

**DECISION NOTICE  
AND  
FINDING OF NO SIGNIFICANT IMPACT  
FOR**

**Willamette National Forest  
Integrated Weed Management**

**ENVIRONMENTAL ASSESSMENT**

USDA Forest Service  
Willamette National Forest  
211 E. 7<sup>th</sup> Avenue  
Eugene, Oregon 97401

An Environmental Assessment (EA) has been prepared for the Willamette National Forest Integrated Weed Management that documents the environmental analysis of the proposal for treatment and control of invasive weeds across the entire Willamette National Forest (WNF). The majority of the project area is located in Marion, Linn and Lane Counties. A small part of Douglas County is also located on the WNF. Treatments will begin in the summer of 2007 and continue for at least 10 years.

The proposed action is to contain established infestations and to eradicate new invader infestations at 753 weed sites on 9700 acres of the Willamette National Forest. The purpose of the project is to reverse the negative impacts caused by invasive plants and to restore ecological communities and function at impacted sites in a cost-effective manner that meets current management direction. Without action invasive plant populations would continue to grow, compromising our ability to manage the forest for healthy native ecosystems.

The program will amend the Willamette Land and Resource Management Plan (LRMP) (USDA, 1990) and tiers to the Region 6 Final Environmental Impact Statement for Preventing and Managing Invasive Plants (R6 FEIS and ROD) (USDA, 2005).

The documents for this project are available for review at the Willamette National Forest Supervisor's Office, 211 E. 7<sup>th</sup> Avenue, Eugene, Oregon 97401 (541) 225-6300. I have reviewed the EA, related documents, and public input; my decision is based upon that review, and after that review I have found the analysis to be in full compliance with direction contained in the above documents.



- PDC 21 modified. Added triclopyr to list of herbicides not used where there is a high water table. Added 10 feet to triclopyr riparian buffer so it now totals 60 feet.
- New PDC 28. Blackberries will not be sprayed when they contain ripe berries to avoid public contact with herbicides.
- New PDC 29. Workers will not enter or wade across any perennial or fish-bearing stream.
- New PDC 30. Chemical treatment of any site will occur only once per year.
- New PDC 31. Chemical treatment will not use more herbicide than predicted by risk assessment models within a 50 foot riparian corridor or 10 contiguous miles in any given HUC6 watershed.
- New PDC 32. Chemical treatment of linear invasive plant sites adjacent to streams utilized by ESA-listed fish will only occur on one riparian area (e.g. left or right bank, not both) in any given year. Spot treatment of sites less than 0.1 acre can occur on both banks.
- New PDC 34. Emphasize the use of non-chemical treatments in riparian areas associated with small streams (less than 1.8 cfs flow) that are utilized by ESA-listed fish. If herbicides must be used, initially treat with herbicide diluted to 50% label concentration.
- New PDC 35. Goat grazing (cultural treatment) will use temporary enclosure fencing which does not allow goat access to streambanks or water bodies.

In addition, there will be an added element to the monitoring system. We will take a subsample of sites (examples of each site type) over time and analyze herbicide use to demonstrate that herbicide use decreases at sites over time. These analyses will occur every three years and be reported in the Willamette NF Monitoring Report.

## **RATIONALE**

It is my decision to implement the action **Alternative 3 Modified** of this EA because this alternative proposes activities that meet the purpose and need for action described in Chapter 1 of the EA. The proposal is preferable because it:

- Provides the framework for treating invasive weeds with the most effective treatments possible while maintaining environmental sensitivity.
- Best addresses the standards and guidelines of the Willamette LRMP as amended by the Region 6 EIS for Preventing and Managing Invasive Plants.
- Provides for treatment of weed infestations in riparian corridors and areas of high human use.
- Establishes guidelines for Early Detection-Rapid Response that better meet the needs of the Integrated Weed Management Program. Alternative 2 provides for only 25 additional sites per year which has resulted in an overflow of unanalyzed and untreated weed infestations.

- Adds guidelines for development of restoration goals for weed treatment sites.
- Establishes mitigation measures and monitoring standards for treatment by following all State and Federal pesticide laws.

