Process	So What? What are the key components/uncertainties of these processes helpful to management of these species/assembledges?	Salmon (all
		Ocean type
Atmospheric		
Changes in air temperature	Links to phenology of invertabrates ande plants; correlation with water temperature across various water habitats; spatial distribution of air temp. (existing gap); number of days above freezing;	x
Changes in precipitation	Correlation b/w water levels; correlation with water budget/balance; timing and magnitude, effects to snowline, phase of precip.; distribution (esp. surface);	x
Terrestrial snow conditions	Insulation as it relates to winter baseflows (depth of ice form); quanity;stratigraphy/structure effects to persistance (character of release);ice depth;	x
Biogeochemical		
Soil moisture changes	correlation with veg cover/expansion; infiltration; slope stability; influence on flamability/fuels; nutrient cycling; terr. Invert. Production	x
Hydrologic		
Shifts in hydrologic cycle (changes in seasonality of the water budget, base flow, flooding, timing of snow melt, changes in groundwater)	amount, timing, partitioning of water/distribution of water inputs and outputs; seasonality; surface water connectivity; hydro effects on geomorphology and impacts on productivity; system complexity	x
Sediment loads	impacts on equil.; changes in sediment supply and character and location and deposition; timing of delivery (impacts on spawning/incubation); impacts on aquatic invert.	x
Changes in water temperature & chemistry in lakes, rivers, and streams	veg. cover; seasonality; bioenenergetics; thresholds of species; productivity; changes in thermocline	x
expanse of beaver populations	distribution/migration route, abundance, ecological significance (costs/benefts); thermal effects; impacts on specific species; impacts on connectivity; floodplain deposition; impacts on diversity	
Permafrost change (water storage)	sediment delivery/supply; storage capacity; surface connectivity; delivery rate and magnitude; alteration of hydrograph; river bank erosion; oceanside beach erosion; water depth; winter/summer baseflow; connectivity to groundwater; stream pattern and profile; impacts on veg. cover and composition	x
Biotic		
Vegetation change (plant succession and distribution)	terr. And aquatic invert. Impacts; beaver distribution; stream flow; stream temp.; sedimentation; erosion; flamability; nutrient input through leaf litter; geomorphic control	x
Effects to Food Preservation abilities		x
Comments	changes to atmospheric observation capabilities	Effects to spawning locations (e.g. severe flooding)
		Same preservation issues across regions?
		king runs have changed drastically, coming throught the deeper water not the shallow beaches (possibily due to water temps.)
sentinal species		
anthropods		
sedoria icopode		
gmerus family		
sculpin		
beaver		

	Key Species of Common Mgmt Species						
Process	5 species)						
	river type	Whitefish (excl. Sheefish)	Dolly varden	Pike	Grayling	Sheefish	Rainbow Smelt
Atmospheric							
Changes in air temperature	x	x	x				
Changes in precipitation	x	x	x				
Terrestrial snow conditions	x	x	x				
Biogeochemical							
Soil moisture changes	x	x	x				
Hydrologic							
Shifts in hydrologic cycle (changes in seasonality of the water budget, base flow, flooding, timing of snow melt, changes in groundwater)	x	x					
Sediment loads	x	x					
Changes in water temperature & chemistry in lakes, rivers, and streams	x	x					
expanse of beaver populations							
Permafrost change (water storage)	x	x					
Biotic							
Vegetation change (plant succession and distribution)	x	x					
Effects to Food Preservation abilities	x	x					
Comments							
						issues with water clarity from thaw slump	Sensitivity to water level changes?
			Same issues regarding migratory runs as noted with king salmon, also a timing of run issue, also preservation issues				
sentinal species							
anthropods							
sedoria icopode							
gmerus family							
sculpin							
beaver							

		Key Supporting Species/Assembledges of those key Mgmt. Species		
Process				
	Rainbow Trout/Steelhead	zooplankton	BMI (aquatic invertabrates)	terrestrial invertebrates
Atmospheric				
Changes in air temperature				
Changes in precipitation				
Terrestrial snow conditions				
Biogeochemical				
Soil moisture changes				
Hydrologic				
Shifts in hydrologic cycle (changes in seasonality of the water budget, base flow, flooding, timing of snow melt, changes in groundwater)				
Sediment loads				
Changes in water temperature & chemistry in lakes, rivers, and streams				
expanse of beaver populations				
Permafrost change (water storage)				
Biotic				
Vegetation change (plant succession and distribution)				
Effects to Food Preservation abilities				
Comments				
sentinal species				
anthropods				
sedoria icopode				
gmerus family				
sculpin				
beaver				

Process	
	fish forage base
Atmospheric	
Changes in air temperature	
Changes in precipitation	
Terrestrial snow conditions	
Biogeochemical	
Soil moisture changes	
Hydrologic	
Shifts in hydrologic cycle (changes in seasonality of the water budget, base flow, flooding, timing of snow melt, changes in groundwater)	
Sediment loads	
Changes in water temperature & chemistry in lakes, rivers, and streams	
expanse of beaver populations	
Permafrost change (water storage)	
Biotic	
Vegetation change (plant succession and distribution)	
Effects to Food Preservation abilities	
Comments	
sentinal species	
anthropods	
sedoria icopode	
gmerus family	
sculpin	
beaver	