



Fish Barrier

Fish



Crystal Springs Watershed Restoration

The Grey to Green Culvert Project

Direction

- 8 culverts in 5 years
- \$2 Million
- How did we decide?
 - Inventory/ranking update (Top 8 approach)
 - Consult City staff (Equal Distribution)
 - Steering Committee of experts (Habitat First)
 - NOAA
 - USFWS
 - ODFW
 - PBOT
 - Parks
 - BES
 - Johnson Creek Watershed Council/US Forest Service

Why Crystal Springs

- Cold Water
- Constant flow
- Relatively clean
- Combined system
- Low in the system and low gradient – prime attributes for fish
- Majority of river in public ownership
- 9 Impassible culverts (juveniles most impacted)

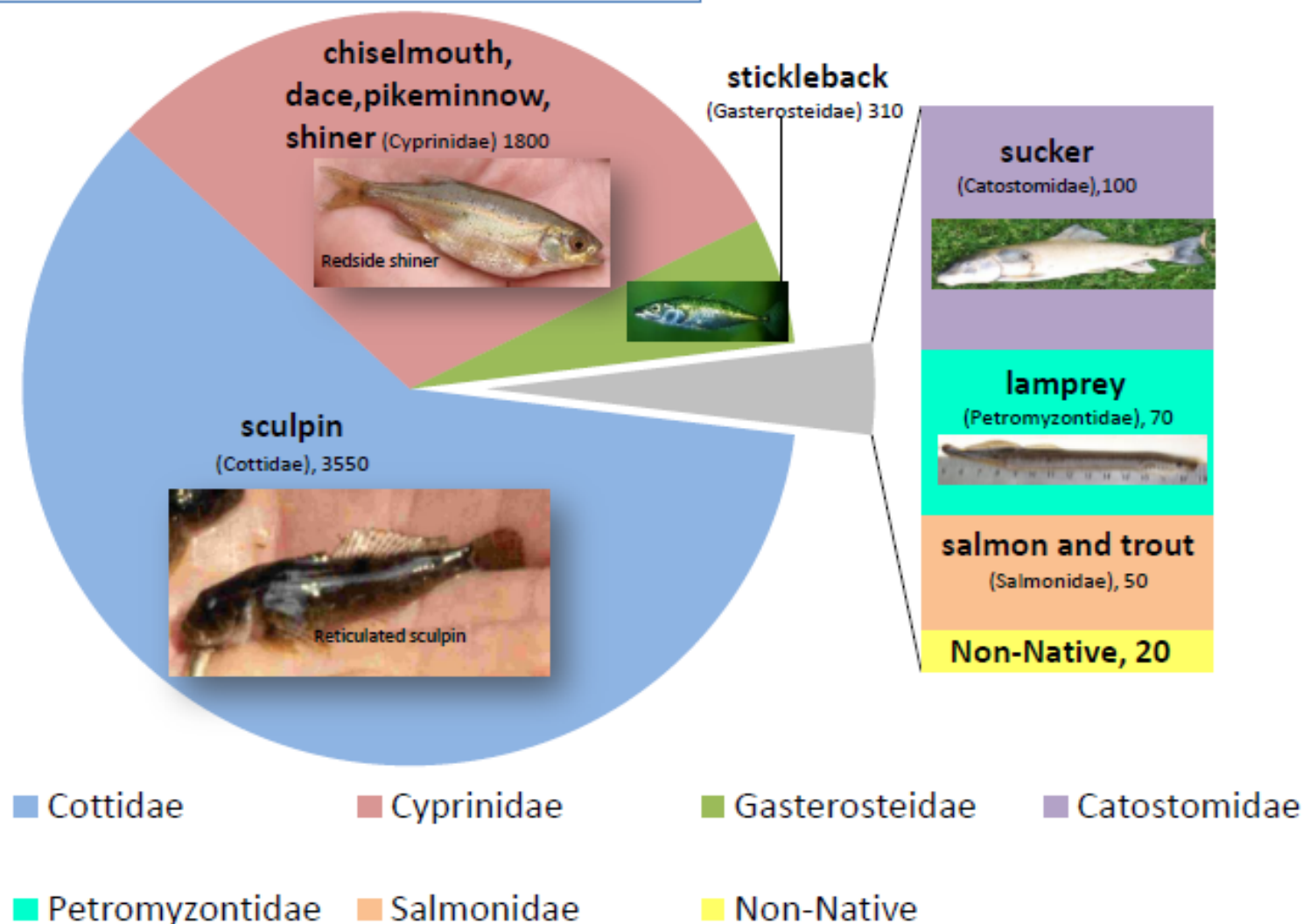
