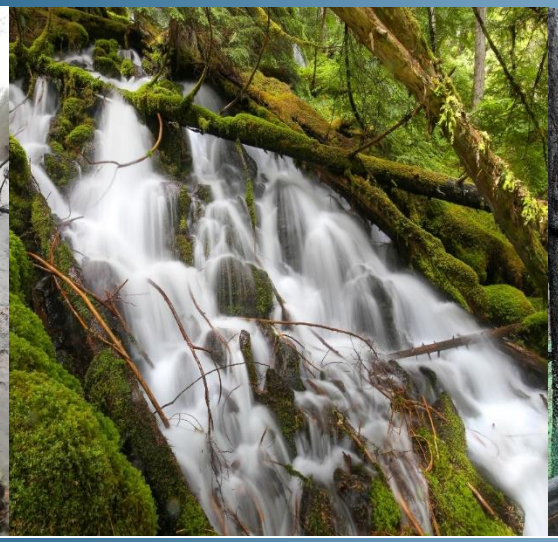
Holiday Farm Fire, McKenzie Watershed


Post-Fire Recovery & Restoration

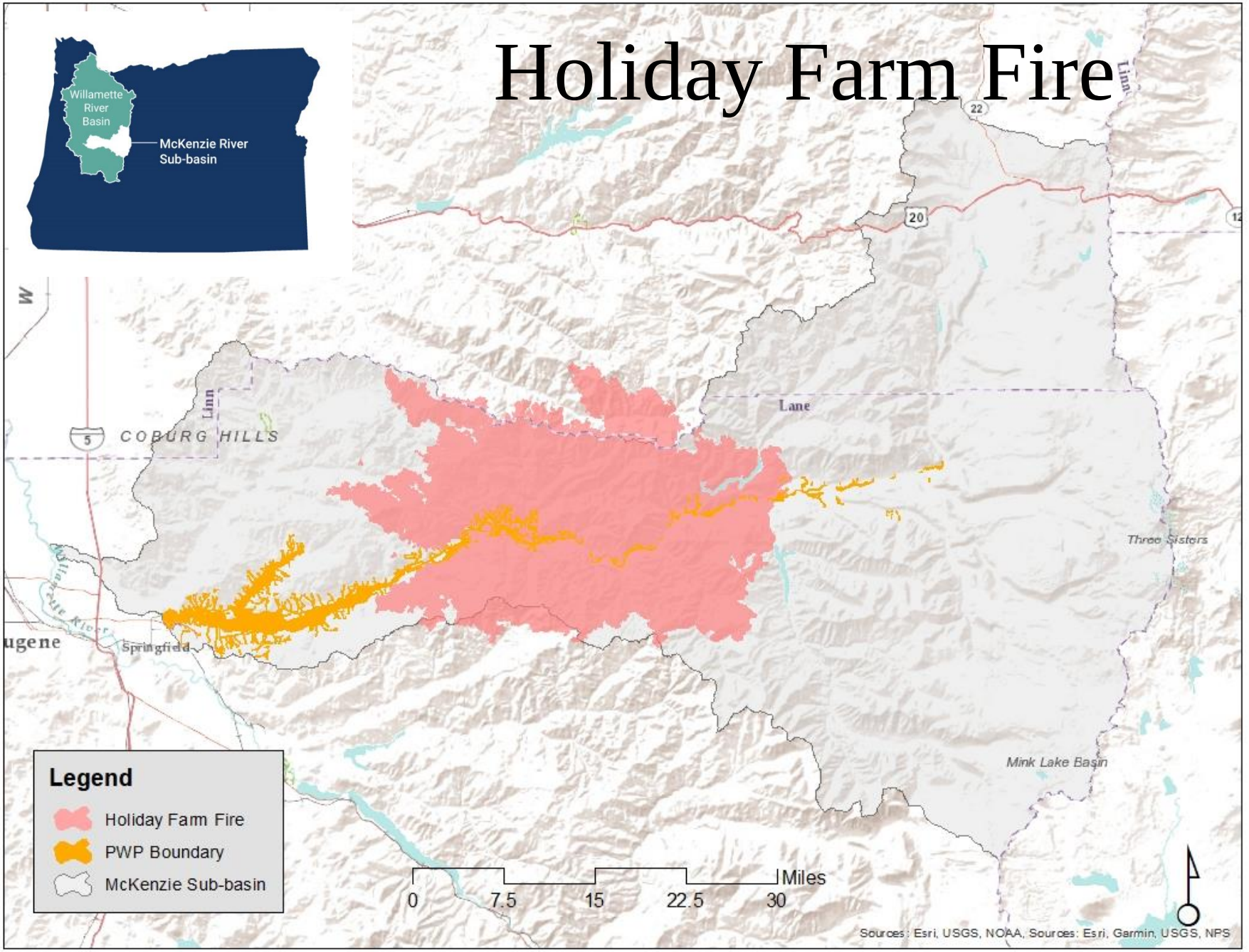
Karl Morgenstern
Watershed Restoration Program Manager

