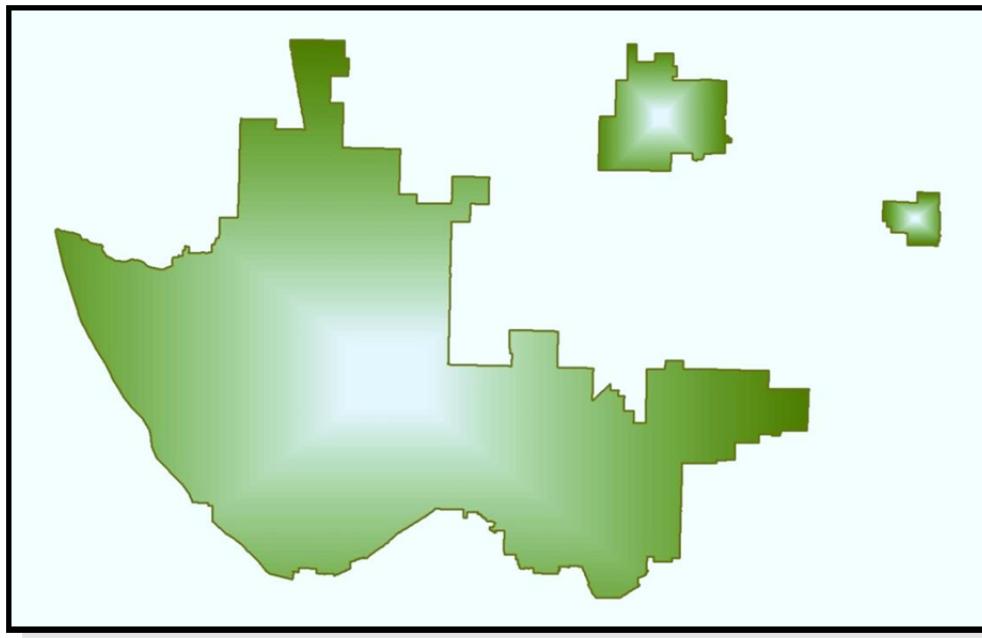


# 2017

## Clark Regional Wastewater District

### Infiltration and Inflow Report For Salmon Creek Treatment Plant



February 12, 2018

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





# **TABLE OF CONTENTS**

2017  
Clark Regional Wastewater District  
**INFILTRATION AND INFLOW REPORT**

---

Overview .....	1
Monitoring Program and Rehabilitation Projects .....	3

## **Appendix**

- Appendix A - Annual Infiltration/Inflow (I/I) Report (DOE form)
- Appendix B - Flow Analysis Data
- Appendix C - Monthly Flow and Rainfall
- Appendix D - ERU and Sewer Line Data



# 2017 Infiltration and Inflow Report

## Overview

---

The Clark Regional Wastewater District (District) was formed in 1958. The District has always maintained a comprehensive construction specification, inspection and maintenance program to minimize infiltration and inflow (I/I) 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 (Ecology publication 97-03).

Beginning in 2016, the District began conveying a portion of the flow generated in the City of Ridgefield service area to the Salmon Creek Treatment Plant. Currently, all flow tributary to the Pioneer Canyon Pump Station is conveyed through the Discovery Corridor Wastewater Transmission System and ultimately to the Salmon Creek Treatment Plant. The average daily flow from the Pioneer Canyon Pump Station is about 0.14 MGD (663 Equivalent Residential Units (ERUs). The Ridgefield Treatment Plant processes the remaining flow generated in Ridgefield. The additional flow to Salmon Creek is incorporated into this report.

## ANALYSIS

The District's average dry weather and wet weather I/I rates are well below excessive. Average dry weather flows greater than 120 gallons per capita per day (gpcd) indicate excessive infiltration. Infiltration occurs during periods of high seasonal groundwater and dry weather with little or no rainfall. The District's infiltration remains well below excessive at only 79 gpcd. Average wet weather flows greater than 275 gpcd indicate excessive inflow. Inflow occurs during periods of wet weather with significant rainfall resulting in ponding and surface runoff. The District's inflow remains well below excessive at only 113 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 ERUs 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 includes commercial and industrial ERUs in addition to residents of the area. At the beginning of 2017, the District had approximately 33,877 ERU's with a population equivalent of roughly 82,320 in the Salmon Creek tributary area. The City of Ridgefield component adds another 567 ERUs with a population equivalent of about 1,379.

As shown in Appendix A, the District's 2017 I/I of 2.31 MGD represent a 110% increase compared to the 2003 base year. To better understand I/I trends in the system, the District reviews the average monthly flows and rainfall for the available records between January 1997 and December 2017. That data shows that 2013 and 2003 represent the lowest I/I years on record. The District's I/I averaged 1.59 over the past 20 years. Reviewing years with similar rainfall patterns, the 2017 I/I does not appear to be out of trend with historical performance. Also, the excessive inflow and infiltration calculations do not lead us to believe that the system is experiencing higher than normal I/I.

TABLE 1  
**1997-2017 I/I AND RAINFALL**

Year	Min of Average Monthly Flow	Max of Average Monthly Flow	I/I	Annual Rainfall
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
2013	5.32	6.39	1.07	21.19
2014	5.34	6.84	1.82	32.17
2015	5.31	8.06	2.75	39.44
2016	5.54	7.27	1.73	48.14
2017	5.93	8.25	2.31	46.89
Average	-	-	1.58	37.73

# Monitoring Program and Rehabilitation Projects

---

## INTRODUCTION

The District places an emphasis on good design and inspection to minimize I/I into the system. However, as pipes age, a variety of methods for the monitoring and identification of I/I are necessary to use. 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 I/I 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% 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 may be suspected. The District also monitors all pump stations as well as four (4) motor operated valves (MOV's). Daily and annual review of the pump run times and flow data help to identify the 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.

The District continues to deploy and collect flow data from FloDar ultrasonic flow meters during both wet and dry weather flows. That data is currently being used to calibrate the District's wet and dry weather flow model as part of the General Sewer Plan update.

## **REHABILITATION**

The District inspects all gravity mains and trunk sewers with CCTV cameras a minimum of every eight years to assess condition, I/I and other related issues. Results help inform the District's Six-Year Capital Program. The six-year program includes an "I/I program" as well as a "Spot Repair" program component. Both programs provide for completion of specific projects targeting the reduction of I/I in the system. The District completed manhole grouting at 15 locations in 2016, which will stop an estimated 25 gallons per minute of I/I, or 36,000 gallons per day. The District completed two (2) cured-in-place pipe contracts in 2017, to stop infiltration and rehabilitate existing concrete pipes. The next manhole grouting contract will be issued in 2018.

## **APPENDIX A**

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



# Salmon Creek Wastewater Treatment Plant

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

**Reporting Year:** From: 2015 To: 2017

Max month design flow: 11.48 MGD (District 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	2015	2016	2017	Year	2015	2016	2017	Year	2015	2016	2017	
January	6.19	7.27	7.20	2.35	9.68	4.12	77342	80807	83938	15076	1502	1308	
February	6.75	6.89	8.19	2.85	5.13	8.22	77487	80984	84164	325	11950	3329	
March	6.35	7.07	8.25	3.19	6.04	8.83	77665	81277	84512	0	9748	21256	
April	5.85	6.11	7.40	1.21	1.56	4.57	77785	81423	84876	1193	11092	0	
May	5.56	5.93	6.86	0.40	1.13	1.86	78113	81849	85128	8929	10966	1632	
June	5.50	5.74	6.47	0.39	1.80	1.35	78287	82251	85494	8079	13771	1737	
July	5.31	5.58	5.97	0.25	0.44	0.00	78611	82480	85805	5575	821	25269	
August	5.32	5.54	5.93	0.53	0.22	0.00	78810	82771	86213	8061	19210	4155	
September	5.32	5.54	6.04	1.11	1.32	2.25	79030	82966	86497	4679	3889	0	
October	5.34	6.23	6.18	4.19	9.58	3.36	79183	83218	86918	0	1608	13187	
November	5.87	6.67	6.90	5.03	6.75	8.90	79383	83482	87341	5157	7905	965	
December	8.06	6.99	6.79	17.94	4.49	3.43	79714	83699	87597	0	13127	5432	
<b>TOTAL</b>	<b>71.42</b>	<b>75.56</b>	<b>82.19</b>	<b>39.44</b>	<b>48.14</b>	<b>46.89</b>				<b>Total (feet)</b>	<b>57074</b>	<b>105589</b>	<b>78270</b>
<b>Low</b>	<b>5.31</b>	<b>5.54</b>	<b>5.93</b>							<b>Total (miles)</b>	<b>10.81</b>	<b>20.00</b>	<b>14.82</b>
<b>High</b>	<b>8.06</b>	<b>7.27</b>	<b>8.25</b>										
<b>Average</b>	<b>5.95</b>	<b>6.30</b>	<b>6.85</b>										
<b>I/I</b>	<b>2.75</b>	<b>1.73</b>	<b>2.31</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
2015	2.75	150	24
2016	1.73	58	15
2017	2.31	110	20

Comments: See report.

J.D. Robin Krause

J.D. Robin Krause, PE  
District Engineer



7-14-2016



## **APPENDIX B**

### **FLOW ANALYSIS DATA**



# Salmon Creek Wastewater Management System - Clark Regional Wastewater District

## ANNUAL INFILTRATION/INFLOW REPORT

1/1/2017 to 12/31/2017

### FLOW AND PRECIPITATION DATA

MONTH	Average Monthly Flow (MGD)						Total Monthly Precipitation (Inches)					
	Year						Year					
	2012	2013	2014	2015	2016	2017	2012	2013	2014	2015	2016	2017
January	6.28	6.39	5.77	6.19	7.27	7.20	5.51	2.63	2.54	2.35	9.68	4.12
February	5.82	5.99	6.63	6.75	6.89	8.19	3.45	1.36	3.70	2.85	5.13	8.22
March	6.66	5.74	6.84	6.35	7.07	8.25	6.17	1.43	5.78	3.19	6.04	8.83
April	6.39	5.78	6.27	5.85	6.11	7.40	2.24	2.19	2.49	1.21	1.56	4.57
May	5.98	5.81	5.91	5.56	5.93	6.86	2.06	2.94	2.28	0.40	1.13	1.86
June	5.85	5.68	5.68	5.50	5.74	6.47	2.54	1.41	2.34	0.39	1.80	1.35
July	5.47	5.39	5.45	5.31	5.58	5.97	0.21	0.01	0.57	0.25	0.44	0.00
August	5.27	5.32	5.35	5.32	5.54	5.93	0.00	0.39	0.03	0.53	0.22	0.00
September	5.19	5.65	5.34	5.32	5.54	6.04	0.07	4.25	1.03	1.11	1.32	2.25
October	5.45	5.43	5.55	5.34	6.23	6.18	5.61	0.93	5.14	4.19	9.58	3.36
November	6.32	5.62	5.90	5.87	6.67	6.90	6.87	2.04	2.39	5.03	6.75	8.90
December	7.19	5.77	6.36	8.06	6.99	6.79	6.92	1.61	3.88	17.94	4.49	3.43
Avg Flow / Total Rain	5.99	5.71	5.92	5.95	6.30	6.85	41.65	21.19	32.17	39.44	48.14	46.89
Low Month	5.19	5.32	5.34	5.31	5.54	5.93	0.00	0.01	0.03	0.25	0.22	0.00
High Month	7.19	6.39	6.84	8.06	7.27	8.25	6.92	4.25	5.78	17.94	9.68	8.90

### POPULATION AND SEWER LINE DATA

MONTH	Year	Sewer Lines Added (Feet)	
		2017	Year
January	83938	1308	
February	84164	3329	
March	84512	21256	
April	84876	0	
May	85128	1632	
June	85494	1737	
July	85805	25269	
August	86213	4155	
September	86497	0	
October	86918	13187	
November	87341	965	
December	87597	5432	
Present Equivalent	87597	Total (feet)	78270
		Total (miles)	14.82

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

Battle Ground usage is reported separately.

