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December 5, 2017

### MEMORANDUM

**TO: Fish and Wildlife Committee members**

**FROM: Kendall Farley, Stacy Horton**

**SUBJECT: Northern Pike discussion and coordination meeting**

**BACKGROUND:** The Washington state staff will update the Committee on the Northern Pike discussion and coordination meeting with representatives from fish and wildlife agencies, tribes and partners throughout the region.

### Northern Pike discussion and coordination meeting

#### Agenda

Date: December 11, 2017

Location: Northwest Power and Conservation Council Central Office  
851 SW 6th Ave #1100  
Portland, OR 97204

Time: 1:00 PM - 3:00 PM Pacific Standard Time

For those not able to join in person, a conference line and go-to-meeting link are provided. Please join my meeting from your computer, tablet or smartphone.

<https://global.gotomeeting.com/join/882932741>

Join the conference call:

800-356-8278, code 186685

Meeting notice: <https://www.nwcouncil.org/fw/northern-pike-dec-2017/>

Agenda:

- 1:00pm Welcome, Council Member Norman
- 1:05pm Introductions
- 1:15pm Adjustments and suggestions to the agenda
- 1:20pm Update on 2017 Lake FDR suppression numbers, Elliott Kittel, STOI
- 1:30pm Northern Pike 2018-2022 removal plan and budget status update  
Chuck Lee, WDFW; Holly McLellan, Colville Tribe; Elliott Kittel, STOI
- 2:00pm Open discussion, updates from the region
- 2:50pm Final questions, comments, wrap up meeting.
- 3:00pm Adjourn



## 2017 Lake Roosevelt Northern Pike Suppression Update

for the Northwest Power Council Committee Meeting

December 11<sup>th</sup>, 2017

Invasive Northern Pike *Esox lucius* are establishing a self-sustaining population in the Upper Columbia River and are negatively impacting culturally significant native fish species as well as the BPA hatchery mitigation fishery (Photo 1, 2). Allowing Northern Pike to proliferate within Lake Roosevelt will directly threaten downstream anadromous conservation and recovery efforts, as well as ESA listed salmon stocks.

Prior to 2015, Northern Pike were rarely observed in standardized fishery surveys in Lake Roosevelt. Increased observations of Northern Pike in 2015 led the co-managers to investigate Northern Pike abundance and distribution. In 2016, preliminary suppression and monitoring resulted in the removal of 1,225 Northern Pike. The first juvenile Northern Pike were documented in summer, 2016.

In 2017, a tentative Northern Pike Suppression Plan was developed and implemented, blending multiple funding sources (Table 1). The Lake Roosevelt co-managers greatly ramped up suppression efforts, continued a three year evaluation of spring abundance monitoring, and conducted an experimental reservoir-wide fall monitoring survey.

Table 1. 2017 Suppression activity timeline.

February	STI/WDFW conduct Northern Pike relative abundance monitoring in Kettle River study area of Lake Roosevelt.
March-July	STI/CCT implement adult suppression. Exploratory surveys document Northern Pike increased downstream distribution.
August-October	STI/CCT conduct juvenile and adult suppression. Temporary staffers are hired to support field work.
November	STI/CCT/WDFW conduct reservoir-wide FWIN and experimental fall Northern Pike monitoring. The first Northern Pike is captured in the Spokane Arm.

In 2017, 4,927 Northern Pike were removed from Lake Roosevelt by the co-managers suppression and monitoring efforts. The year's efforts allowed the co-managers to refine suppression timing and techniques. The utility of various gill net designs and other sampling gear were evaluated and will advise future suppression efforts. Juvenile Northern Pike were again observed in high numbers in 2017.

