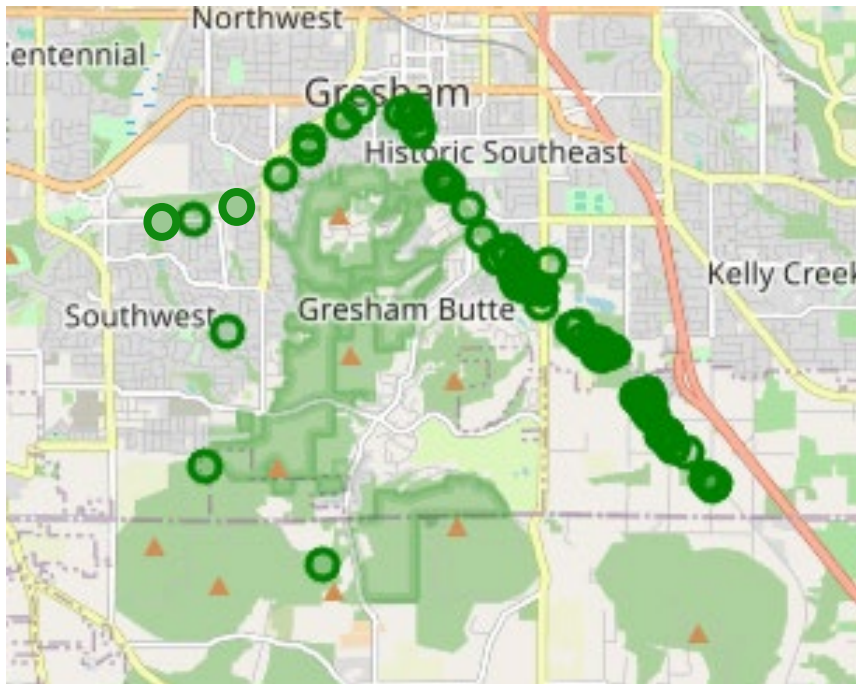


Findings, Trends, and Management Implications of the Community Science Program



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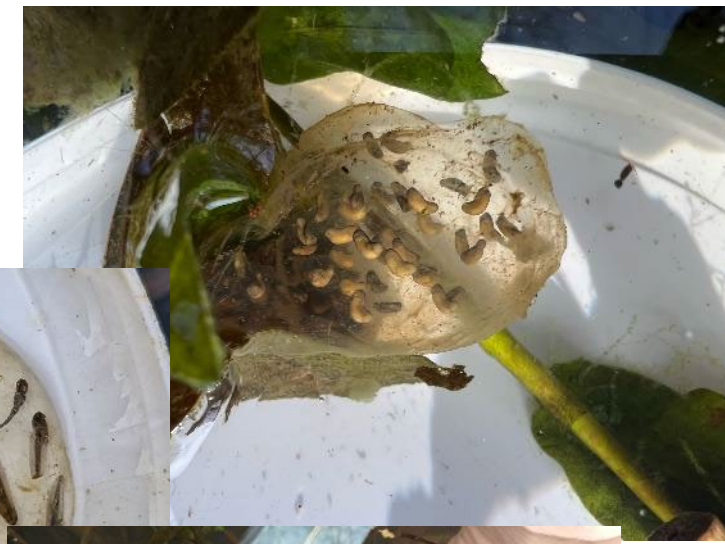
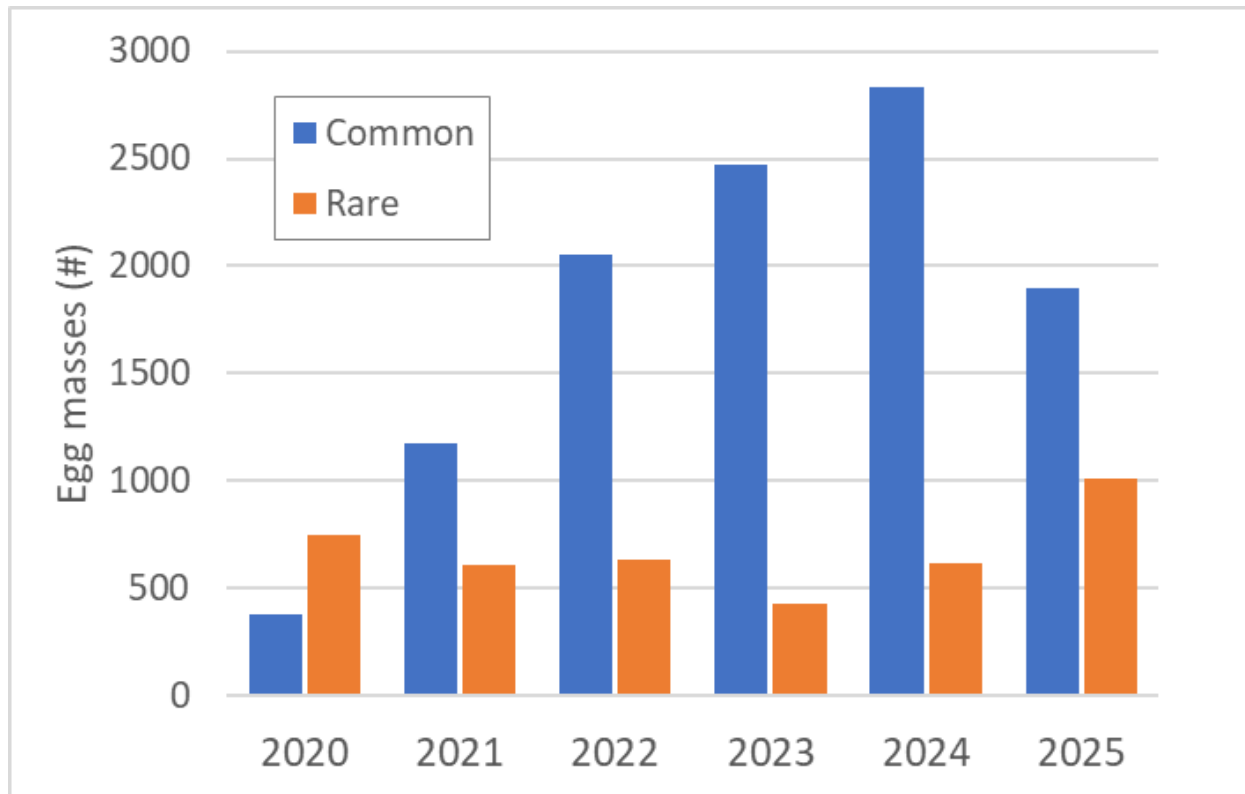
Introduction

- Community science wildlife survey collaboration
 - Johnson Creek Watershed Council
 - Management agencies
- Two goals
 - Data
 - Community engagement
- Five types of surveys
 - Amphibian
 - Dragonfly/damselfly
 - Prairie nesting birds
 - Beaver
 - Salmon



Amphibian Findings

- All native pond-breeding species!
- Habitat loss with urbanization
- Quick colonization of new ponds
- Rare species are following



Amphibian Implications

- Native amphibians are using constructed stormwater ponds!
- Key features
 - Depth
 - Plants
 - Side slopes
- Can design and manage as habitat



Dragonfly/Damselfly Findings

- Many cool species are using constructed wetlands and ponds!
- 21 species have been detected thus far
 - County record for a rare damselfly: Lyre-tipped Spreadwing
- High diversity compared to nearby wetlands
- Abundance and diversity decreasing due to vegetation growth



