8082

Concentration			
	4th Avenue Outfall		
Sample Date	3/2/17	5/5/2017	9/18/2017
Temperature, C°	44	58	59
TSS, mg/L	250	193	71
TP, mg/L	0.48	0.28	0.30
Lead, mg/L	0.013	0.011	0.006
TN, mg/L	1.84	2.82	1.03
Zinc, mg/L	0.25	0.18	0.10
Hardness, mg/L	178	43	29
PCBs, ug/L	ND	ND	ND
Discharge Volume (cubic feet)	23,460	7,820	43,010
Discharge Volume (gallons)	175,481	58,494	321,715
Event Precip (inches)	0.24	0.08	0.44
Inches per year =	26.84	Per USBR AgriMet Station PSFI for calendar year.	

*No significant precipitation event occurred during the months of July and August so no sample was analyzed for that period, per City's SWMP, pg. 69.

2017

Stormwater/Events Data Files/Water Quality Data Centennial Trail Outfall

	PQL	Method
TSS, mg/L	1	SM2540
TP, mg/L	0.007	EPA365.1
Lead, mg/L	0.01	SM3120
TN, mg/L	0.04	SM 4500N B/4110
Zinc, mg/L	0.01	SM3120
Hardness, mg/L	0.2	SM2340
PCBs, ug/L	0.2	EPA 8082

Concentration			
	Centennial Trail Outfall		
Sample Date	3/2/17	5/5/2017	9/18/2017
Temperature, C°	38	59	58
TSS, mg/L	453	735	113
TP, mg/L	1.04	1.65	0.39
Lead, mg/L	0.016	0.019	0.006
TN, mg/L	3.79	6.05	1.39
Zinc, mg/L	1.02	0.66	0.33
Hardness, mg/L	465	77	21
PCBs, ug/L	ND	ND	ND
Discharge Volume (cubic feet)	7,090	2,363	12,994
Discharge Volume (gallons)	53,033	17,675	97,195
Event Precip (inches)	0.24	0.08	0.44
Inches per year =	26.84	Per USBR AgriMet Station PSFI for calendar year.	

*No significant precipitation event occurred during the months of July and August so no sample was analyzed for that period, per City's SWMP, pg. 69.

2017

Event Pollutant Discharge (lbs)*			
	4th Avenue Outfall		
Sample Date	3/2/17	5/5/17	9/18/17
TSS	366.10	94.21	191.15
TP	0.70	0.14	0.81
Lead	0.02	0.01	0.02
TN	2.69	1.38	2.77
Zinc	0.37	0.09	0.28
Hardness	260.66	20.84	77.86
PCBs	ND	ND	ND
Discharge Volume (gallons)	175,481	58,494	321,715
Event Precip (inches)	0.24	0.08	0.44
Inches per year =	26.84	Per USBR AgriMet Station PSFI for calendar year	

*Estimate only, subject to errors and assumptions.

Estimated Load/Inch Precip (lbs/inch)*			
	4th Avenue Outfall		
Sample Date	3/2/17	5/5/17	9/18/17
TSS	1,525	1,178	434
TP	2.93	1.72	1.85
Lead	0.08	0.07	0.04
TN	11.23	17.21	6.28
Zinc	1.53	1.12	0.63
Hardness	1086.1	260.5	176.9
PCBs	ND	ND	ND
Disch Vol (gals.)	175,481	58,494	321,715

*Estimate only, subject to errors and assumptions.

2017

Event Pollutant Discharge (lbs)*			
	Centennial Trail Outfall		
Sample Date	3/2/17	5/5/17	9/18/17
TSS	200.48	108.41	91.65
TP	0.46	0.24	0.31
Lead	0.01	0.00	0.00
TN	1.68	0.89	1.13
Zinc	0.45	0.10	0.26
Hardness	205.79	11.34	16.71
PCBs	ND	ND	ND
Discharge Volume (gallons)	53,033	17,675	97,195
Event Precip (inches)	0.24	0.08	0.44
Inches per year =	26.84	Per USBR AgriMet Station PSFI for calendar year	

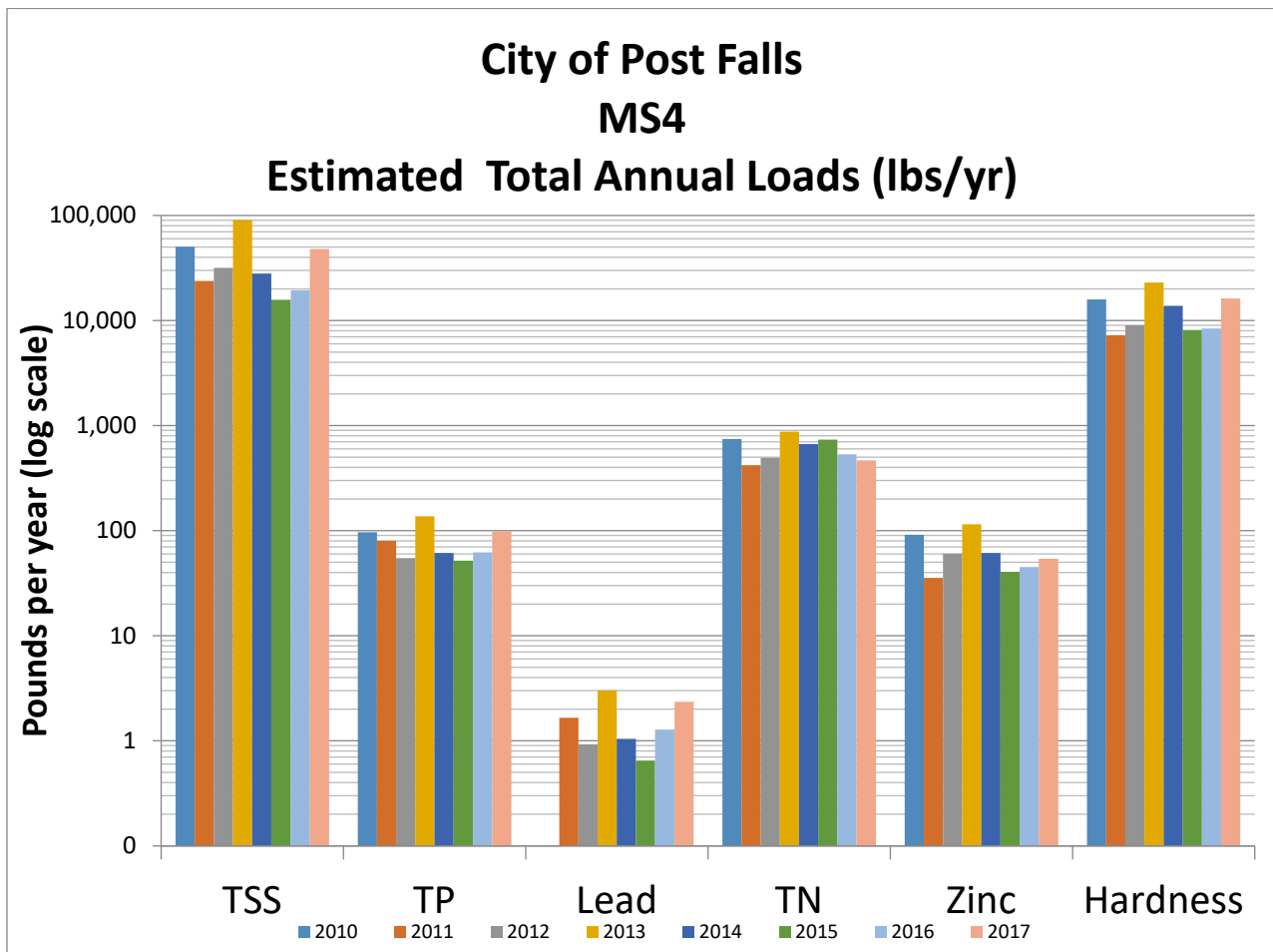
*Estimate only, subject to errors and assumptions.

