

APPENDIX H
RESPONSE TO COMMENTS RECEIVED DURING
THE DEIS COMMENT PERIOD

Olympic National Forest

USDA Forest Service
Region Six, Pacific Northwest

January 2008



This Appendix summarizes the public comments received during the DEIS comment period, and the Forest Service response to those comments.

The Forest Service circulated information about this project to many people, agencies and groups over the past four years. Many comments were received during two scoping periods. Five parties wrote to the Forest Service during the Draft EIS comment period in 2006.

One of the comment letters is from the National Marine Fisheries Service (NMFS). The Forest Service worked closely with NMFS to resolve their concerns since this letter was written. Consultation with NMFS regarding federally listed anadromous fish species continued throughout 2007, culminating in NMFS publishing a Biological Opinion (October 2007) for the project. Consultation has been completed and NMFS will continue to be involved with the project over time to see that measures to minimize harm to aquatic ecosystems are implemented.

APPENDIX H – RESPONSE TO COMMENTS RECEIVED DURING DEIS COMMENT PERIOD

COMMENTER: Environmental Protection Agency (EPA)

Comment: EPA appreciates the efforts of the Forest Service to plan for this project, especially for consideration of public scoping comments in the planning process and incorporation of Integrated Pest Management (IPM) principles in this project plan. We hope that there will also be efforts to boost public participation and education during the proposed project implementation.

Response: *The Olympic National Forest intends to coordinate with many agencies, groups, individuals, and Indian Tribes during implementation of this project. Individuals are encouraged to contact the Forest's Invasive Plant Project Coordinator, to participate. Public involvement ranges from public notification prior to treatment, to discussing integrated prescriptions with adjacent landowners or others, to seeking volunteer labor for manual treatments. In addition, the invasive plant management program includes collaboration with others in recognizing and preventing the spread of invasive plants.*

Comment: Based on information provided, we are rating the draft EIS as EC-1 (Environmental Concerns - Adequate).

Response: *The Final EIS includes additional design features and other adjustments to respond to environmental concerns and ensure that effective invasive plant treatments can be done while minimizing or avoiding risk to the people or the environment. New project design features for soil, water and fish, for instance, include annual treatment caps to ensure herbicide concentration in streams does not exceed a level of concern. Streamside buffers have been changed to increase the likelihood of successful, low impact treatments. Changes in buffers are noted in the text of the FEIS (Chapter 2.5.8).*

Comment: If there are infestations of aquatic invasive plants (floating or submerged in water) on the forest, we recommend that the final EIS include information about such infestations and how they would be treated to prevent deterioration of water quality within waterbodies found on the forest. The draft EIS indicates that some of the streams are already on Washington State's Clean Water Act Section 303(d) list due to dissolved oxygen impairment (p. 144).

Response: *The EIS is focused on treatment tools made available by the R6 2005 FEIS, which did not address floating or submerged invasives. Thus, treatment of infestations of floating and submerged aquatic invasive plants is outside the scope of this EIS. The Washington State Departments of Agriculture and Ecology are responsible for treatment of submerged and floating aquatic invasives. Aquatic invasives and not currently known to threaten freshwater streams on Olympic National Forest system lands.*

The list of water quality limited streams has been updated (see Chapter 3.5) and currently, no streams within or adjacent to the project area are listed as Water Quality Limited due to dissolved oxygen impairment.

Comment: The Final EIS should also include information explaining the treatment of invasive plants within buffer zones.

Response: *Chapter 2.5.8 has been edited to explain the treatments that would occur in the Aquatic Influence Zone in the Proposed Action. Certain types of treatments, herbicide selection, timing and*

methods of application are restricted near wet and dry streams, lakes, wetlands and species or habitats of local interest. The closer to a resource of concern, the more limited the treatment options. For instance, treatments within hydric (wet) soils, wetlands or stream channels are limited to selective and spot applications of aquatic labeled formulations. If no effective treatment option is available, further analysis would be necessary. Conditions would be evaluated before treatment to determine which treatment options would be allowed at a given site. Some buffer distances were changed in the Final EIS to increase the potential treatment effectiveness and/or further minimize the risk of herbicide entering water in response to EPA and other public and interagency comments. The changes made to tables 12-16 are indicated in the FEIS.

