Landscape influence on stream nitrogen abundance
2020 Monitoring

- Late May to Late September

- Continued the Lost Creek surface water monitoring
  - ~240 unique spatio-temporal measurements of surface water quality

- Installed a network of piezometers (50) and stream stage rods (16)
  - ~900 unique spatio-temporal measurements of groundwater quality
Piezometer

WWHP monitoring wells

Stream stage rod

Piezometer

Stream Stage Rod
Groundwater quality

Sampled for
- Nitrate
- Ammonium
- Soluble reactive phosphorus
- Dissolved organic carbon

Nitrogen sourcing

Map the spatial changes in nitrogen abundance along flow paths
- Link changes to potential nitrogen sources
Potential metal-nitrogen interactions

10 cm depth

14,100 mg/kg
350 mg/kg

Nitrogen Processing

Synergistic  Antagonistic  Saturation  Inhibitive

Nitrogen/Metal Abundance

USEPA & CDM Smith 2004; 2012
Questions?