

## **Appendices**

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## **Appendix A–Public Involvement**

### **Scoping, Public Involvement**

The following table summarizes comments received to the March 21, 2007 Government-to-Government and Public scoping letter, as well as comments received as a result of the June 28, 2007 Public Meeting. It also references where the comments are addressed (as appropriate) within the Evans Creek ORV Management Plan Environmental Assessment or project record.

Respondent/Comment	As Appropriate, Where Considered in the EA or Project Record
<b>Arlene Brooks, Pacific Northwest Four Wheel Drive Association</b>	
1. Scoping information not available on the FS website.	General statement noted – information was posted on FS website in SOPA list and for public meeting held on June 28, 2007.
2. Concessionaire potential not outlined in scoping document for project consideration, but expressed at a District Recreation Meeting.	Outside scope of project.
3. Concessionaire issue: lack of FS control of fees; cost prohibitive for non-profit community benefit events (Toys for Tots, Cancer and MS Fund); a drop of volunteer participation; facility seasonal closure; reduced Education and Enforcement Program; etc.	Outside scope of project.
<b>Earl P. Nettnin, Pacific Northwest Four Wheel Drive Association</b>	
1. Concessionaire run campground and day-use area effects on volunteer work parties.	Outside scope of project.
2. No net loss of trail mileage.	EA Purpose and Need for Action p 7, Proposed Action p 42-44, Recreation p 108-109.
3. Effects of road closures on hunters, picnicking, Christmas tree cutting, etc.	EA Recreation p 100, 106, & 108.
4. Trail standards, where to get a copy of FSH/FSM trail standards. Don't want trails to resemble freeways in the woods.	Official Record – Letters dated April 30, 2007 (official record) in response to original scoping letter had internet links to FSH and FSM Trail Standards.
5. Increase of day-use and campground, addressing safety and sanitary issues are needed and desired.	EA Purpose and Need for Action p 8, Proposed Action p 38-42, Recreation p 103-109.
<b>John L. Thompson</b>	
1. Supports closure of FSR 7920 from the 7800 up to and beyond Tolmie Creek.	General statement of support.
2. Erosion control through the proposed changes to the area will help abate soil surface destruction.	EA Purpose and Need p 7, Proposed Action p 39-41, Management Requirements and Mitigation Measures – Table 11 p 50-55, 60-62, Comparison of Alternatives – Table 12 p 64-66, Fisheries p 69-74, Road and Transportation p 79-80, 85-89, Soil and Water Quality p 112-118.
3. Glad to see the FS working on these issues and site.	General statement of support.
<b>Dan Robinson and family</b>	
1. Concessionaire campground & day-use area concern over volunteers having to pay at work parties, causing participation to drop.	General statement noted. Outside scope of project.
2. Rest of plan looks good, although does not like closures other than user made trails.	General statement noted.
3. Concerns with facilities and too few toilets.	EA Purpose and Need for Action p 8, Proposed Action p 38-42, Recreation p 102-105.

4. Lack of money to complete closures and conversions of roads.	General statement noted.
5. Request comment extension to allow groups time to meet and discuss plan.	Project Record – Letter dated April 30, 2007 in response to initial scoping letter.
6. Request information on public meeting.	Project Record – Letter dated April 30, 2007 in response to initial scoping letter and letter dated June 4, 2007 announcing public meeting.
<b>David and Pat Mower</b>	
1. Pleased that area is being looked at.	General statement of support.
2. Trails are overgrown and new trails are popping up everywhere, damaging vegetation, water, and wildlife.	EA Purpose and Need p 7, Proposed Action p 11-12, 14-45, Alternative 2-The Proposed Action p 43-44. Fisheries p 70-71, Botany p 75-77, Soil and Water Quality p 113-116, Wildlife p 120, 127
3. Campers in day-use area every weekend, leaving large amounts of garbage.	General statement of condition.
4. Unlicensed vehicles on Hwy 165 from the 'Y' where they park both day and night.	General statement noted. Outside scope of project.
5. Overall support for the position statement and proposal.	General statement of support.
<b>Neil T. Morgan</b>	
1. Negative impacts are taking place and every effort to remedy the problem should be taken. The causes are many, including lack of adequate maintenance by the FS.	General statement of condition.
2. Why is adequate maintenance not being performed.	Project Record – Roads and Transportation Specialist Report p 7-8,19, Recreation Specialist Report p 10-12.
3. The proposed action gives justification for closures without positive identification or user input.	EA Alternative 2-The Proposed Action p 42 and 44.
4. There is no justification to close a trail if the problem can be identified and mitigated.	General statement noted.
5. Converting roads into trails or providing wider shoulders will not eliminate user conflicts unless the vehicles that currently use the roads are prohibited.	General statement noted.
6. Funding problems should not be a reason for closures and should not be allowed as a means to eliminate the perceived problem of current inadequate maintenance funding.	General statement noted.
7. What evidence is there of fish passage damage and that it has been created only by ORV use.	EA Purpose and Need p 8, Proposed Action-Campground p 12, Issue 3-Sedimentation p 33-34, Fisheries p 69, 70-71 as passage relates to crossings on FSR 7920 and FSR 7930-110 across Evans Creek and is primarily a culvert size and condition issue.
8. What is the difference between "decommissioned" and "closed", what is actually being done.	EA Roads and Transportation p 83-85, Appendix E beginning on E-1, Appendix J-Glossary and Common Terms p J-1 and J-2.

9. What construction standards will be adhered to when converting roads, will the converted roads truly be trails or roads with a new label.	EA Alternative 2-The Proposed Action p 43-44. Appendix E-Potential Activities p E-2
10. The only rationale for closure of Trail 120 should not be "little use" and/or "isolated from the rest of area".	General statement noted.
11. Trail 196 should not be closed as it is one of the few trails that offers a very distinct experience.	General statement noted. Only a portion of the trail is recommended for decommissioning in the proposed action.
12. Agree that the campground requires attention. I recommend this portion of the plan be considered for stepped phases implementation.	General statement noted.
13. There is mention of an 'iron-ranger self-pay station', what would this require users to pay for.	EA Background p 9, Proposed Action p 13-14, Alternative 2-The Proposed Action p 40-41, Appendix J-Glossary and Common Term p J-4.
14. The problems at the day-use area and entrance are because the FS has not provided for increased use over time.	General statement noted. EA Purpose and Need p 8.
15. Camping at day-use and entrance area are a result of the campground being full, where does the FS believe these campers will camp.	EA Purpose and Need p 8, Proposed Action p 12, Alternative 2-The Proposed Action p 38-40, Recreation p 101-103.
16. User built trails are most often unwarranted, demanding on resources and should be closed wherever possible.	EA Purpose and Need p 7, Proposed Action p 14-15, Alternative 2-The Proposed Action p 44, Project Record – Proposed Off-road Vehicle Use-Evans Creek Area EA p 28.
17. Of great concern is the problem that many bypass trails are developed by quad riders while using the same trail as four wheel drive vehicles. Quad riders are allowed to use these trails but the trails are not designed for quad use.	General statement noted.
18. The decision to allow a concessionaire to take over the day-use and camping areas is one of the most destructive actions that can be taken by the USFS, if this plan is implemented, the partnership between the USFS and OHV users will greatly suffer.	General statement noted. Outside scope of project.
19. ORV organizations hold special events at Evans Creek, would they be in direct conflict with the concessionaire.	Concessionaire-Outside scope of project.
20. I and others from the ORV community do not believe that contracting out the indicated functions contributes to the well being of ORV experiences, the betterment of the environment or the ORV trail system. USFS contracting goals for Evans Creek are detrimental to ORV users.	General statement noted.
Form letter (3 signed copies, mailed individually)	
1. Concern over closing trails, more use on remaining trails.	EA Recreation p 106-108

