



## Department of Natural Resources and Parks Wastewater Treatment Division

April 7, 2017

### **West Point Treatment Plant Restoration Effluent Priority Pollutant Monitoring Data**

This file contains a compilation of King County's influent and effluent water quality monitoring data that is being collected at the West Point wastewater treatment plant. This file contains data for parameters that are routinely collected on a frequent basis (i.e., daily, weekly, monthly) in the West Point influent and effluent, as required by the National Pollutant Discharge Elimination System (NPDES) permit for West Point. These frequently measured parameters include flows, rainfall, total suspended solids, biochemical oxygen demand, pH, residual chlorine, fecal coliform bacteria, and nutrients. The attached files contain current monitoring data beginning with the February 2017 monthly reporting period under the NPDES permit, and preliminary partial data for the month of March 2017.

While repairs are underway to repair the treatment processes that were damaged in the flooding on February 9, 2017, the reduced level of treatment has resulted in changes in the concentrations of certain parameters that are not being removed at the same level of performance that occurs under normal West Point operations. The following notes provide information on the current status of treatment-affected parameters:

- Effluent values for parameters including total suspended solids and biochemical oxygen demand are periodically elevated compared to influent samples because the West Point operations were providing limited treatment (removal) of solids since the flooding incident.
- For the month of February, effluent limitations for total suspended solids and biochemical oxygen demand were not met as a result of the flooding damage and ability to provide only primary treatment at West Point.

The "Preliminary Draft Data" watermark refers to analyses completed and validated by King County; however, submittal of the final data to Ecology is pending completion of all sampling and analysis within the current monthly reporting period.

If you have questions about this document, contact Jeff Lafer at 206-477-6315 or email him at [jeff.lafer@kingcounty.gov](mailto:jeff.lafer@kingcounty.gov).

Alternative Formats Available  
206-477-5371, TTY Relay: 711

Day of the Month	Influent						CONT MEASURE MGD	Daily COMP MG/L	Daily CALC LBS/DAY	Monthly CALC %	Daily COMP MG/L	Daily CALC LBS/DAY	Monthly CALC %	
	Frequency	Weekly	Weekly	Daily	Daily	Daily								Daily
	Type	COMP	CALC	COMP	CALC	COMP								CALC
	Units	MG/L	LBS/DAY	MG/L	LBS/DAY	MG/L								LBS/DAY
	BOD 5-DAY	BOD 5-DAY	CBOD5	CBOD5	TSS	TSS	FLOW	CBOD 5-DAY	CBOD 5-DAY	CBOD 5-DAY	TSS	TSS	TSS	
02/01/17	202	137470	154	104804	230	156525	81.60	4	2,722	97.4	3	2,042	98.7	
02/02/17	215	142229	149	98568	249	164721	79.32	4	2,646	97.3	6	3,969	97.6	
02/03/17	164	218336	134	178396	229	304871	159.63	17	22,632	87.3	31	41,271	86.5	
02/04/17	86	160447	69	128730	110	205222	223.70	31	57,835	55.1	61	113,805	44.5	
02/05/17	85	142964	73	122781	113	190058	201.67	18	30,275	75.3	34	57,186	69.9	
02/06/17	84	153297	64	116797	101	184321	218.82	13	23,724	79.7	24	43,799	76.2	
02/07/17	114	141720	105	130532	118	146693	149.06	7	8,702	93.3	9	11,188	92.4	
02/08/17	103	167019	85	137831	147	238367	194.43	7	11,351	91.8	14	22,702	90.5	
02/09/17	108	62609	95	55073	132	76522	69.51	11	6,377	88.4	23	13,333	82.6	
02/10/17							160.54	53	70,962	0.0	74	99,079	0.0	
02/11/17	247	324117	175	229638	264	346425	157.34	81	106,289	53.7	62	81,357	76.5	
02/12/17	165	179347	133	144565	174	189130	130.33	81	88,043	39.1	51	55,435	70.7	
02/13/17	201	191069	176	167304	174	165403	113.98	113	107,417	35.8	51	48,480	70.7	
02/14/17	193	178024	163	150352	185	170645	110.60	126	116,223	22.7	59	54,422	68.1	
02/15/17	64	120310	54	101511	101	189863	225.40	54	101,511	0.0	70	131,589	30.7	
02/16/17	71	123781	57	99373	99	172596	209.04	48	83,683	15.8	67	116,807	32.3	
02/17/17	119	183278	98	150934	109	167876	184.67	98	150,934	0.0	75	115,511	31.2	
02/18/17	111	141962	99	126615	135	172657	153.35	91	116,383	8.1	72	92,084	46.7	
02/19/17	175	199295	164	186768	221	251681	136.55	100	113,883	39.0	86	97,939	61.1	
02/20/17	131	161871	123	151985	193	238481	148.16	97	119,858	21.1	87	107,502	54.9	
02/21/17	144	153615	126	134413	178	189885	127.91	100	106,677	20.6	79	84,275	55.6	
02/22/17	151	153728	142	144565	209	212775	122.07	109	110,969	23.2	85	86,535	59.3	
02/23/17	205	180322	189	166248	382	336015	105.47	113	99,397	40.2	89	78,286	76.7	
02/24/17	204	165764	169	137324	255	207204	97.43	106	86,132	37.3	92	74,756	63.9	
02/25/17	248	197525	210	167259	278	221419	95.50	135	107,523	35.7	88	70,089	68.3	
02/26/17	370	391403	292	308891	530	560658	126.84	125	132,231	57.2	108	114,247	79.6	
02/27/17	184	243842	165	218662	466	617555	158.90	106	140,474	35.8	124	164,328	73.4	
02/28/17	228	209624	189	173767	314	288692	110.24	115	105,731	39.2	93	85,504	70.4	

