2024

Clackamas River Invasive Species Partnership: Annual Report

Activities and accomplishments of the Clackamas River Invasive Species Partnership to prioritize and manage invasive species and associated restoration efforts in the Clackamas River Basin.

CRISP

Contents

Authors and Contributors

Report Authors and Editors

- **Monte Mattsson,** Clackamas Soil and Water Conservation District (CSWCD)
- **Samuel Leininger**, Clackamas Soil and Water Conservation District (CSWCD)

Data Contributors and Authors

- **Eric Butler**, Clackamas River Basin Council (CRBC)
- **Lauren Cary,** North Clackamas Parks and Recreation Department (NCPRD)
- **Sam Gibson**, Oregon Parks and Recreation Department (OPRD)
- **Thomas Gray,** Clackamas County Parks
- **Lin Kyan**, Mt Hood National Forest (MHNF)
- **Samuel Leininger**, Clackamas Soil and Water Conservation District (CSWCD)
- **Mitch Lex,** Oregon Department of Agriculture (ODA)
- **Emily Matson**, Columbia Land Trust (CLT)
- **Monte Mattsson**, Clackamas Soil and Water Conservation District (CSWCD)
- **Beth Myers-Shenai,** Oregon Department of Agriculture (ODA)
- **Kristina Prosser**, Metro
- **Cory Quesada**, Portland General Electric (PGE)
- **Ryan Sevey**, Oregon Parks and Recreation Department (OPRD)
- **Gail Shalom,** Water Environment Services (WES)
- **Caity Winterbottom,** Mt Hood National Forest (MHNF)

Acknowledgements

The Clackamas River Invasive Species Partnership acknowledges the contributions of its partner and funding organizations, and their collective efforts in protecting the Clackamas River Basin. Thank you!

Partner Organizations

- 4-County Cooperative Weed Management Area
- Bureau of Land Management- Northwest Oregon District
- Clackamas County Parks
- Clackamas County Water Environment Services
- Clackamas River Basin Council
- Clackamas Soil and Water Conservation District
- Columbia Land Trust
- Metro
- Natural Resources Conservation Service - Clackamas
- North Clackamas Parks and Recreation District
- Oregon Department of Agriculture - Noxious Weed Program
- Oregon Parks and Recreation Department
- Portland General Electric
- United States Forest Service - Mt. Hood National Forest

Funding Organizations

The following organizations have supplied cash or documented in-kind contributions to support CRISP and implementation of the *Clackamas River Invasive Species Management Plan* in 2024.

- Bureau of Land Management- Northwest Oregon District
- Clackamas River Basin Council
- Clackamas Soil and Water Conservation District
- Columbia Land Trust
- Metro
- Oregon Parks and Recreation Department
- Oregon Watershed Enhancement Board
- Portland General Electric
- United States Forest Service- Mt. Hood National Forest

Partner Representatives

- **Chad Atwood**, Mt Hood National Forest (MHNF)
- **Eric Butler**, Clackamas River Basin Council (CRBC)
- **Lauren Cary**, North Clackamas Parks and Recreation District (NCPRD)
- **Kim Galland**, Natural Resource Conservation Service (NRCS)
- **Sam Gibson,** Oregon Parks and Recreation Department (OPRD)
- **Thomas Gray**¸ Clackamas County Parks
- **James Hughes,** Bureau of Land Management (BLM)
- **Lin Kyan**, Mt Hood National Forest (MHNF)
- **Jeffrey Lee,** Metro
- **Samuel Leininger**, Clackamas Soil and Water Conservation District (CSWCD)
- **Mary Logalbo,** Clackamas River Basin Council (CRBC)
- **Emily Matson,** Columbia Land Trust (CLT)
- **Monte Mattsson,** Clackamas Soil and Water Conservation District (CSWCD)
- **Cheryl McGinnis**, Clackamas River Basin Council (CRBC)
- **Beth Myers-Shenai**, Oregon Department of Agriculture (ODA)
- **Kristina Prosser**, Metro
- **Cory Quesada**, Portland General Electric (PGE)
- **Tom Riggs**, Clackamas County Parks
- **Ryan Sevey**, Oregon Parks and Recreation Department (OPRD)
- **Gail Shaloum**, Clackamas County Water Environment Services (WES)
- **Mark Shaw,** Clackamas County Parks
- **Jonathan Soll**, Metro
- **Brian Vaughn**, Metro
- **Caity Winterbottom,** Mount Hood National Forest (MHNF)

A Letter from the CRISP Chair

CRISP Partners,

This past year the Clackamas River Invasive Species Partnership achieved a meaningful milestone! It was 10 years ago that the idea for the CRISP first came into focus. The genesis of CRISP grew out of a handful of conversations between CRBC, Clackamas SWCD, and Metro before developing into the collaborative effort we see today.

There were a lot of us interested in trying to improve invasive species management and enhance conditions in the Clackamas River Basin. At the time, several partners were involved in similar watershed level management projects in the region and were looking to do something similar in the Clackamas. We knew what was needed, but the commitment required for this effort was going to be no small feat.

Metro helped facilitate this effort by issuing a request for proposals entitled, *Collaborating with Partner Organizations to Implement Restoration Projects on Metro Lands*, which included an opportunity for "*Clackamas River Invasive Weed Planning*."

The early days of the planning effort involved a lot of self-reflection. I still recall a conversation I had with former Project Manager, Jenny Dezso with CRBC. After we both tried to convince each other to unilaterally pursue the RFP, we eventually found ourselves in perfect agreement—there was no way that either of us had the time or bandwidth to take on this task. At the same time, we also recognized the opportunity and potential benefit to be realized by such an effort. After much discussion, we cautiously decided that even though neither of us had the capacity to get the job done, maybe…just maybe ***together*** we could try.

With that decision, we embarked on this journey to develop the Clackamas River Invasive Species Management Plan. The foundation of the CRISP plan focused on improving collaboration among organizations. These organizations originally gathered as a Technical Advisory Group (TAG), before we formalized the CRISP partnership. The sentiment of ***"Let's do it together"*** has continued to shape the CRISP, and our shared efforts.

Over the past ten years, we have seen many friends and colleagues come and go from CRISP. I often feel nostalgic and miss the people that have contributed to our partnership. But I am also inspired by the new friends and enthusiasm that continue to sustain our efforts over the last 10 years.

Many thanks to everyone that has contributed to the success of CRISP. It is because of your tireless efforts that this partnership continues to affect positive changes in the Clackamas River Basin!

Sincerely,

Samuel Leininger
CRISP Chair & Clackamas SWCD WeedWise Manager

CRISP Background

The Clackamas River Invasive Species Partnership (CRISP) was formed in 2014 when the Clackamas River Basin Council, the Clackamas Soil and Water Conservation District, and Metro joined together to respond to the steady expansion of invasive plants within the Clackamas River Basin. To improve invasive species management and to support associated restoration efforts, these organizations developed the *Clackamas River Invasive Species Management Plan* in 2015 with the following goals:

- Develop and maintain a coalition of federal, state, regional, and local partners to prioritize and coordinate invasive plant control and revegetation efforts throughout the basin.
- Secure new and sustainable sources of funding to implement and maintain these efforts.
- Align local and regional policies to support implementation of plan goals.
- Promote recognition among public and private landowners within the basin of the need to actively manage invasive plants and enhance natural areas.
- Identify and prioritize watersheds, natural areas, and important habitats for protection and enhancement.
- Develop an invasive plant treatment strategy that identifies and prioritizes specific invasive species management actions through the consolidation of existing efforts and resources.
- Prevent the introduction and spread of new invasive species, reduce the distribution and cover of priority invasive species, and restore priority natural areas currently infested with common, priority, or new invasive species.
- Outline a strategy to use limited resources to accomplish measurable, impactful, and lasting improvements within the basin.

The partnership now includes fourteen organizations, and their collaborative approach focuses on working cohesively across property lines and jurisdictional boundaries to reduce gaps in management and focus on weed infestations that pose the greatest threat to the Clackamas River Subbasin.

