12-09-2019 WRAP Salcha Meeting Notes

<u>To Do:</u>

- More info needed:
 - Reach out to DNR for mining, land claims on Salcha
 - Mental Health Trust Land?
 - Floodplain mapping
 - Need list of fish for Harding Lake and Salcha
 - Fire Mapping
- Next meeting will be in February 2019
 - Will make draft plan between now and February

Ecological resources of watershed and potential threats:

- Harding Lake:
 - Lake level depends on inflow and precipitation
 - OHW 717'
 - Dropped 5' after 1967 flood causing N Pike population Collapse
 - N wetlands dried up
 - Rogge Creek inlet blowout and flowed into Salcha instead of Harding
 - Diversion built into lake causing lake level increase by 3' and flooding N wetlands
 - Pike still closed
 - Outlet flows into Salcha at around 719', unclear if it has been active. Can be seen from the campground

Road construction could cut off outlet (issue because its a potential flood control valve)

- \circ Little Harding Lake and Harding Lake connected via culvert
- Salcha River:
 - USGS stream gage just above bridge
 - \circ $\;$ Topography changes after "Salcha Split", no gravel bars and narrow
 - Lots of side channels varying in depths
 - Reports of increased log jams
 - Reports of higher water in fall than historically
 - 13' action stage
 - 15' flood stage
 - 15'2" this year
 - 18'6" historic crest listed by NOAA
 - Bank erosion @ 10'
- Fish:
 - Harding Lake: Arctic char, lake trout, burbot, Arctic grayling, northern pike, coho salmon, sockeye salmon, steelhead, rainbow trout, whitefish-unspecified, sheefish, least cisco (important prey)

- Stocked 2019 Arctic Char
- Salcha River:
 - Salcha River has the largest run of Chinook salmon, for the size of its watershed, in the Yukon River Basin. The Tanana River has about 20% of the Yukon River Chinook salmon run (Brown et al. 2017)
 - Productivity 1/10 of historic
 - All large females taken out
 - 2 chum runs and a king run
- Reports of seeing salmon stuck in side channel puddles
- Birds:
 - Migratory Birds including water fowl
 - Harding Lake is a nesting area
 - Migratory waterfowl found in spring in the mid -Salcha
 - Boreal, Great horned and grey owls found throughout watershed
 - Bald eagles, golden eagles, peregrine falcons, red tailed hawks found in upper Salcha
 - Designated as a Tanana Valley IBA (Important Bird Area)
- Mammals:
 - Brown bears seen in upper salcha
 - Black and brown bears around mid Salcha
 - Moose and caribou
 - Beavers throughout
 - Dahl sheep in upper Salcha
- Berries:
 - Upper salcha, fly in access
 - Wetlands near cabins in lower Salcha
- Possible geothermal feature between Paldo and Serpentine Creek
 - Based on aerial survey in the 1960s that identifies vegetation differences and no snow cover in winter
 - Eastern Interior resource management plan
 - BLM inholding

How people use the watershed and threats:

- Cabins along river off the road system
 - Winter trail and boat accessible. Established ATV trails
 - Land ownership static. Some Native allotments
 - Zoning changed 10-12 years ago from 1 acre to 5 acre minimum to reduce dividing
 - GU-1 to RA5
 - Channels moving (silt loam banks), causing lost buildings, cabin moving business, land claims in river
 - Some owners doing bank stabilization

Permafrost Banks

• Most recreation cabins along Butte Creek

- Butte Creek increased limit for private residences
- Year round residents at about 24 mi, 34 mi and 57 mi
- Fire but not flood insurance
- About 12-16 properties have quarry type rocks available (stabilization)
- Logging:
 - East of Harding Lake in drainage
 - Limited
- Fire:
 - DNR State Forestry has done clearing and made fire breaks along Harding Lake
 - Historically less fire control
 - Fire at 98 Mile Creek in 2019
 - Kaoepke Slough fire several years ago
 - Old fire scar up Paleulo
 - Historically fires have not burned to the bank
- Accessibility
 - Can boat approx 100 mi in boat up main channel
 - Salcha Marina down by Hwy
 - About 60% jet boat, 40% airboat
 - Need an airboat if <7' water
 - N channel shallow with big rocks
 - Snowmachine in winter on Winter trail, loops back and forth across Salcha ~60 mile up
 - Trail off of Johnson Rd
 - Trails connecting between Chena drainages and Salcha
 - Airstrips at 40 mi, 50 mi, 60 mi, caribou creek
 - Used frequently-infrequently
- Hunting:
 - Moose, Caribou, Trap lines
 - Camps along river
 - Reports of concerns of overhunting
 - Dates of season appears to be a problem because of temperature
- Mines:
 - Lots of claims (check DNR)
 - Nogrub: mined ~25 years ago
 - Butte Creek
 - Dredge at Caribou creek approx 5 mi off main river
- Military use:
 - NW corner of watershed
- Harding Lake:
 - XC ski, snowmachine, snowshoeing, trapping in winter
 - 6 full time residents
 - Seasonal cabins

Facing increase in population due to military families on Eielson base

- Used as launching point for wildland firefighter folks
 - Fire water source
- Camping
 - Campground by bridge
 - Bingle Memorial Camp 65 acre church camp by Harding Lake
- Trans-Alaska Pipeline
 - Below ground with right away
 - Golden Valley Powerline follows
- Communications site
 - Between Butler Creek and 98 mi, N side on Golfball Creek on Johnson Rd

Ways to split the watershed:

- Elevation boundary
- Sub-watershed boundary
- Harding lake and Salcha
- Residential vs scattered cabins vs fly in area
 - Car vs boat vs fly in
 - Split by access
 - Downstream of bridge would be residential
- Salcha Split

Potential Objectives:

- Maintain Salcha as #1 producer of Chinook salmon through integrity of habitat
- Maintain hunting and fishing opportunities
- Minimize new residential development along river
 - Increase recreational use and decrease comercial use within boundary
- Maintain water quality
 - DEC W.Q. Priority area? What is the concern?
- Maintain integrity of rivers natural processes
 - On and off river, sloughs, beaver pond and maintaining river connections until they naturally go away
- Prevention of movement of invasive species
- Preserving all motorized transportation methods to and from cabins all year round and ability to use land around property
 - Historical uses
- Limit commercial use of the river
- Lock residential development along river
- Maintain access to existing trails and rights to make new trails
- Move properties back with the river