Permit No. WA-002918-1  
 Facility Name West Point WWTP  
 Receiving Water Puget Sound  
 Plant Type Secondary

Discharge No. 001

Month February Year 2017

Frequency	Effluent										Emerg. Bypass Hours	Emerg. Bypass MG			
	CONT MEASURE STANDARD UNITS	CONT MEASURE STANDARD UNITS	CONT MEASURE µg/L	Daily Grab #/100 ML	Monthly COMP MG/L-N	Monthly CALC LBS/DAY	Monthly COMP MG/L-N	Monthly MEASURE MG/L-N	Monthly COMP MG/L-P	Monthly MEASURE MG/L-P					
	pH, Daily Minimum	pH, Daily Maximum	CHLORINE RESIDUAL (after dechlor.)	FECAL COLIFORM	TOTAL AMMONIA	TOTAL AMMONIA	NITRATE-NITRITE	TOTAL KJELDAHL NITROGEN	TOTAL PHOSPHOROUS	ORTHO-PHOSPHATE			Duration (Hours)	Total Volume (MG)	Rainfall (Inch)
02/01/17	7.0	7.2	60	0									0.00		
02/02/17	7.0	7.2	50	0									0.00		
02/03/17	6.9	7.2	110	0									0.66		
02/04/17	6.7	7.0	100	40									0.46		
02/05/17	6.7	7.0	130	0	10.1	16,987		13.3	1.50	0.87			0.38		
02/06/17	6.7	7.1	140	0			1.58						0.17		
02/07/17	6.9	7.1	130	40									0.00		
02/08/17	6.8	7.1	100	0									0.75		
02/09/17	6.6	7.2	70	0							17.80	200.00	1.23		
02/10/17	7.2	7.5	140	70									0.08		
02/11/17	7.2	7.5	90	0									0.00		
02/12/17	7.2	7.6	190	40	11.6	12,609		20.2	2.17	1.42			0.00		
02/13/17	7.2	7.6	180	20			1.83						0.00		
02/14/17	7.2	7.6	250	0									0.30		
02/15/17	6.4	7.8	290	80							14.12	58.29	1.73		
02/16/17	6.9	8.0	140	20							6.10	16.58	0.38		
02/17/17	7.3	7.8	50	500									0.01		
02/18/17	7.2	7.7	130	230									0.06		
02/19/17	7.2	7.4	110	0									0.16		
02/20/17	7.1	7.4	140	40									0.14		
02/21/17	7.1	7.9	100	80									0.31		
02/22/17	7.4	7.7	130	40									0.00		
02/23/17	7.4	7.8	170	20									0.02		
02/24/17	7.4	7.8	270	0									0.00		
02/25/17	7.4	7.7	100	0									0.00		
02/26/17	6.9	7.5	100	1,400	12.3	13,012		22.1	2.85	1.49			0.25		
02/27/17	7.3	7.6	130	1,300			1.03						0.23		
02/28/17	7.2	7.7	130	40									0.01		

