

CLALLAM COUNTY ROAD DEPARTMENT Annual Report 2024



Biological



Physical



Chemical



Cultural



Preventative



Pollinator
Friendly

Prepared by **Clallam County Noxious Weed Control Board**

Available online: <https://www.clallamcountywa.gov/1042/Roadside-Vegetation-Management>

Christina St John, coordinator

Joseph Oakes, weed specialist

Sam Fischbein, weed inspector

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EXECUTIVE SUMMARY

Program Goal:

This program ensures Clallam County complies with noxious weed laws of Washington State. The goal of this project is to shift roadside vegetation to natural, site appropriate plant communities. The goal is to be accomplished by reducing existing weed populations and preventing the establishment of new infestations across the county.

Program Overview:

The Clallam County Integrated Weed Management Plan was created to help the County efficiently comply with its noxious weed control obligations. Integrated Weed Management (IWM) is a coordinated decision-making process that uses the most appropriate weed management methods and strategies, along with a monitoring and evaluation system, to achieve roadside maintenance goals and objectives in an environmentally and economically sound manner. The project identifies high priority targets to contain the worst infestations and prevent the spread of noxious weeds.

2024 Project Overview:

This year we continued to integrate weed management into Road Department activities. Warm winter weather necessitated an early start to the treatment season. We explored new methodology for early season treatment of weeds in pits. We also suspect that the warm winter weather allowed tansy ragwort to flower after only one year (rather than two) and we saw a huge spike in flowering plants this season. We performed manual control while doing weed surveys whenever possible. Our roadside treatments have been effective and well received by the public and overall weed densities are declining. We continued to maintain our pollinator-enhancement sites at the Deer Park Interchange and along the Olympic Discovery Trail in Agnew and experimented with adding fertilizer at the beginning of the growing season.

2024 PROJECT ACCOMPLISHMENTS:

Program Development:

- Completed or progressed with most high priority implementation tasks outlined in the Integrated Weed management Plan (IWMP).
- Monitored gravel storage in pits and adapted treatments to ensure material did not get contaminated
- Prioritized regulated weeds on Priority 1 roads due to a very early start to the treatment season.

County Roadsides:

- Performed **310** treatments and controlled weeds on a total of **198** County Roads: **105** roads had manual only treatment, **45** roads were treated both manually and with herbicide, and **48** roads treated with herbicide only.
- **238** roads were surveyed and determined not to need treatment in 2024.
- Controlled **36** species, including **16** regulated species
- Herbicide was applied on **93** individual roads with a total of **3.92** gallons applied over **170.7** miles and **406.1** acres.
- More than **57** individuals interacted with staff during treatments.

County Rock Sources/Spoil Disposal Sites (Pits):

- Treated weeds in **25** County Pits: **4** pits manual and herbicide treatment, and **12** pits treated with herbicide only.
- Controlled a total of **29** species including **13** regulated species.
- Herbicide was applied within **21** County Pits, with a total of 3.37 gallons of liquid herbicide applied over **217.6** acres (includes retreatments).

County Special Sites:

- Controlled weeds on **18** County Special Sites for a total of **36** treatments; **8** sites manual only, **6** sites herbicide only and **4** sites treated both manually and with herbicide.
- Herbicide was applied on **10** unique sites with a total of **1.13** gallons of herbicide applied over **27.1** acres (including retreatments).
- Controlled **21** species, including **9** regulated species.

Roadside and Pollinator Plantings:

- Monitored, maintained, and/or augmented **five** projects – **Kugel Creek (0.5 ac)**, **Sequim-Dungeness Way/Woodcock Rd roundabout (0.1 ac)**, **Mt Pleasant rain garden (0.1 ac)**, **Old Olympic Hwy/ODT (0.25 ac)** and **Deer Park Overpass (2.6 ac)**.
- Continued planting at the Deer Park Overpass pollinator enhancement site, adding mainly herbaceous perennials. Incorporated **6,838** native shrubs and forb species with sequential bloom periods.
- Planted a combined total of **8,380 plants** over approximately **3.55 acres** between the five sites.
- **5 volunteers** donated approximately **44 hours** to water the pollinator sites over 13 weeks.

Program Monitoring, Evaluation and Reporting:

- The Roadside Weed Monitoring Team (RWMT) assessed **45%** of roads where herbicide was applied reported **79%** average efficacy, **98%** efficacy for poison hemlock and **84%** for meadow knapweed. **(See Appendix K)**.
- Overall, herbicide treatments were determined to be **“Good”**. **No off-target damage** was found.

OBSERVATIONS AND RECOMMENDATIONS:

- This year we were able to survey many new roads
- Tansy ragwort was the most common weed treated on County roads in 2024.
- Wild basil savory has been found on 3 new roads in Clallam County in 2024
- Poison hemlock growing in County pits responded well to early season chemical treatments.

PROJECT SUMMARY

Program Goal:

This program ensures Clallam County Public Works properties and Right of Ways are compliant with noxious weed laws of Washington State. The goal of this project is to shift roadside vegetation to site appropriate plant communities with minimal or nonexistence of noxious weeds. As stewards of county owned land, the Clallam County Noxious Weed Control Board controls noxious and invasive weeds effectively and efficiently in conjunction with the Road Department to reduce existing weed populations and prevent the establishment of new infestations throughout the county. Invasive and noxious weeds negatively impact agricultural and forestry production, property value, as well as water flow and native plant populations. Roadsides are high priorities for control of weed species because they act as conduits for the spread of weeds between many private and public land parcels. County rock sources/soil disposal sites can act as weed sources and are additional high priorities for control.

Program Overview:

The Clallam County Integrated Weed Management Plan (IWM) was created to help the County efficiently comply with its noxious weed control obligations. Integrated Weed Management is a coordinated decision-making process that uses the most appropriate weed management methods and strategies, along with a monitoring and evaluation system, to achieve roadside maintenance goals and objectives in an environmentally and economically sound manner. The IWM plan dictates that each weed problem is addressed from the perspective of all available control options and that the selected control options represent the best treatment for the long-term stability of the desired plant community, while always considering the impact on the local community members.

Weed control methods include biological, chemical, cultural, physical, and preventative measures. This project uses the most effective method or a combination of methods within the IWM decision-making framework to achieve greatest roadside service levels at the lowest life-cycle costs. With more than five hundred miles of country roads there are a variety of weed problems as well as control opportunities.

To effectively shift the roadside vegetation to self-sustaining, site-appropriate communities the project identifies high priority targets that contain the worst infestations of noxious weeds and then reduces the population. High priority targets include infestations of regulated noxious weeds and invasive species of special concern on roadsides, and county rock sources and spoil disposal sites (pits) that act as sources for weed dispersal. The project aims to systematically reduce weed abundance and promote desirable vegetation in the future. As the project matures and the number of high priority targets are reduced, the number of chemical and physical treatments will also be reduced and balanced by cultural and preventative methods. We strive to increase our knowledge and ability to identify noxious weeds within Clallam County; from civilian and employee reporters and encourage people to come to us with questions.

Weed control work on the County Right-of-Way and pits is implemented by the Clallam County Noxious Weed Control Board (CCNWCB) and through partnerships with other municipalities, non-governmental agencies, and volunteers. Partnerships include the Clallam County Road Department, WSU Extension office, Clallam Conservation District, Broom Busters, Olympic Discovery Trail Volunteers and the 10,000 Years Institute. Partnerships add efficiency and overall value to the project by promoting collaboration and public engagement, recruiting larger work forces, and reducing travel time across the county.

2024 Project Description:

In this seventh year of the IWM Program we further integrated weed management into Road Department activities. We facilitated communication between multiple departments and continued implementation of pit plans. We surveyed and treated specific areas before planned projects began construction to reduce the opportunity for weeds being spread by the project.

The RWMT independently reviewed treatments to assess efficacy and potential negative impacts. Their report with the results of their observations can be found in Appendix K. Roadside treatments were observed to be effective and overall public perception of the program was positive.

The Roadside Weed Management Team (RWMT) continues to develop the Strategic Pollinator Assessment map which identifies pollinator corridor potential on County roadsides or managed lands. CCNWCB staff and volunteers expanded plant diversity and physical coverage at two pollinator friendly plantings with locally sourced native plants.

2024 PROJECT ACCOMPLISHMENTS:

Program Development:

- Completed or progressed with most high priority implementation tasks outlined in the Integrated Weed management Plan (IWMP).
- This treatment season we prioritized regulated weeds on Priority 1 roads due to a very early start to the treatment season. Many Priority 2 roads were surveyed and will be reclassified in the 2025 work plan based on the level of weed infestation observed.
- At our county pits (McInnes, Kirner, Blyn, Lower Elwha, Piedmont and Whitcomb Diimmel), there has been significant remodeling and manipulation of the landscape to suit the needs of the Road Department. We will put special emphasis on ensuring these parcels receive treatment of the disturbed soil locations to prevent any new noxious weeds infestations. We will be developing monitoring procedures to document the long-term changes to these pits.
- We continued to expand the pollinator planting and watering program; monitored, maintained, and augmented Deer Park Overpass and Old Olympic Highway/ODT projects. This has created great volunteer opportunities for the public. We acquired multiple water tanks and battery powered pumps to make watering events easier for the volunteers. Clallam County Sheriff's Department has been much appreciated by keeping Deer Park Overpass rest area parking lots safe and welcoming during our volunteer events.

Program Implementation

County Roadsides:

- This year, we treated or surveyed **436 roads**. We visited 71.8% of District 1 (East County) roads, 88.2% of District 2 (Central County) roads and 87.3% of District 3 (West County) roads listed on our 2024 Integrated Weed Management Plan.
- Performed **310** treatments and controlled weeds on a total of **198** County Roads: **105** roads had manual only treatment, **45** roads were treated both manually and with herbicide, and **48** roads treated with herbicide only.
 - 463.8 miles (1113.0 acres) examined
 - 298.4 miles (686.6 acres) treated
 - 83 roads in District 1 (east county)
 - 76 roads in District 2 (central county)
 - 39 roads in District 3 (west county)
- **166** roads were completely treated and **32** roads had spot treatment. We also performed **76** retreatments
- **238** roads were surveyed and determined not to need treatment in 2024.
 - 107.8 miles (253.7 acres) surveyed
 - 127 roads in District 1 (east county)

- 75 roads in District 2 (central county)
 - 36 roads in District 3 (west county)
- Controlled **36** species, including **16** regulated species
- Herbicide was applied on **93** individual roads with a total of **3.92** gallons applied over **170.7** miles and **406.1** acres.
- Manually treated **409.6 acres** and removed **11,971 plants**.
 - Top 5 species manually controlled – Scotch broom (5,382 plants), tansy ragwort (4,422 plants), common teasel (1,576 plants), meadow knapweed (314 plants) and common tansy (200 plants (removal of flowering heads))
- More than **57** individuals interacted with staff during treatments.

County Rock Sources/Spoil Disposal Sites (Pits):

- Treated weeds in **25** County Pits: **4** pits manual treatment only, **11** pits manual and herbicide treatment, and **10** pits treated with herbicide only.
- Controlled a total of **29** species including **13** regulated species.
- Performed **55** treatments (including **30** retreatments) over a total of **252.9** acres (includes retreatments).
- Herbicide was applied within **21** County Pits, with a total of **3.37** gallons of liquid herbicide applied over **212.4** acres (includes retreatments).
- Manually treated **67.6** acres and removed **1,178** plants.
 - Top 5 species manually controlled – tansy ragwort (571 plants), poison hemlock (317 plants), spotted knapweed (153 plants), Italian thistle (75 plants) and common tansy (40 plants (flowering heads removed)).
- Infestations of note: Tansy ragwort was prolific in the pits, just like along the roads. The Italian thistle population in McInnes was found again this year. Material from the Towne Rd levee was moved to McInnes and covered most of the poison hemlock infestation on the northeast section.
- We tried a few combinations of early herbicide treatments for poison hemlock and are learning which herbicides work best at different times of the year.

County Special Sites:

- Controlled weeds on **18** County Special Sites for a total of **36** treatments; **8** sites manual only, **6** sites herbicide only and **4** sites treated both manually and with herbicide.
- Treated **46.1** acres, including retreatments (**63.4** acres examined).
- Herbicide was applied on **10** unique sites with a total of **1.13** gallons of herbicide applied over **27.1** acres (including retreatments).
- Controlled **21** species, including **9** regulated species.
- Manually removed **4,048** plants from **10.15** acres.
 - Top 5 species removed – Italian thistle (2,484 plants), Scotch broom (708 plants), European hawkweed (355 plants), common teasel (248 plants) and tansy ragwort (221 plants).

Strategic Pollinator Plantings:

- Monitored and maintained **2** sites (**Old Olympic Hwy/ODT**, and the **Deer Park Overpass Pollinator Habitat Enhancement**)
 - **5** volunteers donated approximately **44** hours to water the pollinator sites over 13 weeks
- Master Gardener's continued photo monitoring locations at the Deer Park Overpass site to document plant success and growth over time.
- We continue to have a devoted volunteer group dedicated to water plantings to ensure healthy and growing plants at Deer Park Overpass and the ODT.
- Fertilized plantings with a slow-release fertilizer during a volunteer event in April (7 volunteers donated 18 hours to assist in this). Plants that are alive seem to be stunted in the fill material. We will monitor to see if fertilizing increases survival and growth rate.
- Monitoring which species are doing well on the slopes. Puget Sound gumweed (*Grindelia integrifolia*) is our rock star plant of 2024, growing rapidly and flowering only after two years.
- Held volunteer events to assist with pollinator habitat watering. Five people attended, contributing approximately **44 hours** over 13 weeks.

- Continuing to increase diversity and saturation of the Old Olympic Highway/ODT planting site, adding mainly shrubs and herbaceous perennials.
- Continued plantings at the Deer Park Overpass planting site, adding mainly herbaceous perennials.
- Deer Park Overpass species are being shifted towards high elevation and dune native plants, which should have better success in this nutrient deficient location.
- Planted a combined total of **8,380 plants** over **five** projects. **Sixteen** new species of pollinator plants were added in 2024, with a total of **57 unique species** planted at both sites.

Program Monitoring, Evaluation and Reporting

- The RWMT assessed **45% of roads where herbicide was applied** (42 roads; 22% of roadside treatments) and reported **79% average efficacy, 98% efficacy for poison hemlock and 84% for meadow knapweed**.
- Overall, herbicide treatments were determined to be “**Good**” (See Master Gardener (MG) report in Appendix K). Treatments for poison hemlock were found to be “**Excellent**” and treatments for meadow knapweed were found to be “**Good**”.
- **No off-target** damage was found, indicating that spot-spraying was precise and careful.

OBSERVATIONS AND RECOMMENDATIONS:

- This year we were able to survey many roads that had been added to the IWM plan in previous years but had never been visited. After surveying many of these roads in 2024, we were able to evaluate priority categorization and will update the IWM plan in 2025. We will be adding several County roads to our 2025 IWMP where regulated weeds are present.
- Tansy ragwort was the most common weed treated on County roads in 2024 and was found on 115 roads. The warm weather in the winter of 2023 to 2024 may have allowed plants to continue growing in the winter, allowing one year old plants to flower in 2024. Other organizations on the Peninsula also saw similar increases in flowering tansy ragwort this year.
- We have continued our treatments of wild chervil on Marmot Loop, which occurs in the ROW and on two adjacent private parcels. The infestation was much smaller in 2024. There are two other wild chervil sites in the County – one on a private road in Joyce and the other infestation along Hwy 101 in Blyn.
- No kochia has been found on County roads. The infestation along Hwy 101 was much smaller this year. Both Clallam County NWCB and WSDOT removed these plants. The seed bank for kochia lasts 1-2 years, so we are hopeful that we can eradicate this weed from the County soon.
- Wild basil savory has been found on 3 new roads in Clallam County in 2024; overall it has been found on 13 roads. This continues to be a high priority species for survey and treatment.
- European hawkweed is still a concern at the ODT crossing in the Sol Duc. There are still populations on Hwy 101 in the Sol Duc valley that can continue to invade County land. We will work with WSDOT to try to get these infestations treated.
- Italian thistle is an aggressive Class A noxious weed found in only one area of Clallam County. We are continuing to monitor known infestations and surrounding areas including private parcels adjacent to Clallam County right-of-ways.
- Poison hemlock growing in County pits responded well to early season chemical treatments. We need to continue to monitor these pits multiple times a year since poison hemlock germinates throughout the year and material is constantly being moved into and around these pits.

- We are creating a list of roads with weed species that require treatment at different times of the year. This will allow us to plan ahead and make sure that we visit those roads multiple times each year and at the right time for our treatments to be effective.
- Ensuring clean materials for county projects reduces the potential for spreading noxious weeds and is our most important and effective prevention tool. Weed-free rock sources continue to keep the county's weed seedbank on the decline. Many private pit operators are requesting pit inspections and are getting their pits certified weed-free.
- Volunteers at the Deer Park Overpass pollinator planting site greatly helped with maintenance obligations. Dedicated long term volunteers and focusing on the most visible and easily accessible sites greatly improved watering efficacy.
- Volunteer opportunities to participate in pollinator habitat enhancement at the Deer Park Overpass and the ODT Berm are a great way to increase awareness of our pollinator program and to expedite plant installation. Clallam County Sheriff's Department has been much appreciated by keeping Deer Park Overpass rest area parking lots safe and welcoming during our volunteer events.

MAPS: PROJECT AREAS AND TARGET ROADS

Map 1 shows an overview of all roadside treatment activities completed by Clallam County Noxious Weed Control Board and partners in 2024. **Maps 2 – 11** show treatment activities in focus areas in East, Central and West Clallam County. Roads, pits, and Special Sites that received treatment are listed in Appendixes C-E.

Map Description:

The top priority of the 2024 IWM Plan was the control of regulated noxious weeds. Regulated weeds are limited in distribution and control activities that contain or eradicate infestations is required by state law (RCW 17.10). The maps include data points for all treatment activities to control regulated weeds except those that occurred in county pits. Data points represent discrete infestations but are not representative of scale; a point may represent the treatment of a single plant or more expansive infestations.

Non-regulated weeds, such as Scotch broom and Canada thistle, are more widely distributed across the county. Treatment activities for widespread, non regulated noxious weeds varied by location, species and available resources. The maps generally do not include data points for treatment activities of non-regulated weeds; however, comprehensive tabular data of treatment activities and species treated on each road can be found in Appendix C.

Legend Description:

The legends for Maps 2 – 11 includes symbols only for **Species Treated** on roadsides in the areas encompassed in each specific map. Together, maps 2 – 11 show all treated species with spatial data recorded in 2024. See Appendix D for a list of County Pits that were surveyed and treated and Appendix E for which Special Sites were treated.

Map List:

Clallam County

Map 1. 2024 Clallam County Roadside Treatment Overview 2024

East Clallam County

Map 2. Miller Peninsula – Blyn Treatment Area

Map 3. Sequim – Dungeness Valley Treatment Area

Map 4. South Sequim – Carlsborg Treatment Area

Central Clallam County

Map 5. Agnew – East Port Angeles Treatment Area

Map 6. Port Angeles – Elwha Treatment Area

Map 7. Joyce – Lake Sutherland Treatment Area

West Clallam County

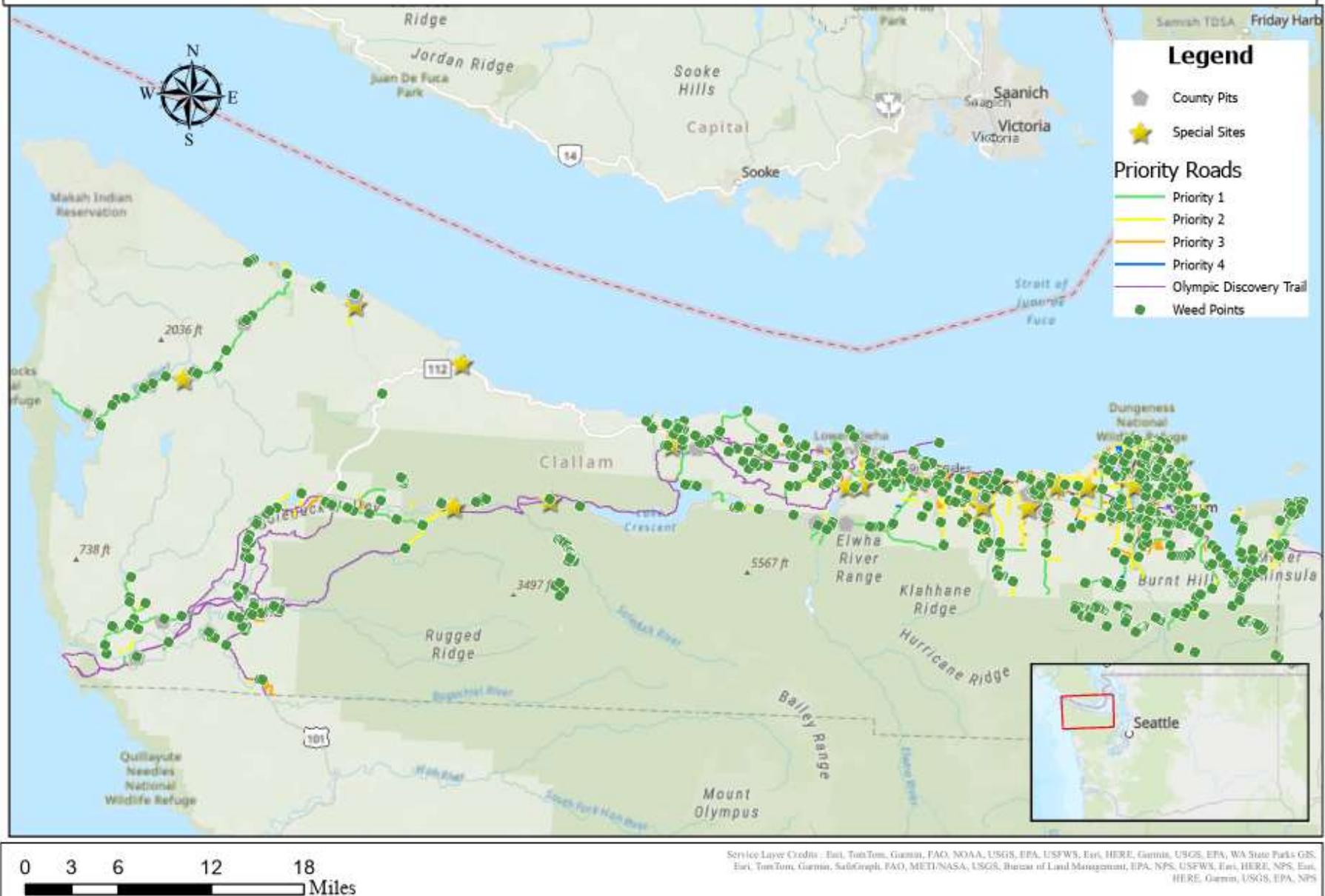
Map 8. Sekiu – Clallam Bay Treatment Area