2. Roads converted to trails, need to be more than a logging road. Trade-offs need to be equal or better.	EA Alternative 2-The Proposed Action p 43. Appendix E-Potential Activities p E-2
3. Trail construction to FSH/FSM standard, will they lose challenge.	EA Alternative 2-The Proposed Action p 43, Recreation p109. Appendix E-Potential Activities p E-2
4. Campground and Day-Use to concessionaire, effect to users and volunteers.	Outside scope of project.
5. Effects of changes on volunteers, work party camping, etc.	Outside scope of project. No change expected.
6. Does not feel that scoping went to a wide enough audience. (on one letter only)	EA Public Involvement p 32-33, Project Record for scoping letters, mailing lists, public meeting and notification.
Form letter (16 signed copies, mailed individually)	
1. Concern over trail closures mentioned.	General statement noted.
2. Impacts to a smaller area of use, what impacts will be seen by users.	EA Recreation p 96-110
3. Trail work may turn trails into a non-challenging road experience.	EA Alternative 2-The Proposed Action p 43, Recreation p 109. Appendix E-Potential Activities p E-2
4. Easier trail access may lead to more illegal activities to edges of ORV area.	General statement noted.
5. Campground and day-use to concessionaire, how will this effect users, will users pay to use both campground, day-use and trails.	Outside scope of project.
6. How will concessionaire effect work party/volunteer camping during cleanup events, etc.	Outside scope of project.
7. Volunteer help may decrease or completely dry-up if charged to camp during work party events, this in turn could lead to loss of NOVA and IAC funding.	General statement noted.
8. Requesting extension to comment period since concessionaire concept was not included in scoping letter and associated documents.	Project Record – letter dated April 30, 2007 response to scoping.
9. Request to be notified of dates and locations of public meetings.	Project Record – letter dated June 4, 2007 public meeting announcement.
Form letter (33 hand written letters, hand delivered in on envelope) Variations of content.	
1. Request extended deadline for public comments. (in 31 letters)	Project Record – letter dated April 30, 2007 response to scoping.
2. Request information on Public Meetings, location and dates. If none, wants to know that too. (in 16 letters)	Project Record – letter dated June 4, 2007 public meeting announcement.
3. Request information on project process. (in 8 letters)	Project Record – letter dated April 30, 2007 response to scoping.
4. Concessionaire in campground and day-use not part of scoping letter. (in 7 letters)	Outside scope of project.

5. Re-write proposal to include concessionaire potential, give whole picture. (in 2 letters)	Outside scope of project.
6. What would happen to Host Agreement. (in 7 letters)	Outside scope of project.
7. What would happen to annual events if under concessionaire, would groups pay fee to access day-use and camping. This would cut into money donated to charitable organizations. (in 8 letters)	Outside scope of project.
8. Potential loss of volunteer help if volunteers have to pay to be able to work, campground fees. (in 14 letters)	General statement noted.
9. Loss of volunteer hours effect on NOVA grant. (in 4 letters)	General statement noted.
10. Would users have to pay both camping/day-use and NWFP fees. (in 7 letters)	EA Background p 9.
11. Parking at entrance and day-use only would cause congestion and overflow would spill out on Hwy 165. (in 3 letters)	General statement noted.
12. Evans open to public since day 1 and should stay that way. (in 2 letters)	General statement noted.
13. Support improvements but there should be no fees. (in 1 letter)	General statement noted.
14. Should not be a pay park. (in 1 letter)	General statement noted.
15. Road closure, access to upper trails, use by others (hunters, snowmobilers, sightseers, campers, etc). (in 16 letters)	EA Recreation p 102, 106.
16. Road maintenance at Evans not a priority with FS. Cost of maintaining these roads is minimal. This is not an honest reason for closure. (in 5 letters)	EA Roads and Transportation p 79-80, 82-83, 86-87.
17. Road conversion to trails – would like to be involved in process. (in 2 letters)	General statement noted.
18. Supports plan as long as no net loss to trails. (in 1 letter)	EA Comparison of Alternatives p 64, Recreation p 109.
19. Changes need to be made but not with closures. (in 3 letters)	General statement noted.
20. Road conversion to trail not the same as a trail experience. (in 1 letter)	General statement noted.
21. Trails too close together to be closed, trails too far apart (little use) to be closed. (in 1 letter)	General statement noted.
22. Concessionaire would bring more problems than solutions. (in 2 letters)	Outside scope of project.
23. Have hosted campground and volunteered trail work, do not want to see area degraded. (in 1 letter)	General statement noted.

24. Surprised to hear project was completed without input from Focus Group, serious lack of cooperation on FS part. (in 1 letter)	General statement noted. Scoping phase at time letter was received (project not completed).
25. Self and club will rethink our work and play, if charged to use area. We volunteer and feel it would be unfair. (in 1 letter)	General statement noted.
Public Meeting Comment Summary (approx. 70 in attendance of which 52 signed in) FACILITIES	
Comments pertaining to use of a Concessionaire at the Campground or Day-use Areas (14 misc. statements/questions)	Outside scope of project.
1. Back-in spaces at campground will inhibit loading/unloading, pull-ins would be preferred. (2)	EA Proposed Action p 13, Alternative 2-The Proposed Action p 38-40, Recreation p 102-103, Appendix L-Campground and Day-use Concept Drawing.
2. Need on-load/off-load ramps.	General statement noted.
3. Try to spread out camp use throughout area, not just at campground.	EA Purpose and Need p 8, Background p 9, Proposed Action p 13-14, Alternative 2-The Proposed Action p 38-42, Recreation 101
4. Will users have to pay twice, NWFP and camp/day-use fee. (2)	EA Background p 9.
5. Where will trailers be parked if day-use is full and entrance parking is restricted. (4)	General statement noted.
6. Pull-through parking needed in all parking areas.	General statement noted.
7. Campground would need to increase in size.	EA Purpose and Need p 8, Proposed Action p 12-13, Alternative 2-The Proposed Action p 38-40, Recreation p 101-103, Appendix L-Campground and Day-use Concept Drawings
8. Need clean toilets (without having to clean before use).	General statement noted.
9. Gatekeeper to allow only better equipped, experienced users to access area.	Outside of scope of project.
10. One entrance/exit only into ORV area.	EA Proposed Action p 14, Alternative 2-The Proposed Action p 42 , 44, Mitigation Measures or Project Design Features-Recreation p 59, Recreation p 107, 110
11. Trash collection – pack-in/pack-out – not working well on trails. Provide trash cans & pickup using trailhead funds.	General statement noted.
12. Use volunteer clearing-house to run campground (volunteers want to do this). (2)	General statement noted.
13. Hosts need E&E (Enforcement & Education)	General statement noted.
14. Will users have input into campground design.	General statement noted.
15. Need bigger campsites. (2)	EA Purpose and Need p 8, Proposed Action p 12-13, Alternative 2-The Proposed Action p 38-40, Recreation p 101-103, Appendix L-Campground and Day-use Concept Drawings



