

# APPENDIX G

## Site-Specific Invasive Plant Treatment Project

Gifford Pinchot National Forest  
Columbia Gorge National Scenic Area - Washington Side

PUBLIC COMMENTS TO THE DEIS  
AND AGENCY RESPONSES





Appendix G contains substantive comments excerpted from all letters and email correspondence sent to the Forest Service during or after the comment period established for the Draft Environment Impact Statement (DEIS). Comments were received from one federal agency (Environmental Protection Agency), three local counties (Lewis, Klickitat and Skamania Counties), one coalition of environmental groups (Gifford Pinchot Task Force, Friends of the Columbia River and Columbia Riverkeepers) and three individuals. The Forest Service responded to the comments by explaining, adding or modifying discussions in the Final EIS and making minor modifications to the Proposed Action. Letters from the Environmental Protection Agency (EPA) and counties are published in full after the comment excerpts and responses.

### **COMMENTS FROM: Environmental Protection Agency**

#### **EPA Comment 1:**

Based on the information provided, we are rating the DEIS as LO (Lack of Objections). An explanation of this rating is enclosed. EPA appreciates the thorough analysis contained in the DEIS.

*Response: Thank you for this comment.*

#### **EPA Comment 2:**

Despite the substantial amount of scientific information that EPA reviews prior to registering a pesticide, it is virtually impossible to identify all conceivable risks and to address all the uncertainties of pesticide use. This means that from time to time new risks are uncovered. Over the years, examples have included egg-shell thinning caused by Dichloro Diphenyl Trichloroethane (DDT), risks from groundwater contamination, pesticides that mimic hormones and the more recent discovery that pesticides in combination may behave synergistically with a multiplier effect. The amount of testing that would be required to resolve these uncertainties would be labor and cost intensive, resulting in a very slow pesticide registration process. Because science cannot, in any practical sense, assure safety through any testing regime, pesticide use should be approached cautiously.

*Response: The DEIS described the layers of caution incorporated into herbicide use in the project. Known adverse effects on people and/or the environment have been avoided or minimized and the potential for unknown effects limited by PDC.*

#### **EPA Comment 3:**

Aside from the potential for toxic effects to people, overuse of pesticides may cause problems such as: a) killing beneficial organisms that would otherwise help control pests; b) promoting development of pesticide resistance in pests, which starts a vicious cycle in which more and more pesticides are needed; c) resurgence of pest populations, and d) contamination of the environment.

*Response: The types of treatments proposed are unlikely to result in these adverse effects. This project would not contribute to herbicide over use. Herbicides would be used according to integrated treatment practices and PDC that limit potential for killing beneficial organisms, developing herbicide resistance, or contamination of the environment. Follow up treatments would occur to respond to any "resurgence" of target species.*

**EPA Comment 4:**

EPA acknowledges that the extent of new detections cannot be predicted, however, we recommend that the document establish a cap on the total number of acres (not including acres of re-treatment) that can be treated over the life of the project. Additionally, because of the uncertainty around future infestations, the DEIS should indicate a cap on the number of acres to be treated annually within each 5th field watershed. Consistent with other regional EIS's, EPA recommends that the number of acres to be treated with herbicide not exceed three percent per year in any one 5th field watershed.

*Response: The analysis is based on a 3,422 acres treated over a 5 year period, with all currently proposed treatment acres (as shown in Appendix A) treated in a single year and re-treatments and restoration occurring thereafter.*

*Over the life of the project, more or different acres may need to be treated because of spread of existing infestations or new detections. As discussed in the EIS Chapters 3.1, 3.2 and 3.7; the fewer existing acres effectively treated at any given time, the greater the total acres likely needing to be treated due to spread. If all of the current sites were treated as quickly as possible, the potential for existing sites to spread would be greatly diminished. Ongoing restoration would also help reduce the potential for re-infestation.*

*The project was designed to provide maximum flexibility to increase the potential effectiveness of treatments, while ensuring that adverse effects are minimized. The premise of early detection-rapid response analysis approach is that treatments of new infestations according to PDC will have similar effects to treatments of existing sites. All new infestations would be evaluated to ensure that no conditions exist that were not considered in this EIS and addressed through PDC. The PDC were developed to ensure that adverse effects are minimized regardless of the acreage needing treatment. This is due to limitations on the treatment type; herbicide selection; application rate or method; and extent in aquatic influence zones. "The PDC serve to limit the rate, type and method of herbicide application sufficiently to eliminate exposure scenarios that would cause concern" (DEIS, page 86). "PDC and buffers described in Chapter 2.5 minimize the risk herbicide exposures that could exceed thresholds of concern for people, wildlife and fish...These thresholds are very conservative and account for uncertainty (see section on layers of caution above) (DEIS, page 92)."*

*PDC H14 was added to the Proposed Action in the Final EIS to further limit potential adverse impacts under EDRR: "Treatments above bankfull, within the aquatic influence zone, would not exceed 10 acres along any 1.5 mile of stream reach within a 6th field subwatershed in any given year. In addition, treatments below bankfull would not exceed 7 acres total within a 6th field sub-subwatershed in any given year." These limitations provide a specific tie to the effects analysis.*

*In practice, the acreage treated in any one year would not likely exceed the most ambitious treatment scenario (2,700 acres in a single year) analyzed because the most ambitious scenario would require about twice the current budget.*

**EPA Comment 5:**

An effective invasive plant management program must include both active control/eradication of existing populations and prevention of new populations. We applaud the Forest and Scenic Area for having established a set of prevention standards, and for their work to incorporate the standards and guidelines related to prevention in the 2005 Pacific Northwest Region Invasive Plant Program, Preventing and Managing Invasive Plants Record of Decision. There are, however, important vectors for spread of invasives that are not addressed in these existing standards and guidelines. Specifically, the FS should consider adopting a site-specific standard prohibiting cross country use of off-highway vehicles (OHVs) and limiting the use of OHVs to designated routes and in designated areas, and closing, decommissioning, or seasonally restricting access to non-essential roads that are high-risk vectors for spread of invasive plants.

