Supporting Łuk'ae (Salmon) Through Ahtna Values & Action:

Restoration, Research, Enhancement and Celebration

Presented by: Jessica Winnestaffer

Chickaloon Native Village



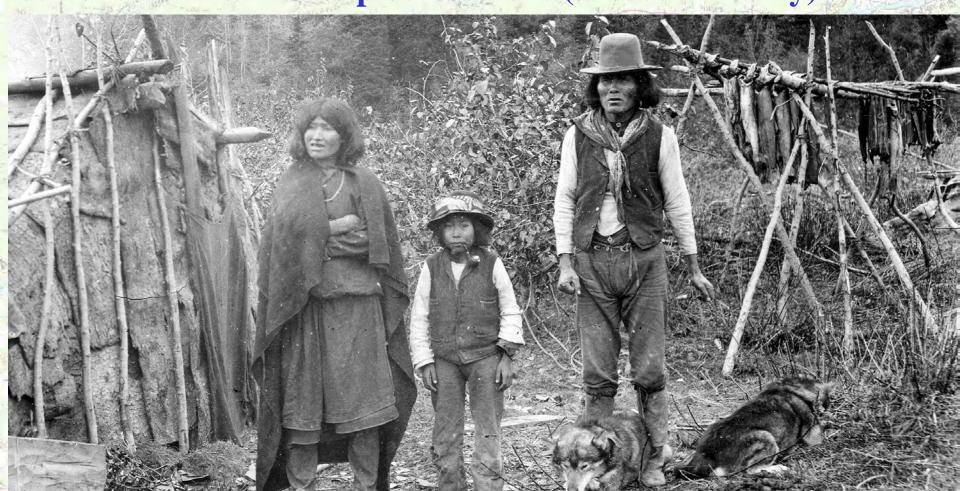
Mat-Su Basin Salmon Symposium 2019

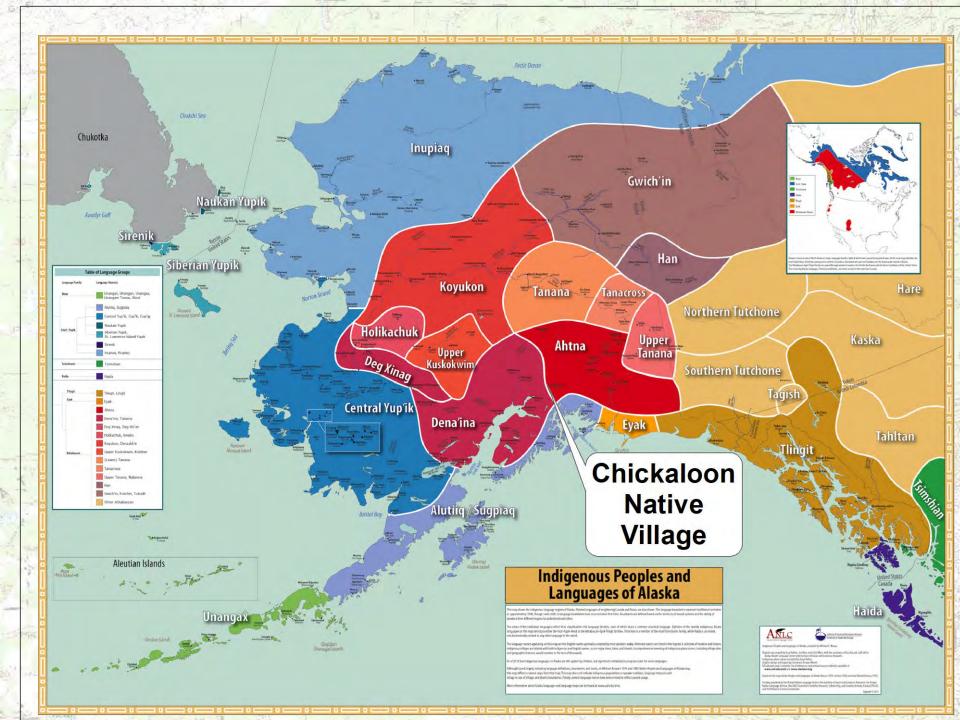


Chickaloon Native Village = Federally Recognized Tribe

Chickaloon Village Traditional Council = Tribal Government

Mission: Perpetuate Ahtna traditions and values and steward our environment to help our citizens (and community) thrive





Our Core Values

- Care and Love for Each Other
- Honesty
- Humor
- Respect
- Education
- Responsibility

- Humility
- Community
- Hard Work
- Gratitude



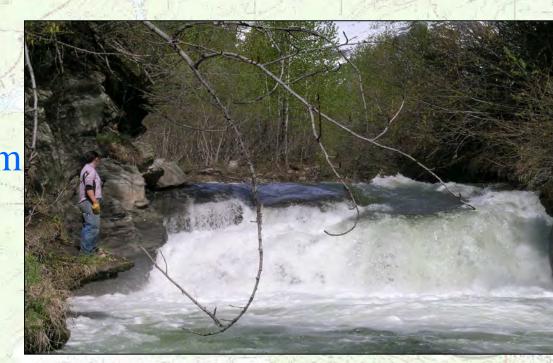
2002: Tribal Elders

Man-made Waterfalls
Decreased Salmon

Why Moose Creek?