Invasive Plant Prioritization

Since the initial prioritization in 2015, which included 19 plant species, CRISP members have adjusted the priority weed list to its current version, which includes 28 species. These species are listed below:

- *Ailanthus altissima*, tree-of-heaven
- *Alliaria petiolata,* garlic mustard
- *Brachypodium sylvaticum,* slender false brome
- *Carduus pycnocephalus,* Italian thistle
- *Centaurea diffusa*, diffuse knapweed
- *Centaurea solstitialis,* yellow star-thistle
- *Centaurea stoebe*, spotted knapweed
- *Centaurea ×moncktonii*, meadow knapweed
- *Daphne laureola*, spurge-laurel
- *Euphorbia oblongata*, oblong spurge
- *Fallopia japonica,* Japanese knotweed
- *Fallopia sachalinensis,* giant knotweed
- *Fallopia × bohemica,* Bohemian knotweed
- *Galega officinalis*, goatsrue
- *Heracleum mantegazzianum*, giant hogweed
- *Hieracium aurantiacum*, orange hawkweed
- *Hieracium caespitosum*, meadow hawkweed
- *Hieracium pilosella*, mouse-ear hawkweed
- *Impatiens glandulifera*, policemen's helmet
- *Linaria dalmatica*, Dalmation toadflax
- *Ludwigia hexapetala*, water primrose
- *Ludwigia peploides*, floating primrose-willow
- *Lythrum salicaria*, purple loosestrife
- *Petasites japonicus*, Japanese butterbur
- *Potentilla recta*, sulfur cinquefoil
- *Silybum marianum*, milk thistle
- *Tribulus terrestris*, puncturevine
- *Ulex europaeus,* gorse

Garlic mustard (Alliaria petiolata) is one of the 28 noxious weeds threatening the Clackamas River.

These 28 species have been selected because of their real and potential impact to the cultural, ecological, and economic livelihood of the Clackamas River subbasin.

Funding

CRISP partners have continued to support weed control efforts in the Clackamas River Basin through investments in time and resources. Significant grant funds from the PGE *Clackamas River Hydroelectric Project Mitigation and Enhancement Fund* (*Clackamas Fund*) support implementation of CRISP projects. These funds have allowed the CRISP to address gaps in management.

The CRISP partnering organizations have also invested significant cash and in-kind contributions over the last year. In total, the CRISP partners reported committing and expending $1,059,188[1] in weed control and restoration services in 2024. The total estimated CRISP-related personnel services reported by partners in 2024 totaled 4,981[2] hours. In total CRISP partners reported surveying 651 sites and 7,648[3] acres of public and private land.

This year marked the first year of CRISP project implementation using the recently awarded Clackamas River Hydroelectric Project Mitigation and Enhancement Fund grant from Portland General Electric (PGE). This award of $540,000 will support CRISP project work through the end of calendar year 2029.

In addition to the PGE funds, our CRISP partners contributed an additional $164,161 to support CRISP projects and personnel. Clackamas SWCD committed $124,161 through various agreements, Metro committed $35,000 for coordination, and the Mt Hood National Forest contributed a significant amount of support through the following agreements: Burn Area Rehabilitation (BAR) ($157,859) and the CSWCD Stewardship Agreement ($241,670) to support weed control activities on the Mt Hood National Forest. BLM also committed $5,000 to support CRISP sponsored projects and an additional $6,029 in Emergency Stabilization Rehabilitation (ESR) funds to be spent in the Riverside fire burn area. This ongoing support has helped to support CRISP and help with the upper Clackamas Subbasin impacted by wildfire.

BUDGET SUMMARY	2024
RESOURCES	
Contracted Services	$575,000
PGE	$540,000
BLM	$5,000
CSWCD PGE	$30,000
BLM Riverside ESR	$0
Mt Hood Stewardship	$0
Mt Hood BAR	$0
Coordination Services	$129,161
Metro	$35,000
CSWCD PGE	$54,764
CSWCD	$39,397
TOTAL RESOURCES	**$704,161**
EXPENSES	
Contracted Services	$547,271
CRISP Sponsored Projects	$141,713
BLM Riverside ESR	$6,029
Mt Hood Stewardship	$241,670
Mt Hood BAR	$157,859
Coordination Services	$129,161
CRISP Specialist	$122,752
CRBC Services	$6,409
TOTAL EXPENSES	**$676,432**
IN KIND	
Contracted Services	$382,756
CLT Contracted Service	$2,259
Metro Contracted Services	$375,497
OPRD Contracted Services	$5,000
Personnel Services (hrs)	2,901
CLT Personnel (hrs)	82
CRBC Personnel (hrs)	266
CSWCD Personnel (hrs)	1,203
Metro Personnel (hrs)	800
ODA Personnel (hrs)	74
OPRD Personnel (hrs)	70
WES Personnel (hrs)	125
USFS Personnel (hrs)	67
CRISP Participation (hrs)	214

Documented resources and expenses from CRISP partners in 2024. Highlighted values denote restricted funds.

[1] Includes in-kind resources reported by: CLT, CRBC, Metro, OPRD and CRISP-sponsored projects funded by: BLM, CSWCD, Metro, PGE, USFS

[2] Reporting organizations: CLT, CRBC, CSWCD, Metro, ODA, OPRD, PGE, USFS, CRISP Participants

[3] Reporting organizations: Clack Co. Parks, CLT, CRBC, CSWCD, Metro, NCPRD, ODA, OPRD, PGE, USFS, WES

Partner Meetings

Each year, the CRISP partners gather in July and December to discuss partner projects and activities. In 2024, the summer hybrid meeting was attended by 16 representatives from 11 partner organizations while the Winter 2024 hybrid meeting had a great turnout with 18 attendees from 11 organizations. We love to see this strong engagement, demonstrating the continued need for the CRISP to exist.

The CRISP published its first management plan in 2015, making 2024 the 10-year anniversary. Given that many of the original CRISP signatories have either retired or moved to new positions, it was decided the 10-year milestone was a great time to review and update the Memorandum of Understanding (MOU) and seek new signatures, all of which will be finalized early to mid-2025.

Rush skeletonweed (Chondrilla juncea)

In addition to our summer and winter meetings, partners carved out a day from their busy schedules to participate in a CRISP Field Day, also in celebration of our 10-year existence. This epic day featured five project site visits spanning 48 road miles, highlighting collaborative projects involving a total of 8 partner organizations. The CRISP Field Day began near the Clackamas-Willamette confluence at Carli Creek (a collaborative project involving WES, NCPRD, CRBC), then moved upriver to River Island (Metro, CRBC, & CSWCD) and Milo McIver's Vortex Meadow (OPRD, CSWCD, CRBC). We sought shelter from the rain at Milo McIver State Park to gorge on fresh hot tamales, and of course search for weeds (in this case mouse-ear hawkweed, which we unfortunately found quite easily). Fueled up, our motorcade headed to Lazy Bend Campground in the Clackamas River Ranger District of the Mount Hood National Forest (USFS, CSWCD, ODA, PGE, CRBC) to discuss ongoing weed management in the 150,000+ acre burn areas. Our day ended at Austin Hot Springs (CRBC, Confederated Tribes of Warm Springs, CSWCD), deep in the National Forest. It was an insightful and fun day. A huge thank you to all attendees, and especially those whose were generous enough to host and talk about their projects. We look forward to more field days in the years to come.

Wild basil *(Clinopodium vulgare)*

During the three CRISP meetings this year, partners highlighted a number of notable finds, some of which are highlighted later in this report. Honorable mentions are rush skeletonweed (*Chondrilla juncea*) near the Barton Bridge, wild basil (*Clinopodium vulgare*) establishing broadly near Barton Park as well as Fish Creek in the Clackamas River Ranger District, Italian thistle (*Carduus pycnocephalus*) just downstream of Carver. Weeds of concern found in adjacent subbasins, but not yet in the Clackamas Subbasin include garden yellow loosetrife (*Lysimachia vulgaris*) in the Willamette watershed and roundleaf bittersweet (*Celastrus orbiculatus*) in the Sandy watershed. These are true early detection-rapid response (EDRR) species in the Clackamas subbasin.