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

### ANNUAL INFILTRATION/INFLOW REPORT

1/1/2017 to 12/31/2017

#### DETERMINATION OF NON EXCESSIVE INFILTRATION

EPA Infiltration Criteria			120 gpcd
District Infiltration			79 gpcd
Period	Flow	Rain	Population Equivalent
Jan 25	6.83	0.00	83938
Jan 26	6.65	0.01	83938
Jan 27	6.49	0.01	83938
Jan 28	6.57	0.00	83938
Jan 29	6.80	0.00	83938
Jan 30	6.46	0.00	83938
Jan 31	6.36	0.00	83938
<b>Average Flow (MGD)</b>	<b>6.60</b>	<b>0.02</b>	<b>Inches Rain</b>

**Comments:** The seven day period of January 25 through January 31, 2017 was identified as a dry weather period within a period of seasonal high groundwater.

#### DETERMINATION OF NON EXCESSIVE INFLOW

EPA Inflow Criteria			275 gpcd
District Inflow			113 gpcd
Period	Flow	Rain	Population Equivalent
Feb 15	8.17	1.33	84164
Feb 16	10.41	0.57	84164
Feb 17	9.08	0.00	84164
Feb 18	8.41	0.17	84164
Feb 19	8.36	0.38	84164
<b>Feb 20</b>	<b>9.54</b>	<b>0.89</b>	<b>84164</b>
Feb 21	9.04	0.30	84164
<b>Highest Average Flow (MGD)</b>	<b>9.54</b>	<b>3.64</b>	<b>Inches Rain</b>

**Comments:** The seven day period of February 14 through February 20, 2017 was identified as a period of significant rainfall with surface ponding and runoff. February 20 was the highest recorded daily flow during a storm event.

# Salmon Creek Wastewater Management System - Clark Regional Wastewater District

## ANNUAL INFILTRATION/INFLOW REPORT

1/1/2017 to 12/31/2017

### INFILTRATION/INFLOW SUMMARY

Year	I/I	% Over Base I/I	% of Max Design Flow
2012	2.00	82%	17%
2013	1.07	-3%	9%
2014	1.50	36%	13%
2015	2.75	150%	24%
2016	1.73	58%	15%
2017	2.31	110%	20%

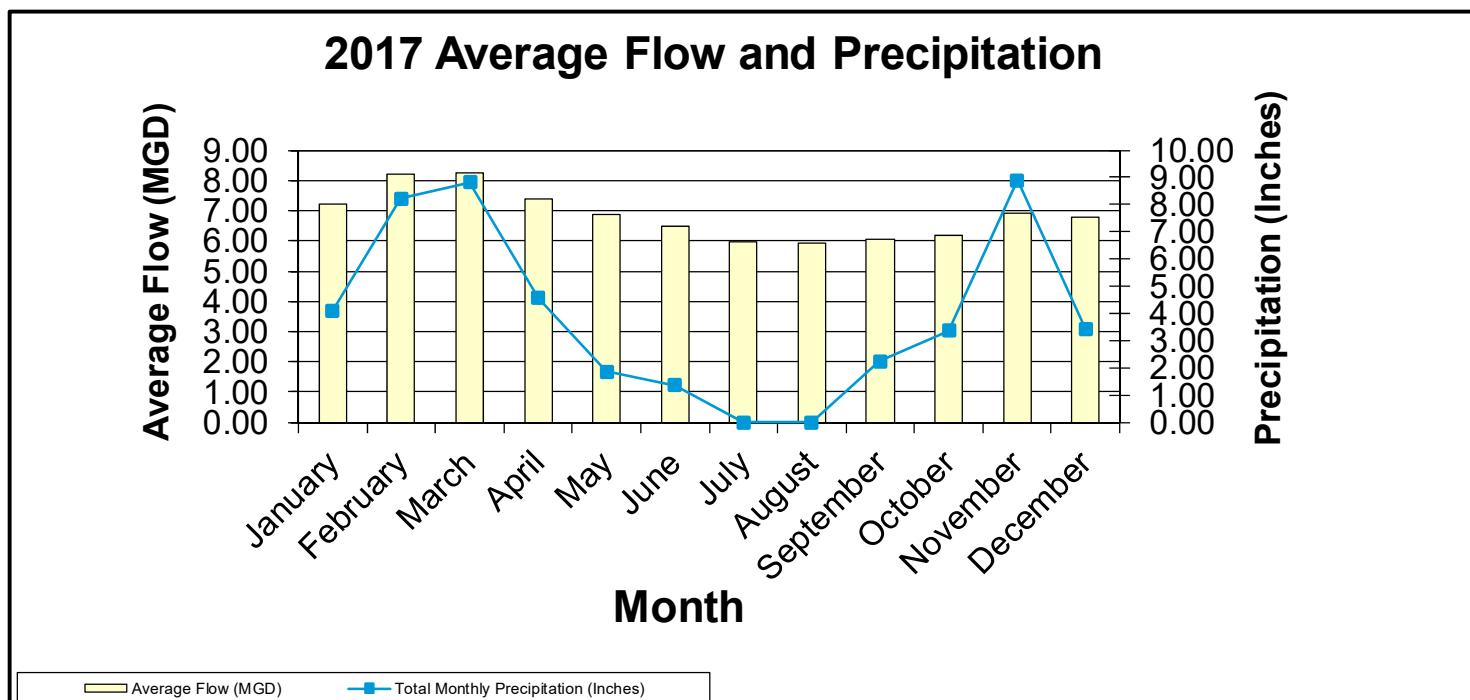
Base Year: 2003

I/I: 1.1

Comments: See Overview for I/I discussion.

### PLANT DESIGN CAPACITY

Peak Design Flow:	15.31 MGD
Max Month Design Flow:	11.48 MGD
Design Population Equivalent:	86,989 People



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**



## Salmon Creek Wastewater Treatment Plant Flow and Rainfall Report

Date	Meadow Glade GPD	Hockinson GPD	Total BG Inf MGD	BG Only MGD	Total BG Eff MGD	Diff MGD	SC Inf MGD	SC Eff MGD	Diff MGD	BG Rainfall	SC Rainfall
1/1/2017	266200	19600	2.09	1.81	1.98	0.12	8.53	8.11	0.42	0.43	0.25
1/2/2017	291900	17600	1.99	1.69	2.42	-0.42	9.09	8.54	0.55	0.05	0.00
1/3/2017	244400	24300	2.00	1.73	1.96	0.04	8.42	7.86	0.56	0.00	0.00
1/4/2017	254900	25400	1.89	1.61	1.86	0.04	8.08	7.56	0.52	0.00	0.00
1/5/2017	264900	23500	1.81	1.52	1.93	-0.12	8.06	7.39	0.67	0.00	0.00
1/6/2017	158100	22500	1.74	1.56	1.85	-0.11	7.89	7.21	0.68	0.00	0.00
1/7/2017	251100	19600	1.91	1.64	1.74	0.17	8.01	7.43	0.58	0.00	0.01
1/8/2017	301900	24900	2.13	1.80	1.76	0.37	8.79	8.27	0.52	0.09	0.56
1/9/2017	302100	30600	2.41	2.07	2.20	0.20	8.39	8.05	0.34	0.72	0.51
1/10/2017	284100	37800	2.40	2.08	2.80	-0.39	9.85	9.50	0.35	0.43	0.24
1/11/2017	264900	21700	2.15	1.86	2.23	-0.08	8.70	8.20	0.50	0.58	0.00
1/12/2017	266400	17900	2.09	1.80	2.07	0.02	8.57	7.99	0.58	0.08	0.38
1/13/2017	207500	16500	1.85	1.62	2.02	-0.17	8.39	7.72	0.67	0.00	0.01
1/14/2017	248800	16400	1.93	1.66	1.92	0.01	8.27	7.56	0.71	0.00	0.00
1/15/2017*	250,000	18200	1.87	1.86	1.81	0.07	8.23	7.54	0.69	0.00	0.00
1/16/2017*	250,000	14900	1.90	1.88	1.61	0.29	7.96	7.37	0.59	0.00	0.00
1/17/2017*	300,000	34100	2.79	2.76	1.83	0.96	9.13	8.55	0.58	0.00	0.30
1/18/2017	378100	59700	4.21	3.77	3.49	0.72	16.23	15.41	0.82	1.37	1.03
1/19/2017	252600	35600	2.95	2.66	4.26	-1.31	13.47	12.99	0.48	0.60	0.04
1/20/2017	180900	32800	2.44	2.22	2.42	0.02	10.39	9.99	0.40	0.00	0.18
1/21/2017	242500	29400	2.79	2.52	2.73	0.06	10.90	10.51	0.39	0.23	0.59
1/22/2017	275900	30300	2.85	2.54	2.75	0.10	11.00	10.61	0.39	0.42	0.00
1/23/2017	203700	32600	2.35	2.12	2.23	0.12	9.75	9.35	0.40	0.07	0.00
1/24/2017	184600	31200	2.09	1.87	2.10	-0.01	8.89	8.47	0.42	0.00	0.00
1/25/2017	186300	34000	2.00	1.78	2.45	-0.45	9.06	8.75	0.31	0.03	0.00
1/26/2017	179500	33500	1.95	1.73	2.00	-0.05	8.44	8.15	0.29	0.00	0.01
1/27/2017	161900	27900	1.94	1.75	1.85	0.09	8.15	7.78	0.37	0.03	0.01
1/28/2017	178200	13800	1.87	1.68	1.88	-0.01	8.26	7.85	0.41	0.00	0.00
1/29/2017	206000	14900	1.78	1.55	1.62	0.16	8.20	7.82	14.19	0.00	0.00
1/30/2017	185100	24400	1.80	1.59	1.82	-0.02	8.07	7.84	0.29	0.00	0.00
1/31/2017	188400	23600	1.73	1.52	1.76	-0.03	7.91	7.59	0.82	0.00	0.00
<b>Total</b>	7410900	809200	67.69	60.27	67.33	0.36	283.08	267.96	29.49	5.13	4.12
<b>Min</b>	158100	13800	1.73	1.52	1.61	-1.31	7.89	7.21	0.29	0.00	0.00
<b>Max</b>	378100	59700	4.21	3.77	4.26	0.96	16.23	15.41	14.19	1.37	1.03
<b>Average</b>	239061	26103	2.18	1.94	2.17	0.01	9.13	8.64	0.95	0.17	0.13

