



King County

Department of Natural Resources and Parks
Wastewater Treatment Division
West Point Treatment Plant, WTP-NR-0100
1400 Discovery Park Blvd
Seattle, WA 98199-1044

January 12, 2018

TO: Robert Waddle, WTD Operations Manager

FROM: Process Control Staff

SUBJECT: West Point Treatment Plant Performance Report – December 2017

Seattle had a near-normal December. West Point recorded a total of 4.51 inches of precipitation for the month. The precipitation was fairly spread out over the entire month with a maximum of 1.18 inches falling on December 19. SeaTac recorded 5.43 inches of precipitation, 0.08 inches above the normal December rainfall of 5.35 inches. Boeing Field recorded 4.67 inches of precipitation, 0.81 inches below the normal 5.48 inches. The National Weather Service Office at Sand Point recorded 4.83 inches of precipitation, 0.60 inches below the normal 5.43 inches. Total Plant flow at West Point averaged 110.63 MGD, 19.02 MGD below the average December flow for the previous five years (129.65 MGD). North end flows were sent to South Plant and Brightwater via Woodinville and North Creek.

There were no NPDES Permit exceptions during the month.

Installation of the new flap gate at the Denny Local regulator was carried out the week of December 18 and completed on December 21.

Salt water intrusion did occur from a partially open gate at Hanford Regulator. The gate had initially opened due to a CSO event, but remained open after the event due to a faulty relay switch. The gate was open from December 29 until January 1.

Key Measures

Volume Treated	3430	million gallons
Permit Compliance	0	exceptions
Biosolids	3986	wet tons hauled
	1185	dry tons hauled
	29.73%	cake total solid

Permit Compliance Summary – December 2017

Flow (mgd)	cBOD (mg/l)	TSS (mg/l)	cBOD (% Removal)	TSS (% Removal)	Fecal Coliforms (counts/100 ml)	Chlorine Residual (µg/l)
	Plant/Permit	Plant/Permit	Plant/Permit	Plant/Permit	Plant/Permit	Plant/Permit
110.63	7/25	13/30	96/80	94/80	7/200	93/139

West Point's NPDES Permit requires 80% removal of cBOD and TSS during the wet season months of November through April. The Permit also sets effluent concentration limits of 25 mg/l for cBOD and 30 mg/l for TSS, or 20% of influent values during the wet season months, whichever is more stringent. For December 2017, the effluent concentration limits were 25 mg/l for cBOD and 30 mg/l for TSS.

Process Control

Total plant flow for the month was 3429.66 million gallons. There were three days when flow was diverted around secondary treatment.

Date	Secondary Diversion Volume (MG)	Reason for Diversion
12/2/17	1.05	Flows > 300 MGD
12/19/17	25.65	Flows > 300 MGD
12/29/17	17.55	Flows > 300 MGD

For the month, influent and effluent cBOD concentrations averaged 171 mg/l and 7 mg/l, respectively (96% removal); influent and effluent TSS averaged 198 mg/l and 13 mg/l, respectively (94% removal).