Italian thistle *(Carduus pycnocephalus)*

Invasive weeds encroaching on the Clackamas River subbasin. ***Above, left:*** *Roundleaf bittersweet (*Celastrus orbiculatus*).* ***Above, right:*** *Garden yellow loosestrife (*Lysimachia vulgaris*) [photo courtesy of King County Noxious Weed Control Board]*

CRISP Field Day: Partners talk about mouse-ear hawkweed, the matted area in the center of the photo.

Partnership Projects

We are proud to report that 2024 was our 9th year implementing the CRISP Management Plan. To allocate funds, partners participate in a proposal and approval process. In 2024, funds were distributed among 12 awarded partnership projects, spanning a range of habitats within the sub-basin.

While every project has positive impacts across all sub-basins within the Clackamas, particular focus is given to highest priority sub-basins identified in the CRISP Management Plan. Projects were selected to manage priority species, to target primary vector pathways, and to address known gaps in management.

Project proposals were submitted by six partnering organizations with implementation occurring across hundreds of sites within the subbasin. The highlighted projects in the table below represent only a small portion of the immense amount of work being carried out by CRISP partners in the Clackamas River Basin.

Project	***Sub-Basin***	***Managing Organization(s)***	***Amount Spent***
Barton Park	Rock Creek/Lower Clack	Metro/CSWCD	$4,866
Calcagno	Rock Creek/Lower Clack	CRBC	$7,732
Clackamas County Rec Sites	Rock Creek/Lower Clack, Dubois Creek/Clack, Upper Clear	Clackamas County Parks/ CSWCD	$6,363
Clackamas River Community Co-op	Rock Creek/Lower Clack	CRBC	$3,582
Deep Creek	Deep Creek	CRBC	$14,981
Estacada Rock	Dubois Creek/ Clack	CSWCD	$4,989
Garlic Mustard and EDRR	Rock Creek/Lower Clack, Dubois Creek/Clack, Clack Basin	CSWCD	$56,614
Knotweed Treatment & Survey	Rock Creek/Lower Clack, Dubois Creek/Clack, Clack Basin	CSWCD	$26,207
McGahan	Dubois Creek/ Clack	Columbia LT	$2,146
Milo McIver	Dubois Creek/ Clack	OPRD	$9,034
J Creek/Skourtes	Rock Creek/Lower Clack	CRBC	$4,899
Upper Feldheimer	Dubois Creek/ Clack	CRBC	$300
Total			***$141,713***

CRISP Partner Summary Statistics

Over the last year, the CRISP partners have accomplished a significant amount of weed control and restoration work. Although reported metrics often differ among organizations, we want to demonstrate the collective amount of work accomplished in 2024. Although impressive, the accomplishments listed below represent only a portion of the data reported from our 14 CRISP partners and should be considered conservative estimates.

- Maintained permissions for over 762 public and private properties[4], representing over 2,110 parcels[5];
- 651 sites and over 7,648 acres surveyed[6];
- Treated weeds on over 566 sites[7] totaling over 3,794 gross acres[8];
- Planted 78,582 native plants/plugs/bulbs[9], 1,017 lbs of native seeds[10] at over 28 project sites[11];
- Expended over 2,901 staff hours[12] on CRISP-related work;
- Spent over $382,756 on in-kind contracted weed control and restoration services[13];
- Spent $547,271 on contracted services for CRISP-sponsored projects, and upper Clackamas projects with restricted funds[14].

Mt Hood WeedWise Specialist, Sierra Bloomer treating knapweeds in the Clackamas River Ranger District.

[4] Reporting organizations: Clackamas County, CRBC, CLT, CSWCD, Metro, NCPRD, OPRD, PGE, USFS, WES

[5] Reporting organizations: BLM, Clackamas County, CLT, CRBC, CSWCD, Metro, MHNF, NCPRD, OPRD, PGE, USFS, WES

[6] Reporting organizations: CRBC, CSWCD, Metro, ODA, OPRD, PGE, USFS

[7] Reporting organizations: Clack Co. Parks, CLT, CRBC, CSWCD, Metro, NCPRD, ODA, OPRD, PGE, USFS, WES

[8] Reporting organizations: Clack Co. Parks, CLT, CRBC, CSWCD, Metro, NCPRD, ODA, OPRD, PGE, USFS, WES

[9] Reporting organizations: Clack Co. Parks, CRBC, Metro, NCPRD, PGE, WES

[10] Reporting organizations: Clack Co. Parks, Metro, PGE, USFS

[11] Reporting organizations: Clack Co. Parks, CRBC, NCPRD, Metro, PGE, USFS

[12] Reporting organizations: CLT, CRBC, CSWCD, Metro, ODA, OPRD, USFS, WES

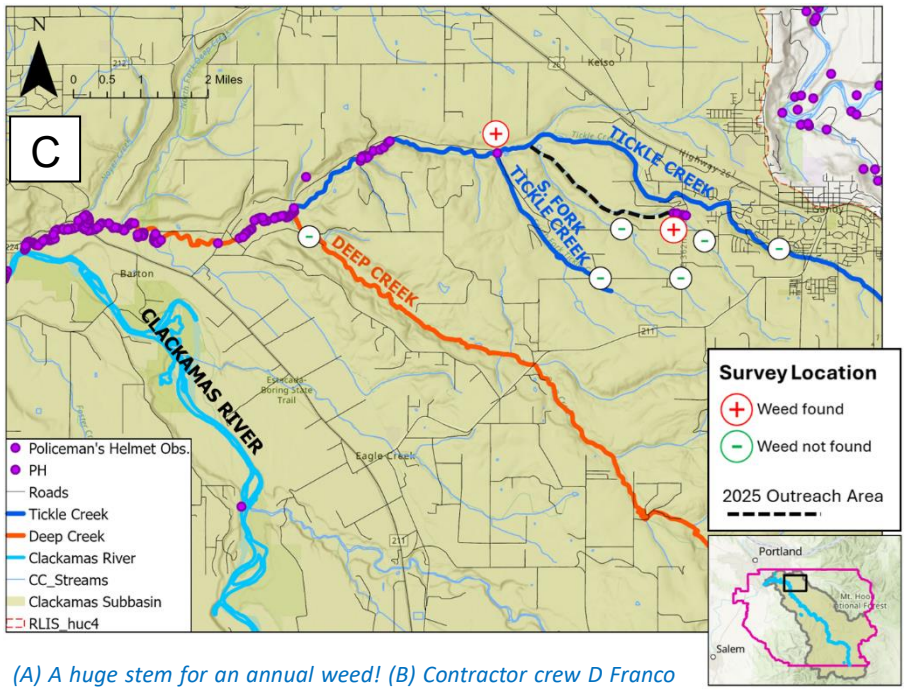
[13] Reporting organizations: CLT, Metro, OPRD

[14] Reporting organizations: Clack Co. Parks, CLT, CRBC, CSWCD, Metro, ODA, OPRD, PGE, USFS

Project and Collaboration Highlights

Partner Highlight - Policeman's helmet in Deep and Tickle Creeks

Impatiens glandulifera, a.k.a. policeman's helmet, is a gargantuan annual weed that has been observed along the mainstem Clackamas for several years. Armed with explosive seedpods and the ability to reproduce from plant fragments, this plant readily disperses along waterways. Thanks to regional control efforts, known patches have responded well to management. However, patches continue to show up along Deep Creek, a tributary that flows into the Clackamas River just downstream of Barton. In 2024, CSWCD and CRBC launched a series of road surveys, targeting road + stream intersections, including Tickle Creek as well as smaller, unnamed tributaries (see map). The good news is that these surveys have identified the likely source population of policeman's helmet, providing managers clear boundaries for which to begin more intensive outreach and survey efforts. The bad news is that the source population is about 8 river miles upstream of Deep Creek's Clackamas confluence, with intervening stream sections crossing 30+ privately-owned tax lots. Therefore, we are gearing up for a robust outreach campaign in 2025, to try and coordinate with these landowners and keep this weed from wreaking havoc on our salmonid-bearing streams.



