

REPORT TO ENVIRONMENTAL SERVICES COMMITTEE MEETING OF WEDNESDAY, NOVEMBER 20, 2024

SUBJECT **Healthy Waters Project for Tod Creek on the Saanich Peninsula – November Update**

ISSUE SUMMARY

To provide the Environmental Services Committee with an update on the Healthy Waters project for Tod Creek and a summary of the draft preliminary report upon its release to the public.

BACKGROUND

On May 10, 2023, the Environmental Services Committee approved \$250,000 in funding for a project proposed by the Raincoast Conservation Foundation (RCF) to monitor the Tod Creek Watershed. The objectives of this project are "to conduct a risk-based evaluation of contaminants of concern in the Tod Creek watershed in support of healthy fish habitat" and "to document possible sources of contaminants of concern in the Tod Creek watershed, including Hartland Landfill and local land use."

The RCF initiated sampling in December 2023, and results from the first of four sampling events were presented to CRD staff in June 2024 in a draft report. Several CRD staff reviewed the report and provided feedback to RCF. The CRD received a second version of the report in July 2024. RCF has expressed its interest in releasing this report to the public at the November 20, 2024 Environmental Services Committee meeting.

IMPLICATIONS

Environmental Implications

The RCF's primary objectives are to provide a baseline summary of contaminants in a watershed for comparison to other watersheds across coastal BC; to provide a high-level summary of general contaminant levels as they relate to pathways from various land uses; and to assess risk to fish health.

The report (Appendix A) summarizes preliminary water quality data from the first of four sampling events, with some limited data from the second event also included. More data and quality assurance/ quality control (QA/QC) information are required to properly understand the data, but the preliminary findings indicate that Tod Creek Watershed is relatively healthy based on the following results:

- Only two parameters exceeded water quality guidelines for protection of aquatic life. Guidelines are conservative screening tools used prior to any detailed risk assessment.
- Some substances were higher at the Hartland site; however, these substances did not appear to impact water quality throughout the watershed.
- Preliminary comparisons to other watersheds indicate that Tod Creek's water quality appears to be in the same range as other coastal watersheds for most substances.
- Finally, tap water samples collected from pooled CRD drinking water and well water (outside of the Tod Creek Watershed) had no exceedances of drinking water quality guidelines.

The report highlights three findings from the Hartland site (nitrate, polychlorinated biphenyls [PCBs] and per- and polyfluoroalkyl substances [PFAS]) for further study.

Results from this site are not representative of landfill leachate, but likely related to runoff from roads, parking lots, aggregate storage areas, construction and other industrial activities occurring within the landfill property. The 2023-2024 environmental monitoring report, completed by an external consultant, confirms that landfill leachate is contained and controlled within the site property and that the source of the nitrate is blast residue from recent aggregate quarrying and stockpiling.

Quarrying activities have historically taken place at the Hartland Landfill to create airspace for refuse. The aggregate generated is beneficially used for operational and capital projects across the site. Investigations have determined that the source of nitrate is blast residue run-off from aggregate stockpile reserved for future operational use. Staff are actively implementing a site-wide aggregate management plan to mitigate and prevent further impacts. This plan includes hydraulic containment systems, strategic depletion of stockpiles, and enhanced monitoring to evaluate the effectiveness of these measures.

PCBs were detected in the wet season sample above the BC aquatic life guideline (0.133 versus 0.100 ng/L). However, for comparison, PCBs were measured at a higher concentration in a Whistler background site, which highlights the need for more data collection, QA/QC oversight and comparison to other watersheds to put these findings in perspective.

The total PFAS measurement from the wet season was reported to be higher at the Hartland site compared to other locations in Tod Creek and most other watersheds assessed by RCF, but was well below available, but limited, water quality guidelines.

CONCLUSION

The Raincoast Conservation Foundation has conducted the first two of four water quality sampling events and provided a preliminary report of the findings. The report indicates that water quality in the Tod Creek Watershed is good, relative to available guidelines, background measurements, and other watersheds. The report highlights the known issue of elevated nitrates associated with aggregate storage on the Hartland site. Further collection, analysis, and reporting of water quality in the Tod Creek Watershed will be undertaken in two subsequent sampling events. A final report is expected in 2026.

RECOMMENDATION

There is no recommendation. This report is for information only.

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ATTACHMENT

Appendix A: Raincoast Healthy Waters – Preliminary Watershed Report – Tod Creek
(October 28, 2024)