

March 2017

# West Point Restoration - Marine Water Quality Monitoring -Frequently Asked Questions

King County Wastewater Treatment Division is working to address questions and concerns about the West Point Treatment Plant emergency that occurred when intense storms combined with an equipment failure to result in unprecedented flooding and damage to the facility.

#### How much untreated wastewater was discharged to Puget Sound?

During emergency bypasses on Feb. 9 and Feb. 15-16, about 235 million gallons of untreated stormwater and wastewater was discharged to Puget Sound through an emergency bypass outfall located 500 feet offshore from the North Beach near Seattle's Discovery Park. The discharge, which occurred during heavy rains, was about 85-90 percent stormwater. About 30 million gallons was sewage.

#### What level of treatment is wastewater currently receiving before discharge into Puget Sound?

At this time, there is no untreated wastewater entering Puget Sound from the West Point Treatment Plant. The plant is performing limited primary treatment including settling some solids, screening, disinfecting and dechlorinating wastewater. However, since Feb. 9<sup>th</sup> the treatment plant is not providing full treatment and therefore is not meeting the water quality standards that we have maintained for many years. In the interim, while the repairs to West Point are being made, the wastewater flows to West Point are being monitored and carefully managed to avoid, to the extent possible, any need to release additional untreated emergency bypass flows from the plant.

We take our commitment to environmental stewardship very seriously. We recognize that lower levels of treatment or stormwater/sewage bypasses do not meet the stringent requirements of our state and federal water quality permits. We are working around the clock to restore secondary treatment. As we do so, you can keep up to date on <u>restoration</u> and <u>monitoring</u> activities.

# What are you doing to monitor Puget Sound while West Point's secondary treatment system is being restored?

As we restore operations at West Point, King County is committed to monitoring areas of Puget Sound and using science to collect and analyze data and determine if there are any harmful effects to water quality as a result of the temporary reduced level of treatment at our West Point Treatment Plant.

As part of a long-term program, King County monitors Puget Sound water quality at 12 offshore and 20 beach locations including sites near the West Point Treatment Plant deep water outfall. This year-round monitoring program has collected data for up to 50 years in some locations, and provides an understanding of water quality throughout the central Puget Sound basin. Visit

http://green2.kingcounty.gov/marine/Monitoring/Offshore for sampling locations.

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The County's long-term, regular monitoring data are used to measure the natural trends in water quality across the Puget Sound. If any large changes in monitoring data occur during this period of reduced treatment at West Point, then comparisons to this baseline data may help the marine scientists to identify the effect of West Point flows on water quality conditions.

Additionally, to more closely monitor the West Point discharges while repairs are being made, we have increased monitoring frequency from two times a month to weekly at four routine offshore sampling sites and added another offshore sampling site close to West Point. We will be posting the monitoring results every two weeks.

#### How will you know if there are impacts to Puget Sound?

King County's Environmental Lab uses samples to assess different indicators of water quality. Tests that are used to indicate the possibility of harmful effects from partially treated wastewater include dissolved oxygen, fecal bacteria, nutrients, and chlorophyll. Dissolved oxygen is needed to support marine life. Bacteria monitoring is used to indicate the presence of pathogens that could cause illness to wildlife, and also humans that may come in contact with the wastewater. Nutrients and chlorophyll indicate potential algae growth. Comparing current data to an extensive baseline helps us identify negative effects that may impact marine life.

# Have there been reports of impacts from the discharge of untreated wastewater?

There have been no reports of harm to fish and wildlife since the temporary bypasses occurred. King County marine scientists report that the relatively short duration of the discharge, the large discharge volume from the plant during the storm (90 percent of flow was stormwater, 10 percent wastewater), and the large tidal exchange and currents in the vicinity of the outfall resulted in rapid dispersion of the flow.

# Could there be long term effects from the discharge of untreated or partially treated wastewater?

King County marine scientists do not expect the discharge of additional solids and organic matter to result in long-term harmful effects to aquatic organisms. The discharges however could result in temporary local effects at the outfall such as lower dissolved oxygen available to organisms, or increased sedimentation.

We will continue to monitor and look for impacts in both waters and sediments around the West Point outfall.

# How will you report monitoring results and any impacts identified by monitoring?

We will post monitoring results <u>online</u>. We are regulated by the State Department of Ecology and have a strong reputation for meeting and surpassing permit requirements. We are continuing to coordinate closely with the Department of Ecology and will monitor and report any impacts from this incident.

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