Map 9. Hoko – Ozette Treatment Area

Map 10. Sappho – Sol Duc Valley Treatment Area

Map 11. Forks – Quillayute Rd Treatment Area

Clallam County Roads Treatment Overview 2024



Sequim - Dungeness Valley Treatment Area

Legend

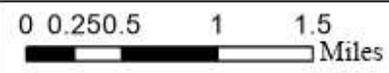
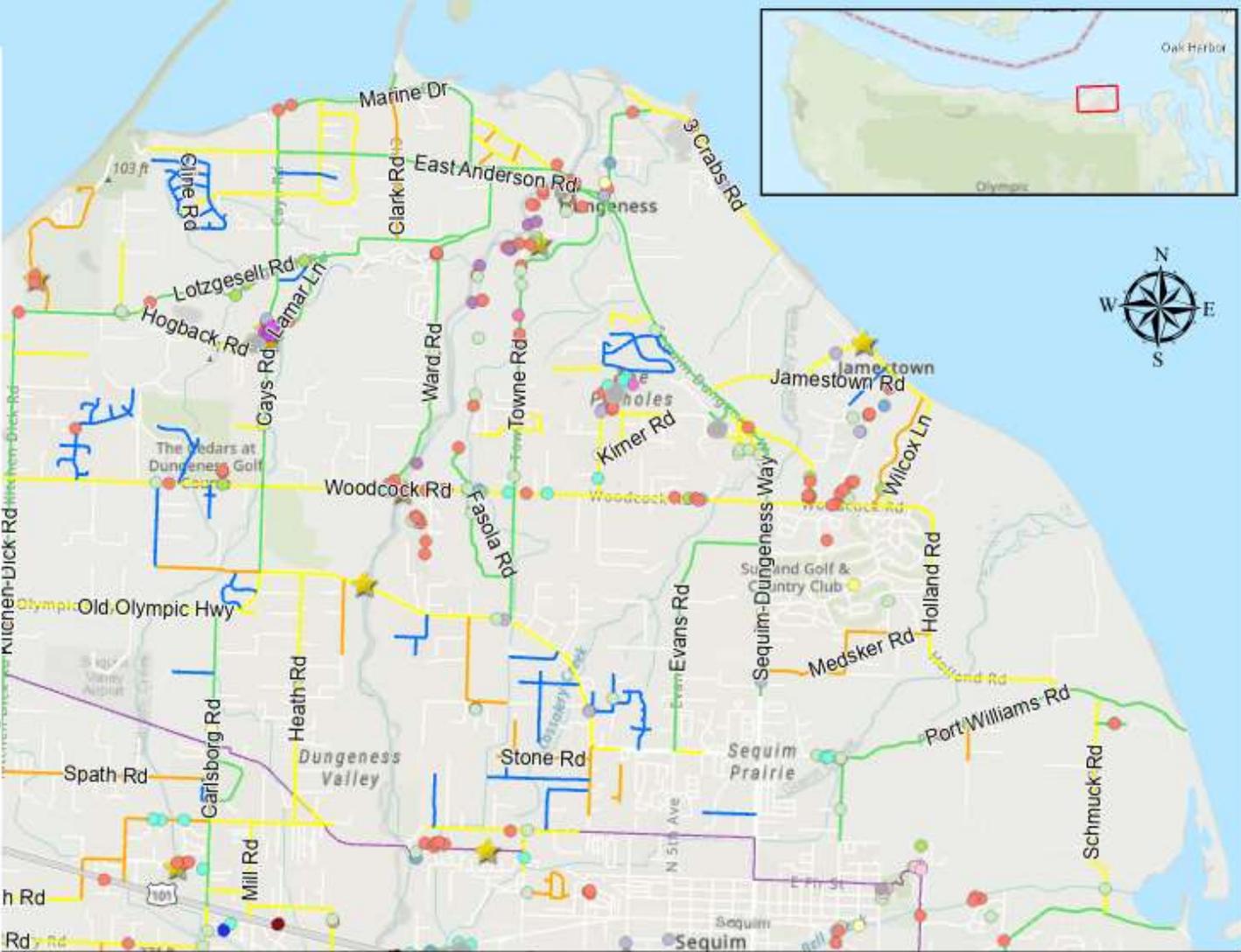
- County Pits
- Special Sites

Weed Points

- poison hemlock
- tansy ragwort
- knapweed, meadow
- knotweed, Bohemian
- knapweed, spotted
- common teasel
- sulfur cinquefoil
- herb-Robert
- hoary alyssum
- yellow archangel
- common tansy
- thistle, Italian
- common fennel (except bubing fennel)
- spurge laurel
- Scotch broom
- Perennial peavine
- Himalayan blackberry
- kochia
- thistle, bull
- English holly
- butterfly bush
- Moleplant
- White-top
- hairy willowherb
- wild carrot (except where commercially grown)
- Tree lupine
- Periwinkle, large
- Potential Scotch thistle?
- Other

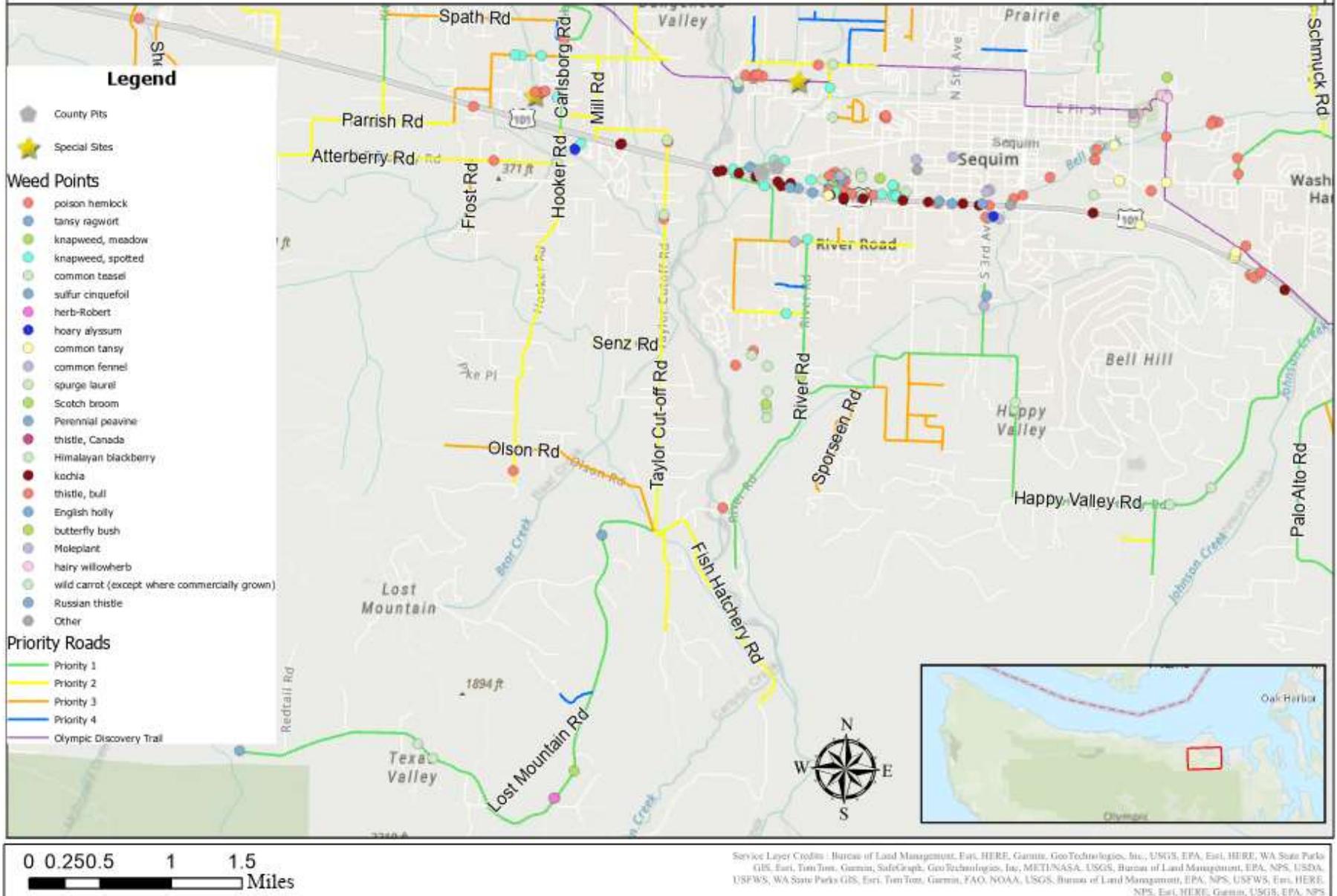
Priority Roads

- Priority 1
- Priority 2
- Priority 3
- Priority 4
- Olympic Discovery Trail

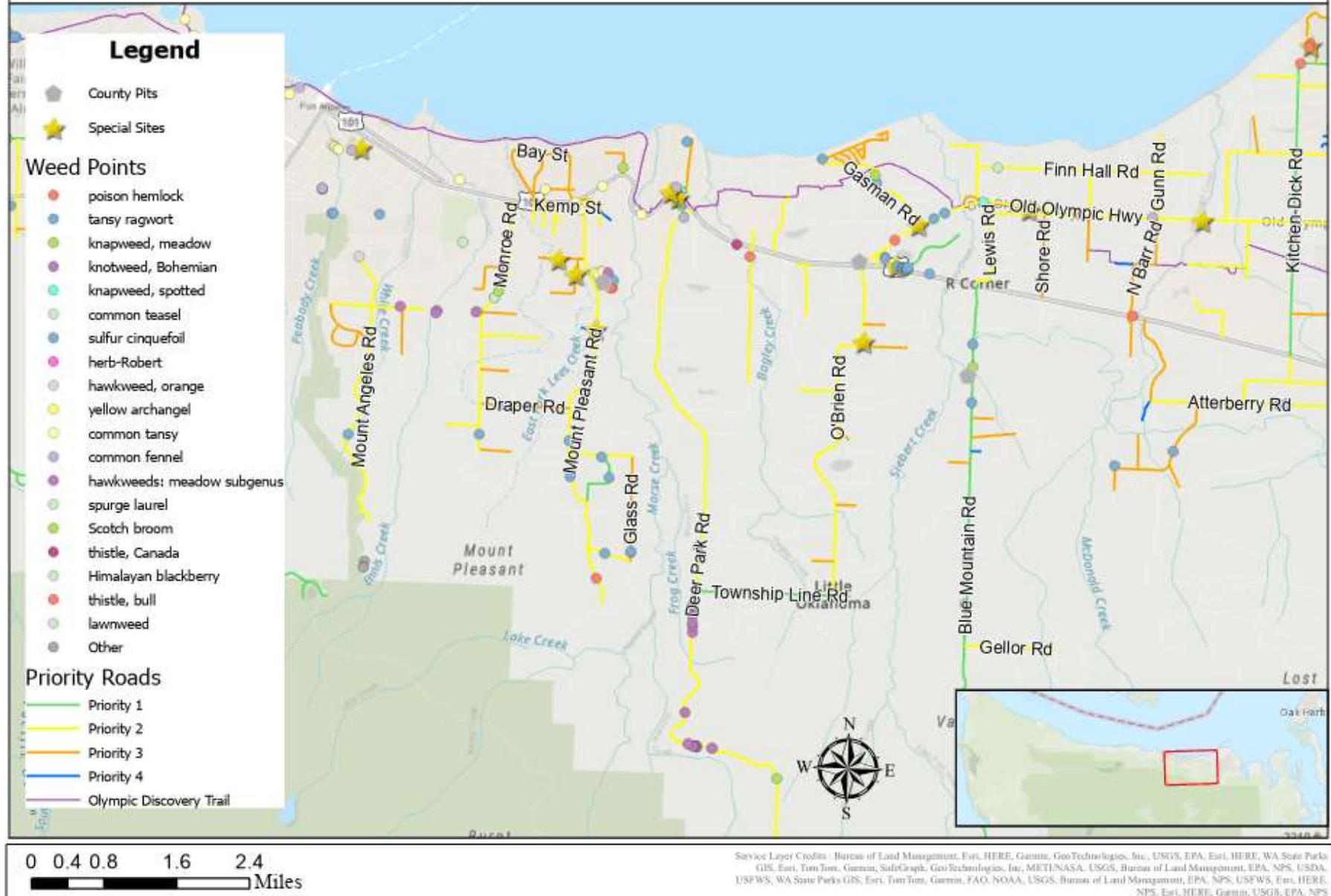


Service Layer Credits - Bureau of Land Management, Esri, HERE, Garmin, GeoTechnologies, Inc., USGS, EPA, Esri, HERE, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS, WA State Parks GIS, Esri, TomTom, Garmin, FAO, NOAA, USGS, Bureau of Land Management, EPA, NPS, USFWS, Esri, HERE, NPS, Esri, HERE, Garmin, USGS, EPA, NPS

South Sequim - Carlsborg Treatment Area



Agnew-East Port Angeles Treatment Area



Joyce - Lake Sutherland Treatment Area



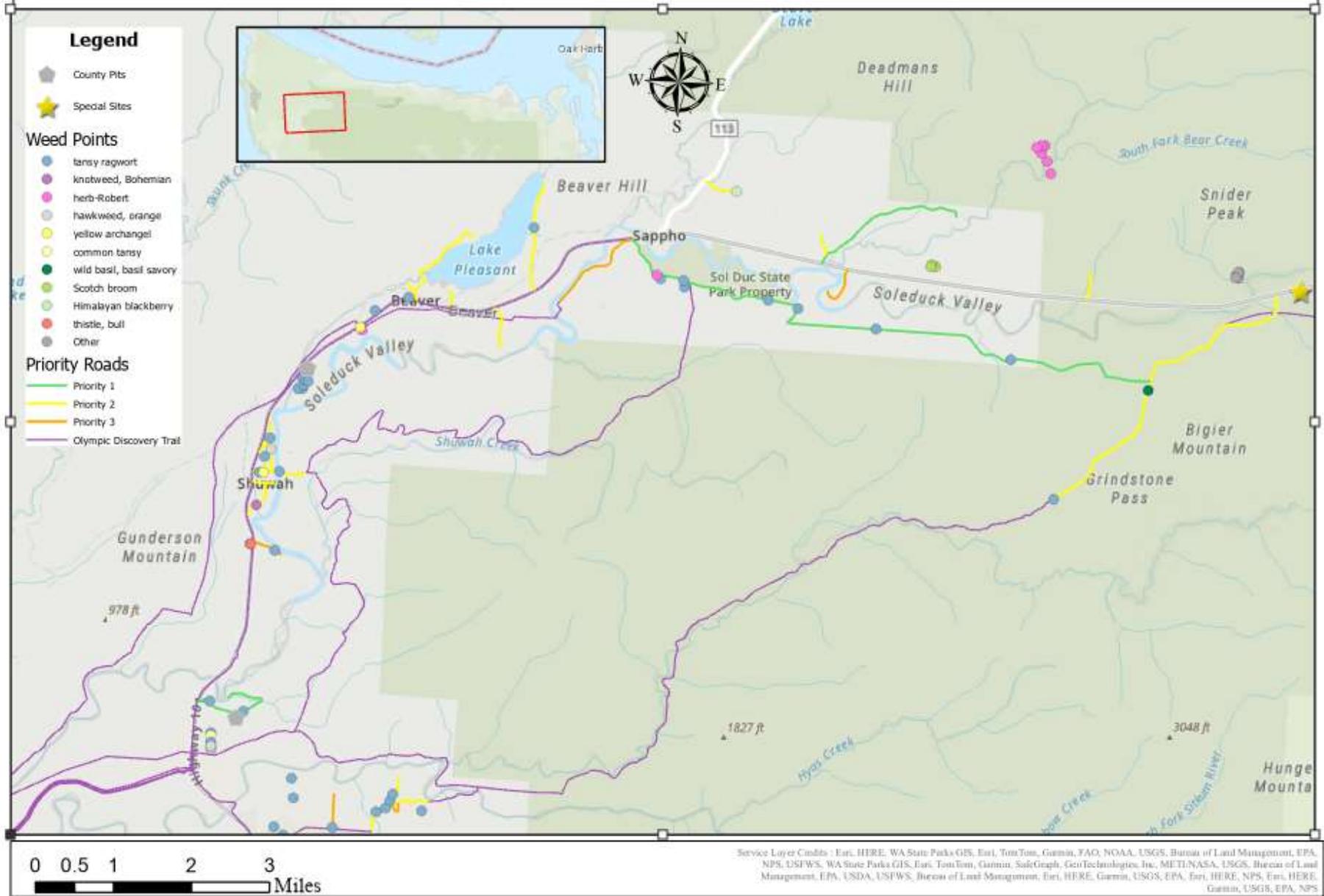
Sekiou - Clallam Bay Treatment Area



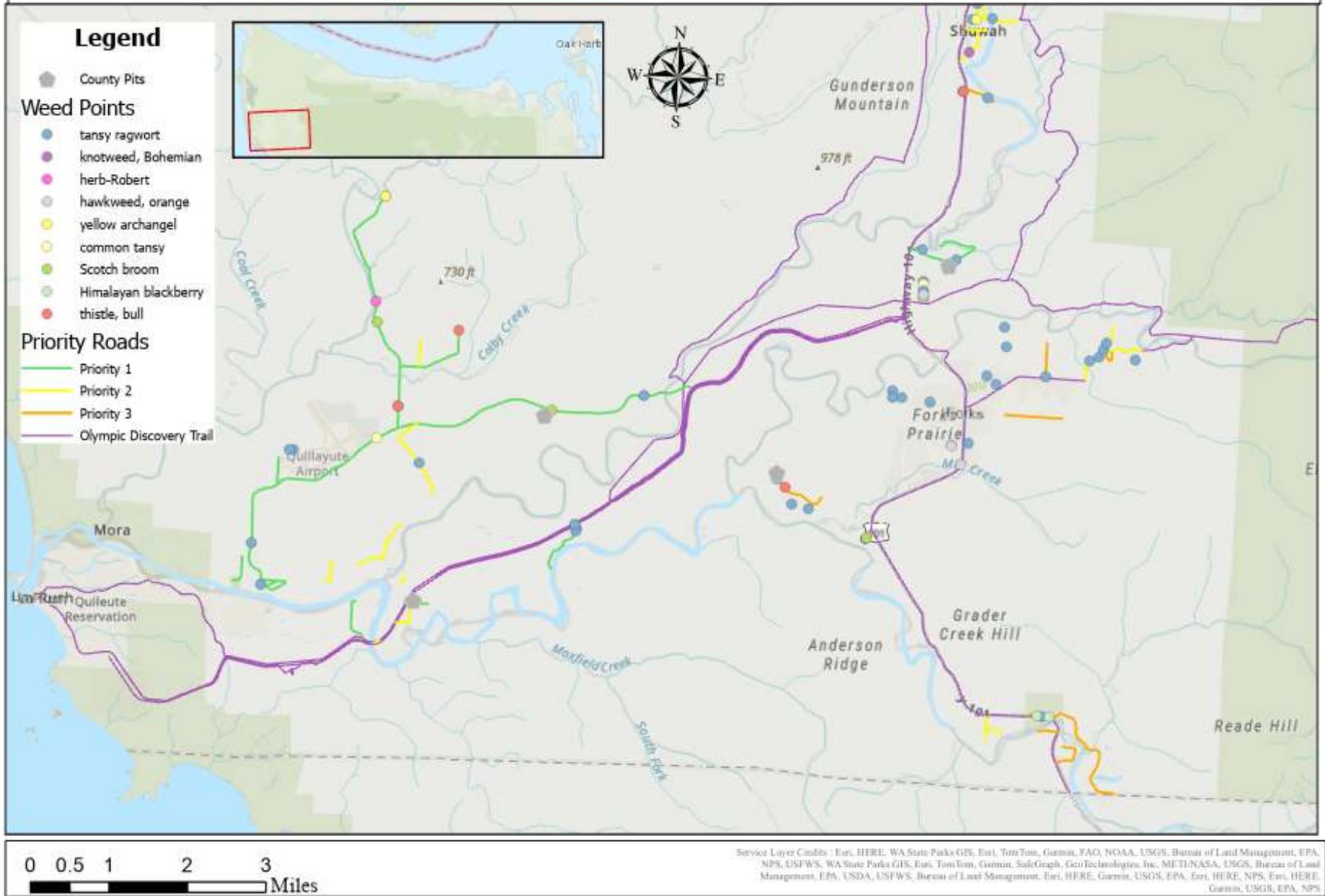
Hoko-Ozette Treatment Area



Sappho-Sol Duc Valley Treatment Area



Forks - Quillayute Road Treatment Area



POST SEASON OBSERVATIONS:

Roadside weed management is a dynamic process and the IWM Plan is intended to be evaluated and adapted over time based on our observations, technical updates and input from partners and the public. The 2024 IWM Plan was designed to continue our prior work, adapt to the observed efficacy, and further specific weed management goals. The successful implementation of the IWM Plan is dependent on the effective execution of its methodology. The CCNWCB reviewed the existing IWM Plan, forms and procedures developed previously and revised as needed for 2024. The IWM Plan is a unique part of the Clallam County Road Department's maintenance program. To be successful, weed control activities are incorporated into the general maintenance activities by coordinating with District Supervisors for appropriate timing of application. Weed control treatments on Clallam County right-of-ways and county operated pits are applied to fit Road Department's maintenance needs and minimize their expense of labor and equipment.

Each spring, prior to the start of treatments, the program coordinator and/or weed specialist meets with all three district supervisors, the environmental coordinator, transportation program manager and head road engineer to discuss the current IWM Plan, new pit plans and any new special considerations on Clallam County properties. We also take this opportunity to get feedback from the prior year and understand the department's goals for this year for each district. This year we continued to have requests for control of Himalayan Blackberry on multiple specific right-of-way locations and pits across all districts. We continued to communicate with the supervisors all year long and worked with them to control any concerns they brought to us. On some occasions their concerns were native plants, and we educated them about mechanical ways they could control them without eliminating the plants entirely, such as mowing or weed eating native blackberries encroaching into roadside hardware.

Work was initially set for known infestations on all County properties that had critical timing treatment needs. Work was then focused on Priority 1 roads; surveying and treating weeds as they were found. In 2022, the number of roads in the IWM plan was expanded, though many of the roads had not been surveyed prior. We continued to survey these roads and will be able to reclassify their treatment priority in the 2025 IWM plan based on whether any target weeds were found, landowner maintenance of the right-of-way and the average traffic use of the road. We continue to find new infestations on county roads not listed in the IWM plan.

Weed surveys and control within county pits began very early in the spring and continued throughout the entire season, with the methods of control changing as the season progressed and plants growth cycles warranted. During the growing season, we also spent time watering and maintaining pollinator plantings from previous years, so as not to lose our progress establishing native plants in areas of high priority and visibility. Our volunteer group was very helpful in this endeavor to preserve this community development project.

Our crew visited 79% (384 of 485) of the county roads listed in our IWM Plan and 52 roads not listed in the 2024 IWMP. We treated 198 roads for weeds, including 22 roads not listed on the 2024 IWMP but were found to have regulated weed species growing within the right-of-way. In 2024, we were able to spend more time surveying and treating Priority 2 and Priority 3 roads. Based on these surveys, we will reclassify roads to accurately reflect their weed infestations or chance for infestation. This reclassification of roads will allow us to focus on more immediate concerns and establish an adequate rotation for monitoring Priority 3 and 4 roads on alternating years. These classifications are reviewed every year and can be modified, either because of new weed infestations, eradication of known weeds, or at a landowner's request.

This year, it felt like we found tansy ragwort everywhere. In 2024, it was found on 121 county roads (27.8% of roads surveyed/treated), an increase from 2023, where it was found on 63 county roads (22.5% of roads surveyed/treated). The drastic increase in the number of roads with tansy ragwort can be attributed to surveying more roads, allowing us to discover and treat small infestations before they get established. This underscores the importance of surveying new county roads and creating a long-term monitoring plan for surveying lower priority roads on a regular basis.

Poison hemlock continues to be a high priority species for control, especially the historically large populations found in some of our eastern Clallam County pits. In 2024 multiple pits were remodeled, including off-site material brought into McInnes Pit from the Towne Rd levee. We will be monitoring these sites for any new poison hemlock infestations. The

persistent seed bank, early growth habits and growth within dense pasture grass and Himalayan blackberry make poison hemlock a challenge to control. We performed a few early season treatments in our pits using Aquaneat and Milestone to see if we could effectively kill hemlock when temperatures are still cold and prevent germination later in the spring. We had good success, though the massive seed bank still allowed some germination to occur. But based on our results, we will be using the Aquaneat/Milestone mix rather than the Element 3A/Milestone mix to treat hemlock in the early spring.