(A) A huge stem for an annual weed! (B) Contractor crew D Franco Reforestation carefully bagging explosive seed pods prior to pulling plants. (C) Survey outline – roads that cross streams allow for convenient survey opportunities for mapping weeds that rapidly spread along riparian corridors.

Project Profile - South Fork Confluence

The 2020 Riverside Fire upended CRBC's plans for a major fish-habitat restoration project in the upper Clackamas Basin. However, in the spirit that any challenge is an opportunity in disguise, we pivoted to a large-wood placement project in the lower 1000' of the South Fork Clackamas River. In summer 2023 our construction contractor brought an excavator across the Clackamas and tipped about 50 fire-killed trees into the South Fork, the largest of which was over 5' in diameter and 200' tall.

The revegetation phase of this project was funded by Riverside Fire recovery money administered by CRISP. Since access to the site requires a river crossing, we needed a reforestation contractor with boats and the experience to operate them. Thankfully, Ash Creek Forest Management had canoes and a crew manager who used to be a river guide. In February 2024 they installed 1600 conifer plugs and red alder seedlings to help re-establish tree canopy in construction-disturbed areas, added 500 sedge plugs to enhance habitat on the stream banks, and harvested and installed 2500 willow and cottonwood cuttings onsite to boost gravel bar formation and channel splitting. They then returned in May and October to treat noxious weeds.

Weeds we targeted included reed canarygrass along the banks of the mainstem, scattered patches of Armenian blackberry, small populations of Canada thistle and Scotch broom, and shining geranium, which is not yet widespread in the upper Clackamas subbasin. No EDRR weeds have been found on the site, and thanks to vigorous regrowth of native hardwoods, the site is not likely to need much long-term weed management.

The massive downed trees in the background may dwarf the willow stakes in the foreground, but both are important to helping this split-channel develop. (Photo by Ian Christie/ACFM, 3/6/24)

Priority Species Projects and Notable Finds

Notable find – Linaria dalmatica (Dalmatian toadflax)

This attractive invasive weed was observed at two separate locations within the first week of June 2024 by WeedWise Specialists working in the Mount Hood National Forest's Clackamas River Ranger District. While relatively common in the drier habitats of eastern Oregon, Dalmatian toadflax is not common west of the Cascades. Therefore, this discovery raised an eyebrow, with concern that the highly disturbed, dry post-fire landscape may offer new opportunities for dispersal along road systems, and with ongoing redevelopment project, before spreading into the regenerating forest, and the rural farming communities of Clackamas County and the Willamette Valley. You can help by keeping an eye out for this weed's signature 1-to-1.5-inch spur, descending from its bilaterally symmetrical yellow snapdragon-like flowers. Also notice the wide fleshy leaves, which lack stems and spiral up and around the main stalk of the plant. Be aware of the related species yellow toadflax (*Linaria vulgaris*), which is more common in our area. Differences to notice are yellow toadflax's distinct two-colored flowers (yellow and orange, see photo below), and thin spindly leaves.

***Left**: Linaria dalmatica Dalmatian toadflax flowers, leaves, and infestation. **Below**: Linaria vulgaris, Yellow toadflax*

Notable find – Gorse in Clear Creek Subwatershed

As noxious weed managers, we are endlessly reliant on the expertise of our professional vegetation contractor partners. Case in point: the fine folks at Kuznetsov Thinning Company tipped us off to a forestry site in which they had identified a large infestation of gorse (*Ulex europeaus*) in the Clackamas River subbasin (specifically, Clear Creek subwatershed). Although listed as a "B" species in Oregon, gorse is a very high priority in Clackamas County due to its low occurrence and severe impact potential. Gorse, a nitrogen fixing weed in the pea family Fabaceae, is aggressive, large, stiffly-spined, and flammable. Not a plant we want in our area!

CSWCD staff responded by surveying the area. Unfortunately, a sizable infestation (3 acre) population was found containing several dozen plants growing amongst and encroaching upon a regenerating conifer planting.

It is not clear how the gorse found its way to this site, but we speculate that it was brought in with logging equipment. This is yet another reminder to always emphasize the importance of equipment sanitation, especially when moving from site to site. Thanks again to Kuznetsov Thinning for their expert eyes and vigilant reporting!

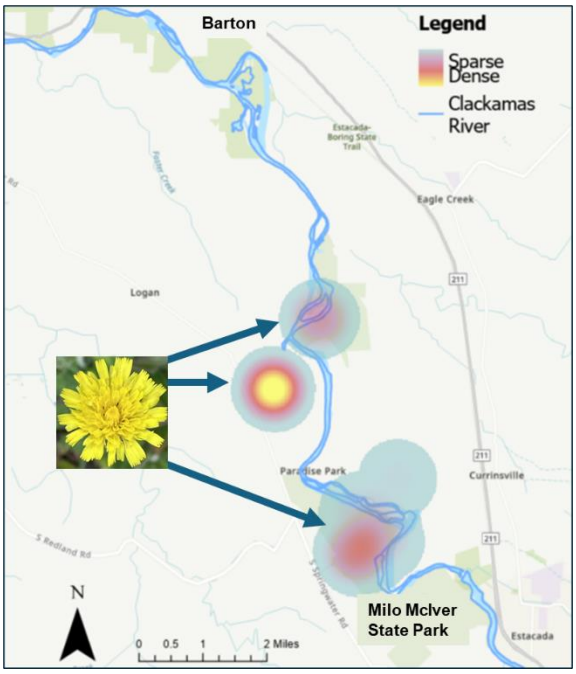
WeedWatch - Hawkweed identification tips

Yes, little yellow "dandelion-like" flowers are everywhere, and species identifications are challenging. Fear not! We're here to sharpen your ID skills so you can spot and report the following stoloniferous super-spreaders before they take over our pastures, meadows, and natural areas:

Mouse-ear hawkweed (*Pilosella officinarum*, a.k.a. *Hieracium pilosella*) is rare but expanding in Oregon, especially in the lower Clackamas River sub-basin between Milo McIver State Park and Barton. Look for a *single* yellow inflorescence on a leaf-less, glandular stalk typically under 16 inches tall. If there are **no** glands, you're probably looking at common hairy cat's ear (*Hypochaeris radicata*). Mouse-ear hawkweed's leaves are unlobed and confined to a basal rosette that lies fairly flat. Each leaf is covered with *long,* but relatively few, hairs. Dig around the base of the plant. If you find stolons spreading out and away from the plant, it very well could be mouse-ear hawkweed.

Meadow hawkweed (*Pilosella caespitosa*, a.k.a. *Hieracium caespitosum*) has been observed around the county a bit longer than mouse-ear. It is aggressively managed and often found alongside mouse-ear. Meadow hawkweed, however, has a *cluster* of glandular inflorescences on a (typically leafless) glandular stalk growing up to 3 feet tall, with basal rosettes of leaves that tend to stand upright, and are densely hairy, but shorter in length compared to mouse-ear hawkweed.

These plants spread vegetatively, but are also wind-dispersed. They can easily hitch rides on boots, equipment, and wet or muddy tires. Please practice and promote hygiene and report sightings to Oregon Invasives Hotline (https://oregoninvasiveshotline.org/).



Left: *Mouse-ear hawkweed's known range in the Clackamas is limited but expanding.*

Above*: Mouse-ear has a single inflorescence, while meadow has a cluster.*

Right*: The leafy basal rosette of mouse-ear tends to like flat and have sparse, long hairs (foreground), while meadow's leaves stand upright, covered with shorter, denser hairs (background).*

Notable find follow-up - Giant knotweed

In the 2023 CRISP Annual Report we shared a story of a local landowner in the Eagle Creek watershed reaching out for assistance with giant knotweed (*Reynoutria sachalinensis*) management, which was expanding on his property.

