



Tyonek Tribal Conservation District Fish Passage & Habitat Program

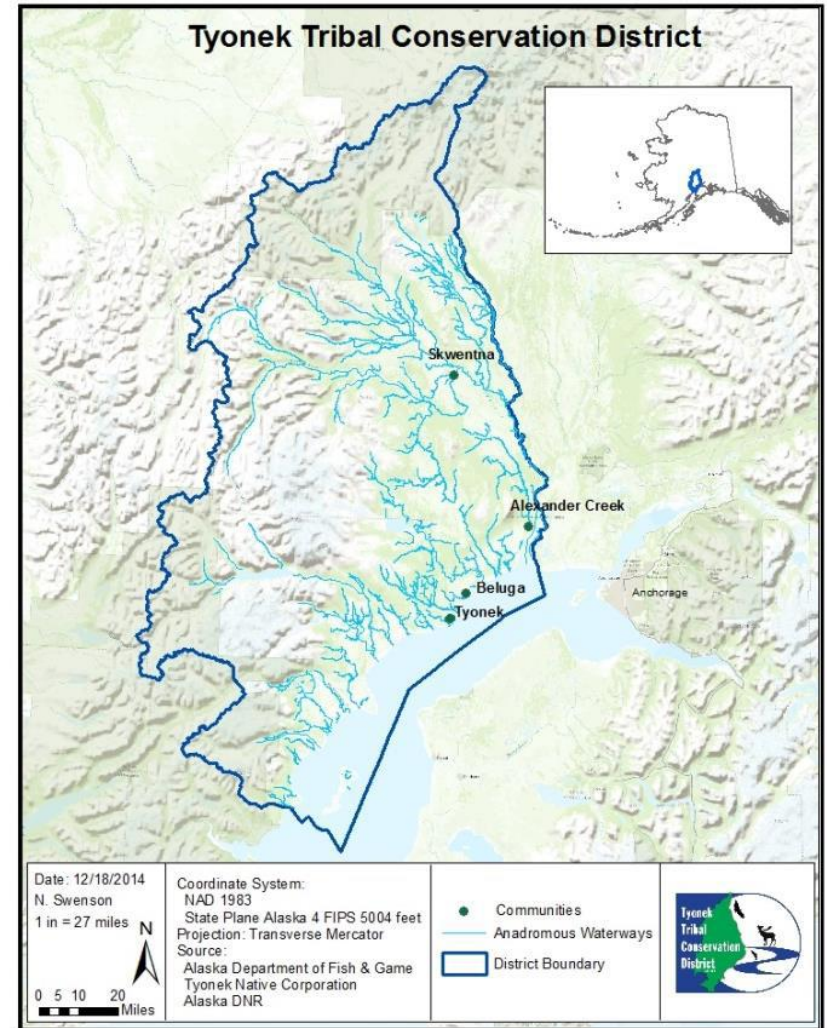
November 18, 2015

Mat-Su Salmon Science & Conservation Symposium



TTCD Background

- Mission: To conserve, enhance, and encourage the wise use of natural resources.
- Core Values:
 - Meet needs of stakeholders
 - Form cooperative relationships
 - Use what the earth has to give





TTCD Addresses Community Needs



Maintaining Healthy Natural Resources



Providing Food Security



Communication with Stakeholders



Youth Involvement



Programs

- Fish Passage & Habitat
- Tyonek Grown
- Technical Assistance
- Tyonek Youth Conservation Science (TYCS)





Fish Passage & Habitat Program



TTCD has opened >20 mi of habitat for salmon through culvert replacements.



