

**CITY OF SPOKANE,  
WASHINGTON**

**CSO FLOW MONITORING PROJECT**

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**FLOW, FREQUENCY AND DURATION**

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**SEWER MAINTENANCE**

**Monthly Report  
February 2007**

April 11, 2007  
*CSOMonthly2007-02.doc*

## OVERFLOW EVENTS

Table 1 – Flow-Frequency-Duration, provides a summary of the flow volume calculated for the overflow pipes at each site for each event recorded. The flow calculations are based on flow monitor recorded level and velocity measurements. See Attachment A for a summary of the precipitation volumes.

**Table 1 – Flow-Frequency-Duration**

	Location	CSO#	Freq.	Date of Event <sup>1</sup>	Estimated <sup>2</sup> Total Flow (Gallons)	Event Duration (Minutes)	Comments
1.	AL Parkway Storage (West)	2	None				
2.	NW Blvd @ Kiernan	6	4	Total	142,187	1,150	Missing data 2/13 08:20 to 2/13 08:25
				2/4	1,983	315	
				2/9	71,296	320	
				2/14	18,599	250	
				2/23	50,309	265	
3.	Columbia @ Downriver	7	2	Total	1,940	230	Missing data 2/13 08:10 to 2/13 08:15
				2/11	972	110	
				2/25	968	120	
4.	Nettleton @ York/Buckeye	10	1	Total	225	65	Missing data 2/13 08:35 to 2/13 08:40
				2/11	225	65	
5.	Nora @ Pettet	12	4	Total	98,985	910	
				2/4	236	55	
				2/9	41,585	260	
				2/14	24,068	320	
				2/25	33,096	275	
6.	Sherwood @ Summit	14	4	Total	9,566	1,235	Missing data 2/13 08:55 to 2/13 09:00
				2/4	3,097	510	
				2/9	2,315	255	
				2/14	2,175	310	
				2/25	1,979	160	
7.	Nettleton @ Ohio	15	None				

<sup>1</sup> Designation as an event means that both a level and velocity reading were recorded concurrently. Not all level and velocity readings that were coincident are included in this report, however. The level and velocity readings that appear to be “background noise” from the electronic equipment are not included in the table.

<sup>2</sup> The flows presented in this column are calculated from measurements of velocity and depth of flow by electronic devices inserted in the water stream. These measurements are subject to singular and possibly cumulative errors. These errors result from limitations inherent in the measuring devices and from the introduction of a measuring device in to the physical flow stream. Also, error in velocity and depth measurements may be and typically are introduced by the physical conditions of each site. The flow numbers presented in this table are estimates only.

	Location	CSO#	Freq.	Date of Event <sup>1</sup>	Estimated <sup>2</sup> Total Flow (Gallons)	Event Duration (Minutes)	Comments
8.	A @ Linton	16B	1	Total	2,092	85	Missing data 2/13 10:00 to 2/13 20:05 Missing data 2/27 10:55 to 3/19 10:50 Due to CSO tank construction.
				2/11	2,092	85	
9.	7 <sup>th</sup> @ Inland Empire	19	2	Total	201	1,050	
				2/8	101	455	
				2/22	100	595	
10.	3500 High Drive	20	None				
11.	Main @ Oak	22B	None				Missing data 2/13 09:40 to 2/13 09:45
12.	Cedar @ Ide	23	4	Total	52,205	295	Missing data 2/13 09:15 to 2/13 09:20
				2/8	32,183	110	
				2/14	10,012	90	
				2/19	1,247	20	
				2/25	8,763	75	
13.	Riverside @ Cedar	24A	3	Total	607,508	470	Missing data 2/13 10:10 to 2/13 10:15
				2/9	519,947	220	
				2/14	84,437	180	
				2/25	3,124	70	
14.	Riverside @ Cedar	24B	None				Missing data 2/13 10:15 to 2/13 10:20
15.	Cedar @ Main	25	None				Missing data 2/13 09:35 to 2/13 09:40
16.	Riverside @ Lincoln	26	2	Total	548,631	305	Missing data 2/13 10:55 to 2/13 11:00
				2/11	399,793	165	
				2/14	148,838	140	
17.	Arthur @ 5 <sup>th</sup>	33A	None				
18.	Perry @ 3 <sup>rd</sup>	33B	None				
19.	Arthur @ 3 <sup>rd</sup>	33C	None				Missing data 2/6 11:00 to 2/6 11:05
20.	Arthur @ 1 <sup>st</sup>	33D	3	Total	8,661	1,345	
				2/8	2,959	525	
				2/14	1,314	235	
				2/22	4,388	585	
21.	Riverside @ Napa/Crestline	34	2	Total	728,867	195	Missing data 2/6 10:30 to 2/6 10:35
				2/11	716,060	135	
				2/14	12,807	60	

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	Location	CSO#	Freq.	Date of Event <sup>1</sup>	Estimated <sup>2</sup> Total Flow (Gallons)	Event Duration (Minutes)	Comments
<b>22.</b>	S. Riverton @ Magnolia	38	1	Total	179	450	
				2/8	179	450	
<b>23.</b>	S. Riverton @ Altamont	39	None				
<b>24.</b>	S. Riverton @ Regal	40	None				
<b>25.</b>	Rebecca @ Upriver	41	None				Missing data 2/6 10:05 to 2/6 10:10
<b>26.</b>	Riverton @ Surro	42	None				
	<b>Monthly Total</b>		<b>33</b>		<b>2,201,247</b>	<b>7,785</b>	<b>No Dry Weather Overflows</b>

