

October
2020

Integrated Floodplain Management in King County

Carol Macllroy
Floodplains by Design

Brandon Parsons, PLA
American Rivers

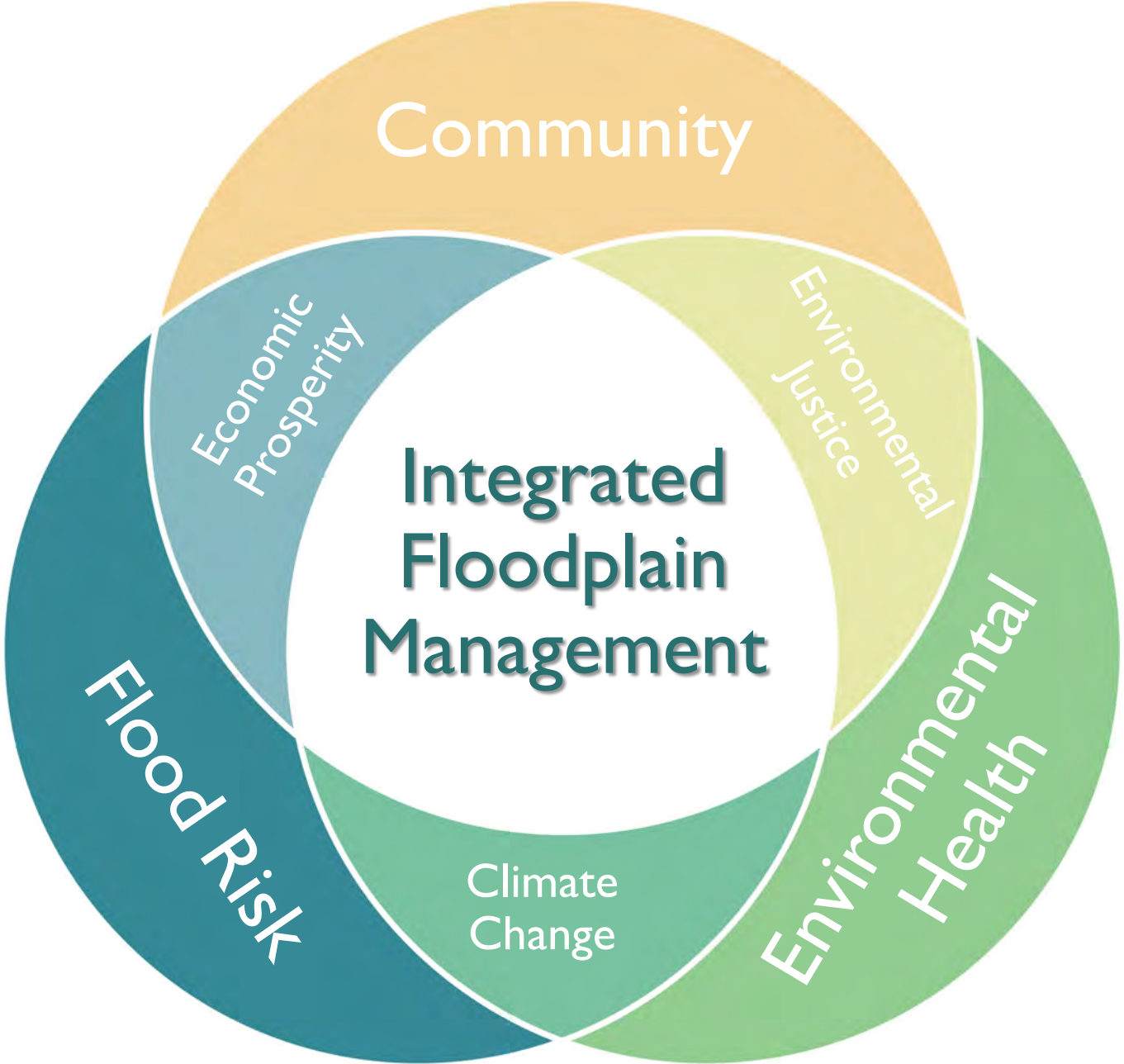
Mo McBroom
Previously of TNC





Integrated Floodplain Management

“An approach in which we move past unintended consequences and siloed management, toward a collaborative model that maximizes benefits and reduces costs to people and nature.”



Integrated Floodplain Management delivers.

