December 8, 2021

POST FIRE RECOVERY



OUR MISSION

Providing opportunities for stakeholders to cooperate in promoting and sustaining the health of the watershed and its communities.







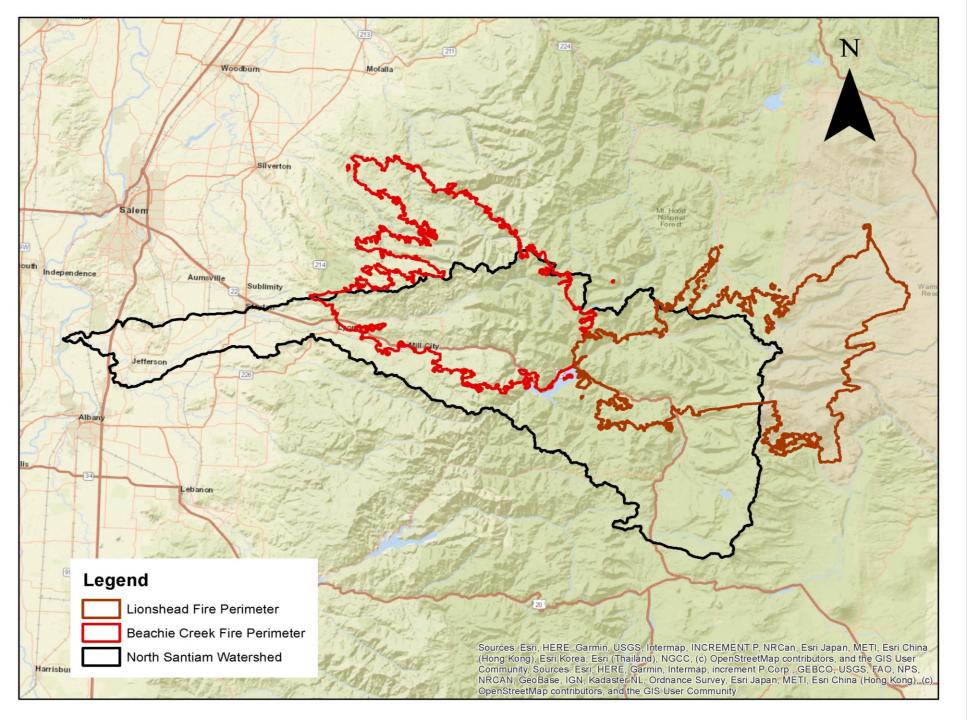
North Santiam Watershed Council Programs

Landowner Restoration

Collaborative Planning & Partnership Building

Community Engagement & Education

Programs are tailored toward protection and restoration of the watershed's natural resources



- Beachie Creek & Lionshead Wildfires: September 7-10, 2020. Continued to put out spot fires for weeks.
- Combined the two fires burned almost 400k acres.
- The North Santiam Watershed is approximately 500k acres.
- 223k of those 500k acres burned.









