



**Safe Street Crew Pulls Herb Robert  
From Collins Campground**

## **Olympic Peninsula Cooperative Noxious Weed Control 2009 Project Report**

A Title II Participating Agreement between the  
USFS Olympic National Forest  
and the  
Clallam County and Jefferson County Noxious Weed Control Boards

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## Executive Summary

### Project Goal:

The goal of this project is to protect the natural resources of Clallam and Jefferson Counties from the negative impacts of invasive non-native plants. This goal is implemented by reducing existing weed populations and preventing the establishment of new ones across both counties. Coordinating and standardizing weed control across jurisdictional boundaries maximizes the efficiency of these efforts and minimizes the negative impacts of noxious weeds on watershed function, wildlife habitat, human and animal health, and recreational activities.

### Project Overview:

This project has been a comprehensive program for noxious weed control on the North Olympic Peninsula. On Forest Service lands it includes surveying, identifying, and controlling noxious weeds in areas identified by the Forest Service. On non-federal lands this project, coordinated by Clallam County, has overseen and implemented Jefferson County Noxious Weed Control Board's program which includes public education, survey and monitoring of noxious weed infestations, and seeking landowner compliance with RCW 17.10. Work has been accomplished with funding under Title II of the Secure Rural Schools Act (SRS), which was designed in part to promote cooperation and collaboration between federal and local governments. This project began in 2002 and was expected to end in 2008 when the Act was set to expire. Work has typically been accomplished by crews of varying size and expertise. This has included a small field crew and a weed specialist hired by the Clallam County Noxious Weed Control Board (CCNWCB), a larger Washington Conservation Corps (WCC) crew, and/or a Olympic Correction Center (OCC) inmate crew, working in pits and on Highway 101 in the west end of Jefferson and Clallam Counties. In 2008 and 2009 the Forest Service hired contractors for certain projects. In 2009 a crew from the Safe Streets program in Tacoma spent a week working in the forest.

### 2009 Project Goals:

1. Control weeds on roads scheduled for decommission.
2. Control weeds in Botanical Areas and similar critical sites.
3. Control weeds in quarries and other rock sources.
4. Revisit previously controlled sites and perform necessary follow-up control work.
5. Identify and treat new populations

### 2009 Resources:

Clallam/Jefferson Noxious Weed Control Boards Staff:

- Supervisor (8 hours/week, 6 months)
- 2 Project Specialists (40 hours/week, 3 months)
- 3 Field Technicians (40 hours/week, 2.5 months)
- Jefferson County Noxious Weed Coordinator/FS Program Assistant (10 hours/week, 7 months, 40 hours/week, 1 month).

Other crews: OCC: Six to nine person crew, (40 hours/week, 8 weeks)

WCC crew: 3-4 persons, 40 hours/week for four weeks (funded by the Forest Service)

Clallam County Sheriff's/Road Department Chain Gang (funded by Clallam County)

### 2009 Accomplishments:

- Treated a total of **353** weed-infested acres (CCNWCB, WCC and OCC).
- Supported coordination of the Jefferson County Noxious Weed Control Program for 7 months.
- Completed and submitted FACTS treatment forms to USFS for upload to their database.
- Completed annual Project Report

### Conclusions and Recommendations:

The Secure Rural Schools Act was re-authorized towards the end of 2008 but because the Resource Advisory Committee (RAC) has not yet been reconvened, no funds have been distributed. Effective, prevention-driven invasive weed control does not require massive funding; it requires stability. It is essential that the RAC meet as early as possible in 2010 so the weed boards can apply for funding.

The successful adoption of the 2008 EIS, which authorized herbicide use throughout the Olympic National Forest, allows effective treatment of larger infestations and certain weed species that do not lend themselves to non-chemical methods. We will continue to consider all control methods, but the most effective treatments for a small CCNWCB crew will likely utilize herbicides on a regular basis.

In the immediate future this project will continue to focus on treatment. However, thorough surveys must be incorporated into the work plan to discover new infestations while they are small and easy to control. We must strike the right balance between the need to treat known problems, and the need to detect new sites early. Weed Board crew is knowledgeable about new invaders and is local. This makes us ideally suited to surveying and monitoring large areas, identifying new infestations, controlling moderate-sized, widely dispersed and/or remote sites, assisting with project planning and overseeing other crews engaging in larger projects.

## Project Summary

### Project Goal:

The goal of this project is to protect the natural resources of Clallam and Jefferson Counties from the negative impacts of invasive non-native plants. This goal is implemented by reducing existing weed populations and preventing the establishment of new ones, across both counties. Coordinating and standardizing weed control efforts across jurisdictional boundaries maximizes the efficiency of these efforts and minimizes the negative impacts of noxious weeds on watershed function, wildlife habitat, human and animal health and recreational activities.

### Project Overview:

This project has been a comprehensive program for noxious weed control on the North Olympic Peninsula, including surveying, identifying, and controlling noxious weeds, coordinating action and communication between local, state and federal jurisdictions, and raising public awareness of the impacts imposed by noxious weeds. This project has also provided funding for the Jefferson County Noxious Weed Control Board and supported their local education, survey, and treatment efforts. Work has been accomplished with funding under Title II of the Secure Rural Schools Act (SRS), which was designed in part to promote cooperation and collaboration between federal and local governments. This project began in 2002 and was expected to end in 2008 when the Act was set to expire.

On Forest Service lands the project has worked under a policy of early discovery and rapid response to prevent the establishment of new infestations wherever possible. Initial work focused on surveys to identify and update weed baselines; the focus has since shifted to treatments. For known sites, the emphasis has been on controlling high priority noxious weeds in areas with high potential to spread, such as rock sources or campgrounds, or in particularly fragile, sensitive environments such as Biological Areas.

On non-Forest Service lands, the emphasis has been on areas where uncontrolled noxious weed populations on federal, state, county, and private land were spreading and hindering coordinated control activities. The Clallam and Jefferson County Weed Boards provided the vital link to private landowners whose weeds threatened federal lands. For that reason, the project focuses on oversight and implementation of the Jefferson County Noxious Weed Control Board's program. Program goals include public education, monitoring infested sites, surveying for new noxious weed infestations, seeking private and public landowner compliance with RCW 17.10 and WAC 16-750, and assisting other public agencies with their efforts to control noxious weeds.

Work has typically been accomplished by crews of varying size and expertise to match the need on the ground. This has included a small, 2 person field crew and weed specialist hired by the Clallam County Noxious Weed Control Board (CCNWCB), a larger Washington Conservation Corps (WCC) crew, and/or a Olympic Correction Center (OCC) inmate crew, working in the west end of Jefferson and Clallam Counties. In 2008 and 2009 the Forest Service hired contractors for certain projects. Details of work performed by the contractor are not available and are not included in this report; areas assigned to a contractor are merely mapped.

### 2009 Project Description:

This year's work primarily involved monitoring and treating previously identified weed infestations on Forest Service land. The Forest Activity Tracking Sheet (FACTS) form was used to document manual or chemical treatment. Treatment reporting was based on a new, unique "Reference Number", arbitrarily assigned within "Project Areas", a broader, previously used reporting model. Additionally, the Forest Service initiated a monitoring program. A Forest Service employee visited treatment sites and sent performance feedback to the counties.

Work continued this year by utilizing any remaining Title II dollars, and by an infusion of money provided directly from specific Forest Service accounts to existing County/Forest Service agreements. Although potential financial support for this program under the Secure Rural Schools Act was re-authorized at the end of 2008, the Resource Advisory Committee (RAC), which reviews and approves projects, has failed to convene. No new Title II funding was distributed in 2009. This changed the way this project could operate, because it placed new constraints on where work could be performed. Work funded directly by the Forest Service, could **only** be performed on Forest Service land. This new stipulation significantly compromised the overall program's intent by reducing or removing altogether the multi-agency, cross-jurisdiction component. The lack of Title II dollars severely limited the Jefferson County Noxious Weed

Control Board (JCNWCB)'s ability to operate effectively. Because Clallam County's weed program is funded through an assessment, it was similarly, but less severely impacted.

Crew staffing levels were modified this year. During the spring work plan meeting, initial assessment of potential funding and work load indicated the need for a larger field crew. Based on this information, Clallam County hired a larger crew than usual (5 people). Because the Program did not receive new Title II funding and direct FS funding was limited, the activity of the weed specialist had to be severely curtailed, and the field crew had to be supplemented by other sources to do other non-Forest Service work. Additionally, the field crew was laid off approximately two weeks earlier than usual, in mid-September. The Forest Service funded a WCC crew for four weeks during the season, which was overseen and directed by County staff. A crew from the Safe Streets program in Tacoma spent a week working with County crews. The Forest Service requested the Safe Streets crew be matched with County funding.

County Weed Board stability protects Forest Service lands from noxious weed encroachment from surrounding lands. Because funding for weed control in Jefferson County is severely underfunded, support in the past from Title II under the Secure Rural Schools Act has enabled the Jefferson County Noxious Weed Control Board program to remain viable. In 2009 less funding was available from both Jefferson County's general fund and Title II. This reduced the JCNWCB Program's ability to both survey for and achieve compliance from landowners in respect to their noxious weed responsibilities.

In 2009, treatments on Forest Service lands were prioritized in the following manner:

6. Control weeds on roads scheduled for decommission.
7. Control weeds in Botanical Areas and similar critical sites.
8. Control weeds in quarries and other rock sources.
9. Revisit previously controlled sites and perform necessary follow-up control work.
10. Identify and treat new populations

#### **2009 Project Resources and Performance:**

The number of staff/participants, the amount of time devoted to this project, and tasks completed were:

- **1 Supervisor: 8 hours/week, for 6 months, licensed applicator**
  - Supervised the project
  - Provided technical information and support, crew training, and assisted with field treatments
  - Participated in 4 planning meetings with Forest Service staff
  - Oversaw end-of-season reporting and planning for 2010 field season
- **Field team: 2 project specialists, 40 hours/week for 3 months (licensed aquatic applicators); 3 field technicians for 40 hours/week for 2.5 months**
  - Treated a total of **221.59** acres
  - Surveyed **298.6** miles of roads
  - Filled out FACTS forms for all treated sites
- **1 Jefferson County Noxious Weed Control Coordinator/FS Program Assistant: 10 hours/week, for 7 months, 40 hours/week for 1 month**
  - Coordinated Jefferson County Noxious Weed Control Program for seven months (hours funded from Title II were reduced—special Forest Service funding was used for Forest Service-required reporting)
  - Compiled data and prepared report
- **OCC crew: 6-9 persons, 40 hours/week for eight weeks**
  - Controlled Scotch broom on **77.5** acres in the west end of both Clallam and Jefferson Counties, in pits and on Highway 101
- **WCC crew: 3-4 persons, 40 hours/week for four weeks (Funded by the Forest Service)**
  - Controlled weeds on **53.87** acres of Forest Service land in Clallam and Jefferson Counties.
- **Clallam County Sheriff's/Road Department Chain Gang (Funded by Clallam County)**
  - Manually removed **69,380** Scotch broom plants and sprayed reed canary grass from County roads and property. *No weed control activities were reported by a Forest Service funded Gang.*

## 2009 Project Accomplishments:

It is evident that the expansion of herbicide treatments and extended use of the OCC and WCC crews allowed us to accomplish more noxious weed control than in previous years. In 2009, 359.89 acres of noxious weeds were treated—an increase of almost 40% from 2008. This was also partly a result of the way projects were funded. More work was certainly focused **solely** on Forest Service land because of funding requirements. However, the lack of a seated Resource Advisory Committee (RAC) and the resulting delay in Title II fund distribution greatly decreased the efficacy of coordinated weed control across jurisdictional boundaries, which has always been one of the most unique and beneficial aspects of this project.

A summary of work performed under this project from 2002-2009 is shown in the following table but changes in reporting over the years make comparison difficult. However, data reporting requirements have remained consistent for the last four years, making comparisons between those years easier. For details as to how much work was manual or chemical, see Appendix A

<b>2002 to 2009 Accomplishments Summary Table</b>									
	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Total</b>
<b>Miles of Roads Surveyed/Treated</b>	192	702	265	113	N/A	N/A	N/A	N/A	1,272
<b>Acres Surveyed/Treated<sup>1</sup></b>	233	851	321	137	N/A	N/A	N/A	N/A	1,542 <sup>1</sup>
<b>Miles of Roads Surveyed</b>	N/A	N/A	N/A	N/A	390.44	368.77	422.74	298.6	1,480.55
<b>Acres Surveyed<sup>2</sup></b>	N/A	N/A	N/A	N/A	946.52 <sup>2</sup>	893.99 <sup>2</sup>	1,024.84 <sup>2</sup>	723.87	3,589.22 <sup>2</sup>
<b>New Sites/Total</b>	<b>122</b>	<b>497/619</b>	<b>147/766</b>	<b>74/840</b>	<b>147/986</b>	<b>12/998</b>	<b>1/999</b>	<b>3/1,002</b>	<b>1,002</b>

<b>Number of Weeds Removed, by Crew</b>									
	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Total</b>
<b>Removed by Field Crew<sup>3</sup></b>	736	886	11,716	51,775	21,016 <sup>3</sup>	N/A	N/A	N/A	86,129 <sup>3</sup>
<b>Removed by WCC Crew</b>	31,085	87,623	1,166,200	880,655	N/A	N/A	N/A	N/A	2,165,563
<b>Removed by Chain Gang</b>	8,286	102,748	112,858	108,225	56,775	72,700	24,350	69,380	555,322
<b>TOTAL # of Weeds Removed</b>	<b>40,107</b>	<b>191,257</b>	<b>1,290,774</b>	<b>1,040,655</b>	<b>77,791</b>	<b>72,700</b>	<b>24,350</b>	<b>69,380</b>	<b>2,807,014</b>

<b>Acres Treated, by Crew</b>									
	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Total</b>
<b>Acres Treated by Field Crew</b>	N/A	N/A	N/A	N/A	20.28 <sup>4</sup>	59.95 <sup>4</sup>	185.95 <sup>4</sup>	221.59 <sup>4</sup>	487.77 <sup>4</sup>
<b>Acres Treated by WCC Crews<sup>6</sup></b>	N/A	N/A	N/A	N/A	N/A	22.35 <sup>4</sup>	N/A	53.87 <sup>4</sup>	76.22 <sup>4</sup>
<b>Acres Treated by OCC Crew</b>	N/A	N/A	N/A	N/A	N/A	337 <sup>4</sup>	74.82 <sup>4</sup>	77.5	489.32
<b>Acres Treated by Chain Gang</b>	N/A	N/A	N/A	N/A	5.67 <sup>5</sup>	7.27 <sup>5*</sup>	2.43 <sup>5</sup>	6.93 <sup>5</sup>	22.3 <sup>5</sup>
<b>TOTAL Acres Treated</b>					<b>25.95</b>	<b>426.57</b>	<b>263.2</b>	<b>359.89</b>	<b>1,075.61</b>

1. Derived from miles surveyed/treated

2. Derived from miles surveyed. Recorded as a separate value for 2006 to 2009 only. Previously combined in miles treated/surveyed and acres treated/surveyed

3. "# of weeds removed" refers to manual only, does not account for chemical treatment and was not reported from 2007 to 2009 because the Forest Service did not require it.

4. "Acres Treated" include chemical and manual treatment and are taken from the FACTS forms filled out by crew members. The figure of 337 acres reported for the OCD crew in 2007 is a misrepresentation due to different reporting protocols.

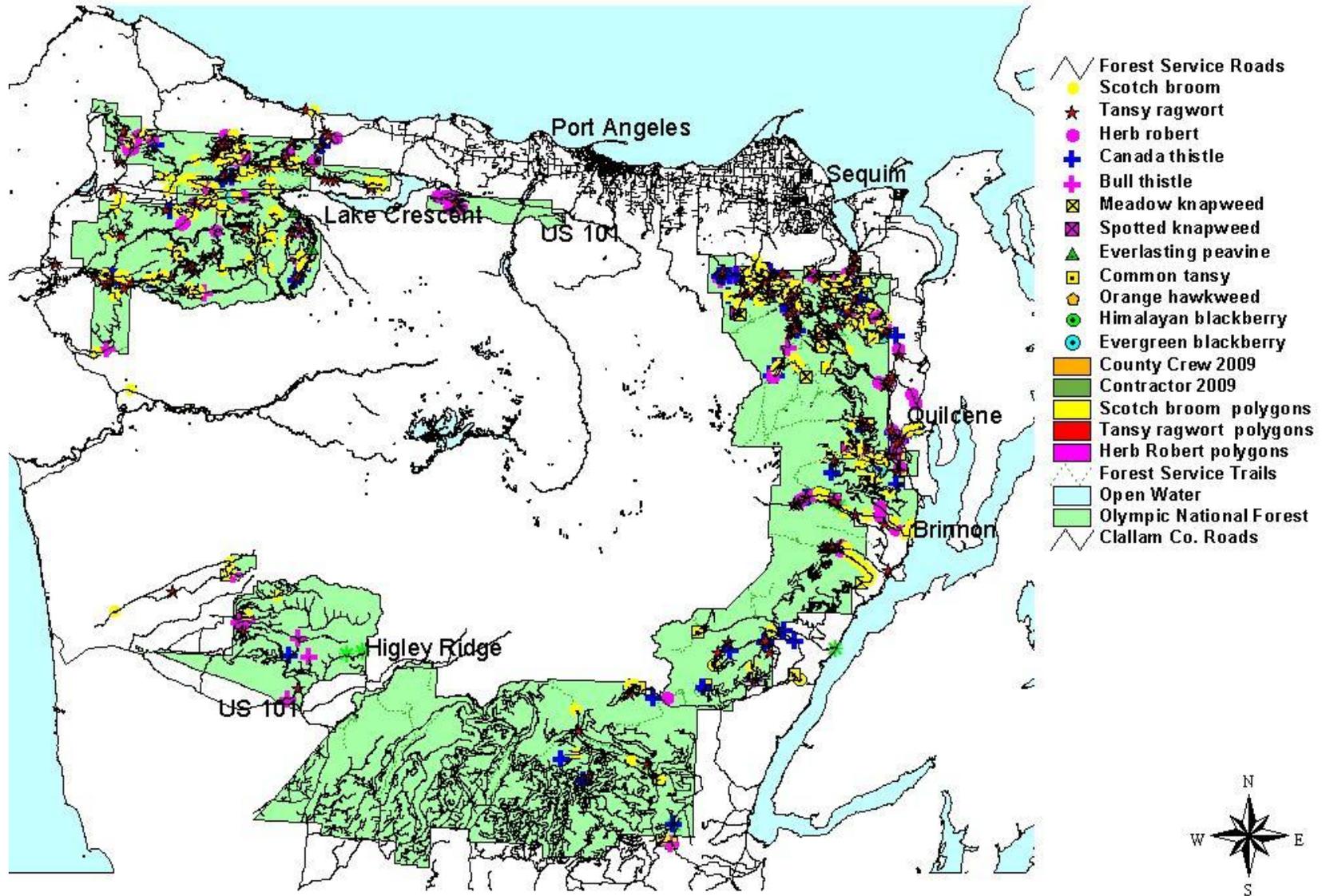
5. For the Chain Gang, each thousand plants were estimated to encompass .1 acre

6. Because the WCC crew worked mainly with the CCNWCB crew, the number of acres controlled by WCC has been estimated.

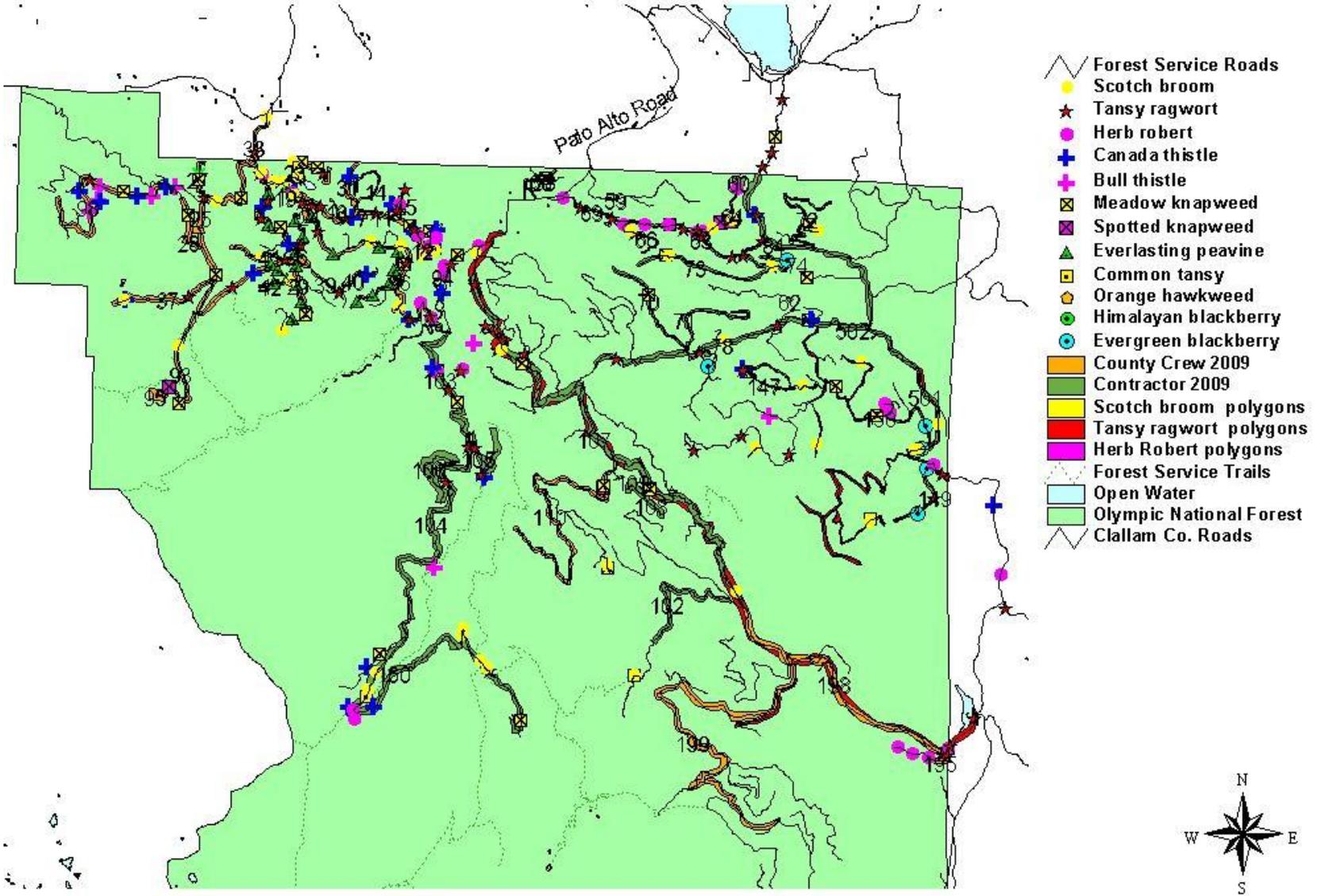
## Maps

- Six maps are shown—an Overview of the Olympic National Forest, three covering the Hood Canal from north to south, one showing the Pacific North district and one showing the area of the 3050 roads south of Lake Sutherland, that was worked on for the first time in 2009.
- The weed species shown come from our 2003 baseline survey.
- Orange polygons indicate areas worked on by the Clallam County Noxious Weed Control Board crew in 2009. Site Reference Numbers from the 2009 work plan are given.
- Green polygons indicate areas that were given to the contractor to work on in 2009. Again, site Reference Numbers from the 2009 work plan are given.