Goals:

- 1) Restore fish passage
- 2) Restore natural stream processes
- 3) Restore salmon



Moose Creek Phase 1

Pre-project:

1,065' long



Post-project:

1,850' of restored relic channel



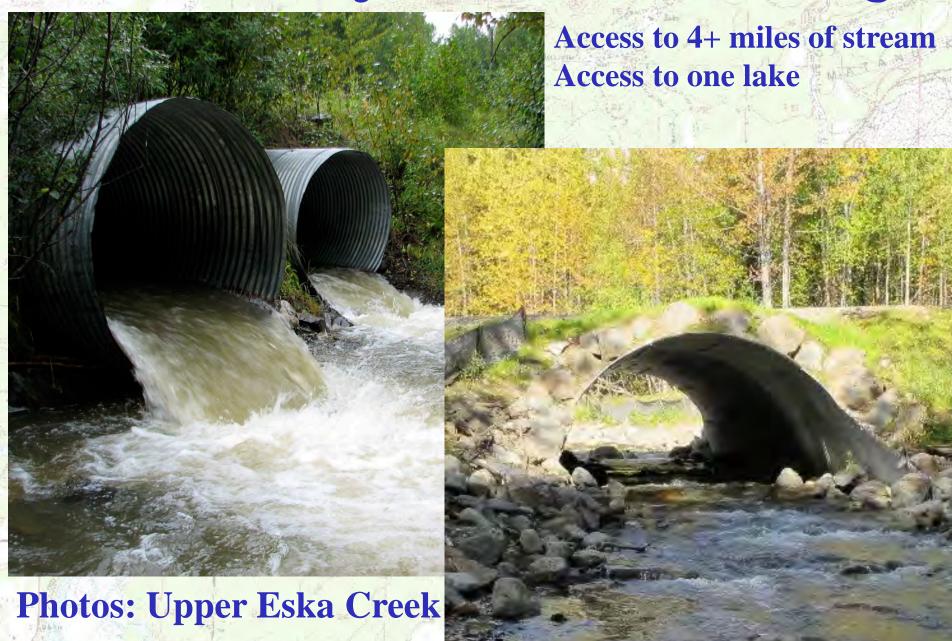
- Salmon access to >8 miles
- 200+ Chinook salmon adults upstream immediately

Moose Creek Fish Passage Restorations By the Numbers

- Bypassed 1 barrier waterfall
- Bypassed 3 partial barriers
- 1,135 lineal feet of stream added
- 15,000 willow cuttings planted
- ~6 acres of floodplain created/connected
- 5+ miles of new stream access
- ~100 year flood (2006, 2012, 2018)
 - **✓ Improved fish habitat quality**

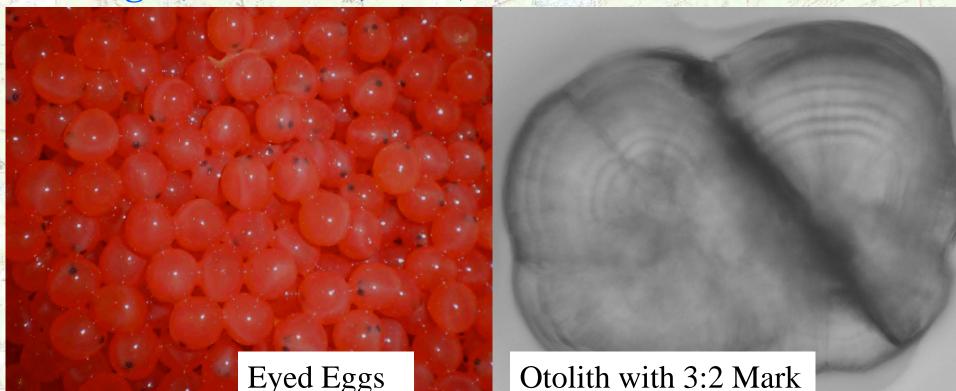


6 Culvert Projects for Fish Passage



Chinook Salmon Population Enhancement on Moose Creek

- Chinook salmon brood stock from lower creek
 20 pairs per year
- Moist Air Incubation system to rear eggs to eyed stage (2007-2010, 2013)

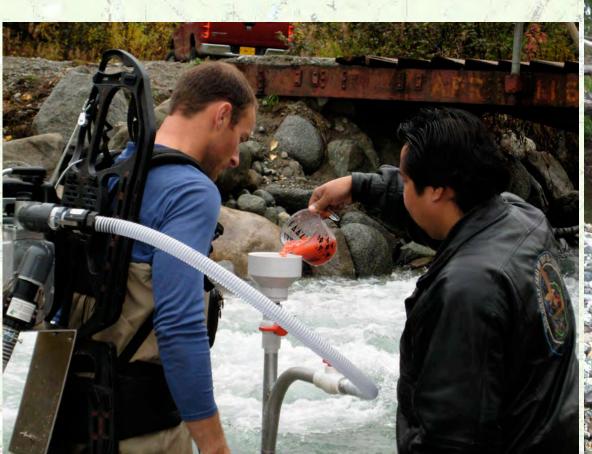


Moist Air Incubator





- Injected eyed eggs into upstream habitats
 River Mile 6-7
- Collect otoliths from carcasses of adults
- Adults identified with our thermal mark!







- 15 years of USGS stream flow data to date
- Applied for Instream Flow Reservation (2009)
- Not yet adjudicated





Other CVTC Research for Salmon

Salmon Spawner Distribution Study (2008-2009)
USFWS; Fishwheel in Matanuska River;
Radio Tagging; Mark/Recapture

Salmon Surveys for Catalog (2007, 2010-2011)
USFWS; Matanuska/ Knik Watersheds

Baseline Water Quality Monitoring
Matanuska Watershed



Education and Celebrations

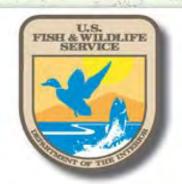




Thank You!

Mat-Su Basin Fish Habitat Partnership AK Department of Fish and Game US Geologic Survey

















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