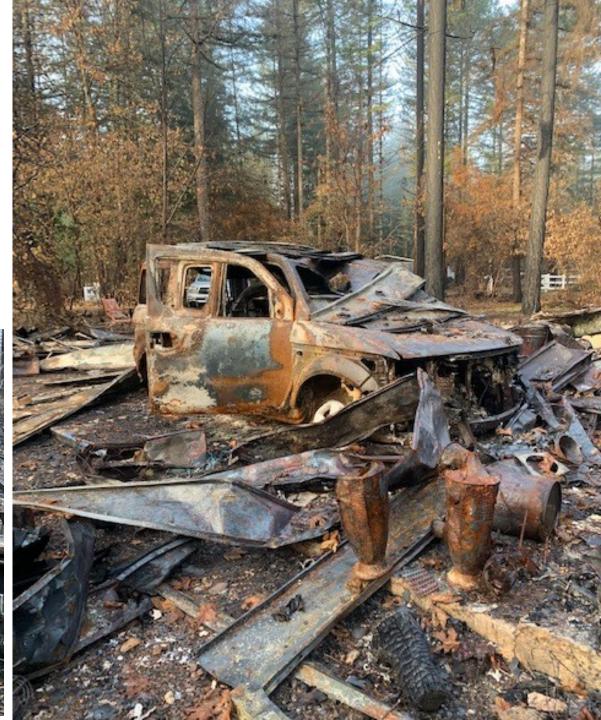






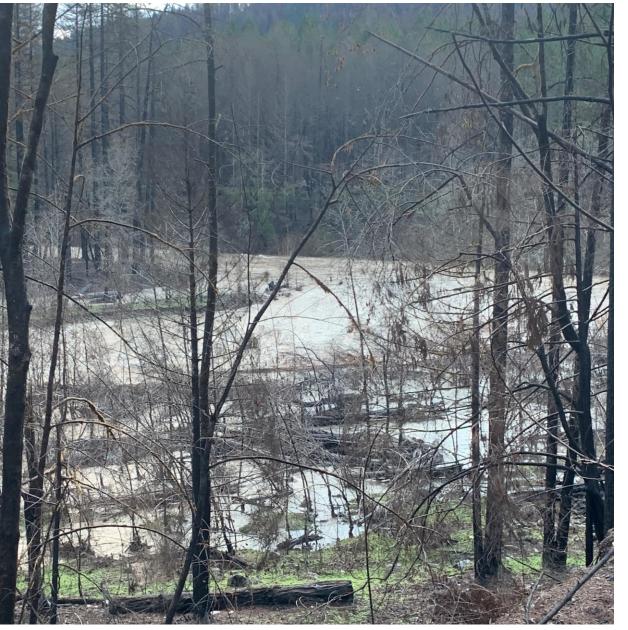












Erosion Control Efforts – Straw Distribution

Straw (weed free fine fescue) was obtained. Distribution began in early October 2020.

City of Salem Grant from 2020 – \$10K. Funds were originally for native plants. Salem approved to use for straw.

Landowners took immediate action to do what they could to buffer the river from their burned structures and prevent soil erosion.

Over 130 Landowners received straw for bank erosion and for protecting the rivers/streams from the burned sites.

Have continued to provide straw from material donated by FEMA.

Over 35 Volunteers assisted with the straw distribution efforts.



Amazing Volunteers















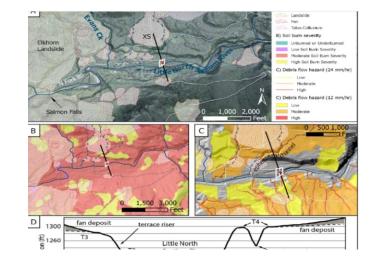
Erosion Risk Site Assessments

Marion SWCD Post Wildfire Grant – 30k

River Design Group Site Assessments & Technical Memorandums. Troy Brandt & Jack Zunka

Tour of Impacted Areas & Individual Site Visits

- ➤ Background: Wildfire & Physical Processes
- ➤ Impacts of Wildfire and Associated Hazards
- >Treatments
- ➤ Reach-Scale Assessment of Site Conditions
- Fire Impacts and Current Conditions
- >Assessment of Hazards/Risk and Expectations
- ➤ Recommendations
 - 4 Site Assessments
 - **6 Reach Assessments**
 - 1 Detroit Assessment





Native Plant Distribution

Bonneville Environmental Foundation/Arbor Day Foundation Grant/ One Tree Planted BLM/ Marion SWCD/Benton SWCD

41k trees and shrubs (41 different species) to over 140 landowners impacted by the wildfires.

THANK YOU!