BEST CHANCE FOR SALMON RECOVERY

- We know fish are using it
- Modeling has projected improvements of 400% for some salmon with restoration
- Opens up the potential for Chum reintroduction

Crystal Springs Creek

Estimated Native Fish Counts

2008 - 2009 ODFW Survey Results

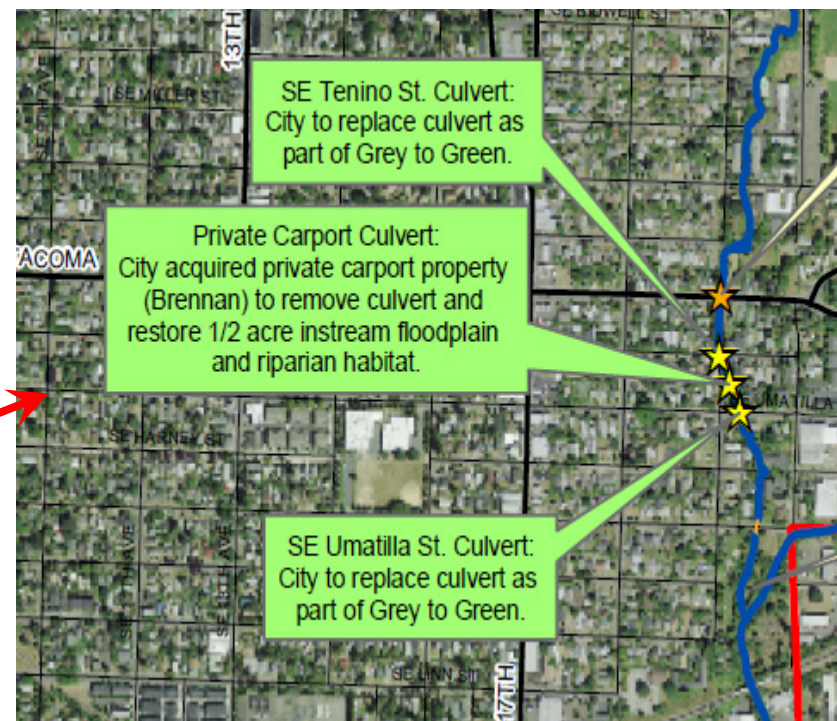
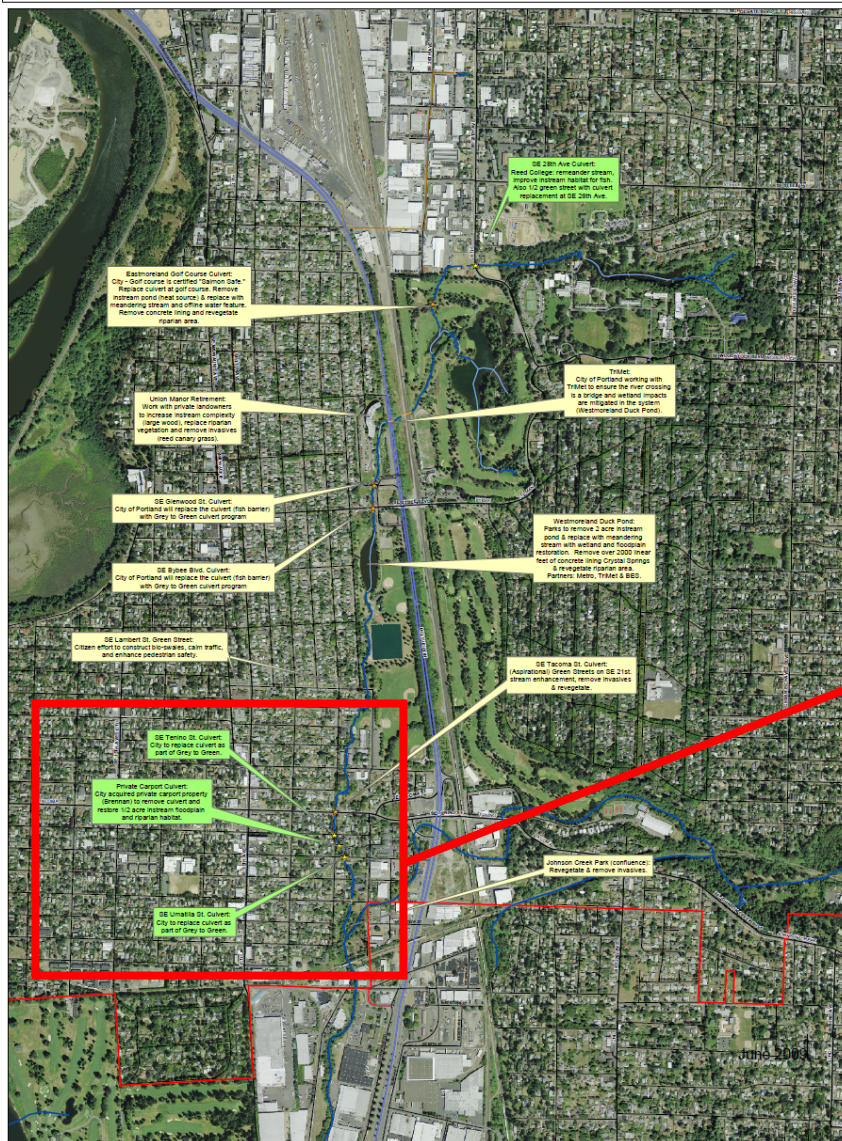


