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May 1, 2018

### MEMORANDUM

**TO: Council Members**

**FROM: John Harrison, Information Officer**

**SUBJECT: Report on Columbia River Treaty and salmon reintroduction presentations at the Lake Roosevelt Forum conference, Spokane, April 24-25, 2017**

The public process to consider the future of the Columbia River Treaty between the United States and Canada got under way in Spokane last week at the Lake Roosevelt Forum conference with a speech by a U.S. State Department official, a panel discussion among treaty interests, and a town hall meeting presided over by the U.S. negotiating team. The team includes the chief U.S. State Department negotiator, Jill Smail, and representatives of the Bonneville Power Administration, Bureau of Reclamation, Army Corps of Engineers, and NOAA Fisheries.

Francisco “Paco” Palmieri, acting assistant secretary for the Bureau of Western Hemisphere Affairs in the State Department, whose responsibilities include the 1964 treaty, promised to “engage with the region” as negotiations get under way, likely this summer, and conduct periodic public meetings during the process. He spoke as part of the panel discussion on the future of the treaty.

“The brilliance of the treaty is to determine how we share resources for mutual benefits,” he said. “The treaty is seen around the world as a model of transboundary cooperation, and we hope it will continue as a model for many, many years to come.”

At the evening town hall meeting, attended by about 125 people, Smail said the U.S. negotiating team would base its discussions with Canada on the December 2013 [Regional Recommendation](#) developed in a public process overseen by the United States Entity for treaty implementation, which consists of the Bonneville Power Administration and the Corps of Engineers. The recommendation calls for continuing the primary purposes of the treaty, hydropower and flood control, but also recognizes “... there is an opportunity for inclusion of certain additional ecosystem operations to

expand, enhance, and complement ... existing ecosystem investments as part of the post-2024 Treaty.”

Ecosystem function and the makeup of the United States’ negotiating team dominated public comments at the Town Hall meeting. Many speakers including representatives of tribes and environmental groups supported the inclusion of ecosystem considerations in a “modernized treaty,” as Smail called it, and these same groups decried the lack of tribal representation on the negotiating team. Smail said the team would represent the United States and intended to pursue the regional recommendation as developed by the U.S. Entity and regional participants in 2013. Tribal governments were included in the development of the regional recommendation but were not consulted about the original Treaty in the early 1960s. However, Smail said she would consult with the tribes during the upcoming negotiations.

The conference also included a session entitled “Sneak Peek of Phase 1 Report: Upper Columbia Fish Passage and Reintroduction,” which featured reports on studies being conducted in the United States and British Columbia regarding reintroducing anadromous fish above Chief Joseph and Grand Coulee dams, where they have been blocked since the late 1930s. In the United States some of the work is being done by the Colville Confederated Tribes and the Spokane Tribe of Indians, both of whose reservations border on Lake Roosevelt. The work is in response to a provision in the Council’s 2014 Columbia River Basin Fish and Wildlife Program that calls for a three-phase investigation of reintroducing salmon and steelhead above the two dams. The work so far is in response to Phase 1, which the tribes expect to complete this summer. The Council awarded a contract to the Spokane Tribe for the Phase 1 analysis in March 2016. The Council has not voted on whether to support reintroduction. The three-phased investigation, with each phase increasing in focus and detail, is intended to inform that decision in the future.

Modeling for the Phase 1 report suggests the habitat could support thousands, even millions, of salmon. Casey Baldwin of the Colville Tribes and Conor Giorgi of the Spokane Tribe reported on work the tribes have done investigating the feasibility of habitat to support anadromous fish if they were reintroduced above Chief Joseph and Grand Coulee, and Bill Green of the Ktunaxa Nation Council of Cranbrook reported on similar efforts in British Columbia. The U.S. tribes and Canadian First Nations are considering test reintroductions of salmon or steelhead as part of their investigations.