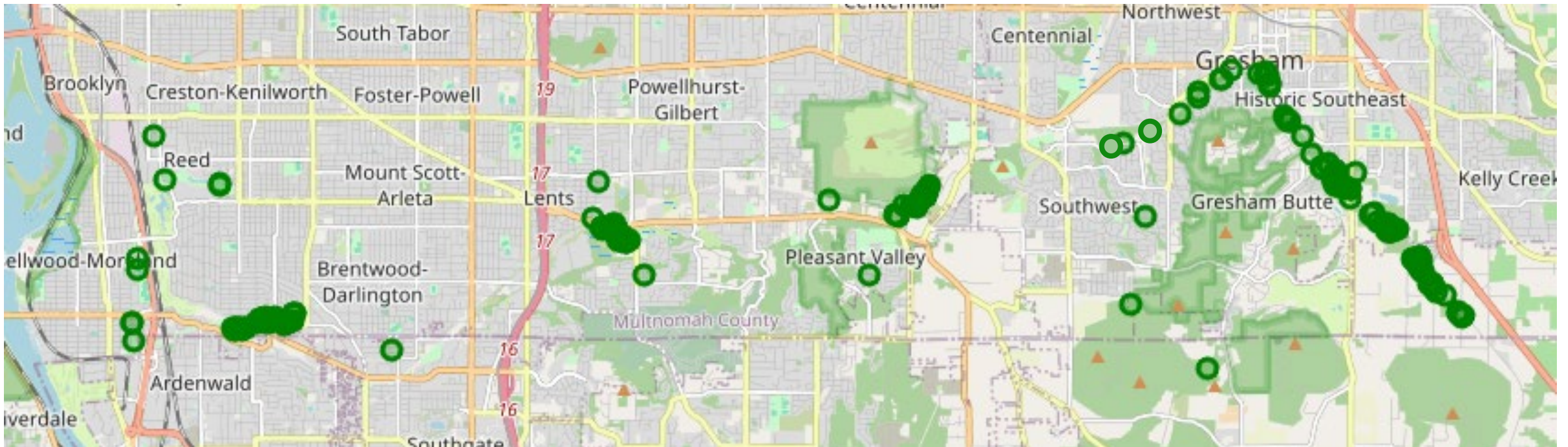
Odonate Implications

- Design for open water where feasible
- Dredge stormwater ponds when appropriate