Woody Jackson
John Caruso
Amy Borba
Shawn Morfod
Jim Quirring
Mari-Linn Grade School
Randall Tinney
All the Amazing Volunteers









Arbor Day Foundation & One Tree Planted

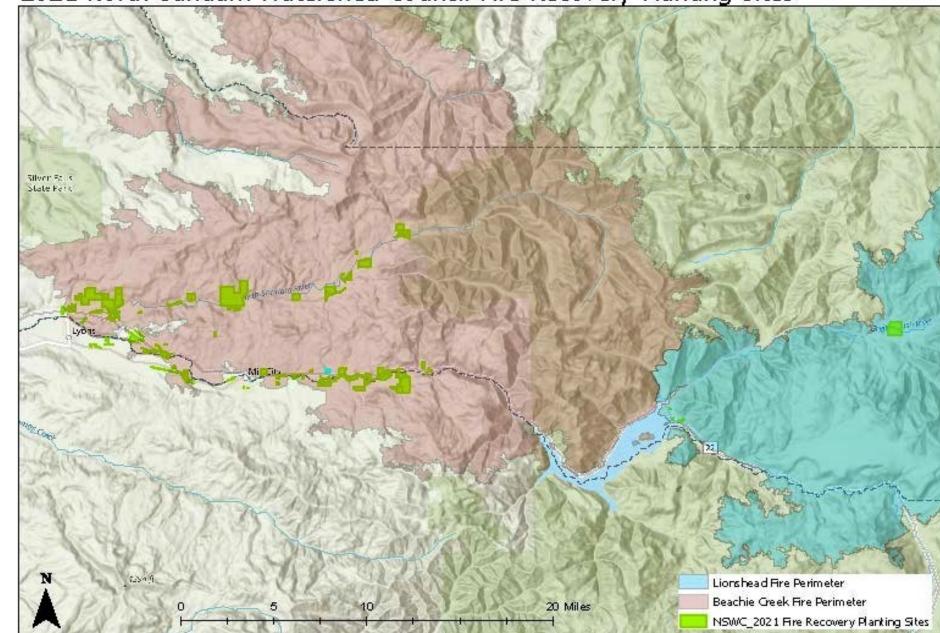
- Arbor Day Foundation covered the NSWC entire plant material bill for 2021 plus cooler costs. 117,450 plants = \$78,945 value
- Through Bonneville Environmental Foundation, One Tree Planted will reimburse up to 0.80 per tree for landowners replanting timber stand trees in the burned areas.
- To date we have submitted reimbursement for 26,245 seedlings for 2021 plantings. Future funds are not guaranteed but possible.





Bonneville
Environmental
Foundation –
Arbor Day
Foundation Grant

2021 North Santiam Watershed Council Fire Recovery Planting Sites



City of Salem Post Wildfire Grant \$100,000

- This is the summary of criteria:
 - Prime objective: Reduces adverse impacts to the North Santiam River caused by the wildfires.
 - Impacts include, but are not limited to, adverse impacts related to erosion, bank instability, and transport of hazardous material.
 - Funding can be used for: project management (including NSWC staff time), material, supplies (including, for example, grass seed), hazardous waste-related concerns, contracted services, site assessments, and more, provided the funds go toward meeting the prime objective.

NSWC Expenses To Date: Staff Time, Seed/Seeding, Contracted Services. Meeting with Salem Staff Monday

Grant Extended beyond 6/30/2021

Native Grass Seed Distribution —Erosion Control



Native Seed Mix: 65% blue wildrye 30% California brome or Sitka brome 5% slender hairgrass

To Date Distributed 2520lbs of seed to 92 landowners =100 acres

Approx. Total =2,520lbs or 168 acres

Erosion Control Conservation Cover/Weed Control

Funded by:

City of Salem: Over 15k Marion SWCD: \$5,728 OWEB Beachie Creek Grant: \$3,650

Oregon Wildlife Foundation: \$3,600

Cost is approx. \$10/lb. at a 15lb/acre seeding rate Total Value \$28k

Post Fire Grants & Federal Program (EFRP)

- Marion SWCD Landowner Assistance Program 2 Projects
- USDA Emergency Fire Response Program (EFRP) Multiple

