

UPDATE:

Ktunaxa Nation Council efforts to  
restore anadromous salmon to the  
Canadian Columbia River basin

Lake Roosevelt Forum April 2018

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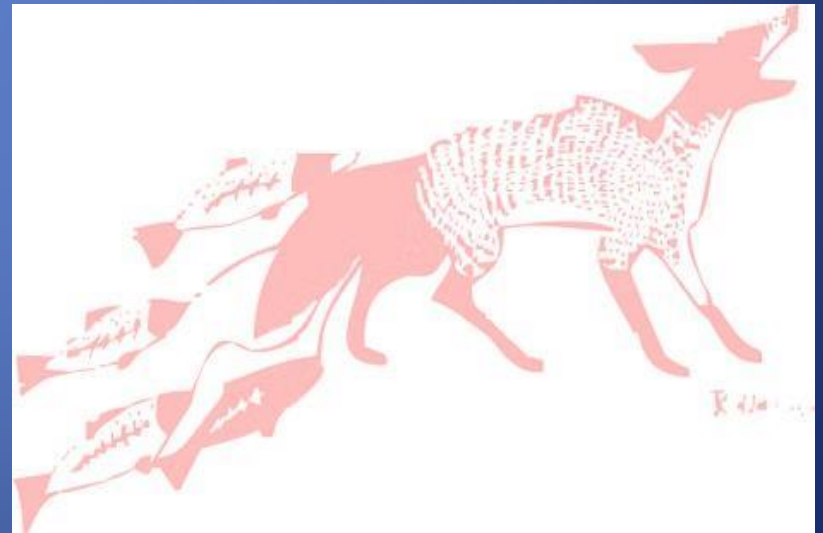
# Ktunaxa Nation and Ktunaxa Nation Council

- Ktunaxa ʔamakʔis is homeland of the Ktunaxa Nation in SE BC, NW Montana, N Idaho and NE Washington
- Ktunaxa Nation includes four communities in BC plus the Confederated Salish and Kootenai Tribes (Montana) and the Kootenai Tribe of Idaho
- Ktunaxa Nation Council represents the four Ktunaxa communities in Canada



# Background and History

- Efforts to restore salmon – organized efforts started in 1994 with formation of CCRIFC
- Focus for this presentation will be efforts since 2016
- Three pronged approach
  - Policy/legal/regulatory
  - Education/outreach
  - Technical



# Policy/Legal/Regulatory

- KNC staff attempt to incorporate salmon restoration into all regulatory matters where applicable.
- Recent meetings and continued outreach with agencies, NGOs and Industry, and particularly with federal agencies and politicians.
- Increased transboundary communication
- CRT engagement



# Education/Outreach

- Columbia Salmon Festival (2017 is 7<sup>th</sup> year)
- Info webinars, lectures at events and at colleges/universities (3-5/yr)
- Website, newsletters.
- Media interviews, esp. related to CRT.