*Brown bullhead present

*Goldfish present

Total Estimated Annual Fish Count in
Crystal Springs Creek = 5900

G2G - Crystal Springs Restoration Partnership





Tenino Culvert

**Brannen culvert and
Stream Restoration**

**Umatilla
Culvert**

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Brennan Property - Before

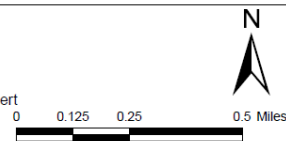
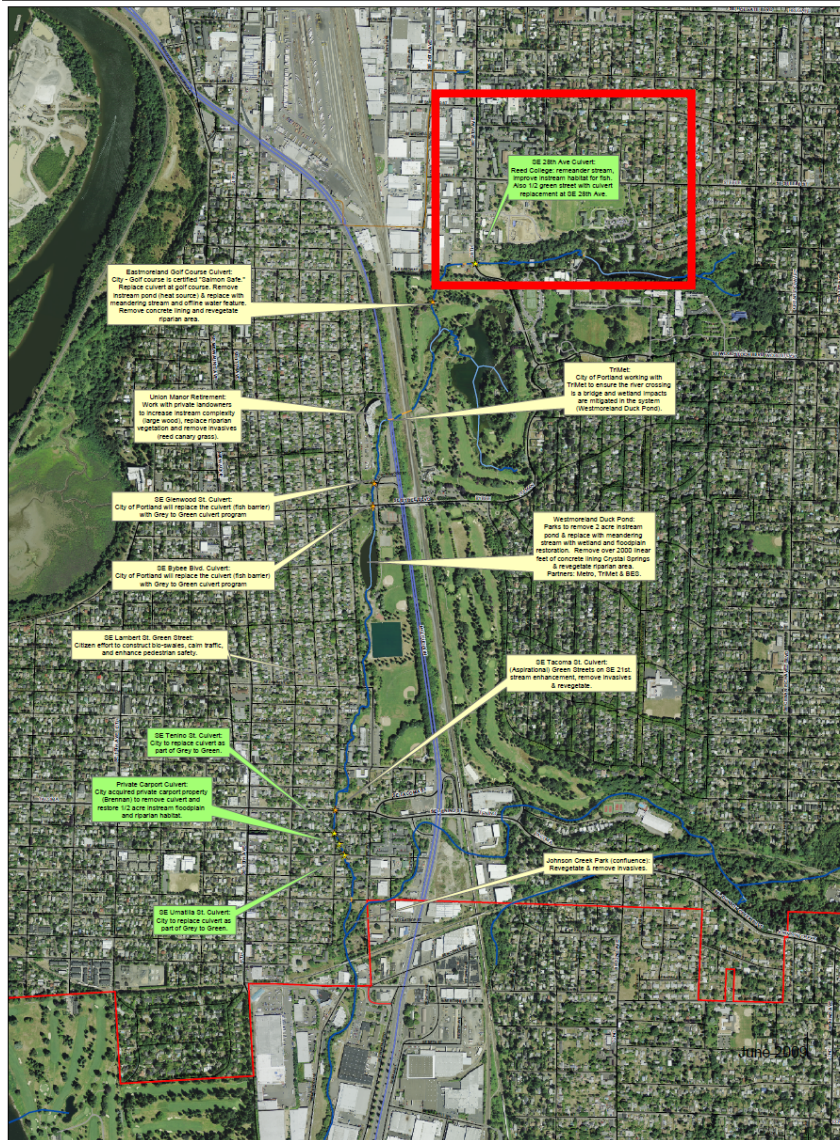


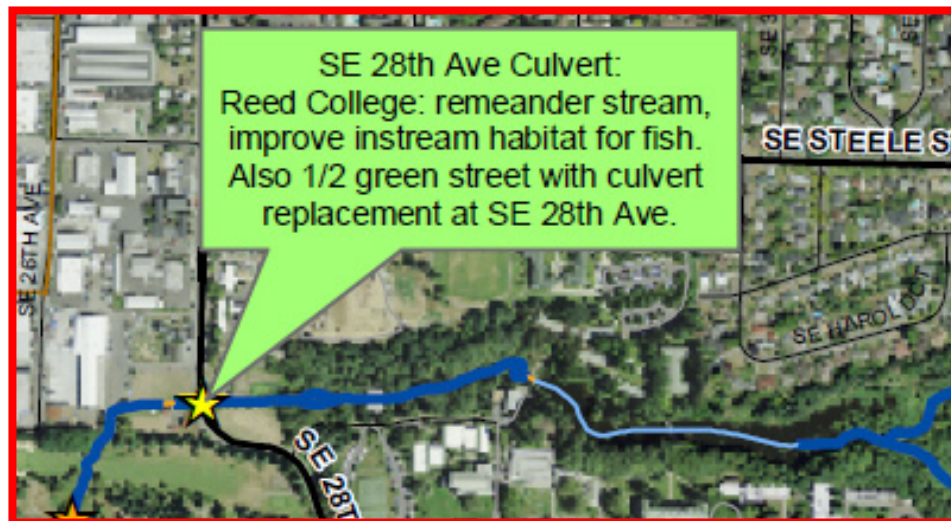
Brennan Property - After

Partners

- METRO, Nature in Neighborhoods Grant program (\$311,000 grant accepted today)
- Johnson Creek Watershed Council
- Friends of Crystal Springs
- Tri-Met
- Neighbors and residents (SMILE)
- Reed College