*Response: The Forest Service's new travel management rule provides the framework for each national forest and grassland to designate those roads, trails and areas open to motor vehicle use. Designated routes and areas will be identified on a motor vehicle use map. This is accomplished through existing Forest Service policy 36 CFR parts 212, 251, 261, and 295 (Travel Management; Designated Routes and Areas for Motor Vehicle Use). Prevention Standard 1 from the R6 2005 ROD requires that travel management plans consider ways to prevent spread along roads.*

**EPA Comment 6:**

Section 2.2 of the DEIS indicates that in 2004, the FS completed field surveys on "main vectors" for invasive plants. The DEIS should give some discussion to how treatment sites in the remaining, uninventoried areas will be identified. Given limited resources, consideration should be given to how to best utilize existing tools (NRIS/Terra database) and existing monitoring programs in order to systematically identify new infestations.

*Response: Inventory and monitoring is addressed through the R6 Framework. Inventory is an essential part of the control program and will be ongoing. High value and risk areas such as trailheads, camping areas, and wilderness, botanical and other special areas would be inventoried more frequently. Forest Service employees and the public are encouraged to identify and report new invasive plant detections.*

**EPA Comment 7:**

The 2004 invasive plant inventory noted above did not document the existence of aquatic invaders. As a result, the DEIS does not address invasive plants floating or submerged in water. Because aquatic invasives are an emerging issue on National Forest land and elsewhere, EPA encourages the Forest Service to include at risk water bodies (such as those used for recreational purposes) in future monitoring and inventory efforts. If work is underway to address aquatic invasives, these efforts should be acknowledged in the document.

*Response: The EIS is focused on treatment tools made available by the R6 2005 FEIS, which did not address floating or submerged invasives. Wetland and stream emergent plants (defined as plants with parts growing above water that can stand freely without the presence of water) were not excluded from the R6 2005 FEIS and thus, would be treated in this project. No freshwater aquatic (submerged or floating) invasives are known to be of concern on National Forest System lands in the analysis area.*

## **COMMENTS FROM: Skamania County Noxious Weed Control Board**

### **Skamania County Comment 1:**

On the first page of Appendix A on the Treatment Area Data Tables, "Mow" is listed as a Mechanical Method for the Collins Slide 22-06. The Skamania County Knotweed Crew has surveyed the length of this infestation and recognizes that mowing is not a feasible alternative for this area due to the steep topography and lack of access. It is our recommendation that "mow" not be considered as an alternative for the treatment of knotweed at all. Segments from mowed plants have to be collected and properly disposed of. We have found that more times than not, mowed areas result in the spread of knotweed and cause the plants to grow shorter and bushier making them harder to treat by injection.

*Response: Mowing (and/or grazing with goats) is proposed in the portion of treatment area 22-06 that contains fields of blackberries and scotch broom. This area would be restored with native grasses and herbaceous flora in connection with western pond turtle habitat enhancement. The knotweed growing along the stream would not be mowed or grazed.*

### **Skamania County Comment 2:**

We believe the knotweed in the Collins Slide to be primarily 'Giant' (*Polygonum sachilinese*). The only knotweed listed for treatment in the Draft EIS is "Japanese" and "Bohemian". We would recommend listing "Giant" to the plant list.

*Response: Giant knotweed has been added to the lists in Appendix A and Chapter 2.*

### **Skamania County Comment 3:**

On page 59, PDC Reference F7 the Design Criteria states "No herbicide application would occur if precipitation is occurring or is forecasted within 24 hours." We do not apply any foliar applications if there is a 50% chance of rain or better. We inject when it is raining. The ability to inject when it is raining is one of the favorable aspects of the injection method for treating knotweed and allows us to treat under any weather conditions. We would like to see some exception stated for chemical application via injection during rainy periods.

*Response: This PDC has been removed from consideration in response to this comment. It was overly restrictive and did not offer substantial benefits.*

## **COMMENT FROM: Klickitat County Noxious Weed Control Board**

**Comment:** I found the scope and thoroughness of this document very well done given the size and complexity of the area defined in the proposal. I am in support of "Alternative B" as presented in the preferred proposed action. Alternative B as proposed is best suited to truly impact the invasive weeds already documented. I am also in favor of the early detection and immediate action component as that will enable prevention of larger scale future invasions. Having the ability to use herbicides is a critical element in Alternative B, herbicides are often the most cost efficient and truly effective tool to use on invasive weed species. Used judiciously herbicide will be more time efficient and safer for the personnel doing the actual control work. The document competently addresses the impacts of invasive species, herbicide and the environmental effects.

*Response: Thank you for your comments.*

### **COMMENT FROM: Lewis County Noxious Weed Control Board**

**Comment:** The Lewis County Noxious Weed Control Board supports the Forest Services efforts in producing a comprehensive document that outlines the management of invasive species, which will work toward the protection of forestland in the Gifford Pinchot NF and the Columbia River Gorge National Scenic Area. The Lewis County Noxious Weed Control Board supports the Proposed Action (Alternative B) as the preferred alternative for the treatment of invasive plants and restoration of treated sites. For Lewis County, the Gifford Pinchot National Forest is an important jurisdictional neighbor that manages a wide range of resources that are important to the citizens of the county. Having a long term plan to manage noxious weeds is critical to the natural resource management and viewed as an essential part of landowner stewardship. Thanks for allowing the Lewis County Noxious Weed Control Board the opportunity to comment on the Draft Environmental Impact Statement.

*Response: Thank you for your comments.*

### **COMMENTS FROM: Gifford Pinchot Task Force, Friends of the Columbia River, Columbia Riverkeepers (GPTF et al)**

#### **GPTF et al Comment 1:**

Alternative C would not address many important invasive problems and could lead to greater environmental damage in the long term due to habitat loss. Alternative C could ultimately lead to greater herbicide impacts if invasive populations are allowed to spread before ultimately being treated.