COOK POST FIRE RESTORATION

327 Conservation Cover 314 Brush Management 612 Tree/Shrub Establishment

Acres 11

Middle Little North Santiam Watershed

Near 100% vegetation mortality/loss

Threat of erosion and invasive plants

RESOURCE CONCERNS

- Plants: Noxious and Invasive Plants
- Plants: Productivity, Health and Vigor
- · Soil Erosion: Sheet and Rill
- Animals: Fish and Wildlife -Inadequate Cover/Shelter
- Animals: Fish and Wildlife -Inadequate Food
- Soil Condition: Organic Matter Depletion



Cook Property showing fire damage: heavy dead and downed trees (October 2020)



JKL POST FIRE RESTORATION

384 Woody Debris Removal 490 Tree/shrub Site Prep 612 Tree/Shrub Establishment 327 Conservation Cover

Lower Little North Santiam Watershed

260 + total acres affected by fire

Mixed stand timber with variable vegetation mortality/burn severity

RESOURCE CONCERNS

- Plants: Noxious and Invasive Plants
- Plants: Productivity, Health and Vigor
- Soil Erosion: Sheet and Rill
- Animals: Fish and Wildlife -Inadequate Cover/Shelter
- Animals: Fish and Wildlife -Inadequate Food
- Soil Condition: Organic Matter Depletion



Fire damage showing complete consumption of fuels and little vegetative regrowth on hillside (December 2020)

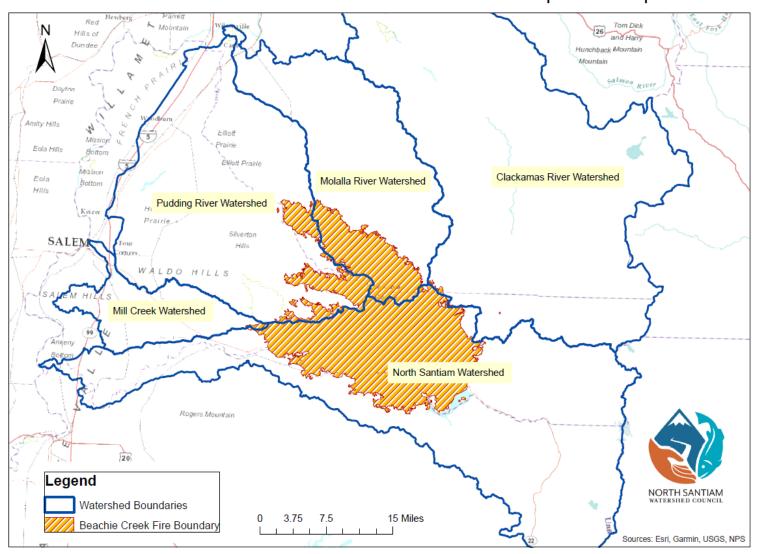


SOLUTIONS

| Beachier Total Fire Area | 192,848 acres | Lionshead Total Fire | 204,356 acres |
|-----------------------------|---------------|--------------------------|---------------|
| | | | |
| North Santiam | 127,738 | North Santiam | 95,171 |
| Pudding | 25,221 | Upper Deschutes | 29,717 |
| Molalla | 38,576 | Clackamas | 12,542 |
| Clackamas | 627 | Warm Springs Reservation | 66,926 |
| Mill Creek | 686 | | |
| | 192,848 | | 204,356 |

OWEB Post Fire Grants – Beachie Creek

OWEB Beachie Creek Post Fire Collaborative Response Proposal



Budget Submitted to OWEB

NSWC Staff Time \$5,395

NSWC Contract PM \$1,650

Log Hauling \$9,000

NSWC Mileage \$364

Native Plant Material \$1,877

Logs w/root wads \$9,000

Native Seed \$3,650

Fiscal Admin \$6,819

Total 37,755 (50% of ask) to Council

Marion SWCD Staff Time = \$2,344

Staff time, log hauling expenses, printing & postage for Molalla River Watch, Pudding WC, Clackamas SWCD

