



# Tyonek Tribal Conservation District Habitat Monitoring & Restoration Program

April 5, 2017

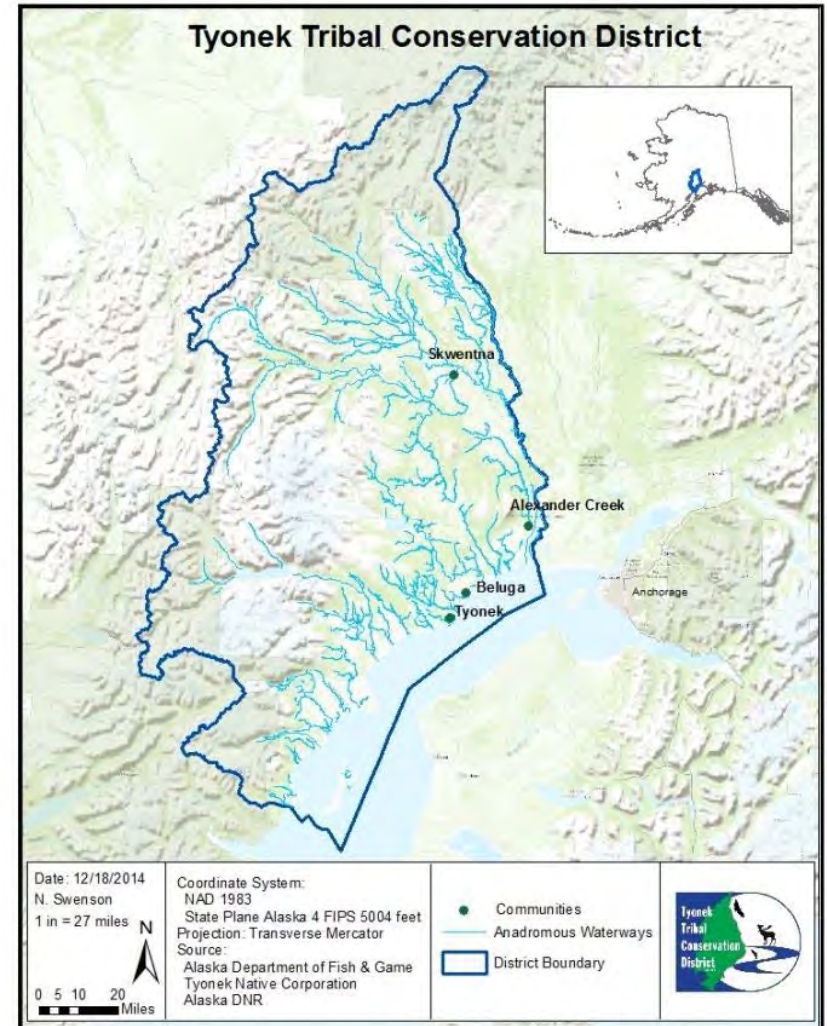
Kenai Peninsula FHP Science & Conservation Symposium



# TTCD Background

**Mission: To conserve, enhance, and encourage the wise use of natural resources.**

*TTCD address local natural resource issues through community-driven conservation.*







# TTCD Addresses Community Needs







# Programs

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







# Habitat Monitoring & Restoration Program



Goal: Monitor and restore fish and wildlife habitat.



*Fish passage restoration*



*Watershed monitoring*



*Waste removal*



*Invasive species control*



# KPFHP Supported Project: Old Tyonek Creek Culvert Replacement



- 2 5' culverts
- Undersized, perched
- Blocking fish habitat
- Washed out in 2012 and 2013.