- More money
- More partners
- More support
- Better results
- More efficiently



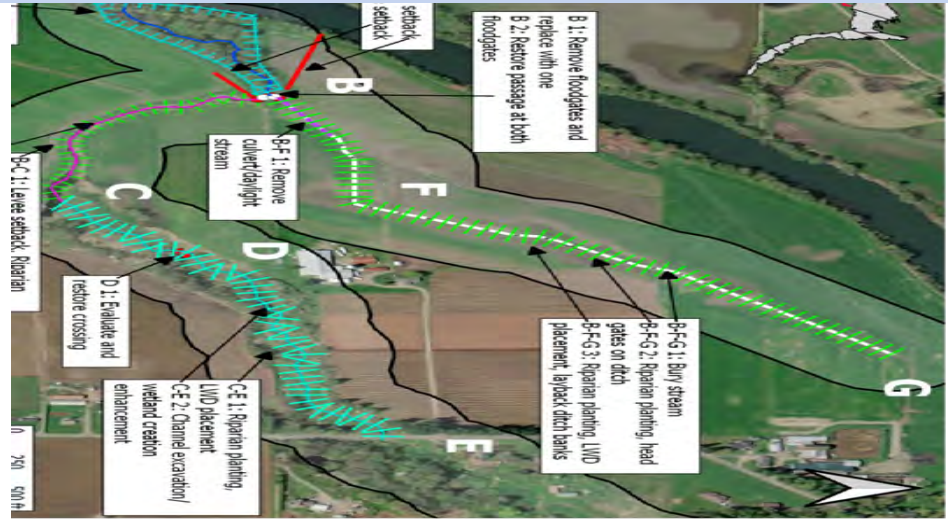


Rich Appel: Pointing at "Lake Appel" – Flood 2020



Reach 2: Design Charrette

In progress: Flood, fish, farm solution to "Lake Appel"

