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Norm Harker  
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February 8, 2013

Carey Cholski  
Permit Administrator  
Washington State Dept. of Ecology  
PO Box 47775  
Olympia, WA 98504-7775

RE: 2012 Infiltration and Inflow Report  
WA0023639

Dear Ms. Cholski:

Enclosed you will find the 2012 Infiltration and Inflow Report for the Salmon Creek Treatment Plant prepared by Clark Regional Wastewater District (CRWWD). This report is being submitted as required by the NPDES Permit No. WA0023639.

If you have any questions, please contact me at 360.993.8821 or by email at [rkrause@crwwd.com](mailto:rkrause@crwwd.com).

Sincerely,

A handwritten signature in blue ink that reads "J.D. Robin Krause".

J.D. Robin Krause, PE  
District Engineer

Enclosure

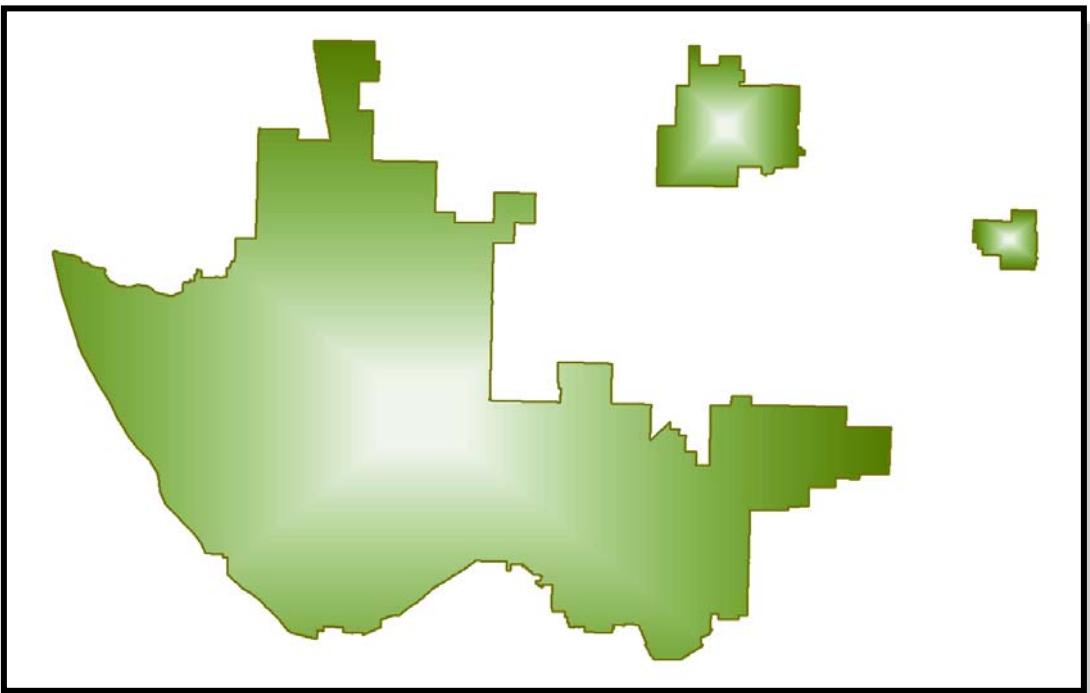
C: David Knight, Pretreatment Coordinator, Washington State Dept. of Ecology  
Kay Hust, Wastewater Operations Manager, Salmon Creek Treatment Plant



2012

Clark Regional  
Wastewater District

**Infiltration and Inflow Report**



February 8, 2013

In Compliance with the NPDES Waste Discharge Permit  
No. WA-002363-9 Special Condition S4.E





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Clark Regional Wastewater District  
INFILTRATION AND INFLOW REPORT

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# **2012 Infiltration and Inflow Report**

## **Clark Regional Wastewater District**

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### **OVERVIEW**

The Clark Regional Wastewater District was formed in 1958. The District has always maintained a comprehensive construction specification, inspection and maintenance program to minimize infiltration and inflow into the system. As a result, the system flow characteristics perform well below the non-excessive criteria as established in the EPA Infiltration/Inflow Analysis and Project Certification (publication 97-03).

### **ANALYSIS**

The District's average dry weather and wet weather flows are well below what would generally be considered excessive. Average dry weather flows greater than 120 gpcd generally indicate excessive infiltration. Dry weather flows occur during periods of high seasonal groundwater and little or no rainfall. The District's infiltration remains well below excessive at only 77 gpcd. Average wet weather flows greater than 275 gpcd generally indicate excessive inflow. Wet weather flows occur during periods of significant rainfall including apparent ponding and surface runoff. The District's inflow remains well below excessive at only 104 gpcd.

For the purpose of this report, population calculations have been based on population equivalents. This method calculates a population based on the total number of Equivalent Residential Units (ERU's) multiplied by the planning assumption of people per ERU. This assumption is 2.43 people per ERU for the Salmon Creek Treatment Plant (CH2M Hill, 2004 SCTP Phase 4). The calculation for population equivalent effectively includes commercial and industrial ERU's in addition to residents of the area.

Flow data during 2012 includes several gaps in the data due to construction activities at the Battle Ground Equalization Basin. Flow meters for Battle Ground influent and effluent, Meadow Glade, and Hockinson were all offline at times between June and December. Flow data for those out-of-service periods are estimated based on flows from adjacent days and active rainfall (highlighted on flow reports). While not completely accurate, these rough estimates are sufficient for this analysis. They are limited to 13 out of 353 total days of data and actual data was used for excessive inflow and infiltration calculations.

As shown on the attached Annual Infiltration/Inflow Report (I/I), the District's 2012 I/I of 2.00 MGD represents an increase of 82% over the 2003 base year.

To better understand I/I trends in the system, the District reviews the average monthly flows and rainfall between January 1997 and December 2012. Table 1 shows that the second lowest I/I year on record is 2003. The District's I/I averaged 1.43 over the past 16 years. Looking more closely at rainfall, the District's average I/I for those years prior to 2012 that exceeded 40 inches of total rainfall is 1.63. Based on the historical performance and excessive inflow and infiltration calculations, the 2012 I/I of 2.00 with over 40 inches of rainfall does not lead us to believe that the system is experiencing higher than normal I/I.

**TABLE 1**  
**1997-2012 I/I AND RAINFALL**

<b>Year</b>	<b>Min of Average Monthly Flow (MGD)</b>	<b>Max of Average Monthly Flow (MGD)</b>	<b>I/I</b>	<b>Annual Rainfall</b>
1997	3.90	5.73	1.84	48.18
1998	4.27	5.48	1.22	45.73
1999	4.20	5.92	1.72	43.87
2000	4.41	5.23	0.82	32.89
2001	4.39	5.74	1.35	36.41
2002	4.34	5.53	1.19	34.01
2003	4.63	5.72	1.10	41.02
2004	4.77	5.94	1.17	35.21
2005	4.79	5.90	1.11	34.82
2006	4.92	7.04	2.12	42.96
2007	5.12	6.64	1.52	34.14
2008	5.13	6.48	1.35	28.79
2009	5.11	6.39	1.28	31.93
2010	5.24	7.00	1.75	42.07
2011	5.05	6.99	1.95	30.77
2012	5.19	7.19	2.00	41.65
Average	-	-	1.43	37.52

# Monitoring Program and Rehabilitation Projects

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## **Intro**

The District places an emphasis on good design and inspection to minimize infiltration and inflow into the system. However, as pipes age, we have to turn to a variety of methods for the monitoring and identification of I/I. This includes yearly review of pump station records, treatment plant flow reports, trunk line flow monitoring, smoke testing, visual inspection of manholes and closed circuit television (CCTV) camera inspection. Through these efforts, the District is able to locate areas of concern for follow-up investigation and correction.

## **Cross-Connections**

For issues on private property (i.e., stormwater cross connections, roof drains or broken laterals), the District contacts the homeowner and works with them to correct the situation. The District typically addresses issues that are within public right-of-way. All side sewer connections (between right-of-way and building envelope) are permitted and inspected by the District.

## **New Construction**

The District addresses inflow and infiltration by inspecting all new systems during construction, including all mainlines, manholes and individual laterals. In addition, during plan review and field inspection, the District reviews the need for inflow dishes or watertight locking lids to control inflow. The District addresses infiltration by requiring manhole joints to be externally sealed in areas of high groundwater, vacuum testing of 50 percent of all new manholes and air testing of all new gravity mainlines.

## **Flow Monitoring**

The District owns several FloDar ultrasonic flow meters that are used to measure flows where I/I is suspected. The District also monitors its 50 pump stations as well as our four motor operated valves (MOV's). Daily and annual reviews of the flow data identify potential for I/I. In addition, the two satellite service areas (Meadow Glade and Hockinson) that are served by STEP systems have individual flow meters at their termination, so the District is able to review flow characteristics of these systems.

We deployed and collected flow data from our 15 FloDar ultrasonic flow meters during both wet and dry weather flows. Dry weather data was collected during the summer months and wet weather data is currently being collected. The District will re-deploy the meters into particular sub-basins suspected of experiencing the greatest amount of I/I. This data will inform more robust efforts to eliminate I/I in the District's system.

### **Rehabilitation**

The District inspects all gravity mains and trunk sewers with CCTV camera every eight years to assess condition, I/I and other related issues. One capital project was completed specifically to eliminate significant I/I at Hockinson Elementary School. The project eliminated I/I from groundwater by repairing the STEP tank risers and two manhole connections.

## **APPENDIX A**

### **ANNUAL INFILTRATION/INFLOW (I/I) REPORT**



The following tables and guidelines have been developed to assist in preparing an Annual Infiltration/Inflow Report:  
Please provide data for the last three years and fill yellow shaded areas.

