Urban Wetlands in Olympia

Jesse Barham
City of Olympia, Environmental Services

Protecting and Restoring Urban Wetlands for Community Benefits

Urban Wetlands in Olympia

March 25, 2021
Olympia, Washington

- Southern tip of Puget Sound/Salish Sea
- Formerly glaciated landscape/soils
- Washington’s Capital City in Thurston County
- ~50,000+ population
- 0 - 380 feet in elevation
- 20 square miles (~90% land., ~10% water)
- ~680 ac of NWI mapped wetlands
- 8 small streams
- Mouth of Deschutes River (currently Capitol Lake)
Regulatory/Policy Context

Federal Clean Water Act
   Sections 401 (WA Dept of Ecology)/404 (USACE)
   NPDES Phase 2 - MS4 Permit

WA Growth Management Act
   City Comprehensive Plan Critical Areas Ordinance

Shoreline Management Act
   Olympia Shoreline Master Program

WA Water Pollution Control Act
Comprehensive Plan Goals

Natural Environment

**GN1**- Natural resources and processes are conserved and protected by Olympia’s planning, regulatory, and management activities.

**GN4** - The waters and natural processes of Budd Inlet and other marine waters are protected from degrading impacts and significantly improved through upland and shoreline preservation and restoration.

**GN6** - Healthy aquatic habitat is protected and restored.
Critical Areas Ordinance (CAO) and Shoreline Master Program (SMP)

**CAO** (2016 update) – Protects streams and riparian areas, wetlands, important habitats and species, landslide hazards, and wellhead protection areas.

**SMP** (updated in 2015) – Protect biology, ecology and water quality; provide public access; and prioritize water dependent uses.
2018 Update

- “Goal 3 Protect, enhance, and restore aquatic habitat functions provided by wetlands, streams, lakes, marine shorelines, and riparian areas.”
- 16 specific strategies to achieve this goal.
- Community surveys show congoing support for aquatic habitat work by utility.
Habitat Planning

1994 – City of Olympia Wildlife Habitat Study – Baseline Study
1999 – Aquatic Habitat Evaluation and Management Report
2003 – Storm and Surface Water Plan
2010 – GIS Basin Analysis
2013 – Habitat and Stewardship Strategy

Identified remaining “habitat” areas across Olympia

2018 - Storm and Surface Water Plan update

Integrated aquatic habitat work more fully into Utility
Past Planning

2013 Habitat and Stewardship Strategy
Funding and Partnerships

SSW Utility Habitat Resources
1 Environmental Habitat Planner
1 Senior Habitat Biologist - Stream Team Outreach
1 Habitat Specialist
6 seasonal vegetation crew
Potential for capital projects

Partners
Charter between Departments defining roles
Olympia Parks Arts and Recreation
• Parks Dept Stewardship Program
• Parks Planning
Local schools (K-12 and Colleges)
Community Groups and Neighborhoods
Scope and Strategies

Focus on Aquatic Habitats (streams, shorelines, wetlands and buffers)

- Public Works Properties
- Park’s Properties
- Private Properties (HOAs, residential)
- Technical Support
- Education and Outreach via Stream Team and Partnership events

(e.g. Arbor Day, MLK Day of Service)
Mission Creek Park

360 acre Mission Creek watershed
37-acre park w/15 acres of headwater wetland

2015
Assessment with recommendations for a multi-year partnership to implement w/Parks and SSW

2015-2018
Crew - site prep and invasive species control.
Volunteers installing willow and woody plantings

2018
Summary Report of work to date
RCG to Willows

2018

2021
Buffer Establishment

1.5 acre Wetland buffer enhancement

1200 woody plants installed in 2018

Competition control trials

Shrub and Forested blocks to preserve view corridors
Existing Buffer Enhancement

Invasive control
(English hawthorn, blackberry and holly)

Underplanting with natives
(e.g. Western red cedar, vine maple)
Work Accomplished

Conversion of RCG to willow thickets (3.5 acres)
Improve wetland buffer conditions
  Blackberry, holly, hawthorn removals (5+ acres)
  Under-planting native species (e.g. cedar)
  Expand woody buffer - 1.5 acres woody plants
Installed over 6700 native plants and 2.25 lb native seed
5 large events involving 349 volunteers
Lessons Learned for Urban Areas

Partnerships and Community Support

Adjacent jurisdictions (outreach and watershed planning)
City departments - (Parks, Public Works, Planning)
Community groups - (Neighborhoods, Non-Profits)
Local schools - (K-12, Colleges and Universities)
Private Citizens - (Landowners and Volunteers)
Technical assistance and labor

More gets done when working together!
Thanks!

Jesse Barham  jbarham@ci.olympia.wa.us
Olympiawa.gov/waterplans