

An aerial photograph of a vast, flat landscape with a winding river. The river flows from the top right towards the bottom left, forming several large, meandering loops. The surrounding land is a mix of brown, tan, and green, suggesting a wetland or marsh environment. In the upper left corner, a vibrant rainbow arches across the sky. The overall scene is captured in a wide-angle, high-altitude perspective.

# SALMON HABITAT AND AQUATIC INVASIVE SPECIES IN WEST COOK INLET



Jillian Jablonski  
Habitat Programs Director



The background image shows a weathered wooden boat with blue and red paint, partially submerged in a stream. The boat is surrounded by tall grasses and some green plants. In the background, there is a dark wooden barn with white window frames, situated on a grassy hillside. The sky is clear and blue.

# Presentation Outline

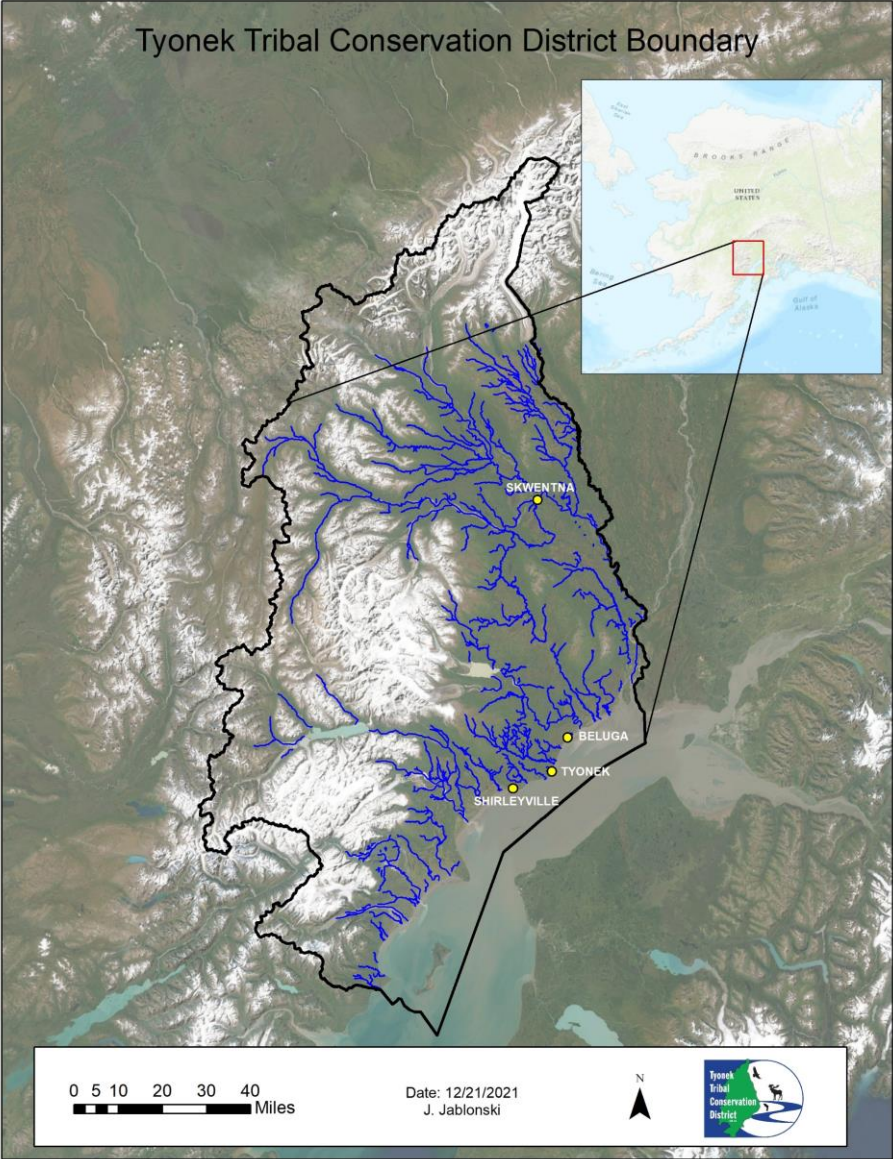


- What is TTCD?
- TTCD's Habitat Monitoring & Restoration Program
- AIS in the TTCD



