Fish Habitat Offsetting in Pristine Wilderness: Regulatory and Design Challenges

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Abstract:

The Fisheries Act prohibits serious harm to fish or fish habitat and declares that offsetting is required when serious harm is unavoidable. Often, opportunities for offsetting sites are obvious and involve the restoration of a degraded site nearby, but what happens when the serious harm takes place in a pristine wilderness?

Preparing and submitting a Fisheries Act Authorization (FAA) for work in a pristine area is a highly scrutinized process involving DFO, First Nations Groups, a Client, multiple landowners, multiple consultants, and an interested public.

This presentation summarizes the process and challenges of obtaining a Fisheries Act Authorization for offsetting in a pristine West Coast coho salmon habitat area. The first step is to define the impact including amount and type of habitat that will be subject to serious harm. It will be up to the FAA applicant to determine what offsetting ratios may be acceptable and to determine how much offsetting area will be required.

Selecting offsetting sites is a huge challenge in a pristine area that has seen very little impact to its watercourses. Options for creating or improving habitat to meet the requirements of the offsetting program can include creating groundwater channels, creating side channels, enhancing riparian areas, enhancing instream habitat complexity, and improving connectivity between water features.

Complicating factors in obtaining the required data for design are difficult and remote site access, wildlife, dense vegetation, and access timing related to high tide. The final design must balance risk, constructability, construction cost, and maintenance requirements with the habitat requirements. Use of natural materials available onsite needs to be prioritized while at the same time preserving old growth forest.

A case study will be used to present the regulatory and design challenges of developing offsetting for a Fisheries Act Authorization in a pristine wilderness area.