

**Environmental Assessment:  
Upper Trout Creek Riparian, Stream Channel and Fish Passage Rehabilitation Project  
Appendix 1: Public Comments and Responses**

## **APPENDIX 1 – PUBLIC COMMENTS AND RESPONSES**

### **INTRODUCTION**

The Forest Service is directed to respond to substantive public comments on project proposals according to 40 CFR 1503.4. A substantive comment is defined as: "Comments that are within the scope of the proposed action, are specific to the proposed action, have a direct relationship to the proposed action and include supporting reasons for the Responsible Official to consider" (36 CFR 215.2 [rev. 6/2004]).

- Provide new information pertaining to the proposed action or an alternative.
- Identify a new issue or expand upon an existing issue.
- Identify a different way (alternative) to meet the underlying need.
- Provide an opinion regarding one or more alternative, including the basis or rationale for that opinion.
- Point out a specific flaw in the analysis.
- Identify a different source of credible research which, if used in the analysis, could result in different effects.

Responses to comments may include:

- Modify alternatives, including the proposed action.
- Develop and evaluate alternative not previously given serious consideration by the agency.
- Supplement, improve, or modify analyses.
- Make factual corrections.
- Explain why the rationale, authorities, and sources were used in the Environmental Assessment (EA) and why the Forest Service position is maintained in the Decision Notice.

Three organizations/individuals submitted comments during the environmental assessment (EA) comment period of April 16 to May 17, 2004. We have attempted to accurately capture every substantive comment. The comments have been grouped according to their subject matter, and the source of the comment is shown following the comment. The Forest Service's response follows each comment or group of related comments.

Commentors:

Ken Berg, US Fish and Wildlife Service, Western Washington Fish and Wildlife Office – Lacey, WA  
Jim Hutchison – Washougal, WA  
Kirsten Stade, Gifford Pinchot Task Force and Regan Smith, Northwest Ecosystem Alliance – via email

**Environmental Assessment:**  
**Upper Trout Creek Riparian, Stream Channel and Fish Passage Rehabilitation Project**  
**Appendix 1: Public Comments and Responses**

**Comment 1:**

Due to the effort, cost and importance of this project, it deserves a more comprehensive monitoring plan than is indicated in the EA. Effectiveness and longevity of the stream habitat structures should be carefully assessed over many years. And fish distribution and population studies should be conducted before and following (long term) the log installations. If funds or manpower for fish monitoring is lacking, a conservation group with proper supervision might provide assistance. (Hutchison)

We would also urge that the Forest Service implement a post-project schedule for monitoring project impacts on turbidity, stream temperature, and other riparian and watershed effects. This project represents an historic opportunity for gathering information as to the ecological impacts and benefits associated with upland and riparian thinning, skid trail construction, and instream habitat construction, and we hope the Forest Service will capitalize on this opportunity with an aggressive monitoring program. (Stade/Smith)

**Response:**

*We agree that monitoring is extremely important. The Clark Skamania Flyfishers have been a very important partner of the Forest Service for well over a decade and we appreciate this group's willingness to help us monitor and protect the Wind River steelhead. The Clark/Skamania Flyfishers are responsible for starting the annual Wind River snorkel survey and establishing an adult trap in the Hemlock Dam fish ladder. These efforts have played a significant role in the management of the Wind River steelhead and greatly increased our knowledge and status of the population.*

*The USGS Biological Research Division (Cook, WA) has collected pre-project data on fish distributions and numbers in the Trout Creek subwatershed, and specifically in the stream reaches to be treated by this project. Washington State Dept of Fish and Wildlife and the US Forest Service have cooperated on fish population estimates in Trout Creek and the Wind River. These efforts are scheduled to continue, and are expected to provide good pre- and post-project data on fisheries in the treatment area. However, because the anadromous fish in Trout Creek are exposed to a host of impacts outside of the Trout Creek drainage, biological monitoring of fish populations alone would not be sufficient to evaluate the effectiveness of this project. The biological data collected through these multi-agency efforts will be supplemented by physical monitoring of the direct effects of this project on habitat conditions.*

*The Forest Service plans to monitor the implementation and effectiveness of the project using some of the methods described below (and on p. 8 of Appendix 1 of the EA) to evaluate project performance relative to project objectives. Monitoring frequency and duration are contingent upon outyear funding levels from both Forest Service and partner agencies.*