# TYONEK TRIBAL CONSERVATION DISTRICT

6.6 MILLION ACRES IN  
WESTERN COOK INLET





# OUR PROGRAM AREAS

- Tyonek Grown
- Technical Assistance
- Tyonek Youth Conservation Science (TYCS)
- Habitat Monitoring and Restoration





An aerial photograph of a river winding through a vast, dense forest. The river is surrounded by a mix of evergreen and deciduous trees. In the background, there are rolling hills and mountains under a cloudy sky. The text "HABITAT MONITORING & RESTORATION" is overlaid in the center of the image.

# HABITAT MONITORING & RESTORATION





## Focal Areas



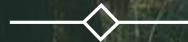
- Aquatic Invasive Species
  - Pike
  - Elodea canadensis
- Salmon Population Monitoring
  - Anadromous Waters Catalog additions
  - Juvenile salmon monitoring
  - Spawning ground surveys
- Salmon Habitat Restoration/Fish Passage
  - 47 miles re-opened since 2012
- Stream Water Temperature
- Terrestrial Invasive Plants



# Northern Pike Program

Goals:

- 1- Prevention
- 2- Early detection
- 3- Suppression to aid in salmon recovery
- 4- Eradication



# History of Pike in the Tyonek area



- ~Late 1990s? Pike invasion – Threemile and Chuitbuna lakes
- 2015-17: Pike derbies in Tyonek and Beluga
- 2017: eDNA and gillnet surveys with CIAA
- 2018: Pike suppression began with NVT and ADFG





# PIKE SUPPRESSION 2018-CURRENT

Total pike removed in 2022:

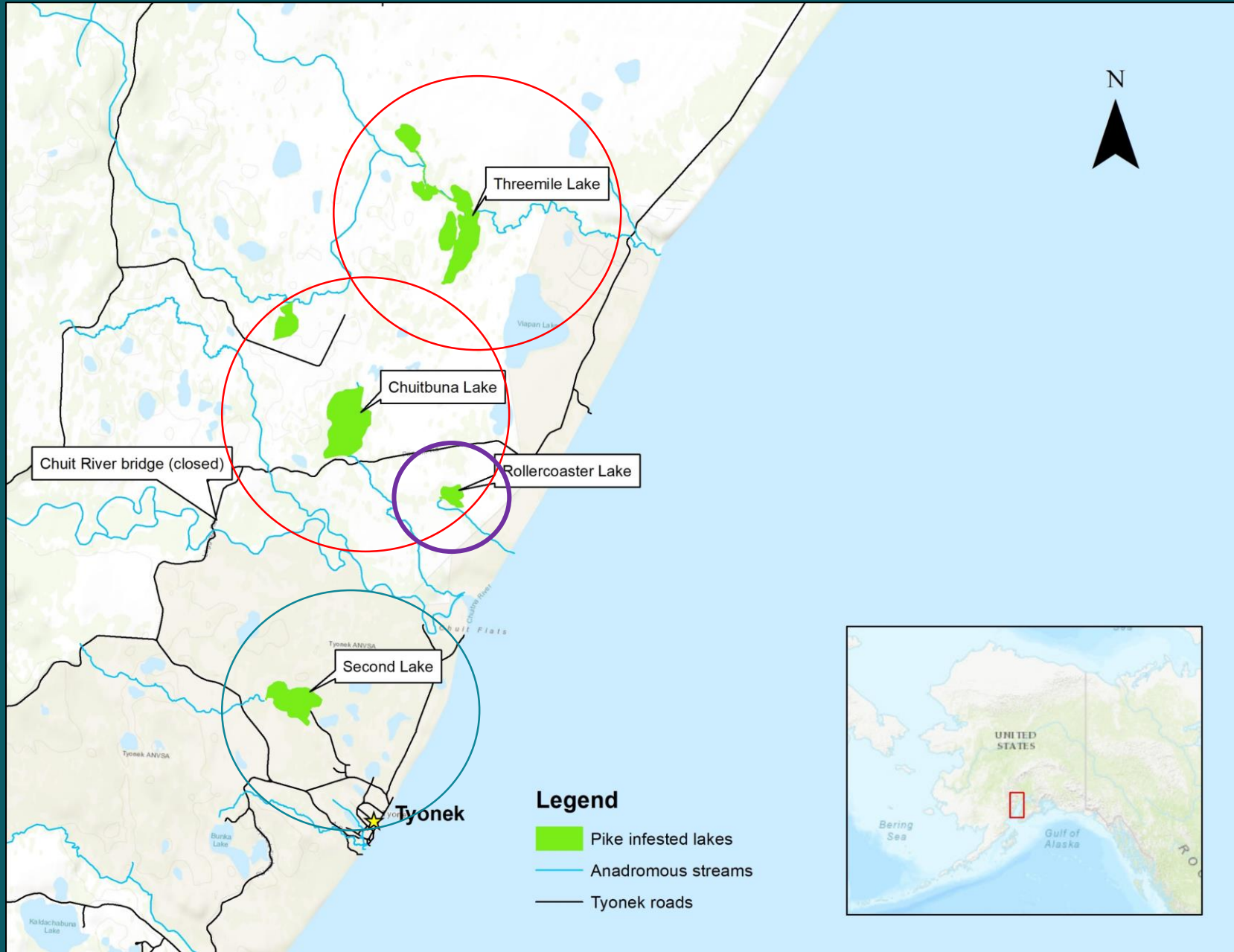
1,246

Total pike removed since 2015:

6,212











# Updated Population Estimates: 2024 & 2025

Mark-recapture for Threemile  
(2024) and Chuitbuna (2025) to  
update population estimates  
constructed in 2018 and 2019.