Comment: Monitoring and reporting will also be valuable components of the proposed invasive plant treatment project. As this project progresses, we would be interested in hearing about the results of treatments in terms of effectiveness of control and environmental consequences.

Response: *More discussion about monitoring and reporting was added to the FEIS in response to this comment. Monitoring will occur as per the framework in R6 2005 ROD (Appendix 2). EPA is invited to join the interagency group developing monitoring and reporting protocols for the invasive plant program.*

COMMENTER: National Marine Fisheries Service

Comment: In our view, the preferred alternative is complicated and very difficult to understand. It is comprised of treatment areas, treatment priorities and strategies, common control measures, herbicide application rates, implementation planning, and project design features and buffers. The information is not linked and there is no clear guidance to help staff in the field. As a result, decisions about whether, when, and how to initially treat and re-treat weed infestations could be made without consideration of full environmental protection or efficacy of treatment. The FEIS should provide an overarching decision framework which ties together all of the above-mentioned information and which helps staff understand its hierarchy.

Response: *The Forest Service acknowledges the complexity of the project, which may be difficult to understand for those not quite familiar with invasive plant management. The project description in the FEIS has been edited to aid public and interagency understanding.*

The Forest Service needs a certain amount of flexibility in project implementation, which increases the complexity of the proposal. Several invasive species are known to occur on the National Forest, and the introduction, establishment and spread of invasive plants is unpredictable. The treatment objective is influenced by a variety of factors, and the hierarchy of these factors also varies depending on the circumstances.

The overall decision framework is provided through the implementation planning process described in Chapter 2.5. The intent is for practitioners to have adequate tools available while minimizing unintended, adverse effects. Forest Service field personnel are experienced at implementing invasive plant treatment projects. PDFs ensure that all treatments will adhere to strict environmental standards.

Comment: The DEIS references the ROD in calling for the reduction in the reliance of herbicides over time. However, there is no guidance on how to implement that reduction. For example, a Project Design Feature (PDF) in the preferred alternative mentions manual treatments once, but does not provide

guidance on the array of manual and mechanical methods that are available for use as follow-up to herbicide treatment. Appendix B, Common Control Methods is an excellent resource for determining when and how to prioritize and treat infestations, but it is not overtly integrated into the preferred alternative.

Response: *The goal of reducing reliance on herbicides over time would be met by effectively reducing invasive plant population sizes using integrated methods so that target populations may be controlled in the future without herbicides. This is discussed in Chapters 3.1, 3.2, and 3.7.*

Appendix B contains the full text of the Common Control Measures that are summarized in Chapter 2. It is incorporated into the Preferred Alternative through reference. The Common Control Measures include integrated techniques to treat invasive plants over time.

The analysis is focused on herbicide treatments because concern about the effects of non-herbicide treatments is minimal and has been addressed by existing analysis such as the R6 2005 FEIS. Non-herbicide methods are a part of all alternatives, including No Action. Non-herbicide methods of noxious weed control have such limited potential for harm that they are often categorically excluded from NEPA documentation. PDFs for soil, water and wildlife limit activities (including non-herbicide treatments) that may disturb species of local interest.

Comment: The analysis of the herbicides in the 2005 Regional FEIS (FEIS 2005) identified three categories of risk to aquatic organisms into which the ten herbicides were grouped. The DEIS has created a new category of “aquatic-labeled” herbicides. The limited buffers associated with this new group imply that the risk from these aquatic-labeled herbicides is lower than identified in the FEIS. This implication is incorrect.

Response: *The Forest Service did not intend to create a new category of herbicides. The EIS has been edited to remove any unintended implications about the risks related to aquatic-labeled herbicides.*

Some herbicide formulations are labeled for application directly to water. These formulations are associated with equal or less risk to fish and aquatic ecosystems than the terrestrial version of the same herbicide. Some herbicides that are not labeled for aquatic use pose lower risk to fish than those with aquatic labels, but still may not be used where delivery to water is likely.

Comment: According to the [R6 2005] FEIS, two aquatic-labeled herbicides, glyphosate and triclopyr both are predicted to pose risks to fish due to predicted concentrations that exceed sub-lethal effect values. In addition, the risk assessment for the third “aquatic-labeled” herbicide, imazapyr, has not been completed. Hence, its risks are not fully known.