The program also continues to maintain and supplement our pollinator enhancement areas, located at the Deer Park Rd Overpass in east Port Angeles and along the Olympic Discovery Trail, adjacent to Old Olympic Highway in Agnew. This is now our seventh year of planting native vegetation for pollinator habitat. These plantings serve not only as native pollinator forage and habitat but a way of increasing the resilience of public areas against noxious weed encroachment. These pollinator projects are also a great way to educate the public on the many environmental benefits that native plants provide. Our pollinator sites are located at areas that are fully exposed and composed primarily of fill material, which makes plant survival and growth difficult. We have found that weekly waterings have greatly increased the survival and growth of our plants. This year was the first time that our plantings at the Deer Park Rd Overpass and Olympic Discovery Trail were fertilized with slow-release fertilizer. Over the years we have noticed that many plants were surviving on these harsh sites but were not growing and looked stressed. We will continue to monitor these plantings to see if our efforts are increasing survival and growth of our native plants.

In 2024 we noticed that our most successful plant at the Deer Park Rd Overpass was Puget Sound gumweed (*Grindelia integrifolia*), which has only been planted on the site since 2022 and is already growing large and flowering. In 2022 and 2023 the gumweed was planted mostly on the north side of the site, mostly on the slope facing northwest. The 2-year-old plants were big and flowering, while the plants installed in 2023 had high survival and looked healthy. During our 2024 plantings, we installed gumweed on the southern slopes. We will also significantly increase the number of gumweed ordered for the 2025 planting season. Other species growing well at the Deer Park Rd Overpass site are goldenrod (*Solidago lepida*), Douglas aster (*Symphyotrichum subspicatum*), Oregon sunshine (*Eriophyllum lanatum*) and coast penstemon (*Penstemon serrulatus*).

Through our partnership with the Clallam Conservation District, we recruited **5** volunteers that donated approximately **44** hours to water the pollinator sites over **13** weeks. This year we did not have any planting events in November or December, but do plan on holding volunteer events in January. Our pollinator enhancement sites would not be successful without the support we get through the Master Gardeners and our volunteers through the Clallam Conservation District, and we look forward to continuing these partnerships. Clallam County Sheriff's Department has been much appreciated by keeping Deer Park Overpass rest area parking lots safe and welcoming during our volunteer events. Also, the District 2 maintenance crew has been very helpful assisting us with careful mowing and erosion control material removal.

APPENDIX A: 2024 IWM TASK TABLE

The table below lists the tasks included in the IWM Work Plan and highlights the balanced approach to weed management. The specific tasks represent the best mix of control options chosen to address specific weed problems. The tasks are categorized by the weed management strategies: **Biological, Physical, Cultural, Preventative, and Chemical**. We completed or made substantial progress on all tasks listed below. The integral principle of the IWM Work Plan is that all treatment methods are potentially available for the County's management of noxious weeds. The table lists the task in **bold** and a description of 2024 activities; blue check marks indicate completed tasks, orange check marks indicate partially completed tasks, red check marks indicate not completed.

Task Status	Biological
	Identify appropriate release sites adjacent to County right-of-way. We did not release any new biological control agents in 2024. We saw many Cinnabar Moth caterpillars on tansy ragwort plants, we removed the caterpillars before disposal and left them in the field.
	Coordinate with WSU Extension and Noxious Weed Control Board for releases as they become available: No releases were scheduled. The program coordinator was in contact with WSU Extension about monitoring how previous releases are affecting weed seed set.
	Physical
	Update contact list to be shared between departments: Shared contact between Road Department Supervisors, Environmental Coordinator and ODT Volunteer Coordinator.
	Promote desirable native vegetation wherever possible: Coordinated planting projects and helped develop native species list for road projects.
	Clearly mark treatment areas: All treatment sections were posted with Herbicide Notice during and after treatments for at least 24 hours.
	Collaborate with Roads Department, WSDOT and Clallam PUD to identify landscape goals and harmonize maintenance techniques: We have routine interactions with Roads Department Supervisors and crews, they are great help by letting us know of infestations. There was no interaction with Clallam PUD in 2024 due to staffing changes. WSDOT has controlled regulated weeds in their rights-of-way when we notify them of infestations.
	Re-imagine Adopt-A-Patch opportunities to increase public interest and participation: Posted online and always had materials available. No agreements in 2024. We still need to identify areas where community involvement could safely occur.
	Review public involvement opportunities to ensure the available material meets program goals and is readily accessible online: Partnerships with the Master Gardeners and the Clallam Conservation District contributed to both the fertilizing and watering of the native pollinator projects this year.
	Cultural
	Identify opportunities to use native plantings in the early stages of projects in the county's transport plan: There were no requests for consultation on new projects from the Road Department this year.
	Further develop pollinator friendly plantings and coordinate with Road Department and WSU Extension to incorporate existing volunteer programs: Evaluating what species are successful at our planting sites and adding new species to the plant order that have the potential to do well. The Deer Park / HWY 101 interchange pollinator plantings and the Old Olympic Highway ODT berm pollinator plantings have been a wonderful source of volunteer projects for the Master Gardeners and Clallam Conservation District.

✓	Seek grant opportunities to implement pilot projects: No special research grants were sought this year; there may be projects in the future that we seek grant funding for.
✓	Assist with research projects where possible: We are continuing to develop an efficacy monitoring protocol for treatments in County pits and Right of Ways. No outside research requests were received this year.
✓	Continue building partnerships with local native plant sources and update material list to incorporate these projects: We are currently working with Shore Road Nursery to obtain locally sourced native plant species that are best suited to the sites we plant at. Lists of appropriate species are updated to reflect use on each individual site.
✓	Partner with experts from local, state and federal agencies and entities including but not limited to: Clallam County Parks, Washington State University Extension, WSU Master Gardeners, local chapter of bee keepers, the native plant and Audubon societies, the Nature Conservancy, conservation districts, Olympic National Park, Olympic National Forest, USFW Marine Refuge System, Makah, Quillayute, Lower Elwha Klallam, and Jamestown S'Klallam tribes, and others who have an interest in developing local native seed and plant resources for use in government projects: : Our partnerships with the entities listed above are ongoing and continue to be a necessity to our operations. CCNWCB hosts the Olympic Invasives Working Group meetings twice a year that bring together many of the weed control agencies on the Peninsula.
✓	Manage "Owner Will Control" agreements. Maintain current list and map of "Owner Will Control" locations for both office and field use. Review "Owner Will Control" application process and forms to ensure all public involvement opportunities are readily accessible online. Encourage landowners with "Owner Will Control" agreements to undertake adjacent roadside enhancement consistent with developing a low maintenance, self-sustaining plant community to prevent weed invasion. This information is available online and available to the public for any interested parties. No agreements were made or renewed in 2024. We spoke to multiple landowners on roadsides about the process for making an "Owner Will Control" agreements with the CCNWCB.
✓	Identify and compile a list of sites for revegetation opportunities: The CCNWCB crew is always looking at new planting sites that would ultimately be successful; the main considerations are accessibility, habitat value, and potential for positive engagement of the surrounding community.
✓	Develop native seed mix for Road Department projects where bare ground is necessary: In the past we have worked closely with Shore Road Nursery and BFI Seeds to purchase native seed for use on the Deer Park Overpass slopes and along the sides of the Dungeness Levee. None were used in 2024.
	Preventative
✓	Update rock and gravel source weed management protocols: All protocols are current and up to date and we routinely interact with and seek feedback from private rock sources as well as Road Department supervisors and their crews.
✓	Continue our partnership with mowing personnel to facilitate practices that encourage growth of natural site appropriate vegetation: We routinely speak with District Supervisors and mower operators about best practices along County roadsides.
✓	Inventory, develop and implement weed management plans for all county quarries, storage areas, and spoil disposal sites (pits); update as needed as County use requirements change: Multiple County pits have been physically modified in 2024 and will need to be closely monitored for new infestations. The District supervisors are very helpful in letting us know when there will be changes to these parcels.
✓	Implement weed free material requirements for all county projects: A "Weed Free Material" clause is included in the county contracts.
✓	Facilitate annual department native and invasive plants identification training in cooperation with weed board staff. Supply field crew with identification booklets: We speak informally with the road crews and investigate any reported

	weed infestations. The District supervisors have not requested formal training, but we will work with them to develop appropriate training.
✓	Identify equipment needs, investigate available resources, procedures as resources allow: We are continuing to improve and expand the watering system for the pollinator planting sites. The Road Department supervisors have been very helpful, offering any handheld equipment we have needed. Damaged or broken equipment is discarded and replaced as needed.
✓	Create county pit reference maps to include in management plans: Weed locations were mapped at each county pit, the points are readily available for review online and in the field. Maps will be created when necessary.
✓	Survey and treat as needed: all sand piles and sand extraction zones in county pits: All piles and extraction zones were surveyed and treated if necessary. Spoke with road crew about mitigating weed contamination before extraction began.
✓	Provide inspection services for all privately sourced material for county projects: Pit inspections were completed for 11 private pits that have current contracts with the county or will be bidding on county contracts in the future. All these participants are enthusiastic about attaining a “Weed Free” rating.
✓	Monitor and evaluate treatments in county pits: Early season treatment locations of poison hemlock in eastern Clallam County pits were revisited in late summer. We found that early season treatments were effective on the plants that were present, but that more plants had germinated since the early season treatments. Multiple treatments on the same infestation throughout the year will be necessary to avoid fully developed plants. Known infestations of noxious weeds that were treated in previous years were surveyed and retreated if necessary. We are continuing to try different methods of control with problematic weed species.
✓	Catalog weed infestations and update road priorities in treatment structure: We kept a record of when roads were surveyed or treated and if their weed infestation warranted a change up or down in the priority ranking. We took GPS points and photos of the regulated species, that data is available online and in the field.
✓	Compile list of sources that meet weed-free standards: Updated private pit list in the shared cloud folder. Also sent list to Road Department June 12 th , 2024 via email.
	Chemical
✓	Implement project list based on tables 4-8 in the 2024 Road Department Integrated Weed Management Plan: 2024 IWM Plan was implemented, crews focused mainly on Priority 1 roads and regulated weeds. In 2024, 189 roads, 25 county pits and 17 Special Sites were treated for noxious weeds.
✓	Post the annual project list. Update during season as resources allow: The annual project list was posted.
✓	Compile locations and instructions for special management areas. Include and update field maps as frequently as possible: Met frequently with District supervisors and discussed treatment for special areas of concern. Ongoing and open conversations with all 3 supervisors. Weed points collected and uploaded to Field Maps daily.
✓	Assess equipment and supplies; identify needs and procure as resources allow: Handheld sprayers, applicators and replacement backpack harnesses were acquired as needed.
✓	Ready all necessary forms, regulatory compliance paperwork and safety equipment before commencing treatment season: Public notice was given early in the year, permits were in the vehicles and all necessary safety data was in the vehicles.
✓	Coordinate with Road Department staff to identify special management areas or non-native, invasive weed locations that interfere with road safety or function; outline additional management needs or strategy for weed control in these areas: Spoke to all District supervisors about Himalayan blackberry and Scotch broom infestations that are interfering with road safety and function to compile a list of treatment locations. Coordinated with the County’s Lead Right-of-Way agent to verify County responsibility before treatments.

✓	Develop and utilize regional partners to assist in weed control across the county: Some manual control of tansy ragwort and cut stump treatment of Scotch broom was accomplished with partners in the county. CCNWCB communicated and collaborated with multiple entities in 2024, WSDOT, City of Port Angeles, City of Sequim, Jamestown S’Klallam Tribe and 10,000 Years Institute.
✓	Complete treatment records daily and enter data into Clallam County Noxious Weed Control Board database: Treatment records were completed daily, and data was entered into the database throughout the season.
✓	Monitor at least 10% of treatments, retreat as needed and as resources allow: In 2024, the Master Gardeners Roadside Weed Management Team monitored 42 (33%) of our 127 herbicide treatments. We checked back on new infestations and retreated as needed. There were 60 retreatments along roadsides, 21% of the 283 treatments. Other monitoring surveys did not warrant retreatment.
✓	Identify any additional equipment needs and take steps to incorporate any available resources including vehicles, application equipment, water tanks, or technical equipment: Repaired or replaced equipment as needed.
✓	Provide WSU Master Gardeners Roadside Weed Monitoring Team (RWMT) with safety equipment, additional training opportunities, and technical support for monitoring projects: We met with the RWMT in May and helped them with field identification of noxious weeds. We also gave instruction on the use of our weed location cataloging application Field Maps. No requests for equipment were received.
✓	Conduct a weed inventory on at least 25% of all county roads annually: 427 roads were surveyed and or treated in 2024. 486 roads are listed in the 2024 IWM Plan, 49 county roads were surveyed and or treated that were not listed in the 2024 IWMP. There are 855 County-managed roads. 50% of all Clallam County roads were surveyed and/or treated in 2024. Not all County roads are included in the IWM Plan but can be treated and added if weed infestations are found.
✓	Identify, document and map additional species, location, size, and density: Mapped and recorded information on all regulated species encountered on county roadsides, pits, and special sites during 2024 activities.
✓	Update survey data of county roadsides and catalog infestations over time: We have multiple roads that we are following over a seven-year period. All survey and treatment data have been compiled for this report. Infestations and survey results will be recorded in our database this winter.
✓	Support volunteer-based projects either on or adjoining county property that protects county property from weed infestations. This may include monitoring and revegetation projects: The Master Gardeners volunteered 200 hours performing the Roadside Weed Monitoring. Landowners in Sequim organized a Scotch broom removal project with CCNWCB and we work with the Spoke Folk to maintain a section of the Olympic Discovery Trail near Sequim.
✓	Promptly respond to all public inquiries. Address any public concerns regarding applications: We spoke with at least 57 individuals while treating roadsides and right-of ways. We addressed all public concerns and provided information on what species were treated and when on specific roads. We spoke to multiple landowners about “Owner Will Control” agreement options.
✓	Review and update online weed control request application process and forms as necessary: Both the weed control request and Knotweed sighting forms are working on the County website.
✓	Review process and forms for interdepartmental communication: Met with departmental staff in the beginning of the season to address any concerns.
✓	Compile annual report summarizing accomplishments, effectiveness, and recommendations for subsequent year. Brief the Road Department and County Commissioners by December 31st: The County Commissioners and Road Department was briefed on the 2024 season during a commissioner work session in early December 2024.



Draft Integrated Weed Management Plan and submit it to the Clallam County Noxious Weed Control Board and Road Department Supervisor for approval prior to the Weed Board's first meeting of the year. Submission of the IWM Plan should occur 20 days before the meeting and should be posted online. Provide public notice that the plan will be discussed, with Weed Board meeting announcements. The finalized plan and maps of proposed treatment locations should be posted online and made available upon public request: Currently in the process of drafting the 2025 IWM Plan and it will be complete and posted at least 20 days in advance of the Weed Board's January meeting.

APPENDIX B: WEED SPECIES TREATED ON COUNTY ROADSIDES, PITS, AND SPECIAL SITES

The table below alphabetically lists all weed species controlled in 2024 on County roadsides or rock sources/soil disposal sites (Pits). The 4-letter Weed Code is the first two letters of the genus and the first two letters of the species. Weed Category is determined in the 2024 IWM Plan to prioritize control. Definitions of headings can be found at the end of the table. Clallam County Noxious Weed List available online: <https://www.clallamcountywa.gov/821/Noxious-Weed-Control>.

COMMON NAME	4-LETTER WEED CODE	SCIENTIFIC NAME	LIFE CYCLE ¹	GROWTH FORM	THREAT	CATEGORY ²	STATUS
bindweed, field	COAR	<i>Convolvulus arvensis</i>	P	Forb	Outcompetes native plants species and can reduce crop yields; forms an extensive root system, often climbing or forming dense tangled mats.	1	NR
burdock, common	ARMI	<i>Arctium minus</i>	B	Forb	A host for mildew and root rot that can affect cash crops, causes animal milk to smell funny and is considered toxic due to its diuretic properties	2	WR
chervil, burr	ANCA	<i>Anthriscus caucalis</i>	A	Forb	Highly adaptable, aggressive competitors, forms monocultures, toxins cause skin irritation	3	WW
chervil, wild	ANSY	<i>Anthriscus sylvestris</i>	A	Forb	Forms monoculture quickly, and difficult to remove once established.	1	NCR
blackberry, cutleaf	RULA	<i>Rubus laciniatus</i>	P	Shrub	Dense canopies crowd out native species; impenetrable barrier	2	NW
blackberry, Himalayan	RUAR	<i>Rubus armeniacus</i>	P	Shrub	Dense canopies crowd out native species; impenetrable barrier	2	NW
broom, Scotch	CYSC	<i>Cytisus scoparius</i>	P	Shrub	Forms dense stands; unpalatable; interferes with forest regeneration; fire hazard; scent can exacerbate human grass allergies; seeds are toxic to horses and livestock	2	NW
carrot, wild	DACA	<i>Daucus carota</i>	B	Forb	Damages agricultural commodity as it may cross pollinate with domestic carrot, seriously degrading the quality of commercial carrot seed production	3	NW
chicory	CIIN	<i>Cichorium intybus</i>	B	Forb	Aggressive invader along roadsides, abandoned lots, lawns and overgrazed pastures	1	WW
daisy, oxeye	LEVU	<i>Leucanthemum vulgare</i>	R	Forb	Aggressive invader of pastures and natural meadows; outcompetes desirable grasses and herbaceous perennials and reduces crop and hay fields; unpalatable	3	NW
hawkweed, orange	HIAU	<i>Hieracium aurantiacum</i>	P	Forb	Aggressive invader forming dense mats, unpalatable, competitor of pasture and range plants	1	NCR
hoary alyssum	BEIN	<i>Berteroa incana</i>	A	Forb	Can be toxic to livestock, aggressive in stressed areas and pastures	1	NCR

COMMON NAME	4-LETTER WEED CODE	SCIENTIFIC NAME	LIFE CYCLE ¹	GROWTH FORM	THREAT	CATEGORY ²	STATUS
ivy, English	HEHE	<i>Hedera helix</i>	P	Vine	Forms dense carpets in understory; climbs and can kill trees or make them more prone to topple during storms; sap can cause allergic reactions and plant is toxic to humans and cattle	2	NW
fennel, common	FOVU	<i>Foeniculum vulgare</i>	P	Forb	Dense stands exclude native vegetation	1	NCR
foxglove	DIPU	<i>Digitalis purpurea</i>	B	Forb	Can be toxic to livestock; spreads aggressively in disturbed areas	3	WW
herb Robert	GERO	<i>Geranium robertianum</i>	A, B	Forb	Rapid spreading; displaces native herbaceous plants; allelopathic, inhibits the germination of small seeded forbs in forest understory	1	NW
knapweed, meadow	CEMO	<i>Centaurea x moncktonii</i>	P	Forb	Outcompetes pasture species; degrades wildlife habitat; interferes with agriculture	1	NCR
knapweed, spotted	CEST	<i>Centaurea stoebe</i>	B, P	Forb	Allelopathic plant that can inhibit the germination of grasses; forms dense stands that exclude desired plants and wildlife	1	NCR
knotweed, Bohemian	POBO	<i>Polygonum x bohemicum</i>	P	Shrub	Easily spreads by disturbance; dense colonies eliminate other plant species and can degrade fish habitat; causes structural damage to human structures	1	NCR
laurel, spurge	DALA	<i>Daphne laureola</i>	P	Shrub	Toxic to humans and animals; contact with plants can cause dermatitis	1	NCR
lupine, tree	LUAR	<i>Lupinus arboreus</i>	P	Shrub	Aggressive invader forming dense monocultures, potentially toxic to livestock	1	WR
moleplant	EULA	<i>Euphorbia lathyris</i>	A, B	Forb	Latex causes severe skin irritation and can be fatal if ingested; spreads rapidly	1	ISSC
mountain ash, European	SOAU	<i>Sorbus aucuparia</i>	P	Tree	Escaped ornamental that invades natural forests and grows rapidly; can quickly begin to outcompete native vegetation; seeds spread readily by birds	2	ISSC
Mustard, wild	BRSP	<i>Brassica</i> spp. (or <i>Sinapis arvensis</i>)	A	Forb	Common weed in fields, roadsides and abandoned areas; can interbreed with domestic Brassicas and contaminate seed crops	3	WW
peavine, everlasting	LALA	<i>Lathyrus latifolius</i> ,	P	Forb - vine	Forms dense thickets; seeds can be toxic to livestock; seriously interferes with forest regeneration where it invades from edges of timber units	2	ISSC
poison hemlock	COMA	<i>Conium maculatum</i>	B	Forb	Highly toxic to humans and animals; all parts of the plant are toxic; severe birth defects	1	NCR
spurge laurel	DALA	<i>Daphne laureola</i>	P	Shrub	Toxic to humans and animals; contact with plants can cause dermatitis	1	NR
St. John's wort, common	HYPE	<i>Hypericum perforatum</i>	P	Forb	Causes photo-sensitization when grazed; toxic at all stages of growth	3	NW
sulfur cinquefoil	PORE	<i>Potentilla recta</i>	P	Forb	Not readily grazed by livestock and wildlife; forms dense stands	1	NCR

COMMON NAME	4-LETTER WEED CODE	SCIENTIFIC NAME	LIFE CYCLE ¹	GROWTH FORM	THREAT	CATEGORY ²	STATUS
tansy ragwort	JAVU	<i>Jacobea vulgaris</i>	B	Forb	Poisonous to horses, cattle, and pigs; animals grazing tansy can produce tainted milk, may result in potentially toxic residue in honey	1	NCR
tansy, common	TAVU	<i>Tanacetum vulgare</i>	P	Forb	Dense stands degrade forage value; toxicity issues for humans and livestock	1	NR
teasel, common	DIFU	<i>Dipsacus fullonum</i>	B	Forb	Forms dense stands of prickly, unpalatable plants; degrades habitat and reduces accessibility	1	NCR
thistle, bull	CIVU	<i>Cirsium vulgare</i>	B	Forb	Aggressive competitor, unpalatable for cattle	2	NW
thistle, Canada	CIAR	<i>Cirsium arvense</i>	P	Forb	Aggressive competitor, unpalatable; decreases forage; host species for several agricultural pests	2	NW
thistle, Italian	CAPY	<i>Carduus pycnocephalus</i>	A	Forb	Spiny, unpalatable, and excludes native vegetation and degrades habitat. Spreads quickly and can be a fire hazard in summer season.	1	NCR
yellow archangel	LAGA	<i>Lamiastrum galeobdolon</i>	P	Forb - vine	Aggressive invader, competes understory species, degrades wildlife habitat	1	NCR
wild basil savory	CLVU	<i>Clinopidium vulgare</i>	P	Forb	Aggressive invader, competes understory species, degrades wildlife habitat	1	NCR

¹A - annual; B - biennial; P - perennial
²ISSC = Invasive Species of Special Concern; NCR = Noxious, Control Required; NR = Noxious, Rare; NW = Noxious, Widespread; WR=Weedy, Rare; WW=Weedy Widespread

APPENDIX C: COUNTY ROADSIDE TREATMENT ACTIVITIES

This table includes all county roadsides managed for noxious weeds in 2024 under the Clallam County Road Department IWM Plan. The table is sorted alphabetically by road name. Definitions for the headings can be found at the end of the table. Species treated are listed alphabetically by the assigned 4-letter code (see Appendix B); 4-letter codes shown in bold are regulated noxious weeds and required for control in Clallam County.

We completed **310 treatments** on **198 county roads** over **95 days** and controlled **36 species**. In total, we treated **298.4 miles** (including retreatments/spot treatments) and examined **1113.0 acres** (including monitoring surveys) of county roadside. For retreatments, Miles Examined, Acres Examined, and Acres Treated were counted in full in order to correctly calculate application rates and Solid Acres.