16. Pull-through sites (70') – motorhomes and trailers concrete slabs.	EA Alternative 2-The Proposed Action p 38-40
17. Sites should be 18'-25' wide for RVs with pull-outs.	EA Alternative 2-The Proposed Action p 38-40, Recreation p 101-103.
18. Establish size limitations on vehicles.	EA Alternative 2-The Proposed Action p 38-40, Recreation p 101-103. Equipment size will be limited by size of campsites available for use once campground and other facilities are modified.
19. Put large parking area for larger motorhomes at entrance to Evans Creek.	Outside scope of project. Land Allocation would not support this development.
20. RV camp should not have been in ORV area in the first place.	General statement noted.
21. Where will campground be placed.	EA Figure 4-Alternative 1 No Action Map p 37, Figure 5-Alternative 2 - Proposed Action Map p 46, Appendix L- Campground and Day-use Concept Plan p L-1
22. Why isn't the campground being placed closer to the entrance to prevent large vehicle traffic on narrower, poorer roads.	Outside scope of project. Land Allocation would not support this development and campground already exists.
23. Maintain access roads to day-use and campground so vehicles (RVs and trailers) don't get beat up on rough roads.	EA Proposed Action p 11, Alternative 2-The Proposed Action p 43, Roads and Transportation starting on p 79
24. What is the purpose of two 'iron-rangers' self-pay stations as indicated in the plan, are fees other than NWFP going to be levied.	EA Background p 9, Proposed Action p 13-14.
<b>ROADS &amp; TRAILS</b>	
1. Tolmie Road (lower FSR 7920) – use a gate & keeper rather than closing.	General statement noted. Outside of scope of project.
2. Closing roads intensifies use on roads & trails left open for use = more erosion, etc.	EA Soil and Water Quality p 114-118.
3. Mass public interest in access to FSR 310 beyond proposed closure, due to scenery, etc (view of Mt. Rainier).	EA Purpose and Need p 7, Alternative 2 – The Proposed Action p 42, Soil and Water Quality Specialist Report p 15. Road segment TCA Class 8 and is a dead end near the Park boundary.
4. Close Tolmie Creek Road (FSR 7920) between Carbon River Road (FSR 7800) and Tolmie Creek Bridge.	EA Alternative 2 – The Proposed Action p 42, Roads and Transportation p 79, Recreation p 101 & 106, Roads and Transportation Specialist Report p 19. Would create a dead-end trail segment on excessively steep slopes.
5. Close FSR 7920 at 610 spur, allow Jeep Trail 120 to remain open. (3)	EA Alternative 2 – The Proposed Action p 42, 44. Logical closure point for FSR 7920 effects Trail 120 remaining open.
6. Identify trails as one way traffic to ease traffic issues.	General statement noted.
7. If creating new trails, some type of speed bump is a must to slow motorbikes.	General statement noted.
8. Jeep Trail 519 has cool obstacle (keep), close 517 instead.	General statement noted.
9. Preserve trail difficulty.	EA Recreation p 109.

10. Conversion of road to trails is difficult if not impossible.	General statement noted.
11. What trail standards will Road 7920 be converted to, if converted. If truly a trail, it may be unsuitable to USFS vehicle travel for emergency use.	EA Purpose and Need p 7, Proposed Action p 11, Alternative 2-The Proposed Action p 42, Recreation p 106, Appendix E-Potential Activities E-2.
12. Will IAC funds be requested for closing and converting roads.	The Forest Service will be seeking funding from several sources to supplement available FS funding.
13. Will funding be sought from other sources to correct the fish passage problems.	The Forest Service will be seeking funding from several sources to supplement available FS funding.
14. Wide range of trail types (easy to difficult) to meet needs of a variety of users. (2)	General statement noted.
15. More easy quad trails for families.	General statement noted.
16. Many jeepers would like to see a rock crawl area created.	General statement noted.
17. Convert roads to trails before road closures, funding may run out before conversion otherwise.	Statement noted. There may be some instances where this is possible, however, roads cannot be converted to trails before other roads (requiring access) can be closed.
18. Trail system maintenance & repair, who will do, volunteers have in the past.	EA Recreation p 108-110.
19. Jeepers don't want to close access from 311 to campground, they use it to get broken down vehicles off the trails.	EA Alternative 2-Proposed Action p 43, Figure 5. Alternative 2 - Proposed Action Map p 46. Portion of 311A will be converted to campground loop road otherwise 311 is not effected by either alternative.
20. What is the plan for erosion control.	EA Mitigation Measures and Management Requirements starting on p 50, Appendix I-Monitoring Forms p I-2.
21. Access for all types of ORVs connecting the day-use area to the campground.	EA Purpose and Need p 7, Proposed Action p 13, Alternative 2-The Proposed Action p 39, Recreation p 102-104.
22. Most high trails aren't navigable in winter.	General statement noted.
23. No road/trail curfews after dark. (2)	General statement noted.
24. Campers generally are night trail/road users.	General statement noted.
25. Jeep trails should have been built in a way that did not encourage such intense erosion/water movement.	General statement noted.
26. Sediment barriers would be beneficial.	Mitigation Measures or Project Design Feature beginning on p 51, Fisheries p 71, Soil and Water Quality p 116, Appendix H-Conservation Measures p H-1
27. What are definitions of 'closed' vs 'decommissioned', what is the difference.	EA Appendix J-Glossary and Common Terms p J-1 and J-2.
28. How will decommissioned roads be treated – no vehicular use at all.	EA Roads and Transportation p 83-85, Appendix E-Potential Activities beginning on p E-1, Appendix J-Glossary and Common Terms p J-1 and J-2. By definition, decommissioned roads would be closed to motorized vehicles.

29. Designate the roads & trails for closure/decommissioning as requiring high priority attention and prohibit use until repair work had been accomplished and then allow continuation of recreation.	EA Purpose and Need p 7, Relationship to the Forest Plan starting on p 16, Alternative 2 – The Proposed Action p 42 & 44, Fisheries p 70-71, Roads and Transportation p 80, Wildlife p 120, 127-128. There is a need to reduce road and trail miles from many standpoints.
30. Road 7920 – all vehicles allowed.	General statement noted.
31. What supports Jeep Trail 120 closure reasoning.	Alternative 2-The Proposed Action p 44. FSR 7920 closure point will effect connectivity of trail.
32. Loop trails desired.	EA Purpose and Need p 7, Proposed Action p 11, Relationship to the Forest Plan starting on p 16, Alternative 2-The Proposed Action p 42, Comparison of Alternatives p 64, Recreation p 107-109.
<b>SIGNAGE</b>	
1. USFS should work better with state to sign Hwy 165 as a Highway. (2)	General statement noted.
2. Entrance needs well defined signage. Road 105 often mistaken for entrance or users miss entrance altogether and end up at Mt. Rainier NP.	General statement noted.
3. Need to sign large shelter area 'NO CAMPING'.	General statement noted. Alternative 2-The Proposed Action p 38-42.
4. Need 'AREA PATROLLED' signs at Evans Creek.	General statement noted. Alternative 2-The Proposed Action p 38-42.
5. Trail description signage (trail #/features/length/ skill level) to prevent confusion and to lessen user impacts from inexperience. (4)	General statement notes. Alternative 2-The Proposed Action p 43-44, Recreation p 103
6. Large area map needed on bulletin boards. (2)	General statement noted. Alternative 2-The Proposed Action p 38-42.
7. Kiosk likely to be vandalized.	General statement noted.
<b>ENFORCEMENT</b>	
1. Alcohol issues: No drinking and driving signage; Alcohol ban on trails; Trail curfew at night; Random Sheriff checkpoint; Ticket drunks. (2)	General statement noted. Alcohol related issues fall under Washington State rules.
2. Need more Law Enforcement to prevent vandalism.	General statement noted.
4. Enforce rules with tickets, not warnings.	General statement noted.
5. Pierce County Sheriff writing tickets for minor infractions (mud flaps) and ignoring speeders on road 7920. Enforcing more on Evans Creek than Hwy 165.	General statement noted.
6. Sheriff needs to focus more on safety and security.	General statement noted.
7. Patrolling Hwy 165 difficult but necessary.	Outside scope of project.
8. Pierce County contract LEO are very inconsistent in enforcement of regulations.	General statement noted.