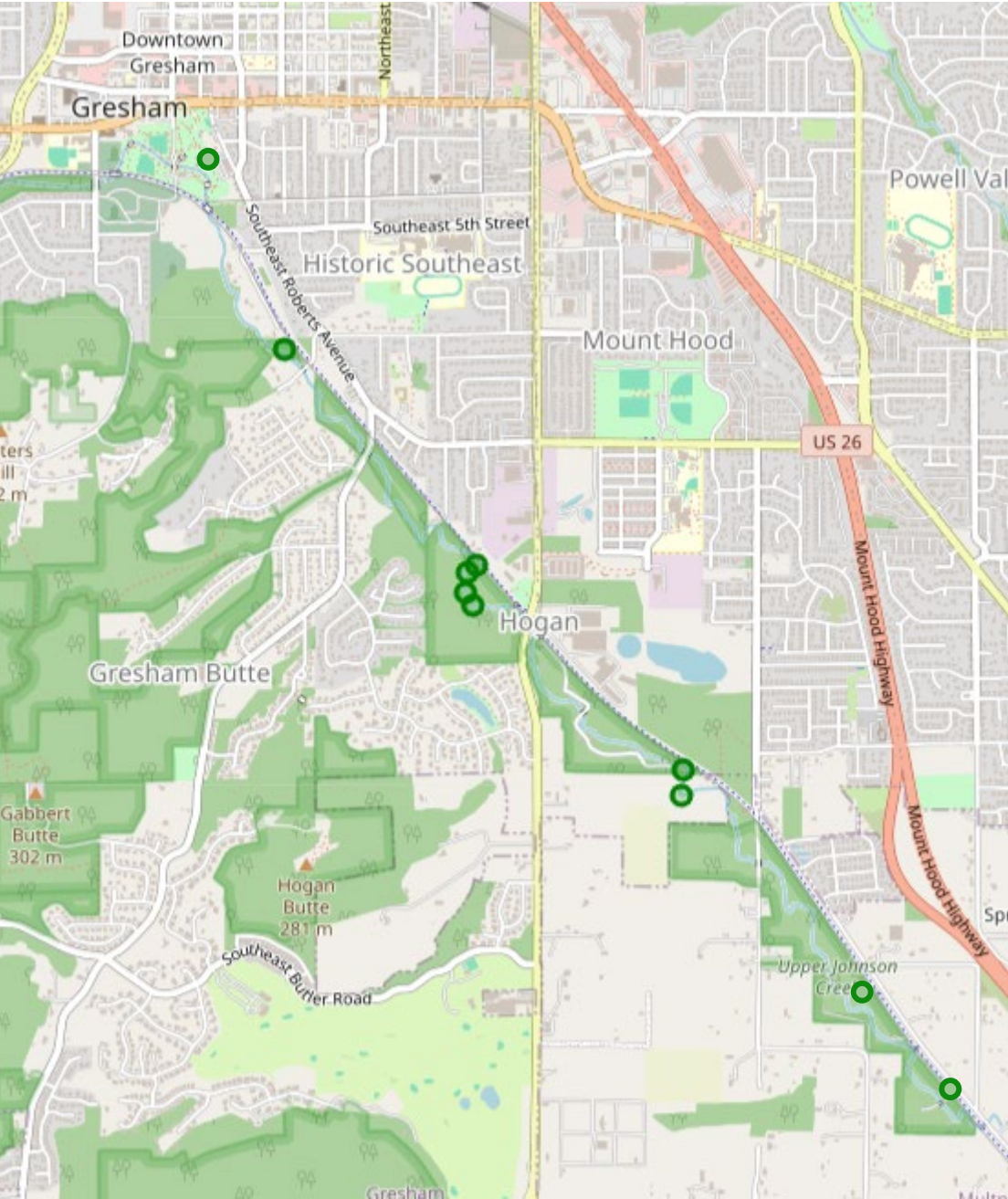


Beaver Findings

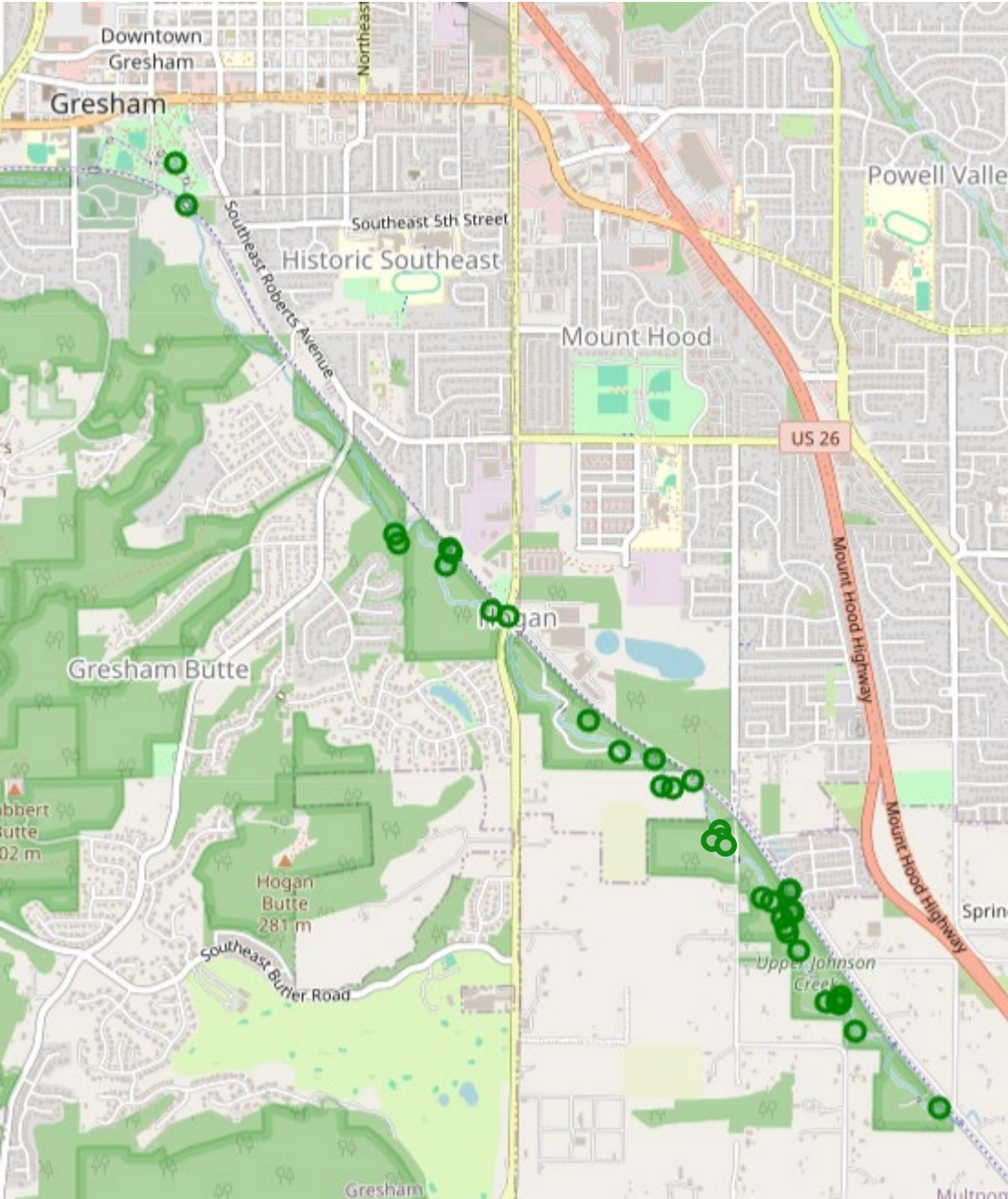
- So much activity!
 - >60 dams in 2025
- Saturating many areas of the mainstem
- Increasing over the years



