Species with Potential Economic Benefits, Known Environmental (and Economic) Impacts:

Northern Pike (Esox lucius)



Northern Pike (Esox lucius)

- Voracious ambush predator
 - Can consume prey (fish, ducks, bats, etc.) up to 60% of their body length
- State record in Montana (via FWP)
 - ~40 lbs and ~4 feet long!
- Non-native to Columbia River Basin
 - Introduced elsewhere legally and illegally
- Non-native in Montana outside of Saskatchewan River drainage



Image Credit: http://fieldguide.mt.gov

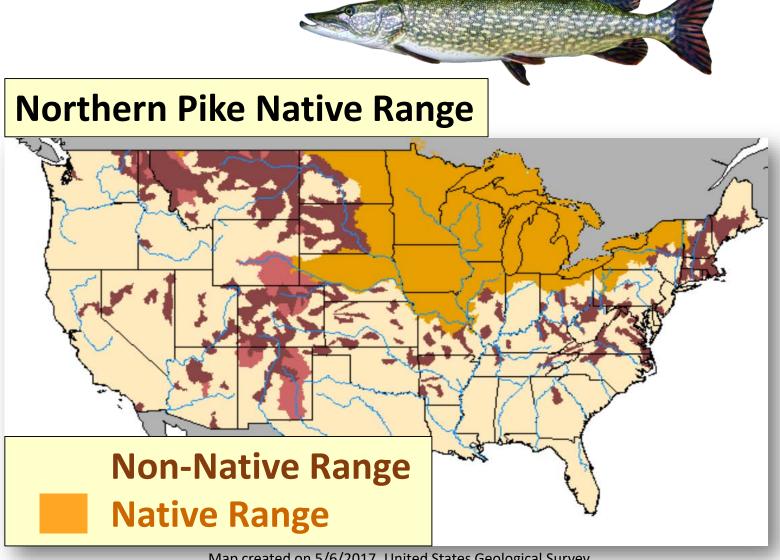
Non-native

Native

All Ranges

Northern Pike (Esox lucius)

- Montana
 - Native and Introduced Game Fish
- Idaho
 - Introduced Game Fish
- British Columbia
 - Native Game Fish and Invasive **Species**
- Washington
 - Invasive Species
- Oregon
 - Invasive Species
- Alaska
 - Native Game Fish and Invasive **Species**



