

Presented By: UNBC's Natural Resources & Environmental Studies Institute



PUBLIC PRESENTATION



Tuesday
November 27,
2018

7:00pm

Mackenzie
Recreation
Centre

400 Skeena Dr.
Mackenzie, BC

Participants can also
attend remotely by

going to:

www.unbc.ca/nres-institute/colloquium-webcasts

(BlueJeans feed only)

One fish, two fish, red fish, lots of fish: Where did they come from and what are they doing?"

Guest Presenter: Dr. Mark Shrimpton
University of Northern British Columbia

Presentation Summary

The Williston Reservoir was created in 1968 following the construction of the WAC Bennett Dam and impounding the Peace River in the canyon near Hudson's Hope, BC for hydroelectric generation. With a surface area of 1,779 square kilometers, the Williston Reservoir is the largest lentic freshwater system in British Columbia. Kokanee (*Oncorhynchus nerka*) were stocked into southern tributaries to the Williston Reservoir from 1990 to 1998 to create a Kokanee sport fishery and a prey source for large piscivorous fish species. Recently, spawning Kokanee have been observed throughout tributaries in the Williston watershed that flow into the north-western portion of the reservoir – not the regions originally stocked. The introduced Kokanee to the Williston Watershed have the potential to dramatically affect the flow of nutrients from the reservoir to streams where they spawn and die, affecting fish, aquatic insects, and lichen from the surrounding riparian zone. We sampled stream resident fish, assessed diversity of aquatic invertebrates and the lichen community within the riparian zone in streams where Kokanee spawn compared to streams where Kokanee do not spawn. Diversity is high for aquatic invertebrates and lichen, but most small tributary streams have few species of fish. Using stable isotope to trace the source of nutrients for tributary streams, we found signatures from the reservoir in streams where Kokanee spawn. Our findings are strongly suggestive that Kokanee provide a source of nutrients to tributary streams in the Williston Reservoir watershed.

All are welcome to attend. No registration required.

The Natural Resources & Environmental Studies Institute at the University of Northern BC, together with its partners, invite those with interest in learning more about amphibians in north-central British Columbia to attend this presentation and discussion. This presentation will also be viewable on the internet via the BlueJeans feed only. Visit www.unbc.ca/nres-institute/colloquium-series for information on how to connect.

This project is funded by the **Fish and Wildlife Compensation Program** on behalf of its program partners **BC Hydro**, the **Province of BC**, **First Nations** and the **public**, who work together to conserve and enhance fish and wildlife impacted by existing BC Hydro dams.