I have determined that the selected alternative will be consistent with the Willamette National Forest Land and Resource Plan, as amended by the Preventing and Managing Invasive Plants EIS and ROD. This finding is based on how the environmental analyses was prepared in accordance to Forest Plan Management Areas and Standards and Guidelines, as cited throughout the EA and documents in the Analysis File. This EA is essentially a listing of how these proposals, and their purposes, respond to the direction contained in the Forest Plan.

The following Table will replace Amendment 259-d:

Site Type	Control Method Available: Non-stream buffer	Control Method Available: Stream buffer
1- Roadside, no vegetation	Manual; Mechanical; Chemical: 5 herbicides-Rodeo, Triclopyr, Clopyralid, Sethoxydim, Imazapyr	Manual; Mechanical (hand-held power tools only); Chemical: Rodeo or Habitat via wiping 0-50 ft, backpack within 10-50 ft., stem injection with Aquamaster 0-50 ft
2- Roadside, competing vegetation	Same as site type 1	Same as site type 1
3- Wilderness, TES	Same as site type 1 <u>but</u> - no mechanical in Wilderness - no mechanical in seasonal wildlife restriction - mitigations for TES plant sites - mitigation for TES/Survey and Manage salamander sites	Same as site type 1 <u>but</u> - no mechanical in Wilderness - no mechanical in seasonal wildlife restriction - mitigations for TES plant sites - mitigation for TES/Survey and Manage salamander sites
4- Administrative sites: high human use	Same as site type 1 <u>but</u> add cultural	Same as site type 1
5- Administrative sites: low use	Same as site type 1 plus cultural	Same as site type 1
6- Forested	Same as site type 1 plus cultural	Same as site type 1
7- Non-Forested	Same as site type 1 plus cultural	Same as site type 1

## Mitigation Measures

This decision implements the following mitigation measures describe in the EA, pages 24 through 26. Underlined segments are part of the modified Project design criteria. In addition PDCs 29-35 on page 2 are added to this list.

### *Herbicide Application*

1. Herbicides will be used according to label instructions.
2. Herbicide use will comply with standards in the *Pacific Northwest Regional Invasive Plant Program – Preventing and Managing Invasive Plants* FEIS (2005), including standards on herbicide selection, broadcast use of some herbicides, tank mixing, licensed applicators, and use of adjuvants, surfactants and other additives (standards 15, 16, and 18- Appendix A)
3. Applicators will use Personal Protective Equipment when applying herbicides. This includes long-sleeved shirts, long pants, gloves, shoes plus socks, eye protection for application and chemical-resistant apron for cleaning, mixing and loading herbicides.
4. Spray equipment will be calibrated prior to seasonal start-up and periodically throughout the season to assure accuracy in applications. Spray tanks will not be washed or rinsed within 150 feet of any live water. All herbicide containers and rinse water will be disposed of where they will not cause contamination of waters.
5. No more than daily use quantities of herbicides shall be transported to the project site.
6. Equipment used for transportation, storage, or application of herbicides shall be maintained in a leak-proof condition.
7. Favor transportation routes with less traffic, less adjacent water bodies, and fewer blind curves. Use a guide vehicle when more than one vehicle is traveling to the site, or when large quantities or other circumstances dictate.
8. Applicators will develop an Emergency Spill Response Plan developed with and approved by the USDA Forest Service, on-site during treatments. The plan would identify reporting procedures, methods to clean up accidental spills, including reporting spills to the appropriate regulatory agency.
9. Apply herbicides only during the months of April-October. Herbicides shall not be applied when rain is forecast within the next 24 hours. Local weather conditions will be considered, and herbicides will not be applied when rainfall is probable. No (herbicide) application when rain is forecast within the next 24 hours and wind speed exceeds 5 miles per hour.
10. A documented pre-operations briefing will be required annually prior to treatment between a USDA Forest Service weed coordinator and the lead contractor or employee to brief spray personnel on the location of sensitive resources (streams, lakes, wetlands, sensitive plants) and to review operational details. The briefing will include safety issues, location, timing, application method, herbicides approved for use, project design criteria, and other pertinent topics.
11. Mechanized spraying equipment should remain on roadways, trails, parking areas or other disturbed areas to prevent damage to vegetation and soil, and potential degradation of water quality and aquatic habitat.
12. All water bodies, campgrounds, wetlands and meadows as well as roadsides will be clearly marked in the field at least one week prior to and following application of herbicides in a project area.
13. To minimize herbicide application drift, use low nozzle pressure and spray tips that produce a coarse spray and large droplets (median spray droplet diameter of at least 0.3 mm).