\*Estimated Meadow Glade GPD

## Salmon Creek Wastewater Treatment Plant Flow and Rainfall Report

Date	Meadow Glade GPD	Hockinson GPD	Total BG Inf MGD	BG Only MGD	Total BG Eff MGD	Diff MGD	SC Inf MGD	SC Eff MGD	Diff MGD	BG Rainfall	SC Rainfall
2/1/2017	183200	25200	1.69	1.48	1.70	-0.01	7.78	7.38	0.40	0.00	0.00
2/2/2017	181700	23900	1.66	1.46	1.59	0.07	7.67	7.28	0.39	0.00	0.00
2/3/2017	179400	25600	1.94	1.74	1.58	0.36	7.89	7.46	0.43	0.19	0.54
2/4/2017	184300	35700	2.74	2.52	2.53	0.21	9.45	9.23	0.22	0.82	0.44
2/5/2017	414800	69700	4.42	3.93	3.17	1.24	12.77	12.09	0.68	1.05	1.98
2/6/2017	297900	49000	3.52	3.17	4.30	-0.78	13.76	13.04	0.72	1.60	0.08
2/7/2017	219700	36100	2.65	2.39	3.14	-0.50	11.10	10.61	0.49	0.10	0.22
2/8/2017	315300	51500	3.57	3.20	2.96	0.61	11.45	10.94	0.51	0.34	0.26
2/9/2017	308100	54100	3.88	3.52	2.85	1.03	12.96	12.55	0.41	1.02	0.49
2/10/2017	188100	33000	2.77	2.55	4.52	-1.75	13.09	12.59	0.50	0.70	0.00
2/11/2017	216400	20300	2.64	2.41	2.95	-0.30	10.98	10.55	0.43	0.05	0.00
2/12/2017	238700	19400	2.52	2.27	2.41	0.12	10.15	9.69	0.46	0.00	0.00
2/13/2017	184800	32500	2.20	1.98	2.23	-0.03	9.42	9.02	0.40	0.00	0.00
2/14/2017	183300	30800	2.09	1.87	2.10	-0.01	8.99	8.64	0.35	0.00	0.00
2/15/2017	292300	54500	3.19	2.84	2.56	0.63	10.39	10.07	0.32	0.33	1.33
2/16/2017	352800	71000	4.11	3.69	3.68	0.43	13.66	13.18	0.48	1.26	0.57
2/17/2017	195400	37300	2.87	2.64	3.84	-0.97	12.69	12.28	0.41	0.98	0.00
2/18/2017	218300	29900	2.72	2.48	2.80	-0.07	10.96	10.61	0.35	0.03	0.17
2/19/2017	223800	31200	2.68	2.42	2.67	0.01	10.77	10.42	0.35	0.28	0.38
2/20/2017	337500	49800	3.96	3.57	3.15	0.81	12.30	11.79	0.51	0.42	0.89
2/21/2017	286100	45500	3.16	2.83	3.34	-0.18	12.05	11.60	0.45	0.84	0.30
2/22/2017	194500	35500	2.21	1.98	2.69	-0.48	10.65	10.14	0.51	0.22	0.01
2/23/2017	188900	30800	2.16	1.94	2.37	-0.21	9.84	9.34	0.50	0.02	0.00
2/24/2017	159200	30800	2.20	2.01	2.18	0.02	9.32	8.90	0.42	0.02	0.08
2/25/2017	169800	20400	2.03	1.84	2.13	-0.10	9.33	8.90	0.43	0.02	0.00
2/26/2017	245500	31700	2.47	2.19	2.32	0.14	9.86	9.40	0.46	0.23	0.27
2/27/2017	215700	37400	2.48	2.23	2.41	0.07	9.65	9.24	0.41	0.39	0.20
2/28/2017	293000	32800	2.28	1.95	2.37	-0.09	9.31	9.00	0.31	0.31	0.01
<b>Total</b>	6668500	1045400	76.81	69.09	76.52	0.29	298.24	285.94	12.30	11.22	8.22
<b>Min</b>	159200	19400	1.66	1.46	1.58	-1.75	7.67	7.28	0.22	0.00	0.00
<b>Max</b>	414800	71000	4.42	3.93	4.52	1.24	13.76	13.18	0.72	1.60	1.98
<b>Average</b>	238161	37336	2.74	2.47	2.73	0.01	10.65	10.21	0.44	0.40	0.29

## Salmon Creek Wastewater Treatment Plant Flow and Rainfall Report

Date	Meadow Glade GPD	Hockinson GPD	Total BG Inf MGD	BG Only MGD	Total BG Eff MGD	Diff MGD	SC Inf MGD	SC Eff MGD	Diff MGD	BG Rainfall	SC Rainfall
3/1/2017	181800	32500	2.14	1.93	2.14	0.01	8.88	8.72	0.16	0.04	0.00
3/2/2017	192000	31300	2.11	1.89	2.11	0.00	8.74	8.54	0.20	0.01	0.00
3/3/2017	167200	32400	2.10	1.90	2.12	-0.02	8.71	8.56	0.15	0.14	0.17
3/4/2017	203100	24900	2.26	2.03	2.24	0.02	9.14	8.79	0.35	0.25	0.13
3/5/2017	255100	27500	2.36	2.08	2.23	0.13	9.35	8.98	0.37	0.26	0.15
3/6/2017	215200	30200	2.60	2.35	2.35	0.25	9.31	8.94	0.37	0.40	0.30
3/7/2017	249400	44800	2.70	2.40	2.62	0.08	9.71	9.45	0.26	0.25	0.59
3/8/2017	268400	44700	2.94	2.63	2.93	0.02	10.29	9.95	0.34	0.73	0.25
3/9/2017	289500	50700	3.18	2.84	3.02	0.17	10.85	10.60	0.25	0.36	0.66
3/10/2017	216300	38000	2.97	2.72	3.12	-0.14	10.82	10.67	0.15	0.65	0.00
3/11/2017	230500	28700	2.72	2.46	2.79	-0.07	10.64	10.39	0.25	0.00	0.45
3/12/2017	227100	21000	2.27	2.02	2.54	-0.27	9.95	9.73	0.22	0.42	0.00
3/13/2017	291400	48900	3.07	2.73	2.69	0.38	10.54	10.34	0.20	0.03	0.69
3/14/2017	376100	78800	4.65	4.19	3.57	1.07	12.27	12.13	0.14	1.07	0.81
3/15/2017	306900	46900	3.53	3.17	4.20	-0.67	14.54	14.02	0.52	1.65	0.94
3/16/2017	208200	37300	2.96	2.71	3.79	-0.84	12.75	12.23	0.52	0.35	0.00
3/17/2017	191900	36200	2.84	2.61	2.87	-0.03	11.33	10.90	0.43	0.00	0.44
3/18/2017	265000	35600	3.47	3.17	3.30	0.17	12.37	11.93	0.44	0.55	0.66
3/19/2017	250600	27900	2.86	2.58	2.98	-0.12	11.86	11.38	0.48	0.53	0.01
3/20/2017	203600	31400	2.50	2.27	2.53	-0.03	10.67	10.26	0.41	0.11	0.08
3/21/2017	198300	33600	2.46	2.23	2.48	-0.02	10.16	10.15	0.01	0.19	0.30
3/22/2017	192800	29900	2.31	2.09	2.31	0.00	9.87	9.87	0.00	0.25	0.01
3/23/2017	216000	38800	2.46	2.21	2.26	0.20	11.41	9.53	1.88	0.04	0.41
3/24/2017	212200	46600	3.01	2.75	3.10	-0.09	11.49	11.45	0.04	0.82	0.67
3/25/2017	224700	27300	2.75	2.50	2.91	-0.16	11.62	11.17	0.45	0.41	0.00
3/26/2017	301100	33600	3.06	2.72	2.80	0.26	11.73	11.28	0.45	0.00	0.66
3/27/2017	226200	36500	2.66	2.40	2.72	-0.06	11.31	10.99	0.32	0.63	0.05
3/28/2017	224200	39900	2.50	2.23	2.46	0.04	10.44	10.24	0.20	0.16	0.05
3/29/2017	244600	43500	2.69	2.40	2.68	0.00	10.91	10.68	9.56	0.46	0.31
3/30/2017	213100	31900	2.41	2.16	2.47	-0.06	10.41	10.20	0.00	0.13	0.04
3/31/2017	176300	26600	2.18	1.98	2.19	-0.01	9.73	9.53	1.88	0.02	0.00
<b>Total</b>	7218800	1137900	84.72	76.36	84.51	0.20	331.80	321.60	21.00	10.91	8.83
<b>Min</b>	167200	21000	2.10	1.89	2.11	-0.84	8.71	8.54	0.00	0.00	0.00
<b>Max</b>	376100	78800	4.65	4.19	4.20	1.07	14.54	14.02	9.56	1.65	0.94
<b>Average</b>	232865	36706	2.73	2.46	2.73	0.01	10.70	10.37	0.68	0.35	0.28

## Salmon Creek Wastewater Treatment Plant Flow and Rainfall Report

Date	Meadow Glade GPD	Hockinson GPD	Total BG Inf MGD	BG Only MGD	Total BG Eff MGD	Diff MGD	SC Inf MGD	SC Eff MGD	Diff MGD	BG Rainfall	SC Rainfall
4/1/2017	178800	19200	1.99	1.79	2.12	-0.13	9.53	9.39	0.14	0.00	0.03
4/2/2017	225000	21400	2.02	1.78	1.94	0.08	9.25	9.04	0.21	0.03	0.00
4/3/2017	190000	16500	1.89	1.68	1.89	0.00	8.86	8.65	0.21	0.00	0.00
4/4/2017	200700	18000	1.79	1.58	1.81	-0.02	8.54	8.41	0.13	0.00	0.02
4/5/2017	215600	16700	1.81	1.58	1.72	0.09	8.35	8.27	0.08	0.04	0.01
4/6/2017	233100	25300	2.26	2.00	2.06	0.20	8.92	8.87	0.05	0.34	0.43
4/7/2017	249200	24000	2.21	1.94	2.31	-0.10	9.65	9.55	0.10	0.49	0.39
4/8/2017	245200	21600	2.15	1.88	2.21	-0.06	9.33	9.12	0.21	0.30	0.00
4/9/2017	290000	23100	2.18	1.86	2.09	0.09	9.32	9.09	0.23	0.02	0.11
4/10/2017	254900	31600	2.05	1.76	2.06	-0.01	9.13	8.97	0.16	0.18	0.07
4/11/2017	244900	32900	2.05	1.78	1.97	0.08	8.74	8.60	0.14	0.05	0.19
4/12/2017	288000	39300	2.39	2.07	2.27	0.13	9.58	9.50	0.08	0.42	0.66
4/13/2017	256900	39900	2.26	1.97	2.33	-0.07	9.58	9.37	0.21	0.37	0.10
4/14/2017	247300	33800	2.33	2.05	2.17	0.16	9.14	8.94	0.20	0.20	0.10
4/15/2017	261300	21700	2.22	1.93	2.14	0.07	9.22	9.00	0.22	0.11	0.00
4/16/2017	240900	18800	1.76	1.50	1.99	-0.23	9.21	9.08	0.13	0.00	0.09
4/17/2017	218500	32500	1.99	1.74	1.96	0.03	8.79	8.73	0.06	0.04	0.20
4/18/2017	254900	30100	1.95	1.67	1.96	-0.01	8.73	8.69	0.04	0.27	0.00
4/19/2017	248800	33400	2.00	1.72	1.88	0.12	8.68	8.55	0.13	0.08	0.23
4/20/2017	235100	36800	2.09	1.81	2.05	0.03	8.93	8.84	0.09	0.39	0.06
4/21/2017	229700	30300	1.83	1.57	1.98	-0.15	8.65	8.60	0.05	0.12	0.00
4/22/2017	249600	25900	2.03	1.75	2.01	0.02	8.89	8.83	0.06	0.00	0.21
4/23/2017	310500	35800	2.41	2.06	2.00	0.41	9.06	8.90	0.16	0.16	0.12
4/24/2017	394100	55800	3.20	2.75	2.77	0.43	10.73	10.48	0.25	0.63	1.13
4/25/2017	289500	40700	2.40	2.07	2.87	-0.47	10.67	10.46	0.21	0.76	0.08
4/26/2017	311800	40000	2.50	2.15	2.50	0.00	10.08	9.91	0.17	0.19	0.13
4/27/2017	289800	36100	2.37	2.04	2.38	-0.02	9.70	9.50	0.20	0.18	0.04
4/28/2017	219300	32000	2.13	1.88	2.20	-0.07	9.33	9.19	0.14	0.20	0.00
4/29/2017	261300	22900	2.19	1.91	2.14	0.05	9.26	9.13	0.06	0.00	0.13
4/30/2017	312100	23100	2.24	1.91	2.18	0.06	9.65	9.51	0.04	0.30	0.04
<b>Total</b>	7646800	879200	64.71	56.18	63.98	0.73	277.50	273.17	8.16	5.87	4.57
<b>Min</b>	178800	16500	1.76	1.50	1.72	-0.47	8.35	8.27	0.04	0.00	0.00
<b>Max</b>	394100	55800	3.20	2.75	2.87	0.43	10.73	10.48	4.06	0.76	1.13
<b>Average</b>	254893	29307	2.16	1.87	2.13	0.02	9.25	9.11	0.27	0.20	0.15