Watershed monitoring



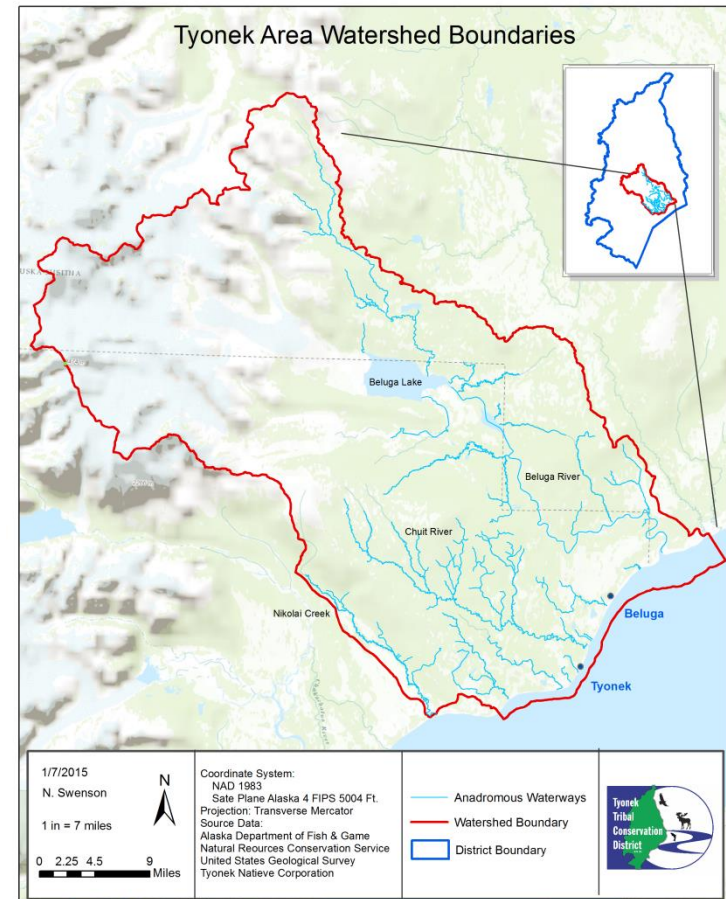
Lead battery removal



Pike derbies

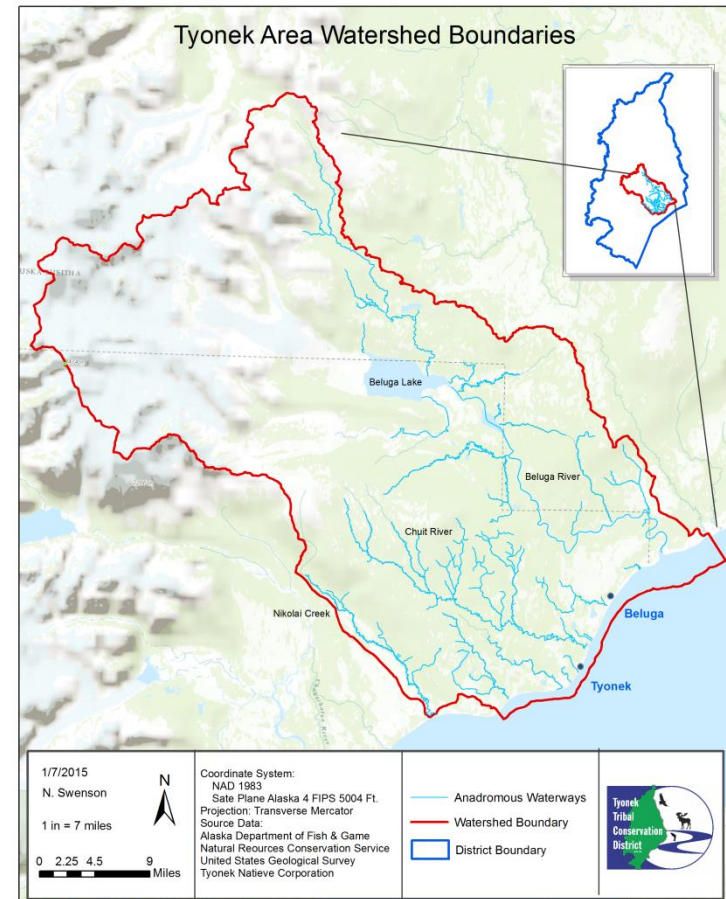
Tyonek Area Watershed Action Plan

- Started in late 2014, funded through USFWS and USDA NRCS, will complete plan by Dec 2016
- Goal: Provide a framework to restore, enhance, and protect the freshwater systems in this area
- Currently funded through June 2020 to carry out plan objectives