*Monitoring will be undertaken to evaluate project performance relative to project objectives. The following lists the project objectives and the monitoring items that are designed to assess whether these objectives have been met:*

1. *accelerate the recovery of riparian forest and canopy cover to improve bank stability, stream shade and reduce water temperature;*
  - *estimate canopy cover and stream shade % (Solar Pathfinder <sup>TM</sup>) within the riparian treatment areas on a 3 to 5 year interval*
  - *compare pre- and post-project canopy cover and stream shade within the treated reaches by using low-level aerial photography, solar pathfinders, or other means. Monitoring should be done at 3-5 year intervals (Replace the bullet above with this one)*
  - *monitor water temperature annually and compare to pre-treatment baseline*
2. *restore the volume of in-stream large woody debris to aggrade stream channels to restore floodplain connectivity, stream sinuosity, off-channel habitat, and reduce peak flow velocities;*
  - *conduct stream surveys at 3-year intervals for 9 years following treatment to evaluate stream channel characteristics*
3. *rehabilitate sediment and nutrient deposition/routing;*
  - *same as 2.*
4. *restore pool quality and frequency to provide high quality habitat for threatened steelhead;*
  - *same as 2.*
5. *restore the historic characteristic structure and complexity to Late Successional Reserves;*
  - *conduct stand exams within the thinned units to evaluate stand structure and canopy density*
6. *restore optimal cover for deer and elk within their winter range;*
  - *same as 1 and 5.*
7. *accelerate the growth rates and recovery of riparian stands;*

**Environmental Assessment:**  
**Upper Trout Creek Riparian, Stream Channel and Fish Passage Rehabilitation Project**  
**Appendix 1: Public Comments and Responses**

- *Establish controls and measure diameter at breast height (dbh) on released trees.*
- 8. *and restore fish passage.*
  - *compare channel characteristics at treated crossings before and after treatment.*

**Comment 2:**

The 47 heavy equipment stream entry points (page 22) will impact over 500 feet of riparian vegetation fronting the streams. Rather than only grass, as planned, fast growing hardwoods and/or willows could be planted adjacent to the streams at the 47 sites prior to project completion. This would lessen potential shade loss and sediment impacts. (Hutchison)

**Response:**

*We agree. Past restoration projects have used rooted hardwoods to jump start the recovery of disturbed sites. Mitigation measure # 10 also refers to use of willow and other hardwoods to restore areas that have been disturbed, including access points. In addition, conifers will be planted throughout treated reaches.*

**Comment 3:**

No trees within 25 feet of the streams will be cut (page 16). Will trees that provide significant shade to streams, but are located behind the 25 foot strip, also be retained during thinning? And will specific various-aged trees in the 360 foot wide riparian reserves be retained to provide future large woody debris to the streams? (Hutchison)

**Response:**

*Water temperature maximums within the project area have exceeded 70° F in recent years therefore any tree providing stream shade is valued at a premium and we will ensure that trees providing stream shade will be retained. Trees within the 360 foot riparian reserve will be thinned from below which means that the largest trees in the stand will be left. The objective of the thinning is to increase stand vigor and accelerate the recovery of a multi-storied/aged old growth characteristics. The older trees will provide the source of future large woody debris.*

**Comment 4:**

"Meander log jams" and "flood plain/gravel bar structures" and their planned anchoring methods are not described. Also helpful would be details on deficiency of the two culverts and the type of replacement culverts planned. (Hutchison)

**Response:**

*The design of log structures has evolved over the past 15 years of our experience with similar projects throughout the Wind River watershed. The meander log jams and gravel bar structures will be constructed with whole length trees and typically keyed into the stream bank or gravel bars. Using whole length trees, especially those with attached rootwads, have been found to be extremely stable when placed in multi-tree complexes. Cables or large rocks will not be used to anchor structures. These techniques have been extremely successful in meeting quantitative objectives for other restoration projects in the Upper Wind River and Dry Creek. Trees are also placed throughout the floodplain to increase roughness and protect young riparian stands.*