*Response: Thank you for this comment.*

#### **GPTF et al Comment 2**

We urge the Forest Service to include a more comprehensive strategy that includes new prevention measures and puts a priority on not simply compliance with environmental standards but restoring at risk ecosystems. During the scoping period for the DEIS, we commented that new weed prevention measures should be proposed and evaluated that would be applied to any land management action that could result in disturbed soil or other conditions that could result in an increased risk of weed establishment. The Forest Service responded by writing, “invasive plant prevention practices that may be applied to land uses on National Forest system lands are not connected actions to the proposed treatments” (DEIS p.26). We feel strongly that the Forest Service should place a high priority on new weed prevention measures as part of the proposed invasive plant treatment project.

[The EIS should] identify a specific process as a part of its rapid response strategy for evaluating and deciding on management related actions that work in tandem with chemical or mechanical control to stop the spread of a given target population. Actions such as temporarily restricting ORV use or grazing in an area where a priority invasive is found to occur is the type of basic management control step that should be taken.

For each target site, the GPNF should consider whether there are any management changes, such as temporary closure to motorized vehicles or grazing, that should be put in place until a given invasion is controlled. We believe that these steps are critical to minimizing the use of herbicides and creating more resilient habitat conditions which are less susceptible to invasions from either existing weeds or future invaders.

**Response:** *Prevention is an important component of invasive plant management addressed throughout the R6 2005 FEIS and ROD, additional national and regional manual direction and policy statements, and the USDA-Forest Service Guide to Noxious Weed Prevention. The R6 2005 ROD added a standard to all Forest Plans requiring that all land use projects, assessments and plans address prevention of invasive plant introduction, establishment and spread (Appendix 1). The Regional Forester intended the prevention standards to reduce rates of spread of invasive plants, while still maintaining the Forest Service's ability to provide for existing uses and management activities on National Forest System lands (ROD page 9).*

*Invasive plant prevention practices will occur regardless of alternative selected for invasive plant treatment in this FEIS, including No Action. The DEIS summarized the predicted results of prevention practices that are assumed to occur in all land uses, as required by the Gifford Pinchot National Forest Plan (as amended by the R6 2005 ROD, which also applies to the Columbia River Gorge National Scenic Area in Washington). Changes to land uses that are already occurring within the project area include (but are not limited to):*

- Timber sale and other contracts require washing heavy equipment;*
- Weed free feed requirements in Wilderness, later throughout National Forest;*
- Weed free rock source requirements;*
- Increased coordination between road maintenance and invasive plant staff to ensure prevention practices are incorporated into road work;*
- Access and Travel Management Plans (36 CFR 212, 251, 261, and 295) that designate routes for off-highway vehicles must address invasive plant prevention.*

*For instance, if grazing practices are affecting the spread of invasive plants or the effectiveness of our invasive plant treatments, R6 2005 ROD Standard 6 provides direction to range managers to adjust the practice using any administrative means available. Similarly, Standard 8 requires consultation with invasive plant managers on road blading, brushing and ditch cleaning and sites that were treated under this project would surely be considered in this consultation. Road construction, re-construction, and use would be guided by Standard 1, which requires invasive plant prevention to be addressed in all decisions, assessments and plans occurring on National Forest in the region.*

*The Forest Service needs the flexibility to respond to rapidly and effectively respond to invasive plant occurrence, regardless of adjacent land use decisions. Land use practices can be adjusted any time, regardless of decisions made for this project, and this project can continue regardless of land use decisions made during the life of the project.*

*Land uses are considered in the Implementation Planning Process when long term strategies are identified and a treatment and restoration prescription developed for each treatment site. However, the analysis assumes that current land uses would continue and over time, changes would be made in accordance with Prevention Standards and other policies discussed above.*

**GPTF et al Comment 3:**

We can accept the limited use of herbicides to treat invasives with the idea that the GPNF is making a genuine and focused effort to restore habitat conditions so that the Forest is ultimately more resistant to invasives. We believe that the proposed project needs to do more to emphasize the use of heavy seeding of aggressive native species or fine mulch as a part of treatment plans after chemical or mechanical treatments.



**Response:** *The Forest Service acknowledges that restoration is a connected action to treatment. More emphasis and explanation about restoration has been added to the Proposed Action description in the FEIS and Appendix A in response to this comment.*

**GPTF et al Comment 4:**

There seem to be several inconsistencies with the DEIS in question and the R6 2005 ROD that are of concern to us. First, the DEIS references the ROD in calling for the reduction in the reliance of herbicides over time, but the DEIS fails to provide guidance on how to implement the reduction. Treating invasive source populations and implementing the planned rapid response plan should also serve to reduce long-term herbicide use and this should be mentioned in the FEIS.

**Response:** *Chapter 3.7 describes the basis for the most ambitious treatment scenario that was analyzed for each alternative. Non-herbicide treatments that are combined with herbicide treatments are modeled to begin occurring in the second year of treatment. The first year is assumed to be 100% herbicide, even though the final prescriptions may include some manual and mechanical treatment during or before herbicide application. This assumption allows for the maximum differentiation between the impacts of herbicide use in the alternatives. For each alternative, the modeled acreage of herbicide and non-herbicide treatments are shown. In the Proposed Action and Alternative C, over time, the proportion of herbicide use compared to non-herbicide methods is shown to decrease.*

**Modeled Pattern of Herbicide to Non-Herbicide Over Time in the Proposed Action**

Year	Percent Herbicide Use	Percent Non-Herbicide Use
2007	100%	0%
2008	75%	25%
2009	50%	50%
2010	0%	100%

*The inclusion of active restoration as part of the Proposed Action is another way the Forest Service intends to reduce reliance on herbicides over time in treated sites (Rochelle to add multiple citations). The FEIS has been edited to acknowledge, “Implementation of early detection-rapid response would help meet the Forest Plan objective of reduced herbicide use over time.” The relationship between timely treatment and reduced reliance on herbicides over time is also discussed in the Purpose and Need section of the FEIS (Chapter 1.2.1).*

**GPTF et al Comment 5:**

We support amending the GPNF Plan standard as proposed at p. 12 to allow controlled use of herbicide use in Riparian Reserves when these key biological areas face an invasive threat. Failing to allow such use for species such as Japanese knotweed or purple loosestrife would undermine the essential functions of Riparian Reserves and the values they were intended to protect. These areas, however, are also the areas where our concern about herbicide use and its aquatic impacts are the greatest. The amendment to the Forest Plan should be limited by allowing only the use of the lowest impact herbicide needed to control a target species and also require that it is applied in the most target-selective way feasible.