Water Committee Hearing
November 16, 2021

Eugene Water & Electric Board

EWEB

Holiday Farm Fire

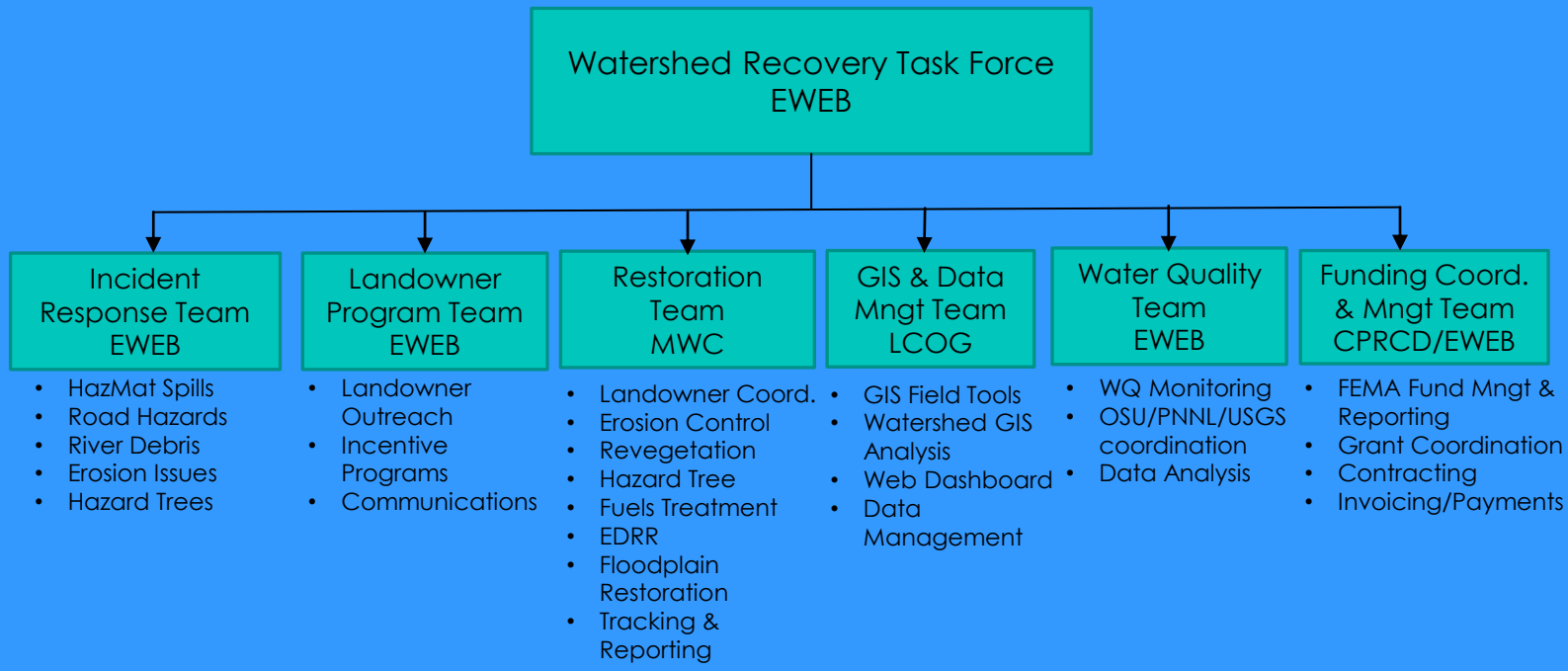


Threats

Toxic ash, debris, asbestos, hazardous materials, metals, nutrients, sewage, sediment, and organic matter washing into waterways.