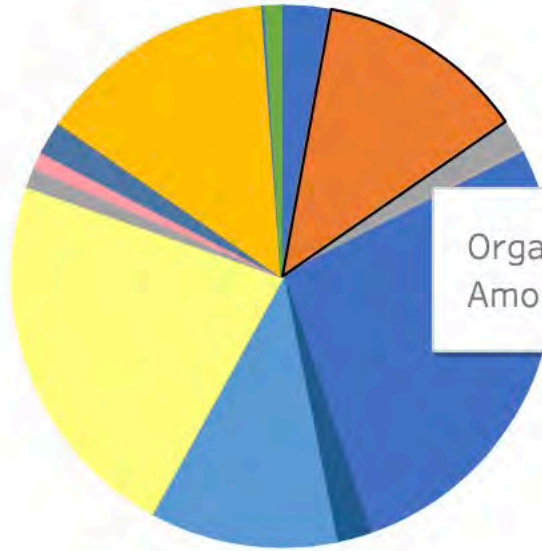


Nooksack/Whatcom County

53M in coordinated expenditures

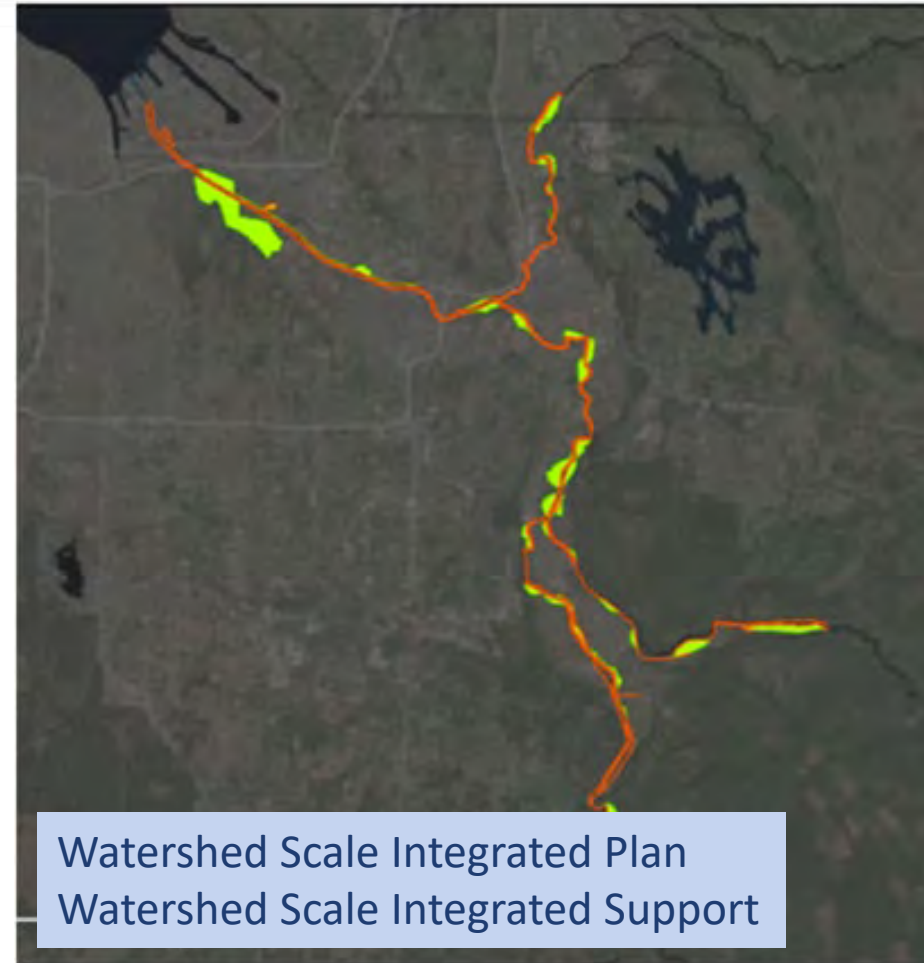
Organization

- Conservation Futures
- Flood Control Zone District
- Pierce Conservation District
- City of Orting
- City of Sumner
- Real Estate Excise Tax
- Surface Water Management
- Floodplains by Design 1
- Floodplains by Design 2
- Floodplains by Design 3
- Pacific Coast Salmon Recovery Fund
- Pre-Disaster Mitigation
- Private
- Salmon Recovery Funding Board
- Terry Husseman Account
- WA Department of Commerce



Organization: **Flood Control Zone District**
Amount: **\$6,465,793**

Puyallup: Floodplains for the Future





*Getting Smarter About
Where and How to
Invest*

Ford Levee Setback, Puyallup River

Calistoga Levee Setback, Puyallup River

CALISTOGA LEVEE SETBACK AT WORK

2009 – 16,000+cfs = 26,000 Orting residents evacuated

2014 – 16,000+cfs and only a handful of people evacuated





“What the city has done [is]...giving the river more space, keeping more flow in the river so that flow doesn’t have to go through town. In turn, we’ve done a much better job now of preparing for flooding disasters.”