**Response:** *The proposed Forest Plan amendment complements the R6 2005 ROD Standards that require projects to minimize or eliminate adverse effects from invasive plant treatments. This meets the general intent of “allowing only the use of the lowest impact herbicide needed to control a target species and also require that it is applied in the most target-selective way feasible.” In this project, risk of herbicide exposure is minimized by limitations on the herbicide formulation and application method and rate in areas where herbicide may be delivered to streams.*

*Risk assessments, prior monitoring, and site-specific analysis all indicate the PDC and buffers would prevent herbicide exposures of concern to people or the environment.*

*Often, there is more than one low risk option available; however there is only one “lowest risk” option. The Forest Service needs the flexibility to choose the most effective combination of methods from a range of options when treating invasive plants, as long as herbicide exposures of concern are prevented.*

**GPTF et al Comment 6:**

We similarly support the proposed amendment to remove the brown out standard since the current standard could limit herbicide application during the driest parts of the year and the visual impacts are far outweighed by the ecological need to address invasives.

*Response: Thank you for your support.*

**GPTF et al Comment 7:**

The EIS should do more to evaluate the effects of “aquatic-labeled” herbicides and specify the types of controls that would be used to limit aquatic impacts from use on emergent invasives. The extent to which direct injection of glyphosate, for example, would be used as opposed to wiping or spot spraying with other herbicides should be discussed.

*Response: The FEIS contains further discussion about the effects of herbicides (including those with aquatic labels) and includes additional PDC to limit the amount of emergent and riparian vegetation that may be treated annually. The FEIS notes that the type and extent of treatments proposed for emergent vegetation is unlikely to result in significant adverse effects to aquatic organisms.*

**GPTF et al Comment 8:**

We are concerned that the DEIS states that “more common invasives such as scotch broom and Himalayan blackberry may also be treated. Very widespread species such as tansy ragwort and oxeye daisy would only be treated in a limited, specific situation.” (p. 5). We were pleased to see that scotch broom was included as a target species for a number of the Forest treatment sites, but we believe that tansy and oxeye should be addressed as a part of this plan and treated if funding allows. These species should be included as target species given their potential to become much more widespread across disturbed habitats including both naturally disturbed areas (e.g., stream and rivers beds) and human-caused disturbed areas. While existing funding may limit treatment of some species, having an approved EIS that contemplates treatment of these important invasives would be very valuable if additional funding becomes available. The FEIS should make clear that so long as the treatment methods are similar to those described in the EIS, treatment of invasives would not be limited to the species specifically described in the EIS. As the EIS did note, in areas where invasive control is going to occur it makes good economic and biological sense to treat as many species of exotics as is feasible instead of merely limited treatment to the number described in the EIS.

*Response: The Proposed Action is indeed intended to allow treatment of target species that are not currently inventoried “so long as the treatment methods are similar to those described in the EIS.” This statement has been clarified in Chapter 2.5.6 of the FEIS.*

**GPTF et al Comment 9:**

According to the Proposed Action, the site-specific treatment prescriptions would be implemented over the next three to fifteen years, based on Common Control Measures and PDC. In Appendix B, the Common Control Measures specifically say to use these measures as a “starting point for developing treatment alternatives to meet your objectives” (B-3). The Proposed Action includes no mention of further analysis of treatment options.

**Response:** *The Implementation Planning Process described in Chapter 2.5.7 discusses the variables that would be considered in determining precise treatment prescriptions including:*

- *target species density and extent;*
- *treatment strategy and priority;*
- *the size of the infestation, its treatment history and response to past treatment;*
- *proximity to species of local interest or their habitats;*
- *proximity to streams, lakes, wetlands;*
- *whether the treatment site is along a road associated with high risk of herbicide delivery to surface water;*
- *soil conditions; municipal watersheds and/or domestic water intakes; and places people gather (recreation areas, special forest product and special use areas).*

*The treatment prescription is an integration of all of these elements, along with whether the mix of target species in an area could be cost-efficiently treated by a common method. The DEIS also showed the decision making process relative to broadcast vs. spot or hand treatment.*

*A “changed condition” analysis as per Section 18 of the Forest Service Handbook (1909.15) would be warranted if the treatment could no longer be cost-effective once PDC and buffers are applied (for instance broadcast is absolutely necessary where currently prohibited). The analysis assumes the most ambitious treatment (for instance broadcast where not explicitly prohibited) but the actual treatment prescription is likely to favor spot and hand methods.*

**GPTF et al Comment 10:**

Another concern is that the PDC’s have not been tested and therefore it is unknown if the criteria are effective at minimizing the potential impacts of invasive plant treatment. A discussion should be added to the FEIS which assesses the likely effectiveness of PDCs.