CSWCD responded to the call and applied chemical treatment in early October 2023 to the roughly 1,000 square foot patch. Our herbicide prescription was 1.0% v/v Imazapyr 4SL, with 1.0% v/v Competitor (modified vegetable oil) surfactant. CSWCD returned in late September 2024 to monitor and retreat, pleased to find the giant knotweed was successfully suppressed (see photos). There were just a few stems of regrowth this year, and those that did regrow looked quite unhealthy. A retreatment was applied (0.5% v/v Imazapyr 4SL, 2.0% v/v Roundup Custom, and 1.0% v/v Competitor). It is certain that abundant roots remain below the surface, so this site will continue to be monitored and re-treated for several years, perhaps skipping a 2025 treatment to allow for the patch to regrow, and another follow-up treatment in 2026.

Partnership Update - Wildfire Response in the Upper Subbasin

Clackamas County was heavily impacted by the Riverside and Bull Complex wildfires in 2020 and 2021, respectively. In the aftermath, CSWCD helps manage invasive species in these disturbed, but once heavily forested, areas are now vulnerable to weed infestations. Partnerships across several organizations have been key for the continuation of projects started before the catastrophic fires, in addition to the implementation of new, post-fire efforts in the Clackamas River Ranger District (CRRD).

Work in 2024 focused on supporting planned infrastructure projects, campground restorations, early detection-rapid response management of low-incidence weed species in remote areas of the subbasin, high vector areas such as roads and boat launches, and more. Here are just a few examples of how partnership collaboration made 2024 a success throughout the Clackamas River Basin, with partners including the US Forest Service, Oregon Department of Agriculture, Clackamas River Basin Council, Portland General Electric, Confederated Tribes of the Warm Springs, and others.

Post-Wildfire funds were awarded by the Forest Service to CSWCD allowing the WeedWise team to hire Specialist Sierra Bloomer and two seasonal technicians. The increased staffing is essential to monitor and treat the vast area. The burn area covers 160,000+ acres, but equally important is monitoring and treating the intact forest adjacent to burn scars not directly impacted, but at risk for invasive species spread. USFS staff met with CSWCD staff on several occasions to discuss current and future efforts, difficulties with highly aggressive species like shining geranium (*Geranium lucidum*), and to iron out an improved system for data collection and sharing. Without this valuable collaboration, work would not have been possible!

The Riverside Fire encompassed several road systems in the CRRD, killing many of the trees and shrubs. This resulted in an immense number of hazardous trees along roads. These trees are prone to falling during adverse weather events and increase the risk of erosion and landslides. Removal of these trees is necessary before reopening roads. This work is generally accomplished using heavy equipment, which can lead to the unintentional introduction and spread of invasive species.

To prepare for hazard tree removal, CSWCD staff treated approximately 28 miles of roadside Scotch broom along Memaloose Road (Road 45) in effort to reduce the amount of seed on the landscape. This was a massive in-house project that will decrease the spread of Scotch broom during and after the entrance of heavy equipment and help foster the return of native species.

Scotch broom treatment along Road 45 prior to hazard tree removal.

Sowing native grasses with seed provided by USFS

Due to the large number of projects involving the improvement or replacement of impacted infrastructure such as recreation sites, roads, and culverts following the fire, there is demand for rock material found in the quarries on Mt. Hood. Quarries are highly disturbed habitats, often experiencing high traffic as they are popular spots for target shooting, camping, and other recreation. As a result, quarries can harbor large numbers of species like Scotch broom and more uncommon species like Dalmatian toadflax (*Linaria dalmatica*). Left untreated, these species would easily spread across the Forest as the rock material is distributed for projects. As such, quarries approved for infrastructure projects were a top priority for treatment. CSWCD coordinated the treatment of five quarries approved for use by Forest Service botanists. Unfortunately, only one was unable to be treated due to the 2024 Sandstone Fire. PGE and CSWCD collaborated to treat an additional quarry on Mt. Hood, approved for use by PGE biologists.

PGE and CSWCD collaborated on projects involving Scotch broom and blackberry (*Rubus spp.)* along the powerline corridor that roughly parallels Highway 224. These invasive plant are typically treated at separate times of year, but since the infestations co-occur, and given the treatment schedules, multiple entries to these sites were needed. This effort was divided between partners which ensured that patches were treated during the correct time of year without overlapping efforts amongst organizations.

ODA and CSWCD divided the CRRD into designated areas of management for treating EDRR species, such as knapweeds (*Centaurea* spp.) and false brome (*Brachypodium sylvaticum),* on remote stretches of Forest Service roads. Because these roads are the most time consuming to travel to and treat, delineating management areas amongst organizations allowed ODA and CSWCD to expand to survey and treat additional road systems, which led to the discovery of undocumented infestations of EDRR species. Clear boundaries also prevented both organizations from re-treating the same areas.

CRBC spearheaded work within the Clackamas Basin at South Fork and Austin Hot Springs (the latter of which is owned by the Confederated Tribes of the Warm Springs), to treat invasive species with a restoration-based approach of management wherein native plants were installed in combination with invasive weed treatments. CSWCD assisted with treating invasive species on Confederated Tribes of the Warm Springs's land adjacent to the Austin Hot Springs site. Much of this area had not been surveyed or treated, so CSWCD staff took on the task of doing so at a decommissioned road on the property, documenting and treating several species.

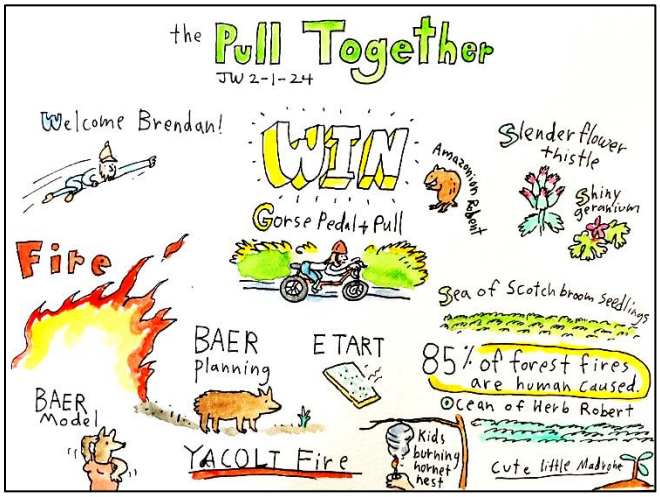
Participating Organization Activities

Individual organizations within the CRISP continue to accomplish an immense amount of work within the Clackamas Basin to control invasive weeds and restore degraded habitat. Many of the activities reported below have been undertaken independently of the CRISP planning efforts. They are included to illustrate the breadth and volume of work accomplished by CRISP partners to control and prevent the spread of invasive weeds within the Clackamas Basin. We hope these activity reports will increase awareness and continue to facilitate collaboration among CRISP partners.

4-County CWMA

The 4-County Cooperative Weed Management Area (CWMA) focuses on support and enhancement of weed management across the Portland Metro region, including the Clackamas Basin. Each year, Clackamas County hosts one 4-County CWMA general meeting. On October 9th, 2024, the Clackamas SWCD hosted a general meeting for the CWMA. The meeting featured a range of speakers and topics, with field updates from the Clackamas WeedWise program, an update from NCPRD about the use of iNaturalist for a Bioblitz at the Boardman Wetlands Nature Park, an update from ODA about weed management activities in the Clackamas, and an update from Metro about new land acquisition and management.

The 4-County CWMA also organizes and hosts the annual "Pull Together," a large event where weed managers learn the latest news on invasive species management. Many CRISP partners and contractors were part of the in-person event at McMenamins Kennedy School, attended by more than 130 people. Aside from CWMA and committee updates, the event focused on post wildfire recovery, with specific attention given to the Riverside and Beachie Creek wildfires in Clackamas County. CRISP Chair, Sam Leininger and CRISP Coordinator Monte Mattsson presented their experiences working to address invasive species issues after the fires. Presentations also featured discussion of recent quagga mussel detection in Idaho, aquatic species in the Willamette River System, the PICOL database, public messaging related to herbicide use, and invasive species threat analysis.