Zane Gibson

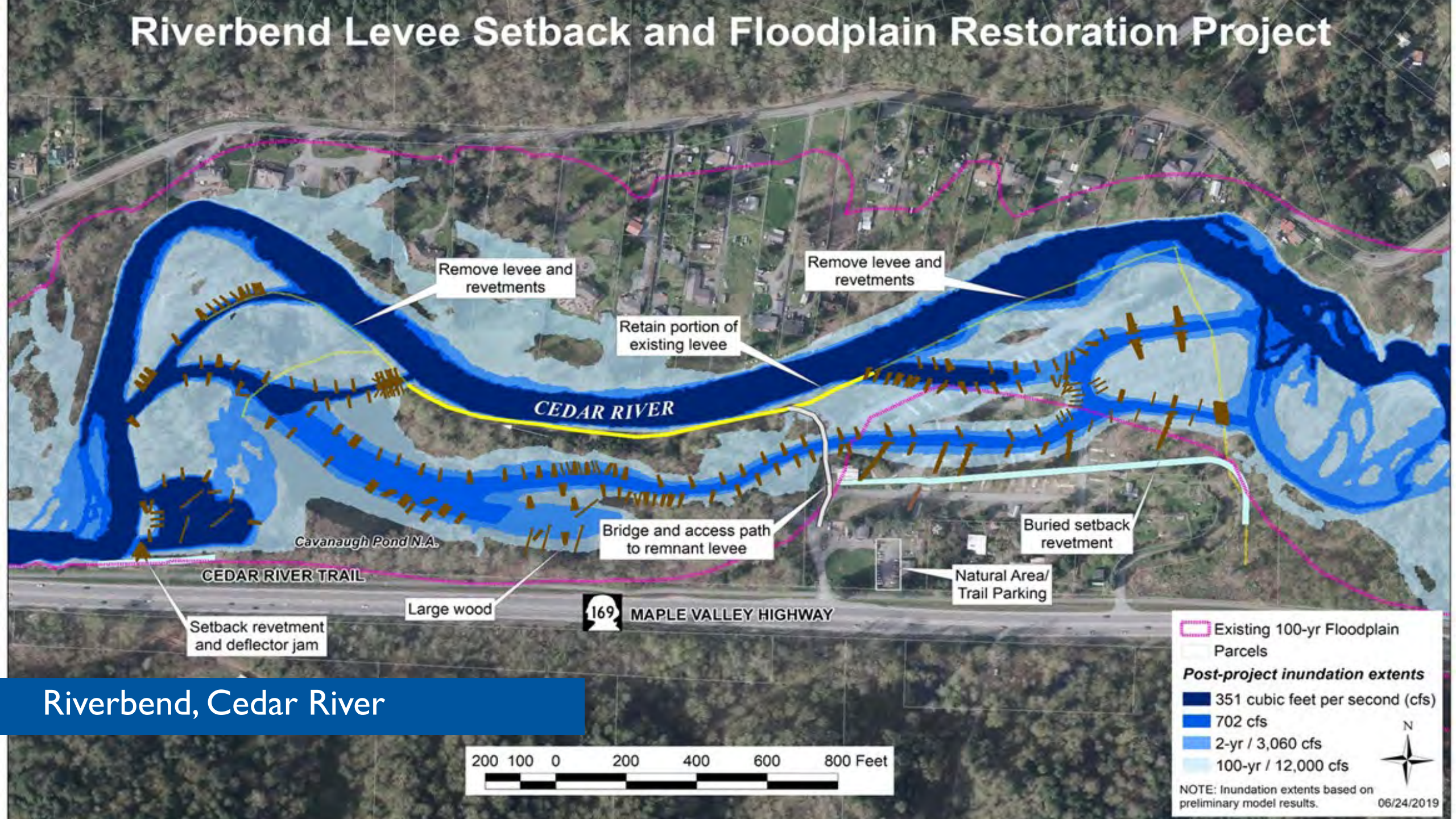
Orting Valley Fire & Rescue

02/10/2020

Flow: 5,530 CFS @ Renton



Riverbend Levee Setback and Floodplain Restoration Project



Riverbend, Cedar River



Riverbend Reach -
Feasibility and Design,
80 acres

Rainbow Bend -
Restoration
Completed in 2013,
40 acres

Public Lands

Taylor Reach -
Future Acquisition
Targets, 75 acres

Cedar River

169

169

Cedar River



Downey Farmstead, Green River

Reduced Flood Risk

NAPA, CALIFORNIA

\$1 B

avoided damages

PORTLAND, OREGON

\$30 M

avoided damages over 100 years

TUCSON, AZ

\$69 M

avoided damages

WATERBURY, VERMONT

20%

reduction in flood damage

Increased Tax Revenue and Jobs

DENVER, COLORADO

\$64 M

new property tax revenue annually

NAPA, CALIFORNIA

1,248

permanent jobs

TORONTO, ONTARIO

\$373 M

new property tax revenue

KING COUNTY, WASHINGTON

24

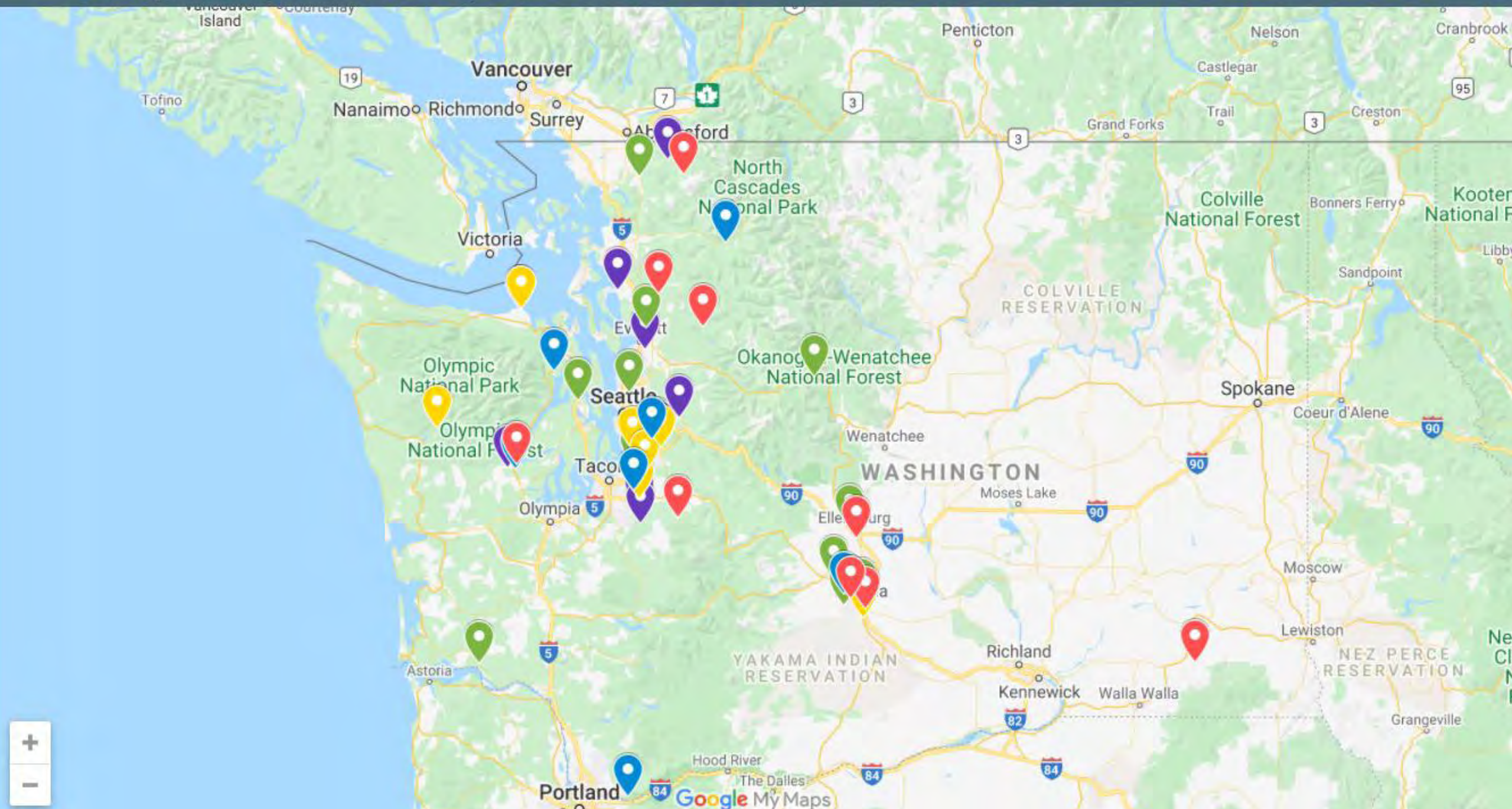
full time jobs





Floodplains by Design Projects

This map was created by a user. [Learn how to create your own.](#)