2021 – 10 dams



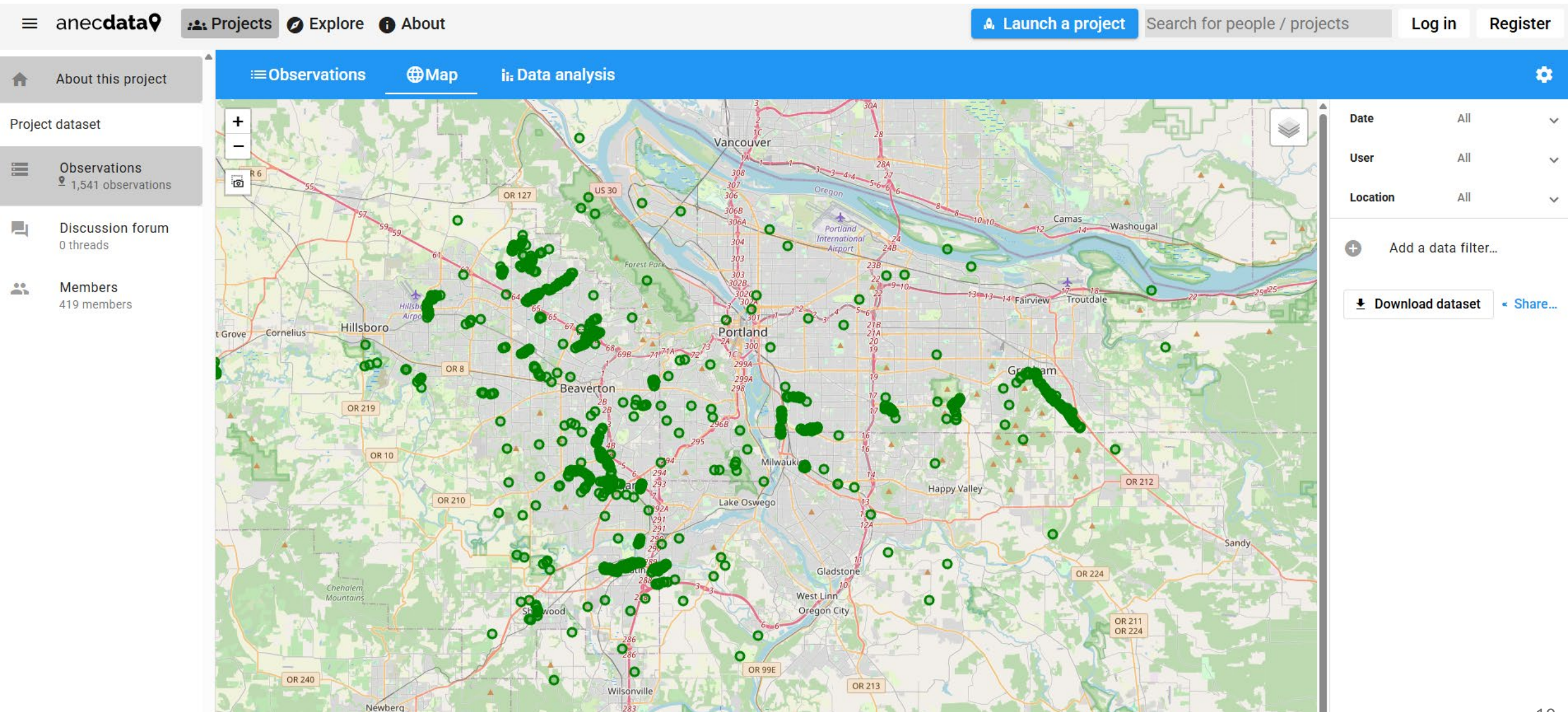
2025 – 35 dams!