Table 2. 2017 Summary of Northern Pike Suppression

Suppression Method	Effort	Northern Pike Removed
Daytime Gill Net	319 sets	132
Overnight Gill Net	744 sets	2,684
Beach Seine	3 efforts	102
Fyke Net	24 sets	100
Daytime Boat Electrofishing	~14 hrs	633
Juvenile Sturgeon Survey Bycatch	320 sets	92
FWIN/Fall Northern Pike Monitoring	300 sets	89
CCT Angler Reward Program	-	1,095
		4,927

Draft data, subject to change

The 2017 suppression and monitoring activities were highly successful. Distribution surveys documented that Northern Pike had expanded southward since 2016, towards the Gifford and Hunter's areas of Lake Roosevelt. These findings were corroborated during the fall Northern Pike monitoring survey. The majority of Northern Pike were removed using gill nets (60%) and the angler reward program (23%) (Table 2). To date, Northern Pike suppression efforts have been well received by the public. The support for the program is likely the result of targeted public outreach and the public's involvement in the angler reward program.

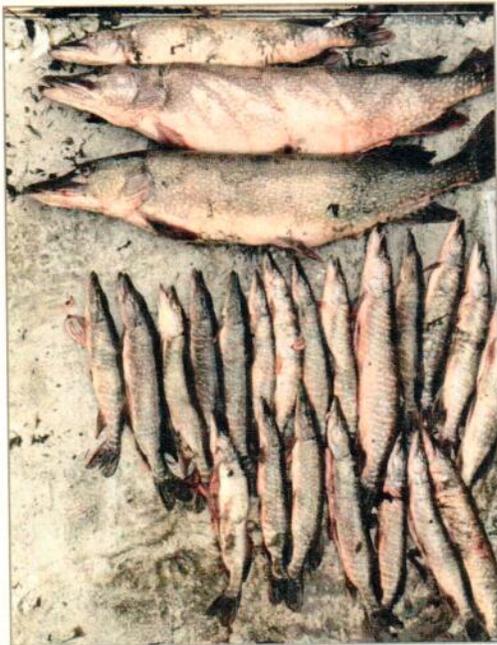


Photo 1. Northern Pike captured from gill nets in spring, 2017



Photo 2. Hatchery salmonids were observed in the stomachs of Northern Pike in the weeks following release into Lake Roosevelt.



## Lake Roosevelt Co-Manager Northern Pike Proposal Update Handout

for the Northwest Power Council Committee Meeting

December 11<sup>th</sup>, 2017



The invasive Northern Pike *Esox lucius* has established a self-sustaining population in the upper Columbia River and are negatively impacting culturally significant native fish species as well as BPA funded hatchery mitigation fisheries.

The co-managers of Lake Roosevelt established the Lake Roosevelt Northern Pike Technical Team (NPTT) in order to collaborate and develop a suppression plan to eradicate Northern Pike from the Lake Roosevelt watershed.

In 2017, the NPTT developed and implemented the first full year of the Northern Pike Suppression Plan in Lake Roosevelt by blending multiple funding sources (BPA, BIA, Tribal and PUD). The co-managers piecemealed the **\$725,474** program using Colville Tribe funds (\$315,000), Spokane Tribe funds (\$395,474) and WDFW funds (\$15,000) funds.

The Northern Pike suppression plan includes multiple gear types and approaches, which are employed in specific areas and times of year to maximize Northern Pike catch. The majority of the budget is used for suppression (82%). Lesser amounts have been dedicated to filling data gaps to improve the suppression effort (17%) and public outreach (<1%). See Table 1 for the Annual Work Plan.

At the request of the Power Council and BPA, the co-managers worked together to design a five year suppression plan that could be funded without BOG funds. It was requested that the proposal incorporate the NPTT's full Northern Pike Suppression Plan. The work plan as designed in the proposal, which included an increase in suppression effort, has an annual cost of \$830,000 (CCT: 381,000, STI 288,000, WDFW 161,000). The proposal was submitted to the Northwest Power and Conservation Council on November 3<sup>rd</sup>, 2017.

The proposal was forwarded by the NPCC to the Independent Scientific Review Panel (ISRP) on December 6<sup>th</sup>, 2017.