Estimated Load/Inch Precip (lbs/inch)*			
	Centennial Trail Outfall		
Sample Date	3/2/17	5/5/17	9/18/17
TSS	835	1,355	208
TP	1.92	3.04	0.71
Lead	0.03	0.04	0.01
TN	6.99	11.15	2.56
Zinc	1.88	1.21	0.60
Hardness	857.4640	141.7843	37.9739
PCBs	ND	ND	ND
Disch Vol (gals.)	53,033	17,675	97,195

*Estimate only, subject to errors and assumptions.

2017 Average Annual Load, lbs/day*			
	4th	Centennial	Total
TSS	76.9	58.8	135.7
TP	0.2	0.1	0.30
Lead	0.0	0.0	0.006 4
TN	0.9	0.5	1.36
Zinc	0.1	0.1	0.17
Hardness	37.3	25.4	62.77
PCBs	ND	ND	ND
*Estimate only, subject to errors and assumptions.			

2017 Average Annual Load, lbs/year*			
	4th	Centennial	Total
TSS	28,070	21,461	49,531
TP	58.2	50.7	108.9
Lead	1.68	0.68	2.35
TN	310.6	185.2	495.9
Zinc	29.3	33.0	62.3
Hardness	13,631	9,280	22,911
PCBs	ND	ND	ND
*Estimate only, subject to errors and assumptions.			



As shown in the above data tables, PCB tests have consistently shown non-detect levels and are therefore not included in this graph.

3. ASSESSMENT OF CONTROL MEASURES

This section of the Annual Storm Water Report summarizes the progress and status of complying with Sections II.B. and II.C. of the MS4 discharge permit. In the following account, the permit requirement is highlighted in bold and the status is in regular font.

Section II. B. Minimum Control Measures

1. Public Education and Outreach

- a.) **Within two years of the effective date of the permit, permittee must develop and implement a public education program about the impacts of storm water on the local water bodies.**

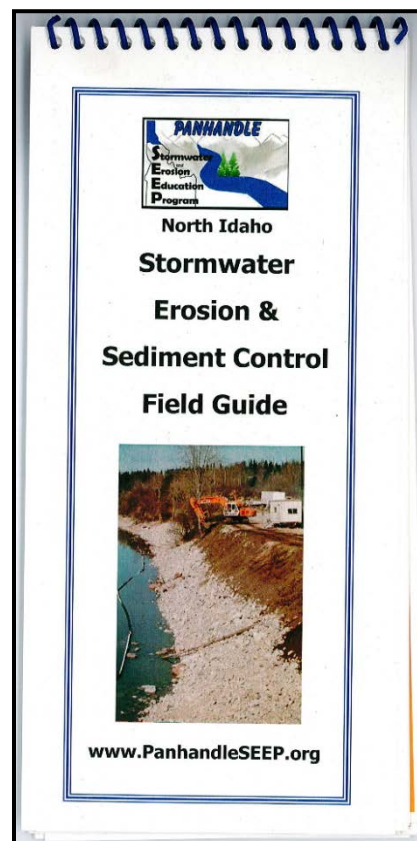
This requirement has been met with the deployment and implementation of the Storm Water Management Plan that is posted on the City’s website and detailed in this and prior annual reports (also posted on the City’s website). Public education efforts have been conducted since January 2010 via provision of brochures, internet postings,

outreach events, article submissions to the local paper, public service announcements on the City's TV channel, facility tours and direct mailings to the public.

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

On November 6, 2017, an informational pamphlet explaining the MS4 system and pollution prevention was mailed directly to all property owners and occupants of property located adjacent to the MS4 storm sewer system. Addresses were obtained using the City GIS system and business license database. There were 272 pamphlets mailed via USPS mail. A copy of the pamphlet is included in Appendix A.

At the building permit service counter, the City continues to make available to the contractors, builders, and the public, useful information about the Construction General Permit as well as the Stormwater Erosion & Sediment Control Field Guide.



c) 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 media outlet.

A public service announcement (PSA), professionally produced on behalf of Panhandle Area Council <http://www.pacni.org/>, is repeatedly broadcast on City Cable TV 13, running three times per week at 8 a.m. Sunday, 10:30 a.m. Tuesday and 6:44 p.m. Friday.

The PSA runs for eight minutes and provides a good overview of erosion, causes, water quality impacts and best management practices for controlling or preventing erosion on construction sites and developments. Panhandle Area Council sponsors the Stormwater and Erosion Education Program which provides classroom and hands-on training to area contractors and government representatives.

On December 22, 2017, a legal notice providing information and further resources on information relevant to the SWMP was submitted by the City to the local media, and published in the local newspaper, The Press. A copy is included in Appendix A.

Public Involvement Participation

- a) **The permittee must comply with applicable State and local public notice requirements when implementing a public involvement/participation program.**

The City abides by the Idaho Open Meeting Law in the performance of its duties, including adoption of rules and regulations.

- b) **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 documentation and Annual Reports must be posted online through its regularly maintained website (or a website sponsored by the permittee).**

All relevant SWMP documents and all Annual Reports required by this permit are available to the public and posted online at the City's official website:

<http://www.postfallsidaho.org/>

2. Illicit Discharge Detection and Elimination

- a) **Within two years from the effective date of this permit, the permittee must develop and implement a program to detect and eliminate illicit discharges from the 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 procedures for detection, identification of the source, and removal of non-storm water discharges from the MS4. This program must 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.**

Procedures for implementing the Illicit Discharge Detection and Elimination Program were completed in 2010 and are included in the City's Storm Water Management Plan which is posted on the City's website.

- b) 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 for enforcement escalation procedures for recalcitrant or repeat offenders.**

In 2010, the City updated its Storm Water, ordinance, Chapter 13.44, to define and prohibit illicit discharge, and developed and implemented enforcement procedures which are documented in the Storm Water Management Plan and posted on the City's website.

- c) Through the ordinance or other regulatory mechanism set forth in Section II.B.3.b, the permittee must prohibit any of the non-storm water 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 non-storm water discharges.**

In 2010, the City updated its Storm Water Ordinance, Chapter 13.44, to define and prohibit illicit discharge, and developed and implemented enforcement procedures which are documented in the Storm Water Management Plan and posted on the City's website. The City's ordinances are available to the public on the City's website: <http://www.postfallsidaho.org/> Allowable non-storm water discharges from potable water sources include fire-fighting activities, water distribution system maintenance, street wash water, overspray and small amounts of runoff from irrigation of vegetation that comply with the City's prohibition of water wasting, Chapter 13.12.060.

- d) 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(s) 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 MS4's, 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 maps(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 completed a comprehensive MS4 map in 2009 and posted it in PDF format on the City's website. In 2012, the MS4 map was converted to Arc GIS format and replaced the PDF formatted map on the City's website. Copies of these maps have been submitted electronically and in hard copy to EPA and IDEQ in 2010, 2011, and 2012.

- e) **Within two years from the effective date of this permit, the permittee must begin an ongoing education program to inform users of the system, 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.**

The City initiated its ongoing education program in 2010. The program includes informing the public, users of the MS4 and public employees of the City of Post Falls of the hazards associated with illegal discharges and improper disposal of waste. Further documentation of the public outreach component of Section II. B. 1. is provided earlier in this section. City employees associated with the MS4 facilities, development services and field staff have been provided annual storm water education since 2010. Topics have included proper storage of materials, street maintenance, parks maintenance and illicit discharges.

- f) **Within three years from the effective date of this permit, the permittee must begin dry weather field screening for non-storm water flows from all stormwater outfalls. By the expiration date of the permit, 100% 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 kits" using test methods not approved by EPA under 40 CFR Part 136, provided the manufacturer's published detection ranges are adequate for the illicit discharge detection 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 detection.**

The City initiated dry weather field screening of the MS4 system in 2011. The results of the screening were posted with the 2011 annual report. The City has only two (2) outfalls, and 100% of those outfalls were screened for dry weather flows in 2011. The only source of dry weather flows was from irrigation runoff. No industrial discharges were found. In 2012, the City conducted dye testing of a dry cleaner business on Spokane Street and found that there was not an illicit discharge to the MS4 system. In November and December 2012, the City conducted a survey of jurisdictional roads and properties adjacent to the Spokane River and did not detect any illicit discharges to the MS4 or storm water discharges or industrial discharges to the river.