Response: *The risks associated with the use of imazapyr, glyphosate and triclopyr have been discussed at length in the R6 2005 FEIS and Regional Biological Opinion, as well as this project level NEPA document and its associated Biological Assessment. The likelihood of herbicides being delivered to fish-bearing waters at levels of concern was found to be low in the Proposed Action, because the buffers and PDFs restrict herbicide selection and method, extent and rate of application enough to reduce the potential for herbicides to reach harmful concentrations in water.*

Since the release of the DEIS, the ingredients of the aquatic formulation of imazapyr were reviewed (see Regional Forester memo, October 2, 2006). No additional risks were found from use of aquatic imazapyr as proposed.

Comment: The DEIS introduces a new category of invasive weeds – emergent weeds – which grow both in riparian areas as well as directly within stream channels. The preferred alternative proposes to treat these emergent weeds with the “aquatic labeled” herbicides by broadcast, spot spraying, or foliar application within the riparian, at the edge of water, directly in wet and dry streams. Currently, the DEIS does not contain sufficient analysis of these types of treatments. As a result, the conclusion of low impact is not substantiated, nor supported.

Response: *The term “emergent” is commonly used to indicate (for?) wetland plant species. For instance the 2004 Washington State Integrated Pest Management Plan for Freshwater Emergent Noxious and Quarantine Listed Weeds notes that “noxious freshwater emergent weeds” are those that grow in wetlands and along the shorelines of rivers, lakes, and reservoirs. The term “emergent” is in the Olympic DEIS glossary as plants growing out of or standing in water, in contrast to “submerged aquatic vegetation,” which grow entirely underneath the waters’ surface.*

The R6 2005 FEIS clearly did not address treatment of floating or submerged vegetation. Treatment of streamside and wetland emergent vegetation, however, was within the analysis scope of the R6 2005 FEIS. Emergent invasive species have adverse effects on aquatic ecosystems, restoration of these areas is part of the objective and purpose of this project.

Two terms “emergent” and “wetland” are used interchangeably in the FEIS. References to the term emergent occur on page 4-121 and 4-150. Numerous references to wetlands are made. Several potentially “emergent” target species are discussed in the FEIS, BA and BO, including purple loosestrife, reed canarygrass, and knotweed. These species are all associated with wetlands, stream banks and stream margins.

Herbicides are proposed as part of an effective, integrated treatment program for emergent invasive species. The 2007 FEIS and Biological Assessment (BA) contain detailed analysis about the potential for herbicide treatment of emergent invasive species (i.e., purple loosestrife, canary reedgrass, knotweed) to affect aquatic organisms. The 2007 FEIS and BA acknowledge that herbicide treatment of emergent vegetation has the greatest potential of all the proposed treatments for herbicide to enter streams, and while the amount is not likely to exceed a level of concern for fish, there could be a non-lethal adverse effect to an individual juvenile fish.

PDFs and buffers substantially reduce the potential for off-site delivery of herbicide and minimize the potential for concentrations of herbicide to reach a level of concern from treatment of emergent vegetation. Broadcasting is prohibited within at least 50 feet of any emergent vegetation.

Comment: The DEIS proposes the Early Detection, Rapid Response (EDRR) program in which new infestations, once found, can be treated under the preferred alternative without further environmental review. As proposed, EDRR is open-ended for the life of the DEIS, 15 years. In addition, the DEIS does not contain any analysis of “un-inventoried” sites which NMFS presumes will comprise a majority of treatment efforts over the life of this NEPA analysis. Due to the potential large scale and long-term of EDRR and the lack of analysis, NMFS questions the finding that the potential effects to the environment

are “greatly reduced.” The description of the EDRR needs more clarity, needs to be bounded, and needs to be analyzed. In addition, there need to be side-boards imposed upon EDRR in order to know whether future sites require individual NEPA analysis.

Response: *The Implementation Planning process (Chapter 2.5) includes environmental reviews to ensure that 1) PDFs and buffers are appropriately applied; AND 2) no site conditions exist that are different than those analyzed. This process will ensure that new situations that have not been fully analyzed in the EIS are identified and addressed.*

New situations are expected to be unlikely because site conditions throughout large treatment areas were considered in the development and analysis of the project. Current infestations cover about 3,830 acres, approximately 7 percent of the gross treatment area acreage (about 57,000 acres of National Forest system lands) in treatment areas.

