# Regional Climate Change Scenario Development Workshop

Timing and Location:

- November 13, 2012 at the Sheraton Hotel, Burlington.
  8:30 am to 6:00 pm

Deliverables:

- Report on the proceedings
- Preliminary regional Climate Change scenarios
- Regional impacts of climate change under alternate scenarios
- A synthesized systems dynamics model to be used in refining the land use transition model, governance network model and IAM.

Agenda:

7:45 to 8:30 am Registration

8:30 to 8:40 am

- Welcome (Deb Markowitz, Secretary, Vermont Agency of Natural Resources)

8:40 to 8:55 am

- Why we are here and what we plan to accomplish (Chris Koliba, University of Vermont)

8:55 am to 9:10 am

- Adaptive Management of Critical Transitions in the Lake Champlain Basin (Asim Zia, University of Vermont)

9:10 to 9:35 am

- Climate Change and Variations: From the IPCC to Vermont (Lesley-Ann Dupigny-Giroux, VT State Climatologist, UVM)

9:35 to 10:20 am

- Presentation/Q&A of Regionally-Downscaled Climate Scenarios (Brian Beckage, UVM)

10:20 to 10:30 am Break

10:30 to 11:00

- Using Models, Data and Physics to Plan: Knowns & Unknowns (Alan Betts, Atmospheric Scientist)

11:00 to 12:00 pm

- Vignettes of alternative futures
  - Agriculture (Tom Vogelmann, Dean, College of Agriculture &
  - Life Science, UVM)
  - Infrastructure (Gina Campoli, Vermont Agency of
  - Transportation)
  - Economic (Jennifer Green, City of Burlington)
  - Social: Public Health & Safety (Daniel Baker, UVM)
  - Environment (Kari Dolan, Agency of Natural Resources)

- Laying out the afternoon's agenda (Chris Koliba, UVM)

Lunch / Networking: 12:00 to 1:00 pm

1:00 to 2:00 pm

**Regional scale impacts exercise:** Homogeneous groupings to brainstorm regional scale impacts of global climate change under alternate scenarios:

- Environmental implications (species, water quality, ecosystems, etc.)
- Agricultural implications (growing season, soil erosion, etc.)
- Social implications (health, safety, housing, quality of life, etc.)
- Economic implications (industry needs/opportunities, job availability, etc.)
- Infrastructure implications (transportation, energy, telecom, zoning, development, etc.)

Given the climate data presented in the morning, what facets of the region's (environmental/agriculture/social/economic/infrastructure) system are most impacted by climate change drivers?

2:00 to 2:15 pm Break

2:15 to 3:25 pm

**Regional scale <u>integrated</u> impacts exercise**: Heterogeneous grouping comprised of representatives from each homogeneous group. Taking the list of impacts on the region's environmental/agriculture/social/economic/infrastructure, construct concept maps of how impacts are linked.

How do "1st order" impacts lead to potential "2nd" and "3rd" order impacts?

3:25 to 3:40 pm Break

3:40 to 4:40 pm

**Reviewing integrated impacts and surfacing adaptive management strategies:** Returning to homogeneous groupings, a completed picture of 1st to 3rd order impacts is reviewed and critiqued. A list of possible adaptive management strategies to account for these impacts is brainstormed.

4:40 to 5:30 pm

**Closing plenary**

Consider uses of regional downscaled climate models in this work.
Review important take-aways from the day.
Review next steps.