## Salmon Creek Wastewater Treatment Plant

### ANNUAL INFILTRATION/INFLOW (I/I) REPORT

**Reporting Year:** From: 2010 To: 2012

Max month design flow: 11.48 MGD (CRWWWD allocation beginning in 2009)  
Peak daily design flow: 15.31 MGD  
Design Population Equivalent: 86,989

Month	Average Monthly Flow (MGD)			Total Monthly Rainfall (inches)			Population Served			Additional Sewer Lines Added (feet)			
	Year	Year	Year	Year	Year	Year	2010	2011	2012	2010	2011	2012	
January	6.48	6.76	6.28	6.29	4.19	5.51	71222	72070	72871	330	1272	399	
February	6.08	6.11	5.82	3.72	3.81	3.45	71310	72232	73033	1140	162	1849	
March	5.87	6.99	6.66	2.20	5.02	6.17	71418	72294	73253	5823	32	1850	
April	5.91	6.55	6.39	2.37	3.55	2.24	71534	72351	73309	0	0	3939	
May	5.79	6.10	5.98	3.66	1.96	2.06	71561	72411	73392	696	0	739	
June	6.34	5.80	5.85	4.35	0.50	2.54	71644	72450	73497	0	1286	25	
July	5.36	5.42	5.47	0.15	0.92	0.21	71694	72515	73563	10	1213	510	
August	5.24	5.23	5.27	0.21	0.01	0.00	71750	72564	73647	80	20	2510	
September	5.35	5.11	5.19	1.81	0.33	0.07	71788	72606	73696	0	0	2050	
October	5.45	5.20	5.45	3.31	1.95	5.61	71831	72693	73789	8671	0	15	
November	6.32	5.59	6.32	5.97	6.59	6.87	71875	72720	73837	0	10	2385	
December	7.00	5.05	7.19	8.03	1.94	6.92	72030	72781	73854	549	49	0	
<b>TOTAL</b>	<b>71.20</b>	<b>69.90</b>	<b>71.87</b>	<b>42.07</b>	<b>30.77</b>	<b>41.65</b>				<b>Total (feet)</b>	<b>17299</b>	<b>4044</b>	<b>16271</b>
<b>Low</b>	<b>5.24</b>	<b>5.05</b>	<b>5.19</b>							<b>Total (miles)</b>	<b>3.28</b>	<b>0.77</b>	<b>3.08</b>
<b>High</b>	<b>7.00</b>	<b>6.99</b>	<b>7.19</b>										
<b>Average</b>	<b>5.93</b>	<b>5.83</b>	<b>5.99</b>										
<b>I/I</b>	<b>1.75</b>	<b>1.95</b>	<b>2.00</b>										

Base Year: 2003

Base Year I/I: 1.1 MGD

### INFILTRATION/INFLOW SUMMARY

Year	I/I	% increase from base I/I	% of max mo design flow
2010	1.75	59	15
2011	1.95	77	17
2012	2.00	82	17

Comments:

J.D. Robin Krause

J.D. Robin Krause, PE  
District Engineer





## **APPENDIX B**

### **FLOW ANALYSIS DATA**



## Salmon Creek Wastewater Management System - Clark Regional Wastewater District

### ANNUAL INFILTRATION/INFLOW REPORT

1/1/2012 to 12/31/2012

#### FLOW AND PRECIPITATION DATA

MONTH	Average Monthly Flow (MGD)					Total Monthly Precipitation (Inches)						
	2007	2008	2009	2010	2011	2012	2007	2008	2009	2010	2011	2012
Year	Year											
January	6.20	6.48	6.39	6.48	6.76	6.28	3.58	6.17	4.96	6.29	4.19	5.51
February	5.86	6.13	5.45	6.08	6.11	5.82	3.97	2.41	1.40	3.72	3.81	3.45
March	6.00	5.90	5.57	5.87	6.99	6.66	2.90	3.79	2.95	2.20	5.02	6.17
April	5.64	5.70	5.64	5.91	6.55	6.39	1.79	2.48	2.42	2.37	3.55	2.24
May	5.41	5.48	5.73	5.79	6.10	5.98	1.25	1.35	3.39	3.66	1.96	2.06
June	5.30	5.48	5.38	6.34	5.80	5.85	1.43	1.27	1.07	4.35	0.50	2.54
July	5.16	5.21	5.14	5.36	5.42	5.47	0.61	0.25	0.43	0.15	0.92	0.21
August	5.12	5.15	5.11	5.24	5.23	5.27	0.46	1.51	0.38	0.21	0.01	0.00
September	5.16	5.13	5.13	5.35	5.11	5.19	1.93	0.08	1.44	1.81	0.33	0.07
October	5.25	5.13	5.19	5.45	5.20	5.45	2.97	1.80	2.89	3.31	1.95	5.61
November	5.43	5.57	5.73	6.32	5.59	6.32	4.53	4.61	5.73	5.97	6.59	6.87
December	6.64	5.66	5.88	7.00	5.05	7.19	8.72	3.07	4.87	8.03	1.94	6.92
<b>Avg Flow / Total Rain</b>	<b>5.60</b>	<b>5.59</b>	<b>5.53</b>	<b>5.93</b>	<b>5.83</b>	<b>5.99</b>	<b>34.14</b>	<b>28.79</b>	<b>31.93</b>	<b>42.07</b>	<b>30.77</b>	<b>41.65</b>
Low Month	5.12	5.13	5.11	5.24	5.05	5.19	0.46	0.08	0.38	0.15	0.01	0.00
High Month	6.64	6.48	6.39	7.00	6.99	7.19	8.72	6.17	5.73	8.03	6.59	6.92

**Comments:** Measured data presented in this report reflects the Clark Regional Wastewater District's capacity usage only.  
Battle Ground usage is reported separately.

MONTH	Population Served (Population Equivalent)					Sewer Lines Added (Feet)	
	2007	2008	2009	2010	2011	Year	Year
January	72871					399	
February						1849	
March						1850	
April						3939	
May						739	
June						25	
July						510	
August						2510	
September						2050	
October						15	
November						2385	
December						0	
<b>Present</b>						<b>Total</b>	<b>16271</b>
						<b>Equivalent</b>	<b>73854 (feet)</b>
<b>Total</b>						<b>Total (miles)</b>	<b>3.08</b>

## **Salmon Creek Wastewater Management System - Clark Regional Wastewater District**

**ANNUAL INFILTRATION/INFLOW REPORT**

**1/1/2012 to 12/31/2012**

### **DETERMINATION OF NON EXCESSIVE INFILTRATION**

### **DETERMINATION OF NON EXCESSIVE INFLOW**

EPA Infiltration Criteria

120 gpcd

CRWWWD Infiltration

77 gpcd

check

	<b>Period</b>	<b>Flow</b>	<b>Rain</b>	<b>Population Equivalent</b>	<b>Period</b>	<b>Flow</b>	<b>Rain</b>	<b>Population Equivalent</b>
12	Jan 07	5.78	0.01	72871	Jan 18		7.83	1.11
	Jan 08	5.98	0.00	72871	Jan 19		8.90	1.33
	Jan 09	5.67	0.03	72871	Jan 20		7.78	0.63
	Jan 10	5.72	0.04	72871	Jan 21		7.06	0.04
	Jan 11	5.53	0.00	72871	Jan 22		7.35	0.34
	Jan 12	5.42	0.00	72871	Jan 23		6.87	0.01
	Jan 13	5.43	0.00	72871	Jan 24		7.20	0.64
	<b>Average Flow (MGD)</b>	<b>5.65</b>	<b>0.08 Inches Rain</b>		<b>Average Flow (MGD)</b>	<b>7.57</b>	<b>4.10 Inches Rain</b>	

Comments: The seven day period of January 07 through January 13, 2012 was identified as a dry weather period within a period of seasonal high groundwater.

Comments: The seven day period of January 18 through January 24, 2012 was identified as a period of significant rainfall with surface ponding and runoff.

## Salmon Creek Wastewater Management System - Clark Regional Wastewater District

### ANNUAL INFILTRATION/INFLOW REPORT

1/1/2012 to 12/31/2012

#### **INFILTRATION/INFLOW SUMMARY**

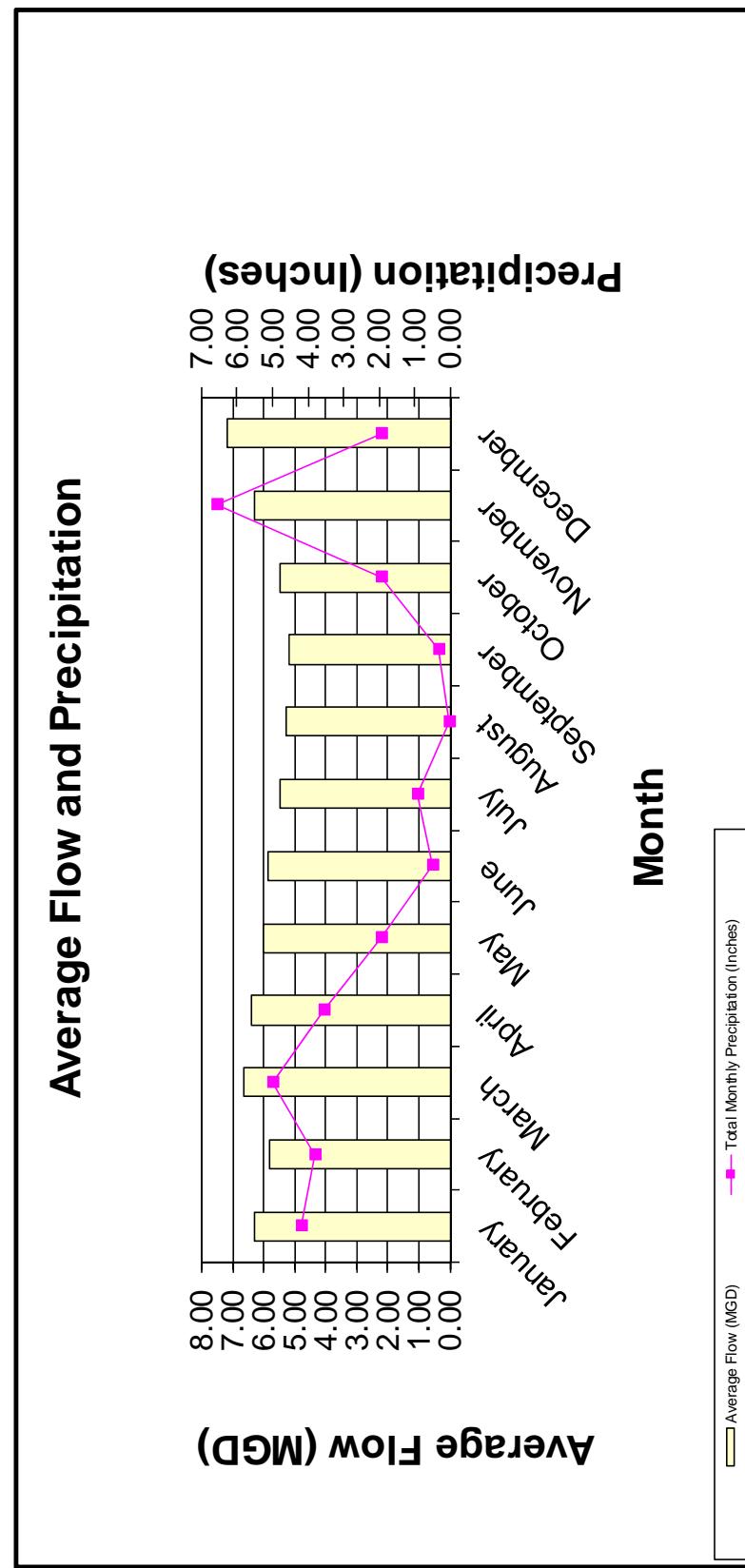
Year	I/I	% Over Base I/I	% of Design Flow	Base Year:	Base Year:
2007	1.52	38.2%	14.8%		
2008	1.35	22.7%	13.1%		
2009	1.28	16.4%	12.4%		
2010	1.75	59.4%	15.3%		
2011	1.95	76.9%	16.9%		
2012	2.00	81.7%	17.4%		

Comments: See Overview for I/I discussion.