The PDFs were developed based on the range of conditions throughout the treatment areas, whether or not sites were currently infested. The PDFs minimize the intensity and likelihood of exposure and the potential for off site movement of herbicides. Sideboards are provided by the PDFs. In addition, annual caps have been added to limit the extent of treatment (for instance, no more than 6 acres below bankfull would be treated in a year in any 6th field watershed).

The effects of treatments would not exceed those predicted for the most ambitious conceivable treatment scenario in any given year because the PDFs limit the rate and extent of herbicide use sufficiently to ensure that herbicide impacts would not accumulate year to year.

Comments: Two “worst-case” scenarios were analyzed in the DEIS which dramatically underestimated the potential exposure to aquatic resources from herbicide application. The two scenarios represent a large flowing river, with a flow rate of almost 17,000 cubic feet per second, and a large bog. Under these scenarios herbicide exposure was calculated to be very low, due in part to the large dilution factor of the waterbodies, and the small size of the treatment areas. Numerous scenarios, considering various exposure potentials, representing known or idealized situations and using real or assumed input parameters, should be evaluated. These “worst-case” scenarios should then represent the limits for EDRR.

Response: *The FEIS has been revised to more fully explain how potential exposure to aquatic resources from herbicide application was modeled using site-specific information. The models incorporated the behavior of the various herbicides in the environment, along with local soil and weather information, to estimate herbicide concentration in a stream. The results were compared to toxicity indices for fish, invertebrates and aquatic plants to indicate degree of hazard associated with herbicide predicted to enter water. The methodology of the SERA Worksheets are described in SERA 2007.*

SERA Worksheets were run for two representative areas, The Cranberry Bog and Middle Hoh River Floodplain treatment areas. These sites were selected because they involve treatment of riparian and emergent vegetation and represent the worst case scenario for treatments within the project area.

The SERA Worksheets are likely to overestimate herbicide concentrations because they do not consider vegetation interception or absorption, herbicide degradation, spot or hand/selective methods, and they do not consider PDC and buffers. SERA worksheets are worst-case scenarios because they assume broadcasting to the water’s edge. The SERA risk assessment scenario assumes an even broadcast spray of

10 acres along a 2 meter wide stream, with a constant flow of 1.8 cfs along 4.3 miles of stream below the 10 acre block (fixed flow velocity). The model assumes a constant 1.8 cfs base flow for 4.3 miles. This scenario represents a worst-case scenario relative to this project. However, the FEIS (Chapter 3.5) acknowledges that “the potential for aquatic imazapyr to kill individual aquatic plants, or for aquatic glyphosate to potentially result in sub-lethal adverse effects to fish, cannot be entirely discounted.”

Comment: The analysis of effects from “aquatic-labeled” triclopyr TEA exposure is problematic. The discussion ignores breakdown products. This leads to the very misleading statement that triclopyr TEA is “practically non-toxic” to aquatic resources, and also to the inaccurate assessment of persistence of triclopyr. The statements that the risk assessments overestimated risk of adverse effects from triclopyr and that the likelihood of toxic levels of triclopyr coming into contact with water is very low are misleading. The risk assessments did not consider inchannel and emergent treatments, as proposed in the DEIS, and no analysis of concentrations likely to result from in-channel (perennial dry and intermittent) application is provided. These oversights should be corrected and the conclusions of degree of impacts should be then derived

Response: *The SERA Risk Assessments considered treatment of freshwater emergent vegetation. For instance, the triclopyr risk assessment states:*

“Garlon 3A tank mixture [6% formulated product by volume, 0.5% LI 700 (nonionic surfactant), and 93.5% water] was applied at 5L/ha, using a handheld backpack sprayer, to the water side of two wetland areas in late stages of purple loosestrife invasion in the State of Washington to determine the nontarget effects of treatment. No statistically significant decreases in the survival or growth of the bioassay organisms (duckweed, Daphnia, or rainbow trout), and no significant decreases in the abundance of freeliving aquatic invertebrates as a result of Garlon 3A application. The authors conclude from this study that Garlon 3A at the application rate used does not pose a hazard to aquatic invertebrates in wetlands in central Washington.” Gardner and Grue 1996..

The breakdown products of triclopyr TEA are addressed in the triclopyr risk assessments and the R6 2005 FEIS to which this project analysis is tiered. The risk assessments are incorporated by reference in to the project level document and analysis. PDFs specific to triclopyr are incorporated into all action alternatives to address it’s toxicity and behavior in the environment.