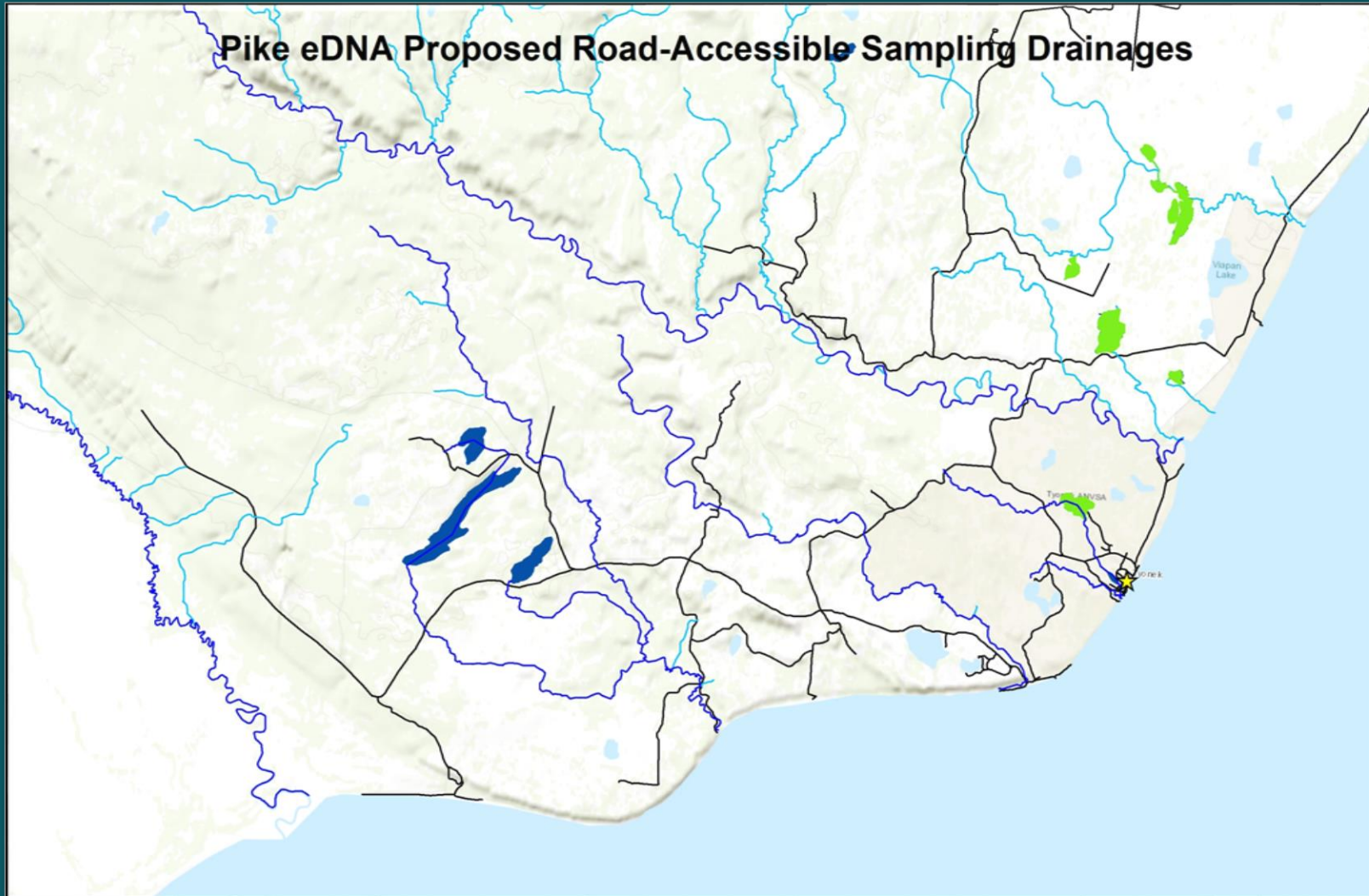
# Rollercoaster Lake Pike Eradication



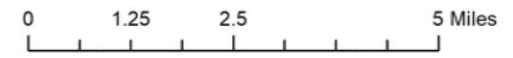
- 18-acre lake
- Invasion likely between 2006-early 2010s
- Pike discovered and suppression began in 2019
- Declining catches
- Pre-spawn netting
- Monitor for re-invasion (Cook Inlet pathway)








# Pike eDNA Proposed Road-Accessible Sampling Drainages



By: Jillian Jablonski  
February 14, 2023



## Legend

-  Pike infested lakes
-  Anadromous Waterbodies
-  Proposed Road-Accessible Drainages
-  Other Anadromous Streams
-  Tyonek roads



A landscape photograph of a wetland area. In the foreground, there is a body of water with lily pads and reeds. The middle ground shows a grassy area with a small stream or path. The background is a dense forest of trees, including several tall, thin, bare trees. The sky is overcast and grey. The text "MONITORING SALMON POPULATIONS" is overlaid in white, bold, sans-serif font across the center of the image.

# MONITORING SALMON POPULATIONS





# FUTURE PLANNING

Threemile Creek Video  
Weir







# Elodea in the TTCD



- Mat Su Elodea Task Force
- Alexander and Sucker lakes infestation
  - Annual surveys