## Salmon Creek Wastewater Treatment Plant Flow and Rainfall Report

Date	Meadow Glade GPD	Hockinson GPD	Total BG Inf MGD	BG Only MGD	Total BG Eff MGD	Diff MGD	SC Inf MGD	SC Eff MGD	Diff MGD	BG Rainfall	SC Rainfall
5/1/2017	255900	29600	2.03	1.75	2.03	0.00	8.99	8.79	0.20	0.00	0.01
5/2/2017	250800	34200	1.98	1.70	1.97	0.01	8.71	8.68	0.03	0.06	0.17
5/3/2017	254300	28200	1.95	1.67	1.90	0.06	8.65	8.72	-0.07	0.12	0.00
5/4/2017	243200	30300	1.92	1.65	1.88	0.04	8.55	8.72	-0.17	0.00	0.00
5/5/2017	238400	37500	2.05	1.78	1.91	0.14	8.59	8.57	0.02	0.16	0.25
5/6/2017	237600	19100	1.86	1.61	1.88	-0.02	8.58	8.49	0.09	0.29	0.00
5/7/2017	261800	15400	1.70	1.42	1.79	-0.09	8.68	8.65	0.03	0.00	0.00
5/8/2017	248400	30300	1.79	1.51	1.75	0.04	8.41	8.47	-0.06	0.00	0.00
5/9/2017	228900	28200	1.70	1.44	1.70	0.00	8.27	8.30	-0.03	0.00	0.00
5/10/2017	205300	26400	1.72	1.49	1.59	0.13	8.12	8.18	-0.06	0.00	0.00
5/11/2017	259700	29200	1.71	1.43	1.74	-0.02	8.21	8.20	0.01	0.02	0.17
5/12/2017	182400	26900	1.68	1.47	1.72	-0.04	8.14	8.05	0.09	0.38	0.13
5/13/2017	242100	21800	2.01	1.74	1.96	0.05	8.73	8.56	0.17	0.31	0.34
5/14/2017	299900	20600	2.09	1.77	1.97	0.12	8.96	8.85	0.11	0.45	0.15
5/15/2017	271600	35000	2.17	1.87	1.98	0.19	8.73	8.65	0.08	0.19	0.17
5/16/2017	286600	39900	2.58	2.25	2.57	0.00	9.62	9.54	0.08	0.73	0.41
5/17/2017	265600	32200	2.25	1.96	2.26	0.00	9.22	9.17	0.05	0.35	0.06
5/18/2017	243600	29400	2.07	1.80	2.09	-0.02	8.83	8.81	0.02	0.01	0.00
5/19/2017	184600	31800	1.82	1.60	1.94	-0.13	8.61	8.69	-0.08	0.00	0.00
5/20/2017	230500	19200	1.87	1.62	1.86	0.01	8.44	8.50	-0.06	0.00	0.00
5/21/2017	281400	22100	1.92	1.62	1.78	0.15	8.52	8.57	-0.05	0.00	0.00
5/22/2017	206300	27600	1.83	1.60	1.76	0.08	8.32	8.50	-0.18	0.00	0.00
5/23/2017	241100	25500	1.64	1.38	1.69	-0.04	8.12	8.29	-0.17	0.00	0.00
5/24/2017	224800	25400	1.68	1.43	1.63	0.05	8.00	7.97	0.03	0.00	0.00
5/25/2017	195600	25600	1.71	1.49	1.63	0.08	7.93	7.97	-0.04	0.00	0.00
5/26/2017	181100	23500	1.45	1.25	1.55	-0.09	7.81	7.91	-0.10	0.00	0.00
5/27/2017	201800	15200	1.53	1.32	1.49	0.05	7.68	7.78	-0.10	0.00	0.00
5/28/2017	187900	13600	1.40	1.20	1.39	0.01	7.54	7.64	-0.10	0.00	0.00
5/29/2017	242600	15000	1.69	1.43	1.58	0.12	8.13	8.15	-0.02	0.00	0.00
5/30/2017	233900	26100	1.49	1.23	1.51	-0.02	7.82	7.83	-0.01	0.02	0.00
5/31/2017	210700	26200	1.48	1.25	1.42	0.06	7.60	7.71	-0.11	0.00	0.00
<b>Total</b>	7298400	811000	56.81	48.70	55.92	0.89	260.51	260.91	-0.40	3.09	1.86
<b>Min</b>	181100	13600	1.40	1.20	1.39	-0.13	7.54	7.64	-0.18	0.00	0.00
<b>Max</b>	299900	39900	2.58	2.25	2.57	0.19	9.62	9.54	0.20	0.73	0.41
<b>Average</b>	235432	26161	1.83	1.57	1.80	0.03	8.40	8.42	-0.01	0.10	0.06

## Salmon Creek Wastewater Treatment Plant Flow and Rainfall Report

Date	Meadow Glade GPD	Hockinson GPD	Total BG Inf MGD	BG Only MGD	Total BG Eff MGD	Diff MGD	SC Inf MGD	SC Eff MGD	Diff MGD	BG Rainfall	SC Rainfall
6/1/2017	204400	23100	1.51	1.29	1.48	0.03	7.61	7.75	-0.14	0.08	0.02
6/2/2017	190000	28000	1.55	1.33	1.43	0.12	7.51	7.64	-0.13	0.00	0.00
6/3/2017	203300	17800	1.51	1.29	1.45	0.06	7.67	7.75	-0.08	0.00	0.00
6/4/2017	208400	14600	1.32	1.10	1.43	-0.11	7.89	7.92	-0.03	0.00	0.00
6/5/2017	205900	23200	1.46	1.23	1.42	0.04	7.72	7.74	-0.02	0.00	0.00
6/6/2017	199200	26300	1.41	1.19	1.40	0.01	7.54	7.64	-0.10	0.00	0.00
6/7/2017	204000	23000	1.41	1.18	1.33	0.08	7.45	7.99	-0.54	0.00	0.02
6/8/2017	204400	24400	1.55	1.32	1.48	0.07	7.82	8.12	-0.30	0.27	0.35
6/9/2017	158300	27500	1.49	1.30	1.52	-0.03	7.76	7.78	-0.02	0.18	0.12
6/10/2017	209100	15700	1.62	1.40	1.58	0.04	8.03	8.03	0.00	0.41	0.09
6/11/2017	251800	17300	1.63	1.37	1.54	0.10	8.13	8.22	-0.09	0.32	0.02
6/12/2017	210300	24800	1.53	1.30	1.50	0.03	7.83	7.86	-0.03	0.00	0.02
6/13/2017	196300	23400	1.48	1.26	1.47	0.01	7.66	7.69	-0.03	0.06	0.17
6/14/2017	197100	25800	1.52	1.30	1.41	0.11	7.51	7.55	-0.04	0.03	0.00
6/15/2017	223500	35000	1.80	1.54	1.71	0.09	8.12	8.19	-0.07	0.06	0.53
6/16/2017	179700	24000	1.70	1.50	1.76	-0.05	8.27	8.43	-0.16	0.09	0.00
6/17/2017	208100	18300	1.60	1.37	1.64	-0.04	8.05	8.15	-0.10	0.01	0.00
6/18/2017	275200	16900	2.00	1.70	1.53	0.46	8.01	8.18	-0.17	0.02	0.00
6/19/2017	193700	21900	1.26	1.04	1.56	-0.30	7.98	8.27	-0.29	0.02	0.00
6/20/2017	209200	19600	1.52	1.29	1.49	0.03	7.65	7.90	-0.25	0.00	0.00
6/21/2017	200000	18800	1.49	1.27	1.42	0.06	7.52	7.65	-0.13	0.00	0.00
6/22/2017	200700	17600	1.48	1.26	1.46	0.01	7.54	7.62	-0.08	0.00	0.00
6/23/2017	158100	17600	1.38	1.20	1.40	-0.02	7.41	7.53	-0.12	0.00	0.00
6/24/2017	190000	13900	1.40	1.20	1.37	0.03	7.34	7.60	-0.26	0.00	0.00
6/25/2017	227500	15200	1.45	1.21	1.34	0.11	7.42	7.67	-0.25	0.00	0.00
6/26/2017	173700	14100	1.44	1.25	1.40	0.03	7.49	7.71	-0.22	0.00	0.01
6/27/2017	218300	15400	1.25	1.01	1.34	-0.09	7.26	7.32	-0.06	0.00	0.00
6/28/2017	208900	14000	1.30	1.08	1.29	0.01	7.18	7.26	-0.08	0.00	0.00
6/29/2017	198700	15000	1.35	1.14	1.34	0.00	7.28	7.42	-0.14	0.00	0.00
6/30/2017	156800	12900	1.26	1.10	1.32	-0.05	7.32	7.38	-0.06	0.00	0.00
<b>Total</b>	6064600	605100	44.67	38.00	43.82	0.86	229.97	233.96	-3.99	1.55	1.35
<b>Min</b>	156800	12900	1.25	1.01	1.29	-0.30	7.18	7.26	-0.54	0.00	0.00
<b>Max</b>	275200	35000	2.00	1.70	1.76	0.46	8.27	8.43	0.00	0.41	0.53
<b>Average</b>	202153	20170	1.49	1.27	1.46	0.03	7.67	7.80	-0.13	0.05	0.05