The unofficial notes of the Pull Together illustrated by Jon Wagner, East Multnomah SWCD

The 4-County CWMA committees also provides support to CRISP partners through the development and maintenance of data collection standards, through the refinement of Best Management Practices for 22 invasive weeds, and through the refinement of its recently redesigned website to better serve its members, such as CRISP.

Bureau of Land Management- Northwest Oregon District (BLM)

The Bureau of Land Management- Northwest Oregon District has been collaborating with the Clackamas SWCD to treat weeds in the Clackamas Basin for many years. The Labor Day fires of 2020, including the Riverside and Beachie Creek fires, burned across many BLM-owned parcels in the Clackamas Basin and surrounding areas.

Projects on BLM landholdings in the Riverside Fire burn scar include ongoing priority weed treatments along the Road 45 system (also known as Hillockburn Road and Memaloose Road). Species treated were:

- Scotch Broom (Road 45)
- Meadow hawkweed (Road 45)
- Garlic mustard (Ridge Road)
- Invasive blackberry (Road 45)
- Invasive thistles (Road 45)
- Invasive knotweed (Little Clear Creek, Eaden Road)

True firs regenerating along a burned section of BLM landholding along Road 45, where multiple weeds are being managed to facilitate regeneration of conifers

Clackamas County – Parks

Clackamas County Parks routinely manages noxious weeds as part of their standard park maintenance activities. In managing approximately 608 acres of established parks on the Clackamas River, Clackamas County Parks serves at the interface between the public and natural areas, providing opportunities to promote outreach and education efforts to the general public. Due to the heavy use of these areas by the public, they are also threatened by the introduction of invasive species through human-mediated dispersal.

In 2024, Clackamas County Parks planted 300 native plants at Eagle Fern, Barton and Carver Parks. Restoration work at Clackamas County's Department of Transportation and Development (DTD) quarry has started with the planting of 3,000 native trees, plugs and native seeds. Invasive weed treatments were also carried out in the old DTD quarry with 10 acres of area treated in total. Species planted in these areas include Douglas-fir, incense cedar, western redcedar, western hemlock, ponderosa pine, cascara, nootka rose, snowberry, Pacific ninebark, tall Oregon grape, kinnikinnick, coastal red wood, Oregon white oak, Jeffrey pine and giant sequoia.

Clear Creek runs through Metzler Park, which has just a few patches of knotweed. CRISP work has prevented knotweed from spreading and protects this habitat for salmon and other aquatic life.

Funded originally by CRBC and Clackamas County Parks in 2000, we have worked over the past 5 years on restoration work along the banks of the Clackamas River at Barton Park near the boat ramp adjacent to the parking lot to restore native plants, adding pathways and treating invasive weeds, turning this area from bare, compacted ground heavily used by the public, back to a native setting while still providing access for walking, fishing or viewing.

At Fisherman's Bend, CSWCD treated garlic mustard to help protect plantings done by CRBC. At Billy Goat Island, a caretaker has been working to clear invasive weeds and revegetate the site, and CSWCD has been contributing to this work through the CRISP. At Madrone Wall, where rocky bluffs are home to nesting peregrine falcons, CSWCD worked to control small patches of sulfur cinquefoil and false brome.

Clackamas River Basin Council (CRBC)

CRBC is the watershed council operating in the Clackamas Basin and a founding member of CRISP. They perform activities such as fish habitat restoration, invasive species control, revegetation, erosion and sediment control, outreach, teaching workshops, and more. The watershed council also oversees CRISP projects and maintains relationships with private landowners and other entities, and they are well positioned to do so, because they are not government representatives and can build trust with citizens who might otherwise be discouraged from participating in the CRISP program.

With springtime came garlic mustard, showing continued decline at some persistently treated sites but robust infestations at others that have received less attention. These treatments have been invaluable to the long-term success of two of our fish habitat projects on the lower river. CRBC also battled an eruption of milk thistle and poison hemlock at one site with CSWCD guidance and other funds.

After a day of industrious surveying by Eric Butler and Monte Mattsson, we were able to locate the upstream end of the policeman's helmet population extending down Tickle Creek from just outside Sandy. We signed up several new landowners, mobilized crews for manual removal, and will plan another big push against this beautiful but pernicious weed next year.

Fall knotweed treatments continued along Deep Creek, with two large new properties below Highway 211 signing up, and at multiple restoration sites in the Lower Clackamas River watershed. CRBC also used USFS Burned Area Recovery (BAR) funds allocated to CRISP to treat weeds at the South Fork Clackamas restoration site following winter planting.

In 2025, CRBC plans to continue and expand upon these efforts by continuing treatments at several sites, engaging more landowners in the Deep Creek subwatershed, and helping coordinate a volunteer event to be determined.

Highlights:

- Garlic mustard treatments on 8 properties
- Policeman's helmet treatments on 10 properties; (4 new); conducted visual surveys from 9 road crossings to track population source
- Knotweed treatments on 10 properties (2 new)
- CRISP treatments in 2024 directly supported 4 CRBC restoration projects in progress

*C*RBC's Eric Butler posing with policeman's helmet on Tickle Creek (L), *Galerucella* beetle sighting on purple loosestrife at Dahl Beach (C), dead milk thistle and poison hemlock near Carli Creek (R), 2024 – Eric Butler

Clackamas Soil and Water Conservation District (CSWCD)

The Clackamas SWCD is the designated noxious weed control program for Clackamas County and is spearheaded through their WeedWise program. The WeedWise program focuses on landscape-scale management of invasive weeds, offering free control of priority invasive weeds as a voluntary service to county residents. The WeedWise program also maintains the Clackamas County Weed List.

The Clackamas SWCD is also a founding member and administrator of the CRISP. The WeedWise program works to build capacity and infrastructure to support CRISP-related activities, and serve as a hub for CRISP-related information such as mapping of weed observations, site surveys, treatments, project sites, and priority weed information associated with the *Clackamas River Invasive Species Management Plan*.

The majority of CSWCD project work in 2024 focused on locating and treating EDRR species such as garlic mustard, invasive knotweeds, false brome, policeman's helmet, invasive hawkweeds, and purple loosestrife, among others. In 2024, we implemented 198 treatments across 1,299 acres of the Lower Clackamas and Eagle Creek subwatersheds (our work in the Upper subbasin is detailed elsewhere in this report). While we are pleased to report ongoing stabilization of many sites, we continue to discover and respond to additional weed infestations. Therefore, we actively recruit new private and public partners, for which we sent 47 outreach letters to landowners to expand the reach of our work, and gave 5 public presentations in 2024. Occasionally, we are lucky enough to encounter reminders of why we do our work, such as seeing salmon at the end of their inbound journey from the Pacific Ocean.

Left: CSWCD Technician Maykala Hartness celebrates *a* salmon *sighting* near the *Clackamas* confluence *with* Deep Creek. *Hopefully* this expiring, anadromous fish left behind offspring nearby! *Right: Ash Creek Forest Management scouts for meadow and mouse-ear hawkweed in Vortex Meadow, Milo McIver State Park.*

Columbia Land Trust (CLT)

Columbia Land Trust is a private, non-profit organization working to conserve and care for fish and wildlife habitat in the lower Columbia River region of Oregon and Washington. In the Clackamas Basin, the Land Trust owns a 23-acre forest (the McGahan Natural Area) across the river from Milo McIver State Park. The Land Trust also holds a conservation easement on a 32-acre private property near Madrone Wall Park, adjacent to a Metro natural area.