- g) Within three years from the effective date of this permit, the permittee must inventory all industrial facilities that discharge into the permittee's MS4 and/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-x) through (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.**

In December 2012, the City conducted a visual survey of industrial properties adjacent to the river in the Riverbend Industrial Park and did not detect any industrial or storm water discharges to the river. The 2011 Survey did not detect any existing industrial discharges to the City's MS4 system. There have been no new industries which discharge to the MS4 system. Developments within the City are required to provide on-site storm water management. The City's nearly universal system of curbs, gutters and bio-filtration swales helps prevent storm water discharges outside of the MS4 facilities. Soils in the City are typically sand and gravel and are highly suited to on-site disposal of storm water via bio-filtration swales and drywells. An end-to-end survey of perimeter roads adjacent to the river in November and December 2012 did not detect any storm water discharges to the river.

3. Construction Site Storm Water Runoff Control

- a) 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 acre. 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.**

In 2010, the City adopted ordinances regarding construction sites, as Chapter 13.44.050, General Requirements, Section E., which requires developers to verify applicability of the Construction General Permit by either providing a copy of their Notice of Intent (NOI) for coverage under the CGP, or a design professional's certification that the project is exempt from the CGP. Projects that are subject to the CGP must maintain a copy of their Storm Water Pollution Prevention Plan (SWPPP) at the project site. CGP-covered projects with the potential to discharge storm water to the MS4 system are inspected during the construction project. In 2010, the City developed a procedure for such inspections which is included in the Storm Water Management Plan posted on the City's website.

- b) 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, #IDR10-0000 (Construction General Permit).

When developers and contractors come in to City hall for a building permit, they are informed of the CGP requirement stated above. The Stormwater Erosion & Sediment Control Field Guide is also available to the developers and contractors on the City's website and at the building permit service counter in City Hall.

- c) **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 and local law that requires 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.**

The City's existing ordinance, Title 8 - Health and Safety, Chapter 8.24, Refuse and Stagnant Water, prohibits the accumulation of any stagnant water or impure water, refuse, vegetable decay or decaying substance, garbage or filth of any kind, nor suffer such yard, lot, place, building or premises to be or to remain in such condition as to cause or create a nuisance or offensive smell or to pollute or render unhealthful the atmosphere or the premises or create a rodent harborage, or thereby to be, become, cause or create a public nuisance. More importantly, all development projects requiring a storm water management system shall provide grass infiltration areas or acceptable alternatives (Chapter 13.44.060), thus prohibiting new discharges of storm water to the MS4. Further, Chapter 13.44.100, Prohibited Conduct, prohibits any person from damaging or impairing any of the grass infiltration areas or any portion of the stormwater management system:

13.44.100: PROHIBITED CONDUCT:

- A. No person shall cause, permit or contribute to illicit discharges to the MS4.
- B. No person shall damage, harm, fail to install or complete, or otherwise impair the grass infiltration areas, approved methods of transmission of stormwater to grass infiltration areas or any portion of the stormwater management system required to be installed pursuant to this chapter. Unless other provisions are made in the process of development review and approval, responsibility for maintenance of stormwater system elements remains with the property owner and violation of these maintenance requirements shall also constitute a violation of this chapter. Occupancy of a dwelling or building without having first obtained a certificate of occupancy, when compliance of this chapter is a condition precedent to issuance of the certificate of occupancy, is a violation of this chapter, in addition to any building and zoning ordinance from which the occupancy requirement derives. (Ord. 1188 § 2, 2010)

- d) **Within two years from the effective date of this permit, the permittee must publish and distribute local 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 the construction site) that may cause adverse impacts to water quality.**

At the building permit service counter, the City continues to make available to the Public the Stormwater Erosion & Sediment Control Field Guide. The Field Guide is also available on the City's website. A public service announcement (PSA), professionally produced on behalf of Panhandle Area Council <http://www.pacni.org/>, continues to run three times per week at 8 a.m. Sunday, 10:30 a.m. Tuesday and 6:44 p.m. Friday. The PSA runs for eight minutes and provides a good overview of erosion, causes, water quality impacts and best management practices for controlling or preventing erosion on construction sites and developments. Panhandle Area Council sponsors the Stormwater and Erosion Education Program which provides classroom and hands-on training to area contractors and government representatives.

- e) **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.**

The City reviews all new development/construction plans prior to issuing construction permits. Every new development plan is reviewed for compliance with the City's ordinances, including the Storm Water Management ordinance. Further details of storm water controls for new projects are provided in the Construction Improvement Agreement required of all new developments. These agreements are posted at www.postfallsidaho.org/documentcenterlong.html under "Engineering"

The City allows plat recordation once all approvals and agreements are in place and the public improvements are bonded for at 150% of the engineers estimate. Prior to the City accepting the constructed improvements, storm water facilities are to be at the following stages – grassy swales are to be roughed in, top soil placed and hydro-seeded and additional storm water facilities, such as drywells, scuppers, catch basins and piping need to be completed. As the majority of our grassy swales are continual swales that run parallel to the roadways, when the lots are developed, the swales will

receive final grading, final hydro-seeding or top soil. Those facilities are inspected in accordance with the City's "Engineering Project Certification and Quality Control Standards" prior to issuing a certificate of occupancy for those developing lots.

- f) Within three 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 provides several avenues for citizens to register complaints or inquire about the storm water program. Complaints or concerns may be delivered to the City via email, telephone, letter or in person at City Hall. In 2017, the Storm Water Program received no complaints about runoff or sediment from construction sites in the City of Post Falls that disturbed one or more acres or less than one acre that was a part of larger project that disturbed one or more acres and had the potential to discharge to the MS4 system.

- g) 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. As part of these procedures, the permittee shall inspect all construction sites in their jurisdiction for appropriate erosion/sediment/waste control at least once per construction season.**

In 2010, the City developed and implemented procedures for site inspection and enforcement of control measures, which is posted on the City's website as part of the Storm Water Management Plan. In 2016, there was one new construction project disturbing an area greater than 1 acre located inside the MS4. This site was inspected on September 18, 2016 by a City stormwater technician. A storm event inspection report was submitted with the 2016 Stormwater Annual Report: Appendix A. No sediment runoff was observed. Major ground disturbing activities were all completed in 2016. This project was substantially completed in 2017 and post-construction stormwater management controls were inspected on July 13, 2017, as stated below.

- h) 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.

The City initiated a major construction project at the Water Reclamation Facility during 2015. On all Public Construction projects, the City complies with the Construction General Permit requirements for stormwater management and runoff controls. The Water Reclamation Facility project documents included specific language ensuring appropriate storm water management. The requirements were monitored on a regular basis throughout 2016 and 2017 as part of, and in addition to, construction observation associated with the project. The project was substantially completed in December 2016. This project was topographically isolated from the MS4 system and incorporates onsite stormwater facilities.

4. Post-Construction Storm Water Management in New Development and Redevelopment

- a) **Within three years from the effective date of this permit, the permittee must implement a program to address post-construction storm water runoff from new development projects that disturb greater than or equal to one acres (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.**

The City had one project in 2016 that was disturbed an area larger than 1 acre and is within the MS4. The project was completed on July 13, 2017. City staff inspected post-construction stormwater runoff controls which were determined to be sufficient to cause no impact to the MS4.