#### **PLANT DESIGN CAPACITY**

Peak Design Flow:	21.74 MGD
Max Month Design Flow:	11.48 MGD

#### **Average Flow and Precipitation**



Comments: Design capacity represents total plant capacity. Present population and infiltration/inflow data included in this report represent Clark Regional Wastewater's usage only. Battle Ground usage is reported separately.



## **APPENDIX C**

### **MONTHLY FLOW AND RAINFALL JANUARY – DECEMBER 2012**



## Salmon Creek Wastewater Treatment Plant Flow and Rainfall Report

Date	Meadow Glade GPD	Hockinson GPD	BG MGD	BG Inf MGD	BG Eff MGD	Diff MGD	SC Inf MGD	SC Eff MGD	Diff MGD	BG Rainfall	SC Rainfall
1/1/2012	203000	19500	2.08	1.86	1.89	0.19	7.55	7.27	0.28	0.00	0.00
1/2/2012	200000	13500	1.94	1.72	1.91	0.02	7.84	7.55	0.29	0.00	0.01
1/3/2012	200000	22900	1.87	1.65	1.73	0.14	7.19	6.97	0.23	0.08	0.00
1/4/2012	167000	25100	1.97	1.77	1.67	0.30	7.10	6.88	0.21	0.00	0.14
1/5/2012	196000	25500	2.01	1.79	1.72	0.28	7.18	6.96	0.22	0.28	0.10
1/6/2012	186000	23700	1.87	1.66	1.66	0.21	7.00	6.76	0.24	0.10	0.13
1/7/2012	172000	10600	1.70	1.52	1.75	-0.04	7.35	7.10	0.26	0.24	0.01
1/8/2012	210000	12000	1.70	1.47	1.67	0.02	7.43	7.12	0.32	0.00	0.00
1/9/2012	188000	23600	1.81	1.60	1.65	0.16	7.11	6.87	0.25	0.02	0.03
1/10/2012	182000	23100	1.75	1.54	1.65	0.10	7.16	6.93	0.23	0.23	0.04
1/11/2012	166000	21300	1.84	1.66	1.56	0.28	6.90	6.60	0.29	0.00	0.00
1/12/2012	174000	20500	1.51	1.32	1.62	-0.10	6.85	6.56	0.29	0.00	0.00
1/13/2012	163000	23700	1.69	1.50	1.47	0.22	6.71	6.44	0.27	0.00	0.00
1/14/2012	173000	10300	1.60	1.42	1.51	0.09	6.91	6.63	0.29	0.00	0.04
1/15/2012	170000	8100	1.54	1.36	1.43	0.11	6.88	6.54	0.35	0.15	0.00
1/16/2012	176000	9300	1.49	1.31	1.51	-0.02	7.04	6.70	0.34	0.00	0.06
1/17/2012	215000	31000	2.15	1.90	1.78	0.36	7.44	7.14	0.30	0.30	0.51
1/18/2012	298000	61700	3.52	3.16	3.24	0.28	10.71	9.43	1.28	1.64	1.11
1/19/2012	323000	92800	4.39	3.98	3.92	0.48	12.40	11.08	1.32	0.58	1.33
1/20/2012	244000	60300	3.70	3.39	3.85	-0.15	11.33	11.39	-0.06	1.35	0.63
1/21/2012	216000	27800	2.93	2.68	3.49	-0.56	10.31	10.03	0.28	0.61	0.04
1/22/2012	203000	31500	2.80	2.57	2.73	0.07	9.85	9.55	0.30	0.08	0.34
1/23/2012	204000	30300	2.57	2.33	2.43	0.14	9.07	8.75	0.32	0.41	0.01
1/24/2012	210000	48700	2.55	2.29	2.67	-0.12	9.61	9.41	0.20	0.22	0.64
1/25/2012	209000	31300	2.55	2.31	2.35	0.20	8.93	8.74	0.20	0.52	0.01
1/26/2012	135000	27300	2.23	2.07	2.19	0.04	8.51	8.22	0.29	0.20	0.03
1/27/2012	146000	27500	2.16	1.98	1.98	0.18	8.03	7.68	0.35	0.03	0.00
1/28/2012	156000	13800	1.99	1.82	1.96	0.03	8.00	7.71	0.29	0.00	0.00
1/29/2012	202000	26700	2.38	2.15	1.92	0.46	8.17	7.90	0.28	0.00	0.28
1/30/2012	196000	33000	2.55	2.32	2.26	0.29	8.48	8.25	0.23	0.69	0.01
1/31/2012	148000	28300	2.22	2.04	1.94	0.29	7.90	7.68	0.22	0.00	0.01
<b>Total</b>	6031000	864700	69.05	62.16	65.10	3.96	252.99	242.82	10.17	7.73	5.51
<b>Min</b>	135000	8100	1.49	1.31	1.43	-0.56	6.71	6.44	-0.06	0.00	0.00
<b>Max</b>	323000	92800	4.39	3.98	3.92	0.48	12.40	11.39	1.32	1.64	1.33
<b>Average</b>	194548	27894	2.23	2.01	2.10	0.13	8.16	7.83	0.33	0.25	0.18

# Salmon Creek Wastewater Treatment Plant Flow and Rainfall Report

Date	Meadow Glade GPD	Hockinson GPD	BG MGD	BG MGD	BG Inf MGD	BG Eff MGD	Diff MGD	SC Inf MGD	SC Eff MGD	Diff MGD	BG Rainfall	SC Rainfall
2/1/2012	179000	26800	2.02	1.81	1.75	0.27	7.51	7.30	0.21	0.05	0.01	
2/2/2012	152000	26600	1.95	1.77	1.72	0.23	7.41	7.15	0.25	0.00	0.00	
2/3/2012	190000	24200	2.17	1.96	1.64	0.53	7.25	7.00	0.25	0.00	0.00	
2/4/2012	195000	11600	2.18	1.98	1.66	0.53	7.40	7.11	0.29	0.00	0.00	
2/5/2012	149000	14500	1.29	1.13	1.57	-0.28	7.45	7.11	0.34	0.00	0.18	
2/6/2012	167000	21700	1.78	1.59	1.54	0.24	7.12	6.83	0.29	0.00	0.00	
2/7/2012	154000	20000	1.65	1.47	1.46	0.18	6.90	7.16	-0.25	0.00	0.00	
2/8/2012	179000	17400	1.73	1.53	1.42	0.31	6.81	6.72	0.09	0.03	0.07	
2/9/2012	174000	22900	1.69	1.49	1.54	0.14	7.03	7.02	0.01	0.28	0.07	
2/10/2012	162000	23200	1.90	1.72	2.31	-0.41	7.01	6.82	0.19	0.10	0.24	
2/11/2012	175000	9800	1.82	1.63	1.54	0.28	7.22	6.97	0.24	0.09	0.21	
2/12/2012	180000	14600	1.70	1.50	1.51	0.19	7.27	6.97	0.29	0.00	0.07	
2/13/2012	196000	23300	1.76	1.54	1.52	0.24	7.07	6.82	0.25	0.18	0.07	
2/14/2012	174000	24300	1.68	1.48	2.31	-0.64	7.00	6.88	0.12	0.07	0.21	
2/15/2012	168000	22600	1.87	1.68	1.51	0.36	6.97	6.71	0.26	0.18	0.00	
2/16/2012	185000	27000	2.08	1.86	1.62	0.45	7.07	6.80	0.26	0.01	0.12	
2/17/2012	175000	28500	2.25	2.05	1.77	0.48	7.40	7.19	0.21	0.26	0.23	
2/18/2012	190000	18000	2.15	1.95	2.15	0.00	8.11	7.89	0.22	0.64	0.29	
2/19/2012	202000	15300	2.17	1.95	1.87	0.30	7.75	7.44	0.30	0.05	0.00	
2/20/2012	224000	18900	2.01	1.76	1.97	0.04	7.96	7.66	0.29	0.11	0.18	
2/21/2012	226000	38900	2.59	2.33	2.27	0.33	7.99	7.80	0.19	0.40	0.07	
2/22/2012	219000	38200	2.69	2.43	2.92	-0.22	8.65	8.42	0.23	0.83	0.25	
2/23/2012	178000	27200	2.18	1.98	2.19	-0.01	8.07	7.80	0.27	0.07	0.00	
2/24/2012	187000	30300	2.35	2.14	2.02	0.33	7.77	7.54	0.23	0.00	0.15	
2/25/2012	245000	28900	2.65	2.37	2.50	0.15	8.51	8.30	0.21	0.47	0.24	
2/26/2012	230000	20000	2.25	2.00	2.38	-0.12	8.53	8.22	0.31	0.50	0.02	
2/27/2012	209000	26100	2.03	1.80	2.04	0.00	7.90	7.56	0.34	0.05	0.00	
2/28/2012	212000	31100	2.12	1.88	3.29	-1.17	7.78	7.48	0.30	0.00	0.34	
2/29/2012	232000	34400	2.38	2.11	2.67	-0.30	8.34	8.05	0.29	0.42	0.27	
<b>Total</b>	5509000	686300	59.09	52.90	56.65	2.44	219.25	212.76	6.49	4.79	3.45	
<b>Min</b>	149000	9800	1.29	1.13	1.42	-1.17	6.81	6.71	-0.25	0.00	0.00	
<b>Max</b>	245000	38900	2.69	2.43	3.29	0.53	8.65	8.42	0.34	0.83	0.34	
<b>Average</b>	189966	23666	2.04	1.82	1.95	0.08	7.56	7.34	0.22	0.17	0.12	

