Summary of Wednesday

- Showed a current event of lava flow using a steepest path across the landscape map.
- Many assumptions exist with our landscape based approach to WQ modeling.
- Many differences exist between landscape WQ models as compared to instream WQ models.
- Best to pick EMC loading values for watersheds near where you are working if possible. If not, then choose similar geology, soils, and conditions.
- Cross walk was needed between NCLD cover classes and our EMC classes.
- Remap tables can help in the reclassification to minimize errors.
- There are three ways we can use this landscape based approach for modeling water quality: (1) with EMC loading values for land cover to predict concentrations, (2) with instream sampled water quality to examine loading downstream, (3) to track and analyze point source discharges for sites off streams.
- Time of travel was calculate using drainage area, slope, mannings n as inputs with some constants for velocity and hydraulic radius.
- Allow the scratch workspace to go to a geodatabase for the MNDNR time of travel tool to work.
- Multicriteria analysis for criteria weighting can be done with rating, ranking and pairwise comparison techniques which differ greatly in theoretical foundation.
- Rating and Ranking methods help us be more consistent in responses for pairwise comparison.
- I provided a spreadsheet which allows 5 criteria weighting and tests for consistency.