

**CITY OF SPOKANE,
WASHINGTON**

CSO FLOW MONITORING PROJECT

FLOW, FREQUENCY AND DURATION

SEWER MAINTENANCE

**Monthly Report
November 2007**

January 8, 2008
CSOMonthly2007-11.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 ¹	Estimated ² Total Flow (Gallons)	Event Duration (Minutes)	Comments
1.	AL Parkway Storage (West)	2	None				
2.	NW Blvd @ Kiernan	6	2	Total	96,056	300	Missing data 11/5 09:00 to 11/5 09:05
				11/12	244	50	
				11/17	95,812	250	
3.	Columbia @ Downriver	7	1	Total	2,408	170	Missing data 11/5 08:55 to 11/5 09:00
				11/17	2,408	170	
4.	Nettleton @ York/Buckeye	10	1	Total	140	80	Missing data 11/5 09:20 to 11/5 09:25
				11/17	140	80	
5.	Nora @ Pettet	12	2	Total	55,213	310	
				11/12	1,153	80	
				11/17	54,060	230	
6.	Sherwood @ Summit	14	2	Total	2,939	300	
				11/12	142	50	
				11/17	2,797	250	
7.	Nettleton @ Ohio	15	None				Missing data 11/5 10:10 to 11/5 10:15
8.	A @ Linton	16B	None				
9.	7 th @ Inland Empire	19	None				Missing data 11/12 08:20 to 11/12 08:25
10.	3500 High Drive	20	None				

¹ 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.

² 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 ¹	Estimated ² Total Flow (Gallons)	Event Duration (Minutes)	Comments
11.	Main @ Oak	22B	None				Missing data 11/5 10:45 to 11/5 10:50
12.	Cedar @ Ide	23	1	Total 11/17	5,834 5,834	115 115	
13.	Riverside @ Cedar	24A	1	Total 11/17	342,254 342,254	260 260	Missing data 11/5 11:20 to 11/5 11:25
14.	Riverside @ Cedar	24B	None				Missing data 11/5 11:15 to 11/5 11:20
15.	Cedar @ Main	25	1	Total 11/17	1,109 1,109	60 60	
16.	Riverside @ Lincoln	26	1	Total 11/17	600,198 600,198	175 175	Missing data 11/5 11:45 to 11/5 11:50
17.	Arthur @ 5 th	33A	None				Missing data 11/6 09:40 to 11/6 10:25
18.	Perry @ 3 rd	33B	1	Total 11/17	15,482 15,482	15 15	Missing data 11/6 10:50 to 11/6 11:10
19.	Arthur @ 3 rd	33C	None				Missing data 11/12 11:10 to 11/12 11:15
20.	Arthur @ 1 st	33D	1	Total 11/17	5,230 5,230	140 140	Missing data 11/12 11:35 to 11/12 11:40
21.	Riverside @ Napa/Crestline	34	1	Total 11/17	379,752 379,752	175 175	Missing data 11/1 10:25 to 11/1 11:00
22.	S. Riverton @ Magnolia	38	None				Missing data 11/12 10:45 to 11/12 10:50
23.	S. Riverton @ Altamont	39	None				Missing data 11/12 10:35 to 11/12 10:40
24.	S. Riverton @ Regal	40	None				Missing data 11/12 10:25 to 11/12 10:35
25.	Rebecca @ Upriver	41	None				Missing data 11/12 10:20 to 11/12 10:25
26.	Riverton @ Surro	42	None				Missing data 11/12 10:05 to 11/12 10:10
	Monthly Total		15		1,506,615	2,100	No Dry Weather Overflows

