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MEDIA RELEASE

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Information about algal bloom, many ways for residents to help protect water quality

The Shuswap Watershed Council (SWC) is providing further information in response to inquiries about the algal bloom occurring in the Salmon Arm portion of Shuswap Lake. As of August 16th, Interior Health has issued a Cautionary Advisory due to the algal bloom for that part of the lake, including Salmon Arm Wharf, Tappen Bay, Sunnybrae, Herald Provincial Park and Canoe Beach.

"Algae are a natural part of an aquatic ecosystem, and they are always present in Shuswap Lake," explains Erin Vieira, the SWC's program manager. "An algal bloom occurs when the number of algae rapidly increases due to a change in environmental conditions that favour algae."

Favourable environmental conditions include sunlight, stable weather and calm water, and a sufficient supply of nutrients – especially phosphorus and nitrogen. An algal bloom is more likely to happen if all these conditions occur at the same time.

"Phosphorus (P) is usually the key nutrient driving an algal bloom," says Vieira. "It's a limiting nutrient, which means that P levels are holding back algal growth. When more P is introduced to an aquatic ecosystem, more plant life and algae will grow according to how much P is available."

Vieira explains that nutrients get into Shuswap Lake from several different sources including the Salmon River and other tributaries such as Tappen Creek and White Creek, household wastewater via the Salmon Arm wastewater treatment plant effluent and septic systems, from shoreline properties (e.g., horticulture and lawn fertilizer, etc.), storm drains, and more. A research report published by the SWC in January 2020, <u>Understanding Nutrients and Water Quality in the Shuswap River and Salmon River</u>, explains that forested land, urban land, and agricultural land contribute an average of 0.035 kg phosphorus per hectare per year, 3.83 kg P/ha/yr, and 13.5 kg P/ha/yr, respectively.

Vieira says the cool, wet spring also likely played a role in the algal bloom. Soil was saturated with water in the spring, first from snowmelt and then from rain. Nutrients move through the soil with the water, eventually making their way to the lake.

"More water moving through soil often means more nutrients moving through soil," says Vieira.



Vieira says there are many things that residents can do to decrease their impact on the watershed and help protect water quality.

"There is a best practices approach to maintaining water quality, and a regulatory side to it. The SWC is a non-regulatory group, so we focus on best practices, incentives, and advocacy. The regulatory side is handled by various orders of government."

Proper septic maintenance is a great way for residents to decrease their impact on the watershed. Vieira also suggests that residents ensure nothing harmful goes down drains, or enters storm drains from yards and driveways.

"It all ends up in the lake, eventually," she says.

More information about algal blooms, and best practices for residents to help keep the Shuswap clean, can be found in the SWC's newest Annual Water Quality Report, available at <u>www.shuswapwater.ca</u>. The Shuswap Watershed Council is also producing a Phosphorus Action Plan for the Shuswap watershed, which will provide guidance to various groups in the Shuswap watershed on actions they can take to reduce phosphorus inputs to Shuswap and Mara Lakes. The Plan will be published this fall.

For up-to-date information regarding algal bloom advisories, visit the Interior Health Public Beaches webpage: <u>https://www.interiorhealth.ca/health-and-wellness/environmental-health-and-hazards/public-beaches</u>.

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About: The Shuswap Watershed Council is a watershed-based partnership organization that works on water quality and safe recreation in the Shuswap.

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