## Salmon Creek Wastewater Treatment Plant Flow and Rainfall Report

Date	Meadow Glade GPD	Hockinson GPD	Total BG Inf MGD	BG Only MGD	Total BG Eff MGD	Diff MGD	SC Inf MGD	SC Eff MGD	Diff MGD	BG Rainfall	SC Rainfall
7/1/2017	183400	12400	1.35	1.16	1.34	0.02	7.21	7.22	-0.01	0.00	0.00
7/2/2017	206000	14000	1.39	1.17	1.25	0.14	7.14	7.32	-0.18	0.00	0.00
7/3/2017	172300	12900	1.23	1.05	1.31	-0.08	7.17	7.27	-0.10	0.00	0.00
7/4/2017	233000	12500	1.37	1.12	1.29	0.08	7.17	7.34	-0.17	0.00	0.00
7/5/2017	174800	13300	1.30	1.12	1.26	0.05	7.20	7.34	-0.14	0.00	0.00
7/6/2017	203400	15000	1.32	1.10	1.29	0.03	7.04	7.34	-0.30	0.00	0.00
7/7/2017	184000	13900	1.40	1.21	1.28	0.13	7.07	7.12	-0.05	0.00	0.00
7/8/2017	191300	13200	1.37	1.16	1.29	0.08	7.10	7.23	-0.13	0.00	0.00
7/9/2017	166400	13400	1.15	0.97	1.24	-0.09	7.25	7.50	-0.25	0.00	0.00
7/10/2017	211800	15600	1.28	1.05	1.29	-0.01	7.14	8.08	-0.94	0.00	0.00
7/11/2017	245200	15700	1.28	1.02	1.27	0.01	6.99	7.27	-0.28	0.00	0.00
7/12/2017	134000	15600	1.30	1.15	1.23	0.07	6.99	7.11	-0.12	0.00	0.00
7/13/2017	187100	13700	1.27	1.07	1.26	0.01	6.97	7.16	-0.19	0.00	0.00
7/14/2017	147900	14100	1.05	0.89	1.27	-0.21	6.98	7.02	-0.04	0.00	0.00
7/15/2017	187800	10800	1.31	1.11	1.26	0.05	7.02	7.14	-0.12	0.00	0.00
7/16/2017	197400	11600	1.33	1.12	1.24	0.08	7.12	7.26	-0.14	0.00	0.00
7/17/2017	217500	12000	1.31	1.09	1.29	0.02	7.08	7.17	-0.09	0.00	0.00
7/18/2017	179900	10400	1.26	1.07	1.26	0.00	6.96	7.06	-0.10	0.00	0.00
7/19/2017	177600	11700	1.23	1.05	1.18	0.05	6.83	6.97	-0.14	0.00	0.00
7/20/2017	184400	13400	1.27	1.07	1.24	0.03	6.91	7.20	-0.29	0.00	0.00
7/21/2017	158100	14100	1.27	1.10	1.24	0.03	6.89	7.22	-0.33	0.00	0.00
7/22/2017	176900	13200	1.26	1.07	1.27	0.00	6.92	7.35	-0.43	0.00	0.00
7/23/2017	211900	12200	1.30	1.08	1.24	0.07	7.11	7.52	-0.41	0.00	0.00
7/24/2017	186900	10900	1.30	1.11	1.27	0.03	7.07	7.28	-0.21	0.00	0.00
7/25/2017	179800	12100	1.27	1.08	1.25	0.02	6.93	7.16	-0.23	0.00	0.00
7/26/2017	179100	13200	1.24	1.05	1.19	0.05	6.89	7.11	-0.22	0.00	0.00
7/27/2017	226600	11100	1.31	1.07	1.27	0.04	6.89	7.14	-0.25	0.00	0.00
7/28/2017	147900	11300	1.20	1.05	1.25	-0.05	6.91	7.16	-0.25	0.00	0.00
7/29/2017	177100	10100	1.32	1.13	1.27	0.05	6.88	7.17	-0.29	0.00	0.00
7/30/2017	222600	11400	1.39	1.16	1.27	0.12	7.09	7.52	-0.43	0.00	0.00
7/31/2017	189300	11500	1.29	1.09	1.27	0.03	7.03	7.40	-0.37	0.00	0.00
<b>Total</b>	5841400	396300	39.96	33.72	39.13	0.83	217.95	225.15	-7.20	0.00	0.00
<b>Min</b>	134000	10100	1.05	0.89	1.18	-0.21	6.83	6.97	-0.94	0.00	0.00
<b>Max</b>	245200	15700	1.40	1.21	1.34	0.14	7.25	8.08	-0.01	0.00	0.00
<b>Average</b>	188432	12784	1.29	1.09	1.26	0.03	7.03	7.26	-0.23	0.00	0.00

## Salmon Creek Wastewater Treatment Plant Flow and Rainfall Report

Date	Meadow Glade GPD	Hockinson GPD	Total BG Inf MGD	BG Only MGD	Total BG Eff MGD	Diff MGD	SC Inf MGD	SC Eff MGD	Diff MGD	BG Rainfall	SC Rainfall
8/1/2017	158600	10700	1.26	1.09	1.22	0.04	6.85	7.19	-0.34	0.00	0.00
8/2/2017	168200	12700	1.25	1.07	1.18	0.07	6.80	7.27	-0.47	0.00	0.00
8/3/2017	170600	10500	1.30	1.12	1.24	0.07	6.85	7.26	-0.41	0.00	0.00
8/4/2017	175600	12400	1.37	1.18	1.22	0.14	6.88	7.18	-0.30	0.00	0.00
8/5/2017	179700	11500	1.29	1.10	1.24	0.05	6.97	7.32	-0.35	0.00	0.00
8/6/2017	201600	10400	1.22	1.01	1.23	-0.01	7.17	7.59	-0.42	0.00	0.00
8/7/2017	186400	8600	1.35	1.15	1.27	0.08	7.12	7.48	-0.36	0.00	0.00
8/8/2017	175800	11000	1.28	1.09	1.24	0.04	7.00	6.75	0.25	0.00	0.00
8/9/2017	181100	12100	1.29	1.10	1.19	0.10	6.92	7.49	-0.57	0.00	0.00
8/10/2017	158900	12600	1.32	1.15	1.25	0.07	6.97	7.49	-0.52	0.00	0.00
8/11/2017	178100	12600	1.31	1.12	1.23	0.07	6.92	7.45	-0.53	0.00	0.00
8/12/2017	168300	9800	1.26	1.08	1.22	0.04	6.90	7.26	-0.36	0.00	0.00
8/13/2017	200900	14200	1.34	1.12	1.25	0.09	7.20	7.63	-0.43	0.14	0.00
8/14/2017	174100	13300	1.34	1.15	1.28	0.06	7.07	7.33	-0.26	0.17	0.00
8/15/2017	177100	12000	1.31	1.12	1.25	0.06	6.90	6.49	0.41	0.00	0.00
8/16/2017	169900	14100	1.29	1.10	1.19	0.09	6.89	7.18	-0.29	0.00	0.00
8/17/2017	174100	12100	1.30	1.12	1.24	0.06	6.94	7.07	-0.13	0.00	0.00
8/18/2017	135500	15900	1.24	1.09	1.23	0.02	6.92	7.02	-0.10	0.00	0.00
8/19/2017	172700	11000	1.35	1.17	1.25	0.10	7.02	7.24	-0.22	0.00	0.00
8/20/2017	195500	12900	1.31	1.10	1.21	0.10	7.03	7.22	-0.19	0.00	0.00
8/21/2017	157900	13700	1.34	1.17	1.25	0.09	6.96	7.17	-0.21	0.00	0.00
8/22/2017	197900	18800	1.31	1.09	1.25	0.05	7.02	7.24	-0.22	0.00	0.00
8/23/2017	174200	13100	1.30	1.12	1.20	0.10	6.95	7.18	-0.23	0.00	0.00
8/24/2017	171200	15700	1.30	1.11	1.25	0.05	7.00	7.20	-0.20	0.00	0.00
8/25/2017	141700	13600	1.23	1.07	1.23	0.00	6.88	7.05	-0.17	0.00	0.00
8/26/2017	174100	11800	1.31	1.12	1.23	0.07	6.90	7.07	-0.17	0.00	0.00
8/27/2017	188200	14400	1.37	1.17	1.21	0.17	7.07	7.32	-0.25	0.00	0.00
8/28/2017	178500	22200	1.38	1.17	1.28	0.10	7.11	7.42	-0.31	0.00	0.00
8/29/2017	179600	22100	1.33	1.13	1.27	0.07	7.15	7.46	-0.31	0.00	0.00
8/30/2017	184800	24400	1.31	1.11	1.23	0.09	6.99	7.28	-0.29	0.00	0.00
8/31/2017	181300	22900	1.36	1.15	1.26	0.10	7.00	7.37	-0.37	0.00	0.00
<b>Total</b>	5432100	433100	40.51	34.65	38.30	2.21	216.35	224.67	-8.32	0.31	0.00
<b>Min</b>	135500	8600	1.22	1.01	1.18	-0.01	6.80	6.49	-0.57	0.00	0.00
<b>Max</b>	201600	24400	1.38	1.18	1.28	0.17	7.20	7.63	0.41	0.17	0.00
<b>Average</b>	175229	13971	1.31	1.12	1.24	0.07	6.98	7.25	-0.27	0.01	0.00

