

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



# PUBLIC PRESENTATION



## White sturgeon in BC: Moving from recruitment failure to restoration

**Guest Presenter: Dr. Steve McAdam**

Hydroelectric Impacts Biologist  
BC Ministry of Environment and  
Climate Change

Co-chair—National White Sturgeon  
Recovery Team

**Thursday  
April 11, 2019**

**7:30 pm**

**7-212  
UNBC Prince George  
Campus**

**Participants can also attend  
remotely by**

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### Presentation Summary:

Most of the 27 sturgeon species in the world are threatened or endangered according to the IUCN. For white sturgeon in BC half of the populations have been undergoing recruitment failure for over 40 years, and natural juvenile production is insufficient to sustain the population. Currently populations in the Nechako, Columbia and Kootenay Rivers are sustained by inputs from conservation fish hatcheries, however, restoration of natural recruitment is the long term recovery goal. While recruitment failure is linked to the presence of dams and flow regulation, a detailed understanding the causal mechanisms is critical to reversing this effect. Research in the past decade has identified important links between recruitment failure and infilling of early rearing habitats by sand and fines. Biological investigations indicate that the presence of suitable interstitial spaces is critical for early development and survival. The negative consequence of substrate change in early rearing habitats, combined with an improved understanding of the fluvial geomorphology of these habitats, has led to the implementation of experimental substrate restoration. While substrate restoration provides a promising approach further evaluation over multiple years is required to verify response from current restoration studies.

Dr. McAdam is broadly interested in the impacts of dams and flow regulation on riverine fish and ecosystems. Currently his work is focussed on the mechanisms causing white sturgeon recruitment failure, larval white sturgeon habitat needs, and remediation of white sturgeon spawning and early rearing habitat. He is currently involved in planning, implementing and monitoring habitat restoration on the Nechako and Columbia Rivers. Steve has been involved in white sturgeon recovery throughout BC since its inception in 2001, and he is the co-chair of the National White Sturgeon Recovery Team as well as the leader of the Habitat Restoration Working Group of the World Sturgeon Conservation Society.

### ***All are welcome to attend. No registration required.***

The Natural Resources & Environmental Studies Institute at the University of Northern British Columbia, together with its partners, invite those with interest in learning more about White Sturgeon to attend this presentation and discussion.

This project is funded by the Fish and Wildlife Compensation Program on behalf of its program partners BC Hydro, the Province of BC, Fisheries and Oceans Canada, First Nations and Public Stakeholders, who work together to conserve and enhance fish and wildlife in watersheds impacted by existing BC Hydro dams.

