

Northern Pike Suppression in Coeur d'Alene Lake: Using radio-telemetry to inform strategies

Jon Firehammer, Coeur d'Alene Tribe Fisheries Program



Funding sources

BPA, Fish and Wildlife Program

BIA, Invasive Species Program

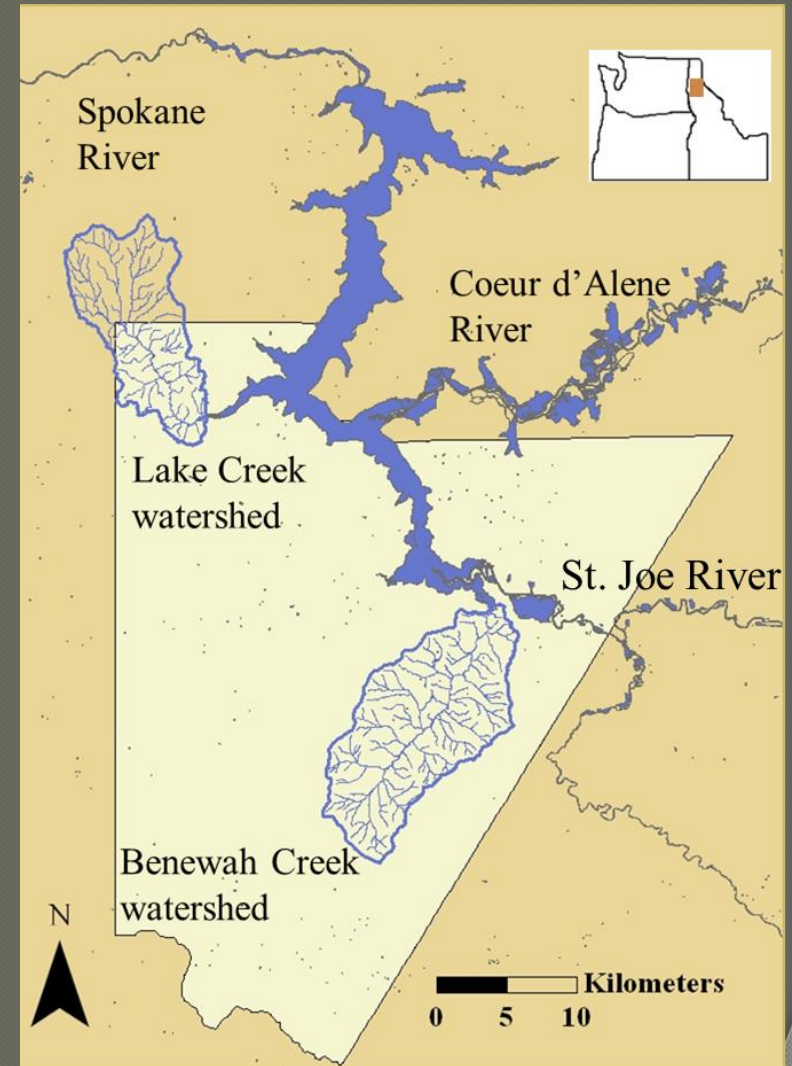
USFWS, Recovery Funding



Northern Pike

- A toothy problem in CDA Lake

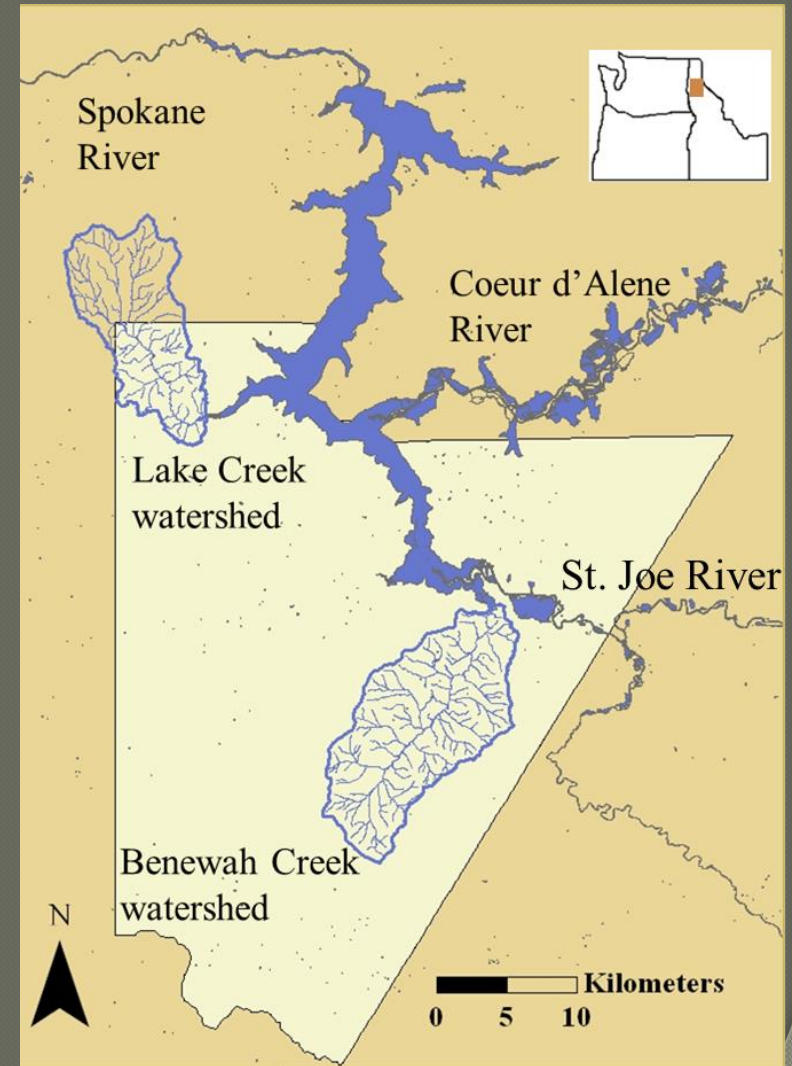
- Natural, regulated lake in northern Idaho