Map created on 5/6/2017, United States Geological Survey



Image Credit: State of Washington Governor's Salmon Recovery Office

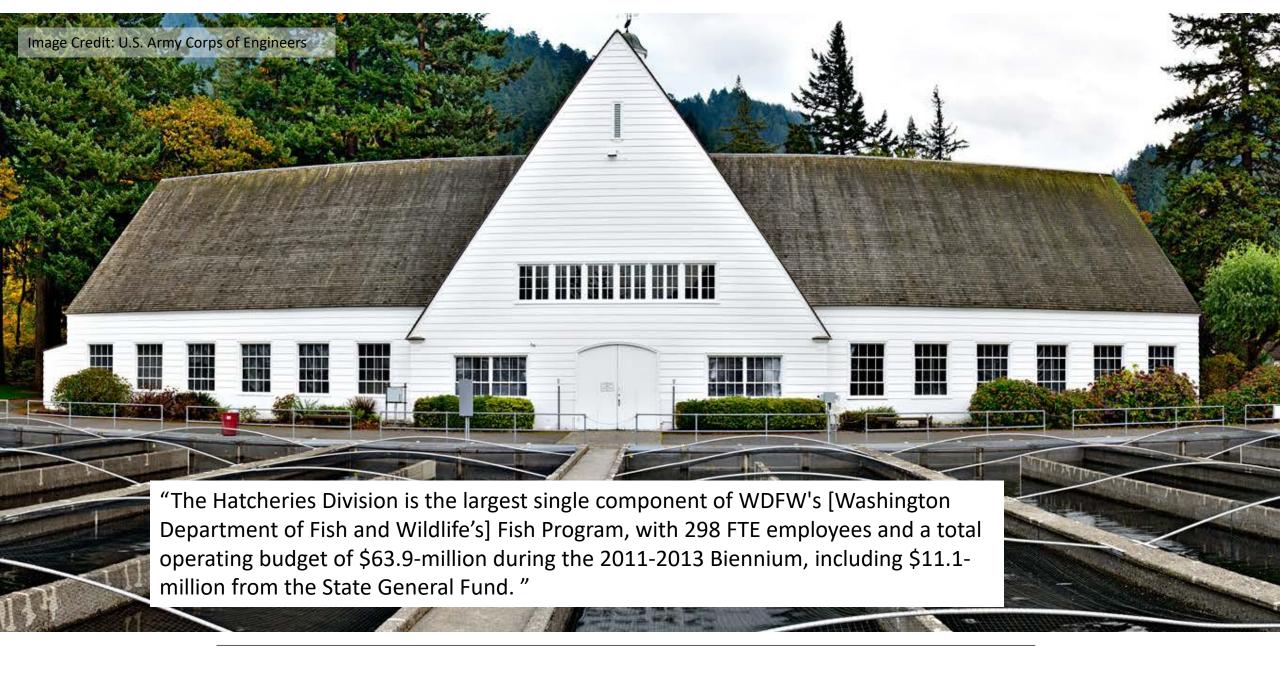


Image Credit: State of Washington