# Old Tyonek Creek Culvert Replacement

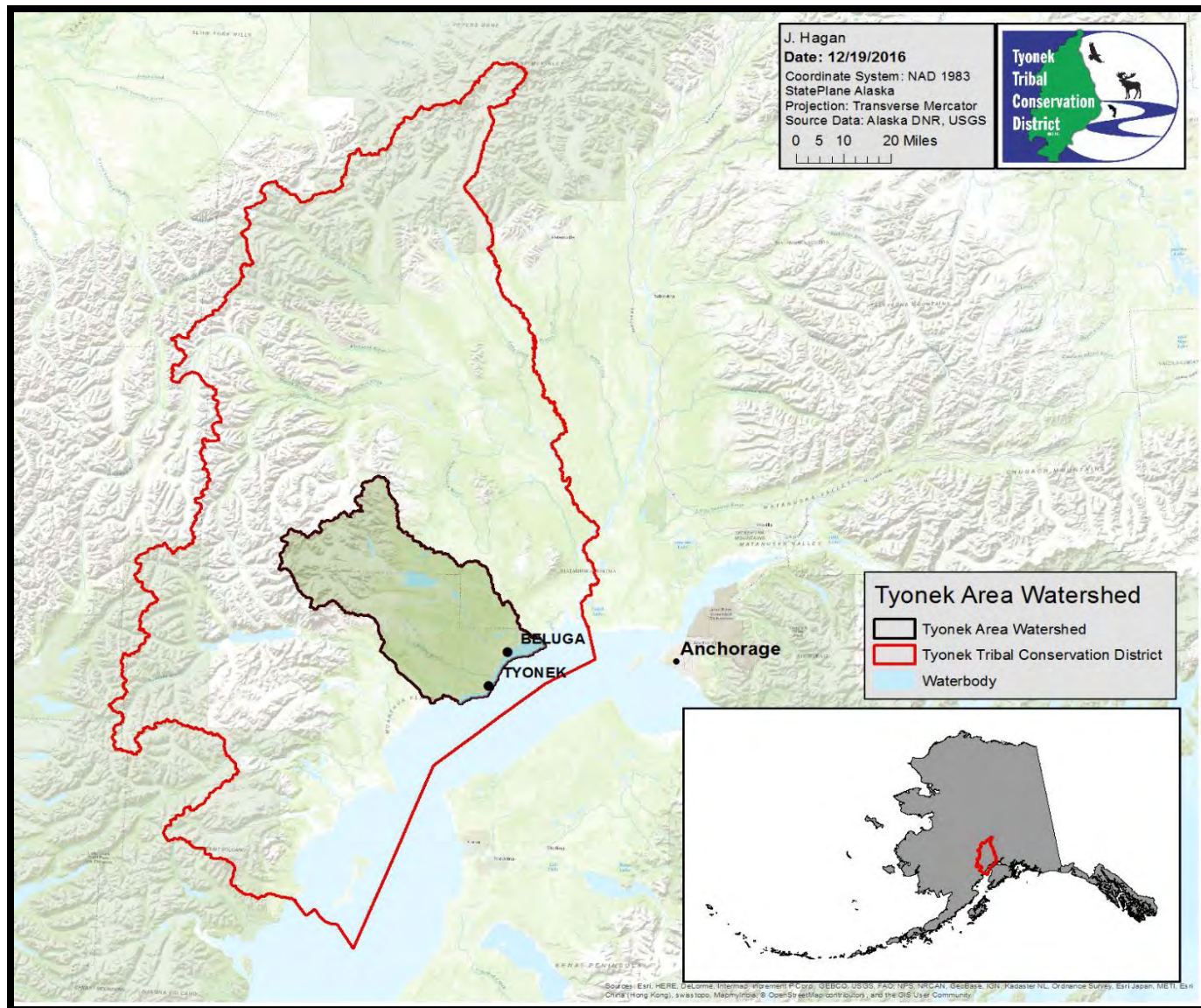


- Installed 28' wide, 13' high steel plate bottomless culvert
- \$1.13 Million Project
- 10.45 miles additional habitat now open to salmon





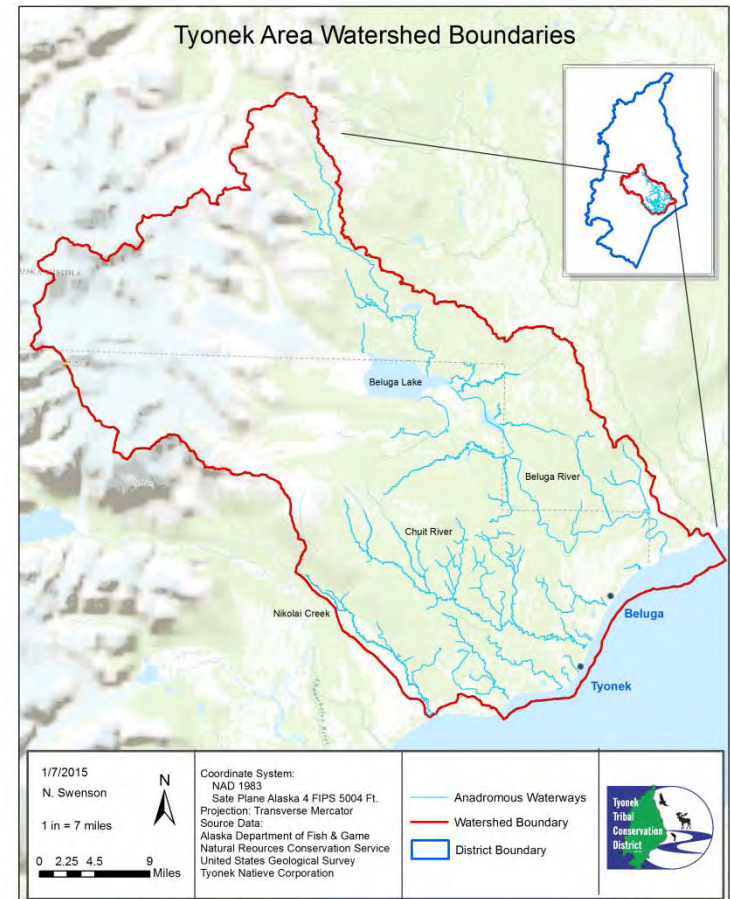
# Tyonek Area Watershed Action Plan





# Project Objectives

- Monitor the overall health of the Tyonek Area Watershed
- Identify current and future threats to the health of the Tyonek Area Watershed
- Work with landowners to address current watershed issues
- Develop best practices to maintain watershed health