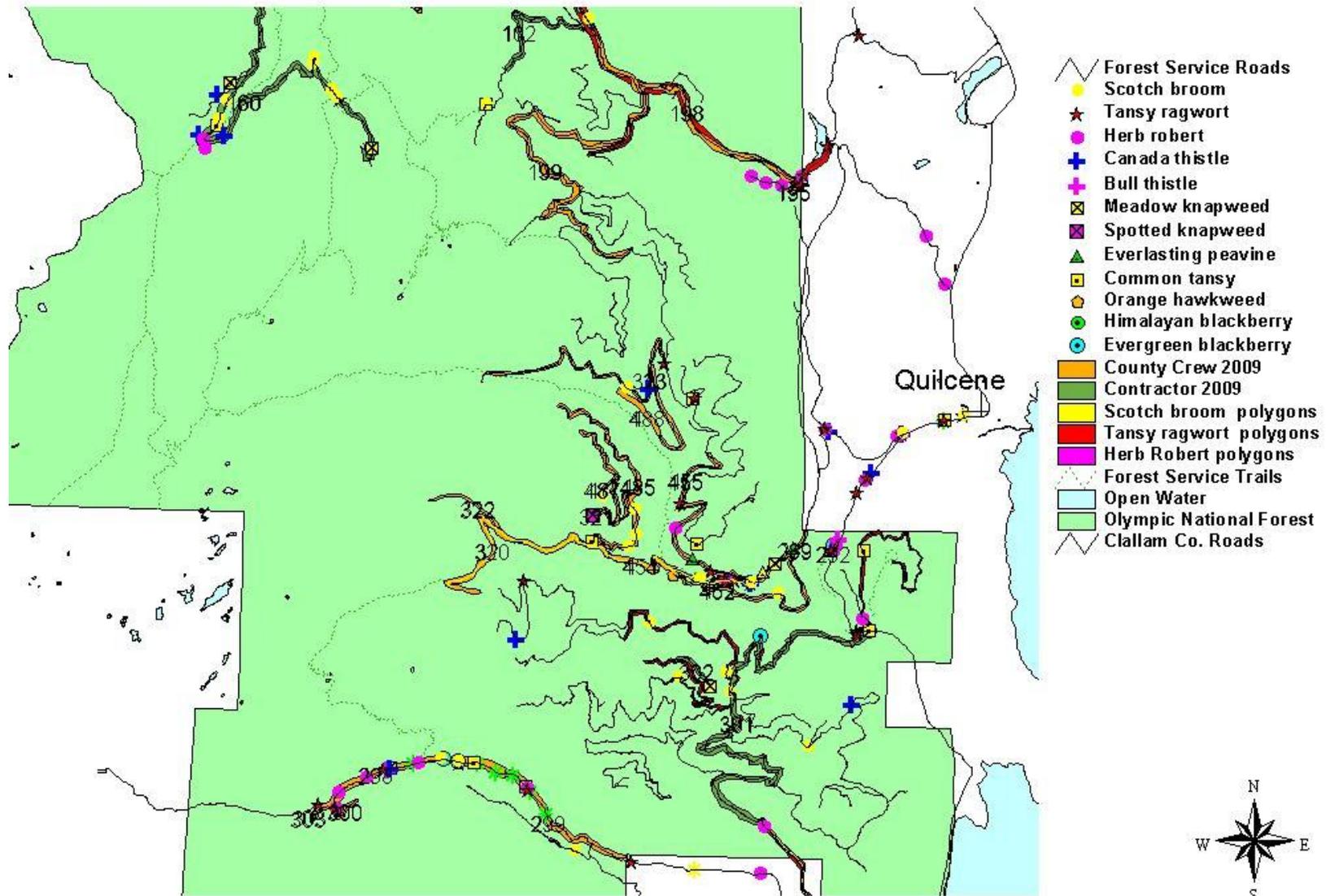
# Olympic National Forest Overview



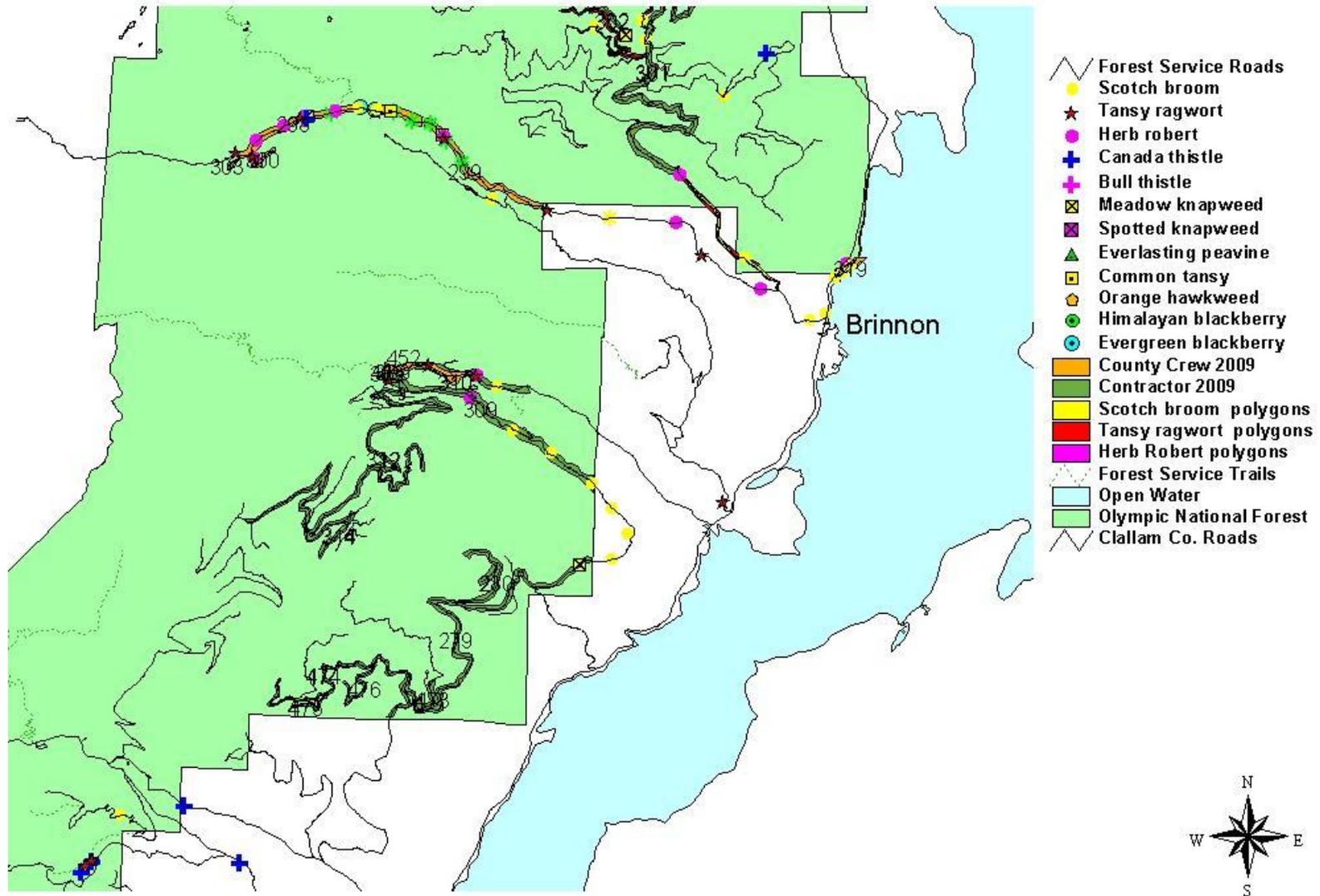
# North Hood Canal



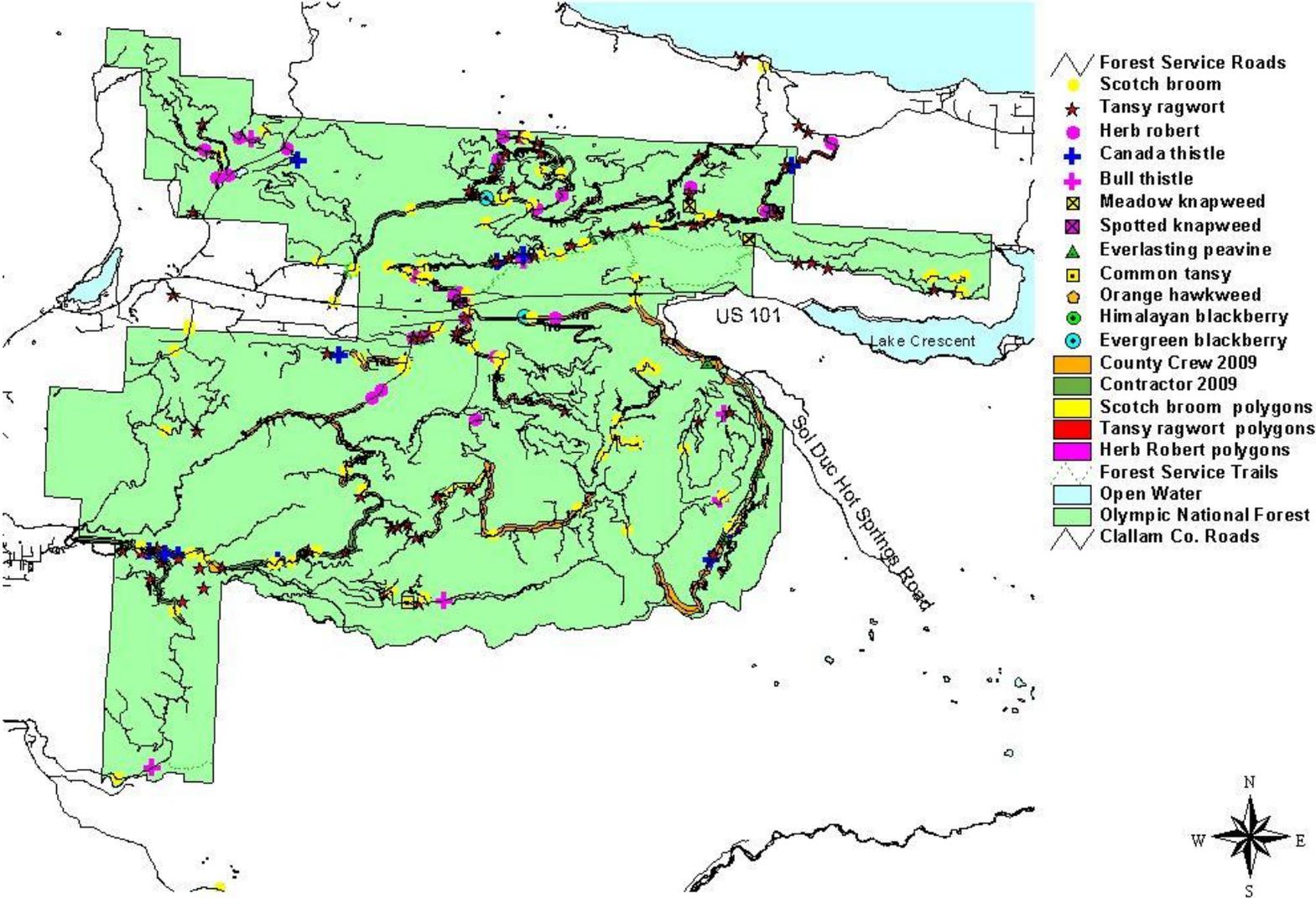
# Mid Hood Canal



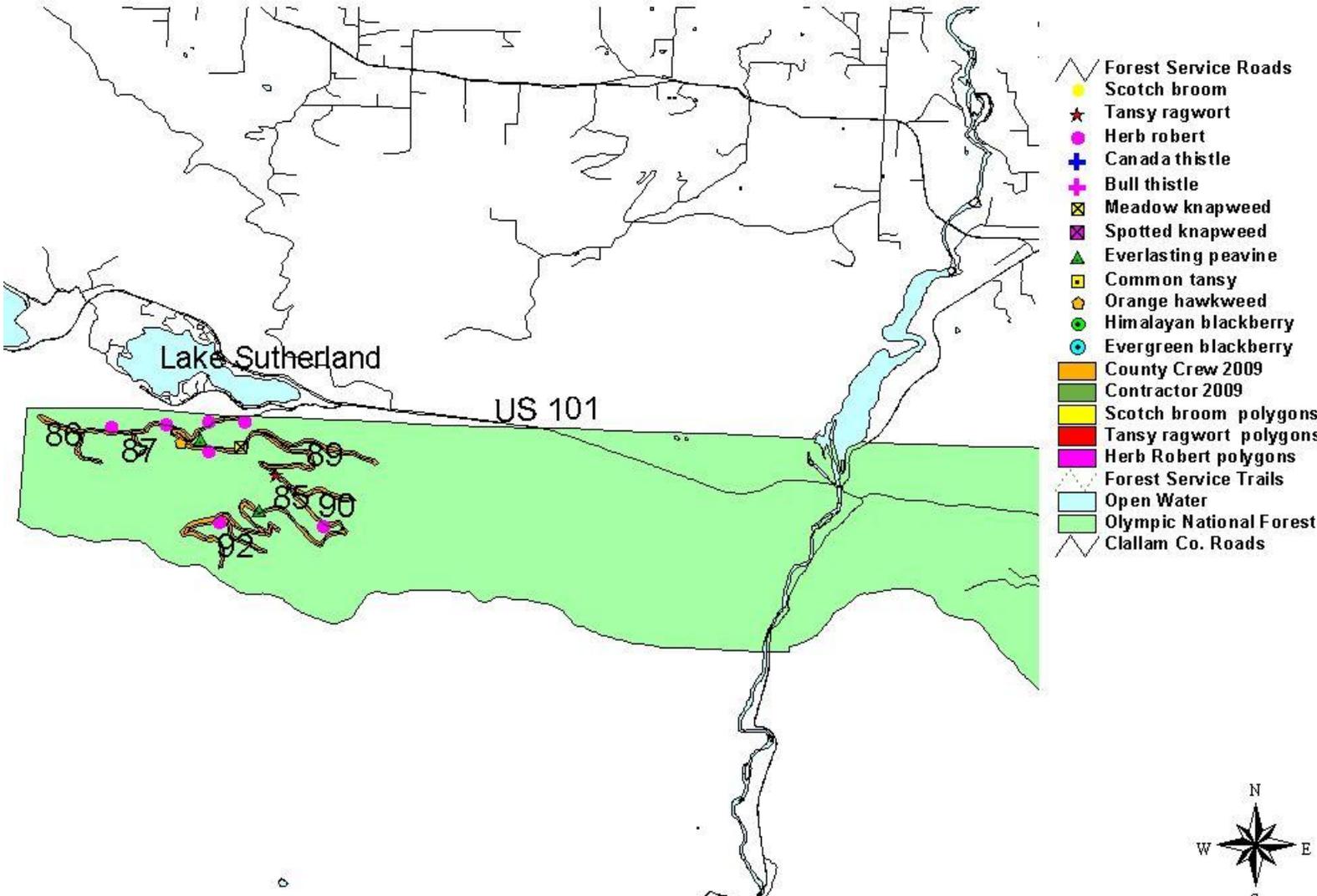
# South Hood Canal



# North Pacific Region



# 3050 Roads



## Post-Season Observations:



Yellow archangel  
(*Lamiastrum galeobdolon*)

### Nature of the Problem:

Weed infestations continue to threaten the health and diversity of native plant communities both within the Olympic National Forest and on adjacent lands. Aggressive and invasive as they are, these plants can out-compete native species. Some of them are toxic to humans and wildlife, and some can adversely affect soil chemistry and/or cause erosion. Many of them die down in the winter and offer no food or habitat for native wildlife.

Crews have controlled weeds on most of the sites identified in the 2003 baseline survey and infestation size and density has been reduced overall. Continued follow-up on known sites is essential to effective control and we have concerns about some sites that have not as yet been visited (see Appendix E).

- The most commonly recorded invasive species continue to be Scotch broom, tansy ragwort, herb Robert, Canada thistle, bull thistle and everlasting peavine.
- Although increasingly common, Herb Robert sites continue to be a high concern, because of the plant's ability to invade undisturbed forest under-story.
- The most infrequently recorded species are comfrey, hawkweeds, knotweed and knapweeds. All known sites of these species were treated this year. Controlling these species, and locating and treating neighboring populations will continue to be a high priority.
- Many pits and other rock sources are still contaminated with noxious weeds, especially Scotch broom. However, good progress has been made, especially when follow-up has occurred.
- Sulfur cinquefoil was found and treated at the Quilcene office compound—the first sighting of sulfur cinquefoil on Forest Service land.
- Significant populations of a variety of invasive species, including yellow archangel, cherry laurel, orange hawkweed, periwinkle, bishop's weed, comfrey, English ivy and reed canarygrass were discovered and treated at the caretaker's house at the Port Townsend Municipal Water Diversion on the Big Quilcene River.
- Butterfly bush was seen in a pit on FS land—the first time it was seen on the forest.
- European hawkweed has appeared on Hwy 101, as it passes through Forest Service land. Controlling this highly invasive plant on non-Forest Service lands in Clallam or Jefferson Counties should be a priority.
- Small populations of purple loosestrife, yellow and European hawkweed, hoary alyssum, hairy willowherb, garlic mustard and common reed have all appeared on Jefferson and/or Clallam County roadsides. We consider control of all of these plants—as yet unrecorded on Forest Service land—a high priority to prevent their spread.
- Poison hemlock and wild chervil are becoming more common on roadsides in Jefferson County. Neither has yet been seen on FS land but could easily spread there.

### Survey and Treatment

- Surveys were only performed while driving to known sites. Crew treated new infestations as they were discovered.
- Combining manual and herbicide treatments has greatly increased productivity. CCNWCB crews treated 221.59 acres. The WCC crew, which worked for only four weeks, treated 53.87 acres, making a total of 275.46 acres—an increase of almost 40% from 2008.
- Using selective herbicides with increased residual activity has increased treatment efficacy.
- A major focus in 2009 was control of weeds on soon-to-be-decommissioned roads, because once decommissioning takes place access is very difficult. The 3050 road system south of Lake Sutherland was a top priority for the FS and crews treated invasive plants there several times in June, with a follow-up visit in August. Working on de-commissioned roads was very time-consuming because of the amount of walking involved.
- Pits continue to be a priority and the Forest Service supplied us with a list of high-priority pits early in the year (June). The crew treated or inspected 5 pits from the list and inspected and/or treated 5 other pits, 3 of which are on Forest Service land. Other small pits were probably treated as the crew treated roadside weeds but they did not always fill out a pit form.

- Direct communication with the WCC crew leader greatly improved coordination. It was extremely beneficial for the WCC crew leader to be a licensed applicator. This crew was able to accomplish much more than in previous years.
- An OCC crew removed heavy infestations of Scotch broom from 14 additional pits and quarries in the west end of both Clallam and Jefferson Counties (that were not on Forest Service lists), and on Highway 101. This is an important task to prevent cross boundary contamination. These pits are shared by many entities, and have a high potential to spread noxious weeds onto Forest Service lands. This work would not have occurred without FS support.
- Treatment of campgrounds continues to be a high priority because of the potential for spread. All FS campgrounds were treated in 2009.
- Cooperation between the Weed Boards, the Forest Service and the Port Townsend Municipal Watershed continued to be excellent, resulting in more weed treatments within the watershed. For the first time, the Municipal Watershed was required to control their weeds on the land they lease from the Forest Service. This led to the discovery of a host of noxious weeds at one facility. The Municipality paid for Weed Board staff to treat the weeds on the property.
- The FS hired a contractor to perform weed control work in some areas. Contractors are better suited to treating dense infestations, by being able to carry more water. However, the contractor treated each site only once during the season, although follow-up treatments or monitoring are necessary. Also, they tended to treat only the road shoulder, not the entire weed infestation.
- The extent of invasive plant populations in less accessible areas continues to be less well documented, nor is there time allowed in the work plan to do so.
- The Cranberry Bog treatment could not have taken place without the extraordinary cooperation and coordination with FS staff and the FS fire crew, which facilitated on-site water storage.
- The large, remote area covered by this project still makes travel time a significant factor in the amount of fieldwork that can be accomplished in a season.
- Because of funding constraints, field crew was not able to re-treat as frequently as necessary.
- Using the Safe Streets crew for a week allowed several inner-city youngsters to work in the forest, which was probably a valuable experience for them.
- For the first time, the Forest Service used their own staff to monitor treatment sites and supply feedback to the counties. Because our crew did not have time to go back and monitor, this was valuable in season information.

### Data Collection

- The FS modified the 2009 FACTS sheets, allowing a single form to be used for both chemical and manual treatment. This was much appreciated by field crew and office staff.
- Milepost information, required by the FS on the FACTS sheets, was often not recorded by the crew because most FS roads do not have mile markers. We regret this omission and realize that it made data entry harder for FS staff.
- The system of “Project Areas”, instigated in 2008, was continued. However, the focus was shifted towards individual sites within those “Project Areas” and the FS gave each site an arbitrary, unique Reference Number.
- The crew did not usually fill in the Reference Number on the FACTS sheets.
- Office staff did a better job in 2009 of reviewing FACTS sheets every few weeks, filling in the gaps (such as the Reference Number), and submitting them to the Forest Service.
- Towards the end of the season, office staff realized that many Reference Number sites had been treated for which we did not have separate FACTS sheets. Because the crew was not familiar with the Reference Number system, no separate record had been made. Because the FACTS sheets had already been turned in we could not create new ones. The Forest Service staff was regrettably informed of this error quite late.
- The crew did not take any electronic data points in 2009.
- There is poor communication about contractor activities and the Weed Boards do not have information about contractor accomplishments during the season or after treatment.

### Mapping

- The majority of weed sites in the Olympic National Forest have already been mapped in the county’s GIS system. There are some omissions—for example, everlasting peavine (*Lathyrus latifolia*) sites had not been mapped during earlier base-line surveys (possibly because it is not a state-listed noxious weed, although it of concern to the Forest Service).
- Office staff created a county-based GIS layer for sites of everlasting peavine, using the data recorded by crew in the FACTS sheets. Because these sites were added manually they do not accurately reflect the location and crews will need to be made aware of that in the future.
- The Weed Board staff created shape files containing locations of Reference Number sites.

## Conclusions and Recommendations:



### Future Direction of the Project

This was a difficult economic year for all agencies and individuals engaged in the fight against noxious weeds. This year's progress was due largely because of the dedication of staff based not only in Olympia, but also those working out of the local Hood Canal and Pacific District Offices. Without the dedicated funding provided through these offices, little work would have been accomplished on the ground. Forest Service Staff worked hard to plan and execute the 2009 season.

As mentioned earlier, the Secure Rural Schools Act was re-authorized towards the end of 2008 but because the Resource Advisory Committee (RAC) has not yet been reconvened, no funds have been distributed. Effective, prevention-driven invasive weed control does not require massive funding; it requires stability. There is concern that unless the RAC is vetted soon, the vibrant and collaborative relationships which have developed between Counties and the Forest Service as a result of the Secure Rural Schools Act (and which were the likely intent of initiating it in the first place), will quickly erode. It is essential that the RAC meet as early as possible in 2010 so the weed boards can apply for funding. If funding is granted, this co-operative project between the County Weed Boards and the Forest Service can continue for several more years. This is an unusual (possibly unique) partnership between Federal and County agencies, which we feel has been very effective and would like to see continue.

The successful adoption of the 2008 EIS, which authorized herbicide use throughout the Olympic National Forest, allows effective treatment of larger infestations and certain weed species that do not lend themselves to non-chemical methods. We will continue to consider all control methods, but the most effective treatments for a small CCNWCB crew will likely utilize herbicides on a regular basis.

Weed Board staff has extensive knowledge ranging from project history and infestation locations to weed identification and best treatment methods. The County weed boards have provided a relatively inexpensive, locally based work force with county wide jurisdiction and long term focus. However, the CCNWCB Program is not equipped to carry out large-scale treatment operations, and the expertise of the Weed Board staff would be most efficiently used in other ways. Ideally, this staff is best suited to identify and control new infestations, tackle moderately-sized or widely-dispersed infestations and serve as advisors and/or supervisors for other crews that are able to tackle larger projects. We appreciate the opportunity to provide input on weed control strategy and to help coordinate the Forest Service's weed management plan. Specific recommendations are listed below.

### Program Development

- Stable funding provides improved year-to-year weed control continuity within the Forest and an improved weed control program on Jefferson County lands that are adjacent and directly connected to the Olympic National Forest. Funding from the Forest Service is especially important because allocations from Jefferson County for weed control continue to be cut.
- Support from Forest Service staff when applying for renewed Title II funding will help ensure a successful outcome. Funding uncertainty adversely affects the program because long-term plans cannot be made.
- Early spring planning meetings, however effective and useful, may not be possible unless Title II funding becomes available. This will likely disrupt important program coordination and delay field treatments.
- If WCC crews are used in the future, there needs to be a mechanism to fill vacated positions during the season. The crew was understaffed all season.
- The Forest Service should further explore funding potential from special project accounts for their own staff hours spent working on invasive species control. This would be consistent with the EIS prevention goals and the ED/RR directive.
- It does not seem advisable to create a separate, Forest Service-based weed control crew. This would likely lead to less interaction and collaboration with surrounding entities. The robust interagency relationship that has resulted from increased cooperation across jurisdictions boundaries has been the greatest benefit of this program to date.