Floodplains by Design Funding

\$165 million since 2013 - \$44 million in King County

- ✓ \$4,103,000 – Lower Cedar Mobile Home Relocation
 - ✓ \$3,328,000 – Snoqualmie at Fall City Floodplain Restoration
 - ✓ \$4,901,000 – Lower Green Levee Improvements & Habitat Restoration*
 - ✓ \$3,649,000 – Porter Levee/Middle Green Flood, Habitat & Farm
 - ✓ \$5,000,000 – Cedar River Corridor Plan Early Implementation
 - ✓ \$7,500,000 – Riverbend Reach Construction Phase 1
 - ✓ \$10,309,278 – Restoring Snoqualmie River Floodplain Processes (Pending)
 - ✓ \$3,326,680 – Downey Farmstead Restoration (Pending)
 - ✓ \$2,061,856 – Pacific Right Bank Flood Protection (Pending)
- * King County Flood Control District applied



Federal Programs

- ✓ *FEMA and EPA promotes natural infrastructure in Hazard Mitigation Plans*
- ✓ *U.S. Army Corps of Engineers WRDA 2016 & 2018*
- ✓ *U.S. Army Corps of Engineers Engineering with Nature*
- ✓ *FEMA's Building Resilient Infrastructure & Communities (BRIC) Program*



Thank you!