Topic: EFN policies - opportunities and barriers

Title:

Examining The Environmental Flow Needs Of The Tod Creek Watershed: Opportunities And Barriers

A dam regulates flow from a small lake in the Tod Creek watershed on Vancouver Island. Under the dam's water license summer flow is released to support downstream irrigation licenses on Tod Creek and to ensure adequate fish flows. Cutthroat Trout and Coho Salmon are present in the watershed. In summer 2018 ownership of the dam was transferred to a new licensee. This prompted an amendment to downstream water licenses under the Water Sustainability Act (WSA) in which Environmental Flow Needs (EFN) must be considered. The water license governing operation of the dam does not have an instream flow requirement (IFR) and the new owner is not legally obligated to conduct summer flow releases. This decoupling of the water licenses requires one licensee to consider EFN while the second licensee (new dam owner) is not required to consider EFN.

Northwest Hydraulic Consultants (NHC) is responsible for installing a monitoring station on Tod Creek and conducting an EFN study. NHC has developed a rating curve and hydrograph for the Tod Creek watershed and applied the Provincial EFN risk management framework to conclude months in which sufficient flows are available for water license diversion.

Over the duration of this project, NHC has identified opportunities and barriers with current Provincial EFN Policies which we present as part of this study. Policy barriers include (a) out of date water licenses leading to legislative confusion during amendments and ownership changes and (b) discretionary legislation regarding EFN in that not all licensees in a watershed have to abide by the same diversion practices. NHC has also identified opportunities such as (a) increased ecosystem protection (b) increased education and (c) operational flexibility and certainty.

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