9. Bumper regulations unnecessarily overly enforced.	General statement noted.
10. Need more night enforcement (2100-0300).	General statement noted.
11. Why isn't Education and Enforcement (E&E) improvements included in this plan.	EA Background p 9, Recreation beginning on p 96.
OTHER	
1. Bias for pictures used in presentation – old or event related.	General statement noted.
2. Post complete information (rules, maps, size, directions, etc) on FS website.	General statement noted.
3. Safety concern with dead standing small trees along some of the trails.	General statement noted.
4. Want to purchase NWFP at entrance to area.	EA Proposed Action p 13-14. Purpose of locating iron-ranger self-pay stations in day-use and campground.
5. Use of tire size limitation (37") helps reduce trail damage.	General statement noted.
6. Want to preserve area but also want to preserve sport.	General statement noted.
7. Hope it does some good, time will tell. Upper Management seems to want to close area.	General statement noted.
8. No excuse for not having NWFP when you arrive at Evans Creek.	General statement noted.
9. Lack of communication (cellphone & radio reception) is a problem.	General statement noted.
10. ATV should be mentioned & considered as user group more strongly.	EA Background starting on p 9 (throughout document)
11. Is FS mandated to allot land for ORV use.	Refer to Executive Order 11644 – Use of Off-Road Vehicles on Public Land, dated 02/08/72 as amended.
12. Will there be more FS participation toward improving and maintaining.	EA Purpose and Need p 7, Background p 9, Proposed Action starting on p 11, Relationship to the Forest Plan starting on p 16, Recreation p 108-110.
13. Volunteer groups haven't been aware of land standards.	General statement noted.
14. Volunteer program has diminished due to rowdy crowds and lack of Law Enforcement.	General statement noted.
15. Host stopped receiving satellite phones for use.	General statement noted.
16. Will Evans be open year-round.	EA Proposed Action p 15, Alternative 2-The Proposed Action p 44-45, Mitigation Measures and Management Requirements beginning on p 50, Soil and Water Quality p 114, Wildlife p 127.
17. May-November general optimal use period.	General statement noted.
18. 24/7 guard or gate personnel.	General statement noted. Outside scope of project.
19. People will find a way in regardless of gatekeeper or other management feature.	General statement noted.

20. Stress Evans is for all ages but should be done/used responsibly.	General statement noted.
21. Is there a need to restrict wheel-base.	General statement noted.
23. Lack of communication between user groups & FS – propose user agreement & user manual. (3)	EA Recreation p 109. Outside scope of project.
24. Need to develop and implement a management team possibly comprised of representatives from individual users, government personnel, organized user groups, non-motorized users and citizens at large responsible for issue identification, prioritization, and recommendations concerning solutions.	General statement noted. EA Recreation p 109-111.
25. What additional sources of funds will be requested other than those of the former IAC funding grants.	The Forest Service will be seeking additional funding from a number of sources to supplement available federal funding.
26. Is real money available from the USFS and budgeted to supplement IAC funding.	The Forest Service will be seeking additional funding from a number of sources to supplement available federal funding.
27. Will projected volunteer time, material, and equipment donations be used as matching funds.	Outside scope of project.
28. What portions of this plan have the highest priority for completion.	EA Mitigation Measures and Management Requirements beginning on p 59.
29. Glad to see FS getting on board.	General statement noted.
30. Is there a financial study on lowering dumpsite fees & relationship to forest garbage dumping.	Outside scope of project.

## **Appendix B—References Cited**

Clean Air Act

Clean Water Act 1972, as amended.

Code of Federal Regulations. Title 36 CFR – Parks, Forests, and Public Property, Section 261.16 - Prohibitions

Code of Federal Regulations. Title 40 CFR – Protection of Environment, Sections 1500-1508 – Chapter 5 Council on Environmental Quality

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Executive Order 11644, as amended by EO 11989. 1972. Use of Off Road Vehicles on Public Land. February 8, 1972.

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## Appendix C—Cumulative Effects Information

### Definition

Cumulative impact is the impact on the environment, which results from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor or collectively significant actions taking place over a period of time (40 CFR 1508.7).

### Cumulative Effects Analysis

The analysis was guided by the June 24, 2005 memo, *Guidance on the Consideration of Past Actions in Cumulative Effects Analysis*, Executive Office of the President, Council on Environmental Quality (Executive Office of the President, CEQ 2005). Briefly, the memo states that agencies are to use scoping to determine whether, and to what extent, information about the specific nature, design, or present effects of a past action is useful for the agency's analysis of effects of a proposed action and its reasonable alternatives. "Agencies are not required to list or analyze the effects of individual past actions unless such information is necessary to describe the cumulative effect of all past actions combined" (Executive Office of the President, CEQ 2005). The memo also noted that agencies can generally conduct an adequate cumulative effects analysis by focusing on the current aggregate (or remaining, residual) effects of past actions without delving into the historical details of past individual actions.

**Table 1. Past, Present, and Foreseeable Actions for Cumulative Effects Analysis**

<b>Activity</b>	<b>Extent</b>	<b>Timing</b>	<b>Miles from ORV Area Project</b>
<b>Future Actions</b>			
Mt. Rainier NP – Carbon Entrance	Repair of the Carbon River road inside the park boundary.	Currently being evaluated for possible repair summer 2008	3 air miles northeast of project area
Future timber harvest on private and state lands	Extent unknown, but there are private and state timberlands to the north, west and south of the forest boundary	Ongoing when lands are snow free.	Adjacent to forest boundary on three sides of project
<b>Present Actions</b>			
Road Maintenance	Brushing and blading on a rotating basis as funds allow (FSR 7920, 7930, 7800, 7810)	Ongoing annual road maintenance on Forest Service Roads	Within and around the project area
ORV Area Trails and Facilities Maintenance	Trail and facilities repair and maintenance	Ongoing	Within project area
State Route 165 Road Maintenance	Brushing and blading of SR 165 from junction with FSR 7800 to Park Entrance	Ongoing	Adjacent to and access for project area
<b>Past Actions</b>			
Clearcut Timber Harvest	Clearcutting of old growth and second growth forest by FS and private land owners on the slopes on lands north of Mowich River and south of Carbon River	Completed from 1900 – 2007	In and adjacent to project area on north, west, south sides
2001 Huckleberry Land Exchange	Non-ground disturbing land exchange between Forest Service and Weyerhaeuser. Forest Service acquired approximately 1,920 acres of land in the Carbon River Watershed	Completed in 2001	4 – 8 miles north-northeast of project area
ERFO Repairs	Repairs (clean and replace culverts, repair fills, install retaining walls, fix ditches) after 1996 Flood event on FSR 7920, 7930, 7930-310 (7,515 cubic yards material replaced)	Completed in 1998	Within project area

## Appendix D - Climate Change and Implications

The Intergovernmental Panel on Climate Change (2007) predicts fewer cold days and nights, warmer and more hot days and nights, more heat waves, increasing area affected by drought, and an increase in precipitation that falls as rain.

On a regional basis, the Climate Impacts Group (2007) predicts a similar scenario for the Pacific Northwest. Their models predict a future warming of approximately 0.5 degrees Fahrenheit per decade with temperatures increasing in all seasons, but particularly in June-August. A larger percentage of winter precipitation would fall as rain rather than snow, with an earlier spring snowmelt, lower summer stream flows, droughts becoming more common, and a greater risk of wildfires.

Plant communities are expected to undergo shifts in composition where different species will not all move in the same direction at the same rate. Loss of biological diversity is likely as species with poor dispersal abilities are unable to respond quickly enough to the shift in climate.

The effects of climate change on forest pests depend on whether summers are dryer or wetter, a subject of some debate (Joint Institute for the Study of the Atmosphere and Ocean (JISAO), undated). If summers are the same or dryer, the resulting physiological stress is expected to lead to an increase in the susceptibility of insect attack.