Comment: The DEIS mentions monitoring and adaptive management, but offers no mechanism to determine whether the PDFs are capable of minimizing and avoiding concentrations of herbicides exceeding a level of concern for aquatic organisms. At present, due to lack of analysis of the efficacy of the PDFs, there is a lack of assurance and significant uncertainty. NMFS is supportive of an adaptive management approach. However, lack of PDF efficacy monitoring will make future adaptive management difficult. We believe it is imperative that, in order for this program to modify over the 15 year life, the determination of whether the PDFs are functioning as intended needs to be built into the NEPA analysis.

Response: *The R6 2005 FEIS included a monitoring framework accepted by NMFS that focused on determining the effectiveness of PDFs and buffers. The Olympic National Forest will submit treatments of emergent vegetation as candidates for monitoring per the regional monitoring framework.*

COMMENTER: Felix Capoeman

Comment: I prefer (C) especially if it will effect the damage being done to young pines, hemlock and fir. The needles and cones dying - brown discoloration.

Response: *This comment does not reflect the actual scope of the project –pine, hemlock and fir are not target species and would not be treated in any alternative.*

The following two comments are addressed collectively because they are similar.

COMMENTER: Elizabeth Wagner

COMMENTER: Jim Scarborough, Olympic Forest Coalition

Comment: Because of my concerns for drift and migration of herbicides beyond the target application areas, I am in support of Alternative C. I really think Alternative C creates a middle ground between those who wish to use herbicides exclusively and those who are opposed to the use of herbicides in the National Forest.

Comment: Olympic Forest Coalition is highly supportive of efforts to prevent and remove invasive species from our public lands (with some caveats). We do support the use of herbicides in the lowest doses possible. Preferably, herbicides are applied at the onset of weed infestations that replace natives in ecological food webs and habitat-forming structural processes. Knotweed is a prime example of this need for cautious herbicide use. However, sublethal effects of pesticides continue to be of concern, particularly in proximity to water. For those species where manual methods have been shown to be effective, we urge the Forest Service to refrain from herbicide use. Although this will entail some added expense (though while also improving local job opportunities), it is the most ecologically responsible option. Alternative C of the DEIS moves closest to this desirable direction, and we would endorse a comparable approach.

Response: *The Proposed Action (Preferred Alternative) has been modified to increase protections in Aquatic Influence Zones in response to these and other comments see (see PDFs and buffers in FEIS Section 2.5). A PDF has been added to limit herbicide application rates and acres treated annually in aquatic influence zones. Buffer distances have been increased in some cases. The types of treatments proposed in the Preferred Alternative, given PDFs and buffers, are unlikely to result in herbicides reaching streams in concentrations of concern from drift, leaching or runoff.*

For many years, the Olympic National Forest has used very little herbicide for invasive plant treatment. Nearly 4,000 acres of National Forest are currently infested despite efforts at manual and mechanical treatment. An option to use herbicides would improve our success in controlling invasive plants and reducing the potential for future spread. For instance, knotweed often grows within stream banks near or in water and non-herbicide methods have not been cost-effective in controlling knotweed. The following table lists target species known to emerge out of or grow near streams and wetlands. These species would not likely be effectively treated under Alternative C.

Target Species	Potential Wet Habitat
Knotweed	Adjacent to and standing in water (streams, rivers, ponds etc.) and along moist roadside ditches.
Hawkweeds	Moist meadows.
Tansies	On streambanks.
Scotch Broom	Adjacent to and in meadows, streams, and riparian margins.
English Ivy	Can grow over rocks and adjacent to water, but not in water.
Reed Canarygrass	Wetland emergent species, likes to be flooded – in wet ground, streams, marshes, canals, irrigation ditches, etc.
Canada and Bull Thistle	In meadows and along creeks, streams, and in aspen stands adjacent to creeks.
Herb Robert	Adjacent to water, creek, streambanks.
Purple Loosestrife	Streambanks, canals, ditches, and in shallow ponds.
Blackberry	Often a monoculture along streams and rivers, etc.
Oxeye Daisy	Adjacent to and in meadows, and stream, and river edges.
Yellow Nutsedge	Moist or wet areas.