# Salmon Creek Wastewater Treatment Plant Flow and Rainfall Report

Date	Meadow Glade GPD	Hockinson GPD	BG MGD	BG Inf MGD	BG Eff MGD	Diff MGD	SC Inf MGD	SC Eff MGD	Diff MGD	BG Rainfall	SC Rainfall
3/1/2012	2190000	27600	2.37	2.13	2.37	0.00	8.51	8.19	0.32	0.57	0.15
3/2/2012	1730000	31800	2.24	2.04	2.24	0.00	8.05	7.81	0.23	0.08	0.00
3/3/2012	2100000	22600	2.23	2.00	2.23	0.00	8.27	8.07	0.20	0.29	0.00
3/4/2012	2400000	18400	2.10	1.84	2.10	0.00	8.20	7.91	0.29	0.01	0.00
3/5/2012	2300000	30900	2.23	1.97	2.23	0.00	8.11	7.82	0.29	0.00	0.18
3/6/2012	1980000	25800	2.02	1.80	2.02	0.00	7.81	7.50	0.31	0.40	0.00
3/7/2012	1750000	26300	2.08	1.88	2.08	0.00	7.44	7.12	0.32	0.00	0.00
3/8/2012	2060000	24000	1.86	1.63	1.86	0.00	7.30	7.02	0.28	0.00	0.00
3/9/2012	1340000	20400	1.50	1.35	1.50	0.00	7.11	6.88	0.23	0.00	0.00
3/10/2012	2000000	18400	1.96	1.75	1.96	0.00	7.38	7.16	0.22	0.02	0.12
3/11/2012	2350000	19600	1.99	1.73	1.99	0.00	8.25	7.92	0.33	0.63	0.13
3/12/2012	3100000	54900	3.05	2.68	3.05	0.00	8.17	7.90	0.26	0.17	0.79
3/13/2012	2480000	45500	2.98	2.69	2.98	0.00	9.62	9.73	-0.11	1.54	0.18
3/14/2012	3050000	57500	3.47	3.11	3.47	0.00	10.43	9.64	0.79	0.18	0.86
3/15/2012	2440000	58400	3.61	3.31	3.61	0.00	12.15	11.76	0.39	1.37	0.55
3/16/2012	1790000	40200	2.94	2.72	2.94	0.00	9.90	9.63	0.26	0.55	0.16
3/17/2012	1790000	27000	2.62	2.41	2.62	0.00	9.80	9.48	0.32	0.33	0.15
3/18/2012	1760000	21400	2.28	2.08	2.28	0.00	9.30	8.94	0.36	0.17	0.15
3/19/2012	1760000	34400	2.37	2.16	2.37	0.00	8.73	8.43	0.30	0.26	0.03
3/20/2012	1770000	38500	2.52	2.30	2.52	0.00	8.78	8.55	0.23	0.25	0.19
3/21/2012	1910000	42300	2.75	2.52	2.75	0.00	9.62	9.27	0.35	0.48	0.35
3/22/2012	1930000	42300	2.91	2.68	2.91	0.00	10.28	9.96	0.31	0.86	0.30
3/23/2012	1640000	33500	2.78	2.58	2.78	0.00	9.26	8.95	0.31	0.00	0.00
3/24/2012	1440000	14200	2.04	1.89	2.04	0.00	8.80	8.59	0.21	0.00	0.00
3/25/2012	1550000	12800	1.79	1.63	1.79	0.00	8.58	8.29	0.28	0.00	0.01
3/26/2012	1540000	23400	1.97	1.79	1.97	0.00	8.19	7.93	0.26	0.03	0.00
3/27/2012	1530000	22700	1.87	1.70	1.87	0.00	8.10	7.88	0.22	0.06	0.20
3/28/2012	1610000	23300	1.92	1.73	1.92	0.00	7.78	7.55	0.22	0.17	0.14
3/29/2012	2430000	47300	3.02	2.73	3.02	0.00	8.96	8.77	0.19	0.30	0.80
3/30/2012	2010000	41500	2.97	2.72	2.97	0.00	10.97	10.72	0.25	1.52	0.21
3/31/2012	2140000	39900	3.11	2.86	3.11	0.00	10.98	10.62	0.36	0.46	0.52
<b>Total</b>	6187000	986800	75.58	68.41	75.58	0.00	274.78	265.99	8.79	10.70	6.17
<b>Min</b>	134000	12800	1.50	1.35	1.50	0.00	7.11	6.88	-0.11	0.00	0.00
<b>Max</b>	310000	58400	3.61	3.31	3.61	0.00	12.15	11.76	0.79	1.54	0.86
<b>Average</b>	199581	31832	2.44	2.21	2.44	0.00	8.86	8.58	0.28	0.35	0.20

Influent Battle Ground numbers were used in the effluent column due to a malfunctioning effluent flow meter.

# Salmon Creek Wastewater Treatment Plant Flow and Rainfall Report

Date	Meadow Glade GPD	Hockinson GPD	BG MGD	BG Inf MGD	BG Eff MGD	Diff MGD	SC Inf MGD	SC Eff MGD	Diff MGD	BG Rainfall	SC Rainfall
4/1/2012	209000	26800	2.64	2.40	2.62	0.02	10.06	9.77	0.29	0.48	0.04
4/2/2012	167000	18600	2.32	2.14	2.32	0.01	9.04	8.81	0.24	0.25	0.00
4/3/2012	171000	22900	2.44	2.24	2.36	0.08	9.00	8.77	0.23	0.00	0.28
4/4/2012	175000	34400	2.64	2.43	2.40	0.24	9.04	8.77	0.27	0.50	0.04
4/5/2012	199000	32700	2.94	2.71	2.79	0.16	9.62	9.31	0.30	0.89	0.16
4/6/2012	138000	19200	2.31	2.15	2.30	0.00	8.82	8.55	0.27	0.08	0.00
4/7/2012	121000	18400	2.34	2.21	2.16	0.19	8.66	8.38	0.28	0.05	0.00
4/8/2012	125000	16300	1.86	1.72	1.97	-0.11	8.51	8.27	0.24	0.00	0.00
4/9/2012	125000	23300	1.90	1.75	1.89	0.02	8.10	7.86	0.24	0.00	0.00
4/10/2012	125000	23300	1.78	1.64	1.77	0.01	7.78	7.57	0.21	0.00	0.02
4/11/2012	125000	31000	2.12	1.96	1.89	0.23	7.90	7.69	0.21	0.05	0.32
4/12/2012	151000	28400	2.02	1.84	1.98	0.04	8.16	7.71	0.45	0.80	0.09
4/13/2012	168000	25200	2.05	1.85	2.19	-0.14	8.06	8.05	0.01	0.00	0.00
4/14/2012	185000	11700	1.83	1.64	1.76	0.08	7.73	7.48	0.26	0.00	0.00
4/15/2012	213000	18000	1.83	1.60	1.86	-0.03	7.74	7.49	0.26	0.00	0.04
4/16/2012	67000	30600	2.14	2.04	2.12	0.02	8.44	8.22	0.22	0.67	0.28
4/17/2012	150000	28600	2.02	1.84	1.90	0.12	7.89	7.64	0.25	0.08	0.06
4/18/2012	170000	24700	2.01	1.81	1.85	0.16	7.76	7.55	0.20	0.21	0.06
4/19/2012	235000	33700	2.33	2.06	2.06	0.27	8.18	8.22	-0.04	0.00	0.34
4/20/2012	250000	30300	2.23	1.95	2.11	0.12	8.24	8.10	0.14	0.64	0.02
4/21/2012	300000	13500	2.04	1.73	1.95	0.09	8.10	7.88	0.22	0.01	0.00
4/22/2012	344000	11600	1.90	1.54	1.83	0.07	8.03	7.79	0.24	0.00	0.00
4/23/2012	200000	21400	1.87	1.65	1.79	0.08	7.76	7.58	0.18	0.02	0.00
4/24/2012	168000	23600	1.85	1.65	1.64	0.20	7.45	7.28	0.17	0.00	0.00
4/25/2012	185000	24700	1.86	1.65	1.58	0.28	7.30	7.19	0.11	0.02	0.05
4/26/2012	135000	23300	1.97	1.81	1.83	0.14	7.83	7.67	0.16	0.46	0.26
4/27/2012	137000	19800	2.34	2.18	1.69	0.65	7.48	7.29	0.19	0.08	0.03
4/28/2012	126000	8400	1.63	1.49	1.69	-0.06	7.52	7.36	0.16	0.09	0.00
4/29/2012	150000	13200	1.73	1.57	1.64	0.09	7.62	7.43	0.19	0.02	0.03
4/30/2012	205000	27200	2.22	1.99	2.04	0.17	7.98	7.81	0.17	0.58	0.12
<b>Total</b>	5219000	684800	63.15	57.25	59.95	3.20	245.81	239.48	6.33	5.98	2.24
<b>Min</b>	67000	8400	1.63	1.49	1.58	-0.14	7.30	7.19	-0.04	0.00	0.00
<b>Max</b>	344000	34400	2.94	2.71	2.79	0.65	10.06	9.77	0.45	0.89	0.34
<b>Average</b>	173967	22827	2.11	1.91	2.00	0.11	8.19	7.98	0.21	0.20	0.07

Shaded cells: Flow meter for Meadow Glade reported values of Zero. Revised value based on adjacent flows and rainfall data.

## Salmon Creek Wastewater Treatment Plant Flow and Rainfall Report

Date	Meadow Glade GPD	Hockinson GPD	BG MGD	BG Inf MGD	BG Eff MGD	Diff MGD	SC Inf MGD	SC Eff MGD	Diff MGD	BG Rainfall	SC Rainfall
5/1/2012	2190000	254000	2.17	1.93	1.96	0.22	7.71	7.50	0.22	0.20	0.06
5/2/2012	2040000	30700	2.26	2.03	1.95	0.32	7.70	7.56	0.14	0.31	0.05
5/3/2012	2580000	37900	2.72	2.42	1.68	1.04	9.30	9.28	0.02	0.53	0.63
5/4/2012	2110000	310000	2.64	2.40	2.33	0.31	8.68	8.67	0.01	0.47	0.12
5/5/2012	1130000	19500	2.25	2.11	2.13	0.12	8.45	8.49	-0.04	0.17	0.00
5/6/2012	150000	15200	1.97	1.81	1.92	0.05	8.20	7.99	0.21	0.00	0.00
5/7/2012	2040000	20600	1.93	1.71	1.38	0.55	7.84	7.67	0.17	0.00	0.00
5/8/2012	1910000	21800	1.86	1.65	1.75	0.11	7.55	7.43	0.12	0.00	0.00
5/9/2012	53000	21100	1.89	1.81	1.61	0.27	7.31	7.19	0.12	0.00	0.00
5/10/2012	1860000	20600	1.74	1.53	1.63	0.11	7.26	7.12	0.13	0.00	0.00
5/11/2012	1690000	19700	1.81	1.62	1.58	0.24	7.14	7.02	0.11	0.00	0.00
5/12/2012	179000	6900	1.58	1.40	1.58	0.01	7.21	7.02	0.19	0.00	0.00
5/13/2012	187000	7100	1.47	1.27	1.49	-0.02	7.20	7.00	0.20	0.00	0.00
5/14/2012	188000	19100	1.58	1.37	1.16	0.42	7.19	7.04	0.14	0.00	0.00
5/15/2012	189000	19000	1.51	1.30	1.48	0.03	6.98	6.85	0.13	0.00	0.00
5/16/2012	190000	17900	1.49	1.28	1.42	0.07	6.96	6.82	0.14	0.00	0.00
5/17/2012	146000	20700	1.47	1.30	1.41	0.06	6.86	6.68	0.18	0.00	0.00
5/18/2012	159000	19200	1.45	1.28	1.54	-0.08	6.73	6.43	0.30	0.00	0.00
5/19/2012	178000	7000	1.46	1.27	1.38	0.08	6.86	6.69	0.17	0.00	0.00
5/20/2012	214000	10500	1.47	1.25	1.39	0.09	7.09	6.91	0.18	0.00	0.07
5/21/2012	205000	22800	1.68	1.46	1.29	0.40	7.42	7.30	0.13	0.19	0.39
5/22/2012	180000	24500	1.72	1.51	1.66	0.06	7.39	7.24	0.15	0.52	0.13
5/23/2012	192000	20000	1.64	1.43	1.49	0.15	7.12	6.98	0.15	0.35	0.01
5/24/2012	177000	23800	1.64	1.44	1.60	0.04	7.36	7.22	0.14	0.26	0.42
5/25/2012	178000	25400	2.29	2.09	2.27	0.02	7.15	7.00	0.14	0.09	0.16
5/26/2012	185000	15600	2.13	1.93	2.84	-0.71	7.92	7.67	0.25	1.25	0.01
5/27/2012	190000	10800	2.01	1.81	1.84	0.17	7.76	7.57	0.19	0.39	0.00
5/28/2012	208000	8000	1.87	1.66	1.47	0.40	7.73	7.50	0.23	0.00	0.00
5/29/2012	181000	20000	1.79	1.59	1.68	0.11	7.28	7.07	0.22	0.01	0.00
5/30/2012	173000	16500	1.65	1.46	1.54	0.12	6.95	6.79	0.16	0.00	0.00
5/31/2012	181000	19700	1.69	1.49	1.56	0.13	6.97	6.83	0.14	0.02	0.01
<b>Total</b>	5638000	598000	56.85	50.62	51.97	4.88	231.27	226.51	4.76	4.76	2.06
<b>Min</b>	53000	6900	1.45	1.25	1.16	-0.71	6.73	6.43	-0.04	0.00	0.00
<b>Max</b>	258000	37900	2.72	2.42	2.84	1.04	9.30	9.28	0.30	1.25	0.63
<b>Average</b>	181871	19290	1.83	1.63	1.68	0.16	7.46	7.31	0.15	0.15	0.07