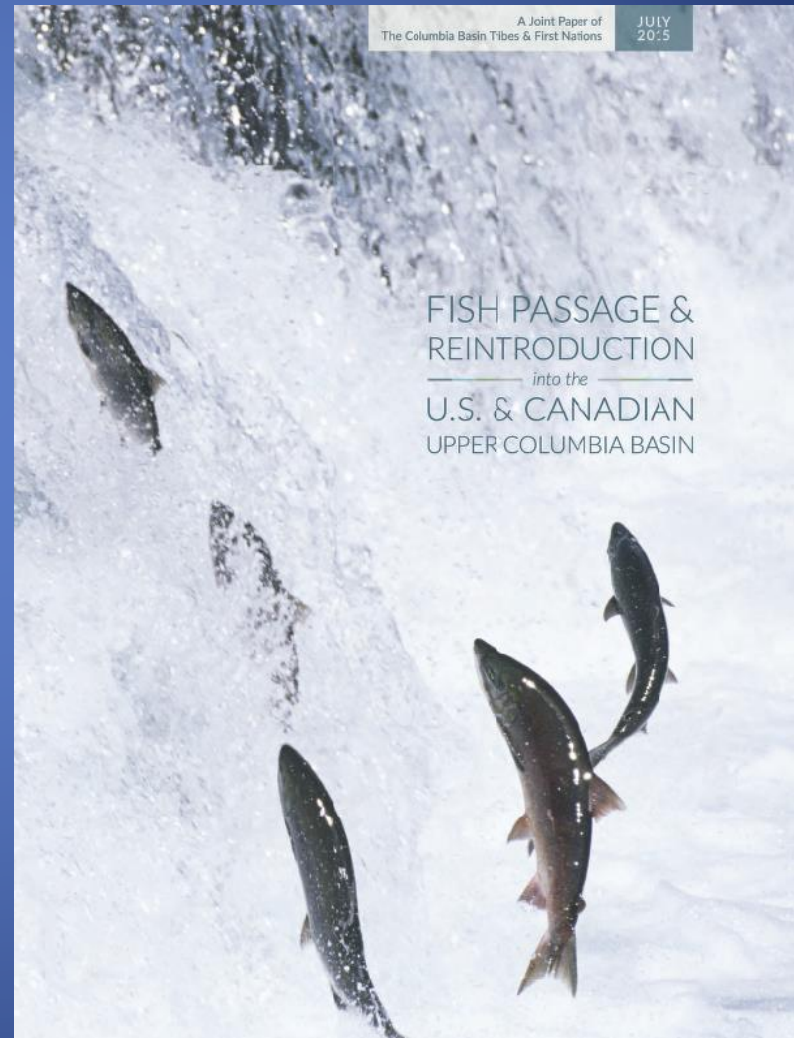


# Technical coordination – Canadian First Nations

- UCAMP (Upper Columbia Aquatic Management Partnership) has representation from KNC, Secwepemc, ONA, and DFO and discusses aquatic management issues on a triannual basis.
- Since 2015, science support from Fisheries and Oceans Canada, particularly for Salmon
- With respect to salmon restoration, currently primarily used as outlet for information sharing.