Non-herbicide methods would be preferred in the Preferred Alternative where they are cost-effective, especially in aquatic influence zones (PDF H2). The analysis assumes herbicides would be part of the initial treatment prescription, however, in practice, non-herbicide methods may precede or replace herbicide methods. As shown in EIS section 3.1 and 3.8, in the Preferred Alternative, non-herbicide methods are expected to comprise a larger share of the suite of treatments as target populations are decreased through effective treatments using herbicides as appropriate.

Cost-effectiveness is a factor considered in the analysis and one of the decision factors. Job creation may be a desirable outcome of labor intensive methods, however this outcome is not one of the purposes of the project or decision factors. Alternative C would be less cost-effective than the Preferred Alternative in areas where herbicides are prohibited. For some species and sites, non-herbicide treatment would not be successful, either because the plant cannot be controlled without herbicides or the costs of manual and/or mechanical treatment are prohibitive.

Alternative C also does not approve broadcast application of herbicide. The Preferred Alternative would not approve broadcast over two-thirds of the National Forest. PDFs for botanical species would tend to further limit the use of broadcast treatment. Broadcast would be only used where the density or distribution of invasives warrant this treatment approach.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10
1200 Sixth Avenue
Seattle, WA 98101

July 31, 2005

Reply To
Attn Of: ETPA-088

Ref: 06-039-AFS

Mr. Dale Hom, Forest Supervisor
Olympic National Forest
1835 Black Lake Blvd. S.W., Suite A
Olympia, WA 98512

Dear Mr. Hom:

The U.S. Environmental Protection Agency (EPA) has reviewed the draft Environmental Impact Statement (EIS) for the proposed **Beyond Prevention: Site-Specific Invasive Plant Treatment Project** (CEQ No. 20060241) on Olympic National Forest in Clallam, Grays Harbor, Jefferson, and Mason counties, Washington. Our review was conducted in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Section 309, independent of NEPA, specifically directs EPA to review and comment in writing on the environmental impacts associated with all major federal actions. Under our policies and procedures, we evaluate the document's adequacy in meeting NEPA requirements.

The draft EIS, which is tiered to the Pacific Northwest Region EIS for the Invasive Plant Program, assesses the impacts of using herbicide, manual, and mechanical methods to treat invasive plants on specific sites within Olympic National Forest and evaluates the project design features to minimize or eliminate risks to people and the environment over the next 5-15 years. Analysis of effects that would result from the proposed invasive plant treatment project considered the following four action alternatives, (A-D).

- A. **No action.** Under this action alternative, there would be no approval of new invasive plant treatment. A total of 672 acres are currently treated. Nearly 86 acres of this area are treated using a variety of methods, including manual, mechanical, herbicide (spot or hand), and a combination thereof. For the remaining 586 acres, manual and mechanical treatments are used.
- B. **Proposed action (Preferred Alternative).** Under this alternative, the Forest Service would manage a variety of invasive plants on nearly 3,830 acres of the forest system lands using a combination of manual, mechanical, herbicide, and restoration of treatment sites. Herbicides would be used to treat only 16 acres. The treatments would be site-specific and be tied to suppression, containment, control, and eradication of invasive plants, the values at risk from the plants, their biology, size of infestation, and proximity to water and other sensitive resources. The draft EIS indicates that Alternative B would result in minimal environmental and human health risks.
- C. Under this alternative, the Forest Service would modify its proposed action to eliminate herbicide use on about two-thirds of the forest (or 2,375 acres) and only use spot/hand treatment where herbicides would be needed (1,035 acres). All other project design features would be the same as for the proposed action.

- D. Under this alternative, the Forest Service would modify the proposed action to allow more broadcast application of herbicides, especially on roadside treatment areas. Spot/Hand application of herbicide would also be used as in alternative C, but on much smaller area - 16 acres.

The above action alternatives essentially differ in the amount of herbicide application and their emphasis on broadcast and spot/hand herbicide application methods. As a result of implementation of the proposed action or preferred alternative, the draft EIS indicates that there would be no significant environmental impacts or risks to human health and safety.

EPA appreciates the efforts of the Forest Service to plan for this project, especially for consideration of public scoping comments in the planning process and incorporation of Integrated Pest Management (IPM) principles in this project plan. We hope that there will also be efforts to boost public participation and education during the proposed project implementation.

Based on information provided, we are rating the draft EIS as EC-1 (Environmental Concerns - Adequate). A copy of the EPA rating system used in conducting our review is enclosed for your reference. This rating and a summary of our comments will be published in the *Federal Register*.