Governor's Salmon Recovery Office



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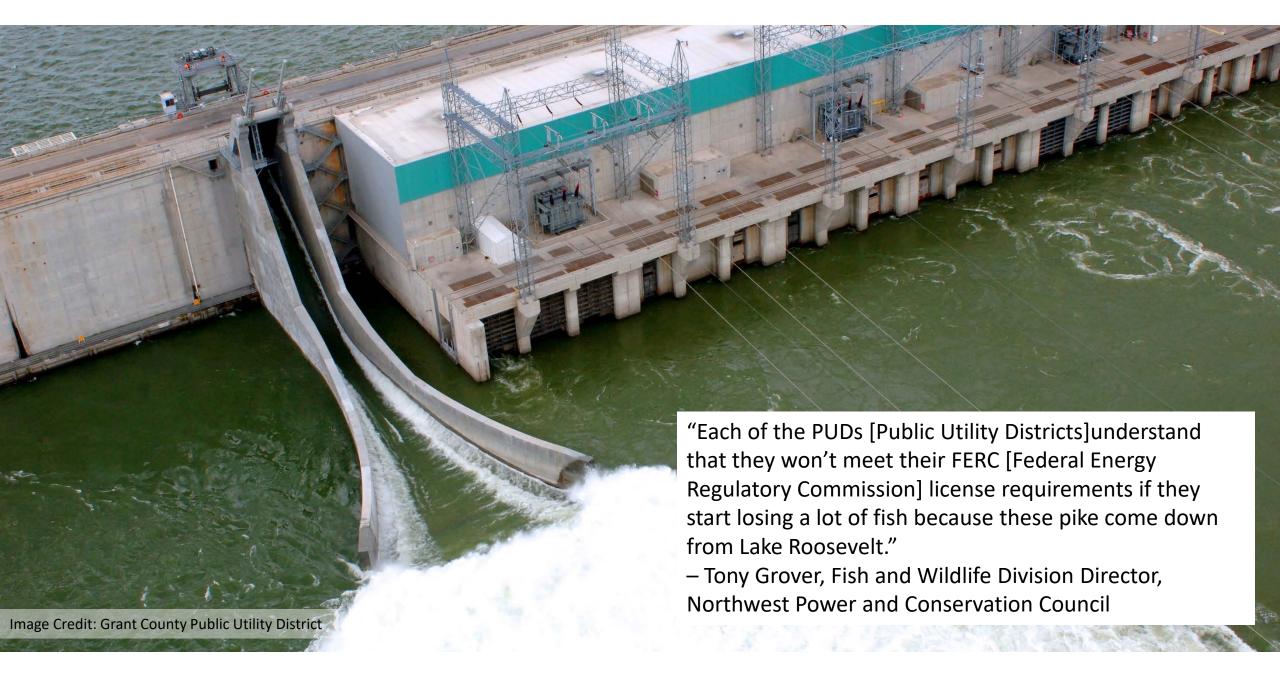
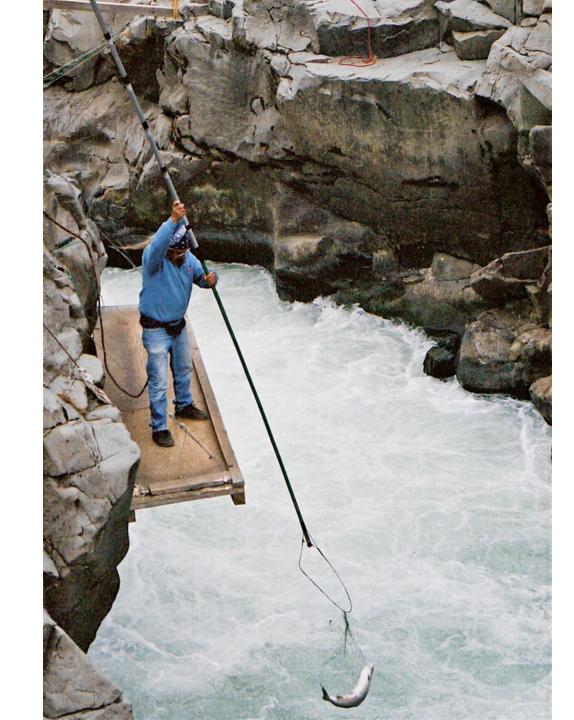
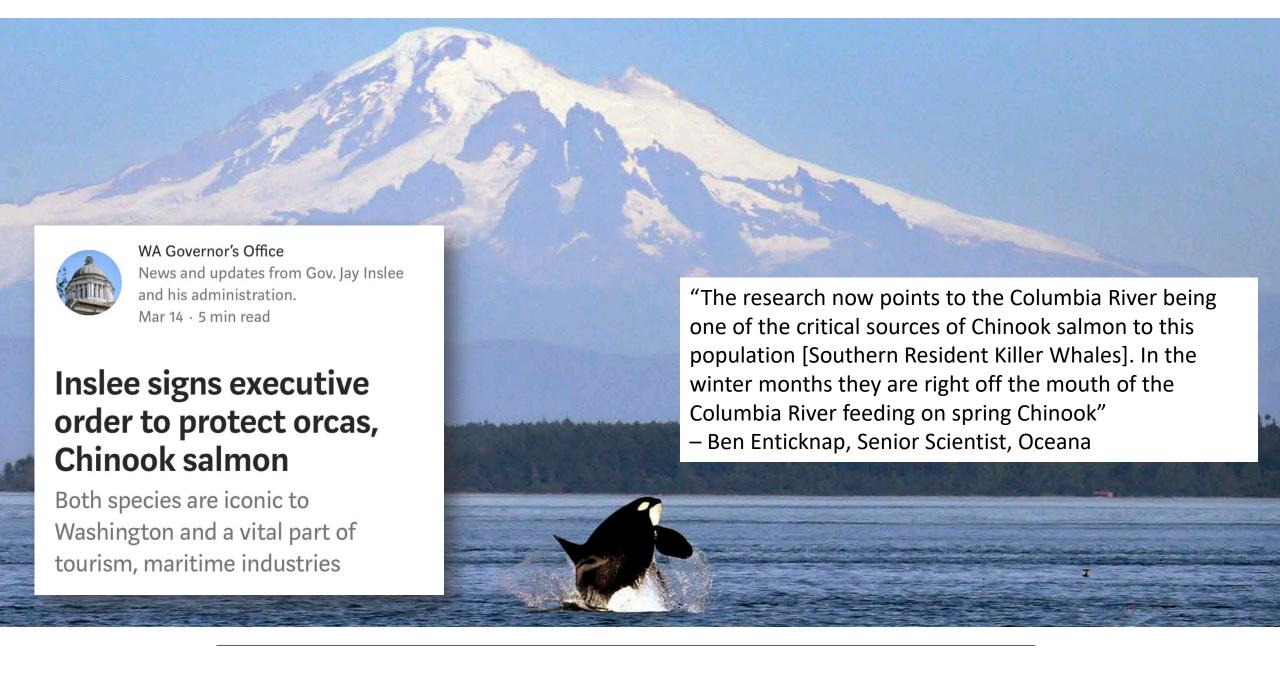


