Questions

- How sensitive are regional land use outcomes to the model of decision-making that is employed?
  - What approaches to modeling decisions are available? Strengths/weaknesses? Feasible to scale to global application?
  - What kind of activity(ies) could address this question?
- Are large-scale IAMs missing important processes?
- How can we best connect (more detailed?) regional land use modeling and data to global scenarios?
- How sensitive is climate and biogeochemistry to the pattern of land use at the regional scale?
  - What are key sensitivities/uncertainties of regional climate/bgc responses? Key feedbacks?
- Can validation of spatial land use modeling be improved? How?

Possible Outcomes

- Written product?
  - Meeting report
  - Joint paper (to IGBP special issue of ESD?)
- Joint model activity? Single region(s), global?
- Proposals
  - NSF RCN resubmission?
  - Other?
- CESM Societal Dimensions Working Group
  - Joint activitiy? Meetings are Feb/June
  - Description and mailing list:
    http://www.cesm.ucar.edu/working_groups/Societal/
- Other ideas?

- Clarifying approaches
  - What is an ABM (minimum definition)?
  - What are key differences in ABM vs IAM approaches? Difference in practice or in principle? Epistemology?
  - Why go to smaller scales (resolve processes rather than parameterize)?
- What do we know about disagreement among models and why it occurs (across ABMs, or across IAMs)?
- Activity to compare outcomes between ABMs and IAMs?
  - Single region study? Global?
- Metrics for comparing land use model outcomes (beyond total land use and emissions)
- Validation of spatial IAMs and ABMs. For what outcomes do these models perform well/poorly?
- How well grounded in econometric estimates are parameter values in spatial IAMs?

- What approaches could be used to bridge regional and global studies?
  - Higher resolution and more comprehensive resource base, e.g. land and water
  - new land use/systems representations, as opposed to only land cover
  - upscaling/outscaling
  - Improved use of econometric results in IAMs; estimates more directly aimed at use in IAMs
  - meta analysis
  - using high res models to estimate parameters for coarser models
- Climate/bgc/water consequences of regional land use change
- Data needs