**Response:** *Further discussion about previous monitoring results has been added to the FEIS in response to this comment. Forest Service monitoring results from Neil Berg (2004) and Washington State Department of Agriculture 2003-2005 monitoring results were used to develop buffers and PDC , along with models based on worst-case scenarios analyzed in the SERA risk assessments, and recommendations from previous Section 7 ESA consultations on herbicide treatments. The purpose and source of each PDC is cited, and all are expected to be effective.*

*The PDC largely avoid potential for discernable adverse effects by eliminating the use of a certain herbicide, or by limiting the rate or method of use. However, under the Proposed Action, some non-target vegetation is likely to be harmed, however these events are likely to be isolated, small, short-term, and treatment sites are expected to recover within a season. Some herbicide may drift, run off, or leach into water, however the likelihood that concentrations of concern would be reached is very low, and would be flushed through the system rapidly with no offsite or chronic effects. This is discussed in Chapter 3.4 and 3.5 and Appendix C.*

*Monitoring of impacts to non-target vegetation would occur during post-treatment site visits and adjustments to site prescriptions would be made if effects were more intense or extensive than predicted.*

**GPTF et al Comment 11:**

The Forest Service is looking for the approval to treat both the sites that are already known -- 2,700 acres -- and future sites that are detected in the next three to fifteen years. We believe that the FEIS needs to better address the impacts that may occur on future sites by clarifying which types of treatment options would be used in which types of situations. Clarifying the predicted scope of future treatment in acres could also add clarity as to the extent of future treatments that are being contemplated under this EIS.

***Response:** The analysis is based on approximately 3,400 acres treated over a 5 year period, with 2,700 acres treated in a single year and follow up treatments and restoration occurring thereafter. Over the life of the project, more or different acres may need to be treated because of spread of existing infestations or new detections. As discussed in the EIS Chapters 3.1, 3.2 and 3.7; the fewer existing acres effectively treated at any given time, the greater the total acres likely needing to be treated due to spread. If all of the current sites were treated as quickly as possible, the potential for existing sites to spread would be greatly diminished. Ongoing restoration would also help reduce the potential for re-infestation. Given the current budget, fewer than 2,700 acres would likely be treated in any single year.*

*The premise of early detection-rapid response analysis approach is that treatments of new infestations according to PDC will have similar effects to treatments of existing sites. PDC and buffers minimize the potential impacts of herbicide use, whether on existing infestations or those found in the future, regardless of the acreage that may be treated. This is because the PDC include limitations on the extent of treatment in aquatic influence zones, seasonal restrictions on treatments near wildlife habitats, limitations on herbicide ingredients and application methods along streams, wetlands and other water bodies, and protection of botanical species of interest.*

*Figures 2a, 2b and 2c describe the decision process for determining whether herbicides should be used and what application method is most effective. The Implementation Planning Process (2.5.7) describes additional treatment considerations. Taken together, the PDC, buffers, and Implementation Planning Process provide several layers of caution address the impacts of future treatments under EDRR.*

**GPTF et al Comment 12:**

The Proposed Action explains that there is a prioritization system for treatment areas and “priority varies on location of the infestation, the environmental or social values that may be threatened, and the aggressiveness of the invasive species” (DEIS p.37). These factors are appropriate to utilize in prioritizing projects, but additional considerations should be added. An important priority should also be preventing the spread of invasives into previously un-impacted areas, defending weed free (or low infestation) areas from new invasions, and treating source populations in key areas. For example, upstream knotweed populations should generally be targeted before populations lower in the watershed.

Additionally, in prioritizing areas for treatment, the potential for reducing a site’s susceptibility to infestation through re-vegetation with natives should be considered. Recognizing, for example, that using a heavy application of native grass seed at a roadside treatment site following chemical or mechanical control could help prevent reinfestation would be important in prioritizing control projects where revegetation would have a higher likelihood of success.

Incorporating revegetation efforts, such as seeding native grass or other early successional natives, into a control or eradication strategy should be considered in most circumstances since unless the underlying habitat conditions are changed reinfestation is very likely to occur. This is the type of integrated invasive control strategy we believe could be relatively easily incorporated into the preferred alternative and is already anticipated to a certain extent.

***Response:** These considerations have been added to the description of the Proposed Action in Chapter 2.5. Susceptibility to reinvasion is part of the prescription process and development of a long term restoration strategy.*

**GPTF et al Comment 13:**

We were pleased to see a thorough risk assessment of the ten herbicides proposed for use included in the DEIS, but believe that the EIS and project plan could do more to minimize adverse effects from planned herbicide use. We do not think it is ecologically defensible to take a philosophic position against the use of herbicides when the long-term ecological damage that exotic weeds are causing can outweigh the potential effects of a given herbicide application. We believe that as a part of determining which herbicide to use for a given treatment there should be a strong priority placed on using the least persistent, lowest impact herbicide that will be effective.

We believe that for at least some of the targeted species described in pages 39 to 48 glyphosate should be considered as an alternative to clopyralid or triclopyr – especially for species where aquatic labeled glyphosate is recognized as effective in areas near water. Where ever possible, chemical treatment should avoid use of more persistent alternatives to glyphosate and the FEIS should reconsider whether glyphosate could effectively replace some of the more persistent or higher impact pesticides.

The analysis of effects from “aquatic-labeled” triclopyr TEA exposure could be improved. The discussion does not discuss the breakdown products of triclopyr, leading to the misleading statement that triclopyr TEA is “practically non-toxic” to aquatic resources and also to the inaccurate assessment of persistence of triclopyr.

Four of the ten herbicides are listed on the Pesticide Action Network (PAN) “Bad Actor” list, meaning they are at least one of the following: known or probable carcinogens; reproductive or developmental toxicants; known groundwater contaminants; or pesticides with high acute toxicity. The four herbicides include chlorsulfuron, clopyralid, imazapyr, and picloram. While use of these herbicides maybe justified in some cases where other effective but less persistent or toxic alternatives do not exist, the FEIS should evaluate how lower impact glyphosate could be used to minimize the use of these herbicides. While this may increase project costs or require re-treatment in some situations, the residual impacts of these non-glyphosate herbicides are of significant concern to us. This alternatives determination should be incorporated into the flow charts at p 74 and 75.