ROAD NAME	TREATMENT METHOD ¹	TREATMENT DATE	MILES TREATED	ACRES EXAMINED ²	ACRES TREATED ³	SOLID CHEMICAL ACRES TREATED ⁴	SOLID MANUAL ACRES TREATED ⁵	TREATED SPECIES LIST ⁶	YEARS TREATED
3 Crabs Rd	Herbicide	04/01/24	0.10	2.53	0.100	0.0115	0.000	COMA	2018-2022, 2024
Agate Beach Rd	Manual	08/20/24	0.20	0.50	0.100	0.0000	0.000	JAVU	2024
Aster Rd	Manual	07/18/24	0.10	0.25	0.250	0.0000	0.001	JAVU	2018-2021, 2023, 2024
	Manual	10/22/24	0.10	0.24	0.010	0.0000	0.000	JAVU	
Atterberry Rd	Manual	02/05/24	0.01	5.10	0.010	0.0000	0.000	COMA	2019, 2022, 2023, 2024
	Manual	09/03/24	0.10	6.78	0.240	0.0000	0.000	JAVU	
Baker Farm Rd	Manual	08/05/24	0.10	0.96	0.240	0.0000	0.000	ARMI	2024
Ballard Rd	Herbicide	04/22/24	0.20	0.35	0.350	0.0161	0.000	LAGA, CYSC, RUAR	2024
Beach Dr	Manual	05/28/24	0.50	1.00	1.000	0.0000	0.000	COMA	2024
	Manual	10/22/24	0.10	1.21	0.010	0.0000	0.000	COMA	
Bishop Rd	Manual	08/21/24	0.20	0.96	0.480	0.0000	0.000	CEMO	2024
Black Diamond Rd	Manual	06/18/24	4.40	10.60	1.270	0.0000	0.001	JAVU, DIFU	2017-2024
	Manual	08/21/24	0.10	10.66	0.240	0.0000	0.001	TAVU	
Blue Mountain Rd	Manual/ Herbicide	08/26/24	7.00	16.96	16.960	0.0000	0.000	JAVU, POBO, HYPE, CIAR, CEMO, LALA	2024
	Manual	09/04/24	0.10	16.96	0.240	0.0459	0.000	CEMO	
Bogachiel Way	Manual	07/31/24	0.30	2.42	0.720	0.0000	0.004	JAVU	2024

ROAD NAME	TREATMENT METHOD ¹	TREATMENT DATE	MILES TREATED	ACRES EXAMINED ²	ACRES TREATED ³	SOLID CHEMICAL ACRES TREATED ⁴	SOLID MANUAL ACRES TREATED ⁵	TREATED SPECIES LIST ⁶	YEARS TREATED
Calawah Way	Manual	07/31/24	1.400	3.390	3.390	0.0000	0.004	JAVU	2023-2024
	Manual	08/12/24	1.400	3.390	3.390	0.0000	0.009	JAVU	
Cameron Rd (District 2)	Manual	12/17/24	0.10	1.93	0.240	0.0000	0.0012	JAVU	2024
Camp Hayden Rd	Manual	08/20/24	3.50	8.48	8.480	0.0574	0.000	JAVU	2018-2024
	Herbicide	08/21/24	3.50	8.48	8.480	0.0000	0.001	GERO, CLVU, JAVU, CIVU	
	Manual	11/01/24	0.10	8.48	0.240	0.0000		JAVU	
Carlsborg Rd	Herbicide	03/29/24	1.80	3.26	3.260	0.0505	0.000	CEST, CYSC, CIAR, CIVU, TAVU, RUAR, CEMO	2018-2024
	Manual	09/04/24	0.10	4.36	0.240	0.0000	0.000	CEST	
Cassidy Rd	Herbicide	09/03/24	0.80	1.93	1.930	0.0138	0.000	JAVU, CEMO, CIAR, CIVU, DACA, DALA	2024
Cedar Park Dr	Manual	10/28/24	0.10	1.69	0.240	0.0000	0.0001	JAVU	2024
Chicken Coop Rd	Manual/Herbicide	07/06/24	3.50	8.48	8.480	0.0161	0.001	CIAR, CIVU, CLVU, DIFU, JAVU	2017-2020, 2024
Cline Spit Rd	Herbicide	04/17/24	0.20	0.36	0.360	0.0000	0.000	COMA	2021,2023-2024
Coho Dr	Manual	09/11/24	0.10	0.72	0.240	0.0000	0.000	JAVU	2021,2023-2024
Commercial St	Herbicide	07/10/24	0.10	0.24	0.240	0.0023	0.000	JAVU	2023-2024
	Manual	09/16/24	0.10	0.24	0.240	0.0000	0.000	JAVU	
Cooper Ranch Rd	Manual/Herbicide	08/27/24	4.20	10.20	10.200	0.0046	0.000	JAVU, CLVU, GERO, RULA	2019-2024
Coulter Rd	Herbicide	03/05/24	0.20	0.36	0.360	0.0057	0.000	COMA, CIVU, CIAR	2020-2022, 2024
	Herbicide	10/09/24	0.10	0.96	0.100	0.0000	0.000	COMA	
Crescent Beach Rd	Manual	08/20/24	1.50	8.48	3.630	0.0000	0.001	JAVU, CEMO	2020-2024
Dan Kelly Rd	Herbicide	07/17/24	3.20	7.80	7.800	0.0459	0.000	POBO, JAVU, CIVU, CIAR, DACA, CEMO, CEDI	2017-2021, 2023-2024
	Manual	08/20/24	3.20	7.75	7.750	0.0000	0.001	JAVU	

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Deer Park Rd	Herbicide	03/29/24	0.10	0.10	0.100	0.0115	0.000	FOVU	2018-2024
	Herbicide	09/04/24	0.10	11.63	0.240	0.0023	0.000	CEMO	
	Manual	10/28/24	0.10	10.90	0.240	0.0000	0.0004	JAVU	
Diamond Point Rd	Manual	10/22/24	1.00	9.68	2.420	0.0000	0.000	JAVU	2018-2024
Dietz Rd	Manual	08/05/24	0.50	1.21	1.210	0.0000	0.000	JAVU, CIVU	2021-2022, 2024
Discovery View Dr	Manual	10/22/24	0.10	1.21	0.010	0.0000	0.000	JAVU	2017, 2019, 2020, 2024
Division St	Herbicide	07/10/24	0.10	0.24	0.240	0.0046	0.000	JAVU	2024
Don Schmith Rd	Manual/ Herbicide	09/18/24	0.50	1.21	1.210	0.0367	0.000	JAVU, CEMO, LALA, PORE, CIAR, RUAR	2023-2024
Doss Rd	Manual	12/18/24	0.10	1.21	0.240	0.0000	0.0001	JAVU	2024
Draper Rd	Manual	08/05/24	0.10	2.42	0.240	0.0000	0.000	JAVU	2024
Dry Creek Rd	Manual	09/17/24	0.10	1.96	0.240	0.0000	0.000	JAVU	2021, 2024
Durrwachter Rd	Manual	08/20/24	1.50	3.63	3.630	0.0000	0.002	JAVU	2019, 2024
Eagle Point Rd	Herbicide	09/16/24	0.20	3.15	0.480	0.0069	0.000	POBO	2024
East Beach Rd	Manual/ Herbicide	04/30/24	1.40	2.53	2.530	0.0002	0.035	CYSC, DALA, GERO, DIPU, ANCA	2017-2024
East Lake Pleasant Rd	Manual	09/11/24	1.20	2.90	2.900	0.0000	0.001	JAVU	2024
East Lyre River Rd	Manual	10/10/24	0.60	1.45	1.450	0.0000	0.000	JAVU, CEMO	2017-2024
East Sequim Bay Rd	Manual/ Herbicide	08/07/24	4.10	9.93	9.930	0.0000	0.000	CLVU, JAVU	2019-2022, 2024
	Manual	08/19/24	0.10	9.93	0.240	0.0046	0.000	JAVU	
	Manual/ Herbicide	10/01/24	4.10	10.00	10.000	0.0115	0.000	CLVU, JAVU	
Easterly Rd	Herbicide	04/29/24	0.30	0.54	0.540	0.0230	0.000	CEMO, CYSC, RUAR, HYPE, GERO	2017-2021, 2023-2024
Eden Valley Rd	Manual	08/20/24	3.50	8.480	8.480	0.0000	0.002	JAVU, DIFU, CEMO	2017-2024

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Elk Creek Ridge Rd	Manual/ Herbicide	07/31/24	0.20	0.480	0.480	0.0023	0.001	JAVU	2024
Elk Loop Dr	Manual	07/31/24	0.20	0.480	0.480	0.0000	0.001	JAVU	2023-2024
Elk Valley Rd	Manual/ Herbicide	08/12/24	0.50	1.210	1.210	0.0551	0.010	JAVU	2023-2024
	Manual	10/30/24	0.10	1.210	0.240	0.0000	0.0001	JAVU	
Elwha River Rd	Manual	09/17/24	0.50	4.60	1.210	0.0000	0.000	JAVU	2019-2024
Emery Rd	Manual	08/26/24	0.50	1.21	0.100	0.0000	0.000	CIVU	2024
Evans Rd	Manual	07/15/24	1.70	4.20	4.200	0.0000	0.002	DIFU	2018-2021, 2024
Evergreen View Pkwy	Manual	08/20/24	0.50	1.21	1.210	0.0000	0.000	JAVU	2019, 2024
Farrington Rd	Herbicide	04/10/24	0.90	1.63	1.630	0.0069	0.000	JAVU, RUAR, CIAR, CIVU, CEMO	2017-2024
	Manual	09/17/24	0.90	2.18	2.180	0.0000	0.002	JAVU, CEMO	
Fasola Rd	Manual	02/12/24	0.30	1.81	0.540	0.0023	0.000	DIFU	2019-2022, 2024
	Herbicide	03/06/24	0.30	0.54	0.540	0.0207	0.000	DIFU	
	Herbicide	04/08/24	0.70	1.27	1.270	0.0000	0.001	DIFU, CIVU, RUAR, FOVU	
	Manual	07/16/24	1.00	2.42	2.420	0.0000	0.001	COMA, DIFU	
Fey Rd	Manual	04/10/24	0.30	0.540	0.540	0.0000	0.000	JAVU	2024
Fisher Cove Rd	Herbicide	10/10/24	0.80	1.93	1.930	0.0390	0.000	CEMO, CIVU, DIPU	2017-2021, 2024
Fleming Dr	Manual	07/15/24	0.40	1.00	1.000	0.0000	0.000	JAVU	2017, 2019- 2020, 2024
	Manual	10/22/24	0.10	0.96	0.010	0.0000	0.000	JAVU	
Freshwater Bay Rd	Manual	08/20/24	1.00	6.06	2.420	0.0000	0.002	JAVU	2019-2021, 2023-2024
	Manual	11/01/24	2.50	6.06	6.060	0.0000	0.0002	JAVU	

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Freshwater Park Lp	Manual	04/10/24	1.30	2.35	2.350	0.0000	0.000	JAVU	2022-2024
	Manual	08/20/24	1.30	3.15	3.150	0.0000	0.001	JAVU	
	Manual	11/01/24	1.30	3.15	3.150	0.0000	0.0004	JAVU	
Front St	Manual/ Herbicide	07/10/24	0.60	1.45	1.450	0.0230	0.002	JAVU	2023-2024
Gagnon Rd	Manual	07/22/24	0.10	1.210	0.240	0.0023	0.000	JAVU	2021, 2024
	Herbicide	09/17/24	0.10	1.210	0.240	0.0000	0.000	CEMO	
Gasman Rd	Herbicide	05/30/24	1.30	3.900	3.200	0.2984	0.000	CYSC, HYPE, CIVU, RUAR, DIPU, GERO	2017, 2020, 2024
Gaydeski Rd	Manual	08/13/24	0.40	0.960	0.960	0.0000	0.000	JAVU	2024
Gilbert Rd	Herbicide	02/07/24	0.20	0.400	0.40	0.0115	0.000	COMA, DALA, CIVU, ANCA, CYSC	2020-2024
	Herbicide	06/05/24	0.10	0.400	0.10	0.0023	0.000	COMA, RUAR	
Glass Rd	Manual	08/05/24	2.20	5.330	5.33	0.0000	0.000	JAVU, CIVU	2021-2022, 2024
Gossett Rd	Manual	09/17/24	0.90	2.180	2.18	0.0000	0.000	JAVU, CEMO	2017-2024
	Manual/ Herbicide	08/21/24	0.90	2.180	2.18	0.0092	0.000	CEMO, JAVU, GERO, CIAR, CIVU, RUAR	
Granite Rd	Herbicide	05/16/24	0.30	3.34	3.34	0.1768	0.000	CYSC, CEMO, HYPE, CIVU, CIAR, RUAR	2021-2022, 2024
Grant Rd- District 1	Manual	08/06/24	0.20	0.72	0.48	0.0000	0.000	CEST	2018, 2022, 2024
Grael-Ramapo Rd	Manual	08/21/24	1.90	4.60	4.60	0.0000	0.001	JAVU	2018-2021, 2023-2024
Happy Valley Rd	Manual	02/12/24	1.00	1.81	1.81	0.0849	0.000	DIFU	2017-2024
	Manual	02/27/24	3.30	6.00	0.20	0.0000	0.005	DIFU	
	Manual	03/27/24	0.10	0.10	0.10	0.0000	0.001	DIFU	
	Herbicide	04/29/24	2.00	14.44	14.44	0.0000	0.004	CEMO, CEST, JAVU, RUAR, CYSC, CIVU, CIAR	

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	Manual/ Herbicide	09/23/24	1.25	3.00	3.00	0.0861	0.002	CEST, CEMO, CIAR, DIFU	
	Manual	12/18/24	0.40	7.27	0.96	0.0000	0.0063	DIFU	
	Manual	12/20/24	0.20	6.00	0.50	0.0000	0.0035	CEMO	
Hardwick Rd	Manual	08/07/24	0.10	0.96	0.10	0.0000	0.000	JAVU	2024
Harrison Rd	Manual	10/22/24	0.30	0.72	0.72	0.0000	0.003	BEIN, CEST	2021-2022, 2024
Harry Brown Rd	Manual	06/18/24	0.20	0.40	0.40	0.0000	0.000	JAVU	2024
Hauk Rd	Herbicide	09/16/24	0.10	0.96	0.24	0.0161	0.000	POBO	2024
Henry Boyd Rd	Manual	08/05/24	0.50	3.87	1.21	0.0000	0.002	JAVU	2021-2024
Herrick Rd	Herbicide	07/22/24	0.10	3.630	0.10	0.0023	0.000	CEST	2021-2022, 2024
Hoare Rd	Manual	06/18/24	0.10	1.30	0.10	0.0000	0.000	CYSC	2023-2024
Hoko-Ozette Rd	Manual/ Herbicide	06/06/24	21.00	50.100	50.10	0.0046	0.000	POBO, JAVU, CYSC	2017-2024
	Herbicide	07/10/24	17.00	44.400	31.50	0.0000	0.006	CIVU, HIAU, POBO, RUAR	
	Manual	07/30/24	18.00	53.300	43.60	0.0115	0.000	JAVU	
Holgerson Rd	Manual	03/12/24	0.10	0.72	0.10	0.0000	0.001	DIFU	2024
	Manual	09/10/24	0.10	0.96	0.24	0.0000	0.001	DIFU	
Holland Rd	Manual	08/06/24	0.10	4.12	0.24	0.0000	0.000	JAVU	2018-2021, 2024
Hooker Rd	Herbicide	02/07/24	0.40	0.76	0.76	0.0230	0.000	COMA, LEVU, RUAR	2020-2022, 2024
	Herbicide	06/05/24	5.00	1.00	1.00	0.0689	0.000	HYPE, DIFU, RUAR, CIAR, CIVU	
Huckleberry Hill Dr	Manual	08/20/24	0.40	0.96	0.96	0.0000	0.001	JAVU	2019, 2024
	Manual	11/01/24	0.10	0.96	0.24	0.0000	0.000	JAVU	
Hudson Rd	Herbicide	04/10/24	0.30	0.54	0.54	0.0023	0.000	CIVU, CIAR, DIPU	2024

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Industrial Pkwy	Manual	07/18/24	0.50	1.20	1.20	0.0000	0.000	JAVU	2017, 2020, 2024
James Page Rd	Herbicide	08/06/24	0.10	0.720	0.10	0.0184	0.000	CIAR	2024
Jamestown Rd	Manual	09/10/24	0.10	3.87	0.24	0.0000	0.000	FOVU	2019, 2024
Johnson Creek Rd	Herbicide	04/29/24	0.50	0.90	0.90	0.0230	0.000	CYSC, CEMO, RUAR, HYPE, JAVU, CIVU, CIAR	2017-2024
	Herbicide	09/23/24	0.25	1.50	0.60	0.0057	0.000	CEMO, CIAR	
Joyce-Piedmont Rd	Manual	08/21/24	0.10	3.39	0.10	0.0000	0.004	TAVU	2018-2021, 2024
Kemp St	Herbicide	09/16/24	0.10	0.100	0.10	0.0069	0.000	POBO	2024
Kirner Rd	Manual	08/06/24	0.10	1.210	0.24	0.0000	0.000	CEST	2024
	Manual	08/14/24	0.10	2.180	0.24	0.0000	0.000	TAVU	
Kitchen-Dick Rd	Herbicide	03/04/24	0.20	5.810	0.36	0.0115	0.000	COMA	2017-2024
Lake Creek Rd	Manual	09/11/24	0.30	0.72	0.72	0.0000	0.000	JAVU	2024
Lamar Ln	Herbicide	03/20/24	0.40	1.270	0.72	0.0115	0.000	CAPY, COMA, CIVU, CIAR	2019-2021, 2023-2024
Lawrence Rd	Herbicide	04/10/24	0.70	1.270	1.27	0.0115	0.000	JAVU, CIVU, CIAR, CYSC	2024
Liljedahl Rd	Manual	08/21/24	1.00	2.420	2.42	0.0000	0.000	JAVU	2018-2019, 2023-2024
Little Loop Dr	Manual	08/05/24	0.20	1.930	0.48	0.0000	0.001	JAVU	2020-2024
Little River Rd	Herbicide	08/28/24	3.50	8.48	8.48	0.0597	0.000	CEMO, CLVU, CIVU, GERO, JAVU	2017-2024
Lost Mountain Rd	Manual	08/26/24	5.20	12.60	12.60	0.0000	0.000	JAVU	2019-2024
	Manual/Herbicide	09/30/24	3.40	8.24	8.24	0.0689	0.000	JAVU, CIAR, CIVU, DIFU, GERO, CIIN, CEMO	
Lotzgesell Rd	Herbicide	03/07/24	1.50	8.00	2.71	0.0402	0.000	COMA, DIFU, CYSC, CIVU	2018-2024
	Herbicide	03/12/24	0.01	0.01	0.01	0.0002	0.000	COMA	
	Manual	12/20/24	0.10	8.24	0.10	0.0000	0.0001	COMA	

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Louella Rd	Herbicide	09/18/24	0.10	2.18	0.10	0.0023	0.000	CEMO	2024
Lower Elwha Rd	Manual	01/08/24	0.01	0.100	0.100	0.0000	0.008	CYSC	2019-2024
	Manual/ Herbicide	07/22/24	2.80	6.780	6.780	0.0781	0.004	CIAR, CIVU, CEMO, CEST, DACA, JAVU	
	Manual	11/01/24	1.40	6.800	3.400	0.0000	0.0004	JAVU	
Lucken Dr	Manual	07/31/24	0.00	0.240	0.000	0.0000	0.000	JAVU, CIVU	2024
Lupine Dr	Manual	07/18/24	0.50	1.20	1.20	0.0000	0.000	JAVU	2017-2020, 2024
	Manual	10/22/24	0.10	1.21	0.24	0.0000	0.000	JAVU	
Madrona Way	Manual	07/15/24	1.10	2.700	2.70	0.0000	0.003	JAVU	2017, 2019- 2020, 2022- 2024
	Manual	10/22/24	0.10	2.700	0.24	0.0000	0.000	JAVU	
Manzanita Dr	Manual	05/28/24	0.7	1.30	1.30	0.0000	0.000	JAVU	2020, 2023- 2024
	Manual	07/18/24	0.7	1.70	1.70	0.0000	0.000	JAVU	
Mapleton Way	Manual	07/22/24	0.1	0.72	0.24	0.0000	0.000	JAVU	2023-2024
Marine Dr	Herbicide	03/20/24	0.10	1.450	0.10	0.0023	0.000	COMA	2019-2024
	Herbicide	04/17/24	0.10	3.800	0.10	0.0023	0.000	COMA	
Marmot Loop	Herbicide	04/08/24	0.10	0.20	0.10	0.0046	0.000	ANSY	2023-2024
Mary Clark Rd	Herbicide	08/27/24	7.70	18.60	18.60	0.0298	0.002	JAVU, RULA, HYPE	2019-2024
	Manual	09/11/24	7.70	18.66	18.66	0.0000	0.000	JAVU	
	Manual	12/16/24	0.10	18.60	0.24	0.0000	0.0001	JAVU	
Maxfield Rd	Manual	08/13/24	0.80	1.930	1.93	0.0000	0.000	JAVU	2024
McAlmond St	Herbicide	04/17/24	0.10	0.240	0.24	0.0344	0.000	CYSC	2024
McGarvie Rd	Manual	09/17/24	0.30	0.720	0.72	0.0000	0.000	JAVU	2017-2019, 2023-2024
Melton Rd	Manual	06/18/24	0.10	0.540	0.10	0.0000	0.000	HIAU	2023-2024
Merchants Rd	Manual	07/31/24	0.50	1.210	1.21	0.0000	0.000	JAVU	2024

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Mina Smith Rd	Manual/Herbicide	04/22/24	3.30	8.00	8.00	0.0344	0.002	JAVU, LAGA, CYSC, CIVU	2018-2024
	Manual/Herbicide	07/02/24	1.55	8.00	4.10	0.0023	0.005	CYSC, LAGA	
	Manual	10/25/24	1.10	8.00	2.66	0.0000	0.0002	JAVU	
Monroe Rd	Manual	08/05/24	0.60	9.21	1.45	0.0000	0.001	JAVU, CEMO	2018, 2020, 2023-2024
Moriarty Rd	Manual	10/25/24	0.10	3.15	0.100	0.0000	0.0000	JAVU	2024
Mount Angeles Rd (South of Eckard Rd)	Manual	08/19/24	0.10	10.66	0.240	0.0046	0.000	JAVU	2024
	Herbicide	08/28/24	0.10	0.10	0.100	0.0023	0.000	POBO	
	Herbicide	09/30/24		0.10	0.100	0.0000	0.000	HIAU	
Mount Pleasant Rd	Manual	01/04/24	0.10	0.36	0.18	0.0689	0.000	CYSC	2020-2024
	Manual	01/05/24	1.50	2.00	1.00	0.0046	0.000	CYSC	
	Herbicide	03/12/24	1.60	5.43	2.90	0.0023	0.000	COMA, CEMO	
	Herbicide	07/11/24	0.10	0.20	0.20	0.0000	0.019	TAVU	
	Herbicide	07/17/24	0.10	0.10	0.10	0.0000	0.010	TAVU	
	Manual	08/05/24	1.50	13.80	3.63	0.0000	0.001	CIVU, JAVU	
Myrtle St	Herbicide	09/30/24	0.10	0.10	0.100	0.0002	0.000	TAVU	2024
Nichols Rd	Manual	06/06/24	0.60	1.10	1.100	0.0000	0.000	CIVU	2024
North Bay View St	Herbicide	04/12/24	0.10	0.60	0.600	0.0459	0.000	TAVU, CYSC, CIVU	2024
North Brown Rd	Manual	09/11/24	0.10	1.20	0.100	0.0000	0.001	DIFU	2020, 2022 2024
North Diamond Shore Ln	Manual	05/28/24	0.10	0.72	0.100	0.0000	0.000	GERO	2024
North Eldridge Rd	Manual	09/03/24	0.10	0.48	0.100	0.0000	0.000	JAVU	2024
North Masters Rd	Herbicide	04/19/24	0.13	1.10	1.100	0.0918	0.000	CYSC	2018, 2024
	Herbicide	04/24/24	0.13	1.10	1.100	0.0505	0.000	CYSC, RUAR, CIVU	

