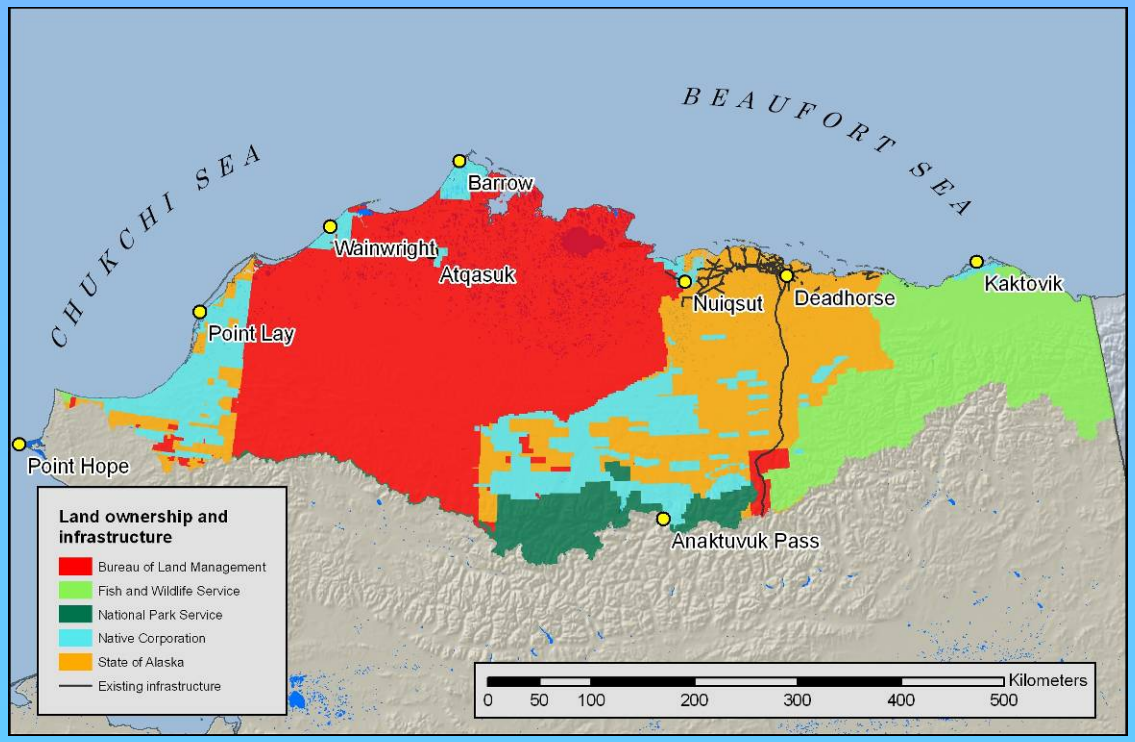
Why Breakout?

Breakout session results will form the core content for a 5-year strategic plan that identifies the priority research, modeling, and synthesis activities needed to predict climate-related impacts to fish and wildlife populations in the Arctic