***Response:** Many complex variables influence the art and science behind designing integrated prescriptions. What is least impact for one resource may not be the least for another. If a botanical species of concern is nearby, a highly potent or non-selective herbicide (such as glyphosate) may not be best choice. Near water, herbicides are limited to those labeled for aquatic use or those that risk assessments indicate pose lower risk to fish and other aquatic organisms. The extent, rate and method of application are important factors to consider, along with the treatment site.*

*In the case of triclopyr vs. glyphosate, the differences in level of concern are clear when looking at the PDC and buffers. Triclopyr is the most effective herbicide for woody plants. For instance, a small, selectively applied amount of triclopyr would be very effective on scotch broom; incidentally the Gifford Pinchot Task Force sent us a message advocating the use of triclopyr (Garlon) on scotch broom. However, another herbicide or non-herbicide method would be required for spot treatments near streams.*

*You mention chlorsulfuron, clopyralid, imazapyr, and picloram as “bad actors.” Table x displays the relative characteristics of each of the ten proposed herbicides. The Chapter 3 of the FEIS and the Biological Assessment contain additional discussions about aquatic labeled herbicides and break down products of triclopyr. TCP is more toxic than triclopyr, however animals and people would be exposed to very low doses.*

*Risk assessment for NPE do not indicate that use at the rates and methods proposed pose risks over a conservative threshold of concern for human health, drinking water, and/or fish. Surfactant use would comply with Washington State and R6 standards.*

**GPTF et al Comment 14:**

We are strongly supportive of the intent to treat new infestations when they are small and before they become established. This will help decrease impacts from invasives and minimize herbicide use. However we would like to see the Early Detection/Rapid Response approach (EDRR) clarified, with a more detailed explanation of how revegetation actions as well as management related controls could be implemented as a part of chemical or mechanical removal plan. While the rapid response discussion mentions the need to “confirm restoration plan” at p. 55 it could more clearly describe what components would go into a restoration plan. The PDCs should include revegetation plans that can minimize the impacts of any non-target vegetation impacted by broadcast spraying and help create more resilient habitat conditions that are less susceptible to invasives.

**Response:** *Supplemental information has been added to Chapter 2.5.2 and 2.5.4 to respond to this comment. The intent of restoration is “resilient habitat conditions that are less susceptible to invasives.”*

**GPTF et al Comment 15:**

The treatment options and Project Design Criteria (PDC) should detail when herbicides should be selected over manual and mechanical means and how to follow up herbicide use with manual and mechanical methods.

**Response:** *The “guiding principles” on page iii of the DEIS included the following:*

- *In treating invasive plants, our highest priority will be minimizing risks to human health, drinking water, wildlife, and botanical species.*
- *Herbicide treatments will be used when necessary and in combination with non-herbicide methods as appropriate to increase treatment effectiveness.*
- *Site restoration will be considered in invasive plant treatment prescriptions.*

*These principles guide when herbicides should be selected; when necessary in combination with non-herbicide methods to increase effectiveness.*

*Page 56 of the DEIS stated, “Re-treatment and active restoration prescriptions would be developed based on post-treatment results. Changes in herbicide or non-herbicide methods, all within the scope of the DEIS, would occur based on results. For instance, an invasive plant population treated with a broadcast herbicide may be retreated with a spot spray, or later manually pulled, once the size of the infestation is sufficiently reduced following the initial treatment.”*

*Figure 2 displays considerations for the decision to use herbicides. Herbicides would be used where non-herbicide methods are not cost-effective. The Common Control Measures Summary Table and Appendices A and B provide reference points for analysis and starting points for the prescription process. The effects analysis covers a range of options providing the implementer with the most flexibility possible, while ensuring adverse effects are minimized or eliminated as per Standards 19 and 20.*

**GPTF et al Comment 16:**

We are particularly concerned with the proposed use of the surfactant nonylphenol polyethoxylate (NPE). The unlimited use of NPE adjacent to water, which has known environmental and human health risks, presents far too many risks. Relying on the PDC to prevent the known risk of surfactants is too risky considering the PDC have not been proven to be effective.

***Response:** NPE may be used but at rates that would not result in exposures of concern based on risk assessments. The PDC add layers of caution by further limiting potential for exposure. The PDC and buffers are based on based on worst-case scenarios analyzed in the SERA risk assessments, recommendations from previous Section 7 ESA consultations on herbicide treatments, and previous monitoring results. The purpose and source of each PDC is cited, and are expected to be effective.*

**GPTF et al Comment 17:**

The Treatment Area Data Table should be merged with the data in the Invasive Species Treatment Area so that looking at a single table it would be possible to see the area proposed for treatment and treatment specifics as well as the species being targeted. Using abbreviations for the target species would be one way to physically fit the target species data into a graph with the treatment area data. We believe that information about revegetation with aggressive natives, mulching or other important non-chemical controls should also be identified in this graph so that it is clear how these tools are being. Again, using abbreviations could help make this feasible spatially.

***Response:** Appendix A has been modified to respond to this comment. Species to be treated and preliminary restoration approach has been added to the treatment area table. The analysis is based on the control measures planned for these species, however, similar treatments at different locations or of new target species could be approved under the EDRR approach.*

**GPTF et al Comment 18:**

Herbicide application methods described for the GPNF appear to rely heavily on broadcast spraying whereas treatment within the Scenic Area is more focused on spot treatments. Because of the increased impacts of broadcast spraying we believe it should be minimized whenever possible especially since impacts to non-target species can create conditions where a given site becomes more susceptible to invasives post-treatment. That said, we recognize that high enough weed densities can require broadcast spraying and the proposed guideline of 70-80% as a threshold for when broadcast spraying is

appropriate seems reasonably conservative to us, assuming an absence of sensitive or rare plants or other species.

***Response:** Thank you for your comment. The “broadcast on roadsides” assumption on the GPNF was intended to generate PDC and other limitations assuming the most aggressive possible treatment. Spot and hand treatments would be favored when cost-effective, and broadcast would not be approved on at least 65 percent of the project area. No broadcast of triclopyr is allowed, and botanical species of local interest would be surveyed and protected within 100 feet of sites where broadcast applications are prescribed.*

**COMMENT FROM: Enid Griffin**

**Comment:** I would support the integrated pest management plan that would do the utmost in guarding our wildlife from any poisons, also the people who must apply pesticides.