If there are infestations of aquatic invasive plants (floating or submerged in water) on the forest, we recommend that the final EIS include information about such infestations and how they would be treated to prevent deterioration of water quality within waterbodies found on the forest. The draft EIS indicates that some of the streams are already on Washington State's Clean Water Act Section 303(d) list due to dissolved oxygen impairment (p. 144). The final EIS should also include information explaining the treatment of invasive plants within buffer zones.

Monitoring and reporting will also be valuable components of the proposed invasive plant treatment project. As this project progresses, we would be interested in hearing about the results of treatments in terms of effectiveness of control and environmental consequences.

Thank you for the opportunity to review this draft EIS. If you have questions or comments concerning our review, please contact Theogene Mbabaliye at (206) 553-6322 or me at (206) 553-1601.

Sincerely,

/s/ Elaine Somers for

Christine B. Reichgott, Manager
NEPA Review Unit



UNITED STATES DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE

Washington State Habitat Office

510 Desmond Drive SE, Suite 103

Lacey, WA 98503

July 27, 2006

Dale Hom
Forest Supervisor
Olympic National Forest
1835 Black Lake Blvd. SW, Suite A
Olympia, WA 98512

RE: Comments on the Olympic National Forest Draft Environmental Impact Statement –
Beyond Prevention: Site-Specific Invasive Plant Treatment Project

Mr. Hom:

The National Marine Fisheries Service (NMFS) appreciates the opportunity to review the above-identified Draft Environmental Impact Statement (DEIS) and would like to convey the following comments. We believe your attention to these comments will yield an invasive plant treatment program that will not only better manage this threat to forest health, but will move the program closer to protecting important trust resources.

In our view, the preferred alternative is complicated and very difficult to understand. It is comprised of treatment areas, treatment priorities and strategies, common control measures, herbicide application rates, implementation planning, and project design features and buffers. The information is not linked and there is no clear guidance to help staff in the field. As a result, decisions about whether, when, and how to initially treat and re-treat weed infestations could be made without consideration of full environmental protection or efficacy of treatment. The FEIS should provide an overarching decision framework which ties together all of the above-mentioned information and which helps staff understand its hierarchy.

There appear to be numerous unsubstantiated inconsistencies between the DEIS and the 2005 Record of Decision (ROD 2005). According to the ROD (ROD 2005), the selected alternative was to be adopted by each National Forest as part of their Forest Plan. It allowed for modification of the selected alternative in accordance with appropriate regulations such as NEPA. The Olympic National Forest (ONF) DEIS does not adhere to the intent of the ROD in that the following proposed modifications are not sufficiently substantiated or analyzed:

- The DEIS references the ROD in calling for the reduction in the reliance of herbicides over time. However, there is no guidance on how to implement that reduction. For example, a Project Design Feature (PDF) in the preferred



alternative mentions manual treatments once, but does not provide guidance on the array of manual and mechanical methods that are available for use as follow-up to herbicide treatment. Appendix B, Common Control Methods is an excellent resource for determining when and how to prioritize and treat infestations, but it is not overtly integrated into the preferred alternative. The above-suggested overarching decision framework should directly incorporate the full content of Appendix B in order to provide staff with the entire suite of manual and mechanical tools, in addition to the herbicide tools. Also, the impacts of the use of those manual and mechanical tools should be analyzed.

- The analysis of the herbicides in the 2005 Regional FEIS (FEIS 2005) identified three categories of risk to aquatic organisms into which the ten herbicides were grouped. The DEIS has created a new category of “aquatic-labeled” herbicides. The limited buffers associated with this new group imply that the risk from these aquatic-labeled herbicides is lower than identified in the FEIS. This implication is incorrect. According to the FEIS, two aquatic-labeled herbicides, glyphosate and triclopyr both are predicted to pose risks to fish due to predicted concentrations that exceed sub-lethal effect values. In addition, the risk assessment for the third “aquatic-labeled” herbicide, imazapyr, has not been completed. Hence, its risks are not fully known. The category of aquatic labeled herbicide needs reconsideration. If the ONF intends on retaining the use of those “aquatic-labeled” herbicides, further analysis of the effects of their application should be conducted.
- The DEIS introduces a new category of invasive weeds – emergent weeds – which grow both in riparian areas as well as directly within stream channels. The preferred alternative proposes to treat these emergent weeds with the “aquatic-labeled” herbicides by broadcast, spot spraying, or foliar application within the riparian, at the edge of water, directly in wet and dry streams. Currently the DEIS does not contain sufficient analysis of these types of treatments. As a result, the conclusion of low impact is not substantiated, nor supported.