Sideboards/Scope

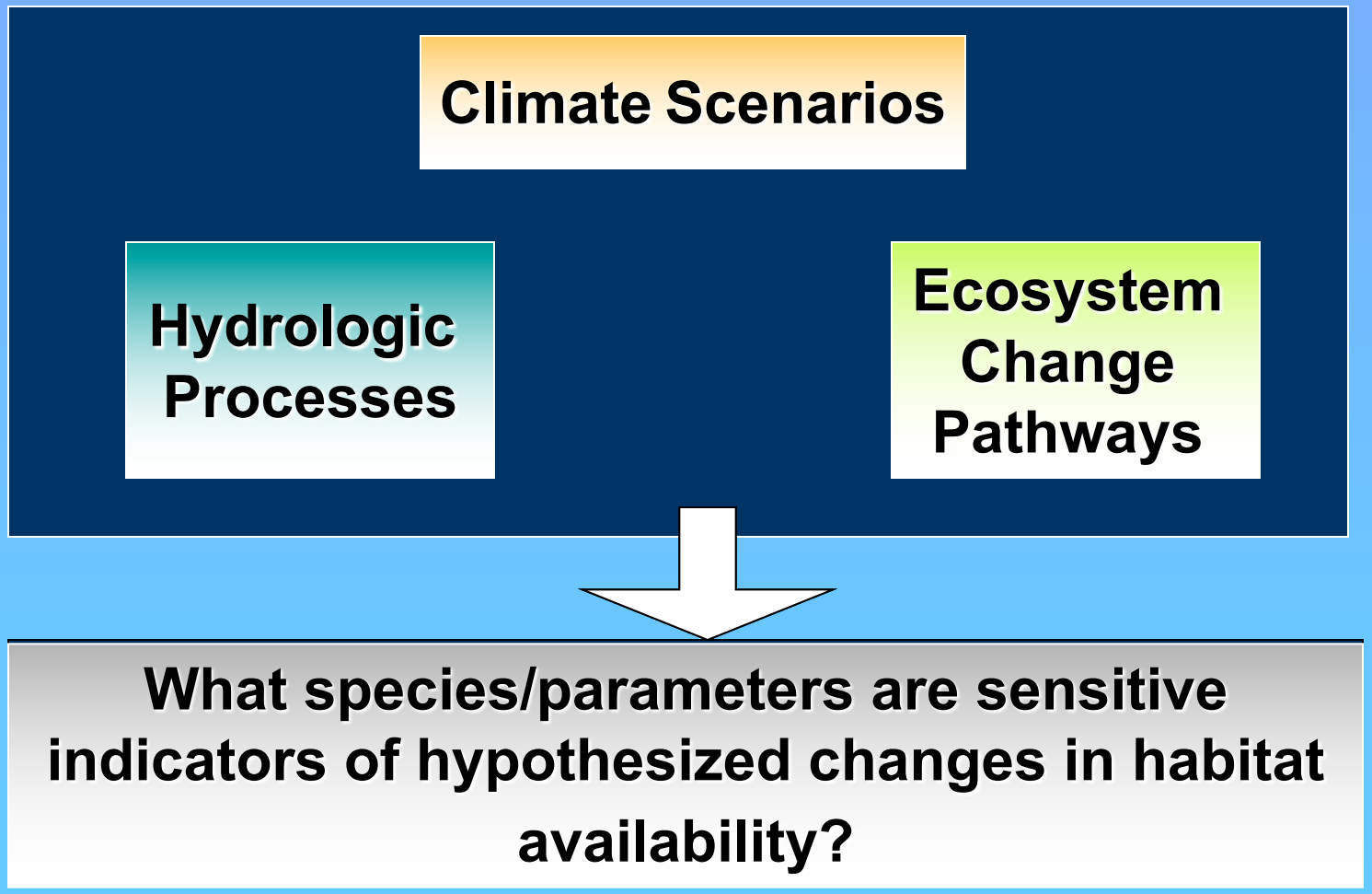
- Terrestrial and Freshwater Systems of the North Slope
  - Coastal Processes - Will affect some spp

