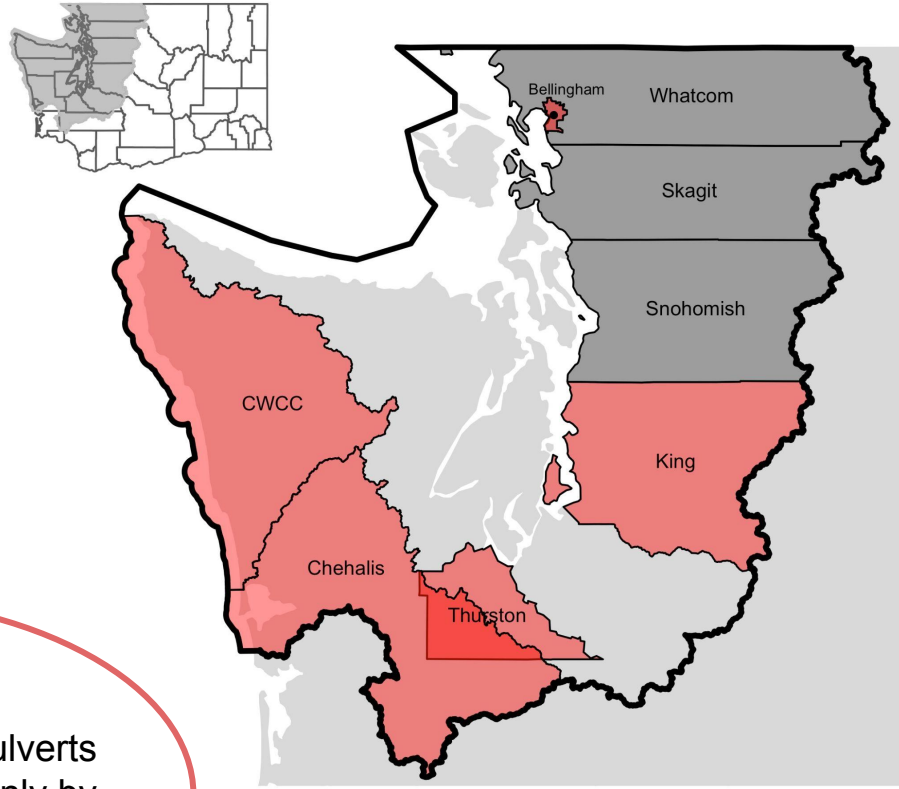
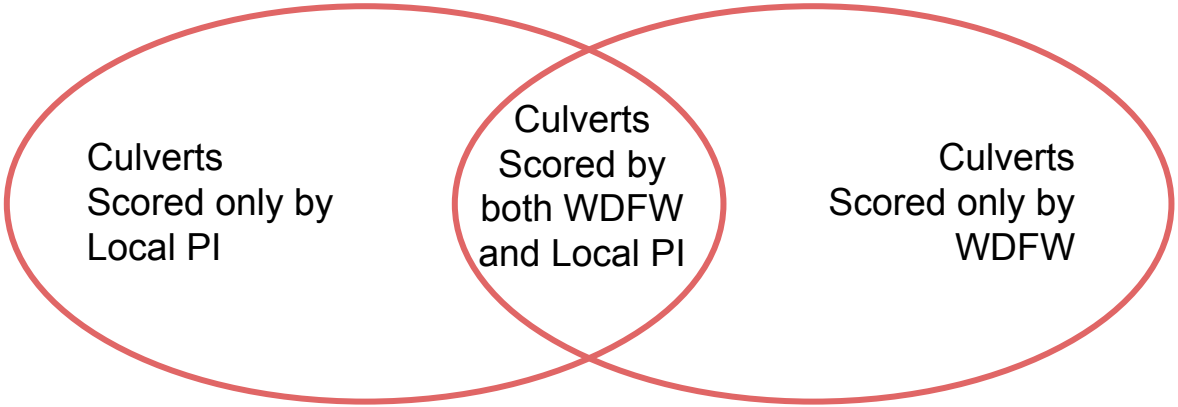
Introduction

- WA Culverts Injunction
- Culvert Prioritization Indexes

Research Question: How does the WDFW scoring inventory compare to local scoring inventories?