Shaded cells: Flow meter for Meadow Glade reported values of Zero. Revised value based on adjacent flows and rainfall data.

# Salmon Creek Wastewater Treatment Plant Flow and Rainfall Report

Date	Meadow Glade GPD	Hockinson GPD	BG MGD	BG Inf MGD	BG Eff MGD	Diff MGD	SC Inf MGD	SC Eff MGD	Diff MGD	BG Rainfall	SC Rainfall
6/1/2012	145000	212000	1.53	1.37	1.52	0.02	6.86	6.76	0.10	0.08	0.05
6/2/2012	159000	99000	1.47	1.30	1.53	-0.06	7.09	6.92	0.17	0.08	0.01
6/3/2012	214000	7100	1.62	1.40	1.49	0.13	7.12	6.87	0.26	0.00	0.00
6/4/2012	187000	29100	1.82	1.60	1.23	0.59	7.13	6.91	0.22	0.15	0.34
6/5/2012	190000	27000	1.98	1.76	2.04	-0.06	8.19	7.98	0.21	0.95	0.40
6/6/2012	181000	24100	1.79	1.59	1.70	0.09	7.42	7.25	0.17	0.02	0.00
6/7/2012	199000	28000	2.12	1.90	2.02	0.11	8.02	7.83	0.19	0.36	0.45
6/8/2012	188000	30900	2.20	1.98	2.20	0.00	7.78	7.56	0.23	0.31	0.04
6/9/2012	170000	12100	1.84	1.65	1.91	-0.07	7.74	7.50	0.24	0.37	0.00
6/10/2012	212000	15300	1.82	1.60	1.76	0.06	7.66	7.36	0.30	0.00	0.00
6/11/2012	170000	21500	1.80	1.61	1.29	0.52	7.44	7.24	0.20	0.00	0.00
6/12/2012	195000	21400	1.86	1.64	1.76	0.10	7.31	7.16	0.15	0.05	0.22
6/13/2012	178000	16900	1.76	1.56	1.29	0.47	7.31	7.17	0.15	0.51	0.00
6/14/2012	194000	11900	1.70	1.49	1.68	0.02	7.23	7.01	0.22	0.00	0.00
6/15/2012	169000	10500	1.74	1.56	1.59	0.15	7.03	6.85	0.19	0.00	0.00
6/16/2012	172000	7000	1.54	1.36	1.55	-0.01	7.10	6.88	0.22	0.00	0.00
6/17/2012	188000	5200	1.43	1.24	1.49	-0.05	7.17	6.97	0.20	0.00	0.00
6/18/2012	169000	5900	1.56	1.39	1.21	0.35	7.17	6.98	0.19	0.11	0.09
6/19/2012	165000	9100	1.53	1.35	1.51	0.02	6.92	6.75	0.17	0.07	0.25
6/20/2012	165000	4900	1.48	1.31	1.40	0.08	6.80	6.63	0.17	0.13	0.00
6/21/2012	166000	5100	1.47	1.30	1.46	0.01	6.88	6.71	0.16	0.00	0.00
6/22/2012	134000	12100	2.23	2.08	1.45	0.78	6.83	6.67	0.16	0.00	0.00
6/23/2012	217000	12900	1.59	1.36	1.90	-0.31	7.81	7.65	0.16	1.00	0.42
6/24/2012	152000	7500	1.37	1.21	1.68	-0.31	7.52	7.31	0.21	0.07	0.11
6/25/2012	189000	9900	1.64	1.44	1.24	0.40	7.25	7.08	0.17	0.00	0.00
6/26/2012	172000	22500	1.60	1.41	1.60	0.00	7.13	6.97	0.16	0.18	0.03
6/27/2012	177000	13900	1.56	1.37	1.47	0.09	6.90	6.70	0.20	0.08	0.00
6/28/2012	156000	10400	1.45	1.28	1.49	-0.04	6.99	6.83	0.16	0.00	0.00
6/29/2012	147000	7900	1.55	1.40	1.44	0.11	6.81	6.66	0.14	0.00	0.00
6/30/2012	150000	7600	1.45	1.29	1.48	-0.02	6.66	6.90	-0.24	0.00	0.13
<b>Total</b>	5270000	428800	50.53	44.83	47.34	3.19	217.29	212.03	5.25	4.52	2.54
<b>Min</b>	134000	4900	1.37	1.21	1.21	-0.31	6.66	6.63	-0.24	0.00	0.00
<b>Max</b>	217000	30900	2.23	2.08	2.20	0.78	8.19	7.98	0.30	1.00	0.45
<b>Average</b>	175667	14293	1.68	1.49	1.58	0.11	7.24	7.07	0.18	0.15	0.08

## Salmon Creek Wastewater Treatment Plant Flow and Rainfall Report

Date	Meadow Glade GPD	Hockinson GPD	BG MGD	BG Inf MGD	BG Eff MGD	Diff MGD	SC Inf MGD	SC Eff MGD	Diff MGD	BG Rainfall	SC Rainfall
7/1/2012	179000	10500	1.48	1.29	1.43	0.05	7.02	6.85	0.17	0.27	0.01
7/2/2012	159000	10600	1.46	1.29	1.13	0.33	6.93	6.78	0.14	0.00	0.03
7/3/2012	144000	13300	1.57	1.41	1.47	0.09	6.84	6.71	0.14	0.27	0.09
7/4/2012	169000	6300	1.33	1.16	1.41	-0.08	6.86	6.66	0.20	0.05	0.00
7/5/2012	156000	6400	1.38	1.22	1.35	0.03	6.60	6.38	0.22	0.00	0.00
7/6/2012	137000	5900	1.42	1.28	1.38	0.05	6.67	6.41	0.26	0.00	0.00
7/7/2012	132000	8300	1.24	1.10	1.36	-0.13	6.69	6.45	0.25	0.00	0.00
7/8/2012	180000	7600	1.40	1.21	1.32	0.08	6.77	6.58	0.19	0.00	0.00
7/9/2012	155000	4700	1.83	1.67	1.06	0.77	6.78	6.60	0.18	0.00	0.00
7/10/2012	161000	4100	0.81	0.64	1.28	-0.48	6.56	6.45	0.12	0.00	0.00
7/11/2012	152000	6600	1.31	1.15	1.25	0.05	6.49	6.36	0.13	0.00	0.00
7/12/2012	142000	3900	1.25	1.10	1.29	-0.04	6.54	6.30	0.24	0.00	0.00
7/13/2012	141000	3800	1.28	1.13	1.27	0.01	6.51	6.36	0.14	0.00	0.00
7/14/2012	144000	2800	1.25	1.10	1.28	-0.03	6.56	6.42	0.14	0.00	0.00
7/15/2012	153000	7000	1.28	1.12	1.24	0.04	6.64	6.51	0.13	0.00	0.00
7/16/2012	137000	6100	1.27	1.12	1.02	0.25	6.58	6.46	0.12	0.00	0.00
7/17/2012	131000	2200	1.22	1.08	1.24	-0.02	6.48	6.27	0.21	0.00	0.00
7/18/2012	124000	3100	1.20	1.07	1.16	0.04	6.34	6.28	0.06	0.00	0.00
7/19/2012	123000	6200	1.28	1.15	1.29	0.00	6.49	6.40	0.10	0.00	0.05
7/20/2012	99000	2000	1.18	1.08	1.20	-0.02	6.45	6.40	0.05	0.16	0.03
7/21/2012	90000	1800	1.19	1.10	1.21	-0.02	6.42	6.28	0.14	0.00	0.00
7/22/2012	144000	5200	1.25	1.10	1.20	0.05	6.59	6.40	0.19	0.00	0.00
7/23/2012	111000	2700	1.23	1.12	1.00	0.24	6.53	6.39	0.14	0.00	0.00
7/24/2012	122000	6400	1.20	1.07	1.21	-0.01	6.41	6.24	0.17	0.00	0.00
7/25/2012	123000	2900	1.20	1.07	1.16	0.04	6.33	6.17	0.15	0.00	0.00
7/26/2012	111000	3400	1.17	1.06	1.18	0.00	6.34	6.17	0.17	0.00	0.00
7/27/2012	151000	3400	1.54	1.39	1.16	0.38	6.27	6.20	0.08	0.00	0.00
7/28/2012	116000	5900	1.08	0.96	1.19	-0.11	6.31	6.23	0.08	0.00	0.00
7/29/2012	117000	3600	0.92	0.80	1.16	-0.24	6.42	6.32	0.09	0.00	0.00
7/30/2012	106000	4700	1.34	1.23	0.98	0.35	6.42	6.31	0.11	0.00	0.00
7/31/2012	150000	6300	1.08	0.92	1.20	-0.12	6.30	6.24	0.05	0.00	0.00
<b>Total</b>	4259000	167700	39.64	35.21	38.08	1.56	203.15	198.57	4.58	0.75	0.21
<b>Min</b>	90000	1800	0.81	0.64	0.98	-0.48	6.27	6.17	0.05	0.00	0.00
<b>Max</b>	180000	13300	1.83	1.67	1.47	0.77	7.02	6.85	0.26	0.27	0.09
<b>Average</b>	137387	5410	1.28	1.14	1.23	0.05	6.55	6.41	0.15	0.02	0.01