Some strategies that have emerged recently as potential ways to mitigate for the effects of climate change are to maintain a wide range of biological diversity, including a full array of species, and to maintain stands at moderate density rather than have them in an over-stocked condition where vulnerability to stress is higher (JISAO, undated; DeBell 2007).

Effects of Climate Change on Proposed Project – The effects of climate change as outlined above would have little, if any, effect on the Proposed Project. Air temperature seems to have little effect on the activities that take place in the ORV area, namely use of ORV trails by Jeeps, ATVs, and motorcyclists, camping and various secondary recreation uses. It would take some 100 years, given the predications, to potentially raise the temperature by 5 degrees Fahrenheit. Less snow, or shorter snowpack periods, could contribute to earlier accessibility to the trail system within the ORV area, thereby lengthening the season of use (outside the winter closure period).

Effects of Proposed Project on Climate Change – This project has the potential to create an increase in vehicle emissions present in the ORV as use increases. This project is situated in that the east side of the project area is bordered by Mt. Rainier National Park, which has limited access points and experiences vehicle traffic four to five months a year and only a short distance inside its boundaries. The other three sides of the ORV area are bordered primarily by private land, a majority held by timber companies, with on-going harvest activities. These private lands have limited vehicle access (vehicles used in the timber companies to manage the tree farm and a limited number of individuals who purchase access permits). The young tree stands are,

effectively, high operating carbon sinks, as the younger stands process and retain carbon at a much higher rate than the mature forest of the National Park system. The land not owned by private timber companies is owned by few individuals who live in the foothills and by the Forest Service, whose near lands are comprised of Late-Successional and Old-Growth designated lands and the Clearwater Wilderness. With the current climate of reducing vehicle emissions through use of fuels and equipment that produce lower emissions and stricter Government standards, it could be expected that emissions would not significantly increase over time. This project area is relatively small and emissions could be considered insignificant, not measurable, in the overall scheme of climate change when looking at the contributions on a landscape or larger level.

## **Appendix E – Potential Activities**

### **POTENTIAL ACTIVITIES TO ACCOMPLISH PROPOSED ROAD AND TRAIL ACTIONS**

#### **USER BUILT TRAIL OBLITERATION**

##### **1 STABILIZATION**

- a. Revegetation – including seeding, transplanting, or both
- b. Recontour surface – including pulling back berms and edges
- c. Treatment of noxious weeds – including pulling, cutting, spraying
- d. Eliminate appearance of driving surface – including obstruction placement, such as rocks, logs, brush, etc.

##### **2. ACCESS**

- a. Block entrances with barriers – including rock, logs, berm, etc.
- b. Signing for closure to motorized use and restoration activities

#### **ROAD DECOMMISSIONING**

##### **1. STABILIZATION**

- a. Pull side cast – excess materials can be used to improve other trails, recontour cuts, narrow driving surface, construct features.
- b. Pull culverts – excess fill materials can be used as above.
- c. Outslope – to reduce maintenance needs and provide for water dispersement
- d. Recontour – using excess materials from other activities
- e. Surface ripping – to decompact soils for reestablishing vegetation
- f. Revegetation – including seeding, transplanting, or both

##### **2. ACCESS**

- a. Trenching – trench, or trench and berm to eliminate access
- b. Obliterate road prism – over all or part of road length
- c. Gating – gate installation at road junction where feasible
- d. Barriers – installation of ecology blocks, rock placement or logs

#### **ROAD CLOSURE**

##### **1. STABILIZATION**

- a. Pull side cast – excess materials can be used to improve other trails, recontour cuts, narrow driving surface, construct features.
  - b. Pull culverts – excess fill materials can be used as above.
  - c. Outslope – to reduce maintenance needs and provide for water dispersement
  - d. Construct waterbars and cross ditches
2. ACCESS
- a. Trenching – trench, or trench and berm to eliminate access
  - b. Obliterate road prism – at road entrance only (or sight length from junction)
  - c. Gating – gate installation at road junction where feasible
  - d. Barriers – installation of ecology blocks, rock placement or logs

## **CONVERT ROAD TO TRAIL**

1. SIGNING
  - a. Replace existing road signs with trail signs and numbers
  - b. Install directional travel route signs as needed
2. CLEARING

No change to clearing limits
3. SURFACING
  - a. Ripping edges to narrow running surface to meet trail standards
  - b. Pull side cast that is not required as part of trail – use excess materials to further accomplish conversion to trail
4. FEATURE CONSTRUCTION
  - a. Rolling dips (water bars, partial buried logs)
  - b. Barrier placement (rock, berm, plantings, etc)
  - c. Water pools
  - d. Extreme dips (10' wide) to replace culvert and fill
    - i. Ford capability
    - ii. Harden surface to prevent erosion
5. ALIGNMENT

Use barrier placement/pull surfacing at key locations
6. DRAINAGE

Locate sediment traps as needed in conjunction with above features



**TRAIL TO ROAD CONVERSION (Dual-track Trail 311A and Single-track Trail 1154 Connector to Road 7920)**

1. CLEARING  
5 feet from shoulder
2. TREAD WIDENING/ RUNNING SURFACE WIDTH  
20 feet with shoulder (2 feet) = approx. 16 feet running width
3. TRAIL ACCESS
  - a. Design for bikes and ATV's (equal to or less than 50 inches wide)
  - b. Locate parallel to Campground Access Road
4. SURFACING (ROAD)
  - a. 6 inches compacted gravel (Mtnce Lvl 3-4)
  - b. 12 inches compacted base
  - c. Grub and clear
5. SURFACING (ATV / MOTORCYCLE ACCESS)  
Compacted base with 1 ¼ inch minus rock
6. DRAINAGE  
Culverts and ditch construction to Mtnce Lvl 3 standards with sediment collection features

**TRAIL UPGRADES**

1. IMPROVE DRAINAGE
  - a. Construct cross drains and rolling dips
  - b. Install sediment traps
  - c. Establish ditchlines
  - d. Remove berms that restrict run-off dissipation
  - e. Outslope surfaces (equal to or less than 6% slope)
2. CLEARING  
Where slope stabilization is required due to oversteepening, some clearing may be required to reach angle of repose
3. SLOPE STABILIZATION
  - a. Recontour over steepened slopes to reach angle of repose

- b. Armor slopes (including rocking, willow slips, etc)
- c. Use of log cordones where functional
- d. Installation of Jute mats for reseeding on severe erosion sites
- 4. TRAIL ALIGNMENT/RELOCATION
  - a. Use of trail obliteration standards for relocating trails
  - b. Temporary barriers (fencing) to restrict access off trail
  - c. Signing for restrictions/location of active trail tread
  - d. Re-establish driving surface/drainage features
  - e. Revegetation of areas beyond trail tread (seeding, planting, etc)
  - f. Educational/restrictive use signage
- 5. SURFACING /ARMORING / HARDENING
  - a. Rock spauls (4-6 inches) for rut restoration/other areas
  - b. Grid blocks for rut restoration/other areas
  - c. Fill ruts with mineral/organic material
- 6. CROSSING STRUCTURES
  - a. Install puncheon to span wet areas
  - b. Bridges foot-style to span unconfined wet areas
  - c. Bridges short creek crossings (3-6 feet wide)
    - i. Seasonal types (less than 2 feet high, less than 72 inches wide)
  - d. Culverts over perennial flows with dip approach
  - e. Fords over seasonal flow with dip approach with rock crossing
- 7. TURNOUTS

Re-establish turnout intervals or where naturally occurring, eliminate excess turnouts.