- Supports adfluvial native trout populations
 - Westslope cutthroat trout (WCT)
 - Bull trout (BT)
- Northern pike (NP) introduced in mid-70's
 - Research study found NP to consume ~ 50% of WCT spawners destined for local streams (Walrath et al. 2015)
 - NP listed as primary threat in BT federal recovery plan (USFWS 2015)



Northern Pike

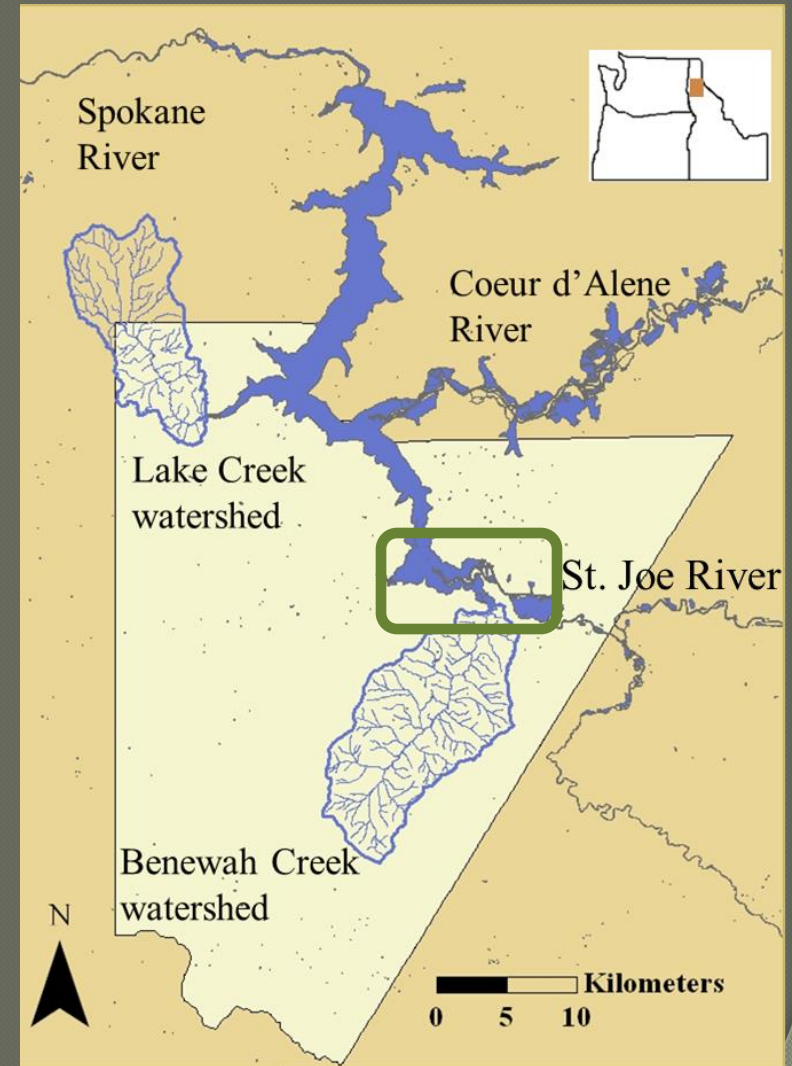
- Localized suppression a potential strategy