- b) **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 and update existing procedures, policies, and authorities (e.g., Post Falls City Ordinance #716) to assist in the development of the required regulatory mechanism.**

The City has had a Storm Water Management Ordinance since 2007, updated in 2010. The SWM Ordinance, Chapter 13.44, requires the installation of storm water management facilities for all new developments and the protection and maintenance

of all such facilities such that storm water is not discharged off site. See:

http://www.sterlingcodifiers.com/codebook/index.php?book_id=350

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

The City has in place appropriate regulatory controls to ensure long term operation and maintenance of permanent storm water controls. SWM Ordinance, Chapter 13.44, requires the landowner to maintain storm water facilities such that storm water is not discharged off site, and prohibits any person from damaging, harming, failing to install or complete or otherwise impair the storm water management systems. See: http://www.sterlingcodifiers.com/codebook/index.php?book_id=350

- d) **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 maintenance and operation.**

The City reviews all new development/construction plans prior to issuing construction permits. Every new development plan is reviewed for compliance with the City's ordinances, including the Storm Water Management Ordinance. Further details of storm water controls for new projects are provided in the Construction Improvement Agreement required of all new developments. See:

<http://www.postfallsidaho.org/PZDept/pzforms/ResidentialConstImprovement.pdf>

The City allows plat recordation once all approvals and agreements are in place and the public improvements are bonded for at 150% of the engineers estimate. Prior to the City accepting the constructed improvements, storm water facilities are to be at the following stages – grassy swales are to be roughed in, top soil placed and hydro-seeded and additional storm water facilities, such as drywells, scuppers, catch basins and piping need to be completed. As the majority of our grassy swales are continual swales that run parallel to the roadways, when the lots are developed, the swales will receive final grading, final hydro-seeding or top soil. Those facilities are inspected in accordance with the City's "Engineering Project Certification and Quality Control Standards" prior to issuing a certificate of occupancy for those developing lots.

5. Pollution Prevention and Good Housekeeping for Municipal Operations

- a) **Within two years from the effective date of this permit, the permittee must 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.

The City developed a Storm Water Pollution Prevention Plan for the wastewater and streets/fleet maintenance site in 2010, even though these facilities cannot discharge to the MS4 system. The plan is posted on the City's website. The City does not have maintenance facilities that are proximate to the MS4 system. The City does not have a municipal golf course, nor operate solid waste transfer facilities, nor have water treatment plant operations, nor have municipal refueling facilities. The City does not store on site sand or de-icer chemicals. The use of sand and road de-icer is in accordance with conventional practices for highway safety. The City conducts street sweeping on a regular basis; a total of 2,160 cubic yards of dirt and debris were removed from City streets in 2017.

In 2017, the City inspected the two storm water outfalls and performed water quality monitoring as required by the permit, cleaned 83 catch basins with a vacuum truck, and direct mailed stormwater pollution prevention information to all MS4 users. There were no stormwater complaints related to construction projects pertinent to the MS4 in 2017.

- b) 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.**

In 2011, City employees received storm water training in the areas of fleet maintenance, material storage, parks and grounds maintenance, solid waste disposal and/or streets and drainage maintenance. The training materials were provided by the Texas Council on Environmental Quality and USEPA.

In 2012, City employees selected storm water training from a number of sources, including Storm Water Pollution Awareness and Prevention Training (University of

Colorado at Denver) which covered illicit discharge, sources of pollution, allowable non-storm water discharges, vehicle washing and fueling, outdoor storage, waste containers and drum management, vehicle parking lots, grounds maintenance, good housekeeping, preventive maintenance, and spill prevention and response. Other training materials provided were Storm Water: Why Take It Personally? (North Central Texas Council of Governments), Stormwater video (City of Sandy Springs), and Stormwater Runoff 101 video (National Resource Defense Council). The City's storm water technician completed a two day course in construction site erosion control and the Construction General Permit.

In 2013 and 2014, City employees selected storm water training from the Texas Council of Environmental Quality employee training videos covering the following topics:

1. Introduction: What We Can Do.
2. Construction Activities and Land Disturbances.
3. Fleet Maintenance and Materials Handling.
4. Streets and Drainage Maintenance
5. Parks and Grounds Maintenance
6. Solid Waste Management

In 2015, City employees watched the video "Stormwater Pollution Prevention for Restaurants" produced by the City of Chapel Hill for the WEF StormTV channel on YouTube. This video was selected as many food service industries had inquired about stormwater practices throughout the year.

In 2016, City employees were provided a stormwater training video titled "How to Spot and Report Stormwater Pollution" produced by the North Central Texas Council of Governments: Environment and Development Division. Because City employees, such as Street Maintenance and Water, are driving around the City daily, education of noticeable illegal discharges can help to reduce stormwater pollution. Documentation of training from the appropriate departments is contained in Appendix A.

In 2017, City employees were provided a stormwater training video titled "Inspecting and Maintaining your Catch Basin" produced by the Washington Department of Ecology for the City of Bellingham. The video educates on how catch basins are inspected, cleaned, and maintained in order to understand that pollution prevention is a key component of maintaining water quality. Documentation of training from the appropriate departments is contained in Appendix A.

- c) **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 City developed and implemented a storm water pollution plan for the fleet maintenance/street division site and wastewater treatment plant in 2010. The SWPP is posted on the City's website as part of the Storm Water Management Program document. It should be noted that none of these facilities has the potential to discharge to the MS4 because of their physical separation from the MS4.

C. Discharges to Water Quality-Impaired Receiving Waters.

1. The permittee must conduct storm water discharge and receiving water monitoring as required in Part IV.

Since 2009, the City has conducted storm water discharge and receiving water monitoring as required in Part IV. The results are found in Section 2 of this report.

2. The permittee must determine whether storm water discharges from any part of the MS4 contribute pollutants of concern, either directly or indirectly, to any Clean Water Act ("CWA" or "Act") Section 303(d) listed water bodies. For the purposes of this permit, the Section 303 (d) listed water bodies according to the IDEQ 2002 Integrated Report and the 2004 Washington Water Quality Assessment Report include but are not limited to, the Spokane River and associated tributaries. "Pollutant(s) of concern" refer to the pollutant(s) identified as causing or contributing to the water quality impairment. Pollutants of concern for the purposes of this permit are metals, (specifically, lead and zinc), nutrients (specifically phosphorus and nitrogen), sediment, dissolved oxygen, total polychlorinated biphenyls, and temperature.

The City of Post Falls' MS4 contributes pollutants of concern indirectly to the Spokane River, including lead, zinc, phosphorus, nitrogen, suspended solids and temperature. Previous reviews of data have concluded the following assessment of the contribution of pollutants to the river:

CONCLUSIONS OF DATA REVIEW

1. The volume of water discharged by the Post Falls MS4 is on the order of one-ten thousandth (1/10,000) of the annual flow of the Spokane River.
2. The Post Falls MS4 contributes less than one one-thousandth (1/1,000) of the pollutant loads in the Spokane River.
3. Pollutant loads from the Post Falls MS4 are less than the detectable pollutant loads existing in the Spokane River upstream of the MS4 outfalls.

4. The variability of MS4 pollutant load estimates is most related to variations in weather, localized precipitation patterns, and temporal monitoring patterns. These variations preclude a BMP effectiveness determination over the course of the monitoring period. In any event, the MS4 flows and loads are insignificant relative to the existing flows and loads in the Spokane River.

CONCLUSION: MS4 loading is insignificant relative to the loading in the upstream river.

As shown in Section 2, loading of pollutants to the Spokane River was similar in the reporting period to prior years in this permit cycle. As a result, the same conclusion is supported.

- 3. Within one year from the effective date of this permit, the permittee's Annual Report must include a description of how the activities in each of the minimum control measures in Part II.B will be targeted by the permittee to control the discharge of pollutants of concern, and ensure to the maximum extent practicable that the MS4 discharges will not cause an in-stream violation of the applicable water quality standards. This discussion must specifically identify how the permittee will evaluate and measure the effectiveness of the SWMP to control the discharge of the pollutant(s) of concern. The permittee must submit this section of the SWMP to EPA and IDEQ as part of the first Annual Report required in Part IV.C, and update it as necessary in subsequent Annual Reports.**

In a letter to EPA and copy to IDEQ dated August 15, 2011, the City of Post Falls provided its first description of how the activities in each of the minimum control measures in Part II.B will be targeted by the permittee to control the discharge of pollutants of concern, and ensure to the maximum extent practicable that the MS4 discharges will not cause an in-stream violation of the applicable water quality standards. In essence, the measure of control measure effectiveness is the impact the MS4 discharges have on water quality of the river.

With seven years of data available, trending analysis could be conducted. The results of this analysis have been included in this report (see above Conclusion of Data Review). These data indicate that although the concentrations of some parameters of concern in discharges from the MS4 are higher than the concentration of the same parameters in the river, the resultant impact on in-stream concentrations and loads is so low as to not be measurable. A mathematical analysis of mass loading indicated that the miniscule volume of the MS4 discharge relative to river flow has no measurable effect on pollutant concentrations in the river. We therefore conclude that discharges from the Post Falls MS4 do not cause Idaho in-stream water quality standards to be exceeded.