## Survey and Treatment

- While our focus should continue to be treating known sites, more time must be allowed each season for surveying and locating new infestations before they become well established. More periodic surveys will also give a better sense of whether we are getting ahead of new invasions, or they simply haven't been identified yet. A list of potential treatment/survey sites is given in Appendix E.
- Set aside two weeks during the season for surveys—these could be used on poor weather days.
- Additional time must be allowed to perform follow-up treatments because multiple applications to the same site during a single growing season provide substantially improved weed control. Specifically, all herb Robert sites will likely require 2 to 3 follow-up treatments per season.
- WCC crew's hours—such as start time—should be better coordinated with Weed Board field crews, or the WCC crew should be prepared to transport herbicide and related equipment.
- We must continue to survey rock sources for noxious weeds and ensure that they are treated before being utilized. Additional protocols and standards for private sources need development.
- The crew should be furnished with a map of high-priority rock sources at the start of the season, since some were not found in 2009.
- Ensure timely and thorough survey of areas where timber management activities are occurring

## Documentation

- Discuss clear goals for data collection and how to realistically achieve them.
- Combining Reference Numbers identifying individual weed sites into larger, more field friendly units, would ease field data entry burden and likely improve overall accuracy. For example, a reference number could include area from one road junction to the next, instead of being based on mile fractions that are hard to determine in the field.
- Consider the possibility of providing hand held GPS units with pre loaded GPS/GIS maps that already contain site references, infestation information and simple electronic data collection sheets that could be updated in the field. However, this would necessitate considerably more training and should only be implemented if the survey fields are relevant to the task at hand.
- Because the FACTS sheets are the only record we have of work performed under this program we need to put more effort into training the crew in how to fill them out and reviewing them WITH the crew, weekly or every two weeks and filling in the gaps.
- Modify FACTS sheets to allow for activity at multiple Reference Numbers sites to be documented on the same sheets, or daily.
- Crew should be reminded to fill out a Pit Form when they treat a pit, as well as a FACTS sheet.
- Creating more 8 X 11 site maps that include the reference number, known weed sites, pit locations, high risk roads, and a local named road reference, would help field crews tie into existing baselines. Crews could mark directly on the map.
- Consider requiring more detailed documentation for priority species, such as those with limited distribution, and less for those that are widespread.

## 2009 Protocols



### 1. Team and Project Dates

This year's project focused almost entirely on treatment, rather than survey. Cathy Lucero (coordinator), and field technicians Cody Hagen, Bonnie Eyestone, Andy Hokit, Graywolf Nattinger and Eibhlinn Cowan-Kuist performed and documented treatments. Fieldwork began in June 2009 and continued through mid-September.

### 2. Invasive Species Recorded

Treatment and surveys focused on Class A and B-designate weeds on the Washington State Noxious Weed List (see Appendix H), and additional species that are of concern to the Forest Service. In most cases Class B non-designate, Class C, and unlisted non-native weeds were only documented when an infestation was in a site of particular concern (e.g. a Botanical Area), when the infestation was of notable size, or when a new species was found. Exceptions were made for especially invasive species, such as herb Robert or knotweeds, which can threaten undisturbed areas. See Appendix G for a complete listing of species recorded from 2002 to 2009. Treatment and surveys were not intended to target all non-native species.

### 3. Road Survey and Treatment (see Appendix D):

The project focus was on treatment of known infestations in specific project areas identified by the Forest Service, often including sites that had received treatment in the past. Survey and treatment of new infested sites was also a priority, especially if new sites were seen en route to known sites.

- a. Trailheads, campground parking areas, and gravel pits were surveyed on foot whenever found.
- b. Typically, 10 feet on both sides of each road was surveyed. The distance surveyed was recorded in the field and the area surveyed was calculated using the following formula.  
$$\frac{\text{miles surveyed} \times 5280 \text{ ft/mi} \times 10 \text{ ft/roadside} \times 2 \text{ roadsides/survey}}{43560 \text{ ft}^2/\text{acre}}$$
- c. Prior to 2007, survey miles were recorded and two surveys on the same road on separate days were recorded twice. This is justified because many plants are only visible on a windshield survey at a specific time of year. Miles surveyed from 2007 through 2009 were estimated from treatment sites (recorded on FACTS forms) and roads taken to get to those treatment sites.
- d. Small weed infestations were usually treated manually when found.
- e. Herbicide treatments were applied based on guidelines established in the 2008 EIS.
  - i. No measurement of the number of plants treated was made, thereby making any comparison to accomplishments of previous years difficult. This data was not required and was not collected in favor of accomplishing more treatment.
  - ii. Foliar herbicide applications were made using 1.5% Aqua Neat (glyphosate) and 0.5% Competitor (surfactant), in areas where there was any chance of herbicide getting into water. On roadsides and other areas well away from water Garlon 3A was used, also 1.5% with Competitor at 0.5%. Garlon3A was chosen because it can legally be used up to water's edge, does not kill established grasses and has a residual effect.
  - iii. A legal notice listing all sites under consideration for herbicide treatment (see Appendix I) was published in the Peninsula Daily News on 5/27/09, more than two weeks before any herbicide applications. Herbicide applications were carried out between 6-17-09 and 9-24-09.
  - iv. On-site postings (see Appendix I) were posted prior to treatments and left in place for at least 24 hours afterwards. Treatments in high-use areas such as campgrounds were avoided during busy times (near weekends or holidays) and Forest Service recreational personnel were contacted prior to treatment being commenced.

#### 4. Data Collection

In the field, weed site data for new sites that were not controlled were recorded on a modified Olympic NF Invasive Plant Inventory Data Collection Form (see Appendix J). Minor modifications to this form allowed for collection of county noxious weed data as well as Forest Service data. The specifics of data entry for the form are described below.

##### ***Olympic NF Invasive Plant Inventory Data Collection Form (see Appendix K)***

- a. Site ID field (30 characters) contains the concatenation of the following:

Year	YYYY
Month	MM
Day	DD
Township	TT
Range	RR
Section	SS
Qtr. Section	QQ
Road ID	XXXXXXX (all 7 characters required, fill with zeros (0) or spaces)
Weed Code	CCCCCCC (typically 4-5 characters, leave extra space blank for codes less than 7 characters)
Complete Site ID	YYYYMMDDTTRRSSQQXXXXXXCCCCCCC
Example Site ID	20050917241001SE217000CIVU

- i. The Road ID for trails surveyed is a “T” and the trail number (fill to 7 characters with spaces), e.g: T823□□□.
  - ii. The Road ID for botanical areas (BA) surveyed is the abbreviated name of the BA, e.g: South Fork Calawah River Botanical Area = SFCRBA.
  - iii. Road IDs for non Forest Service roads were denoted by a two-letter prefix and the road number. County road numbers were preceded by “CR” and state highway routes received the prefix “SR”.
  - iv. In the case of identical Site IDs (e.g. two (or more) separate sites of the same weed found on the same day, on the same road, and in the same quarter quarter section), the second or subsequent site simply received an additional number (second site gets 2, third gets 3, etc.) at the end of the original Site ID in the first available open weed code character space (e.g. 20060701281118NW2923000CEJA and 20060701281118NW2923000CEJA2).
  - v. Prior to 2007, revisits were entered into Rangeland PC with the **original Site ID**. All other information (e.g. date in the date field, not the date embedded in the Site ID) is entered based on the actual revisit. No revisits were recorded from 2007 through 2009; FACTS forms were used instead.
- b. Locational information was primarily recorded as road number and milepost (typically recorded to the nearest 0.05 mi. as estimated from the vehicle trip odometer). The legal description of township, range, section, quarter section, and quarter quarter section was then determined based on road and milepost and either a GIS database or a Forest Service brown line map. Milepost numbers and any additional useful on-the-ground information (e.g. at turnout) were recorded under site comments.
- c. Location at site, site address, owner information, parcel number, site ID, database record number, and contact information were intended for county sites and were not recorded at Forest Service sites.
- d. Aspect and slope were not recorded. Elevation was estimated from GIS or brown line maps.
- e. Dominant plant life form type was selected from the list; dominant species were considered optional.
- f. Site comments included locational information (e.g. milepost) and/or directions to the site.
- g. Phenology, life form, and distribution were selected from the lists.
- h. Infested area was always noted with a minimum size of 0.1 acres (due to NRIS Terra constraints). Gross area was only recorded for very large sites with low cover class and/or scattered patchy distribution. Infested area, cover class, and distribution were sufficient to characterize most sites. Note that the definitions of infested and gross area vary slightly from those used in previous years.
- i. *Infested Area* was defined as the sum of the areas of all separate patches of the weed (not including the area between patches; including the space between plants within a single patch of low cover class) within one site.

- ii. *Gross Area* was defined as the total area of a box (polygon or circle) circumscribed about all of the separate patches of a weed within one site. It is effectively equal to infested area plus the total area between individual patches.
- i. Daubenmire cover class was selected from the list based on a visual estimate of weed canopy cover within the *infested* area.
- j. Distance to water was estimated visually if water was near enough to be a significant factor. This field was left blank for most upland sites that were far removed from water.
- k. Associated species were included only if they stood out for any reason.

New sites that were found and treated were recorded on FACTS forms.

#### ***Forest Activity Tracking Sheet (FACTS)***

In 2009 the Forest Service introduced a combined Herbicide/Manual Treatment Data Form. Having just one form, rather than a separate form each for chemical and manual treatments, made data recording easier for the crews. Basic site information, including infested area for each weed, was recorded on the front of the form. Information recording herbicide treatment was recorded on the back. A sample form and instruction for filling it out, as supplied by the Forest Service, are in Appendix J

#### ***Rock Source Inspections***

A Compliance Form was filled out for each rock source or quarry inspected. A sample form is shown in Appendix J

### **5. RangelandPC Data Entry for NRIS Terra Database:**

- a. All site data collected were to be entered into RangelandPC files and submitted to Forest Service staff for upload to the NRIS Terra database. The exceptions were data collected for pits that contained no weeds or only low priority non-native species; these data were not entered into RangelandPC.
- b. The NRIS Terra database allows a minimum entry of 0.1 acres in the Infested Area field. Since many sites were well under 0.1 acres, the total infested area for the project reported to NRIS Terra is likely artificially inflated somewhat above the actual infested area found.
- c. Site revisits, records of weeds found at previously recorded sites, were entered into separate RangelandPC files than new sites. Revisits were entered using the original Site ID, but the actual date of the revisit was entered into the Date Found field.
- d. New sites were also recorded into a separate spreadsheet that included Site ID, road number, and beginning and ending milepost numbers. This spreadsheet was submitted separately to Forest Service GIS staff so that the Forest Service invasive plants coverage could be updated and linked to all available NRIS Terra data.
- e. Site re-visits that included treatment were documented through FACTS sheets.

### **6. Arc View Plotting:**

Weed sites had already been mapped in ArcView GIS on a laptop computer so that a real-time map could be available to the field crew. The shape files produced for this map are retained by the Clallam County Noxious Weed Control Board for use in future fieldwork as necessary. These files are not submitted to the Forest Service because a Forest Service GIS analyst must construct a GIS coverage that coincides with other Forest Service database materials.

- a. Sites were plotted as points for individual sites. Where practical, multiple sites on a road of the same species were turned into a polygon.
- b. There is a separate layer (shape file) for each weed species.
- c. Polygons were drawn on a separate layer – one layer for each species.
- d. New layers were produced post-season showing where treatment occurred.

### **7. Data Reporting**

Office staff reviewed FACTS forms and Rock Source Survey forms and submitted copies of them to the Forest Service several times during the field season. The originals were retained in the Clallam County Weed Board office. More detailed data is included in the Appendices to this report, as described below.

- a. **Appendix A** is the Project Area list supplied by the Forest Service at the start of the season, with details of 2009 treatments by acreage, date and species. It is a comprehensive account of work accomplished in 2009.
- b. **Appendix B** is summary of rock source inspections and treatments.
- c. **Appendix C** is a summary of work accomplished by other crews—the OCC crew and the Sheriff's Chain Gang in 2009.

- d. **Appendix D** is a master list of the roads surveyed and treated over the course of this project. This list shows the amount of survey completed on each road, and totals for each year, as well as the number of weeds pulled manually for each year up to 2006. It also lists the area of treatment, by road, completed in from 2007 through 2009, and weed species treated.
- e. **Appendix E** shows previously-listed weed sites that were not included in a Forest Service "Project Area".
- f. **Appendix F** gives control recommendations for each invasive species identified during the course of this project.
- g. **Appendix G** is a list of all weed species reported and entered into the NRIS Terra database during the course of this project.
- h. **Appendix H** shows the 2009 Washington State Noxious Weed List, which is updated annually according to WAC Chapter 16-750. Under RCW Chapter 17.10 all non-federal landowners in the state are responsible for controlling or eradicating any listed noxious weeds on their property. This same law provides for the formation of the County Noxious Weed Control Boards, and thus the weed control program in Jefferson County that is administered under this project. Federal agencies are required to work with local agencies to meet or match local weed control standards under the Federal Noxious Weed Act amended in 1994
- i. **Appendix I** shows examples of a legal notice regarding herbicide use and an on-site posting notice.
- j. **Appendix J** shows all forms used in the project.

## Appendix A: Summary of 2009 Project Accomplishments

This table is based on the Project List issued by the Forest Service, which served as the work plan for Clallam County Noxious Weed Control Board (CCNWCB) and the WCC crew who worked for four weeks during the field season. Only sites in Clallam or Jefferson Counties are shown here. Sites treated by the contractor are highlighted in yellow and information on those sites is not available.

The table shows the acreage treated each time the crew was on site, and whether the treatment was manual or chemical. **Re-treatments** are identified with tan shading and total 25.95 acres. When deducted from the total treated acres, this leaves 249.63 acres treated, manually or chemically. The Forest Service estimate of infested acres is added for comparison, but in some cases no estimate was given. This makes the treated acres much larger than the estimated infested acres (249.63 compared with 158.85).

The list was prioritized into Priority 1, 2 or 3. Almost all of the Priority 1 sites were treated at least once (the exception being Matheny Creek/Bills Bog, where bad weather and the long travel distance prevented treatment). These are highlighted in blue and should be treated in 2010. Some Priority 2 sites went untreated and are highlighted in grey; these also should be treated in 2010. Priority 3 sites were treated, if convenient, while en route to other sites.

This table gives only work accomplished on FS land, by the CCNWCB and WCC crews. Details of work done on FS land by the contractor are not available, and work done by the Clallam County Sheriff's Chain Gang and the OCC crew are given in Appendix C.

Olympic National Forest 2009 Invasive Plant Treatment Project Accomplishments (yellow shading = contractor)													
Ref #	Priority	Project	6th Field Watershed Name	2009 Site Name	Road #	Species Treated	FS Estimate Infested Acres	Acres treated (Manual)	Acres Treated (Herbicide)	Herbicide Used	Herbicide Amount (oz)	Date	Crew
153	2	2A	South Fork Calawah	Calawah Botanical Area		SEJA CYSC4	0.3	0.25				9/3/2009	Cl Co
155	2	2B	South Fork Calawah		2932000								
156	2	2B	South Fork Calawah		2900000								
152	1	2C	South Fork Calawah	Calawah Pit									
157	3	2D	South Fork Calawah	Elk Quarry			?						
158	3	2E	South Fork Calawah		2912060		0.2						
159	3	2F	South Fork Calawah		2932013		?						
119	1	3A	Middle Sol Duc River		3040000	CYSC4	3.2	1				6/25/2009	Cl Co
13	1	4A	Canyon/Pats Creek	Cranberry Bog 052	2870052	CEDE5	0		0.1	Garlon	1	8/28/2009	Cl Co
14	1	4A	Canyon/Pats Creek	Cranberry Bog 053	2870053	CIVU CIAR4	0		2	Garlon	14	8/25/2009	Cl Co, WCC
15	1	4A	Canyon/Pats Creek	Cranberry Bog 056	2870056	CIVU CIAR4 CEDE5	0.6		1	Garlon	2	8/28/2009	Cl Co
24	2	4A	Canyon/Pats Creek		2870000	CIAR	0.8		2	Garlon	30	9/8/2009	Cl Co
25	2	4A	Canyon/Pats Creek		2875000		1.2					Treated with ref 5 (4C)	

**Olympic National Forest 2009 Invasive Plant Treatment Project Accomplishments** (yellow shading = contractor)

Ref #	Priority	Project	6th Field Watershed Name	2009 Site Name	Road #	Species Treated	FS Estimate Infested Acres	Acres treated (Manual)	Acres Treated (Herbicide)	Herbicide Used	Herbicide Amount (oz)	Date	Crew
26	2	4A	Canyon/Pats Creek		2878000	LALA4	0.2		5	Garlon	36	8/19/2009	Cl Co
33	3	4A	Canyon/Pats Creek		2870000	LALA4 CYSC4 SEJA CIAR4 CIVU	0.9		3	Garlon	18	7/10/2009	Cl Co
36	3	4AA	Canyon/Pats Creek		2870150	LALA4	0		3	Garlon	12	8/20/2009	Cl Co
10	1	4B	Canyon/Pats Creek	Cranberry Bog			0.7			Treated 8/24 or 8/25 by combined crew			
37	3	4BB	Canyon/Pats Creek		2875070		0.3			Treated 8/24 or 8/25 by combined crew			
5	1	4C	Canyon/Pats Creek	Canyon Pit		CEDE5	0.5		2	Garlon	15	8/12/2009	Cl Co
5	1	4C	Canyon/Pats Creek	Canyon Pit		CEDE5			2	Transline	6	9/16/2009	Cl Co
38	3	4CC	Canyon/Pats Creek		2878060	LALA4 CIAR4	0.1		1	Garlon	6	8/19/2009	Cl Co
6	1	4D	Canyon/Pats Creek	Caraco Cat Unit 1			0.5			Treated 8/24 or 8/25 by combined crew			
39	3	4DD	Canyon/Pats Creek		2878080		0.1			Treated 8/24 or 8/25 by combined crew			
7	1	4E	Canyon/Pats Creek	Caraco Cat Unit 2		CIAR4 CIVU CYSC4	0.36		15	Garlon	42	8/25/2009	Cl Co, WCC
40	3	4EE	Canyon/Pats Creek		2878085		0.1			Treated 8/24 or 8/25 by combined crew			
8	1	4F	Canyon/Pats Creek	Caraco Cat Unit 3			0.5			See Ref 7--done same time			
41	3	4FF	Canyon/Pats Creek		2878110		0.1			Treated 8/24 or 8/25 by combined crew			
9	1	4G	Canyon/Pats Creek	Caraco Cat Unit 4			0.24			Treated 8/24 or 8/25 by combined crew			
42	3	4GG	Canyon/Pats Creek		2878120	LALA4	0.2		2	Garlon	18	8/19/2009	Cl Co
11	1	4H	Canyon/Pats Creek	Cranberry Bog 050	2870050	CIAR4 CIVU	3.6		5	Garlon	30	8/25/2009	Cl Co, WCC
12	1	4I	Canyon/Pats Creek	Cranberry Bog 050	2870050		0.6			Treated 8/24 or 8/25 by combined crew			
16	1	4J	Canyon/Pats Creek	Cranberry Bog 057	2870057		0			Treated 8/24 or 8/25 by combined crew			
17	1	4K	Canyon/Pats Creek	Cranberry Bog 058	2870058	PHAR GERO CIVU CIAR4	1.1		4	Garlon	47	8/24/2009	Cl Co, WCC
17	1	4K	Canyon/Pats Creek	Cranberry Bog 058	2870058	PHAR GERO CIVU CIAR4			1	AquaMaster	16	8/24/2009	Cl Co, WCC

Olympic National Forest 2009 Invasive Plant Treatment Project Accomplishments (yellow shading = contractor)													
Ref #	Priority	Project	6th Field Watershed Name	2009 Site Name	Road #	Species Treated	FS Estimate Infested Acres	Acres treated (Manual)	Acres Treated (Herbicide)	Herbicide Used	Herbicide Amount (oz)	Date	Crew
18	1	4L	Canyon/Pats Creek	Cranberry Bog 059	2870059		2.2						
19	1	4M	Canyon/Pats Creek	Lower Caraco Quarry			0.5						Nothing found
20	1	4N	Canyon/Pats Creek	Ned Hill Quarry			0.5						
21	1	4P	Canyon/Pats Creek	Upper Caraco Quarry			0.5						Nothing found
22	1	4Q	Canyon/Pats Creek	Sand Stone quarry		LALA4 CYSC4 CIVU	0.5		1	Garlon	18	7/17/2009	Cl Co
23	1	4R	Canyon/Pats Creek		2870030	CEDE5 CIAR4 CYSC4 CIVU	0.4		1.5	Garlon	12	7/17/2009	Cl Co
27	2	4S	Canyon/Pats Creek		2875020	CIAR CYSC4 POBO	0.1		1	Garlon	24	8/12/2009	Cl Co
28	2	4T	Canyon/Pats Creek		2877040		0.5				Treated 9/8 with ref 98		
29	2	4U	Canyon/Pats Creek		2878100	LALA4	0.1		3	Garlon	24	8/19/2009	Cl Co
30	2	4V	Canyon/Pats Creek		2880000		0.1						
31	1	4W	Canyon/Pats Creek	Cranberry Bog 054	2870054		0.2			Treated 8/24 or 8/25 by combined crew			
32	3	4X	Canyon/Pats Creek	unnamed gravel pit	2870000	LALA4 CIAR4	?		0.2	Garlon	10	7/17/2009	Cl Co
34	3	4Y	Canyon/Pats Creek		2870110		0						
35	3	4Z	Canyon/Pats Creek		2870130		0						
166	1	5A	Upper Sol Duc River	Klahowya CG	2900990	GERO	0.2		0.5	Garlon	2	9/1/2009	Cl Co
167	1	5A	Upper Sol Duc River	Klahowya CG	2900992		0				Treated with ref 166		
319	1	6A	Spencer Creek/Marple Creek	<b>Seal Rock CG</b>	2610200	CYSC4	4	2				6/30/2009	Cl Co
154	2	7A	South Fork Calawah		2923000								
133	1	8A	North Fork Calawah	Grindstone Pit			0.5						

**Olympic National Forest 2009 Invasive Plant Treatment Project Accomplishments** (yellow shading = contractor)

Ref #	Priority	Project	6th Field Watershed Name	2009 Site Name	Road #	Species Treated	FS Estimate Infested Acres	Acres treated (Manual)	Acres Treated (Herbicide)	Herbicide Used	Herbicide Amount (oz)	Date	Crew
140	3	8B	North Fork Calawah		2923000	GERO	0.5		0.5	Garlon	6	9/1/2009	Cl Co
134	1	8C	North Fork Calawah	Bonidu Meadow			5						
135	2	8D	North Fork Calawah		2065		0.2						
136	2	8E	North Fork Calawah		2900000	CYSC4	13.9	1				5/27/2009	Cl Co
136	2	8E	North Fork Calawah		2900000	CYSC4		1				8/6/2009	Cl Co
136	2	8E	North Fork Calawah		2900000	SEJA			1	Garlon	10	8/4/2009	Cl Co
136	2	8E	North Fork Calawah		2900000	HIAU, GERO			0.2	Garlon	0.5	9/10/2009	Cl Co
137	2	8F	North Fork Calawah		2922000	CYSC4	0.1	2				6/24/2009	Cl Co
137	2	8F	North Fork Calawah		2922000	CYSC4		2				5/27/2009	Cl Co
137	2	8F	North Fork Calawah		2922000	GERO			0.1	Garlon	14	9/11/2009	Cl Co
138	3	8G	North Fork Calawah	?	2923077		?						
139	3	8H	North Fork Calawah	?	2923078		?						
141	3	8J	North Fork Calawah		2923060	CYSC4	0.1	0.05				9/10/2009	Cl Co
141	3	8J	North Fork Calawah		2923060	CIAR GERO			0.1	Garlon	1	9/10/2009	Cl Co
142	3	8K	North Fork Calawah		2923070	CIAR RUD12	0.2		0.6	Garlon	4	9/10/2009	Cl Co
98	2	14A	McDonald Creek/Siebert Creek		2877000	SEJA	0.3	0.2				9/8/2009	Cl Co
98	2	14A	McDonald Creek/Siebert Creek		2877000	CEDE5, CIAR CIVU			1	Garlon		9/8/2009	Cl Co
99	3	14A	McDonald Creek/Siebert Creek			CIVU CIAR	?		6	Garlon	20	7/27/2009	Cl Co, WCC
100	3	14B	McDonald Creek/Siebert Creek		2877100		0.1						
93	1	15A	Lower Gray Wolf		2875000		0.5					Treated 7/27 with ref 95	
95	2	15B	Lower Gray Wolf	Slab Camp Quarry	2875000	CEBI2	0.5		1.8	Garlon	12	7/27/2009	WCC
96	2	15C	Lower Gray Wolf		2870000		1.1					Treated several times with ref 33	
94	2	15D	Lower Gray Wolf	Dungeness Forks Campground	2880050	GERO	0.1		8	Garlon	66	7/1/2009	Cl Co
94	2	15D	Lower Gray Wolf	Dungeness Forks CG	2880050	GERO			10	Garlon	138	9/15/2009	Cl Co, WCC
97	3	15E	Lower Gray Wolf		2880000		0.2						