Native tree and shrub plantings in disturbed area along the boundary with a residential neighbor

In 2024, CRISP funds supported the ongoing treatment of priority weeds at the McGahan Natural Area, focusing on false brome, garlic mustard and spurge laurel. Contractor crews spot sprayed target weeds across the entire 23 acres in spring and fall. The spring treatment was funded by CRISP. There is a larger effort by Clackamas SWCD and State Parks to control false brome along this reach of the river, including the private properties in the neighborhoods surrounding the McGahan Natural Area. Land Trust staff also maintained native tree and shrub plantings along the edges of the McGahan site to revegetate disturbed areas and buffer the existing forest stand. At an adjacent easement, Land Trust staff implemented cut-stump treatments on English holly and removed tree ivy across 20 acres of forest in January.

Yearly maintenance prevents the spread of false brome, spurge laurel and other invasive weeds at the McGahan site, where weed pressure is high due to surrounding residential use and roadside soil and vegetation

Metro

The Metro Regional Government owns or manages over 18,000 acres of natural areas and parks throughout Clackamas, Multnomah, and Washington counties. Building on the accomplishments of previous years, Metro controlled a variety of invasive weeds across its properties thanks to the continued support of voter approved funding. In the Clackamas Basin, 17 sites were the focus of extensive weed management work. Early detection and rapid response (EDRR) treatments were completed by staff and contractors. In addition, restoration efforts spanned across Metro Natural Areas within the Clackamas Basin including on-going efforts for site preparation, planting, plant maintenance, and in-stream restoration efforts.

A couple of highlights of 2024 include the purchase of Clear Creek Confluence Natural Area an 18-acre property at the confluence of Clear Creek and the Clackamas River. Work has started at the site to manage populations of high priority invasive species. In the Winter of 2024 Metro planted 8.5 acres which included 1500 feet of Clackamas River frontage following an in-stream restoration project at Barton Natural Area.

In 2024, Metro implemented the following activities in the CRISP partnership focal area:

- 2018 acres across 17 sites surveyed and actively managed
- 34 EDRR and high priority invasive species treated
- 27,270 native trees/shrubs and 337 lbs. of native seed planted at 7 of 17 Clackamas River sites
- Invasive control, site prep, planting, and plant maintenance utilizing 9 contract firms, with receipts totaling over $375,000 and $35,000 in Metro CRISP cash match annually

Left: *Looking up-river at Barton Natural Area in Spring of 2024 after Fall in-stream construction.* ***Right:*** *16,000 native trees and shrubs planted post in-stream construction at Barton Natural Area. Mulch rings were installed to help plants survive in the rocky conditions found on site.*

Natural Resources Conservation Service- Clackamas (NRCS)

NRCS provides technical and financial assistance to local landowners through their Farm Bill funded programs. Within the Clackamas River Basin, weed control efforts are typically undertaken in conjunction with other conservation practices on private lands.

Current technical and financial assistance has focused predominantly on the management of common invasive weeds. The NRCS works very closely with the Clackamas SWCD Conservation Planning Program and often refers landowners to the SWCD for weed control activities. These resources are available on an ongoing basis and, where appropriate, should be considered for CRISP-related implementation.

NRCS spends cost-share funds to treat land using the conservation practices of herbaceous weed control and brush management, including forested and crop lands in both Clackamas and Multnomah Counties.

NRCS has a number of Conservation Implementation Strategy (CIS) so that can be used to target invasive weeds, and vegetation including Forest Management Planning, Forestry Resiliency in the Face of Climate Change, the Clackanomah Oak Habitat: Phase 2 Expansion, and the Soil Health Restoration and Management North Coast/Lower Willamette Basin . These Conservation Implementation Strategies help to address resource concerns and water quality, which often includes an invasive weed control component.

Implementation of conservation practices to promote Willamette Valley prairie associated species such as Oregon white oak are just some of the programs being targeted for by NRCS programming.

North Clackamas Parks and Recreation District (NCPRD)

North Clackamas Parks and Recreation (NCPRD) is a service district of Clackamas County dedicated to providing exceptional parks and recreation programs, facilities and services. The District – which serves more than 105,000 residents in a 27-square mile area – includes the city of Milwaukie and a large area of unincorporated Clackamas County. NCPRD serves at the interface between the public and natural areas within urban portions of the Clackamas River Basin. NCPRD owns and manages approximately 15.14 acres of natural area in the Lower Clackamas River watershed spread over four sites. Additionally, NCPRD assists Water Environment Services (WES) in the maintenance of approximately 21 acres on WES-owned property in the watershed.

NCPRD worked on four restoration projects in the Clackamas basin in 2024. The sites consisted of Rose Creek Trail (Sieben Creek), Orchard Summit (tributary of Rock Creek), Forest Creek (Sieben Creek), and Trillium Creek (tributary of Rock Creek) and totaled around 15 acres. NCPRD and contractors conducted weed control through multiple herbicide applications at each site. NCPRD found and treated a large population of lesser celandine at the Forest Creek site and the first instance of false brome at Trillium Creek.

Left: New pollinator garden at Trillium Creek

***Right**: Upland at Forest Creek*

Oregon Department of Agriculture (ODA)

ODA staff focuses primarily on priority noxious weeds such as spotted knapweed, sulfur cinquefoil, Japanese knotweed, and false brome on the uppermost sites in the Clackamas River watershed, coordinating closely with Clackamas SWCD staff to divide up sites and areas.

The primary ODA effort on the Clackamas River Ranger District of Mount Hood National Forest in 2024 was to survey and intensively treat all spotted knapweed, in addition to treatments of lower incidence weed species such as sulfur cinquefoil, false brome, meadow knapweed, bladder campion, and yellow toadflax. An added benefit of these efforts is the identification of previously unmapped weed infestations to notify Forest Service Staff and help plan future management efforts.

- Gross Acres Treated: 858
- Net Acre Treated: 2.2
- Number of Quarries surveyed and treated: 6

The Collawash River is an important tributary located in the upper reaches of the Clackamas River (photo by Sierra Bloomer)

Oregon Parks and Recreation Department (OPRD)

Oregon Parks and Recreation Department (OPRD) partners with Clackamas Soil and Water Conservation District (CSWCD) to address high priority invasive species at State Parks within Clackamas County. Through CSWCD's WeedWise program, the Clackamas River Invasive Species Partnership (CRISP) has been a valuable partner, aiding State Parks with invasive weed treatment funding, expertise, and collaboration on Clackamas County priority weed concerns. Through this partnership OPRD can treat over 40 acres of State Parks property that contains several of the Clackamas County priority weed species. In 2023 OPRD pledged $5,000 match for contracted services, $3,000 of in-kind work from OPRD staff for the 23-25 biennium. The partnership between CSWCD and OPRD ensures a collaborative view on Clackamas County invasive species management within State Parks.

Like true Oregonians, CRISP members endure the rain to discuss hawkweed management at Vortex Meadow

Garlic Mustard: OPRD treated or surveyed roughly 20 acres of Milo McIver State Park for Garlic Mustard (GM) in 2024. In 2024 OPRD staff surveyed the 24 known locations of GM within the park and contracted out the herbicide treatment. Recently, populations of GM have been shrinking in size, percent coverage is also lower. Fewer plants are making it to maturity. In heavy recreational locations (disk golf course) we are seeing an increase in small new populations of GM. While overall abundance of GM is decreasing at Milo McIver, the distribution of GM throughout the park has slightly increased.

Hawkweeds: In 2024 hawkweed treatments were altered to increase the number of targeted plants. Spot spray herbicide treatments were leaving too many missed plants from the difficulty of locating hawkweeds in overstory vegetation. Instead, broadcast herbicide treatments were added to increase the number of hawkweed plants being targeted, and treatments using both methods were more effective, whereas areas with only spot spray treatments had mixed results and were not as effective as the areas treated with a broadcast treatment. In the winter of 2024 Park Staff removed the cottonwood trees encroaching on the vortex meadow to open more area that can receive the broadcast treatment in 2025. Several areas of Milo McIver were surveyed in 2024 to see if there were more areas of the park with hawkweed infestations. Mouse-ear hawkweed patches were in several areas of the disk golf course fairways. A more extensive hawkweed survey of the disk golf course is scheduled for 2025.