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
 - Fish Passage
- Established Scientific Advisory Committee



Tyonek Area Watershed Action Plan: Issues Identified

- Invasive species (plants & pike)
- Fish 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



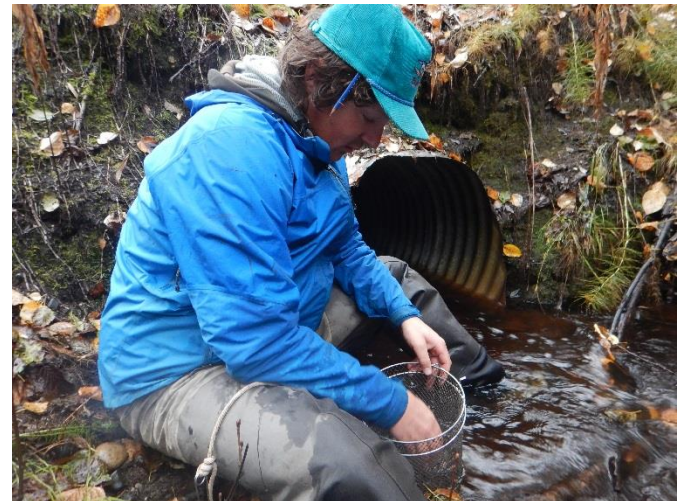
Invasive Pike: Monitoring and Issues Addressed

- Held 2 pike derbies in 2015 and 2 in 2016
 - 2015: removed 85 pike
 - 2016: removed 181 pike
- Will hold derbies in 2017



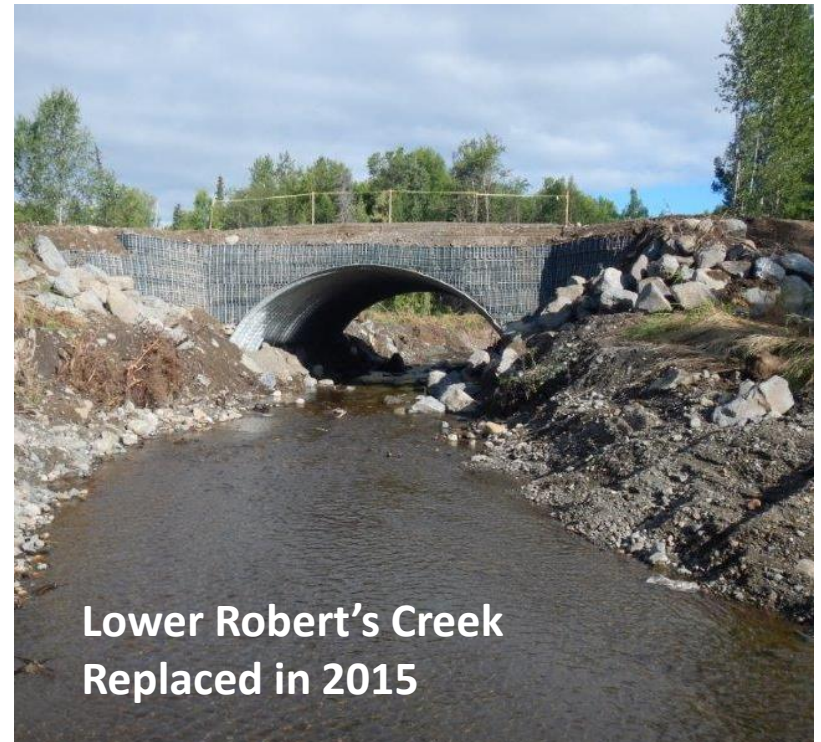
Fish Passage: Monitoring

- Implemented annual monitoring of juvenile salmon in two creeks with and without barriers
- 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 3 culvert replacements
- Pike derbies
- Solid waste backhaul, including lead batteries





Questions?