Olympic National Forest 2009 Invasive Plant Treatment Project Accomplishments (yellow shading = contractor)													
Ref #	Priority	Project	6th Field Watershed Name	2009 Site Name	Road #	Species Treated	FS Estimate Infested Acres	Acres treated (Manual)	Acres Treated (Herbicide)	Herbicide Used	Herbicide Amount (oz)	Date	Crew
101	1	16A	Middle Dungeness	unnamed quarry									
103	1	16B	Middle Dungeness	lower 2870 road	2870000								
102	1	16C	Middle Dungeness		2820000								
104	1	16C	Middle Dungeness	middle 2870 road	2870000								
105	1	16D	Middle Dungeness		2870230								
106	1	16E	Middle Dungeness		2870250								
107	1	16F	Middle Dungeness		2800000								
108	2	16G	Middle Dungeness		2800130								
109	2	16H	Middle Dungeness		2800132								
110	2	16J	Middle Dungeness		2830000	SEJA	0.1	0.2				9/14/2009	CI Co
111	2	16K	Middle Dungeness		2830034		0.2						
112	2	16L	Middle Dungeness		2860000		0.2						
113	3	16M	Middle Dungeness		2800260		0.1						
114	3	16N	Middle Dungeness		2830030		0.1						
115	3	16P	Middle Dungeness		2870230		0.3						
160	1	17A	Upper Dungeness	Upper 2870 road	2870000								
161	2	17A	Upper Dungeness		2870270		10.1						
162	3	17B	Upper Dungeness	Camp Handy	none		0.35						
163	3	17C	Upper Dungeness		none		0.2						
164	3	17D	Upper Dungeness		none		0.2						
57	1	18A	Jimmy-come-lately	Coho Pit									
61	1	18AA	Jimmy-come-lately	unnamed pit			1						
60	1	18B	Jimmy-come-lately	Racoon Pit									
63	1	18B	Jimmy-come-lately		2855000								
64	1	18B	Jimmy-come-lately		2855070	CEBI2		1				9/14/2009	CI Co
58	1	18C	Jimmy-come-lately	Louella Rock pit									
65	3	18D	Jimmy-come-lately		2800351	CEDE5	?		1	Transline	5	9/16/2009	CI Co
75	3	18D	Jimmy-come-lately		2800350	CEDE5	?		3	AquaNeat	10	5/29/2009	CI Co
75	3	18D	Jimmy-come-lately		2800350	CEDE5 CIAR4 CIVU			1	Garlon	16	7/17/2009	CI Co

Olympic National Forest 2009 Invasive Plant Treatment Project Accomplishments (yellow shading = contractor)													
Ref #	Priority	Project	6th Field Watershed Name	2009 Site Name	Road #	Species Treated	FS Estimate Infested Acres	Acres treated (Manual)	Acres Treated (Herbicide)	Herbicide Used	Herbicide Amount (oz)	Date	Crew
59	1	18E	Jimmy-come-lately	Luella LuLu quarry									
62	1	18F	Jimmy-come-lately	Wolf Quarry 2									
66	1	18G	Jimmy-come-lately		2855100								
67	3	18H	Jimmy-come-lately		2800360		?						
68	3	18J	Jimmy-come-lately		2840080		0.2						
69	2	18K	Jimmy-come-lately		5006								
70	2	18L	Jimmy-come-lately		2840070								
71	2	18M	Jimmy-come-lately		2840071								
72	2	18N	Jimmy-come-lately		2850120								
73	1	18P	Jimmy-come-lately		2855030								
74	1	18Q	Jimmy-come-lately		2855032								
76	3	18R	Jimmy-come-lately		5331		?						
77	3	18S	Jimmy-come-lately		2800362		?						
78	1	18T	Jimmy-come-lately		2840000								
79	3	18U	Jimmy-come-lately		2840030		0.1						
80	3	18V	Jimmy-come-lately		2840034		?						
81	3	18W	Jimmy-come-lately		2840035		?						
82	3	18X	Jimmy-come-lately		2840036		?						
83	3	18Y	Jimmy-come-lately		2840120		0.1						
84	1	18Z	Jimmy-come-lately		2850000	SEJA		0.2				9/15/2009	Cl Co
298	1	19A	Lower Dosewallips	Elkhorn (2610) Road	2610000	GERO	2.2		10	Garlon	108	6/30/2009	Cl Co
298	1	19A	Lower Dosewallips	Elkhorn (2610) Road	2610000	GERO, SEJA CIAR, CYSC4			5	Garlon	22	7/29/2009	WCC
298	1	19A	Lower Dosewallips	Elkhorn (2610) Road	2610000	GERO POBO10			5	AquaNeat	111	6/21/2009	Cl Co
298	1	19A	Lower Dosewallips	Elkhorn (2610) Road	2610000	GERO			2	Garlon	25	7/28/2009	Cl Co, WCC
298	1	19A	Lower Dosewallips	Elkhorn (2610) Road	2610000	SEJA		1				6/21/2009	Cl Co
298	1	19A	Lower Dosewallips	Elkhorn (2610) Road	2610000	GERO			0.2	Garlon	4	9/2/2009	Cl Co
298	1	19A	Lower Dosewallips	Elkhorn (2610) Road	2610000	POBO10			0.1	AquaNeat	5	9/2/2009	Cl Co

Olympic National Forest 2009 Invasive Plant Treatment Project Accomplishments (yellow shading = contractor)													
Ref #	Priority	Project	6th Field Watershed Name	2009 Site Name	Road #	Species Treated	FS Estimate Infested Acres	Acres treated (Manual)	Acres Treated (Herbicide)	Herbicide Used	Herbicide Amount (oz)	Date	Crew
299	1	19A	Lower Dosewallips		2500000		0.3				Treated with ref #298		
300	1	19A	Lower Dosewallips	Elkhorn (2610) Road	2610040		0.1				Treated with ref #298		
303	1	19A	Lower Dosewallips	Elkhorn (2610) Road	2610050		6.8				Treated with ref #298		
301	1	19B	Lower Dosewallips		2620000								
302	1	19B	Lower Dosewallips		2620056								
304	3	19B	Lower Dosewallips		2620030		0.1						
305	3	19B	Lower Dosewallips		2620030		0.1						
306	3	19B	Lower Dosewallips		2620050		0.1						
307	3	19B	Lower Dosewallips		2620051		0.1						
308	3	19B	Lower Dosewallips		2620053		0.2						
43	1	20A	Deep Creek		3000200								
46	3	20B	Deep Creek	?	3067000		0.1						
47	3	20B	Deep Creek		3000000		2.9						
48	3	20C	Deep Creek		3040000	GERO CIAR	0.7		3	Garlon	24	8/18/2009	Cl Co
44	1	20D	Deep Creek		3000250								
45	1	20E	Deep Creek		3000330								
116	1	21A	Middle Sol Duc River		3000000								
126	3	21B	Middle Sol Duc River		3000200	GERO	0.6		2.4	Garlon	54	8/11/2009	Cl Co
126	3	21B	Middle Sol Duc River		3000200	GERO			0.75	Garlon	12	8/18/2009	Cl Co
No Ref #		21B	Middle Sol Duc River		3000215	GERO			2	Garlon	20	8/13/2009	Cl Co
117	1	21C	Middle Sol Duc River		2071000		0.5				Treated with ref #118		
118	1	21D	Middle Sol Duc River		3040800	GERO CIAR LALA4	1.2		10	Garlon	110	6/29/2009	Cl Co
118	1	21D	Middle Sol Duc River		3040800	POBO10 CYSC4		2				6/29/2009	Cl Co
118	1	21D	Middle Sol Duc River		3040800	GERO			1	Garlon	20	9/1/2009	Cl Co
118	1	21D	Middle Sol Duc River		3040800	POBO10			0.1	AquaNeat	5	9/1/2009	Cl Co
120	2	21E	Middle Sol Duc River		2065		0.7						
121	2	21F	Middle Sol Duc River		2923100		0.1						
122	2	21G	Middle Sol Duc River		3006000								

Olympic National Forest 2009 Invasive Plant Treatment Project Accomplishments (yellow shading = contractor)													
Ref #	Priority	Project	6th Field Watershed Name	2009 Site Name	Road #	Species Treated	FS Estimate Infested Acres	Acres treated (Manual)	Acres Treated (Herbicide)	Herbicide Used	Herbicide Amount (oz)	Date	Crew
123	2	21H	Middle Sol Duc River		3100300	GERO	0.3		3.5	Garlon	42	8/17/2009	Cl Co
124	2	21J	Middle Sol Duc River		3116000	GERO CIAR RUDI2	0.3		2	Garlon	42	8/3/2009	Cl Co
124	2	21J	Middle Sol Duc River		3116000	GERO			1	Garlon	6	8/13/2009	Cl Co
124	2	21J	Middle Sol Duc River		3116000	GERO			0.1	Garlon	14	9/11/2009	Cl Co
125	3	21K	Middle Sol Duc River	Bear Saddle TS			?						
127	3	21L	Middle Sol Duc River		2923090		?						
128	3	21M	Middle Sol Duc River		3000300		0.2						
129	3	21N	Middle Sol Duc River		3006011		0.1						
130	3	21P	Middle Sol Duc River		3040900		?						
131	3	21Q	Middle Sol Duc River		3100010		0.1						
206	2	22A	Lower Bogachiel		2932000		0.3						
207	3	22B	Lower Bogachiel	unnamed gravel pit	2932000		?						
143	2	23A	Pysht River		3000200								
144	3	23B	Pysht River		3000215		0.1						
145	3	23C	Pysht River		3000250		0.1						
49	2	24A	East Twin River		3040000		0.2						
51	2	24B	East Twin River		3040011		0.2						
50	2	24X	East Twin River		3068000		0.2						
186	3	25A	West Twin River	Bear Saddle TS		CYSC4	?	0.09				6/24/2009	WCC
183	2	25B	West Twin River		3000591		0.5						
187	3	25B	West Twin River		3000000	CYSC4 SEJA	14	2				8/6/2009	Cl Co
187	3	25B	West Twin River		3000000	SEJA			1	Garlon	3	8/6/2009	Cl Co
188	3	25B	West Twin River		3000400		0.1						
189	3	25B	West Twin River		3000580		?						
190	3	25B	West Twin River		3000590		?						
191	3	25B	West Twin River		3000600	CYSC4	?		1	Garlon	12	7/29/2009	Cl Co
192	3	25B	West Twin River		3000800		?						
193	3	25C	West Twin River		3040000	LALA4	0.6		1	Garlon	12	7/30/2009	Cl Co

Olympic National Forest 2009 Invasive Plant Treatment Project Accomplishments (yellow shading = contractor)													
Ref #	Priority	Project	6th Field Watershed Name	2009 Site Name	Road #	Species Treated	FS Estimate Infested Acres	Acres treated (Manual)	Acres Treated (Herbicide)	Herbicide Used	Herbicide Amount (oz)	Date	Crew
184	2	25D	West Twin River		3040100		1						
185	2	25E	West Twin River		3040115		0.5						
52	3	26A	Headwaters Sol Duc	?	2920020		0.1						
53	3	26B	Headwaters Sol Duc	Upper Tom Quarry			?						
54	3	26C	Headwaters Sol Duc		2918000	CYSC4 DIGIT LEVU	0.6		3	Garlon	18	8/4/2009	Cl Co
412	1	26D	Headwaters Sol Duc	2918 & spurs Decomm	2918000		4			Treated as far as possible with ref 454			
413	1	26E	Headwaters Sol Duc	2918 & spurs Decomm	2918100		1			Treated as far as possible with ref 454			
414	1	26F	Headwaters Sol Duc	2918 & spurs Decomm	2918110		1			Treated as far as possible with ref 454			
55	3	26G	Headwaters Sol Duc		2920000		0.1						
56	3	26H	Headwaters Sol Duc		2931000		0.1						
288	3	28A	Lower Big Quilcene		3057		0.2						
289	1	28A	Lower Big Quilcene	Big Quil/Tunnel Creek Roads	2700000	GERO CEJA	0.5		3.5	Garlon	15	7/6/2009	Cl Co
289	1	28A	Lower Big Quilcene	Big Quil/Tunnel Creek Roads	2700000	GERO LALA CYSC4			2.5	Garlon	90	7/8/2009	Cl Co
289	1	28A	Lower Big Quilcene	Big Quil/Tunnel Creek Roads	2700000	GERO LALA4 SEJA CIAR			2.32	Garlon	19	8/26/2009	WCC
289	1	28A	Lower Big Quilcene	Big Quil/Tunnel Creek Roads	2700000	GERO LALA4 SEJA CIAR			2.33	AquaNeat	19	8/26/2009	WCC
291	1	28A	Lower Big Quilcene	Big Quil/Tunnel Creek Roads	2740000	SEJA	0.2	1				7/7/2009	Cl Co
296	1	28A	Lower Big Quilcene	Big Quil/Tunnel Creek Roads	2700080		0.5				Treated with ref 289		
462	1	28A	Lower Big Quilcene	Big Quil/Tunnel Creek Roads	2700040	GERO SEJA CYSC4	3.7		8	Garlon	60	7/6/2009	Cl Co

**Olympic National Forest 2009 Invasive Plant Treatment Project Accomplishments** (yellow shading = contractor)

Ref #	Priority	Project	6th Field Watershed Name	2009 Site Name	Road #	Species Treated	FS Estimate Infested Acres	Acres treated (Manual)	Acres Treated (Herbicide)	Herbicide Used	Herbicide Amount (oz)	Date	Crew
462	1	28A	Lower Big Quilcene	Big Quil/Tunnel Creek Roads	2700040	HIAU SYOF ILAQ80 PRLA5			0.2	Garlon	1.5	7/7/2009	Cl Co
462	1	28A	Lower Big Quilcene	Big Quil/Tunnel Creek Roads	2700040	SEJA CIVU LAGA2		0.07				7/7/2009	Cl Co
462	1	28A	Lower Big Quilcene	Big Quil/Tunnel Creek Roads	2700040	HIAU GERO PHAR HEHE SEJA			1	Transline	2.5	9/24/2009	Cl Co
462	1	28A	Lower Big Quilcene	Big Quil/Tunnel Creek Roads	2700040	HIAU GERO PHAR HEHE SEJA			2	AquaNeat	24	9/24/2009	Cl Co
285	1	28B	Lower Big Quilcene	Quilcene office compound	2730300	CYSC4 RUDI2 PORE	0.5		0.32	Garlon	30	7/9/2009	Cl Co and SS
285	1	28B	Lower Big Quilcene	Quilcene office compound	2730300	CYSC4		0.1				7/7/2009	Cl Co and SS
285	1	28B	Lower Big Quilcene	Quilcene office compound	2730300	CYSC4 SEJA GERO CIAR			4.8	Garlon	104	9/16/2009	WCC
295	3	28C	Lower Big Quilcene		2620000		0.2						
287	3	28D	Lower Big Quilcene				0.1						
290	1	28D	Lower Big Quilcene		2730011		0.1						
292	1	28D	Lower Big Quilcene	Falls View CG	2730200	GERO	0.6		1	Garlon	12	8/31/2009	Cl Co
293	3	28D	Lower Big Quilcene	? Jackson planning			?						
294	3	28D	Lower Big Quilcene	Rainbow CG	???		0.1						
297	3	28D	Lower Big Quilcene		2730000		0.1						
286	3	28F	Lower Big Quilcene		3039		0.1						
311	3	32A	Lower Duckabush	Duckabush Pit	2510000		?						
309	1	32B	Lower Duckabush	Duckabush Roads	2510000	GERO	1.2		4	Garlon	30	7/9/2009	Cl Co
309	1	32B	Lower Duckabush	Duckabush Roads	2510000	SEJA		1				7/9/2009	Cl Co
309	1	32B	Lower Duckabush	Duckabush Roads	2510000	SEJA		1.5				7/9/2009	Cl Co
310	1	32B	Lower Duckabush	Duckabush Roads	2510070	GERO	0.1		4	Garlon	25	7/28/2009	Cl Co, WCC

Olympic National Forest 2009 Invasive Plant Treatment Project Accomplishments (yellow shading = contractor)													
Ref #	Priority	Project	6th Field Watershed Name	2009 Site Name	Road #	Species Treated	FS Estimate Infested Acres	Acres treated (Manual)	Acres Treated (Herbicide)	Herbicide Used	Herbicide Amount (oz)	Date	Crew
310	1	32B	Lower Duckabush	Duckabush Roads	2510070	GERO		2.5				7/9/2009	CI Co & SS
312	1	32C	Lower Duckabush	Duckabush Roads	2530000								
313	1	32C	Lower Duckabush	Duckabush Roads	2530100								
314	1	32C	Lower Duckabush	Duckabush Roads	2530200								
452	1	32E	Lower Duckabush	Duckabush Roads	2510060								
453	1	32F	Lower Duckabush	Duckabush Roads	2510065								
259	1	33K	Middle Quinault River	Bills Bog / Matheny Prairie	2140000		?						
458	1	33L	Middle Quinault River	Bills Bog / Matheny Prairie	2190000		?						
459	1	33M	Middle Quinault River	Bills Bog / Matheny Prairie	2190110		?						
460	1	33N	Middle Quinault River	Bills Bog / Matheny Prairie	2190120		?						
195	1	35A	Little Quilcene River		2800010	GERO CIAR4 CIVU ILAQ80	0.1		5	AquaNeat	4	7/18/2009	CI Co
195	1	35A	Little Quilcene River		2800010	GERO CIAR4 CIVU ILAQ80			5	Garlon	48	7/18/2009	CI Co
198	3	35A	Little Quilcene River		2800000	SEJA	11.6	4.5				7/13/2009	CI Co
198	3	35A	Little Quilcene River		2800000	SEJA		0.2				9/17/2009	WCC
198	3	35A	Little Quilcene River		2800000	SEJA LALA CIAR CIVU CYSC4			0.9	AquaNeat	72	9/17/2009	WCC
204	3	35A	Little Quilcene River		2800060		0.1						
205	3	35B	Little Quilcene River		2800080		?						
199	3	35C	Little Quilcene River		2700000	SEJA CYSC4	1.5	1.5				7/8/2009	CI Co

Olympic National Forest 2009 Invasive Plant Treatment Project Accomplishments (yellow shading = contractor)													
Ref #	Priority	Project	6th Field Watershed Name	2009 Site Name	Road #	Species Treated	FS Estimate Infested Acres	Acres treated (Manual)	Acres Treated (Herbicide)	Herbicide Used	Herbicide Amount (oz)	Date	Crew
199	3	35C	Little Quilcene River		2700000	SEJA LALA CIVU CIAR4			3	Garlon	60	8/26/2009	Cl Co
199	3	35C	Little Quilcene River		2700000	SEJA LALA CIVU CIAR4			3	AquaMaster	60	8/26/2009	Cl Co
199	3	35C	Little Quilcene River		2700000	SEJA LALA CIAR4			3	Garlon	72	8/27/2009	Cl Co
201	3	35C	Little Quilcene River		2700280		?						
202	3	35C	Little Quilcene River		2700281		?						
203	3	35C	Little Quilcene River		2700330		2						
200	3	35D	Little Quilcene River		2700220		?						
197	3	35E	Little Quilcene River	unnamed gravel pit	2700000		?						
194	1	35F	Little Quilcene River	Bon Jon Quarry			0.5						
196	2	35G	Little Quilcene River		2820000		1						
No ref#	2	35G	Little Quilcene River		2820010	SEJA CIAR		2				9/9/2009	Cl Co
No ref#	2	35G	Little Quilcene River		2820010	CEDE5			2	Garlon	8	9/9/2009	Cl Co
165	1	36A	Upper Sol Duc River	Bonidu Pit			0.5						
168	1	36B	Upper Sol Duc River	Tom Creek Pit			0.5						
169	2	36C	Upper Sol Duc River		2065		0.9						
170	2	36D	Upper Sol Duc River		2929070	GERO	0.4		2	Garlon	6	8/20/2009	Cl Co
171	2	36E	Upper Sol Duc River				0.1						
172	3	36F	Upper Sol Duc River	Kloshe Nanitch Loop Trail			0.2						
173	3	36G	Upper Sol Duc River	unnamed gravel pit			0.1						
174	3	36H	Upper Sol Duc River		2900000		3						
175	3	36J	Upper Sol Duc River		2900950		?						
176	3	36K	Upper Sol Duc River		2900960		?						
177	3	36L	Upper Sol Duc River		2918000	LALA4	1.35		0.5	Garlon	8	8/20/2009	Cl Co

Olympic National Forest 2009 Invasive Plant Treatment Project Accomplishments (yellow shading = contractor)													
Ref #	Priority	Project	6th Field Watershed Name	2009 Site Name	Road #	Species Treated	FS Estimate Infested Acres	Acres treated (Manual)	Acres Treated (Herbicide)	Herbicide Used	Herbicide Amount (oz)	Date	Crew
178	3	36M	Upper Sol Duc River		2929000	HIAU GERO CIVU CYSC4	?		1	Garlon	10	8/11/2009	Cl Co
179	3	36N	Upper Sol Duc River		2931000		?						
180	3	36P	Upper Sol Duc River		3040595		0.2						
181	3	36Q	Upper Sol Duc River		3071000		0.1						
316	1	42A	Salmon River		2100000								
317	2	42B	Salmon River		2140000								
318	1	42B	Salmon River	Bills Bog / Matheny Prairie	2140000		0.5						
461	1	42C	Salmon River	Bills Bog / Matheny Prairie	2140030		0.25						
279	2	43B	Fulton/Waketick Creek		2510000								
280	2	43B	Fulton/Waketick Creek		2510200								
282	3	43B	Fulton/Waketick Creek		2510300		?						
283	3	43B	Fulton/Waketick Creek		2510500		?						
284	3	43B	Fulton/Waketick Creek		2510510		?						
281	2	43C	Fulton/Waketick Creek		2510210								
473	2	43D	Fulton/Waketick Creek		2510090								
474	2	43E	Fulton/Waketick Creek		2503000								
475	2	43F	Fulton/Waketick Creek		2503035								

Olympic National Forest 2009 Invasive Plant Treatment Project Accomplishments (yellow shading = contractor)													
Ref #	Priority	Project	6th Field Watershed Name	2009 Site Name	Road #	Species Treated	FS Estimate Infested Acres	Acres treated (Manual)	Acres Treated (Herbicide)	Herbicide Used	Herbicide Amount (oz)	Date	Crew
476	2	43G	Fulton/Waketick Creek		2503045								
85	1	45A	Lower Elwha River	3050 road and spurs	3050000	GERO	9.9		2.08	Garlon	234	6/23-6/24	WCC
85	1	45A	Lower Elwha River	3050 road	3050000	HIAU			0.1	Garlon	6	6/17/2009	Cl Co
85	1	45A	Lower Elwha River	3050 road	3050000	GERO, LALA4			2.4	Garlon	132	6/23/2009	Cl Co
85	1	45A	Lower Elwha River	3050 road	3050000	GERO, LEVU			14	Garlon	180	6/25/2009	Cl Co, WCC
85	1	45A	Lower Elwha River	3050 road	3050000	GERO			1	Garlon	18	8/11/2009	Cl Co
86	1	45B	Lower Elwha River	3050 road	3050011		1.25					6/25/2009	
87	1	45C	Lower Elwha River	3050 road	3050012		0.25					6/25/2009	
88	1	45D	Lower Elwha River	3050 road	3050013		0.25					6/25/2009	
89	1	45E	Lower Elwha River	3050 road	3050150		1					6/25/2009	
90	1	45F	Lower Elwha River	3050 road	3050200		0.85					6/25/2009	
91	1	45G	Lower Elwha River	3050 road	3050270		0.2					6/25/2009	
92	1	45H	Lower Elwha River	3050 road	3050300		0.6					6/25/2009	
322	1	46A	Upper Big Quilcene		2740110		1					Treated with ref 454	
320	3	46B	Upper Big Quilcene		2740000		?					Treated with ref 454	
321	1	46C	Upper Big Quilcene		2740072		0.2					Treated with ref 454	
323	1	46D	Upper Big Quilcene		2750000	SEJA CYSC4	1	3				9/9/2009	Cl Co
323	1	46D	Upper Big Quilcene		2750000	CIAR CIVU LALA4			4	Garlon	12	9/9/2009	Cl Co
323	1	46D	Upper Big Quilcene		2750000	SEJA		1				9/14/2009	Cl Co
454	1	46E	Upper Big Quilcene	Big Quil/Tunnel Creek Roads	2740000	CYSC4 CIAR4 CIVU CEDE5 SEJA	1		4	Garlon	12	9/1/2009	Cl Co

Olympic National Forest 2009 Invasive Plant Treatment Project Accomplishments (yellow shading = contractor)													
Ref #	Priority	Project	6th Field Watershed Name	2009 Site Name	Road #	Species Treated	FS Estimate Infested Acres	Acres treated (Manual)	Acres Treated (Herbicide)	Herbicide Used	Herbicide Amount (oz)	Date	Crew
455	1	46F	Upper Big Quilcene	Big Quil/Tunnel Creek Roads	2700000	GERO LALA4 SEJA CIAR4	0.5		1.7	Garlon	15	8/27/2009	WCC
455	1	46F	Upper Big Quilcene	Big Quil/Tunnel Creek Roads	2700000	GERO LALA4 SEJA CIAR4			1.7	AquaNeat	15	8/27/2009	WCC
484	2	46G	Upper Big Quilcene		2740000	SEJA	?	2				7/7/2009	CI Co
485	2	46H	Upper Big Quilcene		2740060		?					Treated with ref 454	
486	2	46J	Upper Big Quilcene		2740070		?					Treated with ref 454	
487	2	46K	Upper Big Quilcene		2740075		?					Treated with ref 454	
488	2	46M	Upper Big Quilcene		2750020		?						
149	1	47A	Snow Creek/Salmon River		2850010								
150	2	47B	Snow Creek/Salmon River		2852000								
151	2	47C	Snow Creek/Salmon River		2852090								
147	1	47D	Snow Creek/Salmon River		2845070	CYSC4	0.5		2	Garlon	15	7/22/2009	CI Co
148	1	47E	Snow Creek/Salmon River		2845073 2845070	SEJA CIVU CIAR4	0.5		1	Garlon	8	8/3/2009	CI Co
501	1	47F	Snow Creek/Salmon River		2850000								
502	1	47G	Snow Creek/Salmon River		2840000								
315	2	49B	Matheny Creek		2140000								
456	1	49C	Matheny Creek	Bills Bog / Matheny Prairie	2190140		0.5						
457	1	49D	Matheny Creek	Bills Bog / Matheny Prairie	2190147		0.5						
4	1	52A	Bockman Creek	Mary Clark Pit			0.5						OCC
<b>Totals</b>							<b>158.85</b>	<b>36.36</b>	<b>239.1</b>		<b>2781.5</b>		

## Appendix B: Rock Source Surveys and Treatment

We received a list of high-priority pits from the Forest Service in June of 2009. The list is given here with details of inspection and treatment. Some of the pits are hard to find and some are very small. It is entirely possible that the crew treated small roadside pits but did not fill in a report.