4. SUMMARY OF INSPECTIONS AND ENFORCEMENT ACTIONS

There were no active projects larger than one acre or part of a project larger than one acre within the MS4 in the year 2017.

5. SUMMARY OF ENFORCEMENT ACTIONS RECEIVED

The City of Post Falls MS4 did not receive any enforcement actions from a designated storm water regulatory agency in 2017. An on-site audit of the program was completed by EPA on September 19, 2017 but the City has not received any formal correspondence to date pertaining to the outcome of that review.

6. SCHEDULE OF PLANNED IMPLEMENTATION ACTIVITIES FOR 2018

The activities planned for the 2018 reporting period include the following:

1. Implement a public outreach and education program that includes:
 - a. Submit information relevant to the program to the local newspaper.
 - b. Storm water public service announcement broadcast on City's cable TV channel.
 - c. Direct mail or hand delivered brochure as needed.
 - d. Educational booth with stormwater materials at local events
2. City staff education: provide training materials related to City job functions as they relate to storm water.
3. Storm water monitoring: collect required samples during the required monitoring season.
4. Storm water system maintenance: inspect and clean catch basins.
5. Assess the adequacy of BMPs.
6. Complete the 2017 annual report.
7. Post on-line all annual reports and the storm water management plan
8. Conduct pre-construction plan reviews, construction site inspections and enforcement as needed.
9. Continue expansion of the biofiltration system where feasible.

7. SCHEDULE OF PLANNED BMPs NEEDED TO COMPLY WITH WATER QUALITY STANDARDS

The City conducts routine street sweeping and maintenance of storm drains every year. Street and storm drain maintenance is conducted from February through September. In 2017, approximately 2,160 cubic yards of debris and grit were removed from City streets and 83 catch basins were cleaned and inspected. As demonstrated by the monitoring data the Post Falls MS4 does not cause violations of Idaho in-stream water quality standards for the Spokane River. Therefore no additional BMPs are needed for the Post Falls MS4.

In 2013, the City investigated the potential for eliminating all discharge from the MS4 system by increasing the use of bio-filtration swales and other improvements in the drainage areas served by the two MS4 outfalls. The study (see 2013 Report, Appendix H) concluded that it would be possible to eliminate all discharge from the MS4 outfalls, but at considerable expense. However, where feasible and as part of re-development activities, expansion of the biofiltration system will continue with the effect of incrementally reducing discharge to the MS4.

APPENDIX A: COPIES OF PERMIT RELATED PRODUCTS

- Staff Training Logs
- Sweeping Records
- Catch Basin Cleaning Record
- Letter to MS4 Property Owners
- Legal Notice
- Monitoring Results

Supervisor: Please return completed form to Water Reclamation Facility or email to mott@postfallsidaho.org
Deadline: December 22nd, 2017

**STORMWATER MANAGEMENT PROGRAM
2017 EMPLOYEE TRAINING RECORD**

Department/Division: Engineering / Community Development

"I certify that the following employees have completed the training indicated below."

Supervisor's Signature:  Date: 12/19/17

Employee Name
Jennifer Cresci
Bill Melwin
Rob Palus
Tim Mulcahy
Darrin Hibbs
James Spalsbury

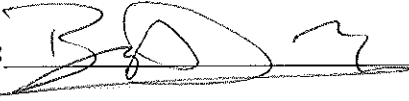
Training: Inspecting and Maintaining your Catch Basin
<https://www.youtube.com/watch?v=SZ0Ow8FpCzU&t=354s>

Supervisor: Please return completed form to Water Reclamation Facility or email to mott@postfallsidaho.org
Deadline: December 22nd, 2017

SURFACE WATER MANAGEMENT PROGRAM 2017 EMPLOYEE TRAINING RECORD

Department/Division: PARKS & URBAN FORESTRY

"I certify that the following employees have completed the training indicated below."

Supervisor's Signature:  Date: 12/13/17

Employee Name
Jason Snowden
Danny Heiderman
Kirk Fisher
Ron Clark
Sgt A. Mays (725)
Robert P. Hill
Deborah Tucker
Michael Dyer

Training: Inspecting and Maintaining your Catch Basin
<https://www.youtube.com/watch?v=sZ0Ow8FpCzU&t=354s>

Supervisor: Please return completed form to Water Reclamation Facility or email to mott@postfallsidaho.org
Deadline: December 22nd, 2017

**SURFACE WATER MANAGEMENT PROGRAM
2017 EMPLOYEE TRAINING RECORD**

Department/Division: WRF

"I certify that the following employees have completed the training indicated below."

Supervisor's Signature: [Signature] Date: 12/21/17

Employee Name	
Robert Hatcher	12/11/17
Carlos Bofano	12/11/17
Pl. [Signature]	12/11/17
Mark S. Bayley	12/11/17
[Signature]	12/11/17
Ryan Lawrence	12/12/17
Adam Tate	12/12/17
Adam B	12/12/17
Fern Jr	12/12/17
Rod Baynet	12/16/17
Don Ellis	12/18/17
JASON CHAVEZ	12/20/17

Training: Inspecting and Maintaining your Catch Basin
<https://www.youtube.com/watch?v=SZ0Ow8FpCzU&t=354s>

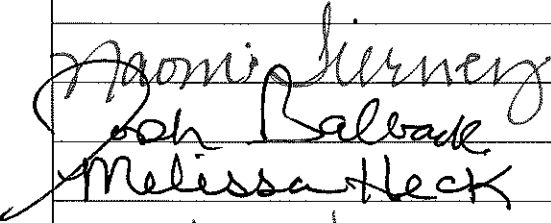
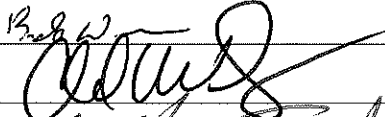
Supervisor: Please return completed form to Water Reclamation Facility or email to mott@postfallsidaho.org
Deadline: December 22nd, 2017

**SURFACE WATER MANAGEMENT PROGRAM
2017 EMPLOYEE TRAINING RECORD**

Department/Division: Water

"I certify that the following employees have completed the training indicated below."

Supervisor's Signature:  Date: 12-11-2017

Employee Name

Josh Balbade
Melissa Heck
Bill Vineyard

Matt Fish

Training: Inspecting and Maintaining your Catch Basin
<https://www.youtube.com/watch?v=SZ0Ow8FpCzU&t=354s>

2016-2017	Number of Loads								Total of all loads
	553 Sand/Silt	554 Sand/Silt	553 Gravel/Chips	554 Gravel/Chips	553 Light Debris	554 Light Debris	553 Gravel/Chips	554 Gravel/Chips	
Day									
October	0	0	0	0	21	12	0	0	33
November	0	9	0	3	0	28	0	0	40
December	0	0	0	0	0	0	0	0	0
January	0	0	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0	0	0
April	11	38	0	0	0	0	0	0	49
May	8	3	0	0	0	84	0	0	95
June	0	3	0	0	72	24	0	0	99
July	0	0	0	0	6	71	0	0	77
August	0	0	0	0	31	52	0	0	83
September	0	0	0	0	19	45	0	0	64
Yearly Totals	19	53	0	3	149	316	3	0	540

Yards of Debris	76	212	0	12	596	1264	2160
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1= 4yards

.5=2yards



Excess water from paved and impervious areas has to go somewhere. Impervious areas are designed to funnel runoff into the stormwater drainage system, carrying any loose litter with it. Even though much effort is put into preventing litter from entering the storm sewer by street sweeping and maintenance, some debris still washes to the Spokane River. Help keep the River clean by taking a few extra steps to a trash can, strapping down trash in truck beds, and re-using items whenever possible.

