Permafrost GOAL: Document and Understand How Degradation of Near-Surface Permafrost Will Affect Arctic and Global Systems

**Key, italics maps onto Permafrost goal, red maps onto our shortened functions**

Map to Activities (First Stab Uma B. 3Oct 2012)

**1. Scientific synthesis workshop** with invited interdisciplinary-experts (plus some others, including key stakeholders) with the following focus

a) Identify early warning signs of permafrost change, identify tipping points (*Objective 1.1*)

b) Prioritize recommendations for necessary observing network to observe a) (*Objective 1.2*)

c) Prioritize recommendations for necessary model improvements to make an outlook.

This would take place in year 1 to help identify key gaps

This maps onto 1 and 3 of our new shortened functions.

**2. Permafrost model intercomparison activity** (caveat: I am not sure the models are out there for this activity since 1.4 lists develop models)

a) Prepare observations in proper format so they can be use to compare with models. This would include variables such as soil moisture and temperature, freezing depth, soil type, carbon content of soil, available nitrogen… (*Objectives 2.2, 2.3, 2.4, 4.2, so parts of Objectives 2 and 4*)

b) Run models in agreed-upon mode and synthesize results, identify error bars and probabilities of certain thresholds and the timing of thaw.

c) Produce permafrost projections, which will be used in Permafrost Outlook (Activity 3 below).

This maps onto 1 and 3 of our new shortened functions.

**3. Permafrost Outlook** – a series of smallish meetings to produce an outlook in Year 4-5

a) Identify the key people in each of our groups (stakeholder, government, industry, and science) and bring them together in Year 1, Year 2, Year 3 to produce an outlook in Year 4-5. (*Coordination objective 5 of this goal*).

b) Take permafrost projections from 2 and develop the path of how this will the influence on fish, wildlife, and human communities (*Objective 3 of this Goal*).

c) How will these projections influence dynamics of Arctic landscape (*parts of Objective 2 of goal*).

This maps onto the following of shortened Function 2.

* SEARCH as the 'honest-broker' in providing this information; value-neutral
* Bring different voices together to do this; bridge science and stakeholders
* Issue some sort of Outlook product/provide information in some form; includes element of translation