Name	Road	Weed	Date	Treatment Type	Acreage Treated
<b>Highest Priority Pits</b>					
Bonidu Pit	2900			Pit reported infested	
Bon Jon Quarry	2800			No form—treated	
Wolf Quarry	CR3039			On contractor list	
Tom Creek Pit	2931		9/3/09	Inspected—mostly clean, 1 broom and some St John's Wort	
Mary Clark Pit	2010			Treated by OCC—see following page for details	
Calawah Pit	2900015			On contractor list	
Ned Hill Quarry	2878125			Not visited	
Upper Caraco Quarry	2870			Inspected--clean	
Lower Caraco Quarry	2870			Inspected--clean	
Coho Pit				On contractor list	
Louella Rock Pit				On contractor list	
Louella Lulu Quarry				On contractor list	
Canine (Gold Creek)				Need location	

<b>Not so High Priority Pits</b>					
Canyon Pit		CEDE5	8/12/09 & 9/16/09	Treated chemically	2
Sandstone Quarry		LALA4 CYSC4 CIVU	7/17/09	Treated chemically	1
Upper Tom Quarry				Not visited	
Grindstone Pit				No form—probably treated	
Elk Quarry				Not visited	
Duckabush Pit				No form—probably treated	

<b>Other Pits</b>					
Unnamed pit	2922	CYSC4 LEVU	6/24/09	Some CYSC4 pulled	2
Unnamed pit	2922, Junc 015	CYSC4	5/27/09	Some CYSC4 pulled	2
Mount Pleasant Pit	Mount Pleasant Road	COMA CYSC4 POBO LEVU CIAR4 CIVU	6/8/09	Treated chemically	0.5
Kirner Pit	Kirner Road	COMA CYSC4 CEBI2 LALA4 CIAR4	6/15/09	Inspected, report filed	
Unnamed Pit	2870—Ref # 32	LALA4 CIAR4	8/24/09	Treated chemically	0.2
Slab Camp Quarry	2875	CEBI2	7/27/09	Treated chemically	1.8

## Appendix C: Other Work Crew Accomplishments

### Clallam County Sheriff's Chain Gang:

In 2009, the Chain Gang continued its effort on Clallam County roads, removing 69,380 Scotch broom plants.

### Olympic Correctional Center Crew:

For the third year, a crew from the Olympic Correction Center (OCC) controlled Scotch broom in pits and quarries and on Highway 101 in the west end of both Clallam and Jefferson Counties. The selected pits are high use and are shared by different agencies, making them likely sources of weeds. Use of the OCC crew to do this work has been highly successful. A list of 2009 accomplishments follows.

OCC ACCOMPLISHMENTS, 2009							
Pits	Name	Ownership	Size	Location/Access	2009 Treatment	Date	Acres
1	Mary Clark	DNR	15 acres	Mary Clark Rd-on right, AA1 Key needed for gate	Manual	4/6/09 to 4/20/09	9.5
2	Box Car -Mary Clark extension	DNR	5 acres	Mary Clark Rd-half mile past 1st pit, or access out back end	Chemical and manual	4/20/09 & 4/21/09	3.5
3	Tyee Pit	Rayonier	10 acres	Off 101 at Beaver	Manual	4/29/09 to 5/11/09	6.75
4	Loop Pit	DNR	5 acres	Off 101 S of Tyee Pit	Manual	5/19/09	0.5
5	Lake Creek-County Pit	Clallam	5 acres	Bedrock Road-County shop (behind shop and on adjoin prop)	Manual	4/29/09	0.5
6	Moriarty Pit	DNR	5 acres	La Push Rd to Quileute Rd left of Maxfield Property to 3200 Rd	Manual	6/4/09	0.75
7	Duncan Pit	Rayonier	40 acres	La Push Rd to Quileute Rd just past address 2781	Manual	5/27/09 & 5/28/09	2
8	Mora Pit	DNR	5 acres	Quileute Prairie Rd-on way to Mora-3400 Rd on right	Manual	6/2/09 to 6/4/09	2
11	Winfield Pit	Rayonier/DNR		Clearwater	Chemical and manual	6/1/09 & 6/10/09	40
12	Rasmussen Pit				Chemical and manual	5/18/09	2
13	Sappho Pit	Rayonier			Manual	5/12/09	3
14	Highway 101 Pit				Manual	5/21/09 & 5/26/09	2
Roads							
	Hwy 101			Approximately 5 miles of Highway 101	Chemical and manual	Many	Approx 5
<b>Total Acreage</b>							<b>77.5</b>

## Appendix D: Roads Surveyed/Treated

The following table shows survey and treatment work for each year since the initiation of the project in 2002, as well as totals for the entire project. The numbers of weeds pulled and areas treated below include work carried out by the Weed Board crews, WCC crews, OCC crews and the Clallam County Sheriff's Department Chain Gang. Since area of treatment was not required for reporting in the past, it is only listed for 2006, 2007, 2008 and 2009. Further, since Chain Gang work was only reported as number of weeds pulled, area of treatments has been estimated at 0.1 acre per 1000 weeds, rounded up.

Project accomplishments are directly tied to project funding which has varied since its inception. Additionally, the project focus has shifted each year as the program has matured. The specific focus for each year is listed below.

- 2002: Weed Board staff familiarization with the Olympic National Forest road system. Begin learning which noxious weeds threatened the health of the forest. Begin the formal survey of the Pacific and Hood Canal districts, learn documentation and mapping processes, and begin control efforts.
- 2003: Survey as many roads as possible and document findings. Continue control efforts. Roads in Mason and Grays Harbor Counties (numbered 2500000 or lower) were surveyed as part of a Botanical Areas survey.
- 2004: Survey roads not previously completed, monitor prior control sites, and perform as much new control work as possible—manual only.
- 2005: Increase the amount of control work preformed and continue to monitor prior control sites, repeating treatments as necessary—manual only.
- 2006: Focus primarily on control work, especially herbicide applications on selected sites. Also survey and treat as many rock sources as possible. Continue monitoring prior control sites and repeating treatments as necessary. First year herbicide treatments allowed.
- 2007: Focus primarily on control work, including herbicide applications on selected sites. Continue monitoring prior sites and repeating treatments as necessary. Survey and remove small infestations en route to treatment sites. Little to no new survey work.
- 2008: Focus still on control, especially since the EIS, completed in March 2008, allows herbicide use on all sites. Continue monitoring prior sites and repeating treatments as necessary. Survey and remove small infestations en route to treatment sites. No new survey work.
- 2009: Focus still on control, especially since the EIS, completed in March 2008, allows herbicide use on all sites. Survey and remove small infestations en route to treatment sites. Few re-treatments and no new surveys.

For definitions for the Forest Service weed species plant codes, see Appendix G.

Note that much of the work done in 2009, particularly by the OCD crew, was done in pits and does not show up on this table of roads. Also note that the lower-numbered roads (lower than 2500) are not in Clallam or Jefferson Counties and are included in this table only because they were surveyed during the early years of the project.

ROAD	Totals 2002-2009			2002-2005			2006				2007			2008			2009		
	No. Years Visited	Total Weeds Removed, '02 to '09	Total Miles '02 - '09	Survey Miles	# of Weeds Removed	Weed Species Removed	Survey Miles	# of Weeds Removed	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed
SR101	3		15.5	1	-	HICA10 GERO	1	4	0.1	SEJA	1	0.6 8	POBO10 POSA4 CYSC4	7.5	18	CYSC4	5	5	CYSC4

ROAD	Totals 2002-2009			2002-2005			2006				2007			2008			2009		
	No. Years Visited	Total Weeds Removed, '02 to '09	Total Miles '02 - '09	Survey Miles	# of Weeds Removed	Weed Species Removed	Survey Miles	# of Weeds Removed	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed
CR5695	5	8,499	8.98	4.9 8	8,499	SEJA CIAR4 CYSC4	-	-	-		0	0		4	2	SEJA			
CR5331	3	-	14.2 4	0			8.24	-	-		2	1.0 3	GERO CEDE5 SEJA	4	0		0	0	
CR3057	1	-	1.9	0			1.9	3	0.1	SEJA	0	0		0	0		0	0	
CR3039	2	4,800	5.1	0	4,800	GERO	1.1	159	0.1	SEJA CYSC4 GERO	0	0		4	0.5	SEJA	0	0	
CR2515	1		0.4	0			0.4	-	-		0	0		0	0		0	0	
CR2500	4	35,074	25.0 5	23. 6	35,07 4	GERO CYSC4	1.5	-	-		0	0		0	0		0	0	
CR2274	2	-	5.7	0			3.7	-	-		0	0		2	0.5	SEJA	0	0	
CR2071	1	-	2.3	0			1.8	15	0.2	SEJA	0	0					0.5	3	GERO CIAR POBO1 0 CYSC4
CR2065	4	22,049	10.5 2	4.4 1	22,04 9	CYSC4 SEJA GERO	4.11	-	-		0	0		2	1	GERO CYSC4	0	0	
3116000	4	-	13.4 5	10	-			-	-		0	0		0	0		3.45	3. 1	GERO CIAR RUDI2
3100420	1	-	0.6	0.6	-			-	-		0	0		0	0		0	0	
3100400	1	-	2.9	2.9	-			-	-		0	0		0	0		0	0	
3100300	3	-	6.95	5	-			-	-		0	0		0	0		1.95	3. 5	GERO
3071015	1	-	0.6	0.6	-			-	-		0	0		0	0		0	0	

ROAD	Totals 2002-2009			2002-2005			2006				2007			2008			2009		
	No. Years Visited	Total Weeds Removed, '02 to '09	Total Miles '02 - '09	Survey Miles	# of Weeds Removed	Weed Species Removed	Survey Miles	# of Weeds Removed	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed
3071000	3	60	2.2	1.2	60	CYSC4		-	-		0	0		1	0		0	0	
3071000	2	-	3.4	3.4	-			-	-		0	0		0	0		0	0	
3068200	3	815	7.2	7.2	815	CYSC4		-	-		0	0		0	0		0	0	
3068190	2	-	0.4	0.4	-			-	-		0	0		0	0		0	0	
3068000	5	30	6	3.2	30	SEJA CYSC4		-	-		0.8	0.1	CYSC4	2	5	SEJA CYSC4 CIVU CIAR4	0	0	
3068000	4	491	31.1	29.1	491	SEJA CEJA		-	-		0	0		2	0.1	CIVU	0	0	
3067000	2	1,402	7.06	7.06	1,402	SEJA CYSC4		-	-		0	0		0	0		0	0	
3050011	2		2.5	1.5	-			-	-		0	0		0	0		1	6	GERO
3050000	2	2	12.8	3.8	2	SEJA		-	-		0	0		0	0		9	18	GERO HIAU LEVU LALA4
3040900	1		0.5	0.5	-			-	-		0	0		0	0		0	0	
3040800	4	54,709	2.55	0.1	54,709	POCU6 GERO				POCU6 ARM12 GERO ILAQ80	0.5	0	SEJA CYSC4 GERO ARM12 CIVU ILAQ80 LALA4 PHAR3	0.5	7	GERO CYSC4 RUDI POBO1 0 LALA4 CIVU CIAR4 SEJA RUDI2	1	10	GERO CIAR LALA4 POBO1 0 CYSC4

ROAD	Totals 2002-2009			2002-2005			2006				2007			2008			2009		
	No. Years Visited	Total Weeds Removed, '02 to '09	Total Miles '02 - '09	Survey Miles	# of Weeds Removed	Weed Species Removed	Survey Miles	# of Weeds Removed	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed
3040595	3	370	4	1	370	CIVU		-	-		0	0		3	1	SEJA	0	0	
3040595	3	3	4	3	3	SEJA		-	-		0	0		1	1	GERO	0	0	
3040200	1		0.02	0			0.02	-	-		0	0		0	0		0	0	
3040115	2	-	1.2	0.7	-		0.5	95	0.1	GERO	0	0		0	0		0	0	
3040100	2	-	5.1	0.5	-		2.3	8	0.3	SEJA CYSC4	2.3	0		0	0		0	0	
3040100	1	-	1.8	1.8	-			-	-		0	0		0	0		0	0	
3040025	3	1	0.5	0.4	1	RUDI2	0.1	-	-		0	0		0	0		0	0	
3040012	1		0.31	0			0.31	2	0.1	CYSC4	0	0		0	0		0	0	
3040011	2	-	0.77	0.7	-		0.07	-	-		0	0		0	0		0	0	
3040 st 15888	1		0.12	0			0.12	-	-		0	0		0	0		0	0	
3040 st 17000	1		0.02	0			0.02	-	-		0	0		0	0		0	0	
3040000	7	-	73.1	16.5	-		22.6	255	1.3	CYSC4 SEJA	18	8.4		8	2	CYSC4 SEJA	8	1	CYSC4
3040000	5	-	36.5	25.5	-			-	-		0	0		6	5	GERO SEJA LALA4 CYSC4 CIVU CIAR4	5	3	GERO CIAR
3040000	6	35,136	50.8	28.8	35,136	SEJA CYSC4 GERO		-	-		0	0		12	3	SEJA CYSC4 CIVU CIAR4 LALA4 CEDE5 GERO	10	1	LALA4
30-200	1		16	0							16	16.6	GERO LALA4 CIVU	0	0		0	0	

ROAD	Totals 2002-2009			2002-2005			2006				2007			2008			2009		
	No. Years Visited	Total Weeds Removed, '02 to '09	Total Miles '02 - '09	Survey Miles	# of Weeds Removed	Weed Species Removed	Survey Miles	# of Weeds Removed	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed
30-250	1		7.6	0							7.6	2.66		0	0		0	0	
3006300	1	-	4.1	4.1	-			-	-		0	0		0	0		0	0	
3006011	1	-	1.2	1.2	-			-	-		0	0		0	0		0	0	
3006000	2	-	9.8	7.8	-			-	-		0	0		0	0		2	1	CYSC4
3000401	1	-	1	1	-			-	-		0	0		0	0		0	0	
3000400	1	-	2.2	2.2	-			-	-		0	0		0	0		0	0	
3000400	1	-	2.3	2.3	-			-	-		0	0		0	0		0	0	
3000395	1	-	0.2	0.2	-			-	-		0	0		0	0		0	0	
3000300	1	-	3.5	3.5	-			-	-		0	0		0	0		0	0	
3000260	1	-	0.7	0.7	-			-	-		0	0		0	0		0	0	
3000250	2	-	9.45	3.9	-		5.55	10	1.2	CYSC4	0	0		0	0		0	0	
3000220	1	-	2.8	2.8	-			-	-		0	0		0	0		0	0	
3000215	3	-	4.6	0.6	-		3	-	-		0	0		0	0		1	2	GERO
3000200	2	-	3	3	-			-	-		0	0		0	0		0	0	
3000200	5	-	46.7	6	-		26.7	6	0.2	SEJA	0	0		12	7	CYSC4 GERO LALA4	2	3	GERO
3000200	2	-	7	7	-			-	-		0	0		0	0		0	0	
3000011	1	-	0.7	0.7	-			-	-		0	0		0	0		0	0	
3000000	5	-	49.26	2.86	-		32.4	553	1	CYSC4	0	0		7	7	CYSC4 SEJA GERO	7	3	CYSC4 SEJA
3000000	4	14,745	32.5	22.5	14,745	GERO RULA CYSC4 SEJA		-	-		0	0		10	9	SEJA CIVU CIAR4 CYSC4	0	0	

ROAD	Totals 2002-2009			2002-2005			2006				2007			2008			2009		
	No. Years Visited	Total Weeds Removed, '02 to '09	Total Miles '02 - '09	Survey Miles	# of Weeds Removed	Weed Species Removed	Survey Miles	# of Weeds Removed	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed
3000000	4	867,800	48.9	33.9	867,800	CYSC4 GERO CIVU		-	-		0	0		15	13	LALA4 CIVU CIAR4 CYSC4 CEDE5 GERO	0	0	
2978085	2	-	1.1	1.1	-			-	-		0	0		0	0		0	0	
2978040	2	-	0.3	0.3	-			-	-		0	0		0	0		0	0	
2978035	2	-	0.1	0.1	-			-	-		0	0		0	0		0	0	
2978030	2	-	0.6	0.6	-			-	-		0	0		0	0		0	0	
2978030	2	-	0.7	0.7	-			-	-		0	0		0	0		0	0	
2978025	2	-	0.3	0.3	-			-	-		0	0		0	0		0	0	
2978025	2	-	0.8	0.8	-			-	-		0	0		0	0		0	0	
2978015	2	18	1.6	1.6	18	CYSC4		-	-		0	0		0	0		0	0	
2978011	2	-	0.4	0.4	-			-	-		0	0		0	0		0	0	
2978000	2	3,604	4.7	4.7	3,604	CYSC4 SEJA		-	-		0	0		0	0		0	0	
2932070	1	12	0.9	0.9	12	CYSC4		-	-		0	0		0	0		0	0	
2932050	1	-	0.3	0.3	-			-	-		0	0		0	0		0	0	
2932040	1	-	0.4	0.4	-			-	-		0	0		0	0		0	0	
2932035	1	-	0.2	0.2	-			-	-		0	0		0	0		0	0	
2932031	1	-	0.5	0.5	-			-	-		0	0		0	0		0	0	
2932030	3	-	2.4	1.3	-		0.1	-	-		0	0		1	0.1	CYSC4	0	0	
2932000	5	1,970	25.8	11.4	2,010	LEVU CYSC4	3.2	143	0.3	CYSC 4	3.2	0		8	8.5	CYSC4 SEJA GERO	0	0	
2931200	1	-	2.5	2.5	-			-	-		0	0		0	0		0	0	
2931190	1	-	1.7	1.7	-			-	-		0	0		0	0		0	0	
2931000	1	1	11.9	11.9	1	SEJA		-	-		0	0		0	0		0	0	

ROAD	Totals 2002-2009			2002-2005			2006				2007			2008			2009		
	No. Years Visited	Total Weeds Removed, '02 to '09	Total Miles '02 - '09	Survey Miles	# of Weeds Removed	Weed Species Removed	Survey Miles	# of Weeds Removed	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed
2929070	3	525	8.8	2.9	525	GERO RULA CYSC4		-	-		2.9	0		0	0		3	2	GERO
2929000	3	-	7.4	2.2	-			-	-		2.2	0		0	0		3	1	HIAU GERO CIVU CYSC4
2929000	2	-	6.2	3.1	-			-	-		3.1	0		0	0		0	0	
2929000	2	-	8.8	4.4	-			-	-		4.4	0		0	0		0	0	
2923100	1		0.2	0			0.2	-	-		0	0		0	0		0	0	
2923077	1		15.6	0							15.6	2.1 5	CYSC4 SEJA	0	0		0	0	
2923070	3	2	13.2	5.2	2	SEJA		-	-		6.4	8	CIVU HYPE GERO SEJA CYSC4	0	0		1.6	0. 6	CIAR RUDI2
2923060	2		3.8	0			0.8	-	-		0	0		0	0		3	0. 2	CYSC4 CIAR GERO
2923000	5	106	67.8	27.4	106	SEJA CIAR4 HIAU CYSC4	13.7	1,328	0.5	SEJA CYSC 4	13.7	0		8	3.5	CYSC4 GERO	5	0. 5	GERO
2922000	3	-	32.2	12.6	-			-	-		12.6	0.1	GERO	0	0		7	4. 1	GERO CYSC4
2920210	1	-	0.2	0.2	-			-	-		0	0		0	0		0	0	
2920020	1	-	1.4	1.4	-			-	-		0	0		0	0		0	0	
2920000	1	-	1.4	1.4	-			-	-		0	0		0	0		0	0	
2920000	1	-	1.8	1.8	-			-	-		0	0		0	0		0	0	

ROAD	Totals 2002-2009			2002-2005			2006				2007			2008			2009		
	No. Years Visited	Total Weeds Removed, '02 to '09	Total Miles '02 - '09	Survey Miles	# of Weeds Removed	Weed Species Removed	Survey Miles	# of Weeds Removed	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed
2920000	1	-	5.7	5.7	-			-	-		0	0		0	0		0	0	
2918110	2	-	1.8	0.8	-			-	-		0	0		0	0		1	1	CYSC4 DIGIT LEVU LALA4
2918100	2	-	6.3	3.3	-			-	-		0	0		0	0		3	1	CYSC4 DIGIT LEVU LALA4
2918000	2	-	18	9	-			-	-		0	0		0	0		9	1.5	CYSC4 DIGIT LEVU LALA4
2918000	2	2,315	11	11	2,315	SEJA CYSC4		-	-		0	0		0	0		0	0	
2912060	2	3	2.8	2.8	3	SEJA		-	-		0	0		0	0		0	0	
2903000	1	78	6.8	6.8	78	SEJA CYSC4		-	-		0	0		0	0		0	0	
2902375	1	-	0.8	0.8	-			-	-		0	0		0	0		0	0	
2902300	1	-	0.6	0.6	-			-	-		0	0		0	0		0	0	
2902000	3	2,500	1.11	1.1	2,500	CYSC4	0.01	1,627	0.2	CYSC 4	0	0		0	0		0	0	
2902000	1	48	1.8	1.8	48	SEJA CYSC4		-	-		0	0		0	0		0	0	
2902000	1	-	2.5	2.5	-			-	-		0	0		0	0		0	0	
2900992	1		0.5														0.5	0.1	GERO
2900990	3	5,300	4.4	2.4	5,300	CYSC4 GERO		-	-		0	0		0	0		2	0.4	GERO
2900950	1	-	0.1	0.1	-			-	-		0	0		0	0		0	0	
2900650	1	-	1.2	1.2	-			-	-		0	0		0	0		0	0	
2900540	1	-	2	2	-			-	-		0	0		0	0		0	0	

ROAD	Totals 2002-2009			2002-2005			2006				2007			2008			2009		
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2900200	2	54	0.7	0.7	54	SEJA CYSC4		-	-		0	0		0	0		0	0	
2900070	1	-	0.4	0.4	-			-	-		0	0		0	0		0	0	
2900070	1	-	2.3	2.3	-			-	-		0	0		0	0		0	0	
2900015	2	-	0.3	0.1	-			-	-		0.2	4	CYSC4	0.5	0.5	CYSC4 RUDI2 SEJA GERO	0	0	
2900000	3	-	3.4	3.4	-									0	0		0	0	
2900000	3	-	3.7	3.7	-									0	0		0	0	
2900000	4	1,074	21.9	13.9	1,074	CYSC4 GERO		-	-		0	0		5	2.5	CYSC4 SEJA CIVU	3	1	SEJA
2900000	4	595,386	35.8	22.6	595,386	CYSC4 HIAU GERO SEJA	4.6	420	0.3	SEJA GERO HIAU	4.6	0.2	HIAU SEJA	1	0.1	HIAU	3	0.2	HIAU GERO
2900000	6	52,092	32.51	24	52,092	POSA4 CYSC4 SEJA CIAR4 GERO	0.01	15,253	2	CYSC4 SEJA	0.5	0.1	SEJA	4	2	CYSC4 RUDI2 LALA4 HYPE	4	2	CYSC4
2880050	7	247,264	2.1	0.3	247,264	GERO	0.3	7,740	0.5	GERO	0	0		0.5	5	GERO	1	18	GERO
2880000	6	8,700	24.84	3.62	8,700	GERO SEJA	13	1,223	0.3	GERO	4.2	4	CEDE5 SEJA	4	1.1	SEJA CYSC4 GERO CIAR4	0	0	
2878123	2	-	0.4	0.2	-			-	-		0.2	0		0	0		0	0	
2878120	3	2,170	3.1	1.05	2,170	CYSC4		-	-		1.05	0		0	0		1	2	LALA4