Baldwin said 40 stocks had been identified and ranked for their reintroduction feasibility based on criteria such as the least impact on downstream stocks and resident fish, disease history of the species, and compatibility with the upper Columbia environment. The stocks included seven sockeye, 10 summer/fall Chinook, 10 spring Chinook, seven steelhead, seven sockeye, and six coho populations. While some of these populations are ESA-listed, he said the tribes are committed to reintroduction with fish that are not listed.

Giorgi said research using the Ecosystem Diagnosis and Treatment model and publicly available Geographic Information Systems (GIS) data has identified 1,161 miles of potential tributary habitat for steelhead and 355 miles for spring Chinook. In terms of

adult fish, this equates to a maximum of 4,168 steelhead, 13,339 spring and summer Chinook, and between 34,066 and more than 1 million sockeye. The sockeye assessment was for the San Poil River system. Lake Rufus Woods, the reservoir behind Chief Joseph Dam, has the habitat capacity to support around 600 to 20,000 summer/fall Chinook and Lake Roosevelt behind Grand Coulee could support between 12 million and 48.5 million sockeye, he said.

Meanwhile, Green said the Ktunaxa Nation Council has been working with the U.S. tribes on the habitat feasibility assessment and has undertaken its own similar studies north of the border. He said the research results to date indicate the transboundary reach of the Columbia is predicted to have suitable habitat for at least hundreds, and perhaps thousands, of Chinook spawning pairs. He said suitable donor stocks are likely available for this reach, most likely a species of summer/fall Chinook. He said the studies to date are not comprehensive regarding whether reintroduction is feasible, “but they provide encouraging support of the feasibility and the approach.” The work to date also does not address the potential cost of reintroduction, but that experimental releases of fish, with risk assessment and careful monitoring, “will be far more informative” regarding cost.

He said there has been other recent encouraging news. For example, the Columbia Basin Trust, the Council’s closest counterpart agency in British Columbia, hosted a “Collaborative Salmon Dialogue” in Vancouver in April and plans a follow-up. The three First Nations in the Canadian Columbia Basin attended the first session as did federal and provincial fish agencies and dam operators. Environment and Climate Change Canada, the federal environmental agency, created an environmental damages fund that Green said provides a major, multiyear funding opportunity for reintroduction work and that the agency “has a strong interest in proposals from indigenous nations and dealing with salmon restoration.” Finally, he said he is very encouraged that both the federal and provincial governments “seem prepared to discuss salmon restoration in the context of the Columbia River Treaty renewal process.”

Steve Smith, a biologist and consultant to the Upper Columbia United Tribes on salmon reintroduction, said the Phase 1 report will serve two broad purposes – to inform the Council about habitat feasibility and potential donor stocks and also inform the upper Columbia tribes about how to pursue salmon releases for cultural purposes. He said he was confident that momentum is building for reintroduction and that in the future there would be salmon above Chief Joseph and Grand Coulee dams. He added: “The current beneficiaries of the dams will continue to obtain their benefits largely or totally unaffected by salmon.”

#### **Links to presentations:**

- John Sirois, Colville Confederated Tribes, overview the Upper Columbia United Tribes and the history of anadromous fish above Chief Joseph and Grand Coulee: <https://bit.ly/2rbgklc>
- Casey Baldwin, Colville Confederated Tribes, donor stock and risk assessment: <https://bit.ly/2JBdKMT>
- Conor Giorgi and Casey Baldwin, Phase 1 habitat assessments: <https://bit.ly/2w06t7t>

- Bill Green, Ktunaxa Nation Council, efforts to restore anadromous salmon to the Canadian Columbia River Basin: <https://bit.ly/2HG8C9z>
- Steve Smith, consultant to the Upper Columbia United Tribes, anadromous fish reintroduction thoughts on the future: <https://bit.ly/2r9Vh2o>

# Lake Roosevelt Northern Pike Research and Suppression



Confederated Tribes of the Colville Reservation: Holly McLellan and Shay Wolvert  
Spokane Tribe of Indians: Elliott Kittel  
Washington Department of Fish and Wildlife: Bill Baker and Charles Lee