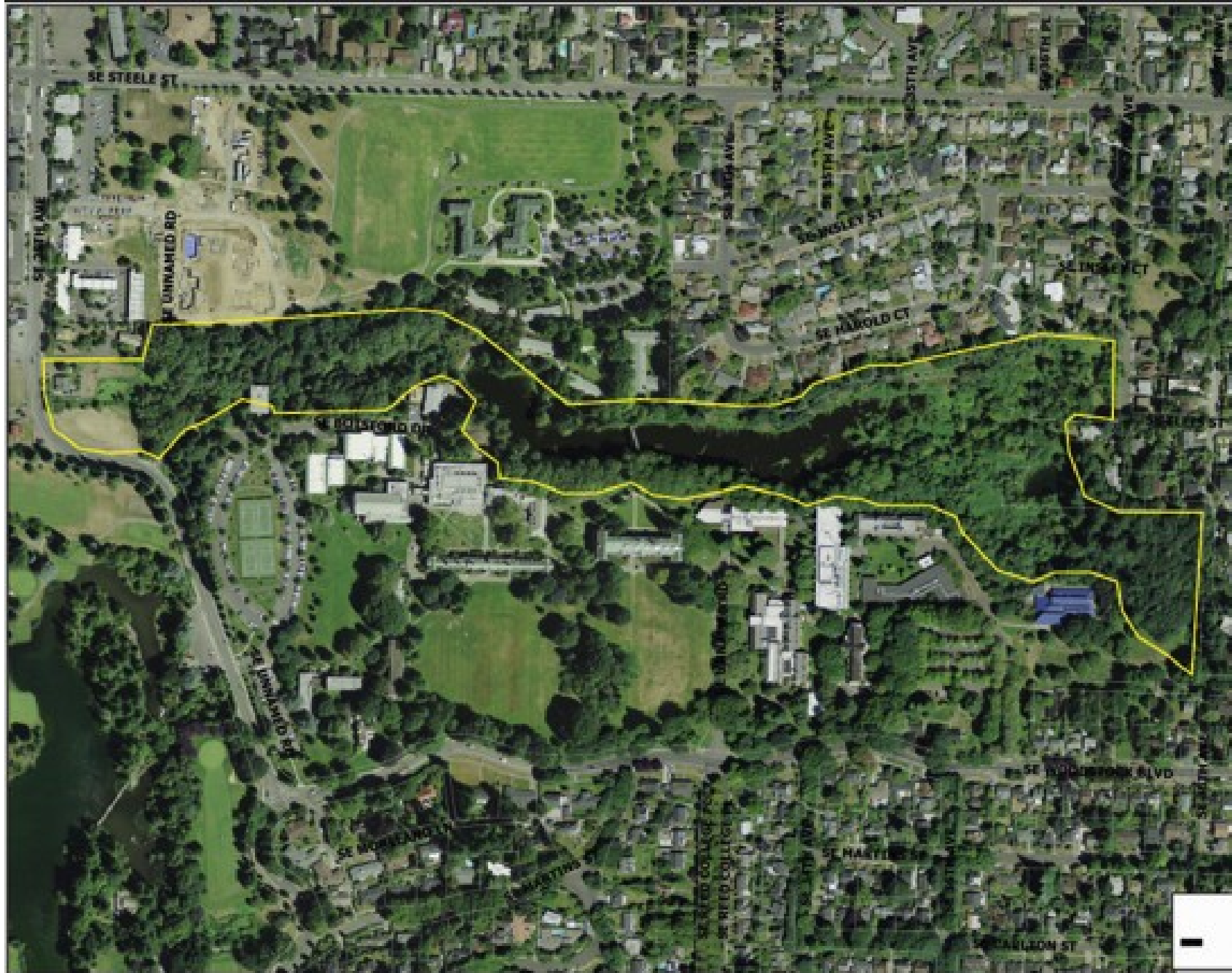
G2G - Crystal Springs Restoration Partnership





Timeline

- Summer 2010 construction for SE 28th (Reed)
- Summer 2011 construction for lower 3
- Corps 206 project funding - moving.
Success of this program will allow City dollars to make the rest happen.
- Continue to grow community involvement









Reed canyon, c. 1920





