# Technical coordination – KNC and US tribes

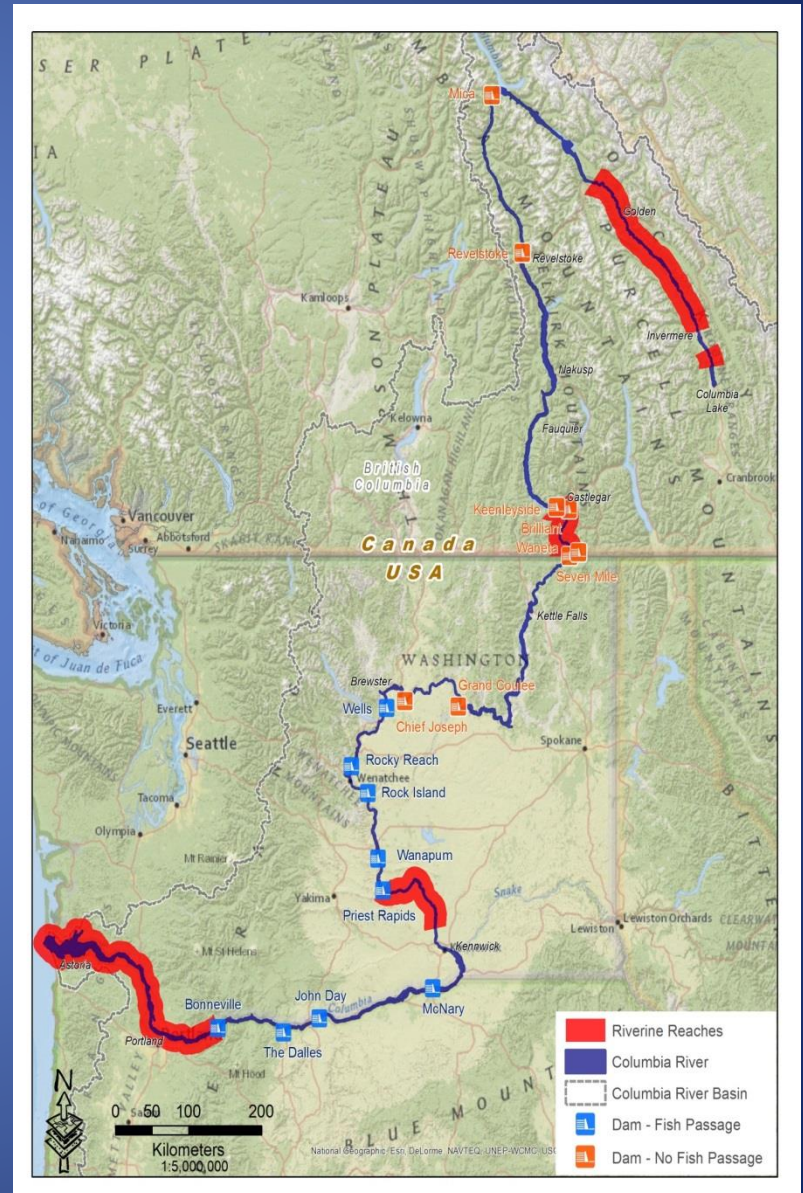
- Seminal document is the Joint paper on fish passage
- No formal working relationship, but active and ongoing communications (technical and leadership level)
- Participation in working groups and ad hoc basis to assist in implementation of US Phase I plan (e.g., life cycle modeling, contribute as needed to reports etc.)