OWEB Post Fire Grants – Lionshead Fire

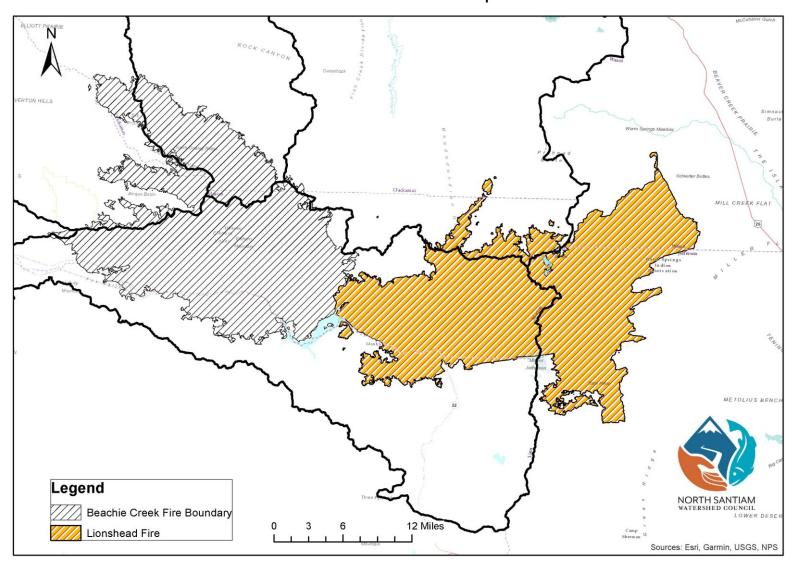
Draft Budget for Lionshead – Preliminary Numbers

NSWC Staff Time NSWC Mileage NSWC Log Hauling Fiscal Admin \$6,819 Must Not Exceed 75k

Clackamas Log Hauling Expenses =28k Breitenbush Community Staff Time Clackamas WC Staff Time \$2,000 Grand Ronde Tribe Staff Time \$1,000 Collaborative Log Hauling

Karen Hans was able to get deadline extended to 12/31/2021.

OWEB Lionshead Post Fire Response Grantl



United Way – Mid Willamette Valley Funds \$150,000 – Capacity

- Hired Amy Borba Part Time -Started
- Hired Amanda Bintliff Watershed Restoration
 Specialist
- Hired Marie Heuberger,
 OSU Fish & Wildlife Summer Intern



 Provided capacity to reach more landowners, conduct more site visits, provide important resource information and conduct EDRR weed surveys.

Oregon Dept of Forestry – Fuels Reduction

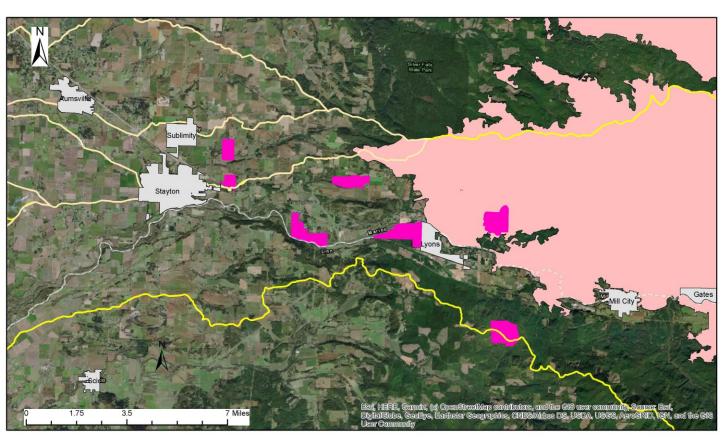
- Solari (81 acres)=\$104,388
- Kimery (45 acres) = \$33,574
- Tinney (44 acres)= \$65,990
- Grand Ronde Tribe (18 acres)= \$15,243
- Ed Beitel (4.3 acres) = \$2,677
- Ed Beitel Valentine (18.98 acres)= \$24,678
- John Beitel (5.3 acres) = \$3,450

Total 250k

Very competitive application process.