### ***Public Protection***

14. Public notice of proposed herbicide applications locations will be published in the local papers one month in advance of herbicide application (Standard 23)
15. Administrative sites and developed campgrounds will be posted or closed in advance of herbicide application, normally 3 days, to ensure that no inadvertent public contact with herbicide occurs. All roadsides and trailhead parking lots will be posted at least one week in advance and after application of herbicides to provide advanced notice to the public.

### ***Botanical Resources***

16. Surveys for Botanical Species of Concern (Region 6 sensitive and Survey and Manage) shall be completed 100 feet from herbicide application prior to treatment if the area is potential habitat and the area has previously not been surveyed as part of a project area survey.
17. Where an invasive plant species is to be treated within 3 feet of a sensitive plant species (non-rhizomatous only) or within 5 feet of a sensitive non-vascular species, the invasive plant should be either manually treated (for perennial species, as close to all of the roots as possible) or herbicide application should be hand-wiping. Use a non-leaching herbicide such as glyphosate, to ensure herbicide is not taken up by roots of sensitive plant.
18. When using selective/hand herbicide treatment methods, reduce further invasive plant invasions on the sites by protecting non-target vegetation when possible.

### ***Water Quality, Aquatic Organisms***

19. Glyphosate may be used for stem injection and plants may be wiped with glyphosate or imazapyr 0-10 feet from streams. These methods plus spot spray with glyphosate and imazapyr may be used in 10-50 feet from streams. Glyphosate used for stem injection must not be applied in concentrations exceeding label requirements.
20. Where the road ditch line flows directly into surface water (e.g. stream, pond, reservoir) spray only when the ditch line is dry. Treat ditches connected to the stream network as intermittent streams.
21. Do not use clopyralid, sethoxydim or triclopyr in riparian buffer areas or where there is a high water table and rapid soil permeability. Triclopyr may not be used within 60 feet of streams.
22. Ground-based mechanized equipment will not be allowed within 25 feet of streams, ponds, or wetlands.
23. Use erosion control measures (e.g., silt fence, native grass seeding) where de-vegetation may result in delivery of sediment to adjacent surface water. Soil scientists or hydrologists will assist in evaluation of sites to determine if treatment is necessary and the type of treatment needed to stabilize soils.

### ***Wildlife***

24. No mechanized activity within 0.25 miles, or 0.50 mile line-of-sight of a bald eagle nest site, shall occur between January 1 and August 31, unless the nest is verified to be unoccupied by the District Wildlife Biologist. Exceptions to this standard are the well-traveled state highways that bisect the Forest- Highway 20, 22, 126 and 58.
25. No mechanized activity within .25 miles , or .5 mile sight distance, of a known bald eagle communal roost, unless the roost is verified to be unoccupied by the District Wildlife Biologist.

26. Chainsaw use within 65 yards of known spotted owl activity centers or unsurveyed suitable habitat will be prohibited during the critical breeding period (March 1 to July 15) to avoid disruption of breeding owls.
27. No areas within 100 feet of a spring or seep will be sprayed with an herbicide without appropriate surveys for sensitive salamanders or mollusk as determined by the unit biologist.

## **Other Alternatives Considered**

There were several control methods that were discussed but eliminated from detailed consideration. Biological control was considered as a method to be discussed under the Alternatives. The current Willamette LRMP standard and guideline FW 259c reads, "Implementation of the IWM program shall allow for release of biological control agents wherever established weed populations would support them. Agents released must be tested and sanctioned by the U.S. Department of Agriculture." This standard was consistent with new direction (Standard 14, R6 ROD, USDA 2005a), so additional analysis was not necessary.

Prescribed burning was also considered as a control method to be discussed under the Alternatives. However, the use of prescribed burning is rarely only for noxious weed treatment; it is used to reduce fuels, to stimulate wildlife forage, to emulate natural disturbance regimes. The specific places where weeds may be treated with prescribed burning have not been delineated, so it would be impossible to conduct site-specific analysis on them. I concur with the Interdisciplinary Team's conclusion that this control method was better treated in environmental analyses when specific prescribed burning projects are proposed.