***Response:** Thank you for your comments. The environment and people will be protected from exposure to herbicide as proposed in this project.*

**COMMENT FROM: Donald and Alice Hack**

**Comment:** Alternative C would be preferred but we realize that the costs and effectiveness must be considered. Due to these aspects, we feel Alternative B is the most reasonable alternative.

***Response:** Thank you for your comments.*

**COMMENT FROM: Barbara Robinson**

**Comment:** Goats can be useful where there is nothing but weeds, but they will destroy all plants, usually the good ones first, so they are not useful where there are native plants that should be preserved.

***Response:** To respond to your comment, the Forest Service has added a PDC to the Proposed Action and Alternative C: “Goat grazing would be limited to areas where invasive plants make up the majority of suitable forage species, away from any botanical species of local interest. Goats would be confined to specific areas and closely supervised. Goats would not be grazed at any one site for more than 30 consecutive days.” This PDC is intended to minimize adverse effects to native flora and habitats.*





**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**REGION 10**  
1200 Sixth Avenue  
Seattle, WA 98101

September 13, 2006

Reply To Attn Of: ETPA-088

Ref: 06-056-AFS

Ms. Carol A. Chandler  
Invasive Plant EIS  
Gifford Pinchot National Forest  
10600 N.E. 51<sup>st</sup> Circle  
Vancouver, WA 98682

Dear Ms. Chandler:

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the Site-Specific **Invasive Plant Treatment Project on the Gifford-Pinchot National Forest and Columbia River Gorge National Scenic Area (Washington Portion)**. We are submitting comments pursuant to our responsibility under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. We appreciate your consideration of these comments.

The Gifford Pinchot National Forest and Columbia River Gorge National Scenic Area in Washington (the Scenic Area) are proposing invasive plant treatments on approximately 2,700 acres. The purpose of this project is to treat invasive plants in a cost-effective manner that complies with environmental standards. The document considers three alternatives:

1. Alternative A – No Action. This alternative would implement treatments according to existing plans; no new invasive plant treatments would be approved. Approximately 2,500 acres would be treated. Of those, 400 acres would be treated with herbicide.
2. Alternative B – Proposed Action. This alternative would approve an effective range of treatment methods according to Project Design Criteria that minimize the risk of adverse effects from herbicide and other types of treatment. Herbicide would be a treatment option in all situations where it is needed. An estimated 2,710 acres are proposed for herbicide treatment combined with non-herbicide treatment.
3. Alternative C – Under this alternative, the risk of adverse effects from herbicide use would be substantially reduced compared to the Proposed Action because herbicide use would not be allowed over approximately 65 percent of the project area. Approximately 2,700 acres would be treated. Of those, 940 would be treated with herbicide.

Based on the information provided, we are rating the DEIS as LO (Lack of Objections). An explanation of this rating is enclosed. EPA appreciates the thorough analysis contained in the DEIS, and offers some comments for additional consideration as the document is finalized.

## General Comments

EPA favors aggressive treatment of invasive plant infestations, and encourages the Forest Service (FS) to embrace the full suite of options available to treat invasive plants through Integrated Weed Management (IWM). EPA endorses the concept of Integrated Vegetation Management or Integrated Pest (or Weed) Management (IPM) for several reasons. Important among these reasons are:

1) *Uncertainties*. Despite the substantial amount of scientific information that EPA reviews prior to registering a pesticide, it is virtually impossible to identify all conceivable risks and to address all the uncertainties of pesticide use. This means that from time to time new risks are uncovered. Over the years, examples have included egg-shell thinning caused by Dichloro Diphenyl Trichloroethane (DDT), risks from groundwater contamination, pesticides that mimic hormones and the more recent discovery that pesticides in combination may behave synergistically with a multiplier effect. The amount of testing that would be required to resolve these uncertainties would be labor and cost intensive, resulting in a very slow pesticide registration process. Because science cannot, in any practical sense, assure safety through any testing regime, pesticide use should be approached cautiously.

2) *Overuse of pesticide causes problems*. Aside from the potential for toxic effects to people, overuse of pesticides may cause problems such as: a) killing beneficial organisms that would otherwise help control pests; b) promoting development of pesticide resistance in pests, which starts a vicious cycle in which more and more pesticides are needed; c) resurgence of pest populations, and d) contamination of the environment.

3) *Economics*. Integrated pest management, when viewed by traditional economics, often results in lower costs than conventional pest management. Additional costs beyond those considered in traditional analysis are likely to shift the balance even further towards IPM. Some of these additional costs are: potential long term health effects, contamination of the environment, effects of pesticides on non-target animals and plants, the health effects to someone who may be particularly sensitive to a pesticide or pesticides, and any other effects that are not now understood, but will be uncovered over time.

EPA promotes IPM because it represents a prudent approach to understanding and dealing with environmental concerns. IPM does not blindly embrace new technology nor does it reject technology. IPM does promote a thoughtful awareness of the pest management inherent in natural systems through an understanding of pest life cycles, and through the use of beneficial organisms, cultural modifications, physical barriers and other mechanical controls. It does not rule out the use of pesticides, but requires that their use be thoughtfully considered.

## Detailed Comments

### Total Treatment Area

Section 1.2.1 of the DEIS notes that the proposed action applies to known/predicted infestations, along with new detections that are discovered during the life of the project. EPA acknowledges that the extent of new detections cannot be predicted, however, we recommend that the document establish a cap on the total number of acres (not including acres of re-treatment) that can be treated over the life of the project. Additionally, because of the uncertainty around future infestations, the DEIS should indicate a cap on the number of acres to be treated annually within each 5<sup>th</sup> field watershed. Consistent with other regional EISs, EPA recommends that the number of acres to be treated with herbicide not exceed three percent per year in any one 5<sup>th</sup> field watershed.