95 proposals submitted with 15 million total ask

Only funded 37 proposals totaling approx. 4 million





NORTH SANTIAM WATERSHED COUNCIL

FUELS REDUCTION & FOREST STAND IMPROVMENT PROPOSAL

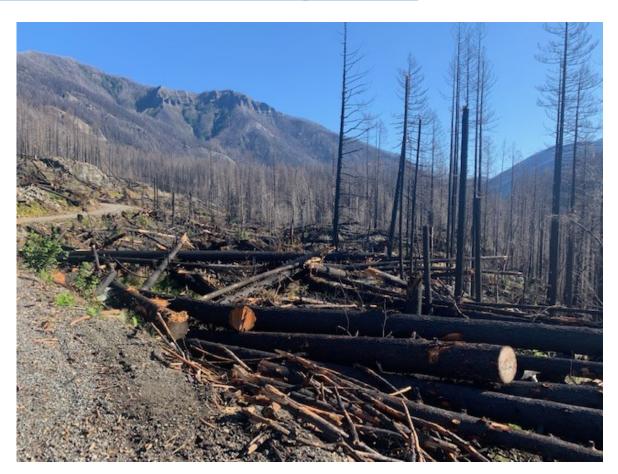


New Landscape - Natives vs. Invasives

SWCD Website: Native Plants for Restoration After Wildfire

https://www.marionswcd.net/wildfire-revegetation/

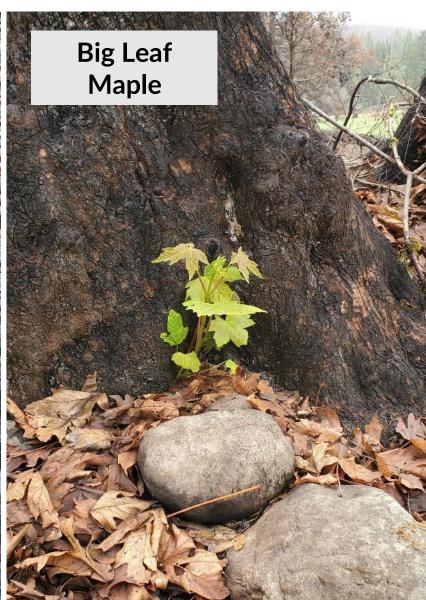
- Why native plants
- Plant recommendations
- Planting tips
- Nursery list
- Propagation information