I deemed aerial herbicide application not an option in this analysis due to potential adverse effects on water resources. The ID Team discussed the need for boom spraying and I decided to be as conservative as we could with our herbicide treatment methods and that boom spraying, having a greater potential for drift than hand-held spray methods, was not necessary.

Many other herbicides were available for use under the R6 ROD. The Interdisciplinary Team analyzed the new and potential invader weeds on the Forest and looked at the list of herbicides available and their environmental effects, and I chose the herbicides that would be most effective on the target weeds with the least environmental effects. If a herbicide were to become available that was less environmentally hazardous while being equally or more effective on our target weeds, we could conduct a supplemental analysis and potentially add it.

## **Public Involvement and Scoping**

The proposal was first listed in the Schedule of Proposed Actions (SOPA) on January 2005 and has been listed in subsequent versions. SOPA provides one means of keeping the public informed of the progress of individual projects. The SOPA is also made available to the public on the Willamette Forest website.

A letter providing details of this proposal was mailed to approximately 50 members of the public and other agencies who had provided comments on previous weed management projects or with whom we routinely work on weed management for comment during scoping from January 3-February 4, 2005.

Using the comments from the public and other agencies the interdisciplinary team developed a list of issues to address. We received 2 responses to this letter. Copies of the letters can be found in the public involvement section of the Analysis File. The interdisciplinary team reviewed all these comments and incorporated the concerns into the issues where applicable and appropriate

The following state and federal agencies were contacted or consulted with during the course of this project: Oregon Department of Agriculture (ODA), National Marine Fisheries Service (NMFS), United States Fish and Wildlife Service (USFWS). The USFWS issued a letter of concurrence with a Not Likely to Adversely Affect spotted owl and bald eagles on February 14, 2007. The USFWS provided a letter of concurrence dated June 11, 2007 stating there will be insignificant and discountable effects to bull trout / Oregon chub and therefore, a less than negligible likelihood of adverse effects to the listed fish species as a result of this project. A NMFS letter dated June 5, 2007 concurs with the Willamette NF's determination that this project is not likely to adversely affect (NLAA) the Upper Willamette River Chinook salmon and UWR steelhead and will not adversely modify critical habitat.

In addition, Tribal Consultation was conducted. The Forest sent maps of proposed treatment sites to the Klamath Tribes, the Confederated Tribes of the Grand Ronde, Siletz Tribes and the Confederated Tribes of the Warm Springs. Meetings were held with Tribes that wanted a briefing and had comments on specific treatment sites: the Confederated Tribes of the Grand Ronde on May 2, 2006; Confederated Tribes of the Warm Springs on April 18, 2006; and the Siletz Tribes on March 15, 2006. We also met with EWEB to brief them on the project on May 15, 2006. Notes from meetings are in the project file.

The interdisciplinary team reviewed all these comments and incorporated the concerns into the issues where applicable and appropriate. Information related to these concerns was either addressed in the discussion of the issues and environmental consequences or can be found throughout the different sections of the EA or Decision Notice.

A public notice was published in the local newspaper on March 22, 2007 requesting comments on the proposed actions and EA.

A complete record of the public participation can be found in the Analysis File for the Willamette National Forest Integrated Weed Management Environmental Assessment.

### **Responses to Comments**

Two comment letters were received from the public.

Doug Heiken of Oregon Natural Resources Council expressed support for protecting native ecosystems, suggested a focus on prevention such as cleaning infested rock pits, retention of canopy in project areas, use standards in projects to not create conditions conducive to weed introduction and spread, limiting the use of non-essential roads, and use of weed free feed in Wilderness and forestwide.

**Response: These activities are covered in the Willamette National Forest Weed Prevention Guidelines.**

In addition, Mr. Heiken urges the Forest Service to buffer streams from herbicide use.

