

Stakeholder Newsletter

Lake Koocanusa Monitoring and Research Committee (LKMRC)

Issue 2, June, 2017

Environment Canada's Elk Valley
American Dipper Research



Helmi Hess (Environment Canada/University of British Columbia) has been collecting samples in the Elk River Valley to characterize selenium cycling in the food web. Helmi analyzed samples from five trophic levels in the aquatic food web for selenium and stable isotopes in the fall of 2016 and is repeating these measures, including dipper productivity measures, this spring. The preliminary data from 2016 suggests that the majority of dippers were in good body condition; one male at a reference site (Forsyth Creek) had a bill deformity.

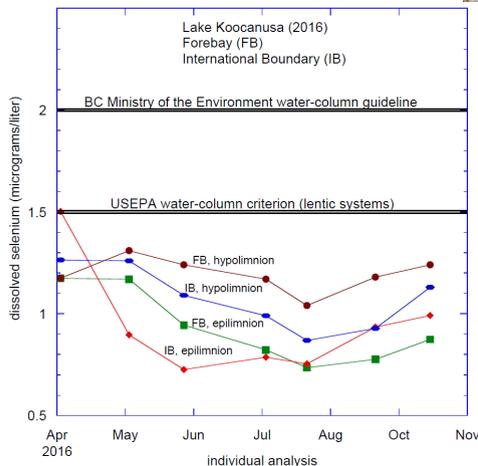
Click [here](#) for a recent article on Helmi and Environment Canada's work. The MRC is eagerly awaiting their results!

To remove your name from our mailing list, please email tmavencamp2@mt.gov. <http://lakekooconusaconservation.pbworks>

The **LKMRC** is a forum for exchanging information, coordinating monitoring and research activities and providing science-based advice to the Steering Committee to protect the uses of LK. Stakeholders are a critical component of this process and your questions and comments shape this process. Thank you for your participation.



A USGS sediment trap in use on LK



Dissolved Se at the IB and FB in 2016

USGS: Selenium Bioaccumulation from the Bottom Up

The Montana Department of Environmental Quality, BC Ministry of Environment and United States Geological Survey teamed up in 2017 for the third year of sediment, water and plankton selenium analysis. The project is part of a multi-agency effort to apply an ecosystem-scale selenium modeling methodology to LK to support the development of a site-specific selenium guideline for the protection of aquatic life in LK. Data from 2015 and 2016 and more details on the methodology, data quality, and model are now publically available [here](#). A graph of selenium concentration in water samples collected at the International Border and Forebay is shown above.

“We are impressed with the proactive approach taken by MT DEQ regarding increasing selenium inputs to Lake Kooconusa,” said USGS field project manager, David Naftz, “Allowing the science to drive the process in determining a site-specific selenium standard for the reservoir is a good investment for Montana’s environmental future.”