## Salmon Creek Wastewater Treatment Plant Flow and Rainfall Report

Date	Meadow Glade GPD	Hockinson GPD	Total BG Inf MGD	BG Only MGD	Total BG Eff MGD	Diff MGD	SC Inf MGD	SC Eff MGD	Diff MGD	BG Rainfall	SC Rainfall
9/1/2017	169500	18500	1.25	1.07	1.24	0.01	6.95	7.11	-0.16	0.00	0.00
9/2/2017	178700	13400	1.29	1.10	1.22	0.07	6.87	7.18	-0.31	0.00	0.00
9/3/2017	163700	13900	1.21	1.03	1.13	0.07	6.73	7.10	-0.37	0.00	0.00
9/4/2017	213200	13900	1.49	1.26	1.32	0.16	7.40	7.74	-0.34	0.00	0.00
9/5/2017	176300	17300	1.29	1.09	1.25	0.04	7.10	7.51	-0.41	0.00	0.00
9/6/2017	188900	20800	1.32	1.11	1.23	0.09	6.98	7.33	-0.35	0.00	0.00
9/7/2017	205200	21000	1.46	1.24	1.27	0.20	7.00	7.40	-0.40	0.00	0.00
9/8/2017	138300	23800	1.06	0.90	1.22	-0.16	6.88	7.21	-0.33	0.00	0.00
9/9/2017	179200	21600	1.34	1.14	1.27	0.07	7.01	7.32	-0.31	0.00	0.02
9/10/2017	217800	21000	1.53	1.29	1.27	0.26	7.24	7.50	-0.26	0.03	0.00
9/11/2017	181500	20900	1.34	1.14	1.29	0.05	7.09	7.43	-0.34	0.00	0.00
9/12/2017	183100	21700	1.31	1.10	1.27	0.04	6.99	7.34	-0.35	0.00	0.00
9/13/2017	185500	22500	1.30	1.09	1.22	0.08	6.91	7.10	-0.19	0.00	0.00
9/14/2017	205600	22900	1.30	1.08	1.26	0.05	6.95	7.07	-0.12	0.00	0.00
9/15/2017	156100	22100	1.12	0.94	1.22	-0.10	6.77	6.95	-0.18	0.00	0.00
9/16/2017	174900	12900	1.31	1.12	1.26	0.05	6.99	7.18	-0.19	0.00	0.00
9/17/2017	210600	18500	1.50	1.27	1.28	0.22	7.30	7.47	-0.17	0.00	0.15
9/18/2017	183800	25000	1.43	1.22	1.37	0.06	7.36	7.49	-0.13	0.44	0.44
9/19/2017	191800	24600	1.62	1.40	1.43	0.19	7.30	7.45	-0.15	0.54	0.27
9/20/2017	199100	23800	1.66	1.44	1.58	0.08	8.05	8.20	-0.15	0.68	0.84
9/21/2017	180000	27100	1.48	1.27	1.44	0.03	7.33	7.43	-0.10	0.33	0.05
9/22/2017	197800	25300	1.50	1.28	1.35	0.15	7.07	7.24	-0.17	0.00	0.00
9/23/2017	189400	13800	1.47	1.26	1.37	0.10	7.22	7.39	-0.17	0.00	0.00
9/24/2017	171500	12800	1.34	1.16	1.35	-0.01	7.41	7.58	-0.17	0.00	0.00
9/25/2017	191100	21500	1.44	1.22	1.34	0.09	7.12	7.34	-0.22	0.00	0.00
9/26/2017	181400	25600	1.37	1.16	1.31	0.06	6.98	7.24	-0.26	0.01	0.00
9/27/2017	193600	17900	1.46	1.25	1.25	0.20	6.90	7.20	-0.30	0.00	0.00
9/28/2017	173500	23600	1.32	1.12	1.28	0.03	6.93	7.21	-0.28	0.00	0.00
9/29/2017	160500	21800	1.27	1.09	1.27	0.00	6.83	7.06	-0.23	0.00	0.14
9/30/2017	180500	12900	1.43	1.24	1.35	0.09	7.18	7.31	-0.13	0.19	0.34
<b>Total</b>	5522100	602400	41.18	35.06	38.92	2.27	212.84	220.08	-7.24	2.22	2.25
<b>Min</b>	138300	12800	1.06	0.90	1.13	-0.16	6.73	6.95	-0.41	0.00	0.00
<b>Max</b>	217800	27100	1.66	1.44	1.58	0.26	8.05	8.20	-0.10	0.68	0.84
<b>Average</b>	184070	20080	1.37	1.17	1.30	0.08	7.09	7.34	-0.24	0.07	0.08

## Salmon Creek Wastewater Treatment Plant Flow and Rainfall Report

Date	Meadow Glade GPD	Hockinson GPD	Total BG Inf MGD	BG Only MGD	Total BG Eff MGD	Diff MGD	SC Inf MGD	SC Eff MGD	Diff MGD	BG Rainfall	SC Rainfall
10/1/2017	212800	15100	1.58	1.36	1.35	0.24	7.45	7.59	-0.14	0.20	0.06
10/2/2017	179800	22400	1.38	1.18	1.33	0.06	7.10	7.22	-0.12	0.00	0.00
10/3/2017	177300	24000	1.32	1.12	1.31	0.01	6.96	7.11	-0.15	0.01	0.00
10/4/2017	187700	22200	1.38	1.17	1.25	0.12	6.87	6.96	-0.09	0.00	0.00
10/5/2017	177600	22000	1.34	1.14	1.30	0.04	6.90	6.97	-0.07	0.00	0.00
10/6/2017	160400	21400	1.18	1.00	1.25	-0.07	6.77	6.88	-0.11	0.00	0.00
10/7/2017	172900	12800	1.34	1.16	1.29	0.05	6.95	7.11	-0.16	0.03	0.01
10/8/2017	204800	14000	1.47	1.25	1.28	0.19	7.21	7.25	-0.04	0.05	0.00
10/9/2017	192000	25600	1.38	1.16	1.29	0.08	6.99	7.01	-0.02	0.00	0.00
10/10/2017	181600	22000	1.33	1.13	1.30	0.03	6.89	6.87	0.02	0.00	0.07
10/11/2017	181600	25200	1.40	1.20	1.28	0.12	6.93	6.99	-0.06	0.21	0.13
10/12/2017	167700	25000	1.53	1.33	1.52	0.01	7.33	7.37	-0.04	0.57	0.30
10/13/2017	185800	13200	1.45	1.25	1.39	0.06	7.10	7.08	0.02	0.41	0.04
10/14/2017	200000	12000	1.51	1.30	1.40	0.11	7.08	6.97	0.11	0.01	0.00
10/15/2017	179500	12600	1.36	1.16	1.35	0.00	7.31	7.27	0.04	0.00	0.00
10/16/2017	186700	22000	1.39	1.18	1.33	0.06	6.99	6.94	0.05	0.00	0.00
10/17/2017	183900	22900	1.35	1.14	1.32	0.03	6.94	6.90	0.04	0.00	0.00
10/18/2017	186700	23600	1.53	1.32	1.34	0.19	6.96	7.14	-0.18	0.08	0.09
10/19/2017	192900	39000	2.13	1.90	2.03	0.10	8.30	8.44	-0.14	1.03	0.93
10/20/2017	190300	34200	1.92	1.70	1.78	0.14	7.84	7.91	-0.07	0.87	0.17
10/21/2017	207100	61900	3.01	2.74	2.44	0.57	9.31	9.37	-0.06	0.64	1.10
10/22/2017	210700	37600	2.45	2.20	2.95	-0.50	11.65	11.81	-0.16	2.00	0.46
10/23/2017	198100	29000	1.97	1.74	2.05	-0.08	8.70	8.85	-0.15	0.13	0.00
10/24/2017	190600	27100	1.76	1.55	1.81	-0.04	7.97	8.06	-0.09	0.02	0.00
10/25/2017	198500	24000	1.67	1.44	1.64	0.03	7.70	7.77	-0.07	0.00	0.00
10/26/2017	228900	22700	1.82	1.56	1.58	0.23	7.50	7.48	0.02	0.01	0.00
10/27/2017	141800	21700	1.18	1.01	1.53	-0.36	7.35	7.17	0.18	0.00	0.00
10/28/2017	197600	14000	1.57	1.36	1.56	0.01	7.51	7.31	0.20	0.00	0.00
10/29/2017	224300	14800	1.60	1.36	1.50	0.10	7.62	7.59	0.03	0.01	0.00
10/30/2017	198100	25100	1.49	1.27	1.47	0.03	7.35	7.36	-0.01	0.00	0.00
10/31/2017	182800	26000	1.45	1.24	1.42	0.02	7.01	6.91	0.10	0.00	0.00
<b>Total</b>	5880500	735100	49.22	42.60	47.63	1.58	232.54	233.66	-1.12	6.28	3.36
<b>Min</b>	141800	12000	1.18	1.00	1.25	-0.50	6.77	6.87	-0.18	0.00	0.00
<b>Max</b>	228900	61900	3.01	2.74	2.95	0.57	11.65	11.81	0.20	2.00	1.10
<b>Average</b>	189694	23713	1.59	1.37	1.54	0.05	7.50	7.54	-0.04	0.20	0.11

## Salmon Creek Wastewater Treatment Plant Flow and Rainfall Report

Date	Meadow Glade GPD	Hockinson GPD	Total BG Inf MGD	BG Only MGD	Total BG Eff MGD	Diff MGD	SC Inf MGD	SC Eff MGD	Diff MGD	BG Rainfall	SC Rainfall
11/1/2017	198100	22600	1.41	1.19	1.37	0.03	7.15	7.20	-0.05	0.01	0.05
11/2/2017	191800	24600	1.55	1.33	1.44	0.10	7.24	7.21	0.03	0.04	0.45
11/3/2017	162200	21400	1.26	1.07	1.43	-0.18	7.13	7.03	0.10	0.30	0.02
11/4/2017	193000	15000	1.58	1.37	1.47	0.11	7.22	7.11	0.11	0.03	0.01
11/5/2017	215800	18600	1.79	1.55	1.62	0.17	7.75	7.64	0.11	0.48	0.00
11/6/2017	197100	27200	1.59	1.36	1.55	0.04	7.71	7.56	0.15	0.04	0.00
11/7/2017	194900	23400	1.48	1.26	1.48	0.00	7.17	7.02	0.15	0.00	0.00
11/8/2017	194200	31400	1.62	1.40	1.48	0.14	7.28	7.20	0.08	0.00	0.47
11/9/2017	163900	28800	1.59	1.40	1.71	-0.11	7.79	7.83	-0.04	0.45	0.70
11/10/2017	210100	22500	1.94	1.70	1.90	0.04	8.27	8.27	0.00	0.46	0.38
11/11/2017	202300	20800	1.83	1.61	1.84	0.00	8.03	8.07	-0.04	0.12	0.15
11/12/2017	224500	25400	2.05	1.80	1.77	0.28	8.27	8.29	-0.02	0.10	0.26
11/13/2017	204800	31900	2.00	1.77	2.01	-0.01	8.60	8.68	-0.08	0.47	0.58
11/14/2017	199500	31400	1.85	1.62	1.85	0.01	8.02	8.09	-0.07	0.06	0.00
11/15/2017	218900	50100	2.70	2.43	2.42	0.28	9.43	9.37	0.06	0.25	1.25
11/16/2017	231800	46000	2.76	2.48	2.64	0.12	9.68	9.58	0.10	1.04	0.37
11/17/2017	196900	35800	2.28	2.04	2.69	-0.41	9.66	9.58	0.08	0.73	0.35
11/18/2017	226300	22100	2.27	2.02	2.30	-0.04	8.99	8.79	0.20	0.03	0.00
11/19/2017	287900	40500	2.91	2.58	2.10	0.81	8.82	8.66	0.16	0.01	0.30
11/20/2017	297800	58000	3.28	2.93	3.26	0.02	10.97	10.88	0.09	1.35	0.83
11/21/2017	216100	41000	2.44	2.19	2.85	-0.41	10.28	10.25	0.03	0.28	0.43
11/22/2017	284100	34400	2.83	2.51	2.85	-0.02	10.59	10.63	-0.04	0.58	0.30
11/23/2017	311700	31000	2.79	2.45	2.62	0.18	10.22	10.29	-0.07	0.15	0.20
11/24/2017	214400	20400	2.10	1.86	2.32	-0.22	8.93	8.84	0.09	0.18	0.01
11/25/2017	263400	27200	2.44	2.15	2.24	0.20	8.90	8.74	0.16	0.01	0.27
11/26/2017	228300	28500	2.22	1.96	2.41	-0.20	9.67	9.55	0.12	0.35	0.64
11/27/2017	263300	35600	2.38	2.08	2.37	0.01	9.18	9.07	0.11	0.32	0.00
11/28/2017	255800	36800	2.42	2.13	2.43	-0.01	9.42	9.26	0.16	0.04	0.70
11/29/2017	271000	33400	2.38	2.08	2.32	0.06	9.18	9.02	0.16	0.56	0.00
11/30/2017	245100	33600	2.21	1.93	2.23	-0.03	8.84	8.70	0.14	0.01	0.18
<b>Total</b>	6765000	919400	63.93	56.25	62.99	0.95	260.39	258.41	1.98	8.45	8.90
<b>Min</b>	162200	15000	1.26	1.07	1.37	-0.41	7.13	7.02	-0.08	0.00	0.00
<b>Max</b>	311700	58000	3.28	2.93	3.26	0.81	10.97	10.88	0.20	1.35	1.25
<b>Average</b>	225500	30647	2.13	1.87	2.10	0.03	8.68	8.61	0.07	0.28	0.30