# Tyonek Area Watershed Action Plan

- Community meetings held in Tyonek and Beluga
- Community concerns:
  - Water quality
  - Invasive species
  - Healthy fish populations
- Established Scientific Advisory Committee





# Tyonek Area Watershed Action Plan: Issues Identified

- Invasive species (plants & pike)
- Fish population, passage
- Water quality and waste management





# Invasive Plants: Monitoring and Issues Addressed

- Conducted annual plant surveys since 2014
- Control efforts
  - Common tansy removal
  - Orange hawkweed removal
- Future plans: continue annual surveys



# Invasive Pike: Monitoring and Issues Addressed

- Held 2 pike derbies in 2015 and 2 in 2016
  - 2015: removed 85 pike
  - 2016: removed 181 pike
- Will hold May derby in 2017
- Netting scheduled for June





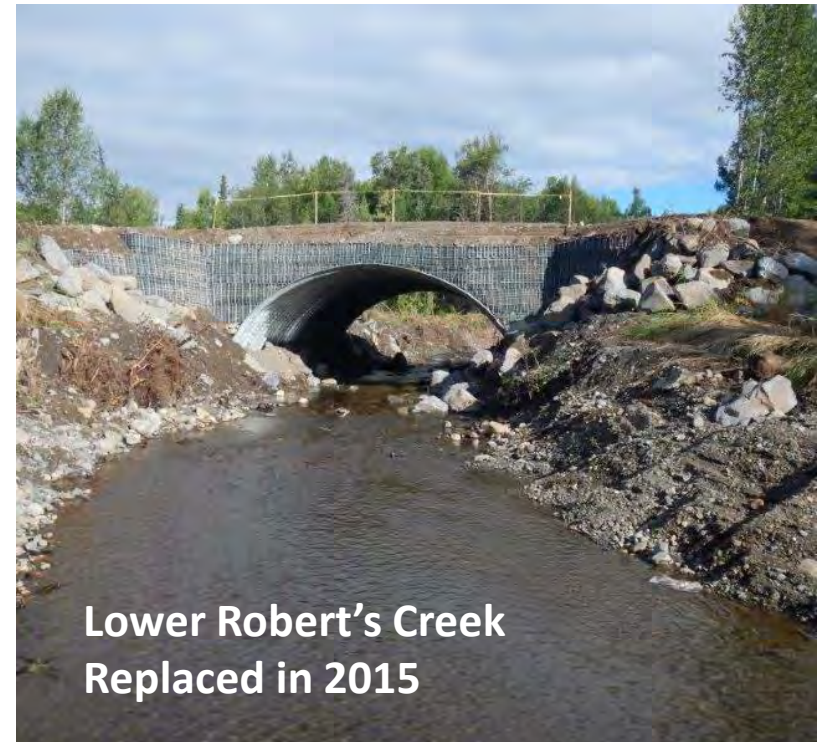
# Fish Population & Passage: Monitoring

- Implemented annual monitoring of juvenile salmon in two creeks
- Implemented annual spawning ground surveys in Indian Creek, site of 2017 culvert replacements



# Fish Passage: Issues Addressed

- Opened >20 mi salmon habitat to date
- Developed a 5 year culvert replacement plan
- Working with landowners and stakeholders to prevent future barriers





# Water Quality: Monitoring and Issues Addressed

- Two years of stream temperature monitoring and basic water quality monitoring at 5 sites
- Developing methods to monitor for pollutants
- Lead battery backhaul and overall waste management



# Tyonek Area Watershed Action Plan: 2017 Plans

- Continue to collect data on:
  - stream temperatures,
  - fish populations,
  - invasive species
- Complete 2 culvert replacements
- 2<sup>nd</sup> year of herbicide treatment on invasive plant infestation
- Pike derby and netting
- Solid waste backhaul, including lead batteries





# Contact Information

Christy Cincotta  
Executive Director  
Tyonek Tribal Conservation District  
907-646-9109  
ccincotta@tyonek.com  
www.ttcd.org

Link to Tyonek Area Watershed Action Plan:  
<http://ttcd.org/programs/fish-passage-and-habitat-program/tyonek-area-watershed-action-plan/>





Questions?