DRAFT Minutes from Spatial Analysis Project Technical Team Meeting
11/9/2000
Cloquet Forestry Station
10:00 AM to 2:00 PM

***Present*:** Tim Jones, George Host, Tim O'hara, Jim Manolis (Team Leader), Bill Befort, Chris Edgar, Jan Green, Mark White, Daren Carlson.

Submitted by Jim Manolis and Daren Carlson.

Outcomes from the Oct. 31 Strategy/Technical Team meeting

Jim Manolis opened by reviewing outcomes from the 10/31/00 joint strategy and technical team meeting. The Strategy Team Accepted the Technical Team's budget recommendation for the Aerial Photo, GLO line-note, and Spatial Analysis of Derived Data source components. The technical team will need to flesh out more detail for the Future Modeling and Interpretation/Synthesis components, and discuss these with the Strategy Team in January.

Project financing

Chris Edgar provided a summary of the budgeting options. He said that most portions of the project can be sole-sourced. That is, the technical team can identify a group most suited to do the work and present their choice to the landscape committee. If the landscape committee backs this choice then no bidding is necessary.
If there is more than one group that can do the work, then we can pursue an informal bidding process. Chris estimates an informal bidding process would take half the time of a formal RFP process.

Aerial photo interpretation

- George Host suggested that we will likely need more than one person or group to do the work in order to meet fiscal deadlines (June 30, 2001).

- The DNR's Resource assessment shop doesn't have the time to undertake the project and the team discussed other options. Bill Befort mentioned that there are several good forestry consulting firms, including George Banzaf in Wisconsin, Horizons in Souix Falls, and James W. Sewell in Maine. Several members suggested limiting to contractors with experience from forests of the eastern US. Bill Befort also suggested that we specify the product and not dictate how it is done. That is, it is up to the contractor to decide if they want to do on-screen digitizing vs. traditional methods. The team agreed with this view.

  Photo acquisition
  Team members present agreed that the DNR resource assessment shop will undertake the photo acquisition phase of the project, most likely by contracting with a third party.

  Selection scheme
  Members agreed that a list of sites needs to be generated soon and discussed selection parameters. Random selection will be performed at the subsection level with Toimi Uplands and Laurentian Highlands lumped as one subsection. NRRI staff will determine random locations so that we can move forward in locating aerial photos.

  Random selection will be constrained by the following rule (more detail provided in the draft workplan):

  1) As determined from satellite data, if a sample plot is >50% water, a new location will be chosen.

GLO line notes
Members thought that Dave Cleland's group in Wisconsin may be the only group prepared to do the work. The team felt comfortable with this group, but thought that we should check to see if any other groups could do the work, including Pregitzer and Mladenoff's Labs. Bill Befort will check if the dataset on microfilm at the Resource Assessment shop is available for use by contractors. Rules were identified for placement of the sample area relative to the aerial photo plots and are detailed in the work plan.

Spatial analysis of derived data sources
Team members agreed that NRRI was best equipped to conduct this component of the project Reasons for suggesting NRRI is that they probably have the most experience as a group with spatial metrics and, since some are part of the technical team, their approach can interact with and respond to the needs of the overall project. Details have been added to the Draft Workplan.

Discussion of Metrics

George Host presented a power point slide show on spatial metrics. We discussed challenges of selecting appropriate metrics. We will need to spend more time on this in order to flesh out details of the spatial analysis of derived data sources component. Jan Green suggested a useful reference: Weins et al. 1993. Ecological mechanisms and landscape ecology. Oikos 66 (3).

Modeling
We need to further explore different models that could be used. We will invite others to the next meeting that can help the discussion, including Tom Crow, Eric Gustafson, and others.

The team will tentatively meet again on December 15 in the Twin Cities.