Frequency Type Units Day of the Month	Influent						CONT MEASURE MGD	Daily COMP MG/L	Daily CALC LBS/DAY	Monthly CALC %	Daily COMP MG/L	Daily CALC LBS/DAY	Monthly CALC %
	Weekly	Weekly	Daily	Daily	Daily	Daily							
	COMP	CALC	COMP	CALC	COMP	CALC							
	MG/L	LBS/DAY	MG/L	LBS/DAY	MG/L	LBS/DAY							
	BOD 5-DAY	BOD 5-DAY	CBOD5	CBOD5	TSS	TSS	FLOW	CBOD 5-DAY	CBOD 5-DAY	CBOD 5-DAY	TSS	TSS	TSS
03/01/17	180	135844	172	129806	258	194709	90.49	140	105,656	18.6	113	85,280	56.2
03/02/17	243	181727	215	160787	306	228841	89.67	163	121,899	24.2	146	109,186	52.3
03/03/17	235	228701	182	177121	396	385385	116.69	154	149,872	15.4	221	215,076	44.2
03/04/17	167	167872	131	131684	248	249295	120.53	122	122,637	6.9	144	144,752	41.9
03/05/17	231	200784	171	148632	270	234683	104.22	140	121,687	18.1	137	119,080	49.3
03/06/17	205	143375	188	131486	182	127289	83.86	143	100,013	23.9	120	83,927	34.1
03/07/17	134	153709	102	117003	162	185828	137.54	123	141,091	-20.6	227	260,388	-40.1
03/08/17	164	138130	127	106967	214	180243	100.99	121	101,913	4.7	118	99,386	44.9
03/09/17	215	244866	160	182226	314	357618	136.56	97	110,474	39.4	139	158,309	55.7
03/10/17	87	95392	144	157890	236	258765	131.47	116	127,189	19.4	114	124,996	51.7
03/11/17	146	163846	127	142523	194	217713	134.56	119	133,545	6.3	122	136,912	37.1
03/12/17	197	157348	151	120607	266	212460	95.77	123	98,243	18.5	116	92,652	56.4
03/13/17	177	218327	104	128283	182	224494	147.90	102	125,816	1.9	141	173,922	22.5
03/14/17	95	147487	77	119542	162	251504	186.15	80	124,199	-3.9	103	159,907	36.4
03/15/17	71	120536	52	88280	72	122234	203.56	66	112,048	-26.9	89	151,094	-23.6
03/16/17	127	173144	106	144514	160	218134	163.47	114	155,421	-7.5	108	147,241	32.5
03/17/17	146	198013	118	160038	207	280744	162.62	117	158,681	0.8	122	165,463	41.1
03/18/17	69	117659	48	81849	99	168814	204.46	57	97,196	-18.8	77	131,300	22.2
03/19/17	117	158135	91	122994	122	164893	162.06	94	127,049	-3.3	86	116,236	29.5
03/20/17	161	160941	126	125954	195	194928	119.86	138	137,949	-9.5	133	132,951	31.8
03/21/17	161	158403	135	132822	192	188903	117.97	126	123,968	6.7	106	104,290	44.8
03/22/17	146	123737	121	102549	164	138992	101.62	101	85,599	16.5	63	53,393	61.6
03/23/17	209	163290	154	120319	248	193760	93.68	120	93,755	22.1	71	55,472	71.4
03/24/17	198	295388	175	261075	264	393851	178.88	110	164,105	37.1	114	170,072	56.8
03/25/17	167	163150	122	119188	158	154358	117.14	87	84,994	28.7	66	64,479	58.2
03/26/17	136	144548	114	121165	180	191313	127.44	107	113,725	6.1	94	99,908	47.8
03/27/17	169	160382	125	118626	202	191700	113.79	95	90,156	24.0	68	64,533	66.3
03/28/17	172	146016	147	124793	182	154505	101.79	92	78,101	37.4	61	51,785	66.5
03/29/17	113	160946	91	129612	167	237859	170.78	76	108,247	16.5	85	121,066	49.1
03/30/17					130	148199	136.69				63	71,820	51.5
03/31/17					168	143461	102.39				50	42,697	70.2