Image Credit: Columbia River Intertribal Fisheries Commission



2018 Montana Invasive Species Summit | Species with Potential Economic Benefits, Known Environmental Impacts | Northern Pike





Pacific Northwest Northern Pike Forum and Coordination Meeting



July 14, 2018 1:00 p.m. to 4:00 p.m.

Known Risks and Potential Impacts

Fish Harvest

Tribal Harvest

- Tribal harvest valued at ~\$270K annually.
 - Kenaitze, Ninilchik, Eklutna, Knik tribal educational fisheries and Tyonek subsistence salmon fishery

Commercial Harvest

- Commercial fishing industry valued at \$1.2 billion annually.
 - Cook Inlet and Prince William Sound commercial fisheries

Recreational Harvest

- Recreational fishing industry valued at \$733 million per year.
 - Cook Inlet region recreational fisheries

Species Recovery

- More than \$4.1 million invested in salmon and trout recovery since 2011.
 - Pike suppression and eradication projects (not including permanent staff time)

Fish Hatchery Production and Returns

- More than \$2 million invested into hatchery production annually
 - Supports recreational fisheries in the Upper Cook Inlet Region

State of Alaska (region where pike are not native)

Cook Inlet Basin in Soutchentral Alaska where pike are not native and are considered an invasive species



Known Risks and Potential Impacts

Fish Harvest

Tribal Fisheries

- Commercial harvest value estimated at \$48.9 million in 2006.
- \$48.9 million does not reflect an economic value placed on personal use or ceremonial and subsistence use.

Commercial Fisheries

Commercial harvest valued at \$65.1 million in 2006.

Recreational Fisheries

• 428,480 recreational anglers spent an estimated 904.8 million in 2006 on fishing-related equipment and trip-related items.

Species Recovery

More than \$731 million invested in salmon recovery since 1991.

Fish Hatchery and Management Investment

More than \$20 million invested annually by Washington Department of Fish and Wildlife.

Hydropower Operating Permit Requirements

State of Washington

2018 Pacific NorthWest Economic Summit | Invasive Species Working Group



Northern Pike Collaboration and Regional Solutions

- What's the potential cost to the economy and environment of the Columbia River Basin?
- What actions can the lower Columbia River Basin take to prevent impacts to salmon and steelhead?
- If spread continues, how can Oregon and Washington quickly respond and what's the long-term strategy?
- How can we work together to avoid illegal fish introductions?



Northwest Sportsman

Northern Pike Netted On Lake Washington

Tribal biologists surveying Lake Washington for walleye and bass populations caught a whole 'nother, unexpected predator species last week.

A northern pike.



(MERCER ISLAND POLICE AND EMERGENCY MANAGEMENT VIA MUCKLESHOOT TRIBE VIA WDFW)

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Questions? Thanks!

Justin Bush, Executive Coordinator
Washington Invasive Species Council
State of Washington Recreation &
Conservation Office

Justin.Bush@rco.wa.gov 360-902-3088 InvasiveSpecies.wa.gov