Contact Us

City of Post Falls
Surface Water Division
2002 W Seltice Way
Post Falls, ID 83854

208-777-9857

postfallsidaho.org
surfacewater@postfallsidaho.org

City of Post Falls
Surface Water Division
408 N Spokane St
Post Falls, ID 83854

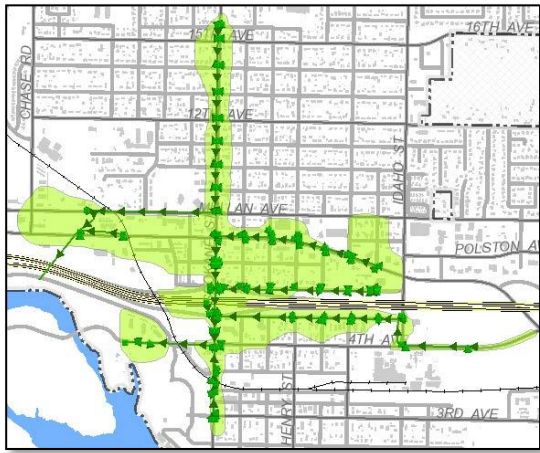


The following information is provided as part of the City's annual public information program regarding storm water pollution prevention. This is for your information only and you do not need to reply. You are receiving this information because our records indicate you have or use property served by the portion of the City's storm sewer system which conveys stormwater to the Spokane River.

If you would like to report a spill or obtain more information about the City of Post Falls surface water protection program, please contact the Utilities Division at 208-777-9857 or visit the City of Post Falls website at:

<http://www.postfallsidaho.org/departments/public-services/surface-water/>

City Stormwater Pollution Prevention



(Area, pipes, and catch basins of the MS4)

The municipal separate storm sewer system (MS4) is a network of catch basins, underground pipes, and outfalls that manage water runoff from paved and impervious areas in parts of Post Falls. This system's job is to collect excess water and convey it to the Spokane River. This water can carry items and contaminants from the pavement into the River. Efforts to keep that water clean require participation from both citizens and the City. Some of the things the City continually does to prevent pollution and protect the Spokane River are:

Thorough street sweeping:

- This year the City removed around 200 dump truck loads of debris from city streets that could otherwise wash into storm drains, clogging them or polluting the River.

Catch basin cleaning:

- All 112 catch basins in the storm sewer system were inspected. 83 of these required cleaning, done by sucking all the debris out of the catch basin and disposing of it.

Outfall inspections and sampling:

- The two outfalls from the storm sewer system are inspected frequently and sampled to monitor water quality. Grates, which require regular cleaning, cover the outfall and screen larger debris out before the water enters the river.

Large construction inspection:

- Inspection of construction projects over an acre within the MS4 to ensure runoff is contained and treated onsite, keeping it from entering the storm sewer system.

Yearly storm drains de-clogging:

- Every year the City receives calls of storm drains that have clogged from leaves, trash and debris and crews clear the grates to drain pooled water

Even with all this maintenance, it still takes help from citizens to keep stormwater clean. Here are some examples of things you can do to help:

- Throw trash in trashcans
- Keep your vehicle from leaking
- Use deicers and fertilizers sparingly

Catch Basin Cleaning

Catch basins are the first place that trash and debris stop when they enter the stormwater drains. There are over a hundred catch basins in the Post Falls storm sewer system which sit right below the storm drains in streets and parking lots. They are about 3 feet deep and feed water from storm drains to a main line which flows to the Spokane River. Catch basins store some of the contaminants from runoff and require cleaning, which is done every spring. The vactor truck (pictured below) sucks everything out of the catch basin into the truck's tank.



Commonly found things in catch basins are:

- Flattened pop cans
- Candy wrappers
- Cigarette butts
- Plastic water bottles
- Lug nuts
- Pine needles
- Dirt

These are things from the streets that could end up in the River. Through joint efforts we can keep the River clean.

Order Confirmation

Ad Order Number

0000149823

Customer

POST FALLS, CITY OF-LEGAL

Payor Customer

POST FALLS, CITY OF-LEGAL

PO Number

Sales Rep.

cdahouse

Customer Account

9975

Payor Account

9975

Ordered By

GH

Order Taker

ghagler

Customer Address

408 N. SPOKANE ST.
POST FALLS ID 83854 USA

Payor Address

408 N. SPOKANE ST.
POST FALLS ID 83854 USA

Customer Fax

0000000000

Order Source

Customer Phone

2084573338

Payor Phone

2084573338

Customer EMail

acctpay@postfallsidaho.org

Special Pricing

Tear Sheets

0

Proofs

0

Affidavits

1

Blind Box

Promo Type

Materials

Invoice Text

CDA LEGAL 8818 PN STORMWATER MANAGEMENT PLAN PF

Ad Order Notes

RUN DATE: DECEMBER 29, 2017

Net Amount

\$26.14

Tax Amount

\$0.00

Total Amount

\$26.14

Payment Method

Invoice

Payment Amount

\$0.00

Amount Due

\$26.14

Ad Number **Ad Type**
0000149823-01 ID Legal

Production Method **Production Notes**
AdBooker

External Ad Number **Ad Attributes** **Ad Released** **Pick Up**
No

Ad Size **Color**
1 X 21 li

WYSIWYG Content

PUBLIC NOTICE
Stormwater Management
Plan (SWMP)

NOTICE IS HEREBY GIVEN
that The City of Post Falls
must provide annual notice of
our Stormwater Management
Plan (SWMP) activities. The
SWMP and Annual Reports
are posted on the City's
website under the Surface
Water Division.

To access this information,
please go to [www.postfallsidah
o.org/departments/public-servi
ces/surface-water/](http://www.postfallsidah
o.org/departments/public-servi
ces/surface-water/) or contact
the Utilities Division at
208-777-9857.

CDA LEGAL 8818
DECEMBER 29, 2017

Run Date	Product	Placement	Rate	Sched Cst	Disc/Prem	Color	Pickup	Tax	Subtotal
12/29/2017	ID CDA Press	Legals	\$7.77 per Inch	\$18.14	\$0.00	\$0.00	\$0.00	\$0.00	\$18.14
12/29/2017	ID CDA ONL-Top Ads	Legals	\$0.00 per Inch	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Accurate Testing Labs, LLC

7950 Meadowlark Way
Coeur d'Alene, ID 83815
Phone (208) 762 8378 Fax (208) 762 9082
www.accuratetesting.com
info@accuratetesting.com

Certificate of Analysis

Order No.: 2017030036

Page: 1 of 2

City of Post Falls Treatment
2002 W. Seltice Way
Post Falls, ID 83854

Project: Storm Water Monitoring


Date Received: 03/03/2017 07:50

Sample: 1
Location: Centennial Trail Outfall
Sample Type: Grabs

Matrix: Non-Potable Water
D/T Collected: 03/02/2017 21:17
Collected by: Ryan Lawrence

Analyte	Result	Unit	Method	PQL	Analysis Date	Analyst
Calcium	22.9	mg/L	EPA 200.7	0.17	03/09/17	WM
Cadmium	0.659	ug/L	SM 3120B	0.003	03/16/17	WM
Magnesium	99.1	mg/L	EPA 200.7	0.03	03/09/17	WM
Hardness, Total (as CaCO3)	465	mg/L	SM 2340	0.2	03/09/17	WM
Nitrite-N	ND	mg/L	EPA 300.0	0.5	03/03/17	WM
Nitrate-N	0.63	mg/L	EPA 300.0	0.5	03/03/17	WM
Aroclor 1016	ND	ug/L	EPA 8082	0.2	03/21/17	ANA
Aroclor 1221	ND	ug/L	EPA 8082	0.2	03/21/17	ANA
Aroclor 1232	ND	ug/L	EPA 8082	0.2	03/21/17	ANA
Aroclor 1242	ND	ug/L	EPA 8082	0.2	03/21/17	ANA
Aroclor 1248	ND	ug/L	EPA 8082	0.2	03/21/17	ANA
Aroclor (PCB, total)	ND	ug/L	EPA 8082	0.2	03/21/17	ANA
Phosphorus, Total	1.04	mg/L	EPA 365.1	0.010	03/09/17	WM
Lead	16.4	ug/L	SM 3120B	0.03	03/16/17	WM
Aroclor 1254	ND	ug/L	EPA 8082	0.2	03/21/17	ANA
Aroclor 1260	ND	ug/L	EPA 8082	0.2	03/21/17	ANA
Total Kjeldahl Nitrogen (N)	3.79	mg/L	SM 4500NORG B	0.09	03/13/17	AC
Total Nitrogen (NO2+NO3+TKN as N)	4.42	mg/L	Calculation		03/13/17	AC
Total Suspended Solids	453	mg/L	SM 2540D	1	03/07/17	AC
Zinc	1020	ug/L	SM 3120B	0.03	03/16/17	WM