**Response: The WNF has been buffering streams for the past 5 years (Alternative 2) and this has allowed weeds such as Japanese knotweed, yellow flag iris and false brome to invade**



**riparian areas. Manual control of these species does not work an additional tools are necessary to effectively control these weed populations.**

Mr. Heiken makes other comments such as spraying chemicals when “wind is blowing >10 mph seems like a very bad idea” and “to protect people and birds, do not spray blackberries when there is fruit on the vine”.

**Response: I have chosen to modify PDC 9 and add PDC 29 to respond to these comments.**

He also provides comments that there be a goal to “reduce herbicide use over time” and develop “site strategy” within 2 years of site identification.

**Response: I have added a paragraph to clarify monitoring to document reduced use of chemicals over time. Developing restoration strategies for sites will occur as funding becomes available. We will not be able to implement the whole program in a single year (see cost analysis in EA, p. 16).**

Mr. Heiken proposes no broadcast spray in riparian or amphibian habitat and identity and impacts of all inert ingredients should be disclosed and analyzed.

**Response: There will be no broadcast spray under Alternative 3 (No alternative analyzed proposed broadcast spray). Impacts of all known inert ingredients have been disclosed and analyzed. No NPE- containing surfactants are proposed for use.**

Mr. Heiken notes that under the Preferred Alternative the most economical method of treating weeds would be used at the expense of ecosystems and society.

**Response: The Alternative I have chosen provides the greatest flexibility in prescription of weed treatments while taking into consideration the location of Threatened, Endangered and Sensitive species, proximity to water, soil types, traditional uses and weed population size and species. The project design criteria are designed to make the project as environmentally benign as possible while allowing us to manage weed infestations.**

The second comment letter came from the State of Oregon. The Noxious Weed Control Program, Oregon Department of Forestry and Oregon Department of Environmental Quality (DEQ) provided comments. The first two sections of the State were supportive of the preferred Alternative. DEQ encouraged care when restoring habitat in watersheds that are TMDL-limited, encouraged prevention and use of non-chemical alternatives wherever feasible.

The DEQ notes that a USGS study found one of the proposed pesticides, triclopyr, in surface waters during studies in the Willamette Basin and that as a result of a lawsuit filed against the EPA by the Washington Toxics Coalition, a federal judge ordered that buffer zones be placed around salmon-bearing streams with a 20 yard no application zone for triclopyr.

**Response: In response to these concerns, I have revised PDC 21. This will restrict the use of triclopyr in areas with high water table or rapid soil permeability. Also, I have chosen to buffer streams an additional 10 feet (60 feet total) from triclopyr application, to be consistent with the EPA.**

The DEQ also expressed concern that the Forest Service adequately protect drinking water by establishing communication with public water system operators.

**Response: The two large providers of drinking water from the Forest, Eugene Water and Electric and the City of Salem Water Resources, have been involved in scoping. Potential impacts to human health was identified as a significant issue and tracked through all Alternatives (EA, p. 129-132)**

The DEQ felt that effects on source water areas and drinking water were not clear.

**Response: None of the models that were run using the Risk Assessment model methodology reached a level of concern for drinking water (p. 130-131 Human Health section, p. 177 Risk Assessment Worksheet Maximum Effects table).**

DEQ expressed concern over removal of vegetation causing sedimentation, impacting water system treatment, maintenance costs and increasing risk of exposure to contaminants that adsorb to sediments.

**Response: Both the soils- erosion hazard (EA p. 51-56) and water quality- turbidity (EA p. 61-69) analysis discussed the potential for erosion and sedimentation and expect with such localized, small scale weed eradication efforts, effects will be so small as to be unmeasurable.**

## **Significant Issues**

The following issues were identified as significant for the project area based on the scoping, public comments received and interdisciplinary team discussions. The significant issues were used to guide development of alternatives and tracked through the analysis process.

The Forest Service identified 2 topics raised during scoping. These issues include: (1) Effects on aquatic and riparian fish and wildlife and (2) Human health.

**1. Effects on aquatic and riparian fish and wildlife:** The application of herbicides in riparian areas has the potential to contaminate terrestrial riparian habitat and water, causing mortality to amphibian and fish species. The largest risk is from drift of herbicide onto non-target vegetation used for food or habitat or drift into water. Some herbicides also pose a risk to water quality through leaching through the soil profile. There are potential indirect effects to food chain through removal of vegetation and sublethal effects on fish behavior.