Burn Unit: In 2024 CRISP funding was used to treat False Brome (FB) in the wildfire impacted area of Milo McIver, FB is expanding throughout the burn unit. False brome is currently patchy within the burn unit. While not extensively dispersed, there are dense patchy areas of false brome that remain easy to locate and treat. It is also worth noting that the northwestern edge of the burn unit shares a boundary with private landowners and is starting to fill in with Scotch Broom. There has been no treatment on the Scotch Broom as the population was just noticed by park staff this fall.

Portland General Electric (PGE)

PGE's 2024 activities within the Clackamas River Basin included implementation of the Clackamas Hydro Project's Vegetation Management Plan (VMP) in accordance with the Federal Energy Regulatory Commission (FERC) license. The VMP includes three interrelated programs: Vegetation Maintenance, Invasive Non-native Plant Species Prevention and Control, and Revegetation.

Non-Native Invasive Plant Prevention and Control

PGE staff conducted manual control of small invasive plant populations and hired licensed contractors to conduct herbicide treatments on 34 acres within the Mt. Hood National Forest (MHNF). Species treated included sulfur cinquefoil, meadow and spotted knapweed, shiny geranium, herb Robert, false brome, policeman's helmet, reed canary grass, Canada thistle, Himalayan blackberry, and Scotch broom. PGE also conducted work on 32 acres of PGE-owned land near Estacada. Priority species included garlic mustard, herb Robert, shiny geranium, false brome, and meadow knapweed. PGE identified new populations of sulfur cinquefoil and knapweed on the MHNF, along with new populations of meadow knapweed and false brome on PGE-owned land.

PGE Revegetation and Vegetation Management

PGE applied 260 lbs of native seed over 7.5 acres of disturbed sites located on the MHNF in 2024. Most of the seed was applied to the Three Lynx restoration site as part of an ongoing effort to establish native vegetation after demolition of the former PGE company town that was heavily damaged in the 2020 wildfire. A native seed mix consisting of California brome (*Bromus carinatus*), slender hairgrass (*Deschampsia elongata*), and blue wildrye (*Elymus glaucus)* was applied to most disturbed sites. Several native forbs were added to the Three Lynx seed mix. PGE also planted over 1400 native trees and shrubs following construction of two new campgrounds at Timothy Lake.

Hydroseeding and tree/shrub plantings at the new Stone Creek Group Campground at Timothy Lake, November 2024.

United States Forest Service- Mt Hood National Forest

The U.S. Forest Service works in cooperation with 12 partners to carry out a variety of high priority invasive plant management activities across Mt. Hood National Forest (MHNF). In 2024, the MHNF obligated approximately $200,000 between ten agreements to complete invasive plant treatments and native plant restoration projects across the forest.

Partners in the Clackamas Sub-basin include ODA, PGE, BPA, Oregon Department of Forestry, Oregon Department of Fish and Wildlife, CSWCD, Walama Restoration Project, Oregon Department of Transportation, and Timber Lake Job Corps. In 2024, treatments equated to 221 acres in the Clackamas River Basin, carried out by CSWCD, ODA, PGE, and Mt. Hood N.F. staff. The fourth year of EDRR (Early Detection Rapid Response) treatment within the Riverside fire and Bull Complex fire areas was completed in the summer and fall.

Pearly everlasting along Fish Creek Road

Continued control efforts in 2024 have minimized expansion of established populations occurring in campgrounds, road margins, and day-use sites along the Highway 224 corridor. Two hazard tree removal contracts were awarded for the road systems impacted by the Riverside, Bull Complex and Lionshead fires. MHNF staff drove these areas extensively to map and flag the presence of invasive species for greater contractor awareness prior to 2025 hazard tree removal. We provided contractors with invasive species ID guides and maps to help them avoid these infested areas and prevent the further spread of invasive species. Driving the burned areas revealed how the native plant community is responding, including large flushes of both fireweed and pearly everlasting along these impacted road systems. Neat to see the forest recovering, and all the blooming plants created a wealth of resources for pollinators in these areas.

The tremendous amount of support from our partners benefits ongoing fire recovery work on the Clackamas River Ranger District. Major ground-disturbing projects (e.g., danger tree removal, recreation site re-designs, trail repair, fish habitat restoration, and road construction) have the potential to further spread invasive plants. Treating these areas early and often helps reduce the risk of negatively impacting sensitive habitats and outcompeting native flora.

District Staff had a Scotch broom removal event called “Broom Bash” outside the Ripplebrook engine bay gate. The goal was to provide an opportunity for staff to go outside, experience healthy manual labor, and improve habitat quality one plant at a time. Staff removed a large portion of Scotch broom, approximately a half-acre!

Mt. Hood NF Staff at this year's "Broom Bash"

In native plant news – Walama Restoration Project has helped MHNF put together a new pollinator garden at the Ripplebrook helipad. This garden will help staff grow forbs and shrubs for out-planting, as well as function as seed production beds. They cleared out around an acre of Scotch broom to maintain an area for the garden beds. Walama Restoration finished building the beds this past year and have filled them with soil. Given the new installation of these garden beds, Mt. Hood staff brought a Portland Parks & Recreation youth crew to the site for an enrichment field trip this summer. They hiked along the Alder Flats trail on a burned section of the Clackamas River Ranger District and brought a few different reference resources with them to examine aspects of wildlife, fire, botany, recreation, and discussed the impacts of fire, invasive plants, and disturbance on our forested landscapes. They then took everyone over to the pollinator garden and talked about the importance of pollinators and native plants. The kids learned how to properly catch and identify different kinds of bees, as well as observe them with specific protocols. We look forward to seeing the impact this project has moving forward and are excited for the opportunities it will provide for our community.

Portland Parks & Rec Youth Crew on a field trip with MHNF staff

We want to thank all our partners for helping us maintain a healthy ecosystem as it benefits everyone who recreates and spends time on Mt. Hood National Forest! Looking forward to accomplishing more next year.

Water Environment Services (WES)

Clackamas Water Environment Services (WES) conducts weed control efforts in the lower portions of the Clackamas River Basin on seven natural areas they own, and on site-specific restoration projects in conjunction with their RiverHealth Stewardship Grant Program. We treated weeds on approximately 57 acres of our property, planted 784 trees/shrubs/live stakes, and 2,750 plugs/bulbs. The grants vary from year to year but frequently involve invasive weed control activities. For example, in the 2023-24 fiscal year, the RiverHealth Stewardship Program funded groups that conducted riparian restoration work at 7 sites in the Clackamas basin, which includes treating weeds on 11.4 acres and outreach to landowners for future riparian work. Grantees planted 1,286 trees/shrubs/live stakes and 100 plugs/bulbs on three different sites.

During the past year, WES continued to maintain Carli Creek, a 15-acre constructed wetland completed in 2019 for storm water treatment. Invasive weed treatments are ongoing and will continue over the coming years to maintain the project after implementation. With the help of NCPRD, WES also continued ongoing invasive species control on its other natural areas in the Clackamas basin, including the Rock Creek Confluence site, WES Verizon Site (Rock Creek), Last Rd Property (Cow Creek), and the Rose Creek Natural Area.

- We treated or funded treatment of invasive vegetation on 13 total sites
- We planted 2,070 native trees, shrubs, and stakes; and planted 2,850 herbaceous plants on 12 different sites.

Aerial view of Carli Creek wetlands, August 2023

Thank You

Reflecting on the many accomplishments of the Clackamas River Invasive Species Partnership, it is clear there has been an immense amount of support to help stop the spread of invasive species within the Clackamas River Basin.

We would like to thank all of the participating organizations for their many contributions. The success of the CRISP reflects the commitment of these participating organizations to the long-term health of the Clackamas River Basin.

We would especially like to thank the staff of our participating organizations who have contributed their passion, expertise, and dedication to this partnership. We would also like to thank our many funders for ensuring the viability of the CRISP and for investing in the future of the Clackamas River Basin. Thank you!