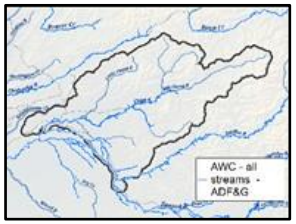
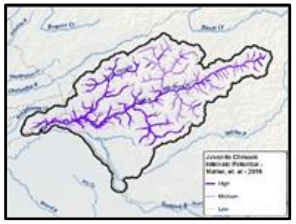
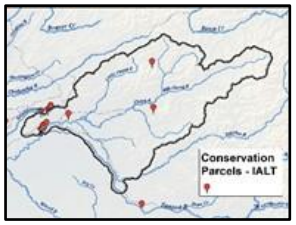
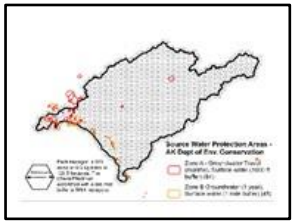
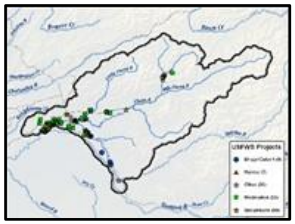
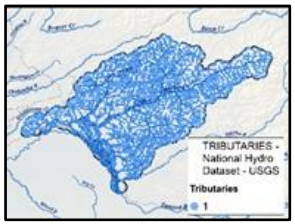
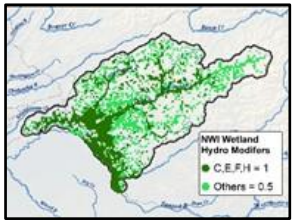
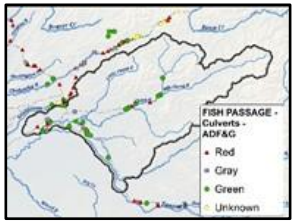
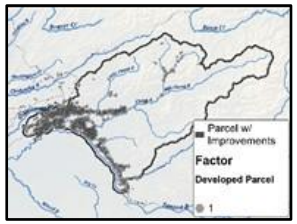
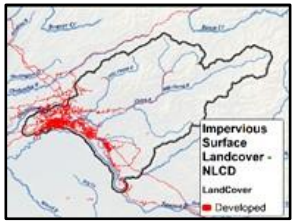
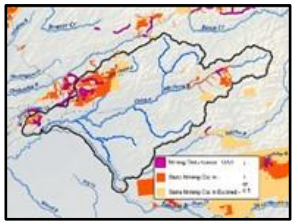
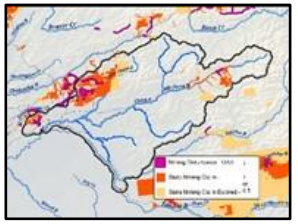
Chena Watershed Prioritization - Final Limiting Factors

Field	Conservation Factor	Value	Source	Methods	File	Link
AWC	**Anadromous Waters Catalog** - all species, presence	0,1 binary	Alaska Dept. of Fish & Game (ADF&G)	select by location, select hexagons which intersect AWC	AWC_all.pdf	
AWC_Kr	Anadromous Waters Catalog, **King Rearing**	0,1 binary	ADF&G	select by location, select hexagons which intersect AWC	AWC_King_Spawn_Rear.pdf	
AWC_Ks	Anadromous Waters Catalog, **King Spawning**	0,1 binary	ADF&G	select by location, select hexagons which intersect AWC	AWC_King_Spawn_Rear.pdf	
Avg_IP_Chinook	Juvenile **Chinook Intrinsic Potential**	0-1, range	University of Alaska Fairbanks (UAF), Matteral, Falke 2018	spatial join, join attributes of IP layer to hexagon, average IP segment values	JuvenileChinook_IP.pdf	
Consv_Parcel	**Parcels managed for conservation**: easement or fee via Interior Alaska Land Trust	0,1 binary	Interior Alaska Land Trust	select by location, select hexagons which intersect IALT polygons	ConservationParcels.pdf	

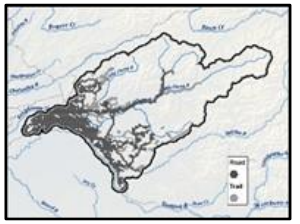
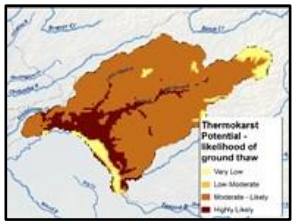
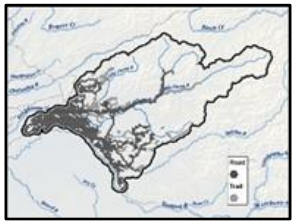
Chena Watershed Prioritization - Final Limiting Factors