**2. Human health:** There is a potential for humans to be exposed to herbicides where they visit treated sites, for example at trailheads or in campgrounds. Humans could inadvertently brush up against vegetation that has been treated with herbicides. Eugene Water and Electric Board staff noted concern that herbicides not be used in a way that they could migrate into drinking water. The most plausible method for herbicides to enter drinking water would be from herbicide drift, although some herbicides can leach through the soil profile.

## **Non-significant Issues**

Several other issues were identified but were found not to be significant for the purposes of this project. Generally, non-significant issues are mitigated by standards and guidelines provided for in the Forest Plans, addressed through resource prescriptions, or decided upon by laws and regulations. These issues included effects to culturally significant plants and effects on native plant communities. The potential impacts of the alternatives on these issues and the environmental factors were analyzed in the EA.

## **Finding of No Significant Impact**

My review of the results of the environmental assessment indicates there will be no significant effects on the quality of the human environment if the preferred alternative is implemented as proposed. I have therefore

determined that this action is not a major federal action which will significantly affect the human environment. An environmental impact statement is not needed, and will not be prepared. This determination was made considering the following rationale, starting with the context and intensity factors listed in the Code of Federal Regulations' definition of "significantly" (40 CFR 1508.27).

**Context:**

*"The significance of an action must be analyzed in several contexts such as society as a whole, the affected region, the affected interests, and the locality.....in the case of site-specific actions (such as this one), significance would usually depend on the effects at the locale rather than the world as a whole".*

The Willamette National Forest Integrated Weed Management EA project implements direction set forth in the Willamette National Forest Plan as amended by the Region 6 ROD for Preventing and Managing Invasive Plants. The selected alternative will affect less than 0.5 % (9700 acres out of 1,700,000 acres) of the Willamette National Forest. Even within the treated acres, most control actions will focus on spot treatments of individual plants or plant populations. This proposal is to treat invasive plants with the most effective methods available at specific sites across the Forest, given specific mitigation measures. In the context of past management actions, this amount of treatment is not a significant amount and will have a negligible effect upon the watershed's functions and values and the county's economy.

The Integrated Weed Management analysis area has been altered by invasive species in several areas. The selected alternative provides for control of those weeds and post-treatment restoration of the sites. Mitigation measures are designed to protect aquatic resources, wildlife, botanical resources and human health. Therefore, the effects of the selected alternative on the resources and species within the project area or at scales larger than the project area are not significant as disclosed in the EA.

**Intensity:**

*1) Impacts may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on the balance the effects will be beneficial.*

The effects of the proposed action will be both beneficial and adverse, as documented in the EA, but not significantly so. The action may have some short-term adverse impacts to water quality, and short-term adverse impacts to fish and wildlife habitat from effects to non-target vegetation from herbicide application, but the long term effects of restoring native vegetation to the riparian area outweigh the short-term adverse impacts by providing forage for wildlife and a more natural setting for other wildlife and fish.

*2) The degree to which the proposed action affects public health or safety.*

The primary purpose and need for the proposed action is to contain or eradicate invasive plant species from the Willamette National Forest. All herbicides will be applied strictly in accordance with the label directions by licensed herbicide applicators. All State and federal pesticide laws will be adhered to. Mitigation measures are listed on pgs 13-14 of the EA. This project will not result in any adverse human health and/or environmental effects that disproportionately impact minorities and low income populations as defined in Executive Order #12898 (EA page 37).

*3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.*

The areas proposed for treatment activities have been surveyed and evaluated for the presence of cultural resources. No known Heritage resources would be affected by herbicide treatment. (EA page 36). The surveys were conducted according to an inventory plan approved by the Oregon State Historic Preservation Office (SHPO). This inventory is consistent with an agreement between the USDA Forest Service R6/PNW, Oregon SHPO, and the advisory council on historic preservation.

Several Management Areas from the Willamette Land and Resource Management Plan (USDA, 1990) are encompassed. Project treatments will be consistent with the standard and guidelines of these management areas.

Where ecologically critical areas occur, for example TES bird nest areas, mitigation is designed to restrict activities during the times of year species could be at risk. Due to the above reasons and conditions, there will be no significant impact to the human environment in regard to these unique geographic characteristics.