Permit No. WA-002918-1  
 Facility Name West Point WWTP  
 Receiving Water Puget Sound  
 Plant Type Secondary

Discharge No. 001

Month **March** Year **2017**

Frequency	Effluent										Emerg. Bypass Hours	Emerg. Bypass MG	
	CONT MEASURE STANDARD UNITS	CONT MEASURE STANDARD UNITS	CONT MEASURE µg/L	Daily Grab #/100 ML	Monthly COMP MG/L-N	Monthly CALC LBS/DAY	Monthly COMP MG/L-N	Monthly MEASURE MG/L-N	Monthly COMP MG/L-P	Monthly MEASURE MG/L-P			
Type											Duration (Hours)	Total Volume (MG)	Rainfall (Inch)
Units													
Day of the Month	pH, Daily Minimum	pH, Daily Maximum	CHLORINE RESIDUAL (after dechlor.)	FECAL COLIFORM	TOTAL AMMONIA	TOTAL AMMONIA	NITRATE-NITRITE	TOTAL KJELDAHL NITROGEN	TOTAL PHOSPHOROUS	ORTHO-PHOSPHATE			
03/01/17	7.3	7.7	80	20								0.00	
03/02/17	7.2	7.6	110	170								0.05	
03/03/17	0.0	8.7	140	0								0.37	
03/04/17	6.9	7.2	110	800								0.05	
03/05/17	6.8	7.8	120	260	13.7	11,908		23.5	3.31	1.78		0.14	
03/06/17	7.0	7.5	120	130								0.00	
03/07/17	6.9	7.2	280	500								0.40	
03/08/17	7.0	7.3	120	110								0.02	
03/09/17	6.6	7.5	190	170								0.58	
03/10/17	6.8	7.2	90	500								0.02	
03/11/17	6.7	7.3	280	170								0.31	
03/12/17	6.8	7.7	110	80	13.8	11,022		24.3	3.09	1.75		0.02	
03/13/17	6.4	7.4	220	500			1.56					0.36	
03/14/17	6.7	7.2	90	230								0.56	
03/15/17	6.7	7.1	180	130								0.45	
03/16/17	6.8	7.4	200	70								0.01	
03/17/17	6.7	7.1	350	300								0.88	
03/18/17	6.7	7.1	70	170								0.37	
03/19/17	6.7	7.5	70	80	8.4	11,353		14.6	1.98	1.11		0.00	
03/20/17	6.2	7.2	100	300								0.00	
03/21/17	6.8	7.2	100	500								0.18	
03/22/17	6.8	7.1	80	40								0.03	
03/23/17	6.8	7.1	40	80								0.22	
03/24/17	6.5	7.2	150	1,300								0.29	
03/25/17	6.7	7.0	90	40								0.01	
03/26/17	6.1	7.1	130	0	15.2	16,155		24.5		1.95		0.20	
03/27/17	6.8	7.3	40	20								0.01	
03/28/17	6.8	7.1	140	70								0.02	
03/29/17	6.4	7.0	350	500								0.54	
03/30/17	6.8	7.3	70	800								0.04	
03/31/17	6.8	7.0	100	0								0.00	