# KNC implementation of Phase I plan

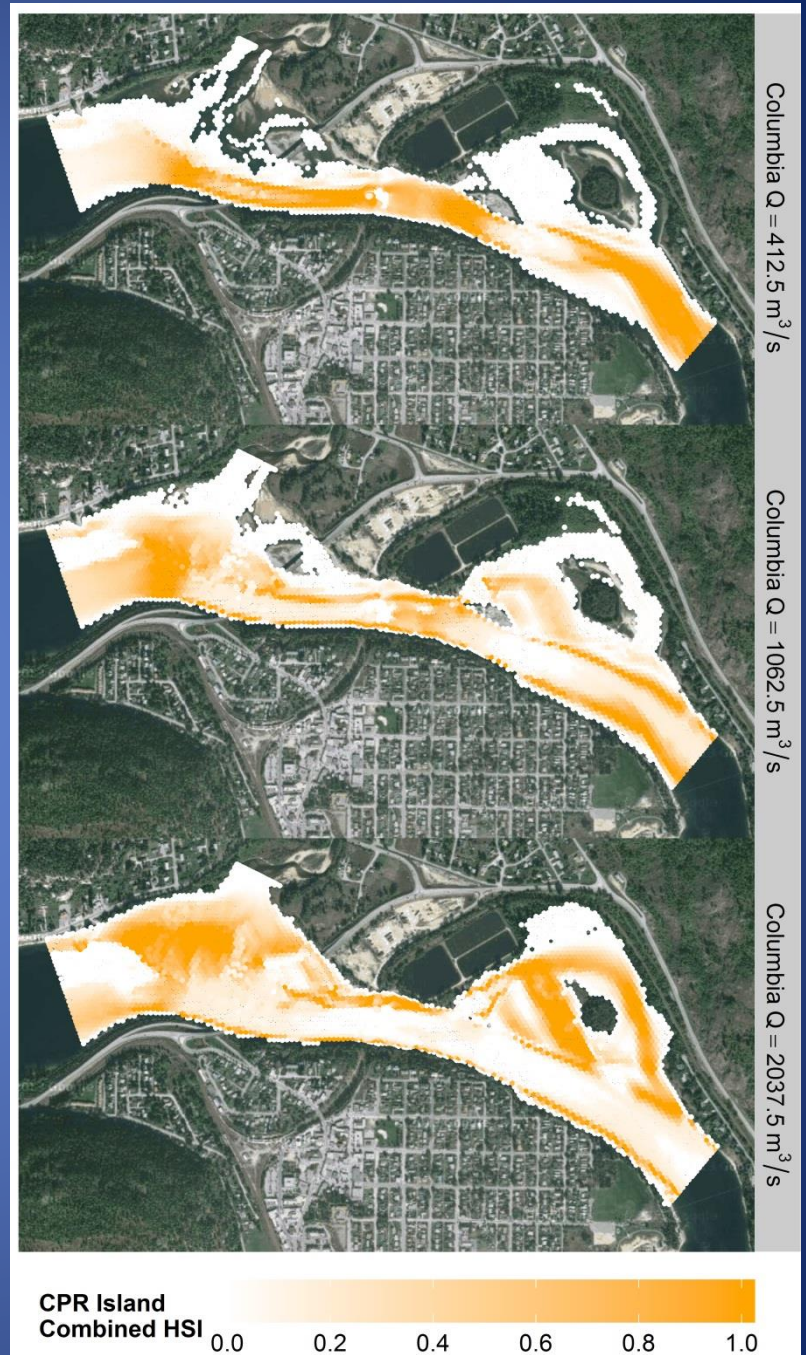
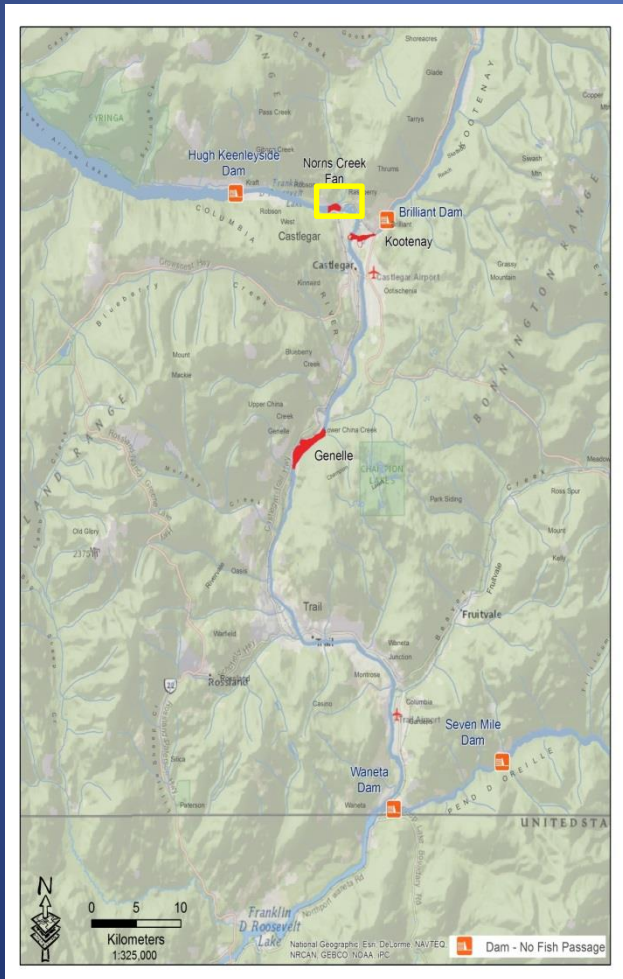
- Efforts focused on Transboundary Reach
- 2013-2016: Donor stock selection of Chinook Salmon
- 2016-2017: Spawning habitat suitability for Chinook and Steelhead
- 2013: Terms of reference for experimental reintroduction design developed (not actively pursued, pending formal collaboration agreement)