## Salmon Creek Wastewater Treatment Plant Flow and Rainfall Report

Date	Meadow Glade GPD	Hockinson GPD	Total BG Inf MGD	BG Only MGD	Total BG Eff MGD	Diff MGD	SC Inf MGD	SC Eff MGD	Diff MGD	BG Rainfall	SC Rainfall
12/1/2017	215600	29700	1.97	1.73	2.13	-0.15	8.52	8.48	0.04	0.18	0.05
12/2/2017	272000	36900	2.54	2.23	2.47	0.08	9.37	9.25	0.12	0.18	0.45
12/3/2017	291800	30300	2.65	2.33	2.52	0.12	9.65	9.42	0.23	0.57	0.06
12/4/2017	247700	30700	2.22	1.94	2.29	-0.08	8.90	8.68	0.22	0.13	0.01
12/5/2017	233200	32600	2.07	1.80	2.10	-0.03	8.45	8.22	0.23	0.01	0.01
12/6/2017	240000	25100	2.00	1.73	1.93	0.07	8.17	7.95	0.22	0.00	0.00
12/7/2017	222200	30800	1.88	1.63	1.90	-0.02	8.05	7.76	0.29	0.00	0.00
12/8/2017	201300	26900	1.69	1.46	1.82	-0.13	7.89	7.56	0.33	0.00	0.00
12/9/2017	228100	22500	1.84	1.59	1.83	0.01	8.05	7.66	0.39	0.00	0.00
12/10/2017	245800	22600	1.93	1.66	1.78	0.15	8.24	7.84	0.40	0.00	0.00
12/11/2017	216100	27900	1.73	1.49	1.73	0.00	7.83	7.46	0.37	0.00	0.00
12/12/2017	223100	28200	1.71	1.46	1.67	0.05	7.66	7.35	0.31	0.00	0.00
12/13/2017	213900	27800	1.64	1.39	1.62	0.02	7.61	7.32	0.29	0.00	0.00
12/14/2017	209800	25900	1.63	1.39	1.62	0.00	7.53	7.21	0.32	0.00	0.00
12/15/2017	219700	27700	1.66	1.41	1.56	0.10	7.37	7.11	0.26	0.00	0.04
12/16/2017	211100	19300	1.66	1.43	1.64	0.02	7.68	7.48	0.20	0.18	0.00
12/17/2017	220400	18500	1.67	1.43	1.66	0.01	7.80	7.69	0.11	0.19	0.05
12/18/2017	192500	17600	1.67	1.46	1.66	0.01	7.69	7.72	-0.03	0.02	0.18
12/19/2017	261500	34300	2.49	2.19	2.26	0.23	8.89	8.91	-0.02	0.34	0.89
12/20/2017	262100	24000	2.18	1.89	2.23	-0.05	8.82	8.67	0.15	0.80	0.00
12/21/2017	228100	23100	1.95	1.70	2.05	-0.10	8.34	8.01	0.33	0.02	0.00
12/22/2017	261900	27300	2.27	1.98	2.08	0.19	8.47	8.24	0.23	0.00	0.48
12/23/2017	303100	29600	2.58	2.25	2.56	0.02	9.84	9.49	0.35	0.74	0.21
12/24/2017	314000	28000	2.56	2.22	2.28	0.28	9.10	8.69	0.41	0.00	0.14
12/25/2017	245400	22800	2.10	1.83	2.29	-0.19	9.15	8.80	0.35	0.50	0.00
12/26/2017	270100	21700	2.22	1.93	2.30	-0.08	9.15	8.75	0.40	0.02	0.00
12/27/2017	258700	25800	2.22	1.93	2.22	0.00	8.83	8.51	0.32	0.05	0.15
12/28/2017	320500	37400	2.79	2.44	2.38	0.42	9.12	8.97	0.15	0.12	0.06
12/29/2017	332100	45900	3.23	2.85	3.15	0.08	10.81	10.91	-0.10	0.94	0.64
12/30/2017	303500	31300	2.86	2.53	3.24	-0.38	10.71	10.52	0.19	0.67	0.01
12/31/2017	289600	26900	2.55	2.23	2.51	0.04	9.61	9.34	0.27	0.00	0.00
<b>Total</b>	7754900	859100	66.13	57.52	65.46	0.67	267.30	259.97	7.33	5.66	3.43
<b>Min</b>	192500	17600	1.63	1.39	1.56	-0.38	7.37	7.11	-0.10	0.00	0.00
<b>Max</b>	332100	45900	3.23	2.85	3.24	0.42	10.81	10.91	0.41	0.94	0.89
<b>Average</b>	250158	27713	2.13	1.86	2.11	0.02	8.62	8.39	0.24	0.18	0.11

C-12

## **APPENDIX D**

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



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

Year: Jan 2017 - Dec 2017

Month	New Residential	Total Residential	Multi Family/ Guesthomes (*.8)	Total Res/ Multi-Family	New Commercial	Total Commercial	Grand Total ERU's	<u>Line Construction</u>		Total Line Construction	Total Miles	Year to Date ERU'S
	ERU's							Developer	District			SCTP - All
Balance Forward		23199.0		5572.6		4080.9	32852.5			2016005	381.8	Res 1,283.0
Jan	76.0	23275.0	0.0	5572.6	2.8 ♦	4083.7	32931.3	1308	0	2017313	382.1	Multi-Family 285.2
Feb	79.0	23354.0	0.0	5572.6	0.1 ♦	4083.8	33010.4	3329	0	2020642	382.7	Comm 30.3
Mar	127.0	23481.0	0.0	5572.6	4.2 ♦	4088.0	33141.6	21004	252	2041898	386.7	Total 1,598.5
Apr	137.0	23618.0	0.0	5572.6	0.0	4088.0	33278.6	0	0	2041898	386.7	Res 50.0
May	90.0	23708.0	0.0	5572.6	0.0	4088.0	33368.6	1632	0	2043530	387.0	Multi-Family 48.0
Jun	115.0	23823.0	28.8 ♦	5601.4	1.8 ♦	4089.8	33514.2	1737	0	2045267	387.4	Comm 21.2
Jul	88.0	23911.0	25.6 ♦	5627.0	2.5 ♦	4092.3	33630.3	25269	0	2070536	392.1	RTP 84.0
Aug	116.0	24027.0	38.4 ♦	5665.4	5.4 ♦	4097.7	33790.1	4155	0	2074691	392.9	-
Sep	79.0	24106.0	30.4 ♦	5695.8	4.8 ♦	4102.5	33904.3	0	0	2074691	392.9	Multi-Family -
Oct	109.0	24215.0	48.0 ♦	5743.8	0.0	4102.5	34061.3	13187	0	2087878	395.4	Comm -
Nov	75.0	24290.0	91.6 ♦	5835.4	3.4 ♦	4105.9	34231.3	965	0	2088843	395.6	Total 84.0
Dec	73.0	24363.0	22.4 ♦	5857.8	2.7 ♦	4108.6	34329.4	5432	0	2094275	396.6	Permits 1320
<b>Subtotals</b>	<b>1164.0</b>		<b>285.2</b>		<b>27.7</b>			<b>78018</b>	<b>252</b>			RTP 82
<b>Total ERU's</b>		<b>24363.0</b>		<b>5857.8</b>		<b>4108.6</b>	<b>34329.4</b>			<b>2094275</b>	<b>396.6</b>	VTP 61
												Total 1463