Over 430 homes destroyed

Photos taken shortly after having access to fire impact area



Special recognition for the core Pure Water Partners (PWP) team that continues to collaborate on the HFF response:

- McKenzie Watershed Council
- Upper Willamette Soil & Water Conservation District
- McKenzie River Trust

Pure Water Partners Program (PWP)

PURE WATER PARTNERS

Purpose: Reward good stewardship through payments to landowners who ***maintain healthy riparian areas*** over long term and help facilitate restoration on other properties that need work.

- Primary focus: *protection* of healthy riparian forests (much more cost effective than *restoration*)
- Goal: align funding from multiple watershed partners, grants, and private funding

McKenzie Watershed Council · Upper Willamette Soil & Water Conservation District · McKenzie River Trust · EWEB · Forest Service U.S. Department of Agriculture · Metropolitan Wastewater Management Commission — partners in wastewater management · Cascade Pacific Resource Conservation + Development

Re-oriented our Pure Water Partners Program

Offered burn assessments to fire-affected landowners

- Required a signed access agreement to evaluate property
- Evaluated erosion concerns, hazard trees and soil conditions
- Made recommendations for short and long-term erosion control measures and replanting

Installed erosion control measures

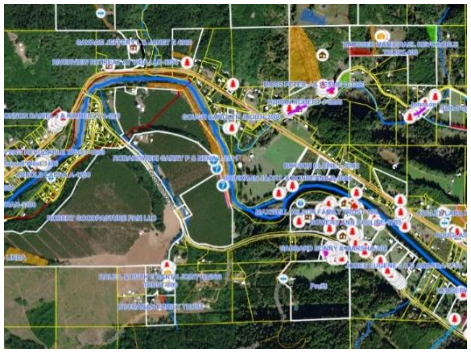
- Wattles, silt fences, hydroseeding, seeding and mulch
- Required landowners to sign an agreement to allow for work on the ground




Emergency Response Phase (Oct 2020 – April 2021)

EWEB Board approved $1,000,000 in emergency funding to address immediate threats (seeking FEMA reimbursement)

Stabilization
Stabilized 139 of 150 high priority destroyed homes along the river



Assessments
Completed 273 burn assessments

Erosion Control
Installed over 300 erosion control BMPs on 123 properties

Reveg./Erosion Control
Hydroseeded severely burned slopes on 19 properties

Riparian Plantings
Revegetated 90 riparian acres w/210,000 native plants across 89 properties

Transition to Watershed Restoration Phase (May – Present)

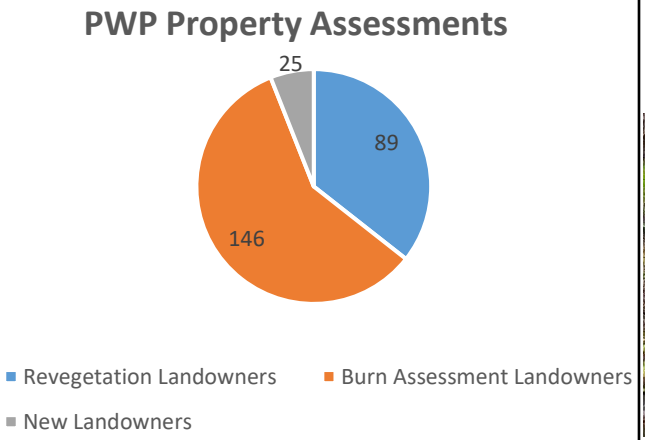
<u>GIS Field Tools</u>
Redesigned field surveyor data collection tools – ranks/prioritizes plantings, erosion, fuels, and invasive issues; feeds work to contractors