*4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.*

The Willamette National Forest Integrated Weed Management EA analysis is based upon the best available scientific information and site-specific data. Models and methods used to estimate the effects presented in the EA are widely used in similar analyses and have been reviewed by the research and academic communities. Modeling for effects of glyphosate on aquatic species was modified to respond to new scientific information on potential effects to aquatic species. I am not aware of any credible, peer reviewed scientific questioning of the methods used in this analysis, nor of its results.

Some members of the public are philosophically opposed to herbicide use on federally managed lands. This opposition is expressed by questioning the accuracy or procedural correctness of various analyses. To these people, the results of any environmental analysis documenting the effects of herbicide use is viewed to be not credible, therefore these management actions are perceived to be controversial.

I find that there is no known controversy surrounding the scientific basis for the estimation of effects of the proposed herbicide use for eradication of knotweed presented in the Willamette National Forest Integrated Weed Management EA.

*5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.*

Herbicide application methods are very tightly controlled (see mitigation measures pgs.3-5 in this document), reducing the degree of possible effects on the human environment. No concern thresholds for humans will be reached from herbicide use due to mitigations in the Action alternative and project design.

*6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.*

The Willamette National Forest Integrated Weed Management EA project will treat a very small area (0.5%) of the Willamette National Forest as a whole.

The Forest Plan is the vehicle that makes decisions in principle about future considerations. Future projects to implement the Forest Plan direction will be analyzed in separate NEPA planning processes. Decisions based upon the Willamette National Forest Integrated Weed Management EA analysis will not directly affect how such future decisions may be made.

*7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.*

1. The analyses presented in the EA constitute an evaluation of cumulative impacts of the Willamette National Forest Integrated Weed Management EA proposed actions. The discussions include effects of past, present, and future foreseeable actions in addition to those of the selected alternative. See the following EA sections for details: vegetation (EA, pages 46-47), wildlife and threatened, endangered, and sensitive species (EA, pages 96, 103-104 and 120-121, Biological Evaluations in Analysis File), water quality (EA, pages 62, 66-67, 70-71), soil resources (EA, page 54).
2. All these effects are within the levels anticipated by the Willamette National Forest and the R6 EIS for Preventing and Managing Invasive Plants. No significant direct, indirect, or cumulative impacts to public safety, recreation, fuel loadings, fisheries, wildlife, water, soil, or other components of the human environment are anticipated.

*8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in the National Register of Historic Places or may cause loss or destruction of significant cultural or historical resources.*

An appropriate review has been conducted by this undertaking, and no significant property (s), which may be eligible for inclusion in the National Register Historic Places, were found to be present in the project area.

This document meets the requirements of Section 106 and 110 of the National Historic Preservation Act.

Effects to cultural resources have been reviewed (as mentioned in Item 3). The proposal will have no adverse effects to cultural resources (EA, page 126).

*9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act.*

The Willamette National Forest Integrated Weed Management EA (BE) and Biological Assessments (BA) address the effects upon endangered and threatened species and their habitat. Several Threatened, Endangered and Sensitive plants (EA p. 96-100), animals (EA p. 74-78) and fish (EA. P, 104-106) are known to inhabit the project area. In addition sensitive or “survey and manage” botanical species populations are known to occur within or adjacent to treatment areas (EA, page 72-81). Cumulative effects of this project in conjunction with other projects in and adjacent to the project area are not expected to jeopardize the continued existence of any TES species or result in a permanently adverse modification of their critical habitat; nor would they likely contribute to a trend towards Federal listing or cause a loss of viability to populations of species designated as R-6 Sensitive or as Management Indicator Species on the Willamette National Forest (EA, pg. 21). The finding of the Biological Assessment (BA) for the selected alternative is a “may affect, but not likely to adversely affect” bull trout or Oregon chub (EA pages 27-33 and letter of concurrence from USFWS Log #1-7-05-I-0463 in the Appendix). Formal consultation was completed with the National Oceanic and Atmospheric Administration (NOAA) - Fisheries Division and concurred that the action described in the BA may effect by is “not likely to adversely affect” UWR spring-run Chinook salmon or their proposed critical habitat. This letter of their concurrence for this finding is also located in the Analysis File.

