Charge to Thematic Breakout groups

Consider synergies & ways to inform & leverage individual project efforts.

Discuss research synthesis ideas & activities.

Incorporate Phase2 projects in Phase1 activities

If possible, outline contents of publications as a working framework.

- **Field & Remote Sensing measurements**
  - What are the (remaining) key knowledge gaps & needs?
  - Ways to fill primary data gaps & needs?
  - What complementarity in mapping & scaling efforts?
  - How might data / observations inform management needs?

- **Informing 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?
  - Utilize model-data framework, comparisons, benchmarking?
Charge to Thematic Breakout groups

- What Phase 1 activities will continue & which if any will expire?
  - For those continuing, how will they change with phase 2?
  - For those expiring, what is the history?
    - Completed, publication(s) expected
    - Abandoned due to…. (no lead, no longer relevant, no support)

- Specifically revisit synthesis activities & update those
  - What are the ongoing synthesis efforts?
  - Who specifically is leading / will lead them?
  - What publications are expected
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
Thematic Breakouts

- 5 breakout groups (chair): rooms
  1. Fire Disturbance (Laura B-C): Room 150
  2. Ecosystem Services / Knowledge co-production (Natalie Boelman): Room 155
  3. Carbon Dynamics (Colm Sweeney): Plenary Room
  4. Vegetation Dynamics (Howie Epstein): Room 165
  5. Hydrology and Permafrost (Mahta M): Room 160

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

Assign / volunteer a rapporteur