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North St	Manual	05/28/24	0.40	0.72	0.010	0.0000	0.000	JAVU	2019-2020, 2024
	Manual	10/22/24	0.10	0.96	0.100	0.0000	0.002	JAVU	
O'Brien Rd	Manual	12/19/24	0.20	9.93	0.200	0.0000	0.0039	CEST, PORE	2017-2021, 2023-2024
Okerman Rd	Manual	10/15/24	0.40	0.96	0.960	0.0000	0.001	CEMO	2020, 2021,2023- 2024
Old Black Diamond	Manual	06/18/24	0.20	0.40	0.400	0.0000	0.000	JAVU	2021, 2023- 2024
Old Blyn Hwy	Herbicide	02/08/24	0.50	2.36	0.900	0.0230	0.000	COMA, JAVU	2018-2024
	Herbicide	08/14/24	2.10	5.09	5.090	0.0482	0.000	CLVU, JAVU, CIAR, CIVU, GERO, COMA	
	Herbicide	10/02/24	0.30	0.72	0.720	0.0758	0.000	CIAR, CLVU, GERO, RUAR	
	Manual	10/28/24	0.10	5.09	0.240	0.0000	0.0004	COMA	
Old Mill Rd (South of 4704 address)	Herbicide	09/09/24	0.90	2.18	2.180	0.0046	0.000	CEMO, POBO	2024
Old Olympic Hwy	Manual	03/27/24	0.10	0.10	0.100	0.0000	0.003	DIFU	2017-2024
	Manual/ Herbicide	07/11/24	0.10	3.87	0.100	0.0000	0.001	CEST, COMA	
	Manual	07/18/24	1.20	2.90	2.900	0.0000	0.008	JAVU	
	Manual	07/18/24	0.20	2.00	2.000	0.0000	0.000	DIFU	
	Manual	08/06/24	0.10	4.84	0.240	0.0000	0.000	FOVU, CEST	
	Manual	10/22/24	0.10	0.10	0.100	0.0046	0.000	FOVU	
	Manual	10/28/24	0.20	0.48	0.480	0.0000	0.0002	DIFU	
Olympic Hot Springs Rd	Herbicide	08/28/24	2.00	4.84	4.840	0.0803	0.000	CEMO, GERO, CLVU, CIAR, CIVU, ARMI, JAVE, POBO, LALA	2017-2021, 2023-2024
Palmer Rd	Manual	07/31/24	0.10	1.21	0.240	0.0000	0.000	JAVU	2024

ROAD NAME	TREATMENT METHOD ¹	TREATMENT DATE	MILES TREATED	ACRES EXAMINED ²	ACRES TREATED ³	SOLID CHEMICAL ACRES TREATED ⁴	SOLID MANUAL ACRES TREATED ⁵	TREATED SPECIES LIST ⁶	YEARS TREATED
Palo Alto Rd	Herbicide	03/05/24	0.10	0.10	0.100	0.0002	0.000	COMA, DACA	2017-2024
	Manual/Herbicide	09/18/24	8.70	21.09	21.090	0.0551	0.000	JAVU, CEMO, CIAR, PORE, LEVU, CLVU	
Panorama Blvd	Manual	04/02/24	0.30	1.00	0.400	0.0000	0.001	JAVU	2019-2021, 2024
Pavel Rd	Herbicide	08/27/24	0.10	3.15	0.100	0.0023	0.000	POBO	2019, 2024
Pit Ln	Manual	06/25/24	0.90	2.20	2.200	0.0000	0.001	JAVU	2023-2024
Place Rd	Manual	08/20/24	2.50	6.06	6.060	0.0000	0.000	JAVU	2021-2022, 2024
Poplar Ct	Manual	05/28/24	0.10	0.18	0.100	0.0000	0.000	JAVU	2017, 2020, 2024
	Manual	10/22/24	0.10	0.24	0.240	0.0000	0.000	JAVU	
Port Williams Rd	Manual	07/15/24	0.10	5.57	0.100	0.0000	0.000	COMA	2018, 2020-2022, 2024
Prawn Rd	Manual	08/20/24	0.10	0.48	0.240	0.0000	0.000	CIVU	2024
Priest Rd	Manual	08/06/24	0.10	0.72	0.240	0.0000	0.000	CEMO	2024
Quillayute Rd	Manual/Herbicide	06/17/24	6.90	16.70	16.700	0.0000	0.004	CYSC, JAVU	2020-2024
	Manual	09/11/24	2.00	4.84	4.840	0.0069	0.005	JAVU	
	Manual	10/25/24	3.00	16.72	7.270	0.0000	0.0007	JAVU	
Quillayute Airport Rd	Manual	10/25/24	0.40	0.96	0.960	0.0000	0.0002	JAVU	2021-2024
Reservoir Rd	Manual	06/18/24	0.20	0.40	0.100	0.0000	0.000	JAVU	2024
Rhododendron Dr	Manual	05/28/24	0.80	1.50	1.500	0.0000	0.001	JAVU	2017, 2019-2020, 2022, 2024
	Manual	07/18/24	0.90	2.20	2.200	0.0000	0.001	JAVU	
	Manual	10/22/24	0.10	1.93	0.010	0.0000	0.000	JAVU	
Rice St	Herbicide	07/10/24	0.10	0.24	0.240	0.0069	0.000	HIAU, JAVU	2024
Richwine Rd	Manual	09/11/24	0.60	1.45	1.450	0.0000	0.000	JAVU	2021-2024
Ridge View Dr	Herbicide	03/29/24	0.10	1.45	0.100	0.0115	0.000	COMA	2023-2024

ROAD NAME	TREATMENT METHOD ¹	TREATMENT DATE	MILES TREATED	ACRES EXAMINED ²	ACRES TREATED ³	SOLID CHEMICAL ACRES TREATED ⁴	SOLID MANUAL ACRES TREATED ⁵	TREATED SPECIES LIST ⁶	YEARS TREATED
River Rd	Herbicide	09/23/24	1.00	2.40	2.400	0.0689	0.000	CEMO, CIAR, CIVU, RUAR, GERO, PORE	2017-2021, 2023-2024
Scenic Overlook Way	Manual	10/28/24	0.10	0.24	0.240	0.0000	0.0000	FOVU	2024
Schindler Rd	Manual/ Herbicide	02/08/24	0.01	0.54	0.010	0.0002	0.000	COMA, JAVU	2024
Schmitt Rd	Manual	09/17/24	0.50	1.21	1.210	0.0000	0.001	JAVU	2017-2021, 2023-2024
Schmuck Rd	Manual	07/15/24	0.20	3.15	1.000	0.0000	0.001	DIFU	2018, 2020, 2024
Schoolhouse Point Ln	Manual	08/06/24	0.40	0.96	0.960	0.0000	0.000	JAVU	2024
Secor Rd	Manual	08/26/24	0.10	1.21	0.100	0.0000	0.000	CEST	2024
Sekiu River Rd	Manual/ Herbicide	07/10/24	0.70	1.69	1.690	0.0115	0.000	CIVU, LAGA, POBO	2019, 2023-2024
	Manual/ Herbicide	09/16/24	0.70	1.69	1.690	0.0069	0.000	POBO, RUAR, CIVU	
Senz Rd	Herbicide	09/30/24	0.10	1.21	0.240	0.0046	0.000	LALA	2024
Sequim-Dungeness Way (North of 1323 address)	Herbicide	02/07/24	0.10	0.20	0.200	0.0057	0.000	COMA	2017-2021, 2023-2024
	Herbicide	03/06/24	0.10	0.36	0.180	0.0046	0.000	COMA, CIVU	
	Herbicide	04/19/24	1.20	2.90	2.900	0.0344	0.000	CEST, CIVU, RUAR, CIAR, TAVU	
	Manual	05/28/24	0.10	5.40	0.100	0.0275	0.000	COMA	
	Manual	08/14/24	0.10	9.93	0.240	0.0000	0.000	JAVU	
	Manual	08/22/24	1.00	2.42	2.420	0.0000	0.001	DIFU	
	Herbicide	10/01/24	0.10	0.20	0.200	0.0000	0.003	CIAR, COAR, GERO, RUAR	
Manual	10/28/24	0.10	0.24	0.240	0.0000	0.0001	DIFU		
Shadow Ln	Manual	08/21/24	0.40	0.96	0.960	0.0000	0.000	JAVU	2024
Sherwood Rd	Manual	07/15/24	0.30	0.70	0.700	0.0000	0.001	JAVU	2017-2020, 2022, 2024
Siebert Creek Rd	Manual	12/19/24	0.10	1.93	0.200	0.0000	0.0014	PORE	2019, 2024

ROAD NAME	TREATMENT METHOD ¹	TREATMENT DATE	MILES TREATED	ACRES EXAMINED ²	ACRES TREATED ³	SOLID CHEMICAL ACRES TREATED ⁴	SOLID MANUAL ACRES TREATED ⁵	TREATED SPECIES LIST ⁶	YEARS TREATED
South 3rd Ave (Reservoir Rd to Happy Valley Rd)	Herbicide	04/01/24	0.50	0.90	0.900	0.0184	0.000	CEMO, EULA, RUAR, JAVU, CIAR, CIVU, HYPE	2021, 2024
South Bagley Creek Rd	Herbicide	03/04/24	0.30	2.72	0.540	0.0115	0.000	COMA, CIVU, GERO, CYSC	2018-2020, 2024
South Shore Rd	Herbicide	08/21/24	0.50	5.09	1.210	0.0459	0.000	GERO, CLVU, HIAU	2018-2019, 2024
Sporseen Rd	Manual	12/18/24	0.10	2.18	0.240	0.0000	0.0001	DIFU	2024
Steelhead Ave	Manual/ Herbicide	08/13/24	0.10	1.69	0.100	0.0023	0.000	HIAU	2024
Swan Bay Rd	Herbicide	06/06/24	0.80	1.50	1.500	0.0023	0.000	JAVU	2018-2021, 2024
	Manual	07/30/24	0.40	1.93	0.960	0.0000	0.000	JAVU	
Taylor Ranch Rd	Herbicide	02/07/24	0.80	1.45	1.450	0.0230	0.000	COMA, GERO, JAVU, CYSC, LEVU, RUAR	2019-2020, 2024
	Herbicide	05/23/24	0.40	1.50	0.720	0.0115	0.000	COMA, CIVU	
	Manual	08/06/24	0.30	1.93	0.720	0.0000	0.001	CEMO, COMA	
	Manual	12/17/24	0.10	1.93	0.240	0.0000	0.0000	COMA	
Taylor St	Manual	09/11/24	0.10	0.24	0.240	0.0000	0.000	JAVU, HIAU	2024
Thompson Rd	Manual	08/19/24	1.10	2.66	2.660	0.0000	0.001	JAVU, TAVU	2024
Timber Rd	Manual	05/28/24	0.10	0.18	0.100	0.0000	0.000	JAVU	2019-2020, 2024
	Manual	07/18/24	0.10	0.25	0.250	0.0000	0.000	JAVU	
Towne Rd	Herbicide	03/13/24	0.50	2.53	0.720	0.0230	0.000	COMA, DIFU, CIVU, RUAR, SIAR	2018-2024
	Manual	05/28/24	0.10	0.10	0.100	0.0000	0.001	DIFU	
	Manual	06/27/24	0.00	0.10	0.100	0.0000	0.001	DIFU	
	Manual	10/22/24	0.10	0.24	0.240	0.0000	0.001	FOVU	
	Herbicide	12/11/24	0.75	1.80	1.800	0.0344	0.0000	BRSP, CIAR, CIVU	
Trout Ave	Manual	08/13/24	0.50	1.21	1.210	0.0000	0.001	JAVU	2023-2024

ROAD NAME	TREATMENT METHOD ¹	TREATMENT DATE	MILES TREATED	ACRES EXAMINED ²	ACRES TREATED ³	SOLID CHEMICAL ACRES TREATED ⁴	SOLID MANUAL ACRES TREATED ⁵	TREATED SPECIES LIST ⁶	YEARS TREATED
Turnstone Ln	Herbicide	03/29/24	0.70	1.27	1.270	0.0184	0.000	CEST, DIPU, CYSC, RUAR, DALA, CIAR	2017-2024
	Herbicide	10/15/24	0.30	1.69	0.720	0.0275	0.000	CEST	
Twin View Dr	Herbicide	04/17/24	0.60	1.09	1.090	0.0023	0.000	CEMO	2024
Undi Rd	Herbicide	03/18/24	0.40	3.62	0.720	0.2984	0.000	RUAR, JAVU, CIVU, LEVU, CYSC	2024
Undi Rd	Herbicide	10/07/24	0.70	4.80	1.700	0.5969	0.000	RUAR, JAVU, CIVU, CIAR, CYSC, RULA	2024
Valley Center Pl	Herbicide	06/05/24	0.10	3.50	0.100	0.0002	0.000	CEST	2020-2021, 2024
Ward Rd	Herbicide	03/06/24	1.60	3.08	2.900	0.0023	0.000	COMA, DIFU	2018-2022, 2024
	Herbicide	04/15/24	0.40	0.72	0.720	0.0069	0.000	COMA, RUAR, CIVU	
	Manual	07/16/24	0.10	4.12	0.100	0.0000	0.000	COMA	
Wasankari Rd	Manual	08/21/24	1.00	2.42	2.420	0.0000	0.000	JAVU	2018, 2024
Washington Harbor Rd	Herbicide	03/05/24	0.80	2.53	1.450	0.0161	0.000	COMA, CIAR, CIVU, CYSC	2019, 2022, 2024
	Herbicide	10/09/24	0.00	0.20	0.200	0.0069	0.000	COMA, CIAR, CIVU	
Washington St	Herbicide	07/10/24	0.40	0.96	0.960	0.0161	0.000	POBO, GERO	2022, 2024
	Manual	09/16/24	0.10	0.96	0.240	0.0000	0.002	JAVU	
West Arnette Rd	Manual	02/27/24	0.01	0.18	0.100	0.0000	0.000	DIFU	2024
	Manual	08/05/24	0.10	0.20	0.200	0.0000	0.000	DIFU	
West Bluff Dr	Manual	09/11/24	0.10	0.72	0.010	0.0000	0.000	JAVU	2024
West Duvall Rd	Manual	09/18/24	0.20	0.48	0.480	0.0000	0.000	JAVU	2023-2024
West Edgewood Dr	Manual/ Herbicide	09/17/24	1.50	4.84	3.630	0.0161	0.001	CEMO, JAVU, RUAR, LAGA, CIAR, CIVU	2017-2022, 2024
West Hendrickson Rd	Herbicide	03/13/24	0.60	1.09	1.090	0.0115	0.000	COMA, DIFU, SIAR, CIVU, GERO	2018, 2020, 2022, 2024
West Lyre River Rd	Herbicide	10/10/24	0.60	1.45	1.450	0.0115	0.000	CEMO, JAVU	2017-2024

ROAD NAME	TREATMENT METHOD ¹	TREATMENT DATE	MILES TREATED	ACRES EXAMINED ²	ACRES TREATED ³	SOLID CHEMICAL ACRES TREATED ⁴	SOLID MANUAL ACRES TREATED ⁵	TREATED SPECIES LIST ⁶	YEARS TREATED
West Runnion Rd	Manual/ Herbicide	08/06/24	0.20	1.21	0.480	0.0046	0.000	CEST	2024
West Silberhorn Rd	Manual	10/22/24	0.10	0.50	0.010	0.0000	0.000	FOVU	2024
West Washington St	Herbicide	02/07/24	0.30	3.30	3.300	0.0057	0.000	DALA, CEST	2017-2024
	Herbicide	04/01/24	0.42	5.70	5.700	0.1722	0.000	CEST, HYPE, DIPU, RUAR	
	Herbicide	06/24/24	0.30	5.70	5.700	0.0689	0.000	CEST, HYPE, SOAU	2017-2024
	Manual	08/06/24	0.20	1.00	1.000	0.0631	0.000	CEST	
	Herbicide	10/15/24	0.40	4.96	4.960	0.0000	0.001	CEST, RUAR, HYPE, PORE	
Whiskey Creek Beach Rd (Hwy 112 to Schmitt Rd)	Manual	09/17/24	0.50	1.21	1.210	0.0000	0.000	JAVU	2017-2024
Whitcomb-Diimmel Rd	Manual	06/25/24	1.50	3.70	3.700	0.0000	0.004	JAVU	2020-2024
	Manual	08/13/24	1.50	3.63	3.630	0.0000	0.006	JAVU, CIVU	
Wilson Rd	Herbicide	03/19/24	0.80	1.45	1.450	0.0230	0.000	CIVU, CYSC, JAVU, DIPU, HEHE, GERO	2018-2019, 2021, 2024
	Herbicide	08/27/24	0.80	1.93	1.930	0.0046	0.000	JAVU, CIVU	
Woodcock Rd	Manual	01/24/24	0.01	0.01	0.010	0.0459	0.000	DIFU	2017-2024
	Herbicide	03/20/24	0.80	1.45	1.450	0.1148	0.000	COMA, CIAR, CIVU, LEVU	
	Herbicide	04/18/24	4.50	10.90	10.900	0.0000	0.000	COMA, CYSC, CIVU, CIAR, DIFU, LALA, FOVU, DACA, CEMO, CEST, ANSY, RUAR, EULA, GERO, LUAR	
	Manual	06/24/24	0.10	0.10	0.100	0.0000	0.000	COMA	
Woods Rd	Manual/ Herbicide	08/19/24	3.20	10.18	8.180	0.4213	0.000	JAVU, CLVU, TAVU, CIAR, GERO, HYPE	2018-2024
	Manual/ Herbicide	08/19/24	1.00	10.18	2.000	0.0574	0.000	JAVU, CLVU, CIAR, GERO, HYPE	
Wye Rd	Manual	08/21/24	0.60	1.45	1.450	0.0000	0.000	JAVU	2019-2024
Youngquist Rd	Manual	09/18/24	0.30	2.18	0.720	0.0000	0.000	DIFU	2024

ROAD NAME	TREATMENT METHOD ¹	TREATMENT DATE	MILES TREATED	ACRES EXAMINED ²	ACRES TREATED ³	SOLID CHEMICAL ACRES TREATED ⁴	SOLID MANUAL ACRES TREATED ⁵	TREATED SPECIES LIST ⁶	YEARS TREATED
Zaccardo Rd	Manual	08/07/24	0.10	1.00	0.100	0.0000	0.000	JAVU	2024
Total Roads: 198	310 Treatments	95 Days of Treating	298.4 Miles	1113.0 Acres Examined	686.6 Acres Treated	4.7121 Acres Treated	0.2993 Acres Treated	36 Species Treated	

*Non-priority species treated intermittently, meaning the entire population was not controlled during treatment

¹**M** – Manual control; **H** – Chemical control; **M/H** – Combination of manual and chemical control

²**Examined Acres** – The total area searched for noxious weeds while crew was involved in treatment activities

³**Treated Acres** – The gross area encompassing all treatments per road per day

⁴**Solid Chemical Treated Acres** – The estimated net area if the plants were “clumped” together; calculated using the tank mix volume applied and calibrated sprayer output

⁵**Solid Manual Acres** – The estimated net area controlled by any manual means (pulling, digging, cutting, etc.) if the plants were “clumped” together; calculated by number of plants removed

⁶**Species Treated** – The 4-Letter Weed codes correspond to the species’ scientific name and can be found in Appendix B. Bolded species are regulated noxious weeds required for control in Clallam County

APPENDIX D: COUNTY ROCK SOURCE/SOIL DISPOSAL SITE TREATMENT ACTIVITIES

These tables include all County rock sources/spoil disposal sites (pits) managed for noxious weeds in 2024 under the Clallam County Road Department IWM Plan. The table is sorted alphabetically by pit name. Definitions for the headings can be found at the end of the table. Species treated are listed alphabetically by the assigned 4-letter code (see Appendix B); 4-letter codes shown in bold are regulated noxious weeds and required for control in Clallam County.

We completed **63** treatments in **25 pits** over **48 days** and controlled **29 species**. **No** pits were surveyed and not treated. In total we treated **268.3 acres** (including retreatments) and examined **395.5 acres** (including monitoring). For retreatments, Acres Examined and Acres Treated were counted in full to correctly calculate application rates and Solid Acres.

PIT NAME	TREATMENT METHOD ¹	TREATMENT DATE	ACRES EXAMINED ²	ACRES TREATED ³	SOLID CHEMICAL TREATED ACRES ⁴	SOLID MANUAL TREATED ACRES ⁵	TREATED SPECIES LIST ⁶
Blue Mountain Transfer Station	Manual	9/3/24	6.80	1	0.005	0.000	COMA
Blyn Pit	Herbicide	02/08/24	18.65	0.10	0.00	0.000	COMA
	Herbicide	05/16/24	1.00	1.00	0.03	0.000	CYSC, JAVU, LALA, VETH
	Manual	08/07/24	18.00	18.00	0.002	0.000	COMA, DIFU, JAVU, TAVU
	Manual	10/09/24	18.65	0.10	0.00	0.000	JAVU
District 1 shop	Manual	08/06/24	4.15	0.40	0.00	0.000	CEST
	Herbicide	10/01/24	0.52	0.52	0.00	0.000	CEST, CIVU
District 2 Shop	Herbicide	04/11/24	5.83	5.83	0.31	0.000	COMA, CYSC, DALA, BRSP, DACA, CIVU
	Herbicide	05/02/24	5.83	2.80	0.01	0.000	HYGL
Forks Pit	Herbicide	06/25/24	5.00	5.00	0.06	0.000	JAVU, POBO, CIVU, RUAR
	Herbicide	10/25/24	1.00	1.00	0.07	0.000	CIVU, CYSC, JAVU, POBO, RUAR
Herrick Pit	Herbicide	07/22/24	11.80	11.80	0.25	0.000	CEMO, CIVU, DIPU, RUAR, HYPE, CIAR
	Herbicide	09/10/24	5.00	5.00	0.11	0.000	CIAR, CIVU, CEMO, DACA*, GERO, RUAR
Hogback Pit	Manual	09/10/24	1.76	0.10	0.00	0.000	TAVU
Hoko-Ozette Rd MP 4.5	Herbicide	06/06/24	1.00	1.00	0.05	0.000	JAVU, CYSC, DIPU, RUAR, HYPE
	Manual	07/30/24	2.00	0.20	0.00	0.000	JAVU

PIT NAME	TREATMENT METHOD ¹	TREATMENT DATE	ACRES EXAMINED ²	ACRES TREATED ³	SOLID CHEMICAL TREATED ACRES ⁴	SOLID MANUAL TREATED ACRES ⁵	TREATED SPECIES LIST ⁶
	Manual	12/16/24	1.37	1.00	0.00	0.000	CYSC, JAVU
Hoko-Ozette Rd MP 10	Herbicide	06/06/24	2.85	2.85	0.06	0.000	JAVU, RUAR, HYPE, CYSC, CIVU, CIAR
Hoko-Ozette Rd MP 13	Herbicide	06/06/24	2.98	0.10	0.1	0.000	CYSC
	Manual	12/16/24	2.98	1.0	0.00	0.000	JAVU
Hwy 101 Storage Yard	Herbicide	02/12/24	2.00	1.00	1.0	0.000	COMA
	Herbicide	03/08/24	1.00	0.65	0.7	0.000	SIAR
Kirner Pit	Herbicide	02/02/24	2.00	2.00	2.05	0.000	COMA, CYSC, GERO, DETH
	Herbicide	02/12/24	6.00	6.00	0.01	0.000	COMA
	Herbicide	03/28/24	6.00	6.00	0.05	0.000	COMA, DIFU, LEVU, CEST, CYSC
	Manual/ Herbicide	08/06/24	11.00	11.00	0.01	0.000	CEST, COMA
	Manual	08/07/24	10.80	10.80	0.00	0.002	CEST, COMA
	Herbicide	09/03/24	4.60	4.60	0.14	0.002	COMA, ELUA, RUAR, CIVU, CIAR
	Herbicide	09/30/24	2.00	2.00	0.01	0.000	CEST
	Manual	10/28/24	1.00	1.00	0.00	0.000	COMA
	Herbicide	12/11/24	4.3	4.3	0.07	0.000	BRSP, CIAR, CIVU, COMA, EULA
	Manual	12/17/24	0.6	0.6	0.00	0.002	COMA
La Push "Ballard" Pit	Herbicide	03/19/24	2.00	2.00	0.13	0.001	JAVU, CYSC, CIVU, DIPU, RUAU, LAGA, CIAR
	Herbicide	03/21/24	0.60	0.60	0.018	0.000	CYSC, RUAR
	Herbicide	04/22/24	3.00	2.10	0.02	0.000	CYSC, RUAR
Lake Creek Pit	Herbicide	05/29/24	30.00	30.00	0.17	0.000	CIVU, CYSC, DIPU, GERO, HYPE, JAVU, LALA, RUAR, RULA`
	Herbicide	06/25/24	1.30	1.30	0.07	0.000	JAVU, RUAR, CIVU, DIPU
	Manual	08/12/24	11.47	7.25	0.00	0.003	JAVU
Little River Pit	Herbicide	06/18/24	5.05	0.10	0.00	0.000	CEMO