Consv_ PublicWater Supply	**Source Water Protection Areas** (SWPA), Public drinking water supplies	0, 0.5, 1 tiered	ADEC	select by location, select hexagons within Zone A = 1.0, select hexagons within Zone B = 0.5	SourceWaterProtectionAreas.pdf	
FWS_Project	**Tributary -** National Hydrographic Dataset	0,1 binary	US Geological Survey (USGS)	select by location, select hexagons which intersect NHD	USFWS_HabitatProjects.pdf	
Trib_NHD	**US Fish and Wildlife Service** Restoration/ Conservation/ Education **Project**, presence	0,1 binary	US Fish and Wildlife Service	is there a restoration project in the hexagon	Tributaries.pdf	
Wetland_ Hydro_Score	**Wetlands**: Highest priority wetlands with hydrologic modifiers: C,E,F,H,J = 1	0, 0.5, 1 tiered	US Fish and Wildlife Service	hexagons with high priority wetlands (hydro modifiers) = 1, hexagon with lower priority wetlands = 0.5	NWI_Wetlands_Hydro_Mod_Hex.pdf	
	NOTES: **Factor** = 1, this dataset was scored and used as a factor in the Chena watershed scale prioritization of 5600 hexagons each measuring 0.5 square miles or 320 acres, **Description** - simple explanation of dataset, **Values** - scoring range, **Source** - data source, **Methods** - methods to calculate dataset's value per evaluated hexagon for the prioritization					

Chena Watershed Prioritization - Final Limiting Factors

Field	Limiting Factor	Value	Source	Methods	File	Link
CULVERT_ RedGray	**Culverts** which do not meet fish passage criteria or have unknown passage rating	0,1 binary	Alaska Department of Fish and Game	select by location, select hexagons which intersect culvert locations with rating of red, gray, or unknown	Culverts.pdf	
Devo_Parcel	**Developed Parcels** with improvement value greater than $10,000 used a surrogate for development	0,1 binary	Fairbanks North Star Borough	select by location, select hexagons which intersect parcels with "Improvement" attribute > $10,000	DevelopedParcels.pdf	
IMPERVIOUS_ Threshold	**Impervious Surface**: interpreted National Land Cover Dataset		USGS - NLCD	NLCD_Impervious_pct >= 0.25 - score of 1, NLCD_Impervious_pct >0.10 - score of 0.5	Impervious.pdf	
MINING_ Claims	**Mining Claims**: active and recently inactive (less than ten years old) mining claims on state lands	0, 0.5, 1	Alaska Department of Natural Resources	select by location, active mining claims = 1, recently inactive mining claims = 0.5	MiningClaimsFootprint.pdf	
MINING_ Disturbance	**Mining Footprint**: historic mining footprint disturbance, digitized from imagery and digital elevation data	0,1 binary	UAA- Alaska Center for Conservation Science	select by location, select hexagons which intersect dataset	MiningClaimsFootprint.pdf	

Chena Watershed Prioritization - Final Limiting Factors

Field	Limiting Factor	Value	Source	Methods	File	Link
ROAD_ present	**Roads** dataset from FNSB	0,1 binary	Fairbanks North Star Borough	select by location, select hexagons which intersect Roads	Roads_Trails_hex.pdf	
Thermokarst_ Score	**Thermokarst**: likelihood of ground thaw, thermokarst	0-1	UAF - SNAP - Scenarios Network for Alaska and Arctic Planning	convert 1 kilometer grid to polygon, spatial join polygons -calculate mean thermokarst potential value per hexagon, divide mean value by 100 to yield range from 0-1	Thermokarst.pdf	
TRAIL_ present	**Trails** dataset from ADNR, may include active trails as well as historic trails, originally sourced from 1:63,360 scale USGS topographic maps so spatial accuracy is limited	0,1 binary	Alaska Department of Natural Resources	select by location, select hexagons which intersect Trails	Roads_Trails_hex.pdf	
	NOTES: **Factor** = 1, this dataset was scored and used as a factor in the Chena watershed scale prioritization of 5600 hexagons each measuring 0.5 square miles or 320 acres, **Description** - simple explanation of dataset, **Values** - scoring range, **Source** - data source, **Methods** - methods to calculate dataset's value per evaluated hexagon for the prioritization					