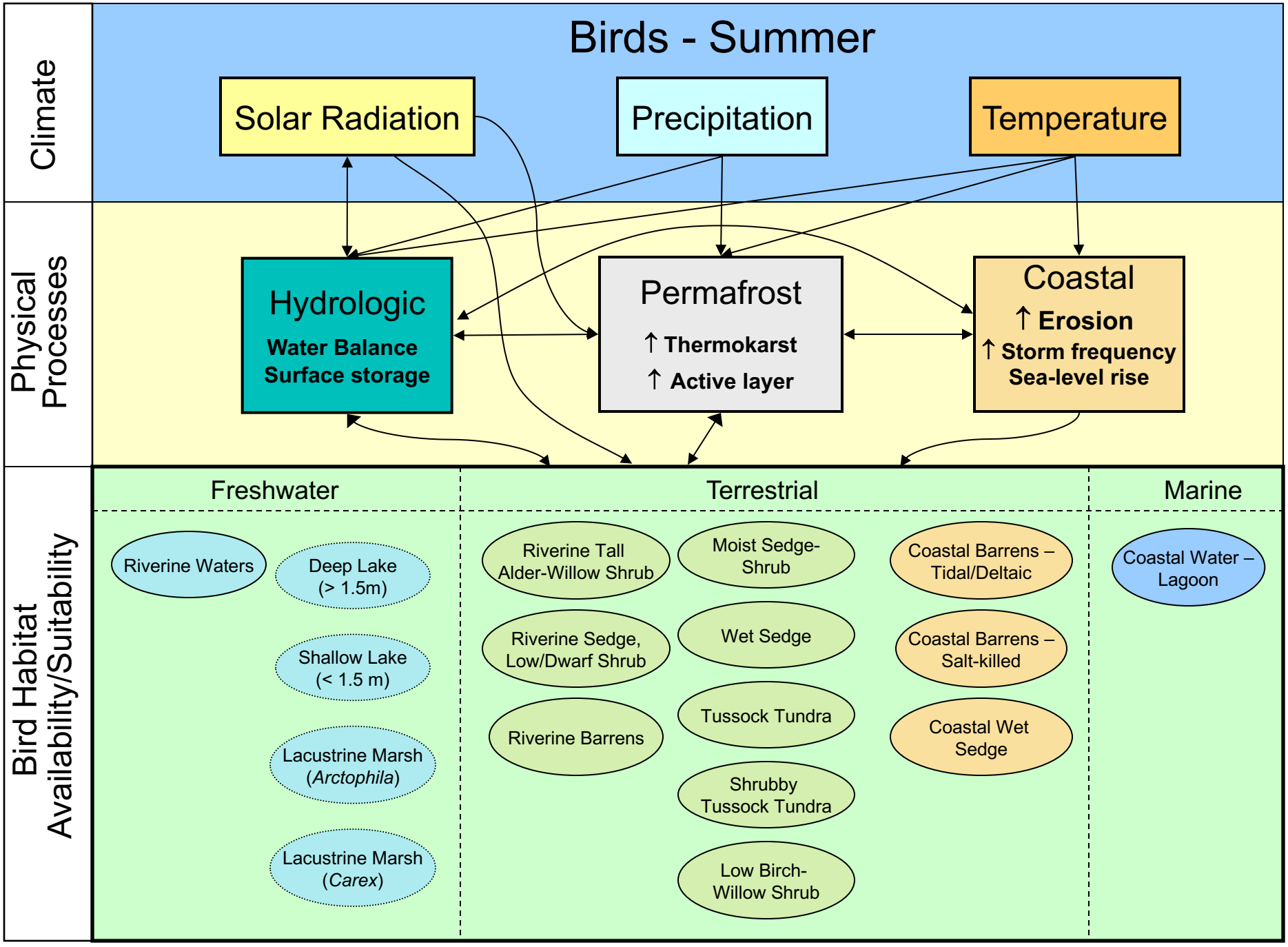


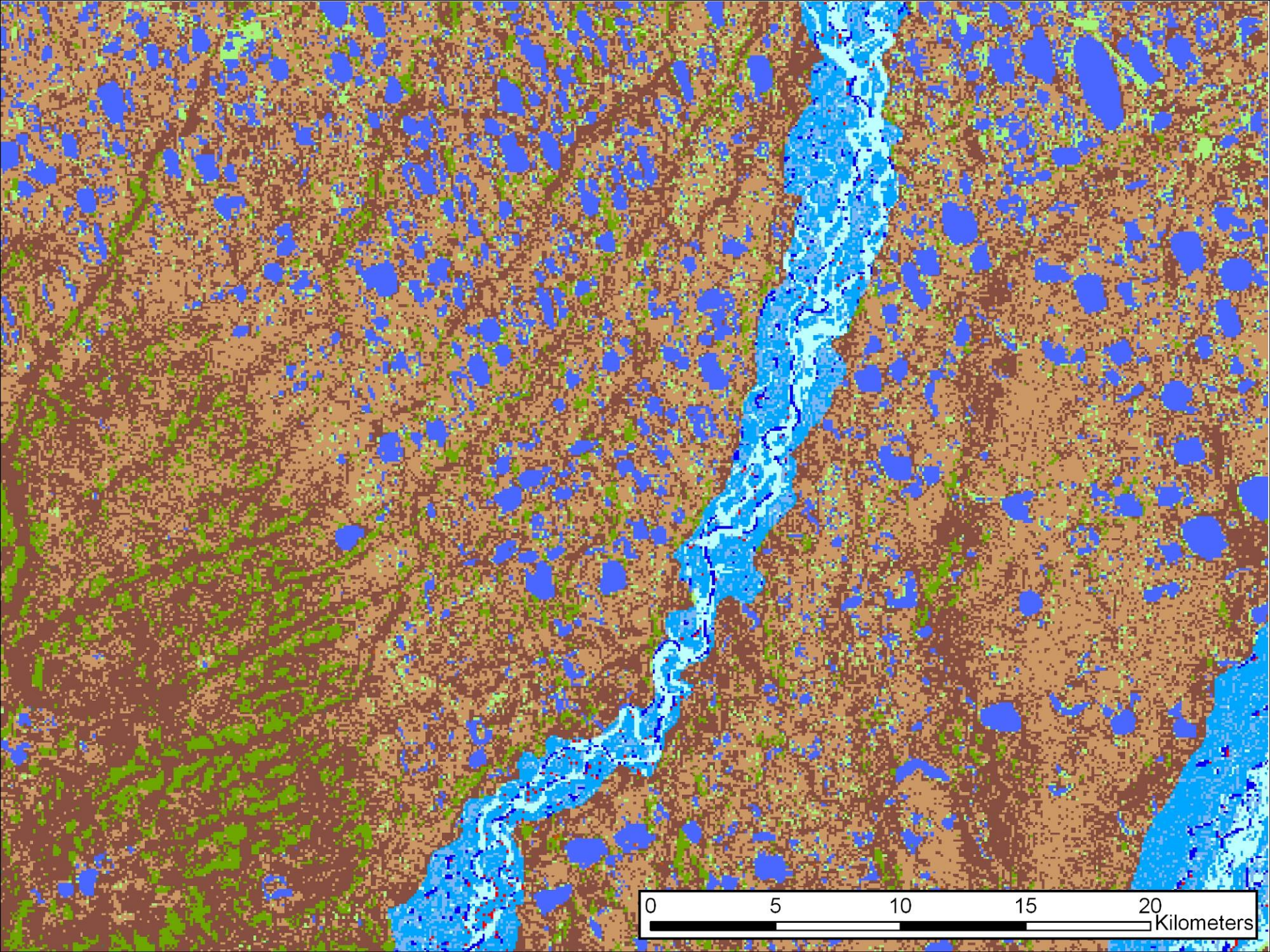
Focal Issues

- Change in relative abundance and distribution of habitat types
- Change in structural or physical characteristics of habitat
- Change in trophic systems, phenology, and forage/prey availability