The DEIS proposes the Early Detection, Rapid Response (EDRR) program in which new infestations, once found, can be treated under the preferred alternative without further environmental review. As proposed, EDRR is open-ended for the life of the DEIS, 15 years. In addition, the DEIS does not contain any analysis of “un-inventoried” sites which NMFS presumes will comprise a majority of treatment efforts over the life of this NEPA analysis. Due to the potential large scale and long-term of EDRR and the lack of analysis, NMFS questions the finding that the potential effects to the environment are “greatly reduced.” The description of the EDRR needs more clarity, needs to be bounded, and needs to be analyzed. In addition, there need to be side-boards imposed upon EDRR in order to know whether future sites require individual NEPA analysis.

Some aspects of the analysis in the DEIS are weak or limited in scope. For example:

- Two “worst-case” scenarios were analyzed in the DEIS which dramatically underestimated the potential exposure to aquatic resources from herbicide application. The two scenarios represent a large flowing river, with a flow rate of almost 17,000 cubic feet per second, and a large bog. Under these scenarios herbicide exposure was calculated to be very low, due in part to the large dilution factor of the waterbodies, and the small size of the treatment areas.
- Numerous scenarios, considering various exposure potentials, representing known or idealized situations and using real or assumed input parameters, should be evaluated. These “worst-case” scenarios should then represent the limits for EDRR.
- The analysis of effects from “aquatic-labeled” triclopyr TEA exposure is problematic. The discussion ignores breakdown products. This leads to the very misleading statement that triclopyr TEA is “practically non-toxic” to aquatic resources, and also to the inaccurate assessment of persistence of triclopyr. The statements that the risk assessments overestimated risk of adverse effects from triclopyr and that the likelihood of toxic levels of triclopyr coming into contact with water is very low are misleading. The risk assessments did not consider in-channel and emergent treatments, as proposed in the DEIS, and no analysis of concentrations likely to result from in-channel (perennial dry and intermittent) application is provided. These oversights should be corrected and the conclusions of degree of impacts should be then derived.

The DEIS mentions monitoring and adaptive management, but offers no mechanism to determine whether the PDFs are capable of minimizing and avoiding concentrations of herbicides exceeding a level of concern for aquatic organisms. At present, due to lack of analysis of the efficacy of the PDFs, there is a lack of assurance and significant uncertainty. NMFS is supportive of an adaptive management approach. However, lack of PDF efficacy monitoring will make future adaptive management difficult. We believe it is imperative that, in order for this program to modify over the 15 year life, the determination of whether the PDFs are functioning as intended needs to be built into the NEPA analysis.

NMFS is currently participating with the ONF in the development of a biological assessment under the Endangered Species Act (ESA) for the preferred alternative. Comments which include these and other issues have been transmitted to the ONF staff. While those comments will be identified in another venue, we believe addressing the above comments during the NEPA process will significantly benefit the upcoming ESA section 7 consultation.

Thank you very much for the opportunity to comment on this DEIS. Please contact Rachel Friedman (rachel.friedman@noaa.gov, 360-753-4063), of my staff, regarding these comments, or Dan Guy (dan.guy@noaa.gov, 360-534-9342), Branch Chief of the Lower Columbia/Southwest Washington Branch, regarding Level 2 policy matters.

Sincerely,

A handwritten signature in black ink, appearing to read "S. Landino", written in a cursive style.

Steven W. Landino
Washington State Director
for Habitat Conservation

cc: Dan Guy, NMFS
Rachel Friedman, NMFS
Patty Walcott, USFWS
Marc Whisler, USFWS

References

USDA Forest Service Pacific Northwest Region. 2005. Pacific Northwest Region Invasive Plant Program: Preventing and Managing Invasive Plants - Record of Decision. Pacific Northwest Region, Portland, OR. October 2005.

USDA Forest Service Pacific Northwest Region. 2005. Pacific Northwest Region Invasive Plant Program: Preventing and Managing Invasive Plants - Final Environmental Impact Statement. Pacific Northwest Region, Portland, OR. April 2005.