## Salmon Creek Wastewater Treatment Plant Flow and Rainfall Report

Date	Meadow Glade GPD	Hockinson GPD	BG MGD	BG Inf MGD	BG Eff MGD	Diff MGD	SC Inf MGD	SC Eff MGD	Diff MGD	BG Rainfall	SC Rainfall
8/1/2012	125000	3800	1.17	1.05	1.14	0.04	6.27	6.19	0.08	0.00	0.00
8/2/2012	112000	4100	1.19	1.07	1.19	0.00	6.36	6.30	0.06	0.00	0.00
8/3/2012	131000	2000	1.16	1.03	1.16	0.00	6.35	6.27	0.07	0.00	0.00
8/4/2012	127000	1400	1.16	1.03	1.14	0.02	6.28	6.17	0.11	0.00	0.00
8/5/2012	102000	4100	1.09	0.99	1.13	-0.03	6.48	6.38	0.10	0.00	0.00
8/6/2012	167000	6300	1.30	1.12	1.07	0.22	6.69	6.58	0.11	0.00	0.00
8/7/2012	125000	3700	1.12	0.99	1.16	-0.03	6.42	6.27	0.15	0.00	0.00
8/8/2012	112000	3100	1.16	1.04	1.11	0.05	6.30	6.23	0.07	0.00	0.00
8/9/2012	107000	900	1.16	1.05	1.17	-0.01	6.41	6.61	-0.20	0.00	0.00
8/10/2012	106000	1600	1.18	1.07	1.17	0.01	6.35	6.16	0.19	0.00	0.00
8/11/2012	123000	1300	1.24	1.12	1.17	0.07	6.37	6.36	0.01	0.00	0.00
8/12/2012	106000	4100	1.06	0.95	1.13	-0.07	6.44	6.43	0.01	0.00	0.00
8/13/2012	98000	7500	1.21	1.11	0.98	0.23	6.49	6.39	0.09	0.00	0.00
8/14/2012	124000	5100	1.15	1.03	1.17	-0.02	6.30	6.20	0.10	0.00	0.00
8/15/2012	95000	4900	1.08	0.98	1.13	-0.05	6.26	6.27	-0.01	0.00	0.00
8/16/2012	111000	900	1.21	1.10	1.14	0.07	6.23	6.03	0.19	0.00	0.00
8/17/2012	116000	4000	1.17	1.05	1.14	0.02	5.96	6.15	-0.19	0.00	0.00
8/18/2012	80000	7800	1.18	1.09	1.17	0.00	6.24	6.24	0.00	0.00	0.00
8/19/2012	89000	10900	1.17	1.07	1.16	0.01	6.40	6.44	-0.04	0.00	0.00
8/20/2012	86000	10800	1.21	1.11	0.97	0.23	6.38	6.44	-0.06	0.00	0.00
8/21/2012	89000	8000	1.21	1.12	1.19	0.02	6.25	6.34	-0.09	0.00	0.00
8/22/2012	84000	7700	1.20	1.11	1.17	0.04	6.21	6.37	-0.16	0.00	0.00
8/23/2012	84000	5500	1.17	1.08	1.19	-0.02	6.25	6.34	-0.08	0.00	0.00
8/24/2012	85000	4000	1.40	1.31	1.14	0.26	6.10	6.12	-0.02	0.00	0.00
8/25/2012	77000	2700	1.14	1.06	1.15	-0.01	6.14	6.17	-0.04	0.00	0.00
8/26/2012	69000	5200	0.92	0.84	1.14	-0.22	6.31	6.38	-0.07	0.00	0.00
8/27/2012	86000	5400	1.19	1.10	1.14	0.05	6.26	6.36	-0.10	0.00	0.00
8/28/2012	88000	8200	1.16	1.06	0.96	0.19	6.19	6.28	-0.09	0.00	0.00
8/29/2012	89000	20300	1.19	1.08	1.14	0.05	6.12	6.19	-0.07	0.00	0.00
8/30/2012	90000	14400	1.14	1.04	1.17	-0.03	6.18	6.28	-0.09	0.00	0.00
8/31/2012	85000	15500	1.30	1.20	1.17	0.13	6.15	6.06	0.09	0.00	0.00
<b>Total</b>	3168000	185200	36.39	33.04	35.14	1.25	195.13	195.01	0.13	0.00	0.00
<b>Min</b>	69000	900	0.92	0.84	0.96	-0.22	5.96	6.03	-0.20	0.00	0.00
<b>Max</b>	167000	20300	1.40	1.31	1.19	0.26	6.69	6.61	0.19	0.00	0.00
<b>Average</b>	102194	5974	1.17	1.07	1.13	0.04	6.29	6.29	0.00	0.00	0.00

## Salmon Creek Wastewater Treatment Plant Flow and Rainfall Report

Date	Meadow Glade GPD	Hockinson GPD	BG MGD	BG Inf MGD	BG Eff MGD	Diff MGD	SC Inf MGD	SC Eff MGD	Diff MGD	BG Rainfall	SC Rainfall
9/1/2012	85000	2000	1.11	1.02	1.13	-0.02	6.02	6.11	-0.09	0.00	0.00
9/2/2012	93000	3500	1.09	0.99	1.09	0.00	5.91	6.02	-0.11	0.00	0.00
9/3/2012	95000	4400	1.19	1.10	1.09	0.10	6.52	6.61	-0.09	0.00	0.00
9/4/2012	111000	16200	1.27	1.14	1.26	0.01	6.47	6.56	-0.09	0.00	0.00
9/5/2012	103000	15300	1.17	1.06	1.16	0.01	6.23	6.26	-0.03	0.00	0.00
9/6/2012	106000	17800	1.23	1.11	1.20	0.03	6.17	5.67	0.51	0.00	0.00
9/7/2012	93000	17500	1.08	0.97	1.15	-0.07	6.04	6.26	-0.22	0.00	0.00
9/8/2012	93000	10000	1.20	1.10	1.19	0.00	6.24	6.51	-0.28	0.00	0.01
9/9/2012	55000	5800	1.19	1.13	1.15	0.04	6.43	6.40	0.03	0.00	0.00
9/10/2012	106000	16600	1.25	1.13	0.97	0.28	6.29	6.29	0.00	0.06	0.06
9/11/2012	76000	18600	1.18	1.09	1.21	-0.03	6.20	6.15	0.05	0.00	0.00
9/12/2012	87000	18100	1.18	1.08	1.15	0.04	6.09	5.98	0.11	0.00	0.00
9/13/2012	90000	22600	1.31	1.20	1.18	0.13	6.11	5.89	0.22	0.00	0.00
9/14/2012	100000	14300	0.96	0.85	1.13	-0.17	6.02	5.94	0.07	0.00	0.00
9/15/2012	96000	600	1.31	1.22	1.18	0.14	6.17	6.04	0.13	0.00	0.00
9/16/2012	75000	7400	1.10	1.02	1.19	-0.09	6.49	6.32	0.17	0.00	0.00
9/17/2012	101000	19100	1.23	1.11	0.96	0.27	6.34	6.23	0.11	0.00	0.00
9/18/2012	101000	15600	1.19	1.07	0.70	0.49	6.18	6.04	0.14	0.00	0.00
9/19/2012	83000	20400	1.20	1.09	1.15	0.04	6.13	6.02	0.11	0.00	0.00
9/20/2012	88000	15300	1.27	1.17	1.18	0.09	6.14	6.01	0.13	0.00	0.00
9/21/2012	85000	14200	1.19	1.09	1.16	0.03	6.04	5.95	0.10	0.00	0.00
9/22/2012	105000	6100	1.19	1.07	1.20	-0.02	6.27	6.13	0.13	0.00	0.00
9/23/2012	95000	3500	1.26	1.17	1.19	0.08	6.54	6.37	0.17	0.00	0.00
9/24/2012	102000	15200	1.19	1.08	0.95	0.24	6.30	6.15	0.15	0.00	0.00
9/25/2012	91000	17000	1.02	0.91	1.17	-0.15	6.10	5.95	0.14	0.00	0.00
9/26/2012	95000	15400	1.16	1.05	1.11	0.04	6.08	5.93	0.15	0.00	0.00
9/27/2012	100000	17100	1.16	1.04	1.15	0.01	6.06	5.94	0.12	0.00	0.00
9/28/2012	109000	13100	1.14	1.02	1.14	0.01	5.99	5.91	0.08	0.00	0.00
9/29/2012	95000	13000	1.23	1.13	1.17	0.05	6.25	6.14	0.11	0.00	0.00
9/30/2012	92000	5200	1.19	1.09	1.18	0.01	6.45	6.23	0.21	0.00	0.00
<b>Total</b>	2806000	360200	35.45	32.28	33.85	1.60	186.27	184.04	2.23	0.06	0.07
<b>Min</b>	55000	600	0.96	0.85	0.70	-0.17	5.91	5.67	-0.28	0.00	0.00
<b>Max</b>	111000	22600	1.31	1.22	1.26	0.49	6.54	6.61	0.51	0.06	0.06
<b>Average</b>	93533	12007	1.18	1.08	1.13	0.05	6.21	6.13	0.07	0.00	0.00

