The project

- Plaster Creek Watershed → “One of most polluted watersheds in the state”

- Plaster Creek Stewards Initiative: Research, Education and Restoration

- Improvements on Urban Green Infrastructure

- Mentoring and educating area high school students about upstream-downstream connections

Top photo courtesy of PCS Facebook
Methods

Transpiration Data Collection:
- Leaf porometer
- 4 collection dates
- Sunny conditions and 10:00 AM - 2:00 PM

Regional Sampling Trip:
- 6 Sampling sites on Grand River and Plaster Creek
- pH, Conductivity, and temperature measurements.
- Sample Collection for E. coli plating
- Report values to LGROW data repository
Results

Native Plant Transpiration (mmol/m²s)

- Asclepias tuberosa - 449.85
- Rudbeckia triloba - 316.76
- Solidago speciosa - 251.93
- Penstemon hirsutus - 251.82
- Liatris spicata - 242.18
- Packera obovata - 241.89
- Lobelia siphilitica - 214.14
- Penstemon digitalis - 209.53
- Monarda fistulosa - 200.43
- Allium cernuum - 37.56

Regional Water Sampling

- High levels of E. coli in both sampling trips
- Created an educational video to share with Green Team Students
- Data shared with LGROW Data Repository
Challenges Faced

❖ COVID-19 obstacles

❖ Data analysis/processing

❖ Future plans for publication
LESSONS LEARNED