Comments:



Laboratory Supervisor, Digitally signed by: Walter Mueller Date: 03/23/17

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Certificate of Analysis

Order No.:

2017030036

Page: 2 of 2

Sample: 2
Location: Fourth Avenue Outfall
Sample Type: Grabs

Matrix: Non-Potable Water
D/T Collected: 03/02/2017 21:30
Collected by: Ryan Lawrence

Analyte	Result	Unit	Method	PQL	Analysis Date	Analyst
Aroclor 1016	ND	ug/L	EPA 8082	0.2	03/21/17	ANA
Aroclor (PCB, total)	ND	ug/L	EPA 8082	0.2	03/21/17	ANA
Calcium	11.7	mg/L	EPA 200.7	0.17	03/09/17	WM
Magnesium	36.1	mg/L	EPA 200.7	0.03	03/09/17	WM
Hardness, Total (as CaCO3)	178	mg/L	SM 2340	0.2	03/09/17	WM
Phosphorus, Total	0.481	mg/L	EPA 365.1	0.010	03/09/17	WM
Nitrite-N	ND	mg/L	EPA 300.0	0.5	03/03/17	WM
Nitrate-N	0.54	mg/L	EPA 300.0	0.5	03/03/17	WM
Cadmium	0.408	ug/L	SM 3120B	0.003	03/16/17	WM
Lead	13.3	ug/L	SM 3120B	0.03	03/16/17	WM
Aroclor 1221	ND	ug/L	EPA 8082	0.2	03/21/17	ANA
Aroclor 1232	ND	ug/L	EPA 8082	0.2	03/21/17	ANA
Aroclor 1242	ND	ug/L	EPA 8082	0.2	03/21/17	ANA
Aroclor 1248	ND	ug/L	EPA 8082	0.2	03/21/17	ANA
Aroclor 1254	ND	ug/L	EPA 8082	0.2	03/21/17	ANA
Aroclor 1260	ND	ug/L	EPA 8082	0.2	03/21/17	ANA
Total Kjeldahl Nitrogen (N)	1.84	mg/L	SM 4500NORG B	0.09	03/13/17	AC
Total Nitrogen (NO2+NO3+TKN as N)	2.38	mg/L	Calculation		03/13/17	AC
Total Suspended Solids	250	mg/L	SM 2540D	1	03/07/17	AC
Zinc	250	ug/L	SM 3120B	0.03	03/16/17	WM

If the RESULT is 'ND' (Not Detected) or 'Absent', that means the concentration is less than the PQL (Practical Quantitation Limit for this method).

Comments:



Laboratory Supervisor, Digitally signed by: Walter Mueller Date: 03/23/17

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Certificate of Analysis

Order No.: 2017050138

Page: 1 of 2

City of Post Falls Treatment
2002 W. Seltice Way
Post Falls, ID 83854

Project: Storm Water Monitoring

Date Received: 05/08/2017 07:50

Sample: 1
Location: Centennial Trail Outfall
Sample Type: Grabs

Matrix: Non-Potable Water
D/T Collected: 05/06/2017 18:01
Collected by: Ryan Lawrence

Analyte	Result	Unit	Method	PQL	Analysis Date	Analyst
Calcium	15.6	mg/L	EPA 200.7	0.17	05/10/17	WM
Cadmium	0.598	ug/L	SM 3120B	0.003	05/10/17	WM
Magnesium	9.21	mg/L	EPA 200.7	0.03	05/10/17	WM
Hardness, Total (as CaCO3)	76.9	mg/L	SM 2340	0.2	05/10/17	WM
Nitrite-N	ND	mg/L	EPA 300.0	0.1	05/09/17	WM
Nitrate-N	ND	mg/L	EPA 300.0	0.5	05/09/17	WM
Aroclor 1016	ND	ug/L	EPA 8082	0.2	05/25/17	ANA
Aroclor 1221	ND	ug/L	EPA 8082	0.2	05/25/17	ANA
Aroclor 1232	ND	ug/L	EPA 8082	0.2	05/25/17	ANA
Aroclor 1242	ND	ug/L	EPA 8082	0.2	05/25/17	ANA
Aroclor 1248	ND	ug/L	EPA 8082	0.2	05/25/17	ANA
Aroclor (PCB, total)	ND	ug/L	EPA 8082	0.2	05/25/17	ANA
Phosphorus, Total	1.65	mg/L	EPA 365.1	0.010	05/11/17	WM
Lead	19.1	ug/L	SM 3120B	0.03	05/10/17	WM
Aroclor 1254	ND	ug/L	EPA 8082	0.2	05/25/17	ANA
Aroclor 1260	ND	ug/L	EPA 8082	0.2	05/25/17	ANA
Total Kjeldahl Nitrogen (N)	6.05	mg/L	SM 4500NORG B	0.06	05/15/17	GL
Total Nitrogen (NO2+NO3+TKN as N)	6.05	mg/L	Calculation		05/15/17	WM
Total Suspended Solids	735	mg/L	SM 2540D	1	05/09/17	GL
Zinc	656	ug/L	SM 3120B	0.03	05/10/17	WM

Comments:



Laboratory Supervisor, Digitally signed by: Walter Mueller Date: 06/01/17

Accurate Testing Labs, LLC

7950 Meadowlark Way
Coeur d'Alene, ID 83815
Phone (208) 762 8378 Fax (208) 762 9082
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Certificate of Analysis

Order No.: 2017050138

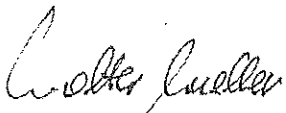
Page: 2 of 2

Sample: 2 Matrix: Non-Potable Water
Location: Fourth Avenue Outfall D/T Collected: 05/06/2017 18:09
Sample Type: Grabs Collected by: Ryan Lawrence

Analyte	Result	Unit	Method	PQL	Analysis Date	Analyst
Aroclor 1016	ND	ug/L	EPA 8082	0.2	05/25/17	ANA
Aroclor (PCB, total)	ND	ug/L	EPA 8082	0.2	05/25/17	ANA
Calcium	9.65	mg/L	EPA 200.7	0.17	05/10/17	WM
Magnesium	4.51	mg/L	EPA 200.7	0.03	05/10/17	WM
Hardness, Total (as CaCO3)	42.7	mg/L	SM 2340	0.2	05/10/17	WM
Phosphorus, Total	0.282	mg/L	EPA 365.1	0.010	05/11/17	WM
Nitrite-N	ND	mg/L	EPA 300.0	0.5	05/09/17	WM
Nitrate-N	0.51	mg/L	EPA 300.0	0.5	05/09/17	WM
Lead	11.2	ug/L	SM 3120B	0.03	05/10/17	WM
Cadmium	0.233	ug/L	SM 3120B	0.003	05/10/17	WM
Aroclor 1221	ND	ug/L	EPA 8082	0.2	05/25/17	ANA
Aroclor 1232	ND	ug/L	EPA 8082	0.2	05/25/17	ANA
Aroclor 1242	ND	ug/L	EPA 8082	0.2	05/25/17	ANA
Aroclor 1248	ND	ug/L	EPA 8082	0.2	05/25/17	ANA
Aroclor 1254	ND	ug/L	EPA 8082	0.2	05/25/17	ANA
Aroclor 1260	ND	ug/L	EPA 8082	0.2	05/25/17	ANA
Total Kjeldahl Nitrogen (N)	2.82	mg/L	SM 4500NORG B	0.06	05/15/17	GL
Total Nitrogen (NO2+NO3+TKN as N)	3.33	mg/L	Calculation		05/15/17	WM
Total Suspended Solids	193	mg/L	SM 2540D	1	05/09/17	GL
Zinc	183	ug/L	SM 3120B	0.03	05/10/17	WM

If the RESULT is 'ND' (Not Detected) or 'Absent', that means the concentration is less than the PQL (Practical Quantitation Limit for this method).