PIT NAME	TREATMENT METHOD ¹	TREATMENT DATE	ACRES EXAMINED ²	ACRES TREATED ³	SOLID CHEMICAL TREATED ACRES ⁴	SOLID MANUAL TREATED ACRES ⁵	TREATED SPECIES LIST ⁶
Lower Elwha Pit	Manual	7/22/24	6.22	0.5	0.00	0.02	JAVU
McInnes Pit	Herbicide	02/02/24	5.00	5.00	0.07	0.000	COMA, ANCA, GERO, CYSC
	Herbicide	05/15/24	0.50	0.50	0.02	0.000	CYSC
	Herbicide	05/23/24	5.50	5.50	0.08	0.000	CAPY, COMA, DIFU, CYSC
	Manual	06/24/24	0.10	0.10	0.00	0.002	CAPY
	Herbicide	07/09/24	2.00	2.00	0.03	0.000	CIVU, COMA
	Herbicide	12/11/24	2.96	2.96	0.03	0.000	BRSP, CIAR, CIVU, COMA, DIFU, TAVU
Morse Creek Pit	Herbicide	2/16/24	11.30	11.30	0.17	0.000	COMA, CYSC
	Herbicide	03/25/24	3.00	3.00	0.05	0.000	COMA, CYSC, RUAR, CIVU, CIAR, PHAR
	Herbicide	05/09/24	14.70	14.70	0.42	0.000	COMA, CYSC, DIPU, CIVU, CIAR, HYPE, PORE
	Herbicide	07/17/24	2.00	2.00	0.02	0.000	RUAR, COMA
	Herbicide	07/17/24	2.00	2.00	0.00	0.000	COMA
	Herbicide	08/12/24	2.00	2.00	0.04	0.000	RUAR
	Manual	09/16/24	33.40	1.00	0.00	0.001	TAVU
Piedmont Pit	Herbicide	05/30/24	2.60	2.60	0.10	0.000	JAVU, CYSC, DIPU, GERO, CEMO
	Manual	10/24/24	2.6	2.6	0.00	0.000	JAVU
Place Pit	Herbicide	08/19/24	4.90	4.90	0.11	0.000	GERO, LALA, RUAR
Quillayute Pit	Manual/ Herbicide	07/02/24	9.80	9.80	0.08	0.003	JAVU, RUAR, HYPE
Ranger Pit	Herbicide	05/23/24	19.30	19.30	0.26	0.000	CYSC, DIPU, DIFU, CIAR, CIVU, POBO, RUAR, CEMO
	Herbicide	05/30/24	0.47	0.47	0.16	0.000	CYSC, DIPU
Sequim Storage Yard	Herbicide	02/07/24	2.57	2.00	0.01	0.000	ARAB, DIFU, DALA, LEVU
Umbrella Creek Pit	Manual	07/10/24	2.00	2.00	0.00	0.002	JAVU

PIT NAME	TREATMENT METHOD ¹	TREATMENT DATE	ACRES EXAMINED ²	ACRES TREATED ³	SOLID CHEMICAL TREATED ACRES ⁴	SOLID MANUAL TREATED ACRES ⁵	TREATED SPECIES LIST ⁶
Whitcomb Diimmel Pit	Manual/Herbicide	06/25/24	9.2	9.20	0.06	0.001	JAVU, RUAR, CIVU
	Manual/Herbicide	08/13/24	10.8	10.80	0.06	0.003	JAVU, CIAR, CIVU, RUAR, DIPU, RULA
Total Pits: 25 sites	Treatments: 63	48 Days	395.48 Acres	268.33 Acres	3.67 Acres	0.029 Acres	29 Species Treated

*Non-priority species treated intermittently, meaning the entire population was not controlled during treatment

¹**M** – Manual control; **H** – Chemical control; **M/H** – Combination of manual and chemical control

²**Examined Acres** – The total area searched for noxious weeds while crew was involved in treatment activities

³**Treated Acres** – The gross area encompassing all treatments per pit per day

⁴**Solid Chemical Treated Acres** – The estimated net area if the plants were “clumped” together; calculated using the tank mix volume applied and calibrated sprayer output

⁵**Solid Manual Acres** – The estimated net area controlled by any manual means (pulling, digging, cutting, etc.) if the plants were “clumped” together; calculated by number of plants removed

⁶**Species Treated** – The 4-Letter Weed codes correspond to the species’ scientific name and can be found in Appendix B. Bolded species are regulated noxious weeds required for control in Clallam County

APPENDIX E: COUNTY SPECIAL SITE TREATMENT ACTIVITIES

This table includes all “Special Sites” managed for noxious weeds in 2024 under the Clallam County Road Department IWM Plan. This table is sorted alphabetically by site name. Definitions for the headings can be found at the end of the table. Species treated are listed alphabetically by the assigned 4-letter code (see Appendix B); 4-letter codes shown in bold are regulated noxious weeds and required for control in Clallam County.

We completed **36 treatments** on **18 Special Sites** over **30 days** and controlled **21 species**. In total we treated **46.13 acres** (including retreatments) and examined **63.37 acres**. For retreatments, Acres Examined and Acres Treated were counted in full to correctly calculate application rates and Solid Acres.

SITE NAME	TREATMENT METHOD ¹	TREATMENT DATE	ACRES EXAMINED ²	ACRES TREATED ³	SOLID CHEMICAL TREATED ACRES ⁴	SOLID MANUAL TREATED ACRES ⁵	TREATED SPECIES LIST ⁶
Black Diamond Pollinator planting	Manual	1/30/24	0.1	0.1	0.00	0.008	PSME
Blake Sand & Gravel Ridge	Manual	01/03/24	0.5	0.22	0.00	0.016	CAPY
	Manual	01/24/24	0.75	0.75	0.00	0.004	CAPY
	Manual	05/06/24	0.6	0.60	0.00	0.002	CAPY
	Manual	05/16/24	5.4	1.00	0.00	0.025	CAPY
Carlsborg Road Fire District	Herbicide	3/7/24	4.64	0.1	0.02	0.000	COMA, RUAR
	Manual	12/20/24	0.5	0.5	0.00	0.000	COMA
Cays & Lamar Intersection	Manual	01/03/24	2.0	1.25	0.00	0.011	CAPY
	Herbicide	04/12/24	2.0	2.00	0.02	0.000	CAPY
	Manual	05/22/24	2.0	2.00	0.00	0.005	CAPY
Deer Park Overpass and Rest Area	Herbicide	05/08/24	0.3	0.30	0.00	0.000	CYSC
	Herbicide	05/20/24	0.1	0.10	0.00	0.000	CYSC
	Herbicide	05/30/24	0.35	0.35	0.00	0.001	CYSC
	Manual	6/20/24	0.2	0.2	0.00	0.002	CYSC
	Herbicide	6/20/24	2.0	2.0	0.06	0.000	CEST, CYSC, CEMO, DACA
	Manual/ Herbicide	8/1/24	0.25	0.25	0.00	0.001	CYSC
	Manual/ Herbicide	8/15/24	1.2	1.2	0.00	0.005	CYSC

SITE NAME	TREATMENT METHOD ¹	TREATMENT DATE	ACRES EXAMINED ²	ACRES TREATED ³	SOLID CHEMICAL TREATED ACRES ⁴	SOLID MANUAL TREATED ACRES ⁵	TREATED SPECIES LIST ⁶
Dungeness Dike Trail Parking Lot	Manual	8/14/24	1.8	1.8	0.00	0.000	DIFU, COMA
Gasman Rd Detention Pond	Herbicide	5/30/24	0.65	0.65	0.09	0.000	CYSC
O'Brien ROW Parcel	Herbicide	10/10/24	1.0	1.0	0.05	0.000	CIAR
ODT -- Dean Creek crossing	Herbicide	3/8/24	1.81	1.81	0.02	0.000	DALA
ODT -- Gossett Rd to Gosset Bridge	Manual	1/23/24	3.6	2.0	0.00	0.004	JAVU
	Manual	11/1/24	3.95	3.95	0.00	0.001	CEMO, JAVU
ODT -- Onella Rd to Freshwater Bay Rd	Manual	1/23/24	1.0	0.5	0.00	0.001	JAVU
	Manual	11/21/24	1.21	1.21	0.00	0.006	CYSC
ODT -- Sol Duc crossing	Manual	8/5/24	0.1	0.1	0.00	0.009	HISA
ODT-Whitefeather Way to West Sequim Bay Rd	Manual/ Herbicide	2/22/24	5.4	5.4	0.08	0.000	RUAR, DALA, CYSC
	Manual/ Herbicide	4/23/24	5.4	5.4	0.00	0.000	RUAR, CYSC
ODT Berm on Old Olympic Highway	Herbicide	3/8/24	0.8	0.8	0.21	0.000	CIAR, ANCA, RUAR, PHAR, CIVU, SIAR
	Herbicide	3/13/24	1.7	1.7	0.09	0.000	SIAR, ANCA, PHAR, RUAR, CIVU, CIAR
Olympic wetland mitigation site	Manual	12/19/24	1.83	1.83	0.00	0.004	PORE
Towne Rd berm - southeast of levee	Manual	06/27/24	0.4	0.400	0.00	0.002	DIFU
	Manual	07/29/24	0.4	0.400	0.00	0.004	DIFU
Towne Rd levee pedestrian path	Herbicide	10/03/24	2.4	2.400	0.09	0.000	CIAR, CIVU, HYRA, LALA, SOSP, RUAR
Voice of America Parking lot	Herbicide	03/07/24	3.9	1.620	0.01	0.000	COMA, CIVU
	Manual	12/12/24	3.15	0.24	0.00	0.000	COMA
Total: 18 sites	36 Treatments	30 Days	63.37 Acres	46.13 Acres	0.74 Acres	0.109 Acres	21 Species Treated

*Non-priority species treated intermittently, meaning the entire population was not controlled during treatment

¹**M** – Manual control; **H** – Chemical control; **M/H** – Combination of manual and chemical control

²**Examined Acres** – The total area searched for noxious weeds while crew was involved in treatment activities

³**Treated Acres** – The gross area encompassing all treatments per site per day

⁴**Solid Chemical Treated Acres** – The estimated net area if the plants were “clumped” together; calculated using the tank mix volume applied and calibrated sprayer output

⁵**Solid Manual Acres** – The estimated net area controlled by any manual means (pulling, digging, cutting, etc.) if the plants were “clumped” together; calculated by number of plants removed

⁶**Species Treated** – The 4-Letter Weed codes correspond to the species’ scientific name and can be found in Appendix B. Bolded species are regulated noxious weeds required for control in Clallam County

APPENDIX F: HERBICIDE VOLUMES BY COUNTY ROADS

The table alphabetically lists the County roads that received chemical treatment in 2024. The table includes the trade name of herbicides used and amounts applied in ounces or grams per treated road section (Note: 1 oz. equals 2 tablespoons). The **Treated Road Section** lists the portions for each road where herbicide application may have occurred. Herbicide applications within the listed boundaries were only made to noxious weeds and exact treatment locations varied with individual plant locations.

In 2024 we applied a total of **3.92 gallons** of liquid herbicide on County roadsides. A combination of Milestone® with Vastlan® or Element 3A® or Aquaneat® was used on roads included in chemical treatment, a mix that was chosen for its efficacy on expected weed species. Polaris® was also used almost exclusively for knotweed species and reed canary grass. All treatment locations were posted, and signs left in place for at least 24 hours.

ROAD NAME	TREATMENT DATE	TREATMENT LOCATION	MILES TREATED	MILESTONE (oz) ¹	VASTLAN (oz) ²	ELEMENT 3A (oz) ³	AQUANEAT (oz) ⁴	POLARIS (oz) ⁵
3 Crabs Rd	04/01/24	Near #461	0.10	0.16		0.96		
Ballard Rd	04/22/24	Lapush Rd to Pit entrance	0.20			1.344		
Blue Mountain Rd	08/26/24	Entire road	7.00	0.64		3.84		
Camp Hayden Rd	08/21/24	Entire road	3.50	0.8		4.8		
Carlsborg Rd	03/29/24	Entire road	1.80	0.704		4.224		
Cassidy Rd	09/03/24	Entire road	0.80	0.192	1.152			
Chicken Coop Rd	07/06/24	Entire road, Near #843	3.50	0.244	1.344			
Cline Spit Rd	04/17/24	Entire road	0.20					
Commercial St	07/10/24	Entire road	0.10	0.032	0.192			
Cooper Ranch Rd	08/27/24	Entire road	4.20	0.064		0.384		
Coulter Rd	03/05/24	Entire road	0.20	0.08			0.48	
	10/09/24	Entire road, mostly midway on south ditch	0.10	0.064		0.384		
Dan Kelly Rd	07/17/24	Entire road	3.20	0.64	3.84			
Deer Park Rd	03/29/24	Easy St intersect	0.10	0.16		0.96		
	09/04/24	Near end of road, adjacent to DNR parcel	0.10	0.032	0.192			
Division St	07/10/24	Entire road	0.10	0.064	0.384			
Don Schmith Rd	09/18/24	Entire road	0.50	0.512		3.072		
Eagle Point Rd	09/16/24	North of #743	0.20	0.096		0.576		
East Beach Rd	04/30/24	#1507 to #2873	1.40				0.5	
East Sequim Bay Rd	08/07/24	Entire road	4.10	0.064	0.384			
	10/01/24	Entire road	4.10	0.16		0.96		
Easterly Rd	04/29/24	Entire road	0.30	0.32	1.92			
Elk Creek Ridge Rd	07/31/24	Near #143	0.20	0.03	0.19			

ROAD NAME	TREATMENT DATE	TREATMENT LOCATION	MILES TREATED	MILESTONE (oz) ¹	VASTLAN (oz) ²	ELEMENT 3A (oz) ³	AQUANEAT (oz) ⁴	POLARIS (oz) ⁵
Elk Valley Rd	08/12/24	Entire road	0.50	0.77	4.61			
Farrington Rd	04/10/24	Entire road, survey again later in year	0.90	0.096				
Fasola Rd	03/06/24	North of Woodcock	0.30	0.032			0.192	
Fisher Cove Rd	10/10/24	Entire road	0.80	0.544		3.264		
Front St	07/10/24	Entire road	0.60	0.32	1.92			
Gagnon Rd	09/17/24	Entire road	0.10	0.03		0.19		
Gasman Rd	05/30/24	From Old Olympic to Island View	1.30	4.16	24.96			
Gilbert Rd	02/07/24	Entire road	0.20	0.16			0.96	
	06/05/24	Entire road	0.10	0.03	0.19			
Gossett Rd	08/21/24	Entire road	0.90	0.13		0.77		
Granite Rd	05/16/24	Entire road	0.30	2.464	14.784			
Happy Valley Rd	04/29/24	Hwy 101 to Johnson Creek Rd	2.00	1.184	7.104			
	09/23/24	3rd Ave to Haven Heights Dr	1.25	1.16	1	6.2		
Hauk Rd	09/16/24	West side, near south end of road	0.10	0.224		1.344		
Herrick Rd	07/22/24	Intersection with Old State Rd	0.10	0.03	0.19			
Hoko-Ozette Rd	07/10/24	Entire road	17.00	0.06	0.38			
	06/06/24	Entire road	21.00	0.16	0.96			
Hooker Rd	02/07/24	Hwy 101 to Roupe Rd #353	0.40	0.32			1.92	
	06/05/24	Olson to #1757	5.00	0.96	5.76			
Hudson Rd	04/10/24	Entire road	0.30	0.032				
James Page Rd	08/06/24	Near bus stop on hwy 101	0.10	0.26	1.54			
Johnson Creek Rd	04/29/24	Entire road	0.50	0.32	1.92			
	09/23/24	One quarter mile	0.25	0.08	0.5			
Kemp St	09/16/24	SW of Kemp and Hauk intersection	0.10	0.10		0.58		
Kitchen-Dick Rd	03/04/24	Near Old Olympic intersection	0.20	0.16			0.96	
Lamar Ln	03/20/24	Entire road	0.40	0.08			1.28	
Lawrence Rd	04/10/24	Entire road	0.70	0.16				
Little River Rd	08/28/24	From Black Diamond to Olympic Hot Springs Rd	3.50	0.832		4.992		
Lost Mountain Rd	09/30/24	From Eggloff to end of road	3.40	0.96	5.76			

ROAD NAME	TREATMENT DATE	TREATMENT LOCATION	MILES TREATED	MILESTONE (oz) ¹	VASTLAN (oz) ²	ELEMENT 3A (oz) ³	AQUANEAT (oz) ⁴	POLARIS (oz) ⁵
Lotzgesell Rd	03/07/24	Kitchen Dick to 200yards from Cays Rd	1.50	0.56			3.36	
	03/12/24	Near Kitchen Dick, wider ROW than usual per Road Dept	0.01	0.003 2			0.19	
Louella Rd	09/18/24	West of Maple Creek Ln	0.10	0.032		0.192		
Lower Elwha Rd	07/22/24	Entire road	2.80	1.09	6.53			
Marine Dr	03/20/24	At intersect of Cays and Marine	0.10	0.00			0.26	
	04/17/24	Culvert outfall repair over cliff bank, yard debris dumping	0.10	0.03		0.19		
Marmot Loop	04/08/24	End of Marmot Loop, orange flags	0.10	0.064				
Mary Clark Rd	08/27/24	Entire road	7.70	0.416		2.496		
McAlmond St	04/17/24	Entire road	0.10	0.48		2.88		
Mina Smith Rd	04/22/24	Entire road	3.30			2.88		
	07/02/24	From mp1.547 to 3.3 end	1.55	0.032	0.192			
Mount Angeles Rd (South of Eckard Rd)	08/28/24	At city limits	0.10	0.064		0.384		
	09/30/24	At city limits, eastside of road		0.032		0.192		
Mount Pleasant Rd	03/12/24	From Hwy 101 to #1595	1.60	0.96			5.76	
	07/11/24	Below #173 to Kemp St.	0.10	0.064	0.384			
	07/17/24	Below #173 to Kemp St.	0.10	0.032	0.192			
Myrtle St	09/30/24	Intersect with North Bayview St	0.10	0.003 2		0.0192		
North Bay View St	04/12/24	Entire road	0.10	0.64		3.84		
North Masters Rd	04/19/24	Hwy 101 to #711	0.13	1.28		7.68		
	04/24/24	Hwy 101 to #711	0.13	0.704	4.224			
Old Blyn Hwy	02/08/24	E Seq Bay rd to Hwy 101	0.50	0.32			1.92	
	08/14/24	Entire road	2.10	0.672	4.032			
	10/02/24	Entire road	0.30	1.056		6.336		
Old Mill Rd (South of 4704 address)	09/09/24	Entire road	0.90	0.064		0.384		
Old Olympic Hwy	07/11/24	From Lewis to Matson	0.10	0.064	0.384			
Olympic Hot Springs Rd	08/28/24	Entire road	2.00	1.12		6.72		

ROAD NAME	TREATMENT DATE	TREATMENT LOCATION	MILES TREATED	MILESTONE (oz) ¹	VASTLAN (oz) ²	ELEMENT 3A (oz) ³	AQUANEAT (oz) ⁴	POLARIS (oz) ⁵
Palo Alto Rd	03/05/24	Near Louella intersection, sweepings dump site	0.10	0.003			0.02	
	09/18/24	Entire road	8.70	0.768		4.608		
Pavel Rd	08/27/24	Entire road	0.10	0.032		0.192		
Quillayute Rd	06/17/24	Entire road	6.90				19.20	
Rice St	07/10/24	Entire road	0.10	0.096	0.576			
Ridge View Dr	03/29/24	Leeson Rd intersect	0.10	0.16		0.96		
River Rd	09/23/24	Secor Rd to BPA powerlines	1.00	1	2.9	2.9		
Schindler Rd	02/08/24	Entire road	0.01	0.003 2			0.019	
Sekiu River Rd	07/10/24	Entire road	0.70	0.16				
	09/16/24	Entire road	0.70	0.096		0.576		
Senz Rd	09/30/24	North side of road across from #143	0.10	0.064		0.384		
Sequim-Dungeness Way (North of 1323 address)	02/07/24	Intersection with East Anderson	0.10	0.08			0.48	
	03/06/24	Woodcock to Evans	0.10	0.064			0.384	
	04/19/24	Woodcock to Sequim City limits	1.20	0.48		2.88		
	10/01/24	House #4501 special request from landowner	0.10	0.384		2.304		
South 3rd Ave (Reservoir Rd to Happy Valley Rd)	04/01/24	Reservoir Rd to Happy Valley	0.50	0.256		1.536		
South Bagley Creek Rd	03/04/24	Hwy 101 to Sky View Rd	0.30	0.16			0.96	
South Shore Rd	08/21/24	From #1172 to boat launch	0.50	0.64		3.84		
Steelhead Ave	08/13/24	Near #292	0.10	0.032	0.192			
Swan Bay Rd	06/06/24	Entire road	0.80	0.032	0.192			
Taylor Ranch Rd	02/07/24	Entire road	0.80	0.32			1.92	
	05/23/24	Woodcock to Laura Ln	0.40	0.16	0.96		0.96	
Towne Rd	03/13/24	North from Woodcock	0.50	0.32			1.92	
	12/11/24	South side of levee	0.75				2.88	
Turnstone Ln	03/29/24	Entire road	0.70	0.256		1.536		
	10/15/24	Entire road, majority of plants along Frontage Rd	0.30	0.384		2.304		
Twin View Dr	04/17/24	Entire road	0.60	0.032		0.192		

ROAD NAME	TREATMENT DATE	TREATMENT LOCATION	MILES TREATED	MILESTONE (oz) ¹	VASTLAN (oz) ²	ELEMENT 3A (oz) ³	AQUANEAT (oz) ⁴	POLARIS (oz) ⁵
Undi Rd	03/18/24	From Hwy 101 up 0.4 mi	0.40			24.96	24.96	
	10/07/24	From hwy 101 up to 0.7mi	0.70	8.32		49.92		
Valley Center Pl	06/05/24	Entire road	0.10	0.003 2	0.0192			
Ward Rd	03/06/24	Entire road	1.60	0.032			0.192	
	04/15/24	Woodcock to Ward Lane	0.40	0.096		5.76		
Washington Harbor Rd	03/05/24	From West Sequim Bay Rd to Baywood Village #421	0.80	0.244			1.34	
	10/09/24	Road parcel #033021road54	0.00	0.096		0.576		
Washington St	07/10/24	Entire road	0.40	0.224	1.344			
West Edgewood Dr	09/17/24	From #2605 to Dry Creek Water office	1.50	0.244		1.344		
West Hendrickson Rd	03/13/24	From Priest Rd to Dungeness Nature Center	0.60	0.16			0.96	
West Lyre River Rd	10/10/24	Entire road	0.60	0.16		0.96		
West Runnion Rd	08/06/24	Entire road, focused near Old Goat Rd	0.20	0.064	0.384			
West Washington St	02/07/24	From City Limits west	0.30	0.08			0.48	
	04/01/24	From District 1 shop-west, including powerline ROW	0.42	2.4		14.4		
	06/24/24	From District 1 shop-west, including powerline ROW	0.30	0.96	5.76			
	10/15/24	From District 1 shop-west, including powerline ROW	0.40	0.88		5.28		
Wilson Rd	03/19/24	Entire road	0.80			1.92	1.92	
	08/27/24	Entire road	0.80	0.064		0.384		
Woodcock Rd	03/20/24	Holland to Sq Dung Way Roundabout	0.80	0.32			5.12	
	04/18/24	Kitchen Dick to Sq Dung Way Roundabout	4.50	1.6		9.6		
Woods Rd	08/19/24	Entire road	3.20	5.872		35.232		
	08/19/24	SW side of the upper section	1.00					4.8

ROAD NAME	TREATMENT DATE	TREATMENT LOCATION	MILES TREATED	MILESTONE (oz) ¹	VASTLAN (oz) ²	ELEMENT 3A (oz) ³	AQUANEAT (oz) ⁴	POLARIS (oz) ⁵
Total: 93 roads	63 Days		170.7 miles	58.75 oz	109.44 oz	247.58 oz	81.49 oz	4.8 oz

¹Milestone® - Active ingredient: aminopyralid; in 0.125-0.250% solution.