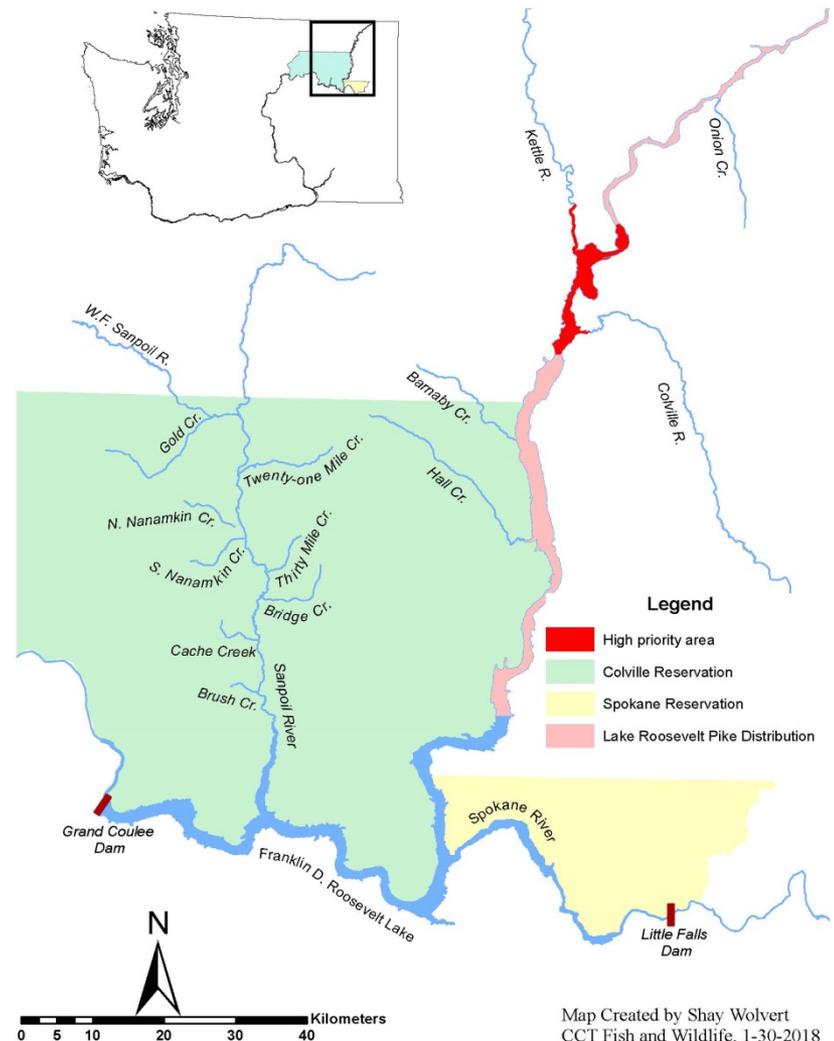
*Presented to The Northwest Power Council on May 8<sup>th</sup>, 2018*

# Northern Pike *Esox lucius*

- Since 2011, NP have been expanding distribution
- Managers are concerned
  - Predation: Redband Trout, White Sturgeon, Burbot, Kokanee, hatchery kokanee and rainbow trout
  - Expansion into Salmon ESA areas
  - Expansion into Banks Lake (Columbia Basin)