1 month after fire















Oceanspray

Pacific Bleeding Heart

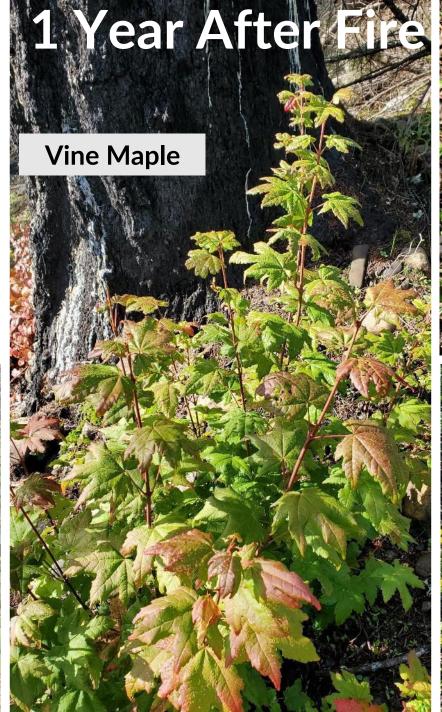
Larkspur

Bracken Fern

6 months after fire











1 Year After Fire







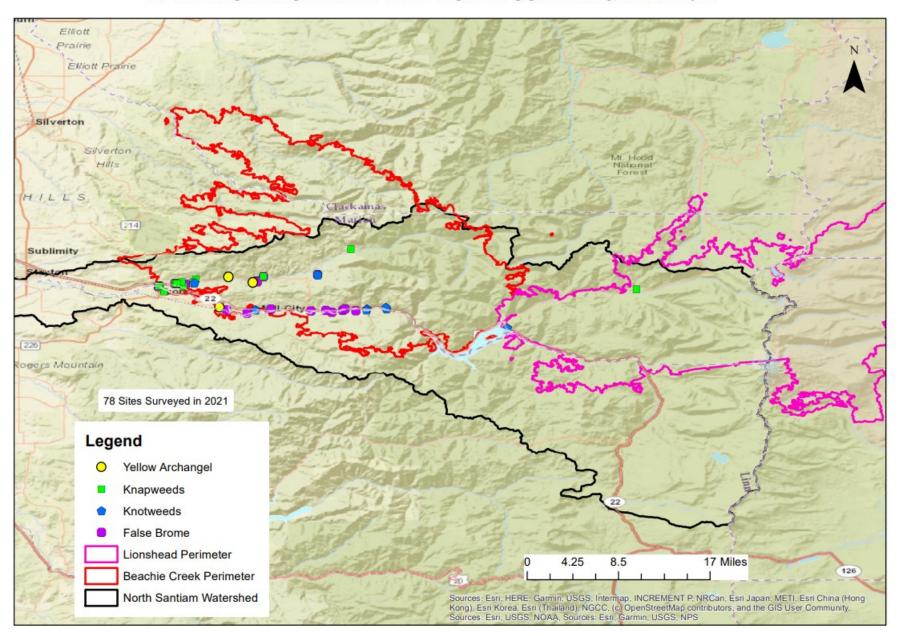


2021-2022 Early Detection Rapid Response Surveys

| Landowner Summary | | | | |
|---|-----|--|--|--|
| Total Landowners Contacted | 131 | | | |
| Total Surveyed Total Landowners No Contact (But We Have Contact Info) | | Note: 10 Parks were Surveyed (included in total) Proposing to reach out in 2022 | | |
| | | | | |
| EDRR Detection Summary | | | | |
| False Brome | 24 | | | |
| Knotweed | 9 | | | |
| Knapweed | 15 | | | |
| Yellow Archangel | 3 | | | |
| Total Populations | 51 | | | |

Applying for 2022 OSWB to treat EDRR species and conduct surveys in areas we could not get to last summer (clean up, salvage logging, rebuilding, etc.)

EDRR WEED SPECIES DETECTED IN THE NORTH SANTIAM WATERSHED SUMMER & FALL 2021



OSWB 2022 Proposal:

Conduct 100 plus EDRR Surveys. Look for False brome, spotted, meadow and diffuse knapweed, Italian thistle, garlic mustard, knotweeds and yellow archangel.

Treat 51 populations of4 of the 8 EDRR invasive plants that were found during in 2021 surveys

Treat 1 site with biological control agents in the fire perimeter: Canada Thistle, spotted knapweed.

OWEB Post Fire Recovery Grant – New Proposal

- For 2020 Post-fire Upland and Riparian Replanting grant:
- Must demonstrate recovery work <u>address priority erosion and water quality</u> concerns for drinking water supplies, source water areas, and important <u>aquatic habitat.</u>
 - Examples: data layers from ODEQ and ODF; Erosion Threat Assessment/Reduction Team (ETART) reports; federal Burned Area Emergency Response (BAER) and Emergency Stabilization and Rehabilitation (ES&R) assessments; and locally conducted assessments.
- <u>Eligible activities include restoration of riparian and upland areas via replanting</u>. Early detection and rapid response (EDRR) or stand-alone treatment of invasive species IS NOT an eligible activity.

Modest costs for exclusion fencing are eligible under this grant offering.



Questions