<u>Erosion Control</u>
Implement erosion control BMPs fall/winter. Completed BMPs on 11 properties so far

<u>Fuels Treatments</u>
Using NYC and contractor to reduce fire fuels identified in assessments. To date completed fuels treatments on 62 properties

<u>Plant Maintenance</u>
Using NYC and contractors to mulch and irrigate new plantings due to drought focused on 35 of the 89 properties

<u>Invasive Vegetation</u>
Using contractors and NYC to use IVM methods to treat invasive weed issues in riparian areas on 68 properties

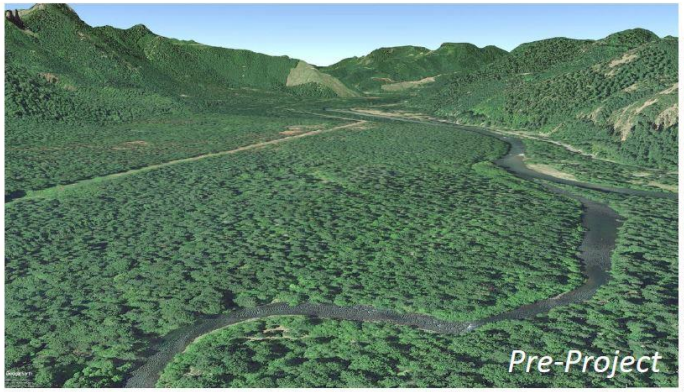


Revegetation Phase 2 (January – March 2022)

- Will receive over 500,000 native shrubs and trees for planting this winter
- Prioritize riparian streambanks and floodways for revegetation
- Interplanting of 2021 revegetation areas due to drought causing 40-60% mortality

<u>Riparian Plantings</u>
Currently developing riparian planting plans for over 100 properties totaling 225+ acres

Floodplain Restoration Projects



- Projects designed to remove berms and other features restricting channel access to floodplain
- Use material to fill in incised channel to reset floodplain elevation
- Spreads-out flow, reduces velocity, drops out sediment, provides excellent habitat
- Resiliency to floods, fires & droughts