ROAD	Totals 2002-2009			2002-2005			2006				2007			2008			2009		
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2878110	2	-	1.9	0.9	-			-	-		0	0		0	0		1	1	LALA4
2878109	1	-	0.27	0.27	-			-	-		0	0		0	0		0	0	
2878108	1	-	0.13	0.13	-			-	-		0	0		0	0		0	0	
2878102	1	-	0.4	0.4	-			-	-		0	0		0	0		0	0	
2878100	2	-	2.59	1.59	-			-	-		0	0		0	0		1	3	LALA4
2878085	2	-	1.9	0.9	-			-	-		0	0		0	0		1	1	CIAR CIVU GERO
2878080	2	-	2.4	1.4	-			-	-		0	0		0	0		1	5	LALA4 CIAR
2878060	2	127	1.4	0.4	127	CYSC4		-	-		0	0		0	0		1	5	LALA4 CIAR
2878050	1	-	0.6	0.6	-			-	-		0	0		0	0		0	0	
2878000	5	1,344	24.13	4.06	1,344	CYSC4	0.01	1,627	0.2	CYSC4	4.06	0		8	9	LALA4 CIAR4 CEDE5 CYSC4 GERO SEJA	8	4	LALA4
2877100	1	-	0.3	0.3	-			-	-		0	0		0	0		0	0	
2877052	1	-	0.29	0.29	-			-	-		0	0		0	0		0	0	
2877050	1	-	1	1	-			-	-		0	0		0	0		0	0	
2877050	1	-	1.65	1.65	-			-	-		0	0		0	0		0	0	
2877040	1	-	0.51	0.51	-			-	-		0	0		0	0		0	0	

ROAD	Totals 2002-2009			2002-2005			2006				2007			2008			2009		
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2877040	2	-	1.78	0.78	-			-	-		0	0		0	0		1	0.2	SEJA CEDE5 CIAR CIVU
2877000	2	-	14.6	4.6	-			-	-		0	0		10	12	CEDE5 LALA4 CIAR4 CIVU CYSC4	10	1	SEJA CEDE5 CIAR CIVU
2875090	1	-	0.1	0.1	-			-	-		0	0		0	0		0	0	
2875070	3	-	3.6	2	-		0.6	-	-		0	0		0	0		1	0.5	CIAR CYSC4
2875020	2	6	1.5	0.5	6	CYSC4		-	-		0	0		0	0		1	0.5	CIAR CYSC4 POBO1 0
2875000	5	-	25	2.3	-		5.9	238	0.4	CEJA	5.9	5	CEDE5	5.9	2.5	CEDE5 LALA4 CIVU CIAR4	5	1.8	CEBI2
2875000	2	30	9.4	3.6	30	CEJA		-	-		5.8	1.5	CEDE5	0	0		0	0	
2870270	2		3.5	0			3.5	-	0.28	CIAR4 CIVU	0	3.2	CIVU CEDE5 SEJA HYPE	0	0		0	0	
2870250	1			0							0	1.5	CEDE5 CEBI2	0	0		0	0	
2870230	4	18	3.97	1.41	18	SEJA	2.56	20	0.3	CIAR4 CIVU HYPE	0	0.4	CIVU CIAR4 GERO	0	0		0	0	
2870150	2		1.6	0			0.6	-	-		0	0		0	0		1	3	LALA4
2870130	1		0.7	0			0.7	1	0.1	CYSC	0	0		0	0		0	0	

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										4									
2870110	1	729	0.3	0.3	729	CYSC4		-	-		0	0		0	0		0	0	
2870059	5	19,529	3.36	1.9 2	19,529	CIAR4 CIVU SEJA CEJA CYSC4 GERO	0.96	-	-		0.96	0		0	0		0	0	
2870058	5	-	9.8	1	-		1.6	-	2.5 5	GERO CIAR4 PHAR 3	3.6	5	PHAR3 CIAR4 CIVU GERO	0	0		3.6	1.5	PHAR3 CIAR4 CIVU GERO
2870057	2		4.8	0							2.4	1.5	CIAR4 CIVU HYPE	0	0		2.4	2.5	PHAR3 CIAR4 CIVU GERO
2870056	6	14	4.8	1.4	14	CEJA SEJA	0.7	-	0.1		0.7	2.9	SEJA CIVU CEDE5 CYSC4	1	5	CIAR4 CIVU	1	1	CIVU CIAR4 CEDE 5
2870054	2		1.5	0							0.5	3	CEDE5	0	0		1	1	CIAR4 CIVU
2870053	3		2	0							0.5	0.2	CEDE5	0.5	3	CIAR4 CIVU	1	1	CIAR4 CIVU
2870050	7	110	27.9	7.9	110	SEJA HYPE	7.8	-	0.8	CEJA CYSC4 GERO CIAR4 LALA4 CIVU	2.4	0.5	SEJA	7.8	8	GERO PHAR4 CIAR4 CIVU RUDI2 LEVU	2	5	CIAR4 CIVU

ROAD	Totals 2002-2009			2002-2005			2006				2007			2008			2009		
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2870030	5	78	8.8	5.1	78	CEJA CYSC4 SEJA		-	-		1.7	2	CEDE5 SEJA	0	0		2	1.5	CEDE5 CIAR4 CYSC4 CIVU
2870000	7	1,963	397.8	29.7	1,963	SEJA	113	1,890	3.13	CEJA SEJA CYSC4	113	9.4	CIAR4 CIVU GERO SEJA HYPE LEVU CEDE5 CYSC4	113	7.1	CYSC4 CEDE5 LALA4 CIVU CIAR4 SEJA	30	5.2	CYSC4 LALA4 CIVU CIAR4 SEJA
2860120	1	-	1.6	1.6	-			-	-		0	0		0	0		0	0	
2860011	2	2,708	0.4	0.4	2,708	SEJA GERO		-	-		0	0		0	0		0	0	
2860000	4	54,000	49.45	49.5	54,000	GERO CIVU		-	-		0	0		0	0		0	0	
2855100	2	-	2.4	2.4	-			-	-		0	0		0	0		0	0	
2855070	6	103	5.9	0.9	103	CEBI2 RULA	1.5	1,976	0.52	GERO SEJA CEBI2	0	0		1.5	4	SEJA CYSC4 CEBI2 CEDE5	1.5	1	CEBI2
2855070	2	3,418	2.6	2.6	3,418	CEBI2 GERO SEJA CYSC4 CIAR4		-	-		0	0		0	0		0	0	
2855032	2	1	1.6	1.6	1	RULA		-	-		0	0		0	0		0	0	
2855030	2	19,200	5.4	5.4	19,200	SEJA		-	-		0	0		0	0		0	0	

ROAD	Totals 2002-2009			2002-2005			2006				2007			2008			2009		
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2855000	5	51,701	20.9	5.4	51,701	CEBI2 CYSC4 CIVU GERO SEJA CEJA	4.5	246	0.4	SEJA	0	0		8	2	SEJA	3	0. 2	SEJA
2852150	2	25	1.29	1.2 9	25	CYSC4		-	-		0	0		0	0		0	0	
2852090	2	1,550	0.4	10. 3	3,362	SEJA GERO CYSC4 CIAR4		-	-		0	0		0	0		0	0	
2852000	4	45,331	7.41	5.4	45,331	SEJA CEJA RULA GERO CIAR4	0.01	2,274	0.3	SEJA	0	0		2	1	CEDE5	0	0	
2851090	2	-	1.2	0.6	-			-	-		0	0		0	0		0	0	
2851080	2	1,660	3.2	3.2	1,660	TAVU CYSC4 SEJA		-	-		0	0		0	0		0	0	
2851000	3	4,750	8.21	8.2	4,750	SEJA	0.01	5,340	0.6	SEJA	0	0		0	0		0	0	
2850124	1	-	0.2	0.2	-			-	-		0	0		0	0		0	0	
2850120	2	-	2.81	2.8	-		0.01	1,400	0.2	CYSC 4	0	0		0	0		0	0	
2850093	1	-	0.1	0.1	-			-	-		0	0		0	0		0	0	
2850090	1	-	1.02	1.0 2	-			-	-		0	0		0	0		0	0	
2850010	3	12	3.21	3.2	12	RULA	0.01	5,340	0.9	SEJA	0	0		0	0		0	0	
2850000	4	61,544	22.2	22.	61,54	GERO	0.01	5,790	0.6	SEJA	0	0		0	0		0	0	

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			1	2	4	SEJA CYSC4 RULA													
2845200	1	-	0.28	0.28	-			-	-		0	0		0	0		0	0	
2845150	1	-	0.2	0.2	-			-	-		0	0		0	0		0	0	
2845120	2	84	3.4	1.7	84	SEJA CYSC4		-	-		1.7	1.9	CIVU SEJA CYSC4	0	0		0	0	
2845090	2	12	1	1	12	SEJA CYSC4		-	-		0	0		0	0		0	0	
2845073	2	-	2.4	0.9	-			-	-		0	0		0	0		1.5	2	CYSC4
2845070	3	1,860	3.2	5.6	1,860	CYSC4		-	-		1.6	0		4	4	CEDE5 CYSC4 SEJA CIAR4 CIVU	0	0	
2845040	1	160	0.3	0.3	160	SEJA		-	-		0	0		0	0		0	0	
2845000	4	5,204	13.81	4.6	5,204	SEJA	0.01	7,174	0.7	SEJA	4.6	0		4.6	0		0	0	
2840150	1	1	0.64	0.64	1	SEJA		-	-		0	0		0	0		0	0	
2840130	1	-	1.1	1.1	-			-	-		0	0		0	0		0	0	
2840120	1	-	0.73	0.73	-			-	-		0	0		0	0		0	0	
2840120	1	-	1.27	1.27	-			-	-		0	0		0	0		0	0	
2840084	1	-	0.25	0.25	-			-	-		0	0		0	0		0	0	
2840080	1	-	0.73	0.73	-			-	-		0	0		0	0		0	0	
2840080	1	1	0.89	0.89	1	RULA		-	-		0	0		0	0		0	0	

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2840071	2	36	2	2	36	SEJA BORAG		-	-		0	0		0	0		0	0	
2840070	2	5,753	3.54	3.54	5,753	SEJA CYSC4		-	-		0	0		0	0		0	0	
2840034	1	-	1.44	1.44	-			-	-		0	0		0	0		0	0	
2840030	1	-	3.04	3.04	-			-	-		0	0		0	0		0	0	
2840000	4	10,010	16.2	10.8	10,010	CIAR4 SEJA CYSC4		-	-		5.4	0		5.4	0		0	0	
2830034	1	-	0.33	0.33	-			-	-		0	0		0	0		0	0	
2830032	1	-	1	1	-			-	-		0	0		0	0		0	0	
2830030	1	-	1.8	1.8	-			-	-		0	0		0	0		0	0	
2830000	4	1,250	20.35	9.9	1,250	CEBI2		-	-		0	0		5	0		5.5	0	SEJA
2820000	3	-	8.01	4	-		0.01	2,274	0.2	SEJA	0	0		4	0		4	2	SEJA CIAR CEDE5
2810070	1	-	0.61	0.61	-			-	-		0	0		0	0		0	0	
2810000	2	10,190	8.02	8.02	10,190	SEJA CYSC4		-	-		0	0		0	0		0	0	
2800351	3		2.4	0							1.2	1	CEDE5 CYSC4	1.2	1	CEDE5	1.2	1	CEDE5
2800350	1		3														3	4	CEDE5 CIAR CIVU
2800310	4	2,155	0.6	0.5	2,155	CYSC4	0.1	2,500	0.2	CYSC4	0	0		0	0		0	0	
2800290	2	1	0.3	0.3	1	SEJA		-	-		0	0		0	0		0	0	

ROAD	Totals 2002-2009			2002-2005			2006				2007			2008			2009		
	No. Years Visited	Total Weeds Removed, '02 to '09	Total Miles '02 - '09	Survey Miles	# of Weeds Removed	Weed Species Removed	Survey Miles	# of Weeds Removed	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed
						CYSC4													
2800270	1	310	0.47	0.47	310	SEJA CYSC4		-	-		0	0		0	0		0	0	
2800262	1	-	0.6	0.6	-			-	-		0	0		0	0		0	0	
2800260	1	-	1.2	1.2	-			-	-		0	0		0	0		0	0	
2800250	3	7	4.6	2.2	7	SEJA	2.4	85	0.1	SEJA	0	0		0	0		0	0	
2800240	1	-	0.8	0.8	-			-	-		0	0		0	0		0	0	
2800220	1	-	1.2	1.2	-			-	-		0	0		0	0		0	0	
2800210	1	-	0.4	0.4	-			-	-		0	0		0	0		0	0	
2800145	1	-	0.3	0.3	-			-	-		0	0		0	0		0	0	
2800132	2	-	1.2	0	-		0.6	463	0.1	CEB2 CEJA	0.6	0		0	0		0	0	
2800130	1		1.6	0							1.6	1.2	SEJA CEB2	0	0		0	0	
2800060	1	-	1.1	1.1	-			-	-		0	0		0	0		0	0	
2800010	3	-	3.6	1.1				10	0.1		0	0		2	1	GERO CIAR4 LALA4	0.5	5	GERO CIAR4 CIVU ILAQ80
2800000	8	60,883	175.61	58	60,883	SEJA CIAR4 CYSC4 GERO CIVU CEJA	30.9	9,438	1	SEJA CYSC4	30.9	52.3	SEJA CIVU CIAR4 DIPU CEDE5	31	26	CEDE5 CEB2 CIAR4 CIVU GERO LALA4 CYSC4 ILAQ80 SEJA	25	5.5	SEJA LALA4 CIAR CIVU CYSC4
2750020	1	-	1.5	1.5	-			-	-		0	0		0	0		0	0	

ROAD	Totals 2002-2009			2002-2005			2006				2007			2008			2009		
	No. Years Visited	Total Weeds Removed, '02 to '09	Total Miles '02 - '09	Survey Miles	# of Weeds Removed	Weed Species Removed	Survey Miles	# of Weeds Removed	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed
2750000	2	-	9.9	4.9	-			-	-		0	0		0	0		5	8	SEJA LALA4 CIAR CIVU CYSC4
2740110	1		1.5														1.5	1	SEJA CYSC4 CIAR4 CIVU CEDE5
2740075	2	-	0.97	0.4 7	-			-	-		0	0		0	0		0.5	1	SEJA CYSC 4 CIAR4 CIVU CEDE5
2740072	4	-	1.7	0.4	-		0.4	200	0.1	CEBI2	0.4	0		0	0		0.5	1	SEJA CYSC4 CIAR4 CIVU CEDE 5
2740070	3	-	7	3.0 5	-		0.95	-	-		0	0		0	0		3	1	SEJA CYSC4 CIAR4 CIVU CEDE5
2740060	4	-	17.4 8	5.8	-		2.84	33	0.2	CYSC 4	2.84	0		0	0		6	1	SEJA CYSC4 CIAR4 CIVU CEDE5
2740000	5	-	36.1 2	13. 7	-		6.72	-	-		13.7	1.6 1	CYSC4	0	0		12	2	SEJA CYSC4 CIAR4

ROAD	Totals 2002-2009			2002-2005			2006				2007			2008			2009		
	No. Years Visited	Total Weeds Removed, '02 to '09	Total Miles '02 - '09	Survey Miles	# of Weeds Removed	Weed Species Removed	Survey Miles	# of Weeds Removed	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed
												CEBI2 SEJA							CIVU CEDE5
2730300	4	934	2.6	1.1	934	CYSC4		-	-		0	0		0.5	3	CYSC4 LALA	1	5.3	CYSC4 RUDI2 PORE SEJA GERO CIAR
2730200	6	19,621	6.1	5.1	19,621	GERO SEJA CIVU		-	-		0	0		0.5	3	GERO	0.5	1	GERO
2730100	3	35	0.4	0.4	35	SEJA		-	-		0	0		0	0		0	0	
2730020	3	-	1.2	1.2	-			-	-		0	0		0	0		0	0	
2730011	1	51	0.9	0.9	51	GERO		-	-		0	0		0	0		0	0	
2730000	4	146,400	15.2	15.2	146,400	SEJA CYSC4 TAVU		-	-		0	0		0	0		0	0	
2700330	1		1	0			1	-	-		0	0		0	0		0	0	
2700140	1	-	1.2	1.2	-			-	-		0	0		0	0		0	0	
2700100	1	-	4.6	4.6	-			-	-		0	0		0	0		0	0	
2700090	1	-	1.99	1.99	-			-	-		0	0		0	0		0	0	
2700080	1	0.5															0.5	2	GERO SEJA LALA4 CYSC4 CEJA CIAR4 CIVU

ROAD	Totals 2002-2009			2002-2005			2006				2007			2008			2009		
	No. Years Visited	Total Weeds Removed, '02 to '09	Total Miles '02 - '09	Survey Miles	# of Weeds Removed	Weed Species Removed	Survey Miles	# of Weeds Removed	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed
2700040	1	3.7															3.7	11	GERO SEJA CYSC4 HIAU BOOF ILAQ80 PRLA5 CIVU LAGA2 PHAR HEHE
2700000	7	4,201	56.8 4	34. 8	4,201	TAVU SEJA	1.84	-	-		11.6	0.0 5	GERO	0	0		8.6	15	GERO SEJA LALA4 CYSC4 CEJA CIAR4 CIVU
2650090	1	-	1.68	1.6 8	-			-	-		0	0		0	0		0	0	
2650050	2	-	0.9	0.9	-			-	-		0	0		0	0		0	0	
2650000	2	2	15	15	2	ARM12		-	-		0	0		0	0		0	0	
2620056	2	24	0.76	0.7 6	24	CEJA		-	-		0	0		0	0		0	0	
2620053	2	-	1.3	1.3	-			-	-		0	0		0	0		0	0	
2620051	2	-	0.89	0.8 9	-			-	-		0	0		0	0		0	0	
2620050	2	-	2.8	2.8	-			-	-		0	0		0	0		0	0	
2620043	1	-	0.7	0.7	-			-	-		0	0		0	0		0	0	
2620030	1	-	9.7	9.7	-			-	-		0	0		0	0		0	0	
2620000	4	39,464	46.4 8	34. 9	39,46 4	SEJA CIVU CYSC4		-	-		0	0		12	0		0	0	

ROAD	Totals 2002-2009			2002-2005			2006				2007			2008			2009		
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						GERO RULA													
2610200	7	3,454	10.5	8	3,454	CYSC4 SEJA HEHE RUDI GERO	2.5	222	0.2	CYSC 4	0	0		1.6	3	CYSC4 SEJA	1.6	2	CYSC4
2610050	1		1														1	1	GERO SEJA CIAR4 CYSC4
2610040	3	3,000	1.4	0.4	3,000	SEJA		-	-		0	0		0	0		1	2	GERO SEJA CIAR4 CYSC4
2610012	1		0.85				0.85	397	0.2	GERO	0	0		0	0		0	0	
2610000	2	50	0.5	0.5	50	CYSC4		-	-		0	0		0	0		0	0	
2610000	7	6,520	51.6	16.4	6,520	GERO SEJA CYSC4 RULA CIVU CIAR4	3.2	2	0.1	CEJA	0	0		16	0.5	SEJA CYSC4	16	17	GERO SEJA CIAR4 CYSC4 POBO 10
2530000	2	-	5.7	5.7	-			-	-		0	0		0	0		0	0	
2527000	1	-	1.2	1.2	-			-	-		0	0		0	0		0	0	
2510070	4	1,600	2.1	0.1	1,600	GERO	1	-	0.8 2	GERO	0	0		0	0		1	6. 5	GERO
2510065	1		0.15	0			0.15	-	-		0	0		0	0		0	0	
2510012	1		1.1	0			1.1	-	-		0	0		0	0		0	0	

ROAD	Totals 2002-2009			2002-2005			2006				2007			2008			2009		
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2510000	4	-	20.6	0.2	-			-	-		0.4	8	GERO HYPE CIAR4 CIVU RUDI2 RULA SEJA	10	2	SEJA	10	6.5	GERO SEJA
2510000	3	-	54.76	1.8	-		33	8	0.53	CEJA CYSC4	0	0		20	3	GERO	0	0	
2510000	1	45	4.6	4.6	45	SEJA		-	-		0	0		0	0		0	0	
2500000	3	-	19.2	0.2	-			-	-		0	0		16	0.8	POBO10	3	3	GERO SEJA CIAR4 CYSC4 POBO10
2500000	1	-	0.98	0.98	-			-	-		0	0		0	0		0	0	
2500000	1	-	1.2	1.2	-			-	-		0	0		0	0		0	0	
2500000	1	-	1.32	1.32	-			-	-		0	0		0	0		0	0	
2500000	1	-	1.46	1.46	-			-	-		0	0		0	0		0	0	
2500000	1	-	4.16	4.16	-			-	-		0	0		0	0		0	0	
2500000	1	-	4.54	4.54	-			-	-		0	0		0	0		0	0	
2480000	1	-	0.91	0.91	-			-	-		0	0		0	0		0	0	
2480000	1	-	1.54	1.54	-			-	-		0	0		0	0		0	0	
2480000	1	-	5.27	5.27	-			-	-		0	0		0	0		0	0	
2471022	1	-	0.42	0.4	-			-	-		0	0		0	0		0	0	

ROAD	Totals 2002-2009			2002-2005			2006				2007			2008			2009		
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				2															
2471020	1	-	0.88	0.88	-			-	-		0	0		0	0		0	0	
2471013	1	-	2.6	2.6	-			-	-		0	0		0	0		0	0	
2471000	1	-	0.15	0.15	-			-	-		0	0		0	0		0	0	
2471000	1	-	0.23	0.23	-			-	-		0	0		0	0		0	0	
2471000	1	-	0.7	0.7	-			-	-		0	0		0	0		0	0	
2471000	1	-	0.76	0.76	-			-	-		0	0		0	0		0	0	
2471000	1	-	1.97	1.97	-			-	-		0	0		0	0		0	0	
2469022	1	-	0.59	0.59	-			-	-		0	0		0	0		0	0	
2469022	1	-	0.63	0.63	-			-	-		0	0		0	0		0	0	
2469000	1	-	0.1	0.1	-			-	-		0	0		0	0		0	0	
2469000	1	-	0.54	0.54	-			-	-		0	0		0	0		0	0	
2469000	1	-	0.63	0.63	-			-	-		0	0		0	0		0	0	
2469000	1	-	0.67	0.67	-			-	-		0	0		0	0		0	0	
2469000	1	-	0.8	0.8	-			-	-		0	0		0	0		0	0	
2469000	1	-	1.46	1.46	-			-	-		0	0		0	0		0	0	
2469000	1	-	1.96	1.96	-			-	-		0	0		0	0		0	0	
2464000	1	-	0.15	0.15	-			-	-		0	0		0	0		0	0	
2464000	1	-	0.65	0.65	-			-	-		0	0		0	0		0	0	
2464000	1	-	0.9	0.9	-			-	-		0	0		0	0		0	0	
2464000	1	-	5	5	-			-	-		0	0		0	0		0	0	

ROAD	Totals 2002-2009			2002-2005			2006				2007			2008			2009		
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2451115	1	-	0.32	0.32	-			-	-		0	0		0	0		0	0	
2451100	1	-	1.5	1.5	-			-	-		0	0		0	0		0	0	
2451100	1	-	4.7	4.7	-			-	-		0	0		0	0		0	0	
2451020	1	-	0.4	0.4	-			-	-		0	0		0	0		0	0	
2451017	1	-	0.3	0.3	-			-	-		0	0		0	0		0	0	
2451000	1	-	0.03	0.03	-			-	-		0	0		0	0		0	0	
2451000	1	-	0.67	0.67	-			-	-		0	0		0	0		0	0	
2451000	1	-	0.84	0.84	-			-	-		0	0		0	0		0	0	
2451000	1	-	0.9	0.9	-			-	-		0	0		0	0		0	0	
2451000	1	-	1.2	1.2	-			-	-		0	0		0	0		0	0	
2451000	1	-	1.42	1.42	-			-	-		0	0		0	0		0	0	
2451000	1	-	1.59	1.59	-			-	-		0	0		0	0		0	0	
2441200	1	-	3.47	3.47	-			-	-		0	0		0	0		0	0	
2421000	1	-	0.13	0.13	-			-	-		0	0		0	0		0	0	
2421000	1	-	0.19	0.19	-			-	-		0	0		0	0		0	0	
2421000	1	-	0.19	0.19	-			-	-		0	0		0	0		0	0	
2421000	1	-	1.95	1.95	-			-	-		0	0		0	0		0	0	
2421000	1	-	2.08	2.08	-			-	-		0	0		0	0		0	0	
2419014	1	-	1	1	-			-	-		0	0		0	0		0	0	
2419000	1	-	0.31	0.31	-			-	-		0	0		0	0		0	0	
2419000	1	-	1.24	1.24	-			-	-		0	0		0	0		0	0	