Beaver Implications

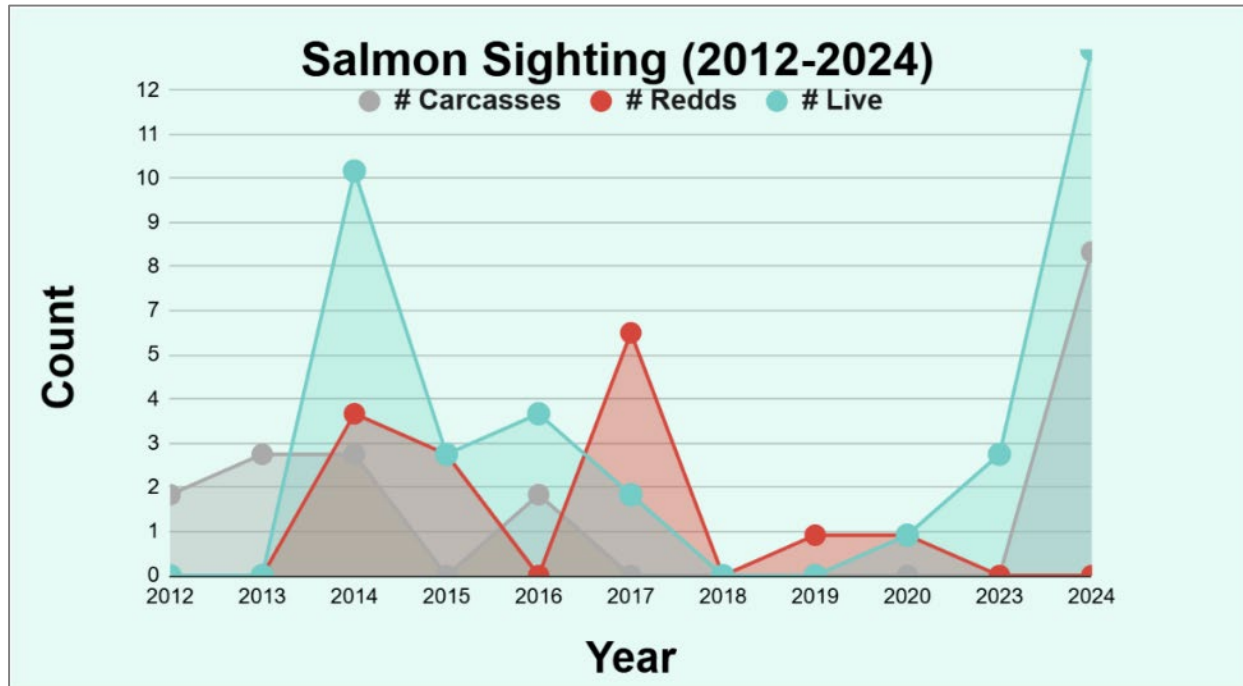
- Restoration is working!
 - Keep it up
- Manage for continued persistence
- Implement co-existence features when needed