## **Prevention**

An effective invasive plant management program must include both active control/eradication of existing populations and prevention of new populations. We applaud the Forest and Scenic Area for having established a set of prevention standards, and for their work to incorporate the standards and guidelines related to prevention in the 2005 *Pacific Northwest Region Invasive Plant Program, Preventing and Managing Invasive Plants* Record of Decision. There are, however, important vectors for spread of invasives that are not addressed in these existing standards and guidelines. Specifically, the FS should consider adopting a site-specific standard prohibiting cross country use of off-highway vehicles (OHVs) and limiting the use of OHVs to designated routes and in designated areas, and closing, decommissioning, or seasonally restricting access to non-essential roads that are high-risk vectors for spread of invasive plants.

## **Inventorying Future Infestations**

Section 2.2 of the DEIS indicates that in 2004, the FS completed field surveys on “main vectors” for invasive plants. The DEIS should give some discussion to how treatment sites in the remaining, uninventoried areas will be identified. Given limited resources, consideration should be given to how to best utilize existing tools (NRIS/Terra database) and existing monitoring programs in order to systematically identify new infestations.

## **Aquatic Invasives**

The 2004 invasive plant inventory noted above did not document the existence of aquatic invaders. As a result, the DEIS does not address invasive plants floating or submerged in water. Because aquatic invasives are an emerging issue on National Forest land and elsewhere, EPA encourages the Forest Service to include at risk water bodies (such as those used for recreational purposes) in future monitoring and inventory efforts. If work is underway to address aquatic invasives, these efforts should be acknowledged in the document.

If you have questions or would like to discuss these comments, please contact Teresa Kubo of my staff at 503/326-2859. Thank you for the opportunity to provide comment.

Sincerely,

//s//

Christine B. Reichgott, Manager  
NEPA Review Unit

Enclosure

## SKAMANIA COUNTY E-MAIL CORRESPONDENCE

From "Cyndi Soliz" <soliz@co.skamania.wa.us>  
Date 11/20/2006 11:52 AM  
To: <comments-pacificnorthwest-giffordpinchot@fs.fed.us>  
Subject: Draft EIS Commentary

Our commentary on this Draft EIS deals primarily with the treatment of knotweed on the Collins Slide treatment area 22-06.

On the first page of Appendix A on the Treatment Area Data Tables, "Mow" is listed as a Mechanical Method for the Collins Slide 22-06. The Skamania County Knotweed Crew has surveyed the length of this infestation and recognize that mowing is not a feasible alternative for this area due to the steep topography and lack of access. It is our recommendation that "mow" not be considered as an alternative for the treatment of knotweed at all. Segments from mowed plants have to be collected and properly disposed of. We have found that more times than not, mowed areas result in the spread of knotweed and cause the plants to grow shorter and bushier making them harder to treat by injection.

We believe the knotweed in the Collins Slide to be primarily "Giant" *polygonum sachilinese*. The only knotweed listed for treatment in the Draft EIS is "Japanese" and "Bohemian". We would recommend listing "Giant" to the plant list.

On page 59, PDC Reference F7 the Design Criteria states "No herbicide application would occur if precipitation is occurring or is forecasted within 24 hours." We do not apply any foliar applications if there is a 50% chance of rain or better. We inject when it is raining. The ability to inject when it is raining is one of the favorable aspects of the injection method for treating knotweed and allows us to treat under any weather conditions. We would like to see some exception stated for chemical application via injection during rainy periods.

Skamania County Noxious Weed Control Board

KLICKITAT COUNTY E-MAIL CORRESPONDENCE

From: "Marty Hudson" <MartyH@co.klickitat.wa.us>  
Date: 11/22/2006 10:51 AM  
To: <comments-pacificnorthwest-giffordpinchot@fs.fed.us>  
Subject: DEIS Comments

Dear Mr. Harkenrider et al,

First I would like to say thank you for the extended comment period and the opportunity to provide comment. I found the scope and thoroughness of this document very well done given the size and complexity of the area defined in the proposal.

I am in support of "Alternative B" as presented in the preferred proposed action. Alternative B as proposed is best suited to truly impact the invasive weeds already documented. I am also in favor of the early detection and immediate action component as that will enable prevention of larger scale future invasions. Having the ability to use herbicides is a critical element in Alternative B, herbicides are often the most cost efficient and truly effective tool to use on invasive weed species. Used judiciously herbicide will be more time efficient and safer for the personnel doing the actual control work. The document competently addresses the impacts of invasive species, herbicide and the environmental effects.

Once again, thank you for the opportunity to provide comment.

Sincerely,

Marty Hudson, Coordinator  
Klickitat County Noxious Weed Control Board  
228 W. Main St. MS-CH-23  
Goldendale, WA 98620

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MartyH@co.klickitat.wa.us  
<http://www.klickitatcounty.org/WeedControl/>



## Lewis County Noxious Weed Control Board

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360 NW North St. MS:AES02 ° Chehalis, WA 98532  
(360) 740-1215  
E-mail: wamsleyb@wsu.edu ° Fax: (360) 740-2792

October 10, 2006

Invasive Plant Treatment Project  
USDA Forest Service

Invasive Plant DEIS Team:

RE: Gifford Pinchot National Forest & Columbia River Gorge National Scenic Area, comments on the Draft Environmental Impact Statement, Site-Specific Invasive Plant Treatment Project.

The Lewis County Noxious Weed Control Board supports the Forest Services efforts in producing a comprehensive document that outlines the management of invasive species, which will work toward the protection of forestland in the Gifford Pinchot NF and the Columbia River Gorge National Scenic Area.

The Lewis County Noxious Weed Control Board supports the Proposed Action (Alternative B) as the preferred alternative for the treatment of invasive plants and restoration of treated sites.

For Lewis County, the Gifford Pinchot National Forest is an important jurisdictional neighbor that manages a wide range of resources that are important to the citizens of the county. Having a long term plan to manage noxious weeds is critical to the natural resource management and viewed as an essential part of landowner stewardship.

Thanks for allowing the Lewis County Noxious Weed Control Board the opportunity to comment on the Draft Environmental Impact Statement.

Sincerely,

Bill Wamsley, Coordinator  
Lewis County Noxious Weed Control Board.