Multiple years classes



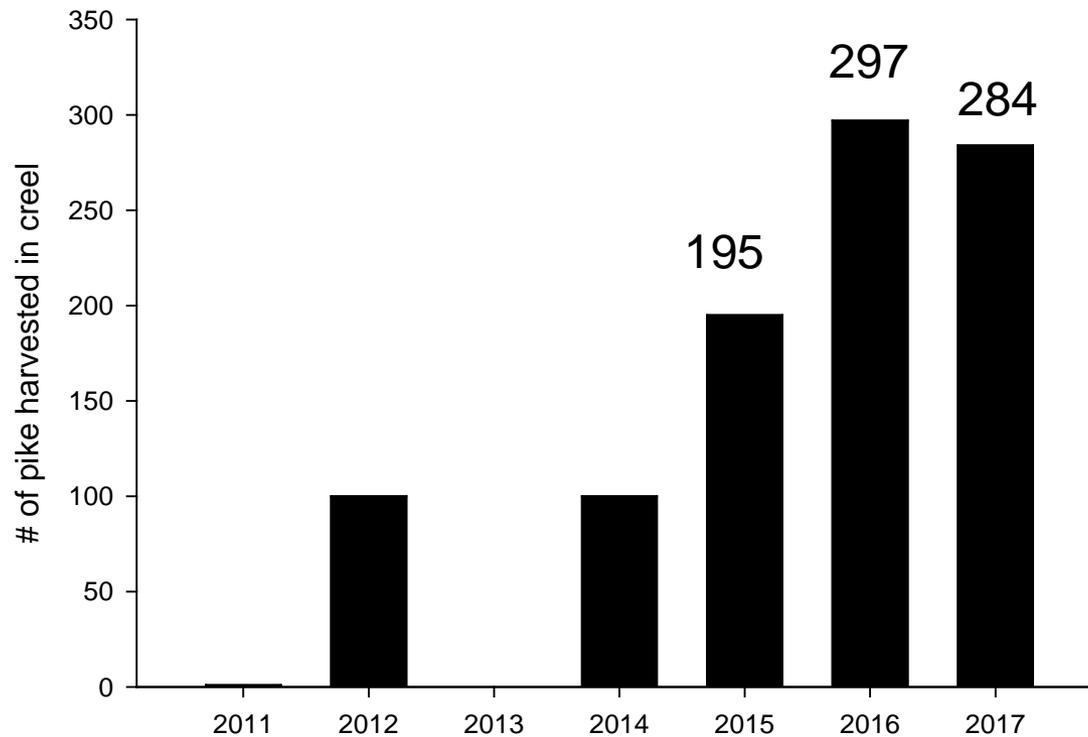
# Why are Pike so bad?

- This fish had a 19 inch Burbot and a 16 inch Walleye in it's stomach
- Walleye and Smallmouth Bass cannot eat fish that large
- Numerous published studies
  - Prey heavily on salmonids
  - Decimate native fish populations
- Suppression works
  - Kalispel Tribe in Pend Oreille River
  - Alaska Dept. of Fish and Game, Alexander Creek. Restored Chinook Salmon runs



21.6 pound female Pike

# Harvest Trends in the Creel



\*Data estimates 2011-2014 preliminary



Harvest still only documented in upper section

# Monthly Northern Pike Work Plan

Surveys	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Research (17% Budget)</b>												
Monitoring Program - 2015											FWIN	
Microchemistry - 2016												
eDNA - 2017												
Harvest via Creel - ongoing												
<b>Suppression (82%)</b>												
Gillnetting -2016												
Boat Electrofishing- 2016												
Reward Program -2017												
Seining/Fyke Surveys - 2017												
<b>Public Outreach – (&lt;1%) 2016</b>												

Lake Roosevelt Suppression Plan finalized and submitted with the proposal (2018)