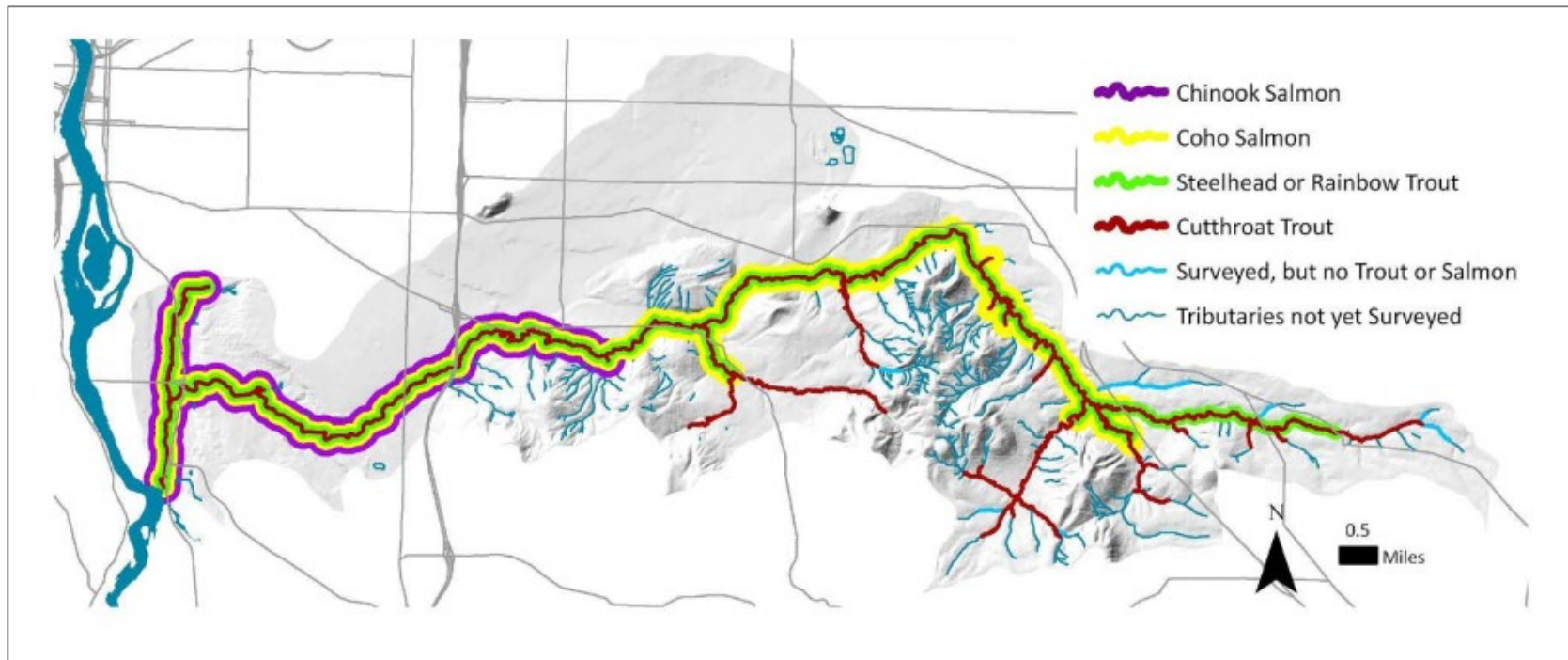
Salmon Findings

- Low numbers, but present throughout watershed
- 2024 was a good year!
- Consistent in Crystal Springs
- Few sightings in mainstem
 - Difficulties with depth and turbidity



Salmon Implications

- They are here, but still need help
- Compliments other data
 - Passage barriers, habitat surveys, juvenile surveys
 - Switch to environmental DNA (eDNA) for data in most of the watershed
- Continue fixing passage barriers and improving habitat



Salmon Implications

- Polluted stormwater is an issue
- Pre-spawn mortality
 - Likely from toxic tire dust (6PPD-q) in runoff
- Focus on stormwater treatment



Conclusions

- Community science data
 - Wouldn't otherwise be collected
 - Used by natural resource managers to improve habitat
- Many wildlife species present throughout watershed; some thriving, others need some help
 - Design/manage constructed ponds as habitat for dragonflies/damselflies and amphibians
 - Restore for beaver and build coexistence devices
 - Treat stormwater for salmon