Comments:



Laboratory Supervisor, Digitally signed by: Walter Mueller Date: 06/01/17

Accurate Testing Labs, LLC

7950 Meadowlark Way
Coeur d'Alene, ID 83815
Phone (208) 762 8378 Fax (208) 762 9082
www.accuratetesting.com
info@accuratetesting.com

Certificate of Analysis

Order No.: 2017090301

Page: 1 of 2

City of Post Falls Treatment
2002 W. Seltice Way
Post Falls, ID 83854

Project: Storm Water Monitoring

Date Received: 09/18/2017 07:35

Sample: 1
Location: Centennial Trail Outfall
Sample Type: Grabs

Matrix: Non-Potable Water
D/T Collected: 09/18/2017 06:37
Collected by: Ryan Lawrence

Analyte	Result	Unit	Method	PQL	Analysis Date	Analyst
Calcium	4.59	mg/L	EPA 200.7	0.17	09/22/17	WM
Cadmium	0.19	ug/L	SM 3120B	0.1	09/20/17	WM
Magnesium	2.22	mg/L	EPA 200.7	0.03	09/22/17	WM
Hardness, Total (as CaCO3)	20.6	mg/L	SM 2340	0.2	09/22/17	WM
Nitrite-N	ND	mg/L	EPA 300.0	0.1	09/19/17	WM
Nitrate-N	ND	mg/L	EPA 300.0	0.5	09/19/17	WM
Aroclor 1016	ND	ug/L	EPA 8082	0.8	10/02/17	ANA
Aroclor 1221	ND	ug/L	EPA 8082	0.8	10/02/17	ANA
Aroclor 1232	ND	ug/L	EPA 8082	0.8	10/02/17	ANA
Aroclor 1242	ND	ug/L	EPA 8082	0.8	10/02/17	ANA
Aroclor 1248	ND	ug/L	EPA 8082	0.8	10/02/17	ANA
Aroclor (PCB, total)	ND	ug/L	EPA 8082	0.8	10/02/17	ANA
Phosphorus, Total	0.386	mg/L	EPA 365.1	0.010	09/21/17	WM
Lead	5.94	ug/L	SM 3120B	1.0	09/20/17	WM
Aroclor 1254	ND	ug/L	EPA 8082	0.8	10/02/17	ANA
Aroclor 1260	ND	ug/L	EPA 8082	0.8	10/02/17	ANA
Total Kjeldahl Nitrogen (N)	1.39	mg/L	SM 4500NORG B	0.06	09/25/17	GL
Total Nitrogen (NO2+NO3+TKN as N)	1.39	mg/L	Calculation		09/25/17	WM
Total Suspended Solids	113	mg/L	SM 2540D	1	09/19/17	GL
Zinc	326	ug/L	SM 3120B	2.5	09/20/17	WM

Comments:



Laboratory Supervisor, Digitally signed by: Walter Mueller Date: 10/10/17

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Sample: 2 Matrix: Non-Potable Water
Location: Fourth Avenue Outfall D/T Collected: 09/18/2017 06:45
Sample Type: Grabs Collected by: Ryan Lawrence

Analyte	Result	Unit	Method	PQL	Analysis Date	Analyst
Aroclor 1016	ND	ug/L	EPA 8082	0.8	10/02/17	ANA
Aroclor (PCB, total)	ND	ug/L	EPA 8082	0.8	10/02/17	ANA
Calcium	5.23	mg/L	EPA 200.7	0.17	09/22/17	WM
Magnesium	3.87	mg/L	EPA 200.7	0.03	09/22/17	WM
Hardness, Total (as CaCO3)	29.0	mg/L	SM 2340	0.2	09/22/17	WM
Phosphorus, Total	0.303	mg/L	EPA 365.1	0.010	09/21/17	WM
Nitrite-N	ND	mg/L	EPA 300.0	0.1	09/19/17	WM
Nitrate-N	ND	mg/L	EPA 300.0	0.5	09/19/17	WM
Cadmium	0.15	ug/L	SM 3120B	0.1	09/20/17	WM
Lead	6.02	ug/L	SM 3120B	1.0	09/20/17	WM
Aroclor 1221	ND	ug/L	EPA 8082	0.8	10/02/17	ANA
Aroclor 1232	ND	ug/L	EPA 8082	0.8	10/02/17	ANA
Aroclor 1242	ND	ug/L	EPA 8082	0.8	10/02/17	ANA
Aroclor 1248	ND	ug/L	EPA 8082	0.8	10/02/17	ANA
Aroclor 1254	ND	ug/L	EPA 8082	0.8	10/02/17	ANA
Aroclor 1260	ND	ug/L	EPA 8082	0.8	10/02/17	ANA
Total Kjeldahl Nitrogen (N)	1.03	mg/L	SM 4500NORG B	0.06	09/25/17	GL
Total Nitrogen (NO2+NO3+TKN as N)	1.03	mg/L	Calculation		09/25/17	WM
Total Suspended Solids	71.2	mg/L	SM 2540D	1	09/19/17	GL
Zinc	104	ug/L	SM 3120B	2.5	09/20/17	WM

If the RESULT is 'ND' (Not Detected) or 'Absent', that means the concentration is less than the PQL (Practical Quantitation Limit for this method).

Comments:



Laboratory Supervisor, Digitally signed by: Walter Mueller Date: 10/10/17

APPENDIX B: REPORTING REQUIREMENTS LIST

C. Reporting Requirements

1. **Storm Water Discharge Monitoring Report.** Within two years from the effective date of this permit, and annually thereafter, all available storm water discharge monitoring data must be submitted as part of the Annual Report. At a minimum, this Storm Water Discharge Monitoring Report must include:
 - a) Dates of sample collection and analyses;
 - b) Results of analytical samples collected;
 - c) Location of sample collection;
 - d) Estimates of the daily and/or monthly average pollutant loads for each pollutant at each sample location; and
 - e) A cumulative annual estimate of pollutant loading for each parameter at each sample location, and an overall annual estimate of the contribution of pollutants from all storm water emanating from the Post Falls MS4.
2. **Annual Report.** No later than February 15 of each year beginning in year 2010, the permittee shall submit an Annual Report to EPA and IDEQ. The reporting period for the first annual report will be from the effective date of this permit through December 31, 2009. The reporting period for all subsequent annual reports shall be the previous calendar year. Copies of all Annual Reports must be made available to the public, at a minimum, through a permittee-maintained website. The following information must be contained in each Annual Report:
 - a) The report must assess compliance with this permit and progress towards achieving the identified actions and activities for each minimum control measure in Parts II.B and II.C. Status of each program area must be addressed, even if activity has previously been completed or has not yet been implemented;
 - b) Results of any information collected and analyzed during the previous 12 month period, including stormwater discharge analytical results of samples collected, estimates of cumulative daily and monthly average pollutant loads for each pollutant at each sample location, water quality monitoring as noted in this part and any other information used to assess the success of the program at improving water quality to the maximum extent practicable;
 - c) A summary of the number and nature of inspections, formal enforcement actions, and/or other similar activities performed;
 - d) A summary list of any water quality compliance-related enforcement actions received from regulatory agencies other than EPA. Such actions include, but are not limited to, formal or informal warning letters, notices of violation, field citations, or similar actions. This summary should include dates, project synopsis, and actions taken to address the compliance issue(s);

- e) Copies of education materials, ordinances (or other regulatory mechanisms), inventories, guidance materials, or other products produced as a result of actions or activities required by this permit;
- f) A general summary of the activities the permittee plans to undertake during the next reporting cycle (including an implementation schedule) for each minimum control measure;
- g) A description and schedule for implementation of additional BMPs that may be necessary, based on monitoring results, to ensure compliance with applicable water quality standards;
- h) Notice if the permittee is relying on another entity to satisfy any of the permit obligations, if applicable.

D. Addresses. Reports and other documents required by this permit must be signed in accordance with Part VI.E and submitted to each of the following addresses:

EPA: United States Environmental Protection Agency
Attention: Storm Water Program
NPDES Compliance Unit
1200 6th Avenue, Suite 900 (OCE-133)
Seattle, WA 98101

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