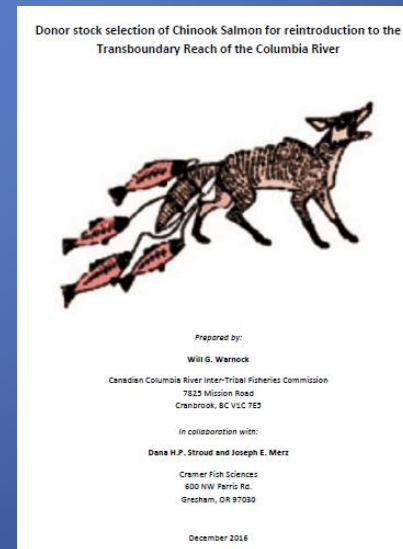
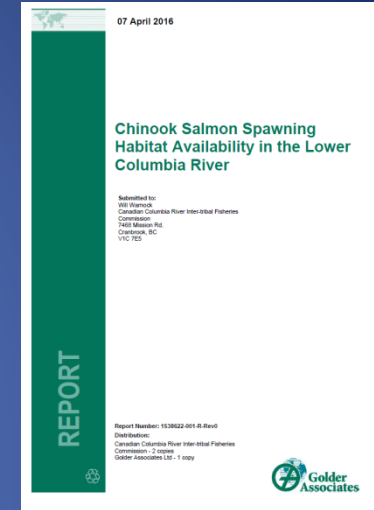
Donor stock	Component 1: Ancestry matching	Component 2: Adaptive potential	Component 3: Environment matching	Component 4: Evolutionary Risks	Component 4: Disease Risks	Component 4: Ecological Risks	Component 4: Demographic Risks
Middle Shuswap River (Fraser)	Lower	Lower	Unknown	Lower	Unknown	Unknown	Unknown
Wells Hatchery Summer-Fall	Higher	Higher	Higher	Conflicting	Unknown	Unknown	Higher
Wenatchee Summer-Fall	Higher	Higher	Higher	Higher	Unknown	Unknown	Higher
Methow Summer-Fall	Higher	Higher	Higher	Higher	Unknown	Unknown	Unknown
Okanogan Summer-Fall	Higher	Higher	Higher	Higher	Unknown	Unknown	Higher
Upper Columbia Mainstem Summer-Fall	Unknown	Unknown	Higher	Higher	Unknown	Unknown	Unknown
Hanford Reach Fall	Higher	Higher	Higher	Higher	Unknown	Unknown	Higher
Snake River Fall	Lower	Conflicting	Higher	Lower	Lower	Unknown	Lower
Swift Creek/Tete Jaune (Fraser)	Lower	Lower	Unknown	Lower	Unknown	Unknown	Lower
Stuart River (Fraser)	Lower	Conflicting	Unknown	Lower	Unknown	Unknown	Lower
Nicola River (Fraser)	Lower	Lower	Unknown	Lower	Unknown	Unknown	Lower
Wenatchee Spring	Higher	Lower	Lower	Conflicting	Unknown	Unknown	Lower
Methow composite	Higher	Lower	Lower	Conflicting	Unknown	Unknown	Unknown
Carson	Higher	Lower	Lower	Lower	Unknown	Unknown	Higher
Yakima Spring	Lower	Conflicting	Conflicting	Lower	Lower	Unknown	Unknown
South Fork Salmon Spring-Summer	Lower	Lower	Lower	Lower	Lower	Unknown	Lower

- Example visual output of model results for chinook salmon at the Norns Creek confluence



# Research results to date

- Transboundary Reach is predicted to contain suitable habitat for at least hundreds-thousands of Chinook spawning pairs.
- Suitable donor stocks likely available for TB Reach, Summer-Fall life history.
- 3 reports available on <http://ccrifc.org/salmon-restoration/>





# Possible next steps

- These studies are not comprehensive to addressing whether reintroducing fish to the Transboundary Reach is feasible, but they both provide encouraging support of feasibility and approach.
- With proper risk assessment and careful monitoring, experimental releases of fish will be far more informative relative to cost.

# Encouraging recent developments

## Collaborative Salmon Dialogue

- The Columbia Basin Trust hosted ‘Collaborative Salmon Dialogue’ workshops in Vancouver in September and early April.
- Ktunaxa, Okanagan and Secwepemc Nations participated, along with relevant federal and provincial government agencies and dam owners/operators.

# Collaborative Salmon Dialogue II

Encouraging and positive outcomes from the April workshop: There is agreement to continue to explore options for joint mechanisms for collaboration and coordination for salmon reintroduction at both the policy and technical levels.



# More encouraging recent developments

## Environmental Damages Fund (Environment and Climate Change Canada)

- Major, multi-year funding opportunity
- Strong interest in proposals from indigenous nations and dealing with salmon restoration
- Proposal for expanded work on chinook habitat (more detailed and broader range) AND development of a comprehensive Adaptive Management Framework

# More encouraging recent developments

## Columbia River Treaty

Encouraging discussions with Canada and BC

Very encouraged that both governments seem prepared to discuss salmon restoration in the context of the CRT renewal process

Thank you!

Lake Roosevelt Forum

Andy Dunau

US tribes and entities

Columbia Basin Trust

Governments of Canada and BC

Bill Green

Ktunaxa Nation Council