# ELODEA 2023

Big Lake Elodea BioBlitz: July 18

Big Lake Surveys

Treatment Fundraising

Devising Treatment Plan

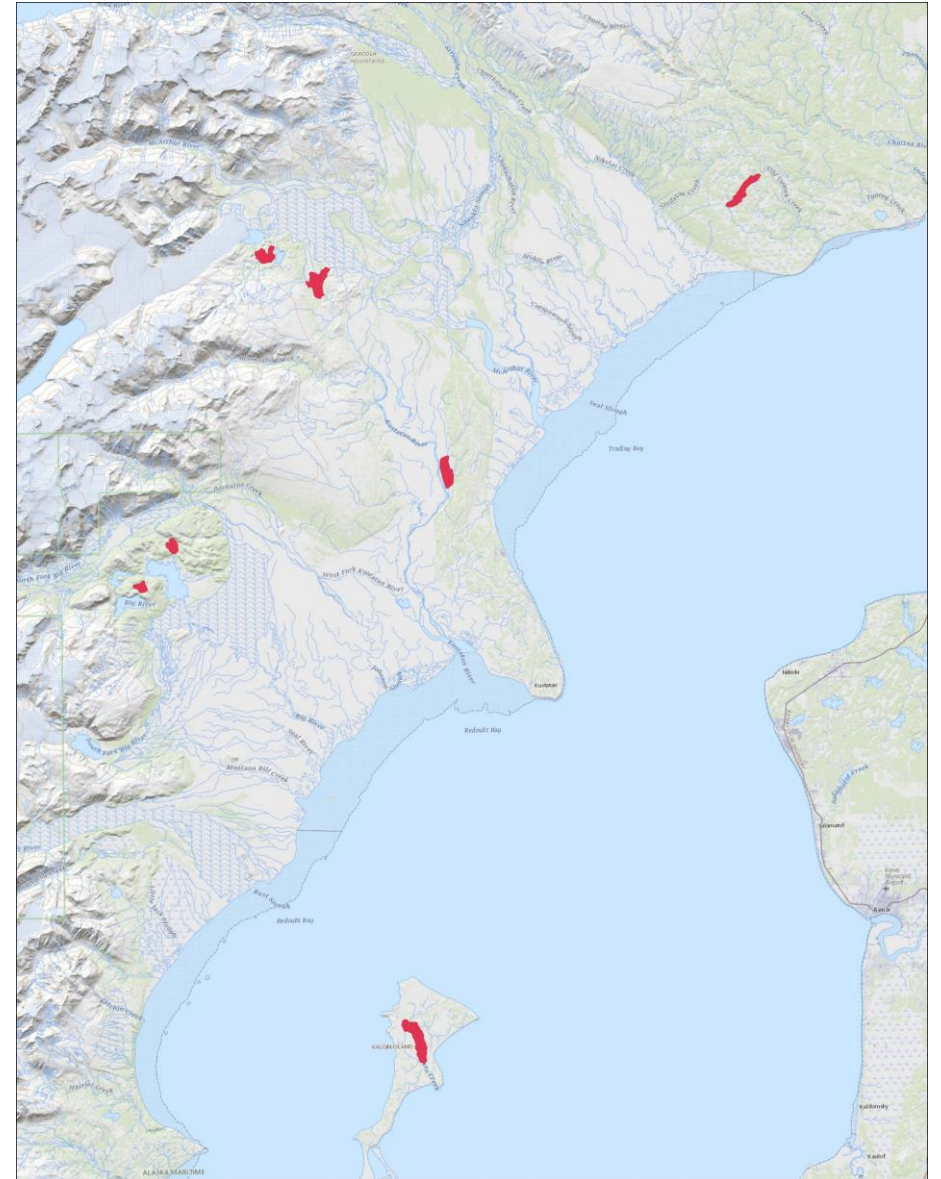
Remote Mat-Su Surveys

Surveys in West Cook Inlet





# WCI KENAI SURVEYS







# Future Planning

Big Lake Vector Study

Mat-Su Specific Waterbody Prioritization





A photograph of a blue wooden boat on a gravel shore. In the background, there is a dark wooden building with several windows. The scene is set in a natural, outdoor environment with trees and grass.

QUESTIONS?  
JJABLONSKI@TTCD.ORG