*10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.*

As mentioned in the EA, this project is in compliance with all Federal and State laws relating to environmental protection. The proposed action meets State air and water quality standards and complies with all regulations in the National Historic Preservation Act, National Environmental Policy Act, Endangered Species Act, Clean Air Act, and Clean Water Act.

This finding is based on how the Willamette National Forest Integrated Weed Management EA environmental assessment was prepared in accordance to Forest Plan Management Areas and Standards and Guidelines, water quality and beneficial uses (EA, page 55-56) threatened, endangered, and sensitive species (see pp in #8).

## Findings Required by Other Laws and Regulations

This decision to implement Alternative 3- Modified is consistent with the intent of the Willamette Forest Plan's long term goals and objectives listed on pages IV-2 to IV-44. The project was designed in conformance with Land and Resource Management Plan standards and incorporates land and resource management guidelines for invasive plant management (EA, Appendix A).

The decision follows all applicable State and Federal laws, regulations and policies including the National Forest Management Act of 1976; the National Environmental Policy Act of 1969; the Endangered Species Act of 1973; Federal Water Pollution Control Act Clean Water Act) of 1972 as amended; Magnuson Stevens Fisheries Conservation and Management Act of 1976; Wild and Scenic Rivers Act of 1968 as amended; Wilderness Act of 1964 as amended; National Historic Preservation Act of 1966 as amended; Executive Orders 11988 and 11990 on Floodplains and Wetlands; Executive Order 12898 on Environmental Justice in Minority Populations and Low Income Populations; Executive Order 13112 on Invasive Species; Executive Order 13186 on Neotropical Migratory Birds.

The Environmental Assessment also follows guidance in Watershed Analyses which were prepared over the past 10 years in accordance with the Northwest Forest Plan. As directed in the Northwest Forest Plan, these watershed analyses were completed prior to the proposed treatments in the Riparian Reserves. The proposed treatments are consistent with findings in the watershed analysis and are consistent with Riparian Reserve standards and guidelines at both the project level and at the 5<sup>th</sup> field watershed level. This project will not retard or prevent attainment of Aquatic Conservation Strategy Objectives outlined in the Northwest Forest Plan (EA pages 56-73).

In April, 2007, Northwest Coalition for Alternatives to Pesticides, the lead signer in the 1989 Mediated Agreement, agreed it was willing to dissolve the Mediated Agreement for purposes of controlling invasive plants in Region 6.

In August 1, 2005 and January 9, 2006, U.S. District Court orders in the Northwest Ecosystem Alliance et al. v. Rey wt al. (NEA), Civ. No. 04-844, WD Wash. Set aside the 2004 Record of Decision (ROD) to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines. The Court re-instated the January 2001 ROD for Amendments to the Survey and Manage, Protection Buffer and other Mitigation Measures Standards and Guidelines, as amended by the 2001 and 2003 Annual Species Reviews. The Order allows projects to continue to be implemented if they complied with the 2001 ROD as amended. The Willamette NF Integrated Weed Management EA is in compliance with the 2001 ROD (EA, p. 78, 91-92, 97-104).

My conclusion is based on a review of the record that shows a thorough review of relevant scientific information, a consideration of responsible opposing views, and the acknowledgment of incomplete or unavailable information, scientific uncertainty, and risk. A section on herbicides, risk assessments and adjuvants presents a collation of scientific information on effects of herbicides on the environment (EA p. 33-36). Relevant scientific information from these risk assessments is found within the individual analyses of effects throughout Chapter 3 (p. 29-133). Incomplete and unavailable information concerning herbicides and adjuvants is acknowledged in the Environmental Assessment (p. 36-37).

## Implementation Date and Appeal Rights

Two comments expressing concerns were received during the 30-day public comment period March 22 to April 23, 2007 for the Willamette National Forest Integrated Weed Management EA; therefore, this project is subject to appeal pursuant to 36 CFR 215.12. Implementation of this project may begin 30 days following publication of this notice in the Register Guard, Eugene, Oregon if no appeals are received.

Approved by:

/s/ Dallas J. Emch  
Dallas J. Emch  
Forest Supervisor  
Willamette National Forest

June 25, 2007  
Date