Urban Floodplains: Reconnecting Habitats

Laura Guderyahn
Ecologist - City Nature Division
Portland Parks and Recreation
What is a floodplain?
Why care about floodplains?

- Clean Water
- Habitat
- Flood Storage
- Groundwater Recharge
- Food
- Transportation
- Culture
Floodplain Wildlife

- Over 200 native plant species
- 100’s of invertebrates (snails, dragonflies, beetles, etc.)
- Over 100 bird species, including more than 30 species of ducks, geese and swans
  - Recent counts have shown use by more than 300,000 wintering waterfowl in upper Willamette Valley, including seven subspecies of Canada geese in winter
- At least 25 butterfly species
- 35 species of fish and shellfish
- Dozens of rare plant communities and sensitive, threatened and endangered species ranging from coho salmon and spotted frogs to the western pond turtle, upland sandpiper and sandhill crane
https://youtu.be/Ys7Qf2OwPX0
https://www.youtube.com/watch?v=pKL21y_0IuM
Desired Impacts and Potential Issues

- **Project Goals:**
  - Enhance 75 acres of wetland habitat
  - Make it possible for fish to pass between the Willamette River and the wetland refuge
  - Improve the tidal flow of the Willamette River in and out of the refuge
  - Excavating tidal slough channels and improving wetland habitats so young fish, including species listed as threatened or endangered, can use the calmer waters of the wetland to rest and find food
  - Removing invasive vegetation, such as purple loosestrife, and revegetating with native species

- **Potential Issues**
  - Short term wildlife impacts: beaver, river otter, freshwater mussels
  - Long term impacts: water levels, Audubon concerns, invasive vegetation
Your Role

- Waterfowl Survey - before and after

- Research Question - How will a more natural hydrologic/flooding regime affect how waterfowl at Oaks Bottom use the reservoir?
  - Changes to diversity and/or abundance?