♦ See reverse for explanation

<b>January</b>			<b>July</b>			<b>September</b>			<b>December</b>				
SCTP	Bowers MarketPlace Retail D 11500 NE 119th St Ste 104 ◆ Clear Choice Chiropractic	0.1	SCTP	Brush Prairie Apartments 11806 NE 122nd Ave ◆ Bldg AA	9.6	SCTP	Brush Prairie Apartments 11806 NE 122nd Ave ◆ Bldg S	11.2	SCTP	Brush Prairie Apartments 11806 NE 122nd Ave ◆ Bldg K	8.0		
SCTP	Legacy Salmon Creek MOB A 2211 NE 139th St Ste 245 ◆ Dr. Berinstein	0.7	SCTP	◆ Bldg FF	9.6	SCTP	◆ Community Center/Office	1.0	SCTP	◆ Bldg L	6.4		
SCTP	2211 NE 139th St Ste 235 ◆ Childrens Center	0.6	SCTP	◆ Bldg GG	<u>6.4</u>	SCTP	Union Park Apartments 11803 NE 124th Ave ◆ Bldg C	<u>19.2</u>	SCTP	◆ Bldg V	<u>8.0</u>		
SCTP	Heathen Brewing ◆ 5612 NE 119th St	<u>1.4</u>	SCTP	Yu Retail 8605 NE Highway 99 ◆ Metro PCS	25.6	SCTP	Montage Kennels ◆ 10200 NE 72nd Ave	<u>3.8</u>	SCTP	Blue Gables Tea House 5206 NE 78th St ◆ Chandelier Bakery	<u>22.4</u>		
SCTP	2.8	SCTP	ULID 1 8411 NE Highway 99 ◆ Abarrotes Lupita	0.2	SCTP	31.4	SCTP	Northgate Shopping Center 9915 NE Hazel Dell Ave ◆ Pro Nails	0.5	SCTP	NE 20th Ave Commercial 13712 NE 20th Ave ◆ Dominos Pizza	0.2	
<b>February</b>			<b>August</b>			<b>October</b>			<b>December</b>				
SCTP	Aadland Office Building 2702 NE 78th St Ste 104 ◆ Dental Expansion	<u>0.1</u>	SCTP	Union Prairie Business Park 3A 11927 NE 113th St ◆ Shell Building	1.0	SCTP	Brush Prairie Apartments 11806 NE 122nd Ave ◆ Bldg R	11.2	SCTP	NE 20th Ave Commercial 13712 NE 20th Ave ◆ Heritage Village	1.0		
SCTP	0.1	SCTP	Union Prairie Business Park 3B 11933 NE 113th St ◆ Phoenix Excavating	<u>1.2</u>	SCTP	31.4	SCTP	13712 NE 20th Ave 2301 NE 81st St ◆ Office	0.5	SCTP	19.2	<u>2.7</u>	
SCTP	2.5	SCTP	2.5	SCTP	3.8	SCTP	8.0	SCTP	9915 NE Hazel Dell Ave ◆ Pro Nails	0.2	SCTP	8.0	
<b>March</b>			<b>August</b>			<b>October</b>			<b>December</b>				
SCTP	Felida Village 3600 NW 119th St ◆ Mt Tabor Pizza	2.8	SCTP	Brush Prairie Apartments 11806 NE 122nd Ave ◆ Bldg BB	11.2	SCTP	Brush Prairie Apartments 11806 NE 122nd Ave ◆ Bldg B	<u>9.6</u>	SCTP	NE 20th Ave Commercial 13712 NE 20th Ave ◆ Dominos Pizza	1.0		
SCTP	Lydia Center 9811 NE 15th Ave Ste 103 ◆ Audio Source	0.2	SCTP	◆ Bldg DD	8.0	SCTP	48.0	SCTP	Heritage Village 2301 NE 81st St	1.0	SCTP	11.2	
SCTP	9811 NE 15th Ave Ste 105 ◆ Brothers Cascadia Brewing	<u>1.2</u>	SCTP	◆ Bldg EE	9.6	SCTP	◆ Bldg P	8.0	SCTP	◆ Office	<u>1.0</u>	SCTP	8.0
SCTP	4.2	SCTP	◆ Bldg CC	<u>9.6</u>	SCTP	38.4	SCTP	◆ Bldg Q	8.0	SCTP	9.6		
<b>June</b>			<b>August</b>			<b>October</b>			<b>December</b>				
SCTP	Brush Prairie Apartments 11806 NE 122nd Ave ◆ Bldg B	8.0	SCTP	Brush Prairie Apartments 8605 NE Highway 99 ◆ Gogo Sushi	1.8	SCTP	Brush Prairie Apartments 11806 NE 122nd Ave ◆ Bldg M	8.0	SCTP	NE 20th Ave Commercial 13712 NE 20th Ave ◆ Heritage Village	1.0		
SCTP	◆ Bldg C	9.6	SCTP	Yearout Business Park 12909 NE 95th St ◆ Precision Auto	1.7	SCTP	◆ Bldg N	8.0	SCTP	13712 NE 20th Ave 2301 NE 81st St ◆ Office	1.0		
SCTP	◆ Bldg Z	<u>11.2</u>	SCTP	◆ Bldg CC	<u>9.6</u>	SCTP	◆ Bldg U	11.2	SCTP	9.6			
SCTP	28.8	SCTP	38.4	SCTP	38.4	SCTP	11.2	SCTP	91.6	SCTP	2.7		
<b>Legacy Restoration</b>			<b>August</b>			<b>October</b>			<b>December</b>				
SCTP	◆ 12420 NW 36th Ave	1.0	SCTP	ULID 1 8411 NE Highway 99	1.0	SCTP	Brush Prairie Apartments 11806 NE 122nd Ave ◆ Bldg A	3.2	SCTP	NE 20th Ave Commercial 13712 NE 20th Ave ◆ Heritage Village	1.0		
SCTP	Miller Paint 13800 NE 20th Ave	0.4	SCTP	◆ Cristo Vive	0.2	SCTP	◆ Bldg B	3.2	SCTP	13712 NE 20th Ave 2301 NE 81st St ◆ Office	1.0		
SCTP	◆ Bridge Chiropractic		SCTP	Legacy Salmon Creek MOB A 2211 NE 139th St Ste 205		SCTP	◆ Bldg G	13.2	SCTP	9.6			
SCTP	Kirkwood Offices Building 2 2105 NE 129th St Ste 107		SCTP	◆ LMG Neurology Clinic	<u>0.7</u>	SCTP	◆ Bldg H	15.2	SCTP	91.6			
SCTP	◆ WFG National Title	<u>0.4</u>	SCTP	5.4	SCTP	◆ Bldg K	8.8	SCTP	91.6				
SCTP	1.8	SCTP	5.4	SCTP	1.7	SCTP	◆ Bldg L	11.2	SCTP	1.4			
<b>Legacy Hospital</b>			<b>August</b>			<b>October</b>			<b>December</b>				
SCTP	2211 NE 139th St Ste 400 ◆ Child and Adolescent Clinic		SCTP	Brush Prairie Apartments 11803 NE 124th Ave ◆ Bldg G		SCTP	Legacy Hospital 2211 NE 139th St Ste 400 ◆ Child and Adolescent Clinic	1.4	SCTP	Westland Industrial Bldgs D1 D2 1311 NE 144th St			
SCTP			SCTP	◆ Shell Building D1		SCTP	1.4	SCTP	1.0	SCTP			
SCTP			SCTP	◆ Shell Building D2		SCTP	1.0	SCTP	3.4	SCTP			
SCTP			SCTP			SCTP		SCTP		SCTP			

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

Year: Jan 2017 - Dec 2017

Month	New Residential	Total Residential	Multi Family/ Guesthomes (*.8)	Total Res/ Multi-Family	New Commercial	Total Commercial	Grand Total ERU's	<u>Line Construction</u>		Total Line Construction	Total Miles
	ERU's							Developer	District		
<b>Balance Forward</b>		720.0		2.4		108.6	831.0			28511	5.4
<b>Jan</b>	1.0	721.0	0.0	2.4	0.0	108.6	832.0	0	0	28511	5.4
<b>Feb</b>	0.0	721.0	0.0	2.4	0.0	108.6	832.0	0	0	28511	5.4
<b>Mar</b>	2.0	723.0	0.0	2.4	0.0	108.6	834.0	0	0	28511	5.4
<b>Apr</b>	0.0	723.0	0.0	2.4	0.0	108.6	834.0	0	0	28511	5.4
<b>May</b>	0.0	723.0	0.0	2.4	0.0	108.6	834.0	0	0	28511	5.4
<b>Jun</b>	2.0	725.0	0.0	2.4	0.0	108.6	836.0	0	0	28511	5.4
<b>Jul</b>	5.0	730.0	0.0	2.4	0.0	108.6	841.0	0	0	28511	5.4
<b>Aug</b>	8.0	738.0	0.0	2.4	0.0	108.6	849.0	0	0	28511	5.4
<b>Sep</b>	3.0	741.0	0.0	2.4	0.0	108.6	852.0	0	0	28511	5.4
<b>Oct</b>	0.0	741.0	0.0	2.4	0.0	108.6	852.0	0	0	28511	5.4
<b>Nov</b>	0.0	741.0	0.0	2.4	0.0	108.6	852.0	0	0	28511	5.4
<b>Dec</b>	0.0	741.0	0.0	2.4	0.0	108.6	852.0	0	0	28511	5.4
<b>Subtotals</b>	21.0		0.0		0.0			0	0		
<b>Total ERU's</b>		741.0		2.4		108.6	852.0			28511	5.4

D-3

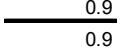


**CLARK REGIONAL WASTEWATER DISTRICT**  
**HOCKINSON AREA**  
**SALMON CREEK TREATMENT PLANT**  
**SEWER CONNECTION REPORT**

Year: Jan 2017 - Dec 2017

Month	New Residential	Total Residential	Multi Family/ Guesthomes (*.8)	Total Res/ Multi-Family	New Commercial	Total Commercial	Grand Total ERU's	Line Construction Developer	Line Construction District	Total Line Construction	Total Miles
<b>Balance Forward</b>		<b>ERU's</b>									
		65.0		0.0		133.6	198.6			6567	1.2
<u>Jan</u>	0.0	65.0	0.0	0.0	0.0	133.6	198.6	0	0	6567	1.2
<u>Feb</u>	0.0	65.0	0.0	0.0	0.0	133.6	198.6	0	0	6567	1.2
<u>Mar</u>	1.0	66.0	0.0	0.0	0.0	133.6	199.6	0	0	6567	1.2
<u>Apr</u>	0.0	66.0	0.0	0.0	0.0	133.6	199.6	0	0	6567	1.2
<u>May</u>	0.0	66.0	0.0	0.0	0.9 ♦	134.5	200.5	0	0	6567	1.2
<u>Jun</u>	1.0	67.0	0.0	0.0	0.0	134.5	201.5	0	0	6567	1.2
<u>Jul</u>	1.0	68.0	0.0	0.0	0.0	134.5	202.5	0	0	6567	1.2
<u>Aug</u>	0.0	68.0	0.0	0.0	0.0	134.5	202.5	0	0	6567	1.2
<u>Sep</u>	0.0	68.0	0.0	0.0	0.0	134.5	202.5	0	0	6567	1.2
<u>Oct</u>	0.0	68.0	0.0	0.0	0.0	134.5	202.5	0	0	6567	1.2
<u>Nov</u>	0.0	68.0	0.0	0.0	0.0	134.5	202.5	0	0	6567	1.2
<u>Dec</u>	0.0	68.0	0.0	0.0	1.0 ♦	135.5	203.5	0	0	6567	1.2
<b>Subtotals</b>	3.0		0.0		1.9			0	0		
<b>Total ERU's</b>		68.0		0.0		135.5	203.5			6567	1.2

♦ See next page for explanation

<b>May</b>	
SCTP H	Hockinson Market Expansion
	◆ 15814 NE 182nd Ave
	
	0.9
	0.9
<b>December</b>	
SCTP H	Hockinson Middle School
	15916 NE 182nd Ave
	◆ Increased capacity
	
	1.0
	1.0

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

Year: Jan 2017 - Dec 2017

Month	New Residential	Total Residential	Multi Family/ Guesthomes (*.8)	Total Res/ Multi-Family	New Commercial	Total Commercial	Grand Total ERU's	Line Construction Developer	Line Construction District	Total Line Construction	Total Miles
<b>Balance Forward</b>		<b>414.0</b>		<b>0.0</b>		<b>153.4</b>	<b>567.4</b>			<b>71356.1</b>	<b>13.5</b>
<b>Jan</b>	13.0	427.0	0.0	0.0	0.0	153.4	580.4	0.0	0.0	71356.1	13.5
<b>Feb</b>	13.0	440.0	0.0	0.0	0.0	153.4	593.4	0.0	0.0	71356.1	13.5
<b>Mar</b>	9.0	449.0	0.0	0.0	0.0	153.4	602.4	6743.0	0.0	78099.1	14.8
<b>Apr</b>	13.0	462.0	0.0	0.0	0.7 ♦	154.1	616.1	0.0	0.0	78099.1	14.8
<b>May</b>	13.0	475.0	0.0	0.0	0.0	154.1	629.1	0.0	0.0	78099.1	14.8
<b>Jun</b>	2.0	477.0	0.0	0.0	0.0	154.1	631.1	0.0	0.0	78099.1	14.8
<b>Jul</b>	6.0	483.0	0.0	0.0	0.0	154.1	637.1	0.0	0.0	78099.1	14.8
<b>Aug</b>	0.0	483.0	0.0	0.0	0.0	154.1	637.1	0.0	0.0	78099.1	14.8
<b>Sep</b>	0.0	483.0	0.0	0.0	0.0	154.1	637.1	0.0	0.0	78099.1	14.8
<b>Oct</b>	16.0	499.0	0.0	0.0	0.0	154.1	653.1	1897.0	0.0	79996.1	15.2
<b>Nov</b>	4.0	503.0	0.0	0.0	0.0	154.1	657.1	0.0	0.0	79996.1	15.2
<b>Dec</b>	6.0	509.0	0.0	0.0	0.0	154.1	663.1	3877.0	0.0	83873.1	15.9
<b>Subtotals</b>	95.0		0.0		0.7			12517.0	0.0		
<b>Total ERU's</b>		<b>509.0</b>		<b>0.0</b>		<b>154.1</b>	<b>663.1</b>			<b>83873</b>	<b>15.9</b>

♦ See next page for explanation

**April**  
SCTP R ICD Coating  
7350 S Union Ridge Parkway Ste 101  
♦ Boss Products                0.7  
                                  0.7