²Vastlan® - Active ingredient: triclopyr; in 1.5-2% solution, 25-50% solution for cut-stump application only.

³Element 3A® - Active ingredient: triclopyr; in 1.5% solution on roadsides, 25-50% solution for cut stump only.

⁴Aquaneat® - Active ingredient: glyphosate, in 1.5% solution on roadsides, 25-50% solution for cut stump only

⁵Polaris® - Active ingredient: Imazapyr; in 1.0% solution on roadsides

APPENDIX G: HERBICIDE VOLUME USED IN COUNTY ROCK SOURCES

The table alphabetically lists the County rock sources and spoil sites that received chemical treatment in 2024. The table includes the trade name of herbicides used and amounts applied in ounces or grams per treatment date (Note: 1 oz. equals 2 tbsp). Herbicide was only applied within County pit boundaries to noxious weeds and other invasive plants and exact locations of applications varied with individual plant locations.

In 2024 we applied a total of **3.37 gallons** of liquid herbicide in County pits. A combination of Milestone® and Vastlan® or Element 3A® was used in most pits included in chemical treatment, a mix that was chosen for its efficacy on expected weed species. Element 4® was used in county pits in 2024. Polaris® was used almost exclusively for knotweed species and reed canary grass. Oust XP® was not used as a treatment on poison hemlock in 2024 but may be used in the future.

PIT NAME	TREATMENT DATE	ACRES TREATED	MILESTONE (OZ) ¹	VASTLAN (OZ) ²	POLARIS (OZ) ³	ELEMENT 3A (OZ) ⁴	AQUANEAT (OZ) ⁵	ELEMENT 4 (OZ) ⁶
Blyn Pit	02/08/24	0.1	0.032				0.192	
	05/16/24	1.0	0.4	2.4				
District 1 shop	10/01/24	0.5	0.032			0.192		
District 2 Shop	04/11/24	5.8	4.32			34.56	34.56	
	05/02/24	2.8					0.96	
Forks Pit	06/25/24	5.0	0.8	4.8				
	10/25/24	1.0	0.96		3.84	5.76		
Herrick Pit	07/22/24	11.8	3.456	20.376				
	09/10/24	5.0			6			
Hoko-Ozette Rd MP 4.5	06/06/24	1.0	0.64	3.84				
Hoko-Ozette Rd MP 10	06/06/24	2.9	0.8	4.8				
Hoko-Ozette Rd MP 13	06/06/24	0.1	0.064	0.384				
Hwy 101 Storage Yard	02/12/24	1.0	0.24				1.44	
	03/08/24	0.7						0.32
Kirner Pit	02/02/24	2.0	0.64				3.8	
	02/12/24	6.0	0.08				0.48	
	03/28/24	6.0	0.64			3.84		
	08/06/24	3.0	0.16	0.96				
	09/03/24	4.6	1.92			11.52		
	09/30/24	2.0	0.096			0.576		
	12/16/24	4.3					5.76	
La Push "Ballard" Pit	03/19/24	2.0	0.88				14.08	
	03/21/24	0.6	1.28				20.48	
	04/22/24	2.1	0			1.344	0	
Lake Creek Pit	05/29/24	30.0	2.3	13.9				
	06/25/24	1.3	0.96	5.76				
Little River Pit	06/18/24	0.1	0.032	0.192				

PIT NAME	TREATMENT DATE	ACRES TREATED	MILESTONE (OZ) ¹	VASTLAN (OZ) ²	POLARIS (OZ) ³	ELEMENT 3A (OZ) ⁴	AQUANEAT (OZ) ⁵	ELEMENT 4 (OZ) ⁶
McInnes Pit	02/02/24	5.0	1.04				6.2	
	05/15/24	0.5	0.244	1.344				
	05/23/24	5.5	1.12	6.72			6.72	
	12/11/24	2.96					2.88	
	07/09/24	2.0	0.48	2.88				
Morse Creek Pit	2/16/2024	11.3	2.4				14.4	
	03/25/24	3.0	0.36				4.32	
	05/09/24	14.7	5.95	35.52			0	
	07/17/24	2.0	0.224	1.344				
	07/17/24	2.0			1.32			
	08/12/24	2.0				3.4		
Piedmont Pit	05/30/24	2.6	1.44	8.64				
Place Pit	08/19/24	4.9	1.5			9.1		
Quillayute Pit	07/02/24	9.8	1.12	6.72				
Ranger Pit	05/23/24	19.3	3.68	22.08			22.08	
	05/30/24	0.5	2.24	13.44				
Sequim Storage Yard	02/07/24	2.0	0.16				0.96	
Whitcomb Diimmel Pit	06/25/24	9.2	0.8	4.8				
	08/13/24	15.7	0.896	5.376				
Total: 21 sites	36 Days	217.62 Acres	44.39 oz	166.28 oz	11.16 oz	70.29 oz	139.31 oz	0.32 oz

¹ Milestone® - Active ingredient: aminopyralid; in 0.125-0.250% solution.

² Vastlan® - Active ingredient: triclopyr; in 1.5-2% solution, 25-50% solution for cut-stump application only

³ Polaris® - Active ingredient: imazapyr in 1% solution

⁴ Element 3A® - Active ingredient: triclopyr; in 1.5% solution, 25-50% solution for cut stump only

⁵ Aquaneat® - Active ingredient: glyphosate in 1.5% solution, 25-50% solution for cut stump only

⁶ Element 4® - Active ingredient triclopyr in 1.5% solution, 10 to 30% solution for basal bark treatment

APPENDIX H: HERBICIDE VOLUME USED IN COUNTY “SPECIAL SITES”

The table alphabetically lists the County-owned “Special Sites” that received chemical treatment in 2024. The table includes the trade name of herbicides used and amounts applied in ounces or grams per treatment date (Note: 1 oz. equals 2 tablespoons). Special Site boundaries include only Clallam County owned lands or lands with county maintenance obligations.

In 2024 we applied a total of **1.13 gallons** of liquid herbicide on “Special Sites”. A combination of Milestone® and Vastlan® or Element 3A® was used on most sites included in chemical treatment, a mix that was chosen for its efficacy on expected weed species. Element 4® was used on special sites in 2024. Aquaneat and Aquamaster both carry the same amount of active ingredient and aquatic rating: both products were used in 2024. Neither Polaris® or Transline® were used in 2024 on special sites, but may be used in the future dependent on control needs.

Site Name	Treatment Date	Acres Treated	Milestone (oz) ¹	Vastlan (oz) ²	Element 3A (oz) ³	Element 4 (oz) ⁴	Aquaneat or Aquamaster (oz) ⁵
Carlsborg Road Fire District	3/7/2024	0.1	0.24				1.44
Cays & Lamar Intersection	04/12/24	2.000	0.32		1.92		
Deer Park Overpass and Rest Area	05/08/24	0.300					0.5
	05/20/24	0.100				1	
	05/30/24	0.350				3	
	6/20/2024	2.0	0.88	5.28			
	8/1/2024	.25					2.0
	8/15/2024	1.2					8.0
Gasman Rd Detention Pond	5/30/2024	0.65	1.28	7.68			
O'Brien ROW Parcel	10/10/2024	1	0.704				
ODT -- Dean Creek crossing	3/8/2024	1.81				9.6	
ODT - Whitefeather Way to West Sequim Bay Rd	2/22/2024	5.4				44.8	
	4/23/2024	5.4					4.0
ODT Berm on Old Olympic Highway	3/8/2024	0.8			17.28		17.28
	3/13/2024	1.7			7.68		7.68
Towne Rd levee pedestrian path	10/16/24	2.400	1.3				
Voice of America Parking lot	3/7/24	1.62	0.096				0.57
Total: 10 Special Sites	14 Days	27.08 acres	4.82 oz	12.96 oz	26.88 oz	58.4 oz	41.47 oz

¹Milestone® - Active ingredient: aminopyralid; in 0.125-0.250% solution.

²Vastlan® - Active ingredient: triclopyr; in 1.5-2% solution, 25-50% solution for cut-stump application only

³Element 3A® - Active ingredient: triclopyr in 2-2.5% solution, 25-50% solution for cut stump only

⁴Element 4® - Active ingredient: triclopyr in 1.5% solution, 10-30% for basal bark only

⁵Aquaneat®/Aquamaster®- Active ingredient: glyphosate in 1.5% solution, 25-50% solution for cut stump only

APPENDIX I: PILOT POLLINATOR PLANTINGS

The table below shows all plants included in pollinator planting projects this year. The table is arranged alphabetically by the scientific name. All plants were native and locally sourced, grown from seed collected on the Olympic Peninsula. The species were selected to provide high quality native pollinator forage with a continuous bloom period ranging from late February to late October. The species represent a mixture of native shrubs and forbs that meet roadside criteria, provide desirable habitat, and through competition, help prevent the establishment of noxious weeds and undesirable vegetation.

Kugel Creek		
Common Name	Scientific Name	Quantity
Slough sedge	<i>Carex obnupta</i>	200
Black hawthorn/stink currant	<i>Crataegus douglasii/Ribes bracteosum</i>	36
Total Species: 3		Total Quantity: 236

Mount Pleasant Raingarden		
Common Name	Scientific Name	Quantity
Broadleaf penstemon	<i>Penstemon ovatus</i>	5
Fragile cactus	<i>Opuntia fragilis</i>	10
Glacier fleabane	<i>Erigeron glacialis</i>	25
Lyall's rockcress	<i>Boechera lyallii</i>	10
Red fescue	<i>Festuca rubra</i>	10
Small-flowered alumroot	<i>Heuchera micrantha</i>	30
Western fescue	<i>Festuca occidentalis</i>	20
Total Species: 7		Total Quantity: 110

Sequim-Dungeness & Woodcock		
Common Name	Scientific Name	Quantity
Common juniper	<i>Juniperus communis</i>	10
Rosy spirea	<i>Spiraea splendens</i>	2
Showy fleabane	<i>Erigeron speciosus</i>	6
Small-flowered alumroot	<i>Heuchera micrantha</i>	6
Total Species: 4		Total Quantity: 24

Deer Park Overpass

Common Name	Scientific Name	Quantity
Beach pea	<i>Lathyrus japonicus</i>	54
Black cottonwood	<i>Populus trichocarpa</i>	14
Blue-eyed grass	<i>Sisyrinchium idahoense</i>	36
Bluebells-of-scotland	<i>Campanula rotundifolia</i>	36
Broadleaf lupine	<i>Lupinus latifolia</i>	18
Broadleaf penstemon	<i>Penstemon ovatus</i>	42
Broadleaf stonecrop	<i>Sedum spathulifolium</i>	209
Buffaloberry	<i>Shepherdia canadensis</i>	52
California tea	<i>Rupertia physodes</i>	200
Canada goldenrod	<i>Solidago lepida</i>	560
Cascade biscuitroot	<i>Lomatium martindalei</i>	18
Coastal mugwort	<i>Artemisia suksdorfii</i>	515
Coastal penstemon	<i>Penstemon serrulatus</i>	279
Douglas aster	<i>Symphyotrichum subspicatum</i>	295
Douglas-fir	<i>Pseudotsuga menziesii</i>	10
Flett's fleabane	<i>Erigeron flettii</i>	145
Fragile cactus	<i>Opuntia fragilis</i>	49
Garry oak	<i>Quercus garryana</i>	60
Glacier fleabane	<i>Erigeron glacialis</i>	259
Green-flowered alumroot	<i>Heuchera chlorantha</i>	80
Harsh paintbrush	<i>Castilleja hispida</i>	18
Herbaceous combo	Various species	54
Kinnikinnick	<i>Arctostaphylos uva-ursi</i>	63
Lanceleaf arnica	<i>Arnica latifolia</i>	72
Lanceleaf stonecrop	<i>Sedum lanceolatum</i>	121
Lyll's rockcress	<i>Boechera lyallii</i>	200
Nodding onion	<i>Allium cernuum</i>	108
Northern goldenrod	<i>Solidago multiradiata</i>	363
Old man's whiskers	<i>Geum triflorum</i>	66
Oregon stonecrop	<i>Sedum oreganum</i>	100
Oregon sunshine	<i>Eriophyllum lanatum</i>	40
Pacific stonecrop	<i>Sedum divergens</i>	35
Parry's arnica	<i>Arnica parryi</i>	34
Pearly everlasting	<i>Anaphalis margaritacea</i>	30

Deer Park Overpass		
Common Name	Scientific Name	Quantity
Pearly everlasting/shrubby cinquefoil combo	<i>Anaphalis margaritacea/ Dasiphora fruticosa</i>	36
Puget sound gumweed	<i>Grindelia integrifolia</i>	849
Sand-dwelling wallflower	<i>Erysimum arenicola</i>	296
Sea-pink	<i>Armeria maritima</i>	220
Sedge species	<i>Carex spp.</i>	90
Showy fleabane	<i>Erigeron speciosus</i>	104
Shrubby cinquefoil	<i>Dasiphora fruticosa</i>	27
Small-flowered alumroot	<i>Heuchera micrantha</i>	292
Starry cerastrium	<i>Cerastium arvense</i>	20
Starry sedge	<i>Carex pachystachya</i>	99
Taper-tip onion	<i>Allium acuminatum</i>	36
Western mugwort	<i>Artemisia ludoviciana</i>	183
Western white pine	<i>Pinus monticola</i>	10
Yarrow	<i>Achillea millefolium</i>	281
Yarrow/sedge combo	<i>Achillea millefolium/Carex spp.</i>	60
Total Species: 46		Total Quantity: 6838

Old Olympic HWY/ ODT Berm		
Common Name	Scientific Name	Quantity
Baldhip rose	<i>Rosa gymnocarpa</i>	10
Blue elderberry	<i>Sambucus cerulea</i>	35
Canada goldenrod	<i>Solidago lepida</i>	100
Coastal mugwort	<i>Artemisia suksdorfii</i>	100
Coast penstemon	<i>Penstemon serrulatus</i>	150
Douglas aster	<i>Symphotrichum subspicatum</i>	200
Glacier fleabane	<i>Erigeron glacialis</i>	36
Hairy honeysuckle	<i>Lonicera hispidula</i>	5
Lanceleaf arnica	<i>Arnica latifolia</i>	36
Northern goldenrod	<i>Solidago multiradiata</i>	200
Puget sound gumweed	<i>Grindelia integrifolia</i>	300

Small-flowered alumroot	<i>Heuchera micrantha</i>	100
Trailing snowberry	<i>Symphoricarpos mollis</i>	50
Total Species: 13		Total Quantity: 1172

Grand Total – Number of Species: 57		Grand Total – Quantity: 8380
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APPENDIX J: PROTOCOLS

Project selection:

The focus of the Clallam County Road Department 2024 IWM was the control of regulated noxious weeds and invasive, non-native weeds of special concern on Clallam County rights-of-way. The 2024 IWM Plan treatment priorities were:

1. Control of Category 1 regulated weeds on county roadsides in accordance with state law.
2. Control of Category 1 regulated weeds and select weeds in all county rock sources.
3. Control of Category 1 and 2 weeds at locations with most impact to local agriculture.
4. Control of Category 1 and 2 weeds at locations with most impact to local forestry.
5. Control of non-native, invasive weeds that interfere with the safety or function of County roadsides or additional non-roadside management areas
6. Control of Category 1 and 2 weeds at locations requested by the public and local agencies.

In addition to the prioritized locations listed in the 2024 Plan, locations discovered to fit “early detection, rapid response” criteria were added to 2024 projects.

Control Methods:

Chemical:

- Used only EPA and WSDA approved formulations of herbicides; all are aquatically approved formulations, with the exception of Transline, Garlon 4 and Oust XP. The products chosen offered the greatest weed selectivity, maximized worker and public safety, offered lowest application rates, acceptable cost and posed the lowest risk for wildlife and environment.
 - Milestone® - Active ingredient: aminopyralid; in 0.125-0.250% solution for foliar application
 - Vastlan®- Active ingredient: triclopyr choline salt; in 0.5-1.5% solution for foliar application; 25-50% solution for cut-stump application
 - Element 3A®- Active ingredient: triclopyr TEA; in 1-2.5% solution for foliar application
 - Polaris® - Active ingredient: imazapyr in 1% solution for foliar application
 - AquaNeat®/Aquamaster® - Active ingredient: glyphosate in 0.5-2.0% solution for foliar application; 25-50% for cut-stump application
 - Garlon 4® - Active ingredient triclopyr; in 1-2.5% solution for foliar application; 10-30% basal bark treatment or cut stump application
- Control possible on all proposed roadside application locations included in Integrated Weed Management Plan, the plan was published online, and notice placed in local newspaper in advance of treatments.
- Offered adjacent landowner agreements/volunteer alternatives to herbicide applications.
- Posted Herbicide Application Notices (Appendix M) to clearly mark treatment areas prior to all herbicide activity. Posted at most public intersections or at each end of treated range if not treating the entire road.
- Herbicide Application Notices included name and mobile contact number to contact control crew in the field during treatments.
- All roadside applications completed by licensed applicators and were conducted on foot without the use of any mechanized equipment
- Used spot treatments ONLY (no broadcast treatments) for specific weeds and included marker dye to aid in identification of treatment areas.
- Prepared herbicides in locations that minimized risk of public exposure to concentrated chemicals and potential for spills.
- Observed strict compliance to directions on product labels and to state and local regulations; including the use of appropriate personal protective equipment as described by product labels.

Physical:

- Dug up newly established infestations of plants wherever practical and conditions were favorable.
- Cut and bagged heads of flowering biennial and perennial plants wherever feasible.

Spatial Data collection and Mapping:

- GPS points were taken for most regulated weed species, priority species, or significant observations.
- Carried cellphone with iForm, the data collector app sponsored by WSDA for recording weed locations and infestation data
- Cellphone also has ArcGIS Fieldmaps with current Clallam County Parcel data, spatial notes and past infestation information
- Data was mapped and symbolized to Treatment Area Maps (Pages 10-21).

Data Reporting and Monitoring:

- Supported WSU Master Gardener’s RWMT with completed Herbicide/Manual Treatment Form and details.
- Detailed activity data published in the appendices to this report.

APPENDIX K: WSU EXTENSION MASTER GARDENER ROADSIDE WEED MANAGEMENT MONITORING REPORT

The following report document is a copy of the report created by WSU Extension program's Master Gardeners Roadside Weed Monitoring Team (RWMT). The WSU Master Gardener program was established in 1971 to assist Extension professionals in the delivery of research-based horticultural information to communities. Today, Master Gardeners undergo 100 hours of training in topics such plant biology and species identification training to become certified Master Gardeners and provide for a variety of community services including educational programs, diagnostic services and answers to home gardening questions.

The RWMT are Master Gardeners engaged as citizen scientists to collect data and provide an independent assessment of the IWM Program and its treatment activities. Master Gardener's unique qualities as an educated, highly-trained volunteer group make the RWMT an extremely valuable asset to the IWM Program.

WEEDS,
WEEDS,
WEEDS

2024

ROADSIDE WEED MANAGEMENT REPORT



**CLALLAM COUNTY MASTER
GARDENERS**

Remembering Bruce Pape

This report is dedicated to the memory of Bruce Pape, Clallam County Master Gardener since 2012 and the coordinator of the Master Gardener Roadside Vegetation Management Team (RVMT). Bruce kept us organized and on track, even as his health was failing. Bruce passed away on July 21, 2024. When the RVMT was formed several years ago, it was obvious Bruce should be our leader. He was respected by all the other volunteers and county leaders. We all soon learned he could write reports, prepare and give presentations, organize work plans and teach. All of this he did with commitment to the Clallam County Master Gardener and Noxious Weed programs, and the volunteers. He was always kind, considerate and caring. Bruce was a person who was easy to like. He was a person who left great memories for those who worked with him. He was a person all of us were glad to have as a friend. Bruce Pape will be missed and remembered by all who knew him. Oh Yes, we will even miss his corny puns.

Rest in Peace Bruce

Your Roadside Vegetation Management Team

Clallam County Master Gardener Roadside Weed Monitoring Report – 2024

EXECUTIVE SUMMARY:

The Washington State University Clallam County Extension Master Gardener's Roadside Vegetation Monitoring Team (RVMT) continued its Clallam County roadside monitoring activity in 2024. The RVMT received 141 treatment sheets and surveyed 42 roadsides in the East, Central, and West Clallam Road Commission Districts, a significant increase over the number of roads monitored in 2023. Vegetational disturbance (eg. mowing) between treatment and monitoring, and a lack of treatment evidence (ie. absence of live or dead plants) made it difficult to evaluate efficacy (ratings of UNK). Ninety-one (91) incidences of 22 weed species were evaluated for efficacy. Fifty-nine (59) incidences (66%) were rated for efficacy and 32 were rated unknown. Six (6) species (Burdock - ARMI, Italian thistle - CAPY, Fox Glove - DIPU, Mole plant - EULA, Orange Hawkweed - HIAU, and Common Tansy - TAVU) were not rated for treatment efficacy (UNK). Overall, 2024 weed control efficacy was 79% (Good). Overall efficacy was Excellent (98%) for poison hemlock (COMA). Efficacy of Meadow Knapweed (CEMO) treatments increased from 73% (Fair) in 2023 to 84% (Good) in 2024.

A number of things affected this year's evaluation. The relative high number of unknowns in the data could be attributed to a couple of factors. Often, when observers were on the proper road location but could not locate any evidence of target plants, either live or dead, an objective determination of treatment effects was not possible. These results may be due to either the actual treatment location could not be identified, or the target species was eradicated.

With eight (8) years of monitoring, some distribution and eradication trends are beginning to appear and need additional analysis. Criteria for the selection of sites for evaluation were determined by Bruce Pape. With the new personnel on the RVMT and the unfortunate passing of Bruce, it will take some time for us to fill that knowledge and skill gap. We are enjoying the projects, expanding our knowledge base, and look forward to continuing to work with the Clallam County Road Department's noxious weed department and we anticipate more learning and research opportunities.

MONITORING PROJECT OVERVIEW:

Entering the eighth year of the Clallam County Integrated Weed Management Plan, Master Gardeners continued our role as an impartial monitor of the weed control efficacy along Clallam County roadsides. Master Gardeners have been monitoring Clallam County roadsides since 2012, noting specific noxious weeds. In 2017, the objective changed to monitoring undesirable weeds that were treated with herbicide and/or manually removed by County noxious weed staff. The primary purpose of the monitoring was and is to evaluate the efficacy of treatment. This emphasis continues. Statistical analysis in this report is limited to Mean, Median, and Mode of categorical data. Additionally, sample size by species is limited. We acknowledge that the collected data are not optimal for statistical treatment as they are subjective and not normally distributed. However, categorical data is often used in this manner and provides a reasonable estimate of the efficacy of treatment.