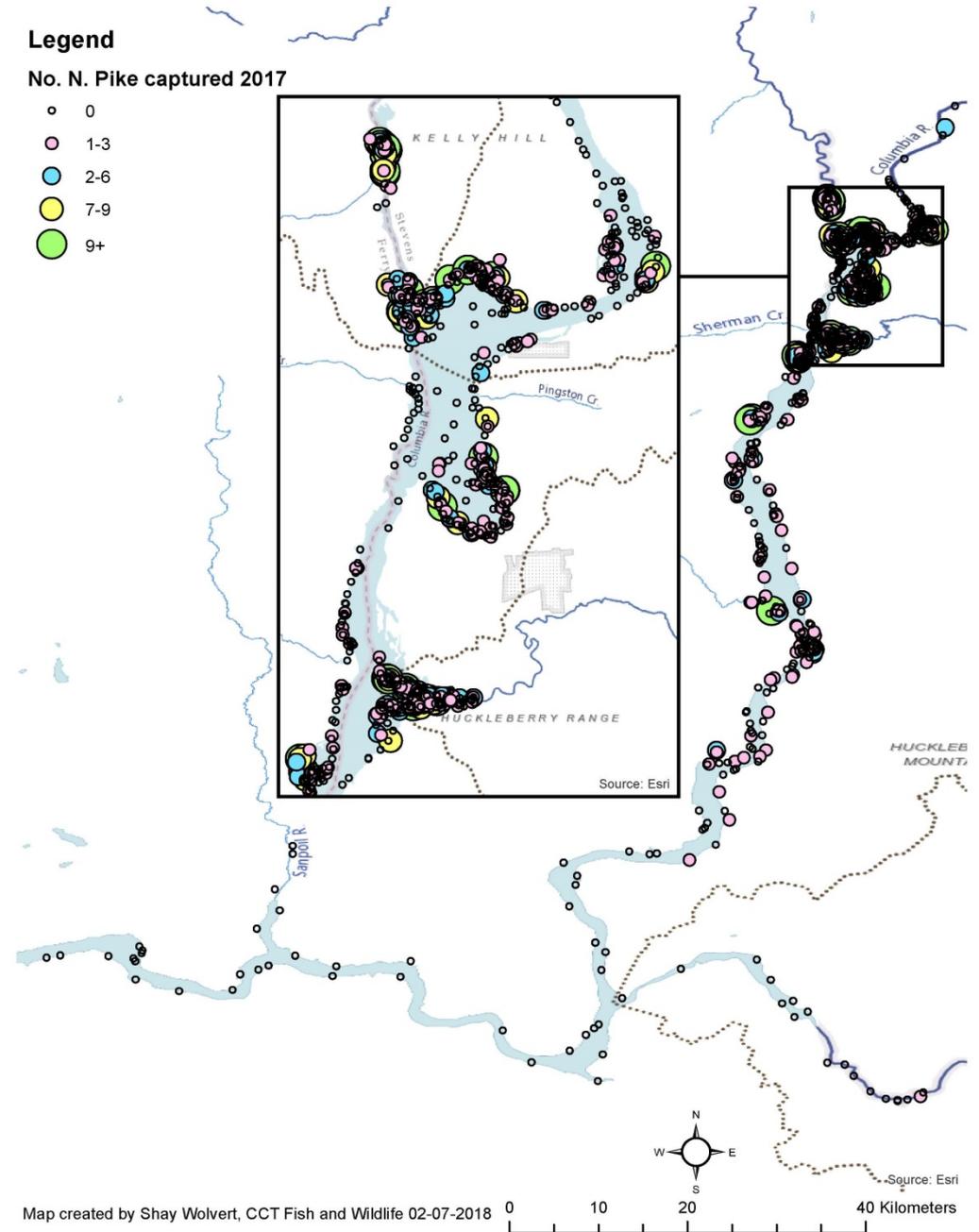
# 2017 Program

- Removed 4,771 NP
  - Fyke Netting = 100
  - Beach Seine = 102
  - Electrofishing = 633
  - Reward Program = 1,095
  - Gill Netting = 2,841