## Appendix F – Revegetation Criteria and Specifications

### R6 Management Requirement

Under the R6 Invasive Plant EIS (USDA Forest Service 2005a), standard and guideline # 13 specifies that “*Native plant materials are the first choice in revegetation for restoration and rehabilitation where timely natural regeneration of the native plant community is not likely to occur.*”

### Management Requirement as it pertains to Evans Creek ORV Project Area

All bare ground that has been created as a result of project activities during construction should be seeded within the same growing season as the disturbance, and covered with 2 inches of weed free mulch. Use local native seed if it is available; otherwise use the MBS non-invasive, non-native seed mix (Table 1) and cover with 2 inches of weed free mulch.

During the ground clearing process, salvage topsoil and shrubs and re-install these materials back on the disturbed site. Care must be taken to dig deep enough to get most of the roots, keep as much soil around them as possible, and to keep the roots cool and wet at all times by surrounding them with burlap, plastic or other material. These salvaged plants should be stored nearby on site (which will ensure that the area that has already been surveyed as part of this project). Once installed, the plants may need to be watered if necessary. As noted in the mitigation measures in Table 1, the Contract Administrator will be responsible for this phase of project implementation and will work with the FS botanist to describe this process in the contract specifications.

If the USFS develops partnerships with user groups who take a stewardship role for the area, a future option is to collect native seed from the watershed, grow out the original collection in nursery beds, and harvest the yield of the crop for two or three years thereafter. This can increase the yield of seeds and reduce the cost per pound over the long run. A complete description of the steps needed for a “seed increase project” can be found in the Olympic National Forest Native Plant Notebook (Potash and Aubry 2007), or on line at <http://www.fs.fed.us/r6/mbs/projects/botany/>. Quantities of total seed need and amount needed to be collected (foundation seed) will depend on the species and will require some additional analysis.

Table 1. Acceptable non-invasive non-native species (per USDA Forest Service 2005b).

≤ 3500' ELEVATION			> 3500' ELEVATION		
DROUGHTY soil lacks moisture in mid-summer	NOT DROUGHTY soil has moisture in mid-summer		DROUGHTY soil lacks moisture in mid-summer	NOT DROUGHTY soil has moisture in mid-summer	
↓	↓	↓	↓	↓	↓
↓	saturated	not	↓	saturated	not
↓		saturated	↓		saturated
↓	↓	↓	↓	↓	↓
SEEDMIX "A"	SEEDMIX "B"	SEEDMIX "C"	SEEDMIX "D"	SEEDMIX "E"	SEEDMIX "F"
soft white winter wheat @ 50 lbs/acre, slender wheatgrass @ 20 lbs/acre, annual ryegrass @ 20 lbs/acre, Austrian winter peas @ 5 lbs/acre.  (goal = 170 seeds/sq ft)	white oats @ 60 lbs/acre, tufted hairgrass <sup>i</sup> @ 4 lbs/acre, annual ryegrass @ 10 lbs/acre, alsike clover @ 2 lbs/acre.	tufted hairgrass <sup>i</sup> @ 4 lbs/acre, annual ryegrass @ 10 lbs/acre, winter triticale @ 60 lbs/acre, alsike clover @ 2 lbs/acre.	slender wheatgrass <sup>ii</sup> @ 20 lbs/acre, winter triticale @ 100 lbs/acre, annual ryegrass @ 20 lbs/acre.  (goal = 180 seeds/sq ft)	white oats @ 60 lbs/acre, tufted hairgrass <sup>i</sup> @ 4 lbs/acre, annual ryegrass @ 10 lbs/acre, alsike clover @ 2 lbs/acre.	tufted hairgrass <sup>i</sup> @ 4 lbs/acre, annual ryegrass @ 10 lbs/acre, winter triticale @ 60 lbs/acre, alsike clover @ 2 lbs/acre.

<sup>i</sup> In areas adjacent to wetlands eliminate tufted hairgrass and increase sowing rate of annual ryegrass to 60 lbs/acre.

<sup>ii</sup> Above 4500 feet, eliminate slender wheatgrass and increase sowing rate of annual ryegrass to 60 lbs/acre. If salvage is not possible, and the cost of cultivating rooted plants is prohibitive, it may be less expensive to collect seed, grow out the original collection in nursery beds, and collect the yield of the crop for two or three years thereafter. This can increase the yield of seeds and reduce the cost per pound over the long run. A complete description of the steps needed for a "seed increase project" can be found in the Olympic National Forest Native Plant Notebook (Potash and Aubry 2007), or on line at <http://www.fs.fed.us/r6/mbs/projects/botany/>. Quantities of total seed need and amount needed to be collected (foundation seed) will depend on the species and will require some additional analysis.

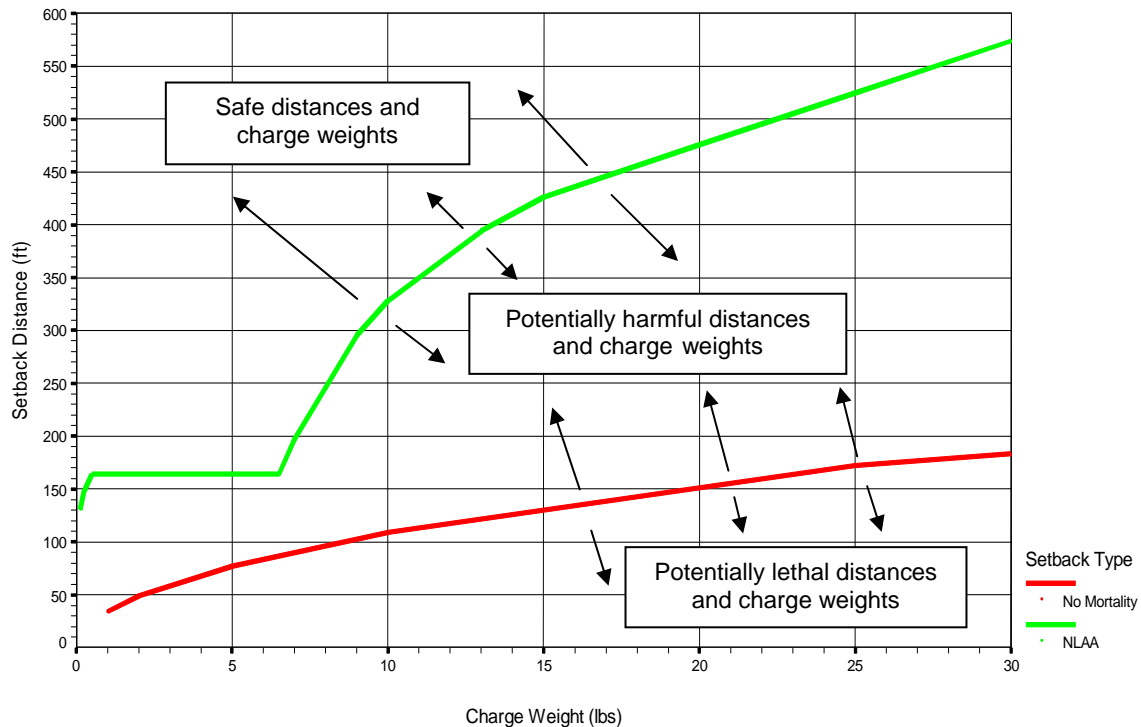
## Appendix G – Mt. Baker-Snoqualmie Blasting Guidelines

For the Protection of Fish - Guidelines agreed to at Aquatic Level 1 Team meeting on January 31, 2007 by USFWS (Marc Whisler, Joe Hiss) and NMFS (Joel Moribe).