- Lake co-managed by Tribe and IDFG, two agencies with different perspectives on NP management
- Research study found NP predation on WCT to occur primarily in spring when both species overlap
- Tagging studies revealed minimal movement of NP among bays
 - Re-colonization of areas addressed by removal efforts may proceed slowly



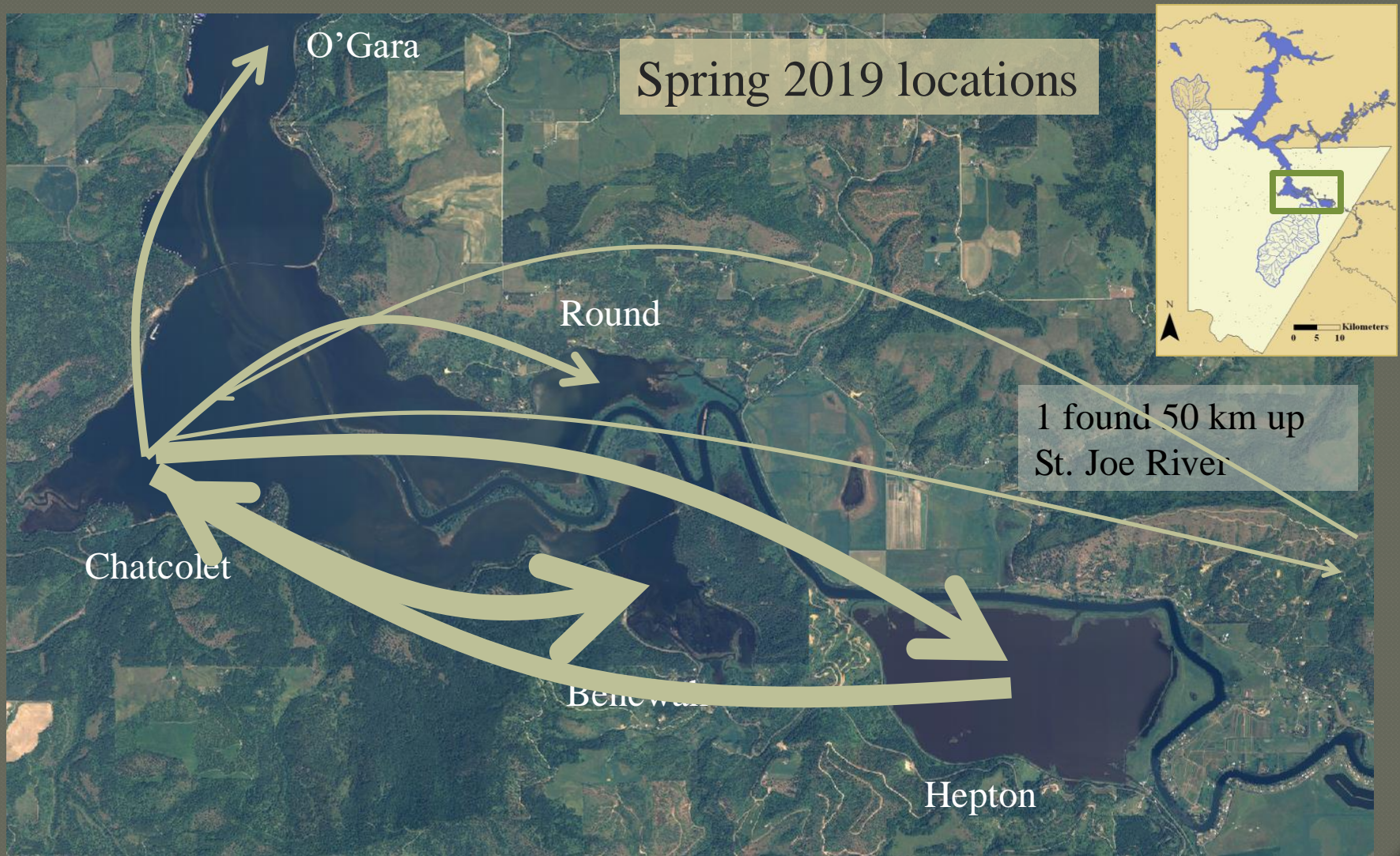
Northern Pike

- Localized suppression a potential strategy



Radio-telemetry

- Identify primary NP spawning centers



Telemetry informed seasonal movements

Tagged Northern Pike

- 2021 - 14 fish
- 2022 - 15 fish
- 495 - 965 mm, TL

Harvested fish

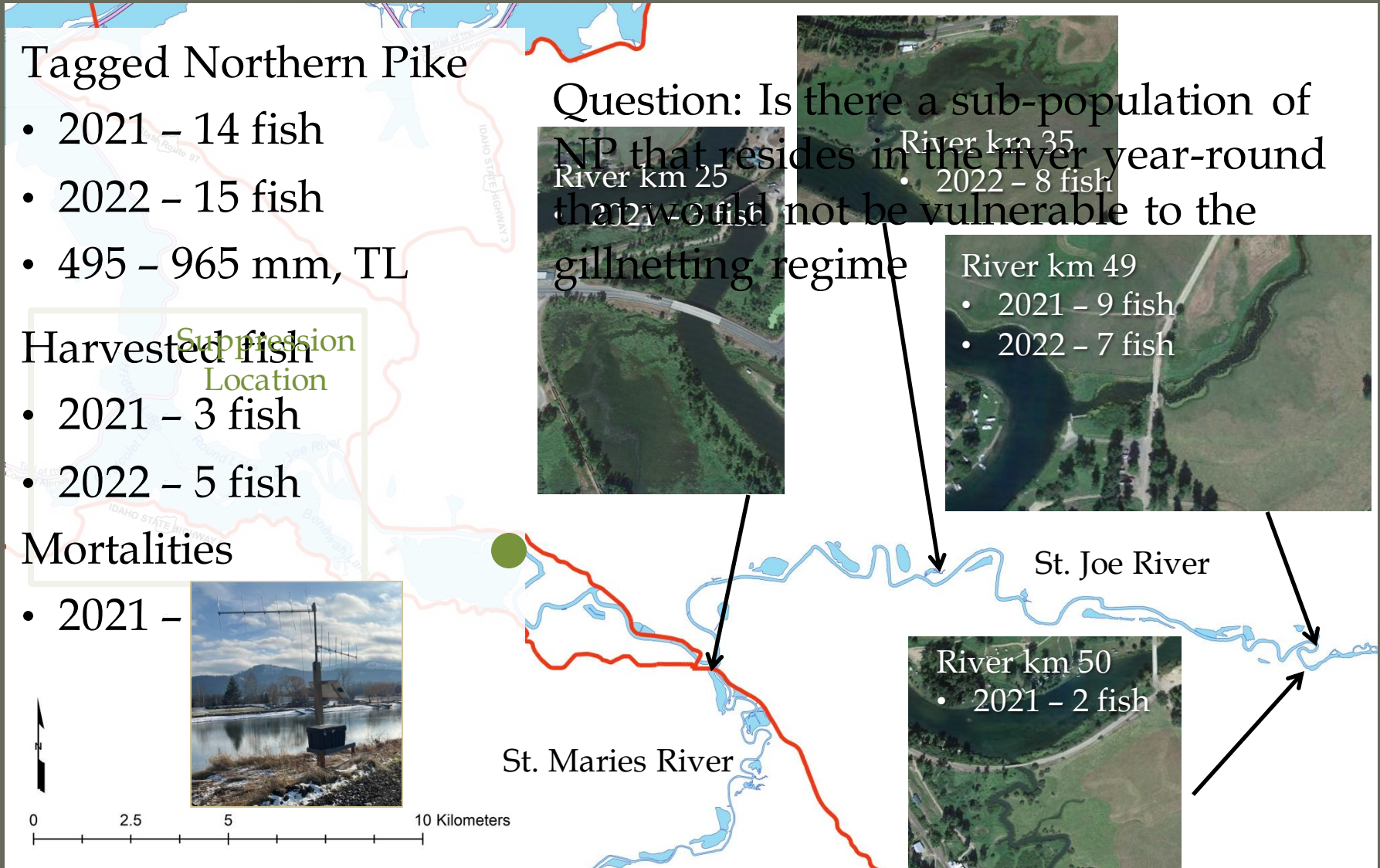
- 2021 - 3 fish