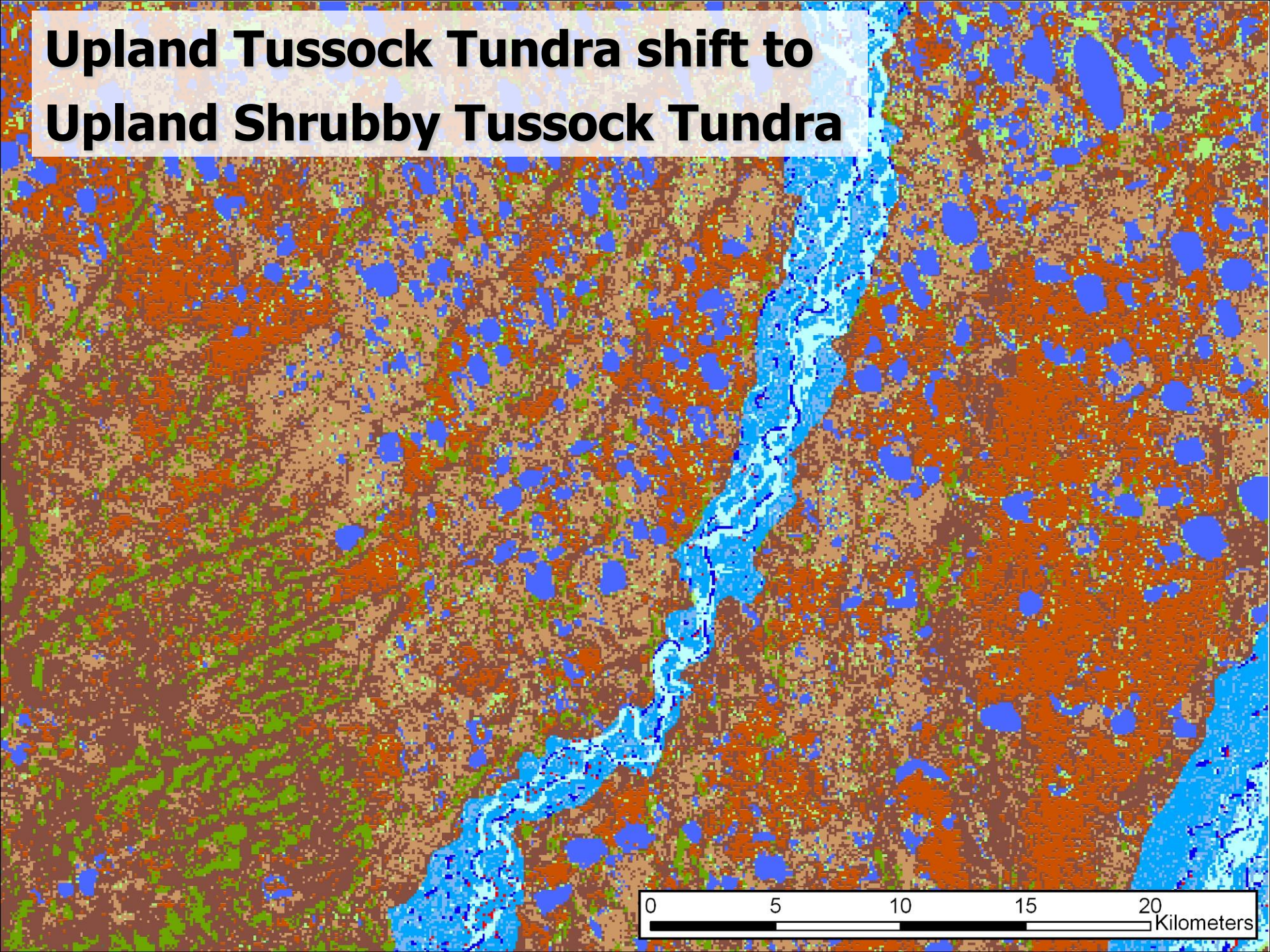
Breakout Session I




Climate
Physical Processes
Bird Habitat Availability/Suitability
Birds - Summer
Solar Radiation
Precipitation
Temperature
Hydrologic
Water Balance
Surface storage
Permafrost
↑ Thermokarst
↑ Active layer
Coastal
↑ Erosion
↑ Storm frequency
Sea-level rise
Freshwater
Terrestrial
Marine
Riverine Waters
Deep Lake (> 1.5m)
Shallow Lake (< 1.5 m)
Lacustrine Marsh (Arctophila)
Lacustrine Marsh (Carex)
Riverine Tall Alder-Willow Shrub
Riverine Sedge, Low/Dwarf Shrub
Riverine Barrens
Moist Sedge-Shrub
Wet Sedge
Tussock Tundra
Shrubby Tussock Tundra
Low Birch-Willow Shrub
Coastal Barrens – Tidal/Deltaic
Coastal Barrens – Salt-killed
Coastal Wet Sedge
Coastal Water – Lagoon


0
5
10
15
20
Kilometers

Upland Tussock Tundra shift to Upland Shrubby Tussock Tundra



Worksheet for Breakout Session I

Species or Species Group	Projected Change in Habitat Availability	Parameter (e.g., growth rate, distribution, abundance, etc.)	Positive or Negative Effect	Rationale for Strong Predicted Effect
Red Phalarope and Pectoral Sandpiper	Less lowland wet sedge due to drier summer condition	Distribution, breeding density, breeding success	Negative	Breeding habitat association with wet sedge. Loss of habitat would limit distribution & abundance; lower invertebrate productivity could reduce breeding success.

Managers' Breakout Session

- Discuss collaboration among research and resource agencies
- Develop collaborative process