Minimum setback distance from streams for a given charge weight to:

1. Keep fish safe and guarantee an NLAA call for the concussive effects of the blast, or
2. Potentially harm fish but not kill them (Alaska Guidelines)

*NOTE: Guidelines do not apply to areas/seasons when eggs are in the gravel nor to any other aspects of a project other than blasting. Guidelines may be modified as more information becomes available.*



*Note: Alaska Guidelines for specific substrate and valley bottom configuration can be used to determine more precise distances if blasts are close to the potentially lethal effects line for rock*

<b>NLAA Setback (minimum safe distance by charge weight)</b>		
<b>Charge Weight (lbs)</b>	<b>Distance (m)</b>	<b>Distance (ft)</b>
0.125	40	131
0.25	45	148
0.5	50	164
6.5	50	164
7	60	197
8	75	246
9	90	295
10	100	328
13	120	394
15	130	426
20	145	476
25	160	525
30	175	574

<b>“No Mortality” Setback Alaska Guidelines for Rock (minimum distance to prevent mortality by charge weight)</b>		
<b>Charge Weight (lbs)</b>	<b>Distance (m)</b>	<b>Distance (ft)</b>
1	10	34
2	15	49
5	23	77
10	33	109
25	52	172
100	103	344

## Appendix H – Conservation Measures

1. If work is in the active channel, divert water around the project site. All water intakes used for a project, including pumps used to isolate an in-water work area, will have a fish screen installed, operated and maintained according to WDFW criteria.
2. Excess materials (spoils) will be disposed of and stabilized so they do not enter stream channels.
3. Erosion control methods shall be used to prevent silt-laden water from entering the stream. These may include, but are not limited to, straw bales, silt fencing, filter fabric, check dams of pea gravel-filled burlap bags or other material, and/or immediate mulching of exposed areas. During construction, all erosion controls must be inspected daily during the rainy season and weekly during the dry season to ensure they are working adequately. Excess sediments will be disposed of so they do not enter the stream channel.
4. If weather conditions during project operations generate and transport sediment to the stream channel, operations will be ceased until the weather conditions improve.
5. All disturbed ground where runoff has the potential to drain into stream channels shall be revegetated or protected from surface erosion by seeding, mulching, or other methods prior to the fall rainy season. Retain measures to prevent sediment from reaching streams until the soil is secure. If appropriate, native species should be used in revegetation. Any seed used for revegetation shall be consistent with MBS guidelines.
6. Wastewater from project activities and water removed from within the work area shall be routed to an area landward of the bankfull elevation to allow removal of fine sediment and other contaminants prior to being discharged to the stream.
7. When removing culverts, streambanks should be properly sloped to an angle of stability (natural repose), and be suitable for establishment of permanent woody vegetation. The streambed shall be restored to the original gradient.
8. No supports, abutments, riprap, fill, armoring, or other foreign material shall be placed in bankfull channels.
9. Trees to be felled within 300 ft of Evans Creek shall be cabled into bundles of 3-5 logs and left in the riparian area away from the campground to simulate larger down wood.
10. Leave all non-treated wood within the stream/wetland, including within the Riparian Reserve. Avoid use of treated wood for structures that may contact flowing water or that will be placed over water. Use of treated wood shall follow best management practices for treated wood in western aquatic environments (WWPI 2000).

11. Have hazardous spill clean-up materials on site. Have a spill containment and control plan with notification procedures, specific clean up and disposal instructions for different products, and quick response containment and clean up measures on site.
12. Any machinery maintenance involving potential contaminants (fuel, oil, hydraulic fluid, etc) will occur at an approved site 150 ft away from a stream channel, or outside the Riparian Reserve. Prior to starting work each day, check all machinery for leaks (fuel, oil, hydraulic fluid, etc) and make all necessary repairs. All equipment operated instream must be cleaned before beginning operations below the bankfull elevation to remove all external grease, dirt, and mud. Stationary power equipment (e.g., generators, cranes) operated within 150 feet of any stream, water body or wetland must be diapiered to prevent leaks.
13. Fish passage structures will use streambed simulation or no-slope hydraulic design.
14. Large woody material removed from a culvert inlet will be put back in the stream channel downstream of the culvert unless doing so will cause degradation of habitat or put a drainage structure at risk.
15. All projects potentially affecting the beds or banks of streams, lakes, or other water bodies shall meet all conditions specified in the WDFW HPA for the project. In-channel activities will be limited to non-spawning and incubation time periods, and will be completed during the WDFW in-water work period. Temporary stream crossings will be minimized, and avoided where possible.
16. Bridges shall fully span the bankfull elevation of the stream channel, and allow 100yr flows and associated debris to pass.
17. Boulders, rock, woody materials and other natural construction materials used for the project must be obtained outside the riparian area.
18. If blasting is needed, MBS Blasting Guidelines shall be followed to avoid potentially lethal distances and charge weights. When blasting using multiple holes per shot, a delay targeted at 50 milliseconds will be used between holes so effects to fish are similar to discrete blasts. Measures will be employed to prevent blasted materials from entering stream channels.

## References

Western Wood Preservers' Institute (WWPI). 2000. Quality Assurance: Inspection Procedures for Best management Practices for the Use of Treated Wood in Aquatic Environments. Western Wood Preservers' Institute, Vancouver, B.C.



## Appendix I — Monitoring Forms

### Mt. Baker-Snoqualmie National Forest Monitoring Summary Form

<b>District:</b> Snoqualmie Ranger District
<b>Project Name:</b> Evans Creek ORV Area Management Plan
<b>Monitoring Objective:</b> Heritage Resource Protection
<b>Monitoring Type:</b> Pre-Inspection or On-Site Monitoring
<b>Priority:</b> High
<b>Parameter:</b> Implementation of any ground disturbing activities would require notification of certified Cultural Resource Technician or Forest Archaeologist to determine scope and need for pre-inspection or monitoring.
<b>Methodology:</b> Following processes outlined in the Forest Plan S&G, 1997 Programmatic Agreement, and the MBSNF Cultural Resource Inventory Strategy.
<b>Frequency/Duration:</b> As needed to fulfill the requirements of Section 106.
<b>Data Storage:</b> Digital and/or hardcopy storage of reports documenting findings.
<b>Report:</b> Cultural Resource Report and Evaluation
<b>Projected Costs:</b> Dependant on number of activities and scope.

**Mt. Baker-Snoqualmie National Forest Monitoring Summary Form**

<b>District:</b> Snoqualmie Ranger District
<b>Project Name:</b> Evans Creek ORV Area Management Plan
<b>Monitoring Objective:</b> Soil Erosion Conditions
<b>Monitoring Type:</b> Conditional
<b>Priority:</b> High
<b>Parameter:</b> Erosion would be monitored after heavy rainfall to identify the need for individual trail closures during the Fall and Spring precipitation events.
<b>Methodology:</b> Collect information based on fields in the Trail Condition Assessment (TCA), modified from Meyer 2002, on trails needing resource protection and recording information on the data forms. Submit data forms to the Aquatics specialist for review and subsequent recommendation for management actions.
<b>Frequency/Duration:</b> After each precipitation event that warrants monitoring of soil conditions.
<b>Data Storage:</b> Hardcopy and/or digital reports.
<b>Report:</b> Trail Condition Assessment data forms and Recommendation for Management Action.
<b>Projected Costs:</b> Varies dependant on number and severity of precipitation events.

**Mt. Baker-Snoqualmie National Forest Monitoring Summary Form**

<b>District:</b> Snoqualmie Ranger District
<b>Project Name:</b> Evans Creek ORV Area Management Plan
<b>Monitoring Objective:</b> Area Closure Compliance
<b>Monitoring Type:</b> Education and Enforcement
<b>Priority:</b> High
<b>Parameter:</b> Monitor closure area for non-compliance during closure period of December 15 – March 31 annually.
<b>Methodology:</b> Site visits should be conducted on a weekend (using aircraft if funding is available). Post, and repost when necessary, signage; issue citations for non-compliance with closure.
<b>Frequency/Duration:</b> Annually during the life of plan
<b>Data Storage:</b> Hardcopy and/or digital format
<b>Report:</b> Compliance statistics and number of contacts/citations issued.
<b>Projected Costs:</b> Varied dependant on method of transportation used to access project area and number of visits made.