METHODOLOGY for 2024:

Operational procedures did not significantly change for 2023, relying on our standard manual method of roadside surveillance to determine efficacy. The Clallam County Noxious Weed Office shared their roadside weed treatment data forms with the Master Gardeners RVMT; the RVMT surveyed the treated areas 4 to 6 weeks post-treatment to evaluate efficacy. If we found sites with poor efficacy ratings or other pertinent information, it was punctually relayed to the Noxious Weed Office.

MONITORING:

A total of one-hundred forty-one (141) weed treatment data forms were received in four sets from the Noxious Weed Office (Table 1). Forty-two (42) forms for herbicide treatment sites with a total of 22 weed species were selected for monitoring. Sites were not candidates for monitoring if: all target weeds were either controlled manually or only partially treated with herbicide, location was west of Joyce/Lake Crescent, herbicide treatment was more than 6 or 7 weeks prior to Master Gardeners receiving the treatment form, or was a special site (e.g., private or commercial property not accessible to the monitoring team).

Several problems arose this year in monitoring.

- Locating treatment sites (e.g., the specific segment of roadside treated)
- Surveying the sites within the optimum 4-6 weeks post-treatment timeframe
- High number of "Unknown" efficacy ratings due to altering of roadside vegetation (mowing) between treatment and efficacy survey, or inability to locate and identify targeted species.

Table 1. 2024 Roadside Vegetation Monitoring.

Treatment Date Range	Monitoring Date(s)	# Roads Monitored	# Species monitored	Mean Efficacy Score
Jan 3 - Mar 20, 2024	April 11, 12, 24	14	6	89
Mar 27 - Apr 30, 2024	May 17	9	14	81
May 16 - Jun 25, 2024	July 22, 24	6	9	75
Jul 2 - Sep 4, 2024	Sep 25, Oct 2, 11, 13	13	20	67
	Total	42	22	79

Twelve (12) roads were monitored in 2023, 6 in the East Clallam Road Department District and 6 in the West District. Forty-two (42) roadsides were monitored during the 2024 season, 27 in the East District and 9 in the Central District. Only 3 roads in the East District and 1 in the West District were repeated from 2023 to 2024. Only one roadside (Happy Valley) has been monitored for the eight consecutive years (Appendix A).

Twenty-two (22) Clallam County noxious weed species were monitored and 16 received efficacy ratings (Appendix B). The Clallam County Category 1 weeds Poison Hemlock (COMA – 20 treated sites) and Meadow Knapweed (CEMO – 10 treated sites) remained the highest priority for control in 2024 based on the number of sites treated. Wild basil savory (CLVU—7 treated sites) is a more recent addition to the high priority list as it has gone from being found along a few relatively isolated locations to increasing distribution throughout the county. Canada thistle and bull thistle (Category 2 noxious weeds) were the second most often treated weeds (9 occurrences each). Other Category 1 weeds treated in previous years remained a high priority in 2024.

The primary concern in the monitoring process is the efficacy of the noxious weed treatments. The developed efficacy data from our monitoring corresponds to the prescribed codes found on the weed treatment monitoring form (WTMF) provided by the Noxious Weed Office. Monitoring of herbicide treated sites was done at least 4 weeks after treatment but usually within six weeks after treatment.

While efficacy ratings are somewhat subjective, they are determined by consensus. Efficacy ratings vary noticeably from road to road and weed to weed. The developed efficacy data from our monitoring evaluation corresponds to the prescribed codes found on the integrated weed management monitoring form.

Prior to 2023 (when only 10 efficacy ratings were given), we have typically given over 200 efficacy ratings and viewed over 100 partial treatments. This year (2024), 60 efficacy ratings were provided on 16 species. Six (6) species received UNK ratings. Thirteen (13) species received multiple ratings, and 5 species received at least 5 ratings. Three (3) of these 5 (COMA, CEMO, JAVU) were classed as Category 1, Status NCR weeds. Control on Category 1 /

NCR weeds treated was Good to Complete except for CLVU (Poor) and CEST (No Effect). Overall, control efficacy rating was Good at 79% (Appendix C).

HERBICIDE RETREATMENT NEEDS:

Other data gathered by the monitoring team on the WTMF included retreatment needs for this year and next. Retreatment needs for this year were communicated to the Noxious Weed staff shortly after monitoring. Any priority weed noted for treatment that had less than half of the target population controlled was promptly reported.

OFF-TARGET DAMAGE:

Assuring chemical weed control activities do not impact native plants is an important role for our impartial RVMT. Immediate feedback helps determine if chemicals or application methods need to be modified. We continue to assess this on every WTMF. No off-target damage sites were noted in 2024.

MONITORING OBSERVATIONS AND CONCLUSIONS:

The passing of Bruce Pape during the 2024 monitoring period has left a significant gap in the knowledge base of the RVMT. Bruce had a history with the program and was aware of the dynamics of year-to-year and long-term trends in the data. He noted multi-year data for most of the roads monitored and provided an analysis of trends in knapweeds typically treated with herbicides in the 2023 report. Generally speaking, density estimates of knapweeds has decreased over time with continued treatments. However, in 2024, density has trended up. Efficacy remains relatively high, especially for CEMO with an overall 85% efficacy rating. Treatment of two CEST treatments that had density estimates of 3 and 2 were rated an efficacy of 0% or "No Effect".

Table 2: Herbicide Treatment of the knapweeds along Happy Valley Road from 2017 - 2024 showing density and efficacy

YEAR	Date	DENSITY	EFFICACY
2017		3,4,5	35, 65, 85
2018	8/7	4,2	65/un
2019	8/27	4	65/95
2020		2	35
2021		---	95
2022		2	35
2023	6/28	1	35
2024		2,3,6	50, 66, 65

The species of emphasis in 2024 was poison hemlock (COMA) with 20 treatment sites evaluated and 10 efficacy ratings. Treatment mean efficacy was 98% with a Median and Mode

of 100%. All treatment sites evaluated were Complete control with the exception of 3 sites rated at 95%.

The Integrated Weed Management Plan has only been in effect since 2017 and noxious weed seeds can survive years, even decades. Therefore, it is important to continue to appropriately resource the County's efforts in order to comply with Washington State weed laws. Supported activity by the Clallam County Road Commission and the Clallam County Commissioners illustrates an awareness of the "big picture" and a view to a sustainable future.

With eight years of monitoring including several roads, we feel we can begin to monitor trends over time. We look forward to the continued partnership between the Clallam County Master Gardeners and the County Roadside Vegetation Management team.

RVMT:

In 2024, nine (9) Master Gardeners continued in the activities associated with the Noxious Weed Office. They were: Bruce Pape, Gary Brundige, Lorraine Eckerd, Peggy Goette, Bev Hetrick, Nancy Kohn, Brenda Lasorsa, John Viada, and Hunter Williford.

Monitoring was mainly accomplished from a slow-moving vehicle, but, when necessary, sites were examined on foot. Safety was always a priority. Activities were limited to the East and Central Clallam Road District areas. During the monitoring, the teams documented post-treatment live noxious weeds and provided point notations for the Noxious Weed Office staff. Total volunteer hours amount to about two hundred (200).

APPENDIX A: Roadsides Monitored

	East	Central
3 rd Ave S	McAlmond St	Camp Hayden
Blue Mountain	Old Blyn Highway	Deer Park
Cassidy	Mt Angeles	Gosset
Cays	River	Granite
Coulter	Ridge view	James Page Rd
E Sequim Bay	Sequim Dungeness	Little River
Fasola	South Bagley Creek	Olympic Hot Springs
Gasman	Towne Rd	South Shore
Gilbert	Turnstone	
Happy Valley*	Twin View Dr	
Hooker	Valley Center	
Little River	Ward	
Lotzgesell	West Hendrickson	
Marine Dr	West Washington	
* 8 years monitoring		

APPENDIX B: Noxious Weeds Monitored

Code	Scientific name	Common name	Category	Category
ARMI	<i>Arctium minus</i>	burdock	2	WR
CAPY	<i>Carduus pycnocephalus</i>	Italian thistle	1	NCR
CEMO	<i>Centaurea x moncktonii</i>	meadow knapweed*	1	NCR
CEST	<i>Centaurea stoebe</i>	spotted knapweed *	1	NCR
CIAR	<i>Cirsium arvense</i>	Canada thistle	2	NW
CIVU	<i>Cirsium vulgare</i>	bull thistle*	2	NW
CLVU	<i>Clinopodium vulgare</i>	wild basil savory	1	NCR
COMA	<i>Conium maculatum</i>	Poison hemlock	1	NCR
CYSC	<i>Cytisus scoparius</i>	Scotch broom*	2	NW
DALA	<i>Daphne laureola</i>	Spurge laurel	1	NR
DIFU	<i>Dipsacus fullonum</i>	Common teasel	1	NCR
DIPU	<i>Digitalis purpurea</i>	Foxglove	3	WW
EULA	<i>Euphorbia lathyris</i>	Mole plant	1	NEW
FOVU	<i>Foeniculum vulgare</i>	Common fennel	1	NCR
GERO	<i>Geranium robertianum</i>	Herb Robert	1	NW
HIAU	<i>Hieracium aurantiacum</i>	orange hawkweed	1	NCR
HYPE	<i>Hypericum perforatum</i>	St. John's wort	2	NW
JAVU	<i>Jacobaea vulgaris</i>	tansy ragwort*	1	NCR
LEVU	<i>Leucanthemum vulgare</i>	oxeye daisy	3	NW
POBO	<i>Polygonum x bohemicum</i>	Bohemian knotweed	1	NCR
RUAR	<i>Rubus armeniacus</i>	Himalayan blackberry	2	NW
TAVU	<i>Tanacetum vulgare</i>	common tansy*	1	NCR

Category

Category 1: Class A, B designate, and selected B or C noxious weeds, additional noxious weeds and invasive species of special concern that are very limited in distribution, and newly discovered invaders that were previously unknown in the county (EDRR - early detection, rapid response). Category 1 weeds are the highest priority for control.

Category 2: Noxious weeds that are widespread, but of particular concern to the public or an affected public entity. Category 2 weed infestations will be added to the annual work plan to methodically reduce widespread weeds over time and to accommodate requests.

Category 3: weeds that are so widespread they are generally considered naturalized or a nuisance. These weeds are tolerated. Control is not considered feasible.

Status

ISSC = Invasive Species of Special Concern; NCR = Noxious, Control Required; NR = Noxious, Rare; NW = Noxious, Widespread; WR = Weedy, Rare; WW = Weedy, Widespread

APPENDIX C: Noxious Weeds Monitored and Efficacy Ratings

SPP	COUNT (instances)	<i>n</i> (w/efficacy)	% rated	MEAN	MEDIAN	MODE
COMA	20	10	50%	98	100	100
CEMO	10	7	70%	84	85	65
CIAR	9	7	78%	59	65	95
CIVU	9	8	89%	77	100	100
CLVU	7	3	43%	11	15	15
JAVU	7	5	71%	84	95	65
CEST	4	2	50%	0	0	0
RUAR	4	4	100%	79	75	65
CYSC	3	3	100%	95	95	#N/A
DALA	2	2	100%	80	80	#N/A
DIFU	2	2	100%	100	100	100
GERO	2	2	100%	34	34	#N/A
HYPE	2	1	50%	95	95	#N/A
POBO (FABO)	2	2	100%	90	90	#N/A
ARMI	1	0	0%	unk		
CAPY	1	0	0%	unk		
DIPU	1	0	0%	unk		
EULA	1	0	0%	unk		
FOVU	1	1	100%	100	100	#N/A
HIAU	1	0	0%	unk		
LEVU	1	1	100%	100	100	#N/A
TAVU	1	0	0%	unk		
22 spp	91	60	66%	79	95	100

CLASSIFIED PROOF

PUBLIC HEARING NOTICE

Clallam County is beginning the 2024 Integrated Weed Control program which may include spot treatments of herbicide to control specific noxious weeds and invasive species of special concern along selected portions of county right-of-way. Notices indicating which herbicide has been applied, the application date, and the target weed species will be posted onsite. The Integrated Weed Management Plan, which contains information about target weeds, locations, and treatment methods, can be viewed online at <https://www.clallamcounty.wa.gov/821/Noxious-Weed-Control>. Property owners who do not wish to have their adjoining right-of-way treated with herbicide have the option of keeping the right-of-way abutting their property weed free by applying for an Owner Will Control Agreement with Clallam County available online. Contact the County for further information at 360-417-2442.
PDN: January 30, 2024
Legal No. 990635

NOTICE

The herbicides aminopyralid, imazapyr, triclopyr, clopyralid or _____ will be applied to this site to control noxious weeds, which threaten native vegetation and habitat in this area.

Planned / Actual application date*: _____

*Actual date of application contingent upon weather conditions.

Targeted Noxious Species:** _____

**Other weed species in this area may also be treated at this time.

NO USE RESTRICTIONS ARE IN PLACE

Avoid contact with treated vegetation until after it has dried.

**Clallam County Noxious Weed Control Board
223 East Fourth Street, Suite 15
Port Angeles, WA 98362
(360) 417-2476
(360) 477-1210**

APPENDIX N: SAMPLE HERBICIDE/MANUAL TREATMENT DATA FORM (SIDE 1):

2024 CLALLAM COUNTY ROADS : Herbicide/Manual Treatment Data Form

Name of Entity/Person for whom Treatment was applied: <u>Clallam County</u>			
Street Address: <u>223 E 4th St</u>	City: <u>Port Angeles</u>	State: <u>WA</u>	Zip: <u>98362</u>
Address or Exact Location of Site: _____			
PIN#: _____			

General Activity Fields

County (circle one)	WRIA (circle one)	Project Name (from project list)	Department (circle one)	Workforce**
Clallam	15 16 17 18 19 20		Roads DCD Parks Other	

**Workforce: County Name, WCC Crew Name, County Weed Board

Crew Members Present:

Site/Inventory Fields

Date	Acres examined for weeds	Acres treated (do not lump plants)	Miles Examined	Miles Treated	Treatment Site (circle one)			Treatment Method (circle one)	Total Manual Infested Area Treated: (DO NOT lump plants together) acres
					Road Pit	Special Site Other	Private	Spot Complete Retreatment	

Weeds Treated (Just the PLANTS code is OK)	Infested Area Treated (DO NOT lump plants together)	% of area examined for weeds infested with species (<u>lump</u> plants together – use cover classes 1 - 9 listed below)	Manual/Herbicide	Number of plants manually removed	Notes

Cover Classes: 1 = Trace, 2 = 1 - 3%, 3 = 3 - 5%, 4 = 5 - 10%, 5 = 10 - 25%, 6 = 25 - 50%, 7 = 50 - 75%, 8 = 75 - 95%, 9 = 95 - 100%
 Note: Cover classes are meant to be *approximations only*.

APPENDIX N: SAMPLE HERBICIDE/MANUAL TREATMENT DATA FORM (SIDE 2):

Herbicide Application

All Licensed Applicators: Name and License # Christina St John #104740 Joe Oakes #100454 Sam Fischbein #102791

Firm Name: Clallam County Noxious Weed Control Board Phone # 360-417-2442

Firm Address: 223 E 4th St, Suite 15 City: Port Angeles State: WA Zip: 98362

Application Date	Time Start	Time Stop	Temp (F)	Wind Speed (MPH)	Wind Direction	Cloud Cover	Remarks - <u>Weather</u> forecast

Application Area (acre)	Total Volume of Mix Applied (gal)	Diluent	Special comment
		Water	

Product Name	EPA Registration #	Amount of herbicide used (oz)	Herbicide Applied/Acre or other measure	Concentration Applied
<input type="checkbox"/> Element 3A	62719-37			
<input type="checkbox"/> Milestone	62719-519			
<input type="checkbox"/> <u>Vastlan</u>	62719-687			
<input type="checkbox"/> Transline	62719-259			
<input type="checkbox"/> Competitor	WA-2935-04001			
<input type="checkbox"/> Blazon Blue				
<input type="checkbox"/> Oust XP	432-1552			
<input type="checkbox"/> <u>Aquaneat</u>	228-365			

Was this application made as a result of a permit? **Yes No**

If yes, Permit # _____

Project Complete? **Y** or **N** (add notes) _____ Project ID #: _____

WA State NPDES Acres: _____

Notes: _____ # Interactions: _____

APPENDIX O: SAMPLE OWNER WILL CONTROL:



OWNER WILL CONTROL AGREEMENT

By entering into this agreement an adjacent property owner (hereinafter referred to as "Owner") will agree to control noxious weeds and other weeds of concern as described in Appendix A of this agreement on county right-of-way adjacent to property located at:

_____ (Street) _____ (City) _____ (Zip)

The County will send a confirmation email upon receiving a completed application and return a copy of the finalized Owner Will Control Agreement (hereinafter referred to as "Agreement").

For the purpose of this Agreement, 'control' will consist of complete removal of all above ground biomass and as much of the root system as is feasible of weeds listed in your packet, as well as any additional weeds of concern as determined by the County.

If noxious or other weeds of concern are observed on right-of-way adjacent to above named address, County will notify property owner of their presence. Owner will then have ten (10) days to completely remove weeds as required by this Agreement. If Owner fails to control weeds in that timeframe, this Agreement will be terminated and weeds will be controlled as determined by the County, including the use of herbicides.

This Agreement is valid from the date signed by both parties until December 31 of the same year.

If the Owner Will Control Agreement is terminated as described above the Owner may apply to re-enter into a new Owner Will Control Agreement the following calendar year.

* _____ * _____ * _____

Owner Name (Print) (Signature) Date

* _____ * _____

(Owner Email) (Owner Phone #)

Interested in Native Plant Enhancement Program? (circle one) **YES NO**

* _____ * _____ * _____

County Representative (Signature) Date

*Required Field

APPENDIX P: SAMPLE ADOPT-A-PATCH PERMIT:

Clallam County Public Works Department
 223 East Fourth Street, Suite 15 Port Angeles, WA 98362
 360-417-2703 Phone 360-417-2414 Fax

\$160 plus all costs beyond public use**
 **See C.C.C. 5.100.245 – Fee Schedule 245-A

PROJECT NO. _____
ROAD NAME _____
PERMIT NO. _____
COUNTY USE ONLY

APPLICATION FOR SPECIAL USE OR EVENT ALONG CLALLAM COUNTY RIGHT OF WAY

In Clallam County, a "Right-of-Way" permit is required to work along a county-owned road within the county right of way.

PLEASE PRINT

Name of Applicant: _____	County Road: _____
Mailing Address: _____ _____ _____	Address/ Milepost of Project Site: _____
Phone: _____	<u>When the project is approved.</u> (check one item below) <input type="checkbox"/> Mail permit when approved <input type="checkbox"/> Call when approved <input type="checkbox"/> Fax when approved
Cell Phone: _____	
Fax: _____	

USE PROPOSED & PURPOSE

Special Use: NOXIOUS WEED CONTROL

Name of Event Coordinator: _____

Start Date _____
 End Date _____

IMPORTANT:

Project Location Description: _____
 (Reference "Adopt-A-Patch Site List" for location")

THE EXACT LOCATION OF THE ENTIRE EVENT/USE AREA MUST BE CLEARLY MARKED SO AS TO BE EVIDENT TO COUNTY PERSONNEL. FAILURE TO COMPLY WILL RESULT IN A DELAY OF THE PROCESSING OF THIS PERMIT.
 It is the responsibility of the applicant to notify all utilities and private property owners when such property is liable to injury or damage through the performance of the permitted work. The applicant shall make all necessary arrangements relative to the protection of such property and/or utilities.

By signing this permit, the applicant agrees to comply with all conditions as stated on the PERMIT, Form RWPCOND041604, Permit Conditions Addendum and C.C.C. 5.100.245 – Fee Schedule 245-A. Applicant has 10 days from permit approval date to request clarification or modification to permit conditions attached.

Signed _____ Date _____

***** COUNTY USE ONLY *****

PERMISSION IS HEREBY GRANTED DENIED
 Call 360-417-2703 for the following:
 Start Date _____ _____ Final
The Approved Permit Must be Posted on Site Until Final Inspection.

FEE CALCULATION

AMT WAIVED: _____
NET FEE: _____
DATE: _____
RECEIPT#: _____
CHECK#: _____
REC'D BY: _____

COMMENTS: _____

This permit shall be void unless the work herein contemplated is completed before the following date: _____
 Area Supervisor/Design Review Engineer _____ Date _____ Final Inspection By: _____ Date: _____

Program details and forms available online at <https://www.clallamcountywa.gov/1042/Roadside-Vegetation-Management>

APPENDIX Q: SAMPLE ADOPT-A-PATCH ACTIVITY REPORT:



Adopt-A-Patch Activity Report

Permit#: _____ **Permittee Name:** _____

Permittee Phone #: _____

Dates included in this report: _____ (mm/dd/yy)

_____ (mm/dd/yy)

_____ (mm/dd/yy)

_____ (mm/dd/yy)

Target Species: _____

Estimated Total Removed:

Species 1 _____ **#plants** _____ **lbs of flowers/seeds** _____

Species 2 _____ **#plants** _____ **lbs of flowers/seeds** _____

Species 3 _____ **#plants** _____ **lbs of flowers/seeds** _____

Species 4 _____ **#plants** _____ **lbs of flowers/seeds** _____

Total Distance Covered: shoulder 1 _____ **miles/feet shoulder 2** _____ **miles/feet**

Total # in Workforce: _____ **Total # Hours Worked:** _____

Comments? _____

Submit reports as often as desired, but submit no later than October 31.

Email to Noxiousweedcontrol@clallamcountywa.gov or Mail to: Clallam County Noxious Weed Board
223 E Fourth St, Suite 15
Port Angeles, WA 98362

Program details and forms available online at: <https://www.clallamcountywa.gov/1042/Roadside-Vegetation-Management>

APPENDIX R: SAMPLE ADOPT-A-PATCH WAIVER:

Adopt-A-Patch Waiver

Name of Grantee		Permit #	
Name of Volunteer/Assignee			
Address	City	Zip Code	Telephone Number
Person to notify in case of emergency		Relationship	
Address	City	Zip Code	Telephone Number
<p>Clallam County's Adopt-a-Patch Program issues permits that allow permit holders, hereinafter known as "Grantees" to enter onto County owned lands for the purpose of controlling noxious and invasive plants of special concern. Grantees and their participants, hereinafter known as "Volunteers" or "Assignees" are advised that working adjacent to a county road can be hazardous and shall exercise due care in performing weed control activities. Grantees and their Assignees must receive safety training prior to participating in any weed control activities.</p> <ol style="list-style-type: none"> 1. I understand that working within right-of-ways and performing noxious weed control can be hazardous. 2. I hereby verify that I am 18 years of age or older, have viewed the Adopt-a-Highway Safety Video and read the Adopt-a-Patch Safety Tips. I understand the conditions, responsibilities, and privileges of participation in the Adopt-a-Patch Program. 3. By signature below I verify that I am operating on Clallam County right-of-way as a Volunteer/Assignee for Grantee _____ under a valid Clallam County permit and therefore agree to defend, indemnify, and save harmless the County from all claims, actions or damages of every kind and description which may accrue to or be suffered by any person or persons, corporation or property by reason of the performance of any such work, character of materials used or manner of installation, maintenance and operation or by the improper occupancy of rights of way or public place or public structure, and in case any such suit or action is brought against said County for damages arising out of or by reason of any of the above causes, the grantee, his agents, successors, assigns, or volunteers will upon written notice to him or them or commencement of such action defend the same at his or their sole cost and expense and will fully satisfy any judgment after the said suit or action shall have finally been determined if adversely to the County. 			
Signature of Assignee		Date	
<input type="text"/>		<input type="text"/>	
Number of hours worked			
<input type="text"/>			

Program details and forms available online at: <https://www.clallamcountywa.gov/1042/Roadside-Vegetation-Management>