ABoVE WG Coordination & Synthesis Activities

Carbon Dynamics:
Changes in seasonal amplitude of CO2 concentrations
CH4 data/knowledge gaps
Aquatic carbon fluxes
Partitioning net ecosystem exchange components
C Flux measurements in permafrost ecosystems (with Hydrology/Permafrost WG)

Hydrology / Permafrost:
Active Layer Distribution - synthesize & assess active layer depths (with SAR WGs)
Freeze-thaw dynamics and timing (with C Dynamics WG)
Lake trends – comparison of methods & long-term trends in lake area, and drivers
Snow properties – crosscutting synthesis activity with Wildlife WG

Fire Disturbance:
Wildfire soil carbon combustion synthesis
Post-fire forest regrowth composition & trajectories (with Veg Dynamics WG)

Vegetation Dynamics:
Succession/recovery following disturbances (with Fire WG)
Forest greening/browning including role of climate & insects in forest decline
Tundra greening/browning including shrub expansion & densification
Breakout 2 charge

Discuss research synthesis ideas & activities. Consider synergies & ways to inform & leverage efforts. If possible, outline contents of publications as a working framework.

- **Field mmts & remote sensing**
  - What are the key knowledge gaps & needs?
  - Ways to fill primary data gaps & needs?
  - Complementarity in mapping & scaling efforts?
  - How can data / observations inform management needs?

- **Modeling efforts**
  - Broader suite of *in situ* mmts for cal-val?
  - What data are lacking wrt informing & assessing models?
  - How can models best inform vulnerability assessments?
  - Model-data framework, comparisons, benchmarking
Breakouts (rooms)

- 5 breakout groups

1. Wildlife & Ecosystem services (Boelman, North)
2. Fire Disturbance (Mack, East)
3. Vegetation dynamics (Goulden, Municipal / Superior)
4. Carbon dynamics (Natali or Commane, Federal)
5. Hydrology & Permafrost (Watts, South)

Self-select to breakouts (diversify if possible)

- If you have multiple project participants, go to different WGs

Assign / volunteer a rapporteur