Piloting Integrated Watershed Management using Chinook as a Key Indicator Species on the South Coast of BC

The Cowichan Watershed Health and Chinook Initiative

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## **CWB** Target

 As time and resources permit support Chinook restoration initiative and development of Chinook target utilizing the Flows and Fish Working Group as a forum.

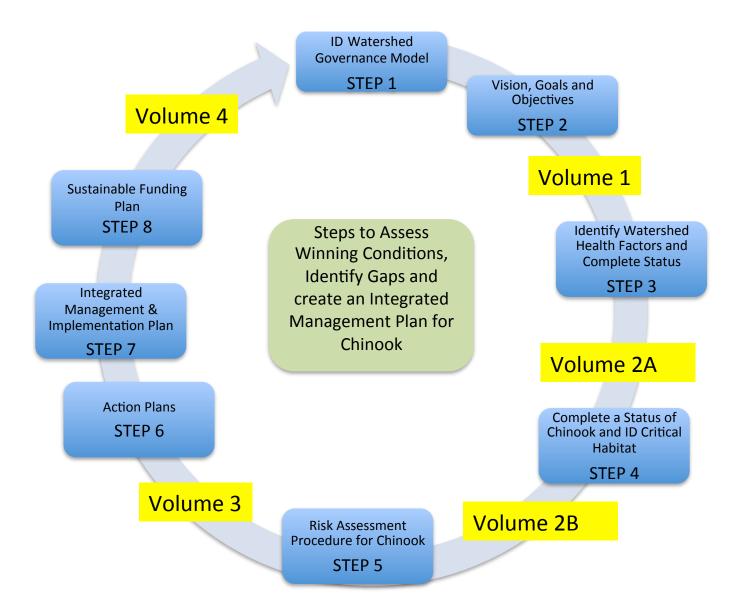
### Piloting WSP Strategy 4 -Implementation

- On the ground action to affect critical limiting factors in fresh-water is not within the immediate jurisdiction of the Federal Government, other than regulation of impacts through the Fish Protection Act and SARA.
- Can support First Nations and provincial/ municipal agencies in addressing watershed health at a local level
- Limiting factors for salmonid production in fresh-water are well aligned with issues faced at a local level - salmon are a key indicator of watershed health

### Cowichan Watershed Health and Chinook Initiative

#### Process to date

- 2010 DFO promise to provide a Cowichan Chinook Re-building Plan – link to WSP
- 2010-2013 draft of compendium document
- 2013 Risk Assessment Procedure (RAP) to identify and prioritize the limiting factors for Chinook production
- Late 2014 funding to re-initiate process Partnership with Cowichan Tribes
- 2015 revisit compendium > 4 volumes
- Jan 2016 Review RAP
- Feb 22<sup>nd</sup> review revised RAP, identify causal mechanisms and start Action Planning

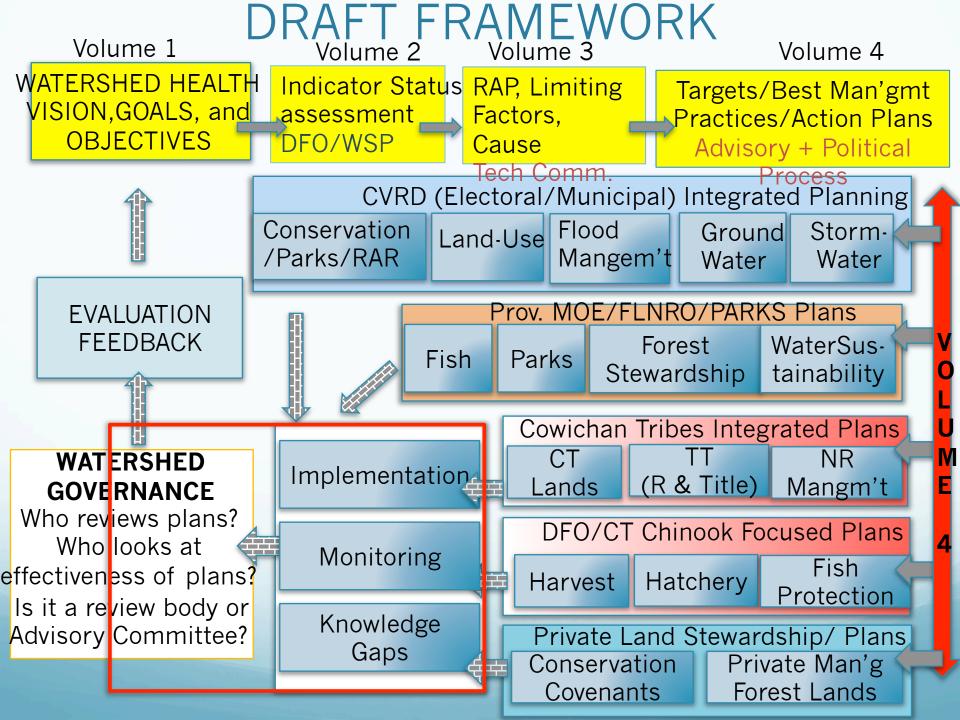


### Risk Assessment - Very High Risks/Limiting Factors

- Predation of adults in the estuary and lower river by pinnipeds when flows are lower than 15cms
- Lack of high quality rearing habitat w/good instream complexity
- Limited or no access to historical tributary or off channel habitat
- Lack of good quality estuarine or near-shore habitat
- Predation of eggs, alevins, fry and smolts in river by mergansers, brown trout, sculpins etc.

# Risk Assessment - High Risks/Limiting Factors

- Aggradation creates a migration barrier in the lower Cowichan mainstem during summer and early fall period
- Limited or delayed spawner access through lower river and Skutz Falls due to low flows
- Loss of safe migration through lower river due to channelization, loss of habitat complexity and instream cover features
- Lack of good quality pool refuge habitat in lower reaches



### The Plan Forward to Completion Spring 2016

- Develop action plans for v. high and high limiting factors – Send out for feed-back
- March 18th- Meeting with practitioners/planners to identify tools and barriers
- Draft Documents out for review late March/April larger meeting – CSRT/CWB?
- Hatchery Re-visit Strategic Plan next fiscal
- Harvest identify key areas to focus (SBC Chinook process), Harvest RT – next fiscal

Critical Habitat Mapping – 2016-2019 if CT HSP funding approved