ROAD	Totals 2002-2009			2002-2005			2006				2007			2008			2009		
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2419000	1	-	2.53	2.5 3	-			-	-		0	0		0	0		0	0	
2419000	1	-	2.66	2.6 6	-			-	-		0	0		0	0		0	0	
2419000	1	-	3.44	3.4 4	-			-	-		0	0		0	0		0	0	
2401100	1	-	0.12	0.1 2	-			-	-		0	0		0	0		0	0	
2401033	1	-	1.08	1.0 8	-			-	-		0	0		0	0		0	0	
2401012	1	-	0.15	0.1 5	-			-	-		0	0		0	0		0	0	
2401000	1	-	0.59	0.5 9	-			-	-		0	0		0	0		0	0	
2401000	1	-	1.07	1.0 7	-			-	-		0	0		0	0		0	0	
2401000	1	-	1.21	1.2 1	-			-	-		0	0		0	0		0	0	
2401000	1	-	1.81	1.8 1	-			-	-		0	0		0	0		0	0	
2401000	1	-	1.85	1.8 5	-			-	-		0	0		0	0		0	0	
2401000	1	-	2.38	2.3 8	-			-	-		0	0		0	0		0	0	
2401000	1	-	3.19	3.1 9	-			-	-		0	0		0	0		0	0	
2361700	1	-	0.69	0.6 9	-			-	-		0	0		0	0		0	0	
2361210	1	-	2.76	2.7 6	-			-	-		0	0		0	0		0	0	
2361200	1	-	0.67	0.6 7	-			-	-		0	0		0	0		0	0	
2361000	1	-	0.5	0.5	-			-	-		0	0		0	0		0	0	
2361000	1	-	0.9	0.9	-			-	-		0	0		0	0		0	0	
2361000	1	-	1	1	-			-	-		0	0		0	0		0	0	
2361000	1	-	3.5	3.5	-			-	-		0	0		0	0		0	0	

ROAD	Totals 2002-2009			2002-2005			2006				2007			2008			2009		
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2353140	1	-	0.1	0.1	-			-	-		0	0		0	0		0	0	
2353140	1	-	0.3	0.3	-			-	-		0	0		0	0		0	0	
2353140	1	-	0.5	0.5	-			-	-		0	0		0	0		0	0	
2353140	1	-	0.6	0.6	-			-	-		0	0		0	0		0	0	
2353100	1	-	0.6	0.6	-			-	-		0	0		0	0		0	0	
2340088	1	-	0.96	0.96	-			-	-		0	0		0	0		0	0	
2340080	1	-	0.7	0.7	-			-	-		0	0		0	0		0	0	
2340000	1	-	0.46	0.46	-			-	-		0	0		0	0		0	0	
2340000	1	-	0.73	0.73	-			-	-		0	0		0	0		0	0	
2340000	1	-	1.11	1.11	-			-	-		0	0		0	0		0	0	
2300000	1	-	0.12	0.12	-			-	-		0	0		0	0		0	0	
2300000	1	-	0.26	0.26	-			-	-		0	0		0	0		0	0	
2300000	1	-	4.88	4.88	-			-	-		0	0		0	0		0	0	
2300000	1	-	7.47	7.47	-			-	-		0	0		0	0		0	0	
2190240	1	-	0.3	0.3	-			-	-		0	0		0	0		0	0	
2190220	1	251	0		251	POCU6 COTON		-	-		0	0		0	0		0	0	
2190200	3		40.7	0			3.5	-	0.1	POCU 6	18.6	1.6	POBO10 DIPU SEJA CIVU CYSC	19	0.1	POBO1 0	0	0	
2190170	1	-	1.59	1.59	-			-	-		0	0		0	0		0	0	

ROAD	Totals 2002-2009			2002-2005			2006				2007			2008			2009		
	No. Years Visited	Total Weeds Removed, '02 to '09	Total Miles '02 - '09	Survey Miles	# of Weeds Removed	Weed Species Removed	Survey Miles	# of Weeds Removed	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed	Survey Miles	Acres Treated	Weed Species Removed
2190000	2	-	2.98	1.49	-			-	-		1.49	0		0	0		0	0	
2190000	2	-	3.4	1.7	-			-	-		1.7	0		0	0		0	0	
2190000	2	-	4.82	2.41	-			-	-		2.41	0		0	0		0	0	
2190000	2	-	12.66	8.44	-			-	-		4.22	0		0	0		0	0	
2180000	2	-	2.52	2.52	-			-	-		0	0		0	0		0	0	
2180000	1	-	4.24	4.24	-			-	-		0	0		0	0		0	0	
2180000	1	-	4.6	4.6	-			-	-		0	0		0	0		0	0	
2170020	1	-	4.28	4.28	-			-	-		0	0		0	0		0	0	
2170000	1	-	8.24	8.24	-			-	-		0	0		0	0		0	0	
2160000	2	-	4.7	4.7	-			-	-		0	0		0	0		0	0	
2160000	2	-	11.6	11.6	-			-	-		0	0		0	0		0	0	
2140000	1	-	1.7	1.7	-			-	-		0	0		0	0		0	0	
2140000	1	-	3.1	3.1	-			-	-		0	0		0	0		0	0	
2140000	1	-	7.2	7.2	-			-	-		0	0		0	0		0	0	
2120000	1	-	1.2	1.2	-			-	-		0	0		0	0		0	0	
2100000	1	-	2.84	2.84	-			-	-		0	0		0	0		0	0	
2100000	2	-	3.4	3.4	-			-	-		0	0		0	0		0	0	
2100000	2	50	7.4	7.4	50	SEJA		-	-		0	0		0	0		0	0	
<b>TOTALS</b>		<b>2,562,778</b>	<b>1432.59</b>	<b>1162.52</b>			<b>297.62</b>	<b>77,792</b>	<b>26.68</b>		<b>368.77</b>	<b>112.06</b>		<b>422.74</b>	<b>185.95</b>		<b>298.6</b>	<b>227.33</b>	

## Appendix E: Potential Survey and Treatment Sites

Future Forest Service work should focus on FS Priority species, especially those with limited distribution in the forest.

- Treat spotted knapweed populations—these are all confined to the Dungeness and Little Quilcene watersheds and should be a priority.
- Eradicate orange hawkweed, yellow archangel, butter and eggs (yellow toadflax) and knotweeds.
- Add sulfur cinquefoil to the FS list as a number 1 priority and eradicate.
- Allow sufficient time for multiple treatments of all herb Robert sites. Inspect and treat neighboring road spurs.
- Ensure that all meadow knapweed sites are on the work plan.
- Try to include the ends of roads in projects, since these areas often harbor weeds.
- Treat all campgrounds, pits, trailheads and special use facilities such as administrative sites and water diversions.
- Identify high-priority cross-boundary projects with other public land agencies.

At the end of the 2009 season we compared shape files and tables of this year's treatments with our baseline weed survey files and tables and identified roads that still need survey or treatment. These are listed below along with some other sites that may have been overlooked.

FS Road	Note	Weed(s)
2610	Above washout—herb Robert is rampant below	
3006	Close to known herb Robert infestation	
3078	Olympic Hot Springs Road as it passes through ONF	??
3116 (to end of road)	Close to known herb Robert infestation	
2277050	"	
2610012		??
2620053 (to end of road)	Never surveyed	
2630000	Never surveyed	
2650000	MP 1.56	ARM12
2700090	Never surveyed	
2730011	Close to known herb Robert infestation	
2800250		SEJA
2800270		CYSC4 SEJA
2800290		SEJA CYSC4
2800310	Schmidt Knob	CYSC4
2800320	Close to known herb Robert infestation	
2800321	"	
2800360	"	
2820000 (to end of road)	On list for 2009 but not treated	CEDE5 at end of road
2840080	Close to known herb Robert infestation	
2840088	"	
2850090		CEDE5—untreated for several years
2851000		SEJA
2860011	East Crossing CG	GERO SEJA
2900200	Pit	CYSC4
2923070 (to end of road)	Close to known herb Robert infestation	
3000300	"	
3000400	"	
3000450	Close to known herb Robert infestation	
3068000		CEDE5 & SEJA
3068200	Off 3040, above Snider	CYSC4
3100700	Close to known herb Robert infestation	
3116200	"	

## Appendix F: Control Recommendations by Weed Species

Specific treatment recommendations for each species encountered are given in the table below. General recommendations based on plant lifecycle are listed below.



Comfrey  
*Symphaticum officinale*

- Annuals like herb Robert, particularly at campgrounds, should be treated as early in the season as possible. With herb Robert in particular it will almost certainly be necessary to repeat treatments within the season, though if seed set is prevented each time, the size of the infestation can be greatly reduced with each treatment effort.
- Early blooming perennials, such as orange and yellow hawkweed should be treated as early as possible.
- Biennials like tansy ragwort are often difficult to treat effectively with either chemical or manual treatment alone; once plants have bolted it may be most effective to pull and deadhead flowering stalks, though first year rosettes may be easier to treat chemically.
- Scotch broom and other woody shrubs can be effectively pulled early in the season before seed set and while the ground is damp; herbicide treatments will be most effective later in the summer.
- Later blooming perennials like reed canarygrass, Canada thistle, everlasting peavine, knotweeds, knapweeds, common tansy and common toadflax may be effectively treated from midsummer until fall, depending on the species and the location (altitude, aspect, etc).

### Control Recommendations Protocol:

1. These control recommendations are based on best management practices for our local forest.
2. The overall system burden of invasive plant species needs to be reduced before manual and mechanical methods become feasible in many cases.
3. Greater emphasis needs to be placed on prevention and early detection, continued surveys, early intervention, and incorporation of weed control into Forest Service projects such as road decommissioning, restoration, and routine road maintenance.
4. Effective noxious weed control depends on a combination of factors: plant biology, level of infestation, and location. These control recommendations reflect a consideration of Olympic National Forest conditions with currently available data.
5. For additional control recommendations, see [Common Control Measures for Invasive Plants of the Pacific Northwest Region](#). (A NFS publication.)

Plant Code	Common Name	Botanical Name	Control Recommendation
	knotweed species	<i>Polygonum spp.</i>	Injection with glyphosate; and/or foliar application of glyphosate
ANSY	wild chervil	<i>Anthriscus sylvestris</i>	Manual removal; spot herbicide application
ARMI2	common burdock	<i>Arctium minus</i>	Where minimal occurrence, manual removal; spot herbicide application to rosettes by early spring; or to second year growth, before budding
CEBI2	spotted knapweed	<i>Centaurea stoebe</i>	Manual removal very small sites; spot application with selective herbicide - clopyralid preferred
CEDI	diffuse knapweed	<i>Centaurea diffusa</i>	Manual removal for very small sites; foliar herbicide application - clopyralid preferred

Plant Code	Common Name	Botanical Name	Control Recommendation
CEDE5	meadow knapweed	<i>Centaurea jacea x nigra</i>	Foliar herbicide application with selective herbicide - clopyralid preferred
CIAR4	Canada thistle	<i>Cirsium arvense</i>	Manual removal has limited effectiveness, for only very early infestations; spot herbicide application with glyphosate at bud to full bloom; fall or foliar application of a selective herbicide throughout the summer, fall
CIVU	bull thistle	<i>Cirsium vulgare</i>	Where minimal occurrence, manual removal; spot herbicide application to rosettes by early spring or to second year growth, before budding
COTON	rockspray cotoneaster	<i>Cotoneaster horizontalis</i>	Manual removal; herbicide treatment only if size of infestation increases
CYSC4	Scotch broom	<i>Cytisus scoparius</i>	Manual removal for small infestations; cut stump treatments preferred for very large infestations, foliar herbicide applications possible
DACA6	wild carrot	<i>Daucus carota</i>	Manual removal; spot herbicide application
GERO	herb Robert	<i>Geranium robertianum</i>	Manual removal for small infestations; spot herbicide application where feasible;
HEHE	English ivy	<i>Hedera helix</i>	Manual removal; cut stump or foliar herbicide application
HIAU	orange hawkweed	<i>Hieracium aurantiacum</i>	Spot spray with selective herbicide in late spring or summer; - clopyralid preferred - possible manual removal for very small infestation
HYPE	St. Johnswort	<i>Hypericum perforatum</i>	Pervasive. Preventative control should be incorporated into restoration and maintenance projects. Herbicide control options are available should this species otherwise become a resource management issue.
ILAQ80	English holly	<i>Ilex aquifolium</i>	Manual removal; cut stump or foliar herbicide treatment
LALA4	everlasting peavine	<i>Lathyrus latifolius</i>	Foliar herbicide application - clopyralid preferred
LEVU	oxeye daisy	<i>Leucanthemum vulgare</i>	Pervasive. Preventative control should be incorporated into restoration and maintenance projects. Herbicide control options are available should this species otherwise become a resource management issue.
LIVU2	common toadflax	<i>Linaria vulgaris</i>	Spot herbicide application
LYSA2	purple loosestrife	<i>Lythrum salicaria</i>	There is only one known site: manual removal should be possible, however herbicide application is available (potential aquatic application)
PHAR3	reed canary grass	<i>Phalaris arundinacea</i>	Glyphosate in mid-June and mid-Sept.
RUDI	Himalayan blackberry	<i>Rubus discolor</i>	Treat cut stump with glyphosate or foliar application as appropriate to site
RULA	evergreen blackberry	<i>Rubus laciniatus</i>	Cut stump or foliar herbicide application - triclopyr preferred
SEJA	tansy ragwort	<i>Senecio jacobaea</i>	Will require <u>systematic</u> removal from roadsides and follow-up; manual removal before full bloom (after full bloom, flower heads need to be removed and disposed of); selective herbicide application in first year or pre-bloom in 2 <sup>nd</sup> year.
SYOF	comfrey	<i>Symphaticum officinale</i>	Minimal occurrence; spot herbicide application
TAVU	common tansy	<i>Tanacetum vulgare</i>	Spot herbicide application

**Appendix G: Weed Species Reported on Forest Service Land in Clallam or Jefferson Counties, 2002-2009**  
(Other counties may have reported other species)



Sulfur cinquefoil  
*Potentilla recta*

Plant Codes come from the USDA Natural Resources Conservation Service PLANTS database.

Common Name	Botanical Name	Plant Code
bishop's weed	<i>Aegopodium podgraria</i>	AEPO
Bohemian knotweed	<i>Polygonum x bohemicum</i>	POBO10
bull thistle	<i>Cirsium vulgare</i>	CIVU
butterfly bush	<i>Buddleja davidii</i>	BUDA
Canada thistle	<i>Cirsium arvense</i>	CIAR4
cheatgrass	<i>Bromus tectorum</i>	BRTE
comfrey	<i>Symphytum officinale</i>	SYOF
common burdock	<i>Arctium minus</i>	ARMI2
common tansy	<i>Tanacetum vulgare</i>	TAVU
common toadflax	<i>Linaria vulgaris</i>	LIVU2
diffuse knapweed	<i>Centaurea diffusa</i>	CEDI
English holly	<i>Ilex aquifolium</i>	ILAQ80
English ivy	<i>Hedera helix</i>	HEHE
European hawkweed	<i>Hieracium sabaudum</i>	HISA
evergreen blackberry	<i>Rubus laciniatus</i>	RULA
everlasting peavine	<i>Lathrus latifolius</i>	LALA4
giant knotweed	<i>Polygonum sachalinense</i>	POSA4
herb Robert	<i>Geranium robertianum</i>	GERO
Himalayan blackberry	<i>Rubus discolor</i>	RUDI2
Japanese knotweed	<i>Polygonum cuspidatum</i>	POCU6
meadow knapweed	<i>Centaurea debeauxii</i>	CEDE5
orange hawkweed	<i>Hieracium aurantiacum</i>	HIAU
oxeye daisy	<i>Leucanthemum vulgare</i>	LEVU
periwinkle	<i>Vinca minor</i>	VIMI
purple loosestrife	<i>Lythrum salicaria</i>	LYSA2
reed canary grass	<i>Phalaris arundinacea</i>	PHAR3
rockspray cotoneaster	<i>Cotoneaster</i>	COTON
Scotch broom	<i>Cytisus scoparius</i>	CYSC4
spotted knapweed	<i>Centaurea stoebei</i>	CEBI2
St. Johnswort	<i>Hypericum perforatum</i>	HYPE
sulfur cinquefoil	<i>Potentilla recta</i>	PORE
tansy ragwort	<i>Senecio jacobaea</i>	SEJA
wild carrot	<i>Daucus carota</i>	DACA6
yellow archangel	<i>Lamiaeum galeobdolon</i>	LAGA
yellow hawkweed	<i>Hieracium caespitosum</i>	HICA10

**High-Risk Species in Clallam and Jefferson Counties, Not Yet Detected on FS Lands**

common reed	<i>Phragmites australis</i>
hairy willowherb	<i>Epilobium hirsutum</i>
hoary alysium	<i>Berteroa incana</i>
poison hemlock	<i>Conium maculatum</i>
spurge laurel	<i>Daphne laureola</i>
wild chervil	<i>Anthriscus sylvestris</i>

**Class A Weeds:** Non-native species whose distribution in Washington is still limited. Preventing new infestations and eradicating existing infestations are the highest priority. **Eradication of all Class A plants is required by law.**

buffalobur	<i>Solanum rostratum</i>
common crupina	<i>Crupina vulgaris</i>
cordgrass, common	<i>Spartina anglica</i>
cordgrass, dense flower	<i>Spartina densiflora</i>
cordgrass, salt meadow	<i>Spartina patens</i>
<b>^cordgrass, smooth</b>	<b><i>Spartina alterniflora</i></b>
dyers woad	<i>Isatis tinctoria</i>
eggleaf spurge	<i>Euphorbia oblongata</i>
<b>*false brome</b>	<b><i>Brachypodium sylvaticum</i></b>
floating primrose-willow	<i>Ludwigia peploides</i>
<b>* flowering rush</b>	<b><i>Butomus umbellatus</i></b>
garlic mustard	<i>Alliaria petiolata</i>
giant hogweed	<i>Heracleum mantegazzianum</i>
goatsrue	<i>Galega officinalis</i>
hawkweed, European	<i>Hieracium sabaudum</i>
hawkweed, yellow devil	<i>Hieracium floribundum</i>
hydrilla	<i>Hydrilla verticillata</i>
johnsongrass	<i>Sorghum halepense</i>
knapweed, bighead	<i>Centaurea macrocephala</i>
knapweed, Vochin	<i>Centaurea nigrescens</i>
kudzu	<i>Pueraria montana</i> var. <i>lobata</i>
meadow clary	<i>Salvia pratensis</i>
purple starthistle	<i>Centaurea calcitrapa</i>
reed sweetgrass	<i>Glyceria maxima</i>
ricefield bulrush	<i>Schoenoplectus mucronatus</i>
sage, clary	<i>Salvia sclarea</i>
sage, Mediterranean	<i>Salvia aethiopsis</i>
<b>*shiny geranium</b>	<b><i>Geranium lucidum</i></b>
silverleaf nightshade	<i>Solanum elaeagnifolium</i>
Spanish broom	<i>Spartium junceum</i>
spurge flax	<i>Thymelaea passerina</i>
Syrian bean-caper	<i>Zygophyllum fabago</i>
Texas blueweed	<i>Helianthus ciliaris</i>
thistle, Italian	<i>Carduus pycnocephalus</i>
thistle, milk	<i>Silybum marianum</i>
thistle, slenderflower	<i>Carduus tenuiflorus</i>
variable-leaf milfoil	<i>Myriophyllum heterophyllum</i>
velvetleaf	<i>Abutilon theophrasti</i>
wild four o'clock	<i>Mirabilis nyctaginea</i>

**Class B Weeds:** Non-native species presently limited to portions of the State. Species are **designated** for control in regions where they are not yet widespread. Preventing new infestations in these areas is a high priority. In regions where a Class B species is already abundant, control is decided at the local level, with containment as the primary goal. Please contact your County Noxious Weed Control Coordinator to learn which species are designated in your area.

Austrian fieldcress	<i>Rorippa austriaca</i>
blackgrass	<i>Alopecurus myosuroides</i>
blueweed	<i>Echium vulgare</i>
Brazilian elodea	<i>Egeria densa</i>
bugloss, annual	<i>Anchusa arvensis</i>
bugloss, common	<i>Anchusa officinalis</i>
butterfly bush	<i>Buddleja davidii</i>
camelthorn	<i>Alhagi maurorum</i>
common catsear	<i>Hypochaeris radicata</i>
common fennel	<i>Foeniculum vulgare</i>
common reed (nonnative genotypes)	<i>Phragmites australis</i>
Dalmatian toadflax	<i>Linaria dalmatica</i> ssp. <i>dalmatica</i>
Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
fanwort	<i>Cabomba caroliniana</i>
gorse	<i>Ulex europaeus</i>
grass-leaved arrowhead	<i>Sagittaria graminea</i>
hawkweed oxtongue	<i>Picris hieracioides</i>
hawkweed, mouseear	<i>Hieracium pilosella</i>
hawkweed, orange	<i>Hieracium aurantiacum</i>
hawkweed, polar	<i>Hieracium atratum</i>
hawkweed, queen-devil	<i>Hieracium glomeratum</i>
hawkweed, smooth	<i>Hieracium laevigatum</i>
hawkweed, yellow	<i>Hieracium caespitosum</i>
herb-Robert	<i>Geranium robertianum</i>
hoary alyssum	<i>Berteroa incana</i>
houndstongue	<i>Cynoglossum officinale</i>
indigobush	<i>Amorpha fruticosa</i>
knapweed, black	<i>Centaurea nigra</i>
knapweed, brown	<i>Centaurea jacea</i>
knapweed, diffuse	<i>Centaurea diffusa</i>

**Class B Weeds - Continued**

knapweed, meadow	<i>Centaurea jacea x nigra</i>
knapweed, Russian	<i>Acroptilon repens</i>
knapweed, spotted	<i>Centaurea stoebe</i>
knotweed, Bohemian	<i>Polygonum bohemicum</i>
knotweed, giant	<i>Polygonum sachalinense</i>
knotweed, Himalayan	<i>Polygonum polystachyum</i>
knotweed, Japanese	<i>Polygonum cuspidatum</i>
kochia	<i>Kochia scoparia</i>
lawnweed	<i>Soliva sessilis</i>
lepyrodiclis	<i>Lepyrodiclis holosteoides</i>
longspine sandbur	<i>Cenchrus longispinus</i>
loosestrife, garden	<i>Lysimachia vulgaris</i>
loosestrife, purple	<i>Lythrum salicaria</i>
loosestrife, wand	<i>Lythrum virgatum</i>
oxeye daisy	<i>Leucanthemum vulgare</i>
parrotfeather	<i>Myriophyllum aquaticum</i>
perennial pepperweed	<i>Lepidium latifolium</i>
perennial sowthistle	<i>Sonchus arvensis</i> ssp. <i>arvensis</i>
policeman's helmet	<i>Impatiens glandulifera</i>
poison-hemlock	<i>Conium maculatum</i>
puncturevine	<i>Tribulus terrestris</i>
rush skeletonweed	<i>Chondrilla juncea</i>
saltcedar	<i>Tamarix ramosissima</i>
Scotch broom	<i>Cytisus scoparius</i>
spurge laurel	<i>Daphne laureola</i>
spurge, leafy	<i>Euphorbia esula</i>
spurge, myrtle	<i>Euphorbia myrsinites</i>
sulfur cinquefoil	<i>Potentilla recta</i>
swainsonpea	<i>Sphaerophysa salsula</i>
tansy ragwort	<i>Senecio jacobaea</i>
thistle, musk	<i>Carduus nutans</i>
thistle, plumeless	<i>Carduus acanthoides</i>
thistle, Scotch	<i>Onopordum acanthium</i>
water primrose	<i>Ludwigia hexapetala</i>
white bryony	<i>Bryonia alba</i>
wild carrot	<i>Daucus carota</i>
wild chervil	<i>Anthriscus sylvestris</i>
yellow floating heart	<i>Nymphoides peltata</i>
yellow nutsedge	<i>Cyperus esculentus</i>
yellow starthistle	<i>Centaurea solstitialis</i>

**\*New additions to the 2009 Noxious Weed List / ^Change in Noxious Weed Class**

**Class C Weeds:** Noxious weeds which are already widespread in WA or are of special interest to the state's agricultural industry. The Class C status allows counties to enforce control if locally desired. Other counties may choose to provide education or technical consultation.

absinth wormwood	<i>Artemisia absinthium</i>
babysbreath	<i>Gypsophila paniculata</i>
black henbane	<i>Hyocyamus niger</i>
cereal rye	<i>Secale cereale</i>
common groundsel	<i>Senecio vulgaris</i>
common St. Johnswort	<i>Hypericum perforatum</i>
common tansy	<i>Tanacetum vulgare</i>
curly-leaf pondweed	<i>Potamogeton crispus</i>
English ivy - four cultivars only	<i>Hedera helix</i> 'Baltica', 'Pittsburgh', and 'Star'; <i>H. hibernica</i> 'Hibernica'
<b>*evergreen blackberry</b>	<b><i>Rubus laciniatus</i></b>
field bindweed	<i>Convolvulus arvensis</i>
fragrant water lily	<i>Nymphaea odorata</i>
hairy whitetop	<i>Cardaria pubescens</i>
hairy willow-herb	<i>Epilobium hirsutum</i>
*hawkweed, common	<i>Hieracium lachenalii</i>
hawkweeds, nonnative and invasive species not listed elsewhere	<i>Hieracium spp.</i>
<b>*Himalayan blackberry</b>	<b><i>Rubus armeniacus</i></b>
hoary cress	<i>Cardaria draba</i>
jointed goatgrass	<i>Aegilops cylindrica</i>
old man's beard	<i>Clematis vitalba</i>
reed canarygrass	<i>Phalaris arundinacea</i>
scentless mayweed	<i>Matricaria perforata</i>
smoothseed alfalfa dodder	<i>Cuscuta approximata</i>
spikeweed	<i>Hemizonia pungens</i>
spiny cocklebur	<i>Xanthium spinosum</i>
thistle, bull	<i>Cirsium vulgare</i>
thistle, Canada	<i>Cirsium arvense</i>
white cockle	<i>Silene latifolia</i> ssp. <i>alba</i>
yellow archangel	<i>Lamiaeum galeobdolon</i>
yellow flag iris	<i>Iris pseudacorus</i>
yellow toadflax	<i>Linaria vulgaris</i>

**\*New additions to the 2009 Noxious Weed List**

To help protect the State's resources and economy, the Washington State Noxious Weed Control Board adopts a State Noxious Weed List each year (WAC 16-750). This list classifies weeds into three major classes – A, B, and C – based on the stage of invasion of each species and the seriousness of the threat they pose to Washington State. This classification system is designed to:

- Prevent small infestations from expanding by eradicating them when they are first detected
- Restrict already established weed populations to regions of the state where they occur and prevent their movement to uninfested areas
- Allow flexibility of weed control at the local level for weeds that are already widespread.