**Mt. Baker-Snoqualmie National Forest Monitoring Summary Form**

<b>District:</b> Snoqualmie Ranger District
<b>Project Name:</b> Evans Creek ORV Area Management Plan
<b>Monitoring Objective:</b> Establish Plots for Wildlife Concerns
<b>Monitoring Type:</b> Implementation Monitoring
<b>Priority:</b> High
<b>Parameter:</b> Following plan approval, conduct inventory of old-growth areas, special habitat sites (e.g. talus) and other old-growth “legacy elements” bisected by ORV trails.
<b>Methodology:</b> A complete walk-through survey of each old-growth patch that is bisected or lies adjacent to a designated trail should be mapped for habitat enhancement and restoration where off-trail riding/driving is a problem. These sites should also be monitored to reinforce compliance and education to protect old-growth habitat. <ul style="list-style-type: none"><li>• Establish line transects and plot locations to inventory plant forms (i.e. forb, herb, grass, shrub, tree), plant density, and dimensions of snags and down wood.</li><li>• Establish GPS photo points to document ground surface topography and site condition of problem areas.</li><li>• Establish GPS photo points in each problem area showing approximate percent cover habitat type of residual plants.</li><li>• Specific monitoring protocols will be developed for the problem sites.</li><li>• Monitor problem sites for non-compliance.</li><li>• Monitor and inspect signage, barricades, used to educate and discourage off-trail riding within old-growth patches.</li></ul>
<b>Frequency/Duration:</b> Annually for life of plan
<b>Data Storage:</b> Hardcopy and/or digital format
<b>Report:</b> An annual report on monitoring results will be submitted to the District Ranger by the end of each Calendar year.
<b>Projected Costs:</b> The monitoring plan, once approved, shall be funded and implemented as part of the annual ORV area operations. Cost dependant on the number of plots and photo points required to meet the intent of monitoring.



## Appendix J — Glossary and Common Terms

Activity Area	The total area of ground impacting activity, and is a feasible unit for sampling and evaluating. Some examples are: a sale contract unit, pasture, allotment, meadow, riparian reach, burned area.
Activity Center	The core of an owl's territory and the focal point of protection measures. Most frequently located in or near the highest concentration of remaining suitable habitat.
Aggradation	Deposition in one place of material eroded from another. Aggradation raises the elevation of streambeds, flood plains, and the bottom of other water bodies.
All Terrain Vehicle (ATV)	A type of off-highway vehicle that travels on three or more low-pressure tires; has handlebar steering; is less than or equal to 50 inches in width; and has a seat designed to be straddled by the operator.
Alluvial Fan	A low, outspread mass of loose materials and/or rock material, commonly with gentle slopes, shaped like an open fan or a segment of a cone, deposited by a stream at the place where it issues from a narrow mountain valley upon a plain or broad valley, or where a tributary stream is at its junction with the main stream. It is steepest near the mouth of the valley where its apex points upstream. Moreover, it slopes gently and convexly outward with decreasing gradient.
Alluvial	Originate through the transport and deposition from running water.
Anadromous Fish	Fish that are hatched and rear in freshwater, move to the ocean to grow and mature, and return to freshwater to reproduce. Salmon and steelhead are examples.
Annual Maintenance	Work performed to maintain servicability, or repair failures during the year which they occur.
Appurtenance	Something that belongs with or to another more important thing.
Bryophyte	Collectively mosses, liverworts, and hornworts.
Bulk Density	The mass of dry soil per unit volume, not including coarse fragments greater than 2 mm in diameter.
Carrying Capacity	The maximum number of organisms that can be supported in a given area of habitat at a given time.
Closed Road	A road that remains part of the transportation system, but motorized use has been eliminated, prohibited, or restricted during all or certain times of the year.
Concept Plan	Conceptual drawings produced for the purpose of evaluating impacts of proposed disturbance for improvement to the Campground, Day-use and Entrance facilities.
Concern Species	Species whose populations are of concern to biologists on the Mt. Baker-Snoqualmie National Forest. An informal designation.
Convert Road-to-Trail	Site specific treatments used in order to achieve conversion of a road to a trail, which can include one or more of the following: reduction/removal of culverts, reduced culvert length, fill pullback, outsloping, seed and mulching exposed soils, fill reduction over culverts, and narrowed footprint to 4 to 5 feet in width.
Corvid	Bird species related in the taxa that includes jays, crows, ravens, magpies, and nutcrackers.
Critical Habitat	(Endangered Species Act) defined as an area occupied by a species listed as threatened or endangered within which are found physical or geographical features essential to the conservation of the species, or an area not currently occupied by the species, which is itself essential to the conservation of the species. As defined

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	in the ESA “conservation” means any and all methods and procedures, and the use of those, needed to bring a species to recovery—the point at which the protections of the ESA are no longer needed.
Culvert	A conduit or passage way under a road, trail, or other obstruction, usually constructed entirely below the elevation of the traveled way.
Cumulative Effect	The effect on the environment that results from the incremental effect of the action, when added to the effects of other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes the other actions and regardless of land ownership on which the other actions occur. An individual action when considered alone may not have a significant effect, but when its effects are considered in sum with the effects of other past, present, and reasonably foreseeable future actions, the effects may be significant. They can occur when small, incremental amounts of habitat are lost over time through a variety of management activities across a landscape.
Decommissioned Road	On the MBSNF, a road that no longer is serving a current or planned future access need and has been removed from the transportation system maps and database. The ground occupied by the road corridor is managed according to the land allocation in which it is located and vehicle use is prohibited.
Debris Avalanche	A rapid moving mass of rock fragments, soil, and mud of various sizes not reaching a stream channel.
Debris Fans	A gently sloping fan shaped mass of detritus formed as a result of upslope or upstream erosional events.
Debris Flow	A rapid moving mass of rock fragments, soil, and mud with more than half the particles being larger than sand size.
Deferred Maintenance	Maintenance that was not performed when it should have been or when it was scheduled, therefore, was put off or delayed to be accomplished at a future period.
Degradation	Erosional removal of materials from one place to another. Degradation lowers the elevation of streambeds and floodplains.
Depressed Stock	A stock of fish whose production is below expected levels based on available habitat and natural variations in survival rates, but above the level where permanent damage to the stock is likely.
Developed Recreation	A designated recreation oriented facility or identified site of varying dimensions, which is commonly used by and maintained annually for camping, day & overnight parking, picnicking, providing potable water/sanitation or viewing. Development levels vary from highly developed sites such as campgrounds (paved roads, traffic control barriers, designated site parking, potable water, multiple flushing/pit toilets, tent pads, fire rings and tables) to a remote trailhead, which may only have a single toilet, table, sign and/or gravel parking. All sites are designated to accommodate access by motorized vehicles but some are more accessible from established highway travel ways than others.
Discharge	Volume of water flowing past reference point per unit time (usually expressed as cubic meter/second).
Dispersed Recreation	An undeveloped or non-maintained recreation site or area, which is used seasonally or periodically by people for camping, parking, berry picking, hunting, climbing and/or viewing. These areas or sites lack formal development or designation but may have some rough versions of amenities found at developed sites (i.e. dirt roads, natural rock material for traffic control barriers, informal site parking, and pit toilets). Access by motorized vehicles can be difficult since most are not readily accessible from established highway travel ways.
Ecological Type	A category of land having a unique combination of potential natural plant community, soil, landscape features, climate, and differing from other ecological types in its ability to produce vegetation and respond to management. (Ref. FSH

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	2090.11)
Ecosystem Management	A land management system that strives to maