

M E M O R A N D U M

March 4, 1977

State of
Washington
Department
of Ecology

To: Craig Baker

From: Douglas Houck

Subject: North Bend STP Survey

On a special request by you and the Northwest Regional Office I conducted a three day survey on North Bend's Sewage Treatment Plant. The purpose was to collect two 24-hour composites of both the influent and effluent and record the flows for this same time period.

I arrived on the 13th and placed a sampler at the beginning of the clarifier and another sampler in an eight inch pipe just before chlorination. A Manning Dipper was placed in a manhole on the effluent discharge pipe to record the flow. The manhole is located at the beginning of the gravel road leading to the treatment plant. It is right next to the influent manhole where Trepanier had a bubbler recorder installed.

I calculated the flows in the effluent manhole with an electromagnetic flow meter and measured the depth of flow. On the 13th at approximately 1500 hours the flow was 0.674 MGD. The flow on the 15th at approximately 1100 hours was 1.13 MGD. I could not calculate the total flow as the dipper malfunctioned on the first day. I feel that the flow is fairly constant and that the flow given for the 13th is low. Using a population equivalent of 2,000 a flow rate of 115 gallons per capita per day and a total flow of 1.0 MGD I calculate that 77 percent of the total flow is due to groundwater infiltration. This is further substantiated by the low raw BOD₅, conductivity and solids results. Enclosed is a copy of the lab data.

DH:ee