To learn more about noxious weeds and noxious weed control in Washington State, please contact:

**Washington State Noxious Weed Control Board**

P.O. Box 42560  
Olympia, WA 98504-2560  
(360)-725-5764

Email: [noxiousweeds@agr.wa.gov](mailto:noxiousweeds@agr.wa.gov)  
Website: <http://www.nwcb.wa.gov>

Or

**Washington State Department of Agriculture**

21 North First Avenue #103  
Yakima, WA 98902  
(509) 225-2604

Or

**Clallam County Noxious Weed Control Board**

223 E 4<sup>th</sup> St. Suite 15  
Port Angeles WA 98362  
(360) 417-2442

**Please help protect Washington's economy and environment from noxious weeds!**

# 2009 Washington State Noxious Weed List



Shiny geranium, *Geranium lucidum*, a new Class A noxious weed

Figure from *Deutschlands Flora in Abbildungen* at <http://www.biolib> by

Johann Georg Sturm in 1796.

Image taken from Wikimedia Commons

## Appendix I: Samples of Herbicide Notification—Legal Ad and On-Site Posting

A legal notice preceding herbicide application on the Olympic National Forest was published in the Peninsula Daily News (PDN), which is distributed throughout both Clallam and Jefferson Counties. The notice appeared on 5/27/09, more than two weeks before the first herbicide application was carried out on 6/17/09. The text of the legal notice in the PDN read as follows:

The Pacific and Hood Canal Ranger Districts, Olympic National Forest may be applying herbicide containing glyphosate, triclopyr or imazapyr to noxious weeds or other invasive plant species at the following Forest Service sites in Clallam and Jefferson Counties between May 28<sup>th</sup> and October 20, 2009. Applications will be conducted as planned in the 2007 Final EIS-Olympic National Forest Site Specific Invasive Plant Treatment Project, which was finalized in March 2008. Notices indicating that formulations containing glyphosate, triclopyr or imazapyr will be applied, will be posted at entrances to target road systems and/or individual sites. For questions about applications or to receive a complete list of individual treatment sites contact Susan Piper, Wildlife, Botany, and Invasive Plant Program Manager at 360-956-2435, Cheryl Bartlett, Botanist, at 360-956-2283 or Cathy Lucero, Clallam County Noxious Weed Control Coordinator at 360-417-2442. **PACIFIC RANGER DISTRICT PROJECTS** are located within **Bockman Creek Subwatershed (Prj#52)** including Mary Clark Pit, **Upper Quinault River Subwatershed (Prj #11)** Rd 2190020, **Mid Quinault Subwatershed (Prj#33)**, Rd. 2140, **Raft River Subwatershed (Prj #41)** Rd 2100, **Headwaters Sol Duc River Subwatershed (Prj #26)** Rds 2918, 2920, 2820, and 2931, **Upper Sol Duc River Subwatershed (Prj #5 and Prj #36)** including Klahowya Campground, Kloshe Nanitch Loop Trails (#16,20,21), Bonidu Pit, Tom Creek Pit, an unnamed pit, Rds 2900, 3040, 2065, 2929, 2918, 2931, 3071, and related spurs, **Middle Sol Duc River Subwatershed (Prj #3 and Prj #21)** including Snider Work Center, Bear Saddle TS, Rds 2071, 2923, 3040, 3000, 3006, 3100, 3116, 2065, and related spurs, **South Fork (Prj #2 and Prj #7) and North Fork (Prj #8) Calawah River Subwatersheds** including Calawah Pit, Elk Quarry Pit, Rds 2912060, 2922, 2923, 2065, 2932, and related spurs, **Lower Bogachiel River Subwatershed (Prj #22)** including Bogachiel Trailhead, an unnamed pit, and Rd 2932, **Deep Creek (Prj #20), Pysht River (Prj #23), West Twin River (Prj #25), and East Twin River (Prj #24) Subwatersheds**, which include Ned Hill Quarry, Bear Saddle TS, Rds 3040, 3067, 3068, 3000, 3100 and many related spurs, **Lower Elwha Subwatershed (Prj. #45)** including Rd. 3050 and related spurs. **HOOD CANAL RANGER DISTRICT PROJECTS** are located within **McDonald Creek/Siebert Creek Subwatershed (Prj #14)** including access to Pat's Prairie, and Rd 2877 and related spurs, **Jimmy-Come-Lately Creek Subwatershed (Prj #18)** including Louella Work Center, Wolf Quarry, Rds 2850, , 2855070, 2855, 5006, 5331, 2800, 2840 and many related spurs, **Snow Creek/Salmon Creek Subwatershed** including Rds. 2852, 2845, 2850 and related spurs, **Spencer Creek /Marple Creek Subwatersheds, (Prj #6)** including Seal Rock Campground, and Rd 2610, **Lower Big Quilcene River Subwatershed (Prj #28)** including Falls View and Rainbow Campground, trailheads, Quilcene Ranger Station, Rds 2620, 2730, 2700, 2740, 2730, 3039, 3057 and related spurs, **Lower Dosewallips River Subwatershed (Prj #19)** including Elkhorn Campground, Rds 2500, 2610, 2620 and related spurs, **Lower Duckabush (Prj #32) and Fulton Creek/Waketick Creek (Prj #43) Subwatersheds** including Duckabush pit, campgrounds, Rds 2510, 2500, 2530 and related spurs, **Mainstem Hamma Hamma Subwatershed (Prj #34)** two unnamed pits, Rds 2502 and 24800, **Canyon Creek/Pats Creek subwatershed (Prj. #4), Lower Gray Wolf subwatershed (Prj. #15)** including the Cranberry Bog, Slab Camp Quarry, Dungeness Forks Campground, Rds 2870, 2880, 2875, 2878, 2877 and related spurs, **Middle Dungeness (Prj. #16) and Upper Dungeness (Prj. #17) subwatersheds** including Camp Handy including Rds 2870, 2860, 2800, 2830, 2820 and related spurs, **Little Quilcene River subwatershed (Prj. #35)** including the Bon Jon Quarry, another unnamed pit, Rds 2800, 2700, and related spurs, **Upper Big Quilcene subwatershed (Prj. #46)** including Rds. 2740, 2750, 2700 and related spurs, **Salmon River subwatershed (Prj. #42)** including Rd. 2100, **Matheny Creek Subwatershed (Prj. #49)** including Bill's Bog, Rd 2190, 2140 and related spurs.

**Onsite Posting Sample:** Postings were placed at each application site at least 24 hours prior to applications, and at least one week prior for high use sites (campgrounds and trailheads). The blank lines (planned/actual date of application and weed species targeted) were filled out by hand at the site.

# **NOTICE**

**The herbicide glyphosate, triclopyr, imazapyr, or clopyralid will be applied to this site between May 26, 2009 and October 20, 2009 to control noxious weeds, which threaten native vegetation and habit 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.**

**FOR MORE INFORMATION CONTACT:**

**Susan Piper,  
Wildlife, Botany, and Invasive Plant Program Manager  
Olympic National Forest  
1835 Black Lake Blvd., SW Suite A  
Olympia, WA 98512  
360-956-2435**

**or**

**Clallam County Noxious Weed Control Board  
Cody Hagen, weed control specialist  
223 East Fourth Street, Suite 15  
Port Angeles, WA 98362  
(360) 417-2442**

## **Appendix J: Project Forms**

- Sample Invasive Plant Inventory Data Collection Form
- FACTS Manual/Herbicide Treatment Data Form
- Instructions for Filling out FACTS Treatment Data Form
- Rock Source Inspection Form

# Sample Invasive Plant Inventory Data Collection Form

20060911.pdr

**Olympic NF/Clallam and Jefferson County Noxious Weed Control Boards  
Invasive Plant Inventory Form  
Adapted from NF/pg NRIS TERRA Form  
July 2003 cld**

Fill out one form for each weed, and attach a map to each form. Site ID must be unique for each form.

Site ID: Region 06, Forest 09, District: (circle) 01 Hoodspout 03 Quinault  
~~02 Quilcane~~ 05 Soleduck  
 Twnshp (2): 28W Range (2): 03W Section (2): 10 Qtr. Section (2): SW Qtr Qtr: SE  
 Initials (2): MM Road ID (6): 2800132 Ownership: FS  
 Weed PLANTS Code (4): CEDI3 Common Name: Diffuse Knotweed  
 Weed Class: A B+ Bs Cs Date (MM/DD/YYYY): 09/16/06  
 Primary Examiner (Last, First, Middle): McDorman and Use: Roadside  
 WA State County (Circle) 009 Clallam 031 Jefferson Compliance Date \_\_\_\_\_

Location at site: \_\_\_\_\_

Site Address: \_\_\_\_\_

Owner and Owner Address: \_\_\_\_\_

Parcel #: \_\_\_\_\_ Situs ID: \_\_\_\_\_ Land ID: \_\_\_\_\_

Previous Contact? \_\_\_\_\_ Contact? \_\_\_\_\_ Name: \_\_\_\_\_

Aspect (deg) \_\_\_\_\_ OR ALL Average Slope (%) \_\_\_\_\_

Elevation (ft) \_\_\_\_\_ min \_\_\_\_\_ max OR \_\_\_\_\_ average

Circle *Dominant Life Form	AL Algae	LC Lichen	SS Subshrub
	FB Forb	NP Nonvascular plant	<u>TR</u> Tree
	GR Graminoid	SH Woody shrub	
<u>3 Dominants</u>	PLANTS Code	Scientific Name.	
	_____	_____	
	_____	_____	

Site Comments (Directions, description, aerial photo # and aerial photo date, etc)

End of Road  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Infestation Density (1-5): \_\_\_\_\_

Infestation Size in Acres (≤1, 1-5, 5-10, 10-20): \_\_\_\_\_

\* Must make address based on nearest possible - then estimate

# Sample Invasive Plant Inventory Data Collection Form, continued

Circle one each for phenology, life form, and distribution of the weed.

Phenology	Grasses			Forbs and Shrubs		
	G1	Leaves Partially Developed, no heads	F1	Vegetative, rosette, pre-flowering		
	G2	Inflorescence inside the sheath	<u>F2</u>	Flowering		
	G3	Inflorescence partially or fully extended	F3	Fruiting		
	G4	Seeds maturing or mature	F4	Senescent or dormant		
	G5	Senescent or dormant				
	RG	Regrowth				
Life Form	AL	Algae	LC	Lichen	SS	Sub-shrub
	<u>FB</u>	Forb	LI	Woody liana	TR	Tree
	FU	Fungus	NP	Nonvascular plant	UN	Unknown
	GR	Graminoid	SH	Woody Shrub	VI	Herbaceous Vine
Distribution	<u>Cl</u>	Clumpy	SE	Scattered even		
	SP	Scattered patchy	LI	Linear		

\*Infested Area (acres) 1 Gross area (ac) \_\_\_\_\_  
 (Infested area is REQUIRED. Minimum size is 0.1 acre. Use Gross Area ONLY when portions of polygon are uninfested. Minimum Gross Area ≥ 1 acre. Gross Area x % of land occupied by weeds = Infested Area.)

Daubenmire Cover Class		*Weed Canopy Cover of Infested Area					
		OR		Estimated percent cover			
T	0 - 1%	<u>2</u>	5.1 - 25%	4	50.1 - 75.0%	6	95.1 - 100%
I	1 - 5.0%	3	25.1 - 50.0%	5	75.1 - 95.0%		

Horizontal Distance to Water (ft) \_\_\_\_\_ Vertical Distance to Water (ft) \_\_\_\_\_  
as crow flies, not slope distance

Associated Species	PLANTS Code	Scientific Name
_____	_____	_____
_____	_____	_____
_____	_____	_____

Comments: Survey pulled all found (453) + 10 meadow Hoopweed

Map: \_\_\_\_\_ North

# Herbicide/Manual Treatment Data Form

(Circle one)

Ref #: 141

### General Activity Fields

Region	Forest	District (circle one)*	6 <sup>th</sup> Field Watershed Name	Project # and Name	Owner	Workforce**
06	09	PAC-N PAC-S	NF Cabala	2923060 # 85	FS	Cady Bon Wolf
Method Code (circle one)	Equipment Code (circle one)	Fund Code	Comments: If road, enter requested info. beg. & end mileposts, recommendations, wet areas, other			
700 Herbicide	711 hand sprayer 712 backpack sprayer 713 hack & squirt	716 injector 721 mobile ground 000 other	Road number with BMP and EMP: 2923060 Other comments:			
100 Manual	000		Beginning MP UTM E: _____ Beginning MP UTM N: _____			
			Ending MP UTM E: _____ Ending MP UTM N: _____			

### Site/Inventory Fields

Treatment Type (circle one)	Start Date	Stop Date	Application Site (circle one)	Licensed Applicator: Name and License #	
				Total Manual Infested Acres Treated	
Pesticide MH - Manual	9/10	9/10	Road edge/ROW Gravel/rock source Forest Admin Site	Bonnie Eyerstep 78632	
Weeds Treated (Scientific name or code)	Infested Area Treated (acres)		Phenology (circle stage of majority of plants)		
Canada Thistle CIAR	1/20		Vegetative/Flowering/Fruiting		
herb Robert GERD	5/20		Vegetative/Flowering/Fruiting		
			Vegetative/Flowering/Fruiting		

District Codes: Pacific North (05) = PAC-N; Pacific South (03) = PAC-S;  
 Hood Canal North (02) = HC-N; Hood Canal South (01) = HC-S  
 \*Workforce: County Name, Contractor Name, WCC, USFS Force Account.

Administrative Use Only

Activity Unit FACTS ID#: \_\_\_\_\_ Name: \_\_\_\_\_

Activity Subunit #: \_\_\_\_\_ Name: \_\_\_\_\_

Daily Log

Application Date	Time Start (military time)	Time Stop (military time)	Application Area (Acres)	Temp (F)	Wind Speed (MPH)	Wind Direction	Cloud Cover	Acres Treated within 150' of Water
9/10/09	10:00	12:00	.1	65	0		12	0
Volume Applied			Mix (oz/gal)	Dilutant Water				
1/2 gal			2					
Herb Product Name			Percent Solution	Product Rate				
Garlon			1.5	3.3				
			Adjuvants	UOM				
			Dynamic	Oz/Ac				
				Oz/Ac				
				Oz/Ac				
Remarks - Weather forecast.								
Clear sand, minimal								
herb re-bert + Canada + M.S./G								
MAJOR scotch Broom								
infestation @ 2nd river								
crossing - not treated								

Daily Log (Day 2) For use when more than one day is necessary to treat the infestation.

Application Date	Time Start (military time)	Time Stop (military time)	Application Area (Acres)	Temp (F)	Wind Speed (MPH)	Wind Direction	Cloud Cover	Acres Treated within 150' of Water
Volume Applied			Mix (oz/gal)	Dilutant Water				
Herb Product Name			Percent Solution	Product Rate				
				UOM				
				Oz/Ac				
				Oz/Ac				
				Oz/Ac				
Remarks - Weather forecast.								

## Instructions for filling out the FACTS Herbicide/Manual Treatment Data Form

Circle either Herbicide or Manual in form title depending upon treatment type.

For **manual treatments** complete page one only.

For **herbicide treatments** complete pages one and two.

**Ref#(s):** Upper right hand corner of datasheet. Enter the reference number (Ref#) from the project detail table or contract. **Do not** enter multiple reference numbers; a separate datasheet should be used for each area treated that corresponds to a single reference number on the project detail table or contract.

Example 1: Ref# 103

Example 2: Ref# 250

### General Activities Fields

**District:** Circle the district code where treatment occurred. See bottom of form for key to District Codes.

**6<sup>th</sup> Field Watershed Name:** Provided in the project detail table or contract.

This is often times the same as the project name.

Example 1: Middle Dungeness River

Example 2: West Fork Humptulips River

**Project # and Name:** Project number and Name are provided in the project detail table or contract, under

the headings “Project Number” and “2009 Site Name”, respectively. If the “2009 Site Name” column in the

project detail table is blank, enter the project # and watershed name.

Example 1: 16 Lower 2870 Road

Example 2: 39 West Fork Humptulips

**Workforce:** Name of company, agency or group performing the work.

**Method:** Circle either 700 Herbicide or 100 Manual depending upon treatment type.

**Equipment Code:** Circle code for the type of equipment used for the treatment.

**Fund Code:** Leave blank.

**Comments:** **This section is extremely important!** Enter the specific area of project treated.

For roads: Under “Road number with BMP and EMP”, write down this information, with the full project number as a prefix:

Example 1: 2B 2932000 MP 0 - 3.7

Example 2: 39E 2207000 MP 0 – 2.7

\* If only part of a road segment is treated, indicate this in the treatment area descriptions. For example, if the project detail table or contract says treat the 2932000 road from MP 0 – 3.7, but only MP 0 – 3.0 is treated, then write down: 2B 2932000 MP 0 – 3.0. Use the small project maps to come up with a best estimate of the BMP and EMP of these types of treatment areas. Please **do not** write down things like “from beginning of road to washout”: the people entering the data have no idea where this would be.

**Comments (cont.):** For non-roads: Write down the name of the area treated, with the full project number as a

prefix. Some examples: 52A Mary Clark Rock Pit  
4B Cranberry Bog  
50D Coho Campground

Under “Other comments”, enter any other observations or recommendations relevant to the project, such as recommendations for future treatment/monitoring, the presence of wet areas, etc.

If a GPS unit (like a Garmin) is available to you, please enter the UTM coordinates of the beginning and ending points of road segments treated, or a single UTM in the center of non-road treatment areas. This info is only necessary if the exact location of the treatment area is ambiguous; it is not required that you enter co-ordinates for all treatment areas.

### Site/Inventory Fields

**Treatment Type:** Circle either pesticide or manual.

**Start Date/Stop Date:** Date treatment work began and ended on the specific project.

**Application Site:** Circle the description that best describes the site treated.

**Licensed Applicator:** Name and WA State pesticide license # of licensed applicator.  
If treatment is manual, this is not applicable.

**Total Manual Infested Acres Treated:** Actual extent in acres of manual treatments.  
This represents the non-overlapping area treated.

**Weeds Treated:** Scientific name or PLANTS code of each species treated.

**Infested Area Treated (Acres):** Portion of the area infested by a single species that was treated. Due to the potential for species overlap in a particular area, if more than one species infestation is recorded, the sum of all species may be greater than the Total Manual Infested Acres Treated or the Application Area (for herbicide treatments).

**Phenology:** Circle the predominant life stage of the target species at the time of treatment.

**UTM Easting and Northing:** Record UTM's only for locations of high priority species, such as knapweed, knotweed, yellow archangel, etc. It is only necessary to record coordinates if this is a previously unknown site for species listed as "priority 1" for the Forest, or List A or B on the County or State lists.

**Activity Unit FACTS ID# and Name:** Leave blank. For administrative purposes only.

**Activity Subunit# and Name:** Leave blank. For administrative purposes only.

### Daily Log Fields

**Application Date:** Date of herbicide treatment. If more than one day is needed to treat the site, a daily log must be filled out for each day herbicide applications occurred.

**Time Start/Time Stop:** Record the time herbicide application began and ended in military time.

**Application Area:** This is the extent in acres of the treatment for the specific Daily Log entry. This represents the non-overlapping treatment area.

**Acres Treated within 150' of Water:** Give a "best estimate" of the number of acres treated within 150 feet of water (this includes creeks, rivers, lakes, ponds, meadows, seeps, and springs).

**Volume Applied:** Total volume of tank mix applied on the site including product and dilutant.

**Mix (oz/gal):** herbicide oz./gal. dilutant

**Herbicide Product Name:** Enter the name of the herbicide product applied to the site.

**Percent Solution:** Enter the percent solution of the chemical product that was applied.

**Adjuvants:** Record the product name and product rate in oz/acre of any adjuvant used.

**Remarks:** Record weather forecast and any other relevant information regarding the herbicide treatment.

**Compliance Form: Invasive Plant ROD Standard 7:**

*"Inspect active gravel, fill, sand stockpiles, quarry sites and barrow material for invasive plants before use and transport.*

*Treat or require treatment of infested sources before any use of pit material*

*Use only gravel, fill, sand, and rock judged to be weed free by District or Forest Weed Specialists" per ROD, October 11, 2005*

**This form is to be placed in project implementation folder:**

**Project Name:** \_\_\_\_\_

**Legal Description** (Township/Range/Section) \_\_\_\_\_

**Name of Rock Source:** Maryclark Pit

**Pit or Quarry Rock Source Inventory (RSI) Number**

**or Road Number & Milepost:** Maryclark Rd

**Name and Title if Inspector:** \_\_\_\_\_

**Date of Inspection:** \_\_\_\_\_

TREATED: YES  NO  DATE: 4-6-09 - 4-21-09 OCC Crew

**District or Forest Weed Specialist compliance statement and signature:**

Based on the results of the rock source inventory (see backside of this form) conducted on the date above.....

**CHECK ONE**

*I hereby judge this rock material to be weed free and in full compliance with Standard 7 of the Invasive Plant FEIS and ROD.*

*I hereby quarantine this rock material until it is treated and judged to be weed free.*

Name of Local Weed Specialist: \_\_\_\_\_

Date: \_\_\_\_\_

Over 

**REPORT ON ROCK SOURCE INVENTORY**

Target species for conducting rock source inventories consist of the priority 1 & 2 invasive plants on the Olympic National Forest invasive plant list (attached). Report any invasive plants growing on the rock source itself, rimming the piles, or in the yard area.

**Please attach:**

1. NRIS forms
2. Sketch map of the pit showing the location of the invasive plants
3. FACTS treatment form if treatment was conducted on site.

**Infested Area:**

1. Estimated size of the pit: 30 acres
2. Estimate the percent of the pit that is occupied by invasive plants (if plants are scattered, mentally lump them together to estimate their cover in the pit)  
5 %

**NRIS Site ID numbers for inventory:**

Site ID #	Species Code	Common Name	Comments
		Scotchbroom	Pulled - Heavy to deal
		Himalayan Blackberry	- not tracked yet
		Reed canary grass	- not tracked yet

**Mitigation/Treatment:**

Provide recommendations for mitigation measures that would allow the rock material to be judged weed free. Include a proposed treatment plan listing possible treatment options and a timeline for anticipated follow-up treatments. Make notations on pit sketch map for clarification.

J:\users\clucero\Word97\Title II Application\2007 work  
info\Forms\Oly\_weed\_free\_rock\_Combpliance\_form\_Updated071307.doc