# Salmon Creek Wastewater Treatment Plant Flow and Rainfall Report

Date	Meadow Glade GPD	Hockinson GPD	BG MGD	BG Inf MGD	BG Eff MGD	Diff MGD	SC Inf MGD	SC Eff MGD	Diff MGD	BG Rainfall	SC Rainfall
10/1/2012	111000	18500	1.20	1.07	0.94	0.26	6.19	6.03	0.16	0.00	0.00
10/2/2012	93000	15100	1.17	1.06	1.17	0.00	6.12	5.91	0.21	0.00	0.00
10/3/2012	97000	18200	1.18	1.06	1.13	0.04	6.08	5.84	0.24	0.00	0.00
10/4/2012	109000	16700	1.19	1.07	1.16	0.03	6.08	5.84	0.24	0.00	0.00
10/5/2012	103000	14300	1.23	1.11	1.12	0.11	6.00	5.75	0.25	0.00	0.00
10/6/2012	117000	2300	1.11	0.99	1.17	-0.06	6.20	5.91	0.28	0.00	0.00
10/7/2012	116000	5800	1.13	1.01	1.19	-0.06	6.42	6.13	0.29	0.00	0.00
10/8/2012	121000	18500	1.19	1.05	0.95	0.24	6.27	6.01	0.26	0.00	0.00
10/9/2012	126000	13700	1.14	1.00	1.15	-0.01	6.01	5.79	0.22	0.00	0.00
10/10/2012	113000	12400	1.13	1.00	1.09	0.04	5.95	5.73	0.22	0.00	0.00
10/11/2012	116000	17200	1.14	1.00	1.15	-0.02	5.99	5.74	0.24	0.00	0.00
10/12/2012	97000	11800	1.47	1.36	1.29	0.18	6.52	6.35	0.18	0.00	0.89
10/13/2012	93000	1100	1.24	1.15	1.29	-0.05	6.55	6.41	0.14	1.11	0.01
10/14/2012	109000	10300	1.33	1.21	1.33	0.01	6.66	6.52	0.14	0.02	0.31
10/15/2012	111000	20500	1.54	1.41	1.20	0.34	7.15	7.16	-0.01	1.00	0.27
10/16/2012	130000	17100	1.36	1.22	1.41	-0.04	6.65	6.54	0.11	0.46	0.03
10/17/2012	125000	16100	1.30	1.16	1.25	0.04	6.29	6.05	0.24	0.01	0.00
10/18/2012	117000	20200	1.26	1.12	1.27	-0.02	6.24	6.04	0.20	0.00	0.07
10/19/2012	88000	17400	1.35	1.25	1.37	-0.01	6.37	6.24	0.14	0.08	0.47
10/20/2012	122000	9600	1.64	1.51	1.56	0.08	6.97	6.71	0.26	0.62	0.26
10/21/2012	151000	8300	1.56	1.40	1.54	0.02	7.29	7.00	0.29	0.71	0.05
10/22/2012	137000	20900	1.61	1.45	1.26	0.35	7.09	6.82	0.27	0.08	0.36
10/23/2012	133000	17700	1.46	1.31	1.43	0.04	6.63	6.42	0.21	0.40	0.12
10/24/2012	139000	18500	1.53	1.38	1.52	0.02	6.82	6.61	0.21	0.34	0.16
10/25/2012	150000	16400	1.42	1.26	1.45	-0.02	6.53	6.26	0.27	0.15	0.01
10/26/2012	110000	14900	1.36	1.23	1.37	-0.02	6.39	6.16	0.23	0.00	0.04
10/27/2012	150000	16400	1.89	1.72	1.72	0.17	7.18	6.97	0.20	0.11	0.47
10/28/2012	181000	27100	2.20	1.99	1.91	0.29	7.93	7.74	0.19	0.78	0.48
10/29/2012	171000	30300	2.12	1.92	1.53	0.59	8.39	8.33	0.06	1.31	0.56
10/30/2012	188000	37400	2.42	2.19	2.39	0.03	8.47	8.37	0.10	0.32	0.77
10/31/2012	160000	31600	2.17	1.98	2.39	-0.22	7.96	6.92	1.04	0.71	0.28
<b>Total</b>	3884000	516300	45.04	40.64	42.69	2.35	207.36	200.30	7.06	8.21	5.61
<b>Min</b>	88000	1100	1.11	0.99	0.94	-0.22	5.95	5.73	-0.01	0.00	0.00
<b>Max</b>	188000	37400	2.42	2.19	2.39	0.59	8.47	8.37	1.04	1.31	0.89
<b>Average</b>	125290	16655	1.45	1.31	1.38	0.08	6.69	6.46	0.23	0.26	0.18

## Salmon Creek Wastewater Treatment Plant Flow and Rainfall Report

Date	Meadow Glade GPD	Hockinson GPD	BG MGD	BG Inf MGD	BG Eff MGD	Diff MGD	SC Inf MGD	SC Eff MGD	Diff MGD	BG Rainfall	SC Rainfall
11/1/2012	207000	38700	2.60	2.36	2.32	0.28	8.09	8.38	-0.30	0.43	0.09
11/2/2012	153000	20000	1.85	1.68	1.98	-0.13	7.51	7.63	-0.11	0.34	0.07
11/3/2012	171000	14400	1.97	1.78	2.06	-0.09	7.81	7.72	0.08	0.37	0.20
11/4/2012	192000	11900	1.77	1.57	1.83	-0.06	7.92	7.77	0.15	0.03	0.00
11/5/2012	154000	21300	1.77	1.60	1.34	0.43	7.15	7.00	0.15	0.05	0.00
11/6/2012	182000	24000	1.68	1.48	1.67	0.02	6.90	6.74	0.17	0.02	0.04
11/7/2012	164000	23700	1.64	1.46	1.61	0.04	6.87	6.58	0.29	0.21	0.02
11/8/2012	165000	19000	1.60	1.41	1.60	-0.01	6.81	6.49	0.32	0.00	0.00
11/9/2012	139000	18100	1.57	1.41	1.51	0.05	6.60	6.30	0.31	0.00	0.00
11/10/2012	163000	5400	1.61	1.44	1.50	0.11	6.72	6.39	0.33	0.00	0.00
11/11/2012	176000	15400	1.78	1.59	1.51	0.27	6.95	6.69	0.26	0.00	0.42
11/12/2012	196000	18500	1.87	1.66	1.57	0.30	8.21	8.03	0.18	0.80	0.38
11/13/2012	155000	20900	1.69	1.51	1.76	-0.07	7.23	7.05	0.18	0.05	0.01
11/14/2012	173000	19800	1.64	1.45	1.58	0.06	6.87	6.67	0.19	0.02	0.00
11/15/2012	168000	21300	1.57	1.39	1.59	-0.02	6.82	6.58	0.24	0.01	0.00
11/16/2012	161000	20700	1.66	1.48	1.52	0.14	6.63	6.38	0.25	0.00	0.00
11/17/2012	178000	20800	2.02	1.82	1.88	0.14	7.68	7.49	0.19	0.35	0.61
11/18/2012	251000	30000	2.55	2.27	2.06	0.49	8.02	7.80	0.22	0.51	0.91
11/19/2012	295000	64600	3.86	3.50	2.91	0.95	11.95	11.67	0.28	1.50	2.13
11/20/2012	255000	53400	3.22	2.92	0.06	3.16	10.80	9.94	0.87	1.30	0.27
11/21/2012	273000	95800	2.91	2.54	2.89	0.03	9.87	9.61	0.26	0.48	0.17
11/22/2012	239000	110300	2.34	1.99	2.43	-0.08	9.01	8.69	0.32	0.08	0.00
11/23/2012	302000	62900	3.20	2.84	2.74	0.46	8.91	8.69	0.21	0.00	0.77
11/24/2012	270000	24400	2.79	2.49	3.07	-0.29	10.35	10.11	0.24	1.36	0.05
11/25/2012	228000	17300	2.19	1.95	2.41	-0.22	8.97	8.67	0.30	0.02	0.00
11/26/2012	237000	25000	2.09	1.83	1.63	0.46	8.20	7.90	0.31	0.00	0.00
11/27/2012	209000	27200	1.94	1.71	1.99	-0.04	7.68	7.39	0.29	0.00	0.00
11/28/2012	215000	25000	1.89	1.65	1.85	0.05	7.41	7.18	0.23	0.00	0.05
11/29/2012	217000	27600	1.98	1.73	1.90	0.08	7.48	7.27	0.21	0.08	0.19
11/30/2012	276000	32600	2.71	2.40	2.07	0.64	7.79	7.65	0.14	0.42	0.49
<b>Total</b>	6164000	930000	63.98	56.88	56.82	7.16	239.22	232.46	6.76	8.43	6.87
<b>Min</b>	139000	5400	1.57	1.39	0.06	-0.29	6.60	6.30	-0.30	0.00	0.00
<b>Max</b>	302000	110300	3.86	3.50	3.07	3.16	11.95	11.67	0.87	1.50	2.13
<b>Average</b>	205467	31000	2.13	1.90	1.89	0.24	7.97	7.75	0.23	0.28	0.23

Meter malfunctioned on November 20, 2012. Unable to record an accurate read.

## Salmon Creek Wastewater Treatment Plant Flow and Rainfall Report

Date	Meadow Glade GPD	Hockinson GPD	BG MGD	BG Inf MGD	BG Eff MGD	Diff MGD	SC Inf MGD	SC Eff MGD	Diff MGD	BG Rainfall	SC Rainfall
12/1/2012	284000	284000	2.78	2.47	2.74	0.04	9.61	9.45	0.16	0.73	0.57
12/2/2012	284000	22900	2.76	2.45	3.08	-0.32	10.61	10.46	0.15	0.85	0.59
12/3/2012	271000	36400	2.78	2.48	2.01	0.77	9.50	9.33	0.17	0.40	0.12
12/4/2012	343000	54600	3.51	3.11	3.51	0.00	10.85	10.59	0.26	0.46	0.67
12/5/2012	251000	34200	2.81	2.53	2.99	-0.18	10.22	9.93	0.29	1.03	0.14
12/6/2012	228000	33500	2.46	2.20	2.47	-0.01	8.93	8.66	0.27	0.01	0.01
12/7/2012	200000	26300	2.24	2.01	2.30	-0.06	8.48	8.25	0.23	0.15	0.10
12/8/2012	218000	16000	2.14	1.91	2.18	-0.04	8.34	8.06	0.28	0.10	0.10
12/9/2012	260000	17300	2.23	1.95	2.15	0.08	8.46	8.17	0.29	0.13	0.11
12/10/2012	228000	29800	2.21	1.95	1.66	0.55	8.29	8.05	0.24	0.25	0.01
12/11/2012	257000	34600	2.34	2.05	2.26	0.08	8.23	7.98	0.25	0.03	0.19
12/12/2012	220000	29500	2.33	2.08	2.31	0.02	8.38	8.10	0.28	0.49	0.07
12/13/2012	228000	30700	2.33	2.07	2.16	0.17	8.15	7.87	0.28	0.13	0.01
12/14/2012	196000	28900	2.12	1.89	2.25	-0.13	8.30	8.01	0.30	0.36	0.24
12/15/2012	275000	26200	2.61	2.31	2.36	0.25	8.77	8.48	0.29	0.03	0.40
12/16/2012	344000	41100	3.24	2.85	3.02	0.22	10.10	9.79	0.30	0.68	0.76
12/17/2012	271000	40800	3.09	2.77	2.35	0.74	11.48	11.19	0.29	1.30	0.32
12/18/2012	243000	29600	2.64	2.36	2.65	-0.02	9.78	9.47	0.31	0.23	0.04
12/19/2012	299000	43300	3.21	2.87	2.66	0.55	9.49	9.21	0.28	0.28	0.36
12/20/2012	261000	50700	3.52	3.21	3.52	0.00	12.07	11.55	0.53	1.31	0.62
12/21/2012	181000	25000	2.73	2.52	2.86	-0.13	10.23	9.86	0.37	0.48	0.07
12/22/2012	184000	20400	2.50	2.30	2.57	-0.06	9.68	9.36	0.32	0.26	0.19
12/23/2012	224000	27600	2.82	2.56	2.54	0.27	9.70	9.30	0.40	0.04	0.38
12/24/2012	197000	21800	2.61	2.39	1.99	0.62	10.09	9.74	0.35	0.72	0.05
12/25/2012	235000	28500	2.98	2.72	2.77	0.21	10.24	9.84	0.40	0.29	0.67
12/26/2012	188000	21700	2.39	2.18	2.64	-0.26	10.12	9.81	0.31	0.48	0.12
12/27/2012	187000	18500	2.29	2.08	2.34	-0.05	9.24	8.94	0.30	0.11	0.01
12/28/2012	163000	17000	2.25	2.07	2.12	0.14	8.63	8.30	0.32	0.01	0.00
12/29/2012	175000	15500	2.01	1.82	2.00	0.01	8.37	8.01	0.36	0.00	0.00
12/30/2012	157000	15000	1.72	1.55	1.86	-0.13	8.08	7.73	0.35	0.03	0.00
12/31/2012	179000	15900	2.00	1.80	1.44	0.56	7.97	7.63	0.34	0.00	0.00
<b>Total</b>	7231000	881700	79.64	71.53	75.76	3.88	290.38	281.09	9.29	11.37	6.92
<b>Min</b>	157000	15000	1.72	1.55	1.44	-0.32	7.97	7.63	0.15	0.00	0.00
<b>Max</b>	344000	54600	3.52	3.21	3.52	0.77	12.07	11.55	0.53	1.31	0.76
<b>Average</b>	233258	28442	2.57	2.31	2.44	0.13	9.37	9.07	0.30	0.37	0.22

Shaded cells: Reported total effluent was far below the influent and what would be expected based on rainfall. Value revised to equal the influent number.

