Introduction

Nearly all of the water that enters the Provo River has had some interaction with soil. During precipitation and snowmelt events soil is flushed, mobilizing trace metals such as Mercury and Strontium. The chemical and physical properties of soil can have a significant impact on the mobility of these trace metals.

Objectives:
- Make an early effort to characterize the soil in the Upper Provo River Watershed.
- Through soil chemistry and physics, gain insight into areas of interest where further sampling should be conducted.
- Twenty sample sites were selected, including one lake for sediment samples.
- All samples were collected on the same day, and prepped for analysis in the BYU Environmental Analytical Lab.
- Soil tests included: Texture, Organic Matter (OM), pH, Nitrate, Electrical Conductivity (EC), Total C/Total N.

Results

- Tests showed that overall soil conditions were high in OM, and the dominant soil texture to be Loam.
- No significant differences were observed at different elevations.
- Early efforts to measure special variation in the soil will guide future testing.

Conclusion

- Sites at lower elevation show higher OM, suggesting that additional soil tests should be done in this area.
- Additional tests to be done include: ICP-OES, XRD, static leaching.