- 2022 - 5 fish

Mortalities

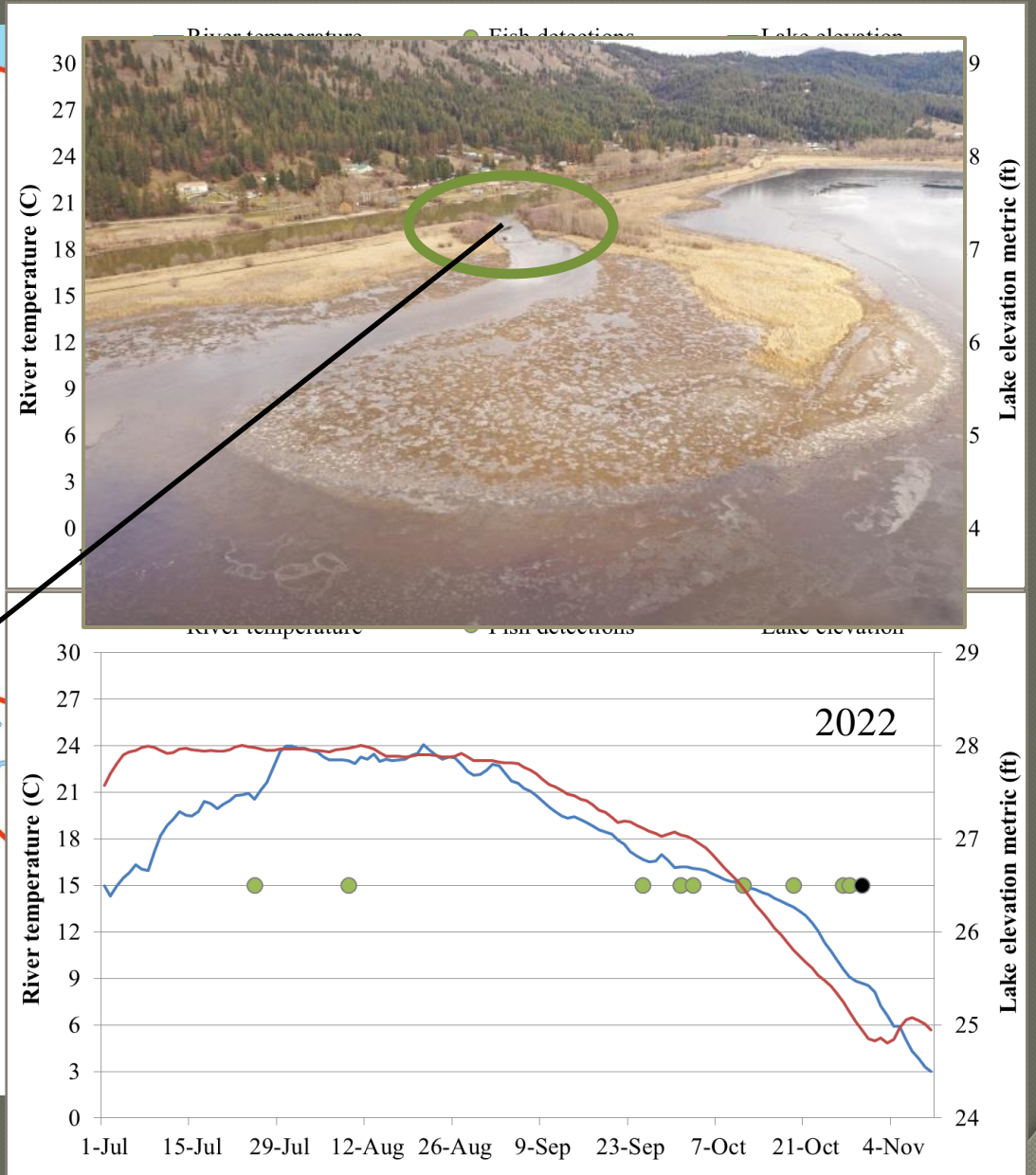
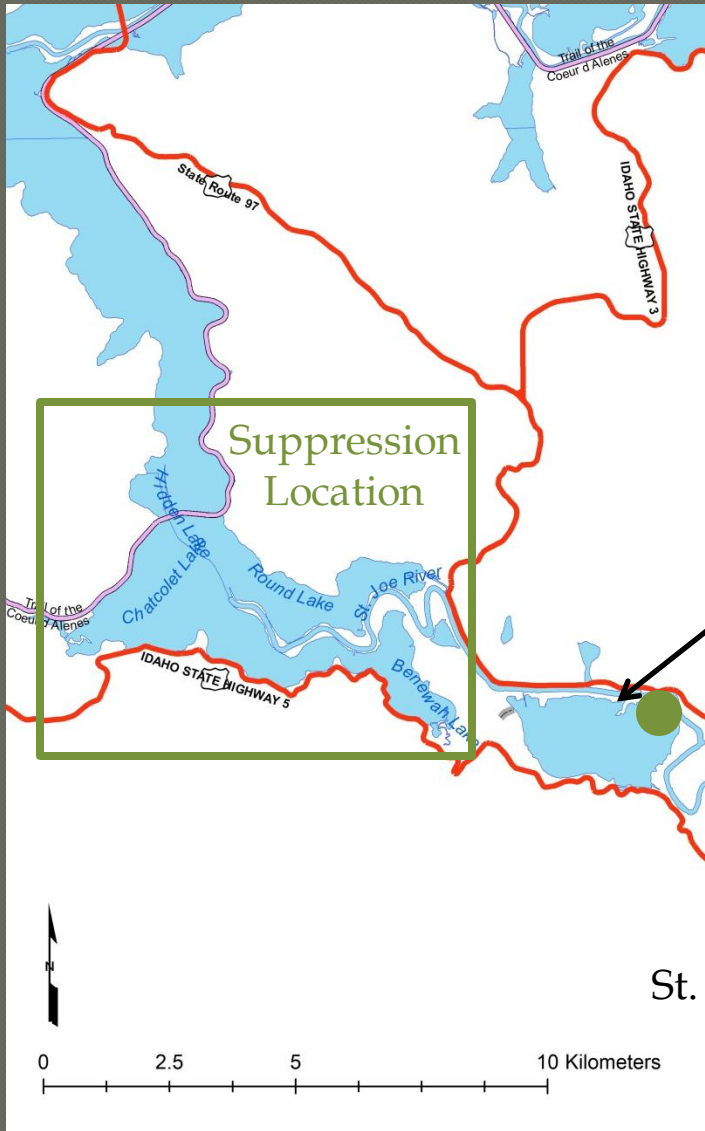
- 2021 -



Question: Is there a sub-population of NP that resides in the river year-round that would not be vulnerable to the gillnetting regime



Telemetry informed seasonal movements



Northern Pike Suppression in Coeur d'Alene Lake: Using radio-telemetry to inform strategies

Jon Firehammer, Coeur d'Alene Tribe Fisheries Program



- Telemetry identified major spawning/production centers, one of which addressed by an unconventional measure
- Though spawning habitats widespread, telemetry-informed behavior indicated vulnerability to a spatially-limited removal program