## **APPENDIX D**

### **2012 ERU AND SEWER LINE DATA**



**CLARK REGIONAL WASTEWATER DISTRICT  
SALMON CREEK TREATMENT PLANT  
SEWER CONNECTION REPORT**

Year: Jan 2012 - Dec 2012

Month	New Residential	Total Residential	Multi Family/ Guesthomes (*.8)	Total Res/ Multi-Family	New Commercial	Total Commercial	Grand ERU's	Total ERU's	Line Developer	Construction District	Total Construction	Line Construction	Total Miles	Year to Date	
														ERU's	ERU's - All
Balance Forward		20283.0		4844.1		3897.0	29024.1					1758184	333.0		
Jan	15.0	20298.0	19.2 ♦	4859.5	1.0 ♦	3898.0	29055.5	399				1758583	333.1		Res 296.0
Feb	19.0	20317.0	46.4 ♦	4896.6	0.0	3898.0	29111.6	1849				1760432	333.4		Multi-Family 131.2
Mar	23.0	20340.0	65.6 ♦	4949.1	0.0	3898.0	29187.1	1850				1762282	333.8		Comm 13.4
Apr	21.0	20361.0	0.0	4949.1	1.0 ♦	3899.0	29209.1	3939				1766221	334.5	Total 440.6	
May	28.0	20389.0	0.0	4949.1	4.2 ♦	3903.2	29241.3	739				1766960	334.7	VTP	
Jun	39.0	20428.0	0.0	4949.1	1.3 ♦	3904.5	29281.6	0				1767780	334.8	Res 15.0	
Jul	27.0	20455.0	0.0	4949.1	0.0	3904.5	29308.6	25				1767805	334.8		Multi-Family 0.0
Aug	28.0	20483.0	0.0	4949.1	3.6 ♦	3908.1	29340.2	510				1768580	335.0	Comm 0.0	
Sep	18.0	20501.0	0.0	4949.1	0.4 ♦	3908.5	29358.6	2510				1771090	335.4	Total 15.0	
Oct	38.0	20539.0	0.0	4949.1	0.3 ♦	3908.8	29396.9	2050				1773140	335.8		
Nov	18.0	20557.0	0.0	4949.1	1.4 ♦	3910.2	29416.3	15				1773155	335.8		Permits
Dec	6.0	20563.0	0.0	4949.1	0.2 ♦	3910.4	29422.5	2385				1775540	336.3		SCTP 2
Subtotals	280.0		131.2		13.4							16271	1085		VTP 0
Total ERU's		20563.0		4949.1		3910.4	29422.5					1775540	336.3	Total 2	

♦ See reverse for explanation

## CRWWWD SCTP

	January	June	October
North Glen Villas ♦ 7101 NE 109th St	20.2	Salmon Creek Dentistry ♦ 13710 NE 10th Ave	Shurgard Retail 1319 NE 134th St Ste 103 ♦ Elements Therapeutic Massag
February		Gateway Medical Building 2621 NE 134th St Ste 300 ♦ Sunrise Dental	0.3
North Glen Villas ♦ 7101 NE 109th St	46.4	Hazel Dell Towne Center 9301 NE 5th Ave G 126 ♦ Sleep Country	Gateway Medical Building 2621 NE 134th St Ste 210 ♦ Oral Surgery Solutions
March			0.4
North Glen Villas ♦ 7101 NE 109th St	65.6	Schlecht Commercial Building 7500 NE Saint Johns Rd ♦ Tenmax America	1.0
April		Barberton Industrial 10022 NE 72nd Ave Ste 200 ♦ Performance Prototype	0.7
King Lasik ♦ 17600 NE Delfel Rd	1.0	Wubben Industrial Park 11606 NE 66th St Ste B ♦ NWRTC Expansion	0.2
May		M&O Properties - 5 Corners Mall 9310 NE 76th St ♦ City Zoo	
North Park Building E 5408 NE 88th St ♦ nLight Photonics	0.8	Barberton Industrial Park 10018 NE 72nd Ave Ste 300 ♦ Nuna Baby Essentials	2.8
Goddard School ♦ 13201 NE 27th Ave	3.4	September	
		Gateway Medical Building 2621 NE 134th St Ste 300 ♦ Executive Suites II	0.4

**CLARK REGIONAL WASTEWATER DISTRICT  
MEADOWGLADE AREA  
SALMON CREEK TREATMENT PLANT  
SEWER CONNECTION REPORT**

Year: Jan 2012 - Dec 2012

Month	New Residential	Total Residential	Multi Family/ Guesthomes (*.8)	Total			Grand Total	Total Line Construction	Line Construction	Total Miles
				New	Res/	Total Multi-Family Commercial	ERU's	Developer		
<b>Balance Forward</b>				1.6		106.7	749.3			25182 4.8
<b>Jan</b>	1.0	642.0		1.6		106.7	750.3			25182 4.8
<b>Feb</b>	1.0	643.0		1.6		106.7	751.3			25182 4.8
<b>Mar</b>	1.0	644.0		1.6		106.7	752.3			25182 4.8
<b>Apr</b>	1.0	645.0		1.6		106.7	753.3			25182 4.8
<b>May</b>	2.0	647.0		1.6		106.7	755.3			25182 4.8
<b>Jun</b>	3.0	650.0		1.6		106.7	758.3			25182 4.8
<b>Jul</b>	0.0	650.0		1.6		106.7	758.3			25182 4.8
<b>Aug</b>	3.0	653.0		1.6		106.7	761.3			25182 4.8
<b>Sep</b>	2.0	655.0		1.6		106.7	763.3			25182 4.8
<b>Oct</b>	0.0	655.0		1.6		106.7	763.3			25182 4.8
<b>Nov</b>	0.0	655.0		1.6		106.7	763.3			25182 4.8
<b>Dec</b>	0.0	655.0		1.6		106.7	763.3			25182 4.8
<b>Subtotals</b>	14.0		0.0			0.0		0	0	
<b>Total ERU's</b>		655.0		1.6		106.7	763.3			25182 4.8

**CLARK REGIONAL WASTEWATER DISTRICT**  
**HOCKINNIN AREA**  
**SALMON CREEK TREATMENT PLANT**  
**SEWER CONNECTION REPORT**

Year: Jan 2012 - Dec 2012

Month	New Residential	Total Residential	Multi Family/ Guesthomes (*.8)	Total			Grand Total	Line Developer	Construction District	Total Line	Total Miles
				New	Total	Res/ Multi-Family	Total Commercial				
Balance Forward	ERU's	44.0		0.0			133.6	177.6		5746	1.1
Jan	1.0	45.0		0.0			133.6	178.6		5746	1.1
Feb	0.0	45.0		0.0			133.6	178.6		5746	1.1
Mar	1.0	46.0		0.0			133.6	179.6		5746	1.1
Apr	0.0	46.0		0.0			133.6	179.6		5746	1.1
May	0.0	46.0		0.0			133.6	179.6		5746	1.1
Jun	0.0	46.0		0.0			133.6	179.6		5746	1.1
Jul	0.0	46.0		0.0			133.6	179.6		5746	1.1
Aug	0.0	46.0		0.0			133.6	179.6		5746	1.1
Sep	0.0	46.0		0.0			133.6	179.6		5746	1.1
Oct	0.0	46.0		0.0			133.6	179.6		5746	1.1
Nov	0.0	46.0		0.0			133.6	179.6		5746	1.1
Dec	0.0	46.0		0.0			133.6	179.6		5746	1.1
<b>Subtotals</b>		2.0		0.0			0.0		0		
<b>Total ERU's</b>		46.0		0.0			133.6	179.6		5746	1.1

**CLARK REGIONAL WASTEWATER DISTRICT  
VANCOUVER TREATMENT PLANT  
SEWER CONNECTION REPORT**

Year: Jan 2012 - Dec 2012

Month	Residential	New Residential	Multi Family/ Guesthomes (* .8)	Total			ERU's	Grand Total	Line Construction	District	Construction	Total Line Miles
				Total	New	Commercial						
Balance	ERU's	Forward	3028.0	732.0				831.8	4591.8			334383
Jan	0.0	3028.0		732.0			831.8	4591.8			334383	63.3
Feb	0.0	3028.0		732.0			831.8	4591.8			334383	63.3
Mar	0.0	3028.0		732.0			831.8	4591.8			334383	63.3
Apr	4.0	3032.0		732.0			831.8	4595.8	495		334878	63.4
May	0.0	3032.0		732.0			831.8	4595.8			334878	63.4
Jun	3.0	3035.0		732.0			831.8	4598.8			334878	63.4
Jul	1.0	3036.0		732.0			831.8	4599.8			334878	63.4
Aug	6.0	3042.0		732.0			831.8	4605.8			334878	63.4
Sep	0.0	3042.0		732.0			831.8	4605.8			334878	63.4
Oct	1.0	3043.0		732.0			831.8	4606.8			334878	63.4
Nov	0.0	3043.0		732.0			831.8	4606.8			334878	63.4
Dec	0.0	3043.0		732.0			831.8	4606.8			334878	63.4
<b>Subtotals</b>	<b>15.0</b>		<b>0.0</b>				<b>0.0</b>		<b>495</b>	<b>0</b>		
<b>Total ERU's</b>			<b>3043.0</b>	<b>732.0</b>			<b>831.8</b>	<b>4606.8</b>			<b>334878</b>	<b>63.4</b>