MRT Finn Rock Reach Floodplain Restoration Project (Before)
June 2021

MRT Finn Rock Reach Floodplain Restoration Project (After)
October 2021

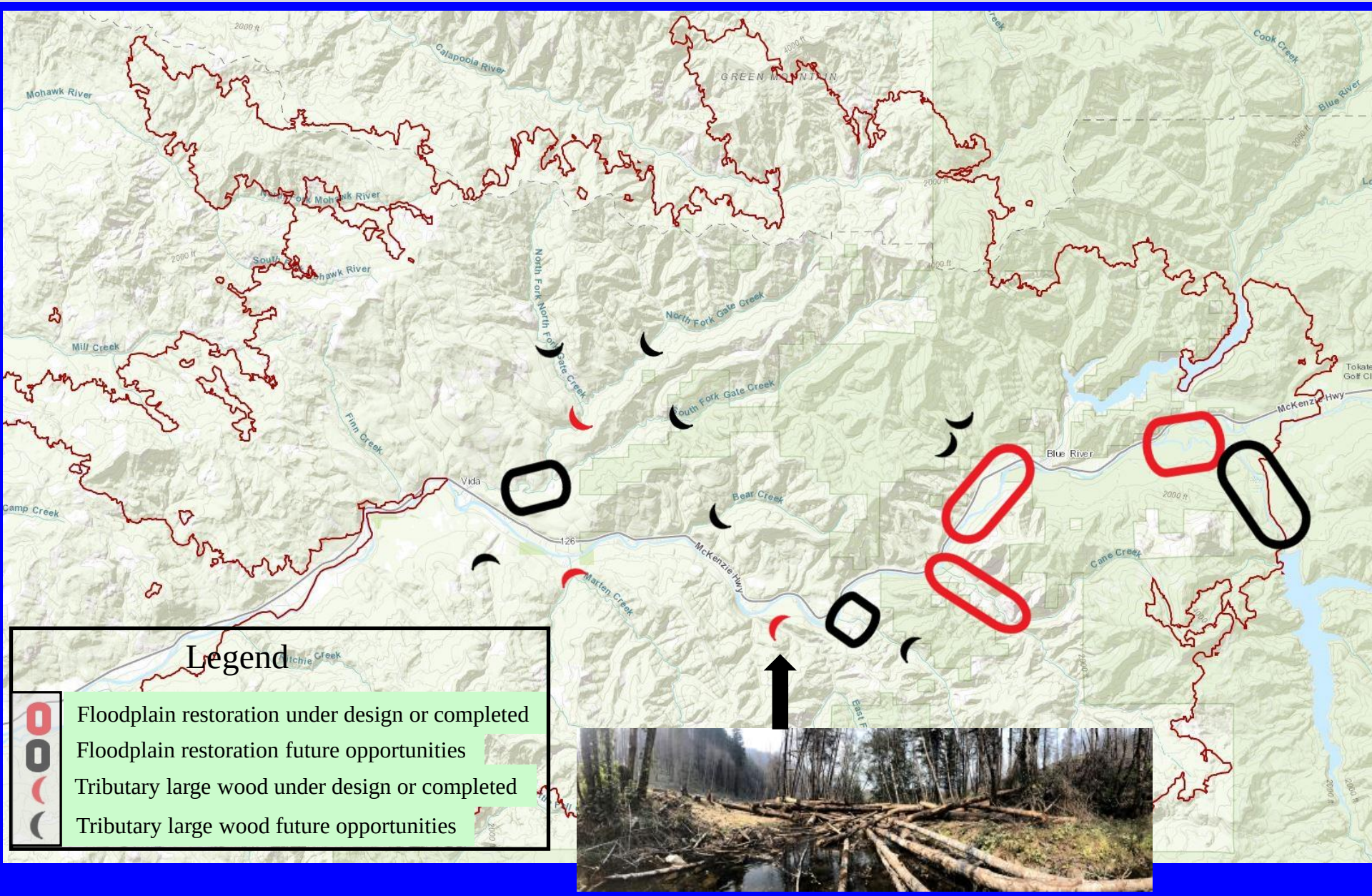
Deer Creek Before and after restoration work

February 2021

October 2021

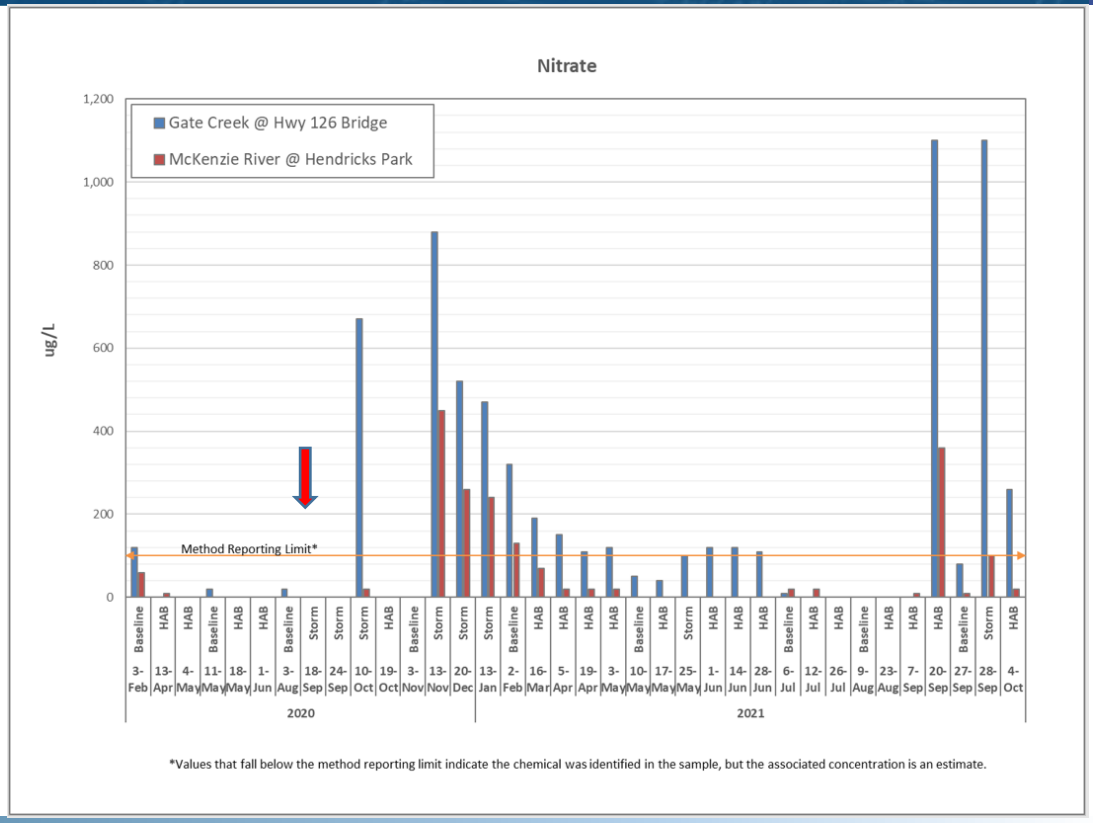
View from the upper bridge looking down stream