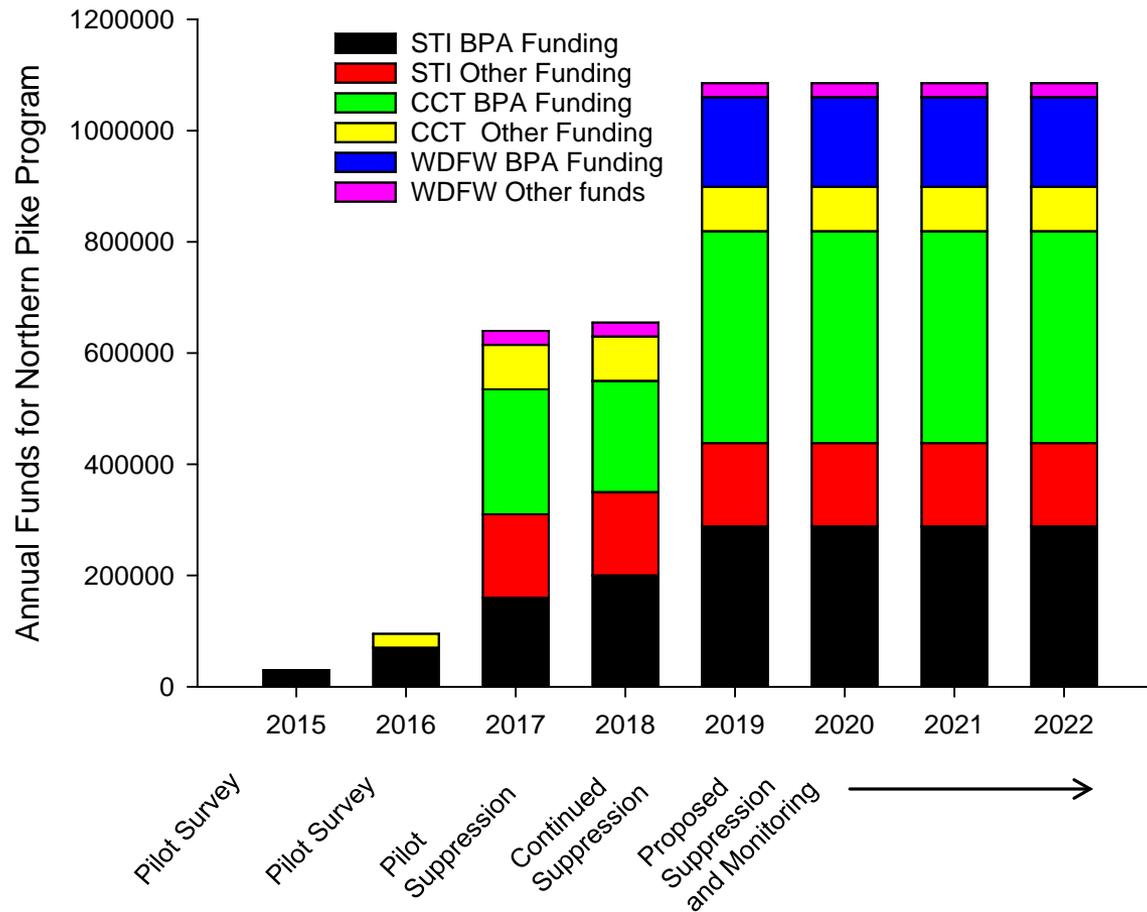


## Legend

No. N. Pike captured 2017



# Northern Pike Suppression and Monitoring Program



# Future plans and needs

- Implement full suppression program in 2018
- Secure Funding for 2018 – 2022
  - Hire necessary staff to implement project
  - Address ISRP concerns/suggestions
  - Use adaptive management to address uncertainties
- Participate in Regional Northern Pike forums



## STOP THE SPREAD OF INVASIVE NORTHERN PIKE



Northern Pike (*Esox lucius*) are a Prohibited Species in Washington State. Anglers are encouraged to kill **ALL** Northern Pike caught. Harvested Northern Pike must be dead before anglers leave the water where they are caught.

**No minimum size or possession limit.**

Northern Pike are now present in Lake Roosevelt. This fish species is known to have negative impacts on native fish populations and popular sport fisheries. In addition, further spread of Northern Pike into downstream portions of the Columbia River poses a severe threat to Salmon and Steelhead recovery efforts.

**It is illegal to transport or release live fish without a WDFW permit.**

Penalty includes up to \$5,000 in Fines and A Year in Prison (RCW 77.15.250) and a person found guilty can also be ordered to pay all costs of capturing, controlling or killing those fish or their progeny (in excess of \$100,000).

If you see someone transporting or releasing live fish, please call the Washington State Patrol. They will contact the nearest WDFW officer.

Spokane County WSP Dispatch: 509-456-4101  
Stevens County WSP Dispatch: 509-684-7431



# Questions and Comments

Many thanks to our funding agencies and dedicated staff:

- Colville Tribe, Spokane Tribe, and WDFW staff
- National Park Service and multiple funding agencies