Data Sources

Culvert Inventory Geographies

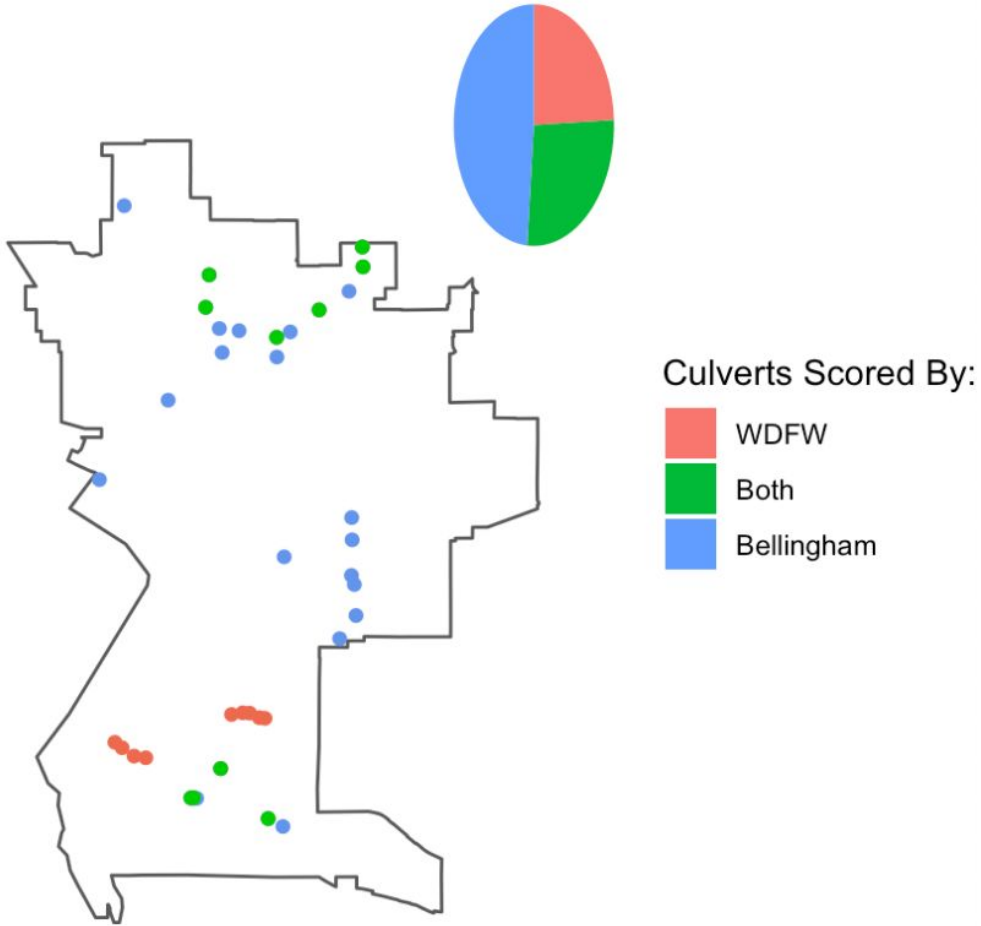
- WDFW
  - gdb: downloaded from arcGIS
- Bellingham
  - csv: scraped from table in public report
  - shp: downloaded from county website
- Thurston County
  - csv: personal correspondence
- King County
  - csv: downloaded from arcGIS
- Chehalis
  - csv: downloaded from geodataservices
- Cold Water Connection Campaign
  - csv: personal correspondence

General Geographies

- Case Area boundary
  - shp: downloaded from WSDOT
- County boundaries
  - shp: downloaded online
- WRIA boundaries
  - gdb: downloaded online

Concept

- Used WDFW ID to attach geometry
- Filtered WDFW to only barrier culverts with scores that are city owned
- Filtered Bellingham to only include barrier culverts with scores
- Subsetted to assess spatial overlap
- Future Directions:
  - Expand method to include other jurisdictions
  - Bivariate choropleth
  - Make prettier



Limitations

- Thurston County does not have lat/long data or WDFW IDs attached to their culvert inventory
- I was unable to match 4 of Bellingham's culverts to WDFW IDs when creating sf object
- When I scale up to all jurisdictions it may be difficult to view. Should I consider leaflet so that you can zoom in to see individual culverts?
- If I build the bivariate choropleth, I have to consider how to bin PI scores into high/medium/low because the legend is not continuous.
- Troubleshooting: Scatterpie is not circular