Floodplain & Tributary Restoration Project Locations



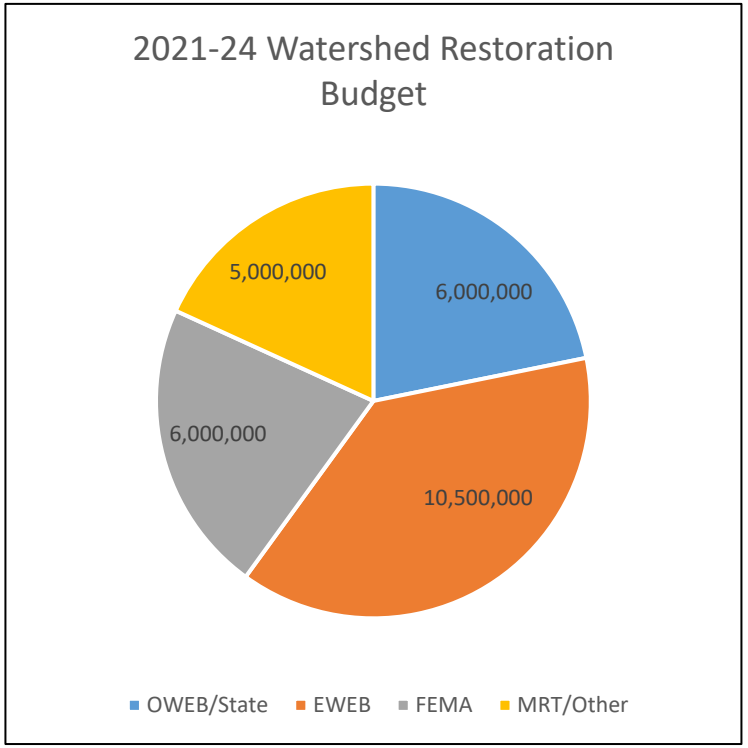
Water Quality Impacts – Nitrate

- Concentrations in raw water are well below any health-based criteria or MCLs.
- Little change to water quality during base flows or without storms.
- Increased concentrations of metals, nutrients, solids, bacteria, and organic carbon during storm events.
- Lack of large storms immediately post-fire was good for water quality.



Funding Summary

- EWEB Board approved Watershed Recovery surcharge ($3/meter) that will sunset in 60 months raising $12.3 million
  - Floodplain & Tributary Restoration
  - Riparian Revegetation
  - Floodway land acquisitions
  - Erosion, Invasive Weeds, Fuels Treatments
  - Septic systems, smarter rebuild incentives
  - Water quality monitoring
- State Legislature approved $4 million for McKenzie restoration (via OWEB)
  - Floodplain & Tributary Restoration
  - Riparian Revegetation
  - Land acquisition
- State Legislature approved $1.5 m for septic systems
- FEMA funding is pending (floodplain restoration)
- McKenzie River Trust matching EWEB w/$3 million for floodway acquisitions



http://www.eweb.org/community-and-environment/mckenzie-watershed-protection

EWEB

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