*The existing culverts are dual culverts that have been replaced with bridges at both the Forest Road 42 crossing and the Forest Road 43 (decisions were made separately from this one: Decision Memo: Trout Creek/Forest Road 42 Fish Passage Improvement Project, and Decision Memo: Trout Creek/Forest Road 42 Fish Passage Improvement Project, both signed June 24, 2004). The crossings were assessed in 2002 and found to not pass the current U.S. Forest Service criteria for fish passage; basically the culverts restricted flow and increased velocity through the pipes to a point where they would restrict fish passage of parr steelhead. In addition, the existing culverts are chronically plugged by debris and the beaver within the watershed have found that they are excellent places for dams. The 43 road culvert plugs almost yearly and erodes road fill into a high density spawning reach. The bridges will restore the natural streambed and width of the stream which will restore fish passage for all life histories.*

**Comment 5:**

Why was alternative B, with its lower expected sediment loads and riparian damage, chosen over alternative C ? How will the project be funded, and what are the cost comparisons between alternatives B and C ? The

**Environmental Assessment:**  
**Upper Trout Creek Riparian, Stream Channel and Fish Passage Rehabilitation Project**  
**Appendix 1: Public Comments and Responses**

project involves “commercial thinning” and “harvest” (page 11). Does this mean that some timber will be sold? If so, related information would be appropriate. (Hutchison)

**Response:**

*Alternative B will introduce more sediment into the stream however it will result in nearly 50% less damage to riparian area and potential stream shade than Alternative C. The reason that Alternative B was proposed is that the adverse effect of sediment introduced into the stream will be short term while the removal of stream shade would be longer term.*

*The project has received funding from the U.S. Forest Service, Bonneville Power Administration (BPA), Washington State Salmon Recovery Funding Board (SRFB) and Regional Advisory Committee (RAC). At this time \$236,000 has been set aside for implementation. Total project cost estimates for 9 river miles are \$1,500,000 for Alternative B and \$2,200,000 for Alternative C.*

*The project does not involve commercial timber extraction and no timber will be sold. The following sentences on page 11 may have led to the confusion: “The harvest treatments are described in Table II-1. The location of harvest Units 1, 3, 4, and 7 is depicted in Figure 2, page 5. These upland thinning units stem from a previously planned but never implemented commercial thinning timber sale.” We are using trees from the Win Thin Timber Sale project area which was originally proposed as a commercial thinning. This decision will not authorize the commercial sale of timber. A separate decision concerning implementation of the Win Thin Timber Sale has not yet been made.*

**Comment 7:**

The Environmental Assessment for this project states that overstocked upland and riparian stands will be thinned to provide large woody material for stream rehabilitation. In particular, the Assessment proposes aggressive thinning of 20 acres to a level of 30% canopy cover, coupled with replanting of shade-tolerant conifers in some thinned areas. While we recognize the need for thinning in overstocked young stands to achieve ecological objectives, there is no ecological justification for thinning to this degree. In naturally fire-regenerated stands as well as in stands resulting from a regeneration harvest, thinning for the advancement of ecological objectives should leave a canopy of at least 60% to allow for minimum disturbance of wildlife requiring interior forest conditions. (Stade/Smith)

**Response:**

*A total of 20 acres, within Units 1 and 7 that were previously proposed for heavy thinning have been modified in the Decision Notice (DN, p. 3). Unit 1 will be thinned to a moderate thinning prescription of a minimum of 40% canopy closure. Unit 7, which is in the Wind LSR, will be thinned to a light thinning prescription of a minimum of 50% canopy closure. Thinning of young stands will increase the diameter growth of the leave trees. All proposed thinning within the riparian stands will maintain a minimum of 50% canopy cover post treatment and not receive any heavy thinning.*

*One of the objectives of this project is to increase stand vigor and accelerate the recovery of a multi-storied/aged old growth characteristics within both the Late-Successional Reserve and Riparian Reserves. Other terrestrial objectives include increasing coarse woody debris (CWD) and snags for wildlife. Trees within the units and riparian reserve will be thinned from below which means that the largest trees in the stand will be left.*

*Thinning that results in a more open canopy produces greater effects to growth rates of the trees that are left after thinning. The benefits also continue over a longer period. Within 20 years, all of the proposed thinning regimes will return to a 70% canopy closure (minimum) as the residual tree crowns expand and capture the available growing space.*

**Comment 8:**

We support the provision in the EA for retention of old growth and snag trees as legacy trees in all units. These trees are important habitat components and should under no circumstances be logged. We do, however feel that all trees larger than 30” dbh should be retained, rather than only trees of 40” or greater as proposed in the EA. (Stade/Smith)

**Response:**

*We agree and this change will be reflected in the Decision Notice (DN, p. 3).*

**Environmental Assessment:  
Upper Trout Creek Riparian, Stream Channel and Fish Passage Rehabilitation Project  
Appendix 1: Public Comments and Responses**

**Comment 9:**

In addition, if a young stand is being thinned to address problems of overstocking, we have difficulty understanding how understory replanting of that area is warranted. We understand the need for greater diversity of tree species in the project area but we request that thinning is kept to a conservative level so as to minimize the need for understory replanting. (Stade/Smith)

**Response:**

*The only reason we will be replanting conifers within thinned units is to diversify the stand. The majority of stands within the project area are composed of Douglas-fir and red alder. Historically the project area stand composition was: western red cedar, western hemlock, grand fir and Douglas-fir. Replanting objectives are to replace these missing components.*

**Comment 10:**

While we recognize the superiority of Alternative B over Alternative C given the severe impacts on stream temperature that would be introduced by clearcutting in the riparian area, we feel that the potential of Alternative B to result in further degradation of the riparian zone is significant. (Stade/Smith)

**Response:**

*The use of helicopters has been emphasized in the Decision Notice and ground disturbance will be avoided or limited in size (DN, p. 3). Monitoring of similar projects (the 1999 Mining Reach and 2001 Dry Creek Restoration projects) have shown that sub-soiling with the excavator and mulching of skid trails greatly reduces the potential for compaction and allows natural revegetation succession of ground cover such as Oregon grape within two years. In addition, entry into these areas will allow us to increase potential riparian productivity by de-compacting old skid trails and roads that were created during the initial harvest.*

**Comment 11:**

The EA states that the project could result in mortality of juvenile steelhead through movement of heavy machinery in the stream channel and from sedimentation resulting from the construction of skid trails into the riparian zone. Has the Forest Service undergone consultation with the National Marine Fisheries Service on the impacts of this project on listed steelhead in Trout Creek? Has the agency received an Incidental Take Permit to allow for possible fish mortality resulting from this project? (Stade/Smith)

**Response:**

*NOAA Fisheries has been involved throughout the planning process and has field reviewed the project with U.S. Fish and Wildlife Service. The project has gone through the formal Section 7 Consultation process and a Biological Opinion (BO) was issued by NOAA Fisheries on February 20th, 2004 that authorizes incidental take. The required reasonable and prudent measures that are necessary to minimize take have been incorporated into the project design and the mitigation measures (BO, p. 15-17).*

**Comment 12:**

We hope that as part of these efforts, the Forest Service will address the significant road density in the planning area by proposing several roads for decommissioning or closure. While we understand that this effort was undertaken as part of the larger Gifford Pinchot Roads Analysis, we feel that road decommissioning is an essential part of the rehabilitation of Upper Trout Creek and should be a component of this project as well. (Stade/Smith)

**Response:**

*We agree that road decommissioning is a critical component to a comprehensive watershed restoration strategy which is why we have decommissioned approximately 20% of all roads within the Wind River watershed since 1996. Road densities have been dramatically reduced in the Trout Creek watershed with approximately 0.3 mile of road left to decommission. Decommissioning was not undertaken as a part of the proposed action because we plan to separately propose a more comprehensive plan for road decommissioning throughout the Wind River watershed.*

**Comment 13:**

**Environmental Assessment:**  
**Upper Trout Creek Riparian, Stream Channel and Fish Passage Rehabilitation Project**  
**Appendix 1: Public Comments and Responses**

In those areas where existing weed sites will be treated, we request that only the most ecologically benign methods of weed treatment be used. Particularly in sensitive riparian areas, herbicide application can have far-reaching impacts on native vegetation and wildlife. We request that manual treatment of weed sites be used wherever possible. (Stade/Smith)

**Response:**

*Noxious weed treatment within the project area is presently limited to hand-pulling or mechanical removal. A decision to treat noxious weeds in any other way would be subject to further analysis. An EIS is being prepared at the regional and sub-regional (site-specific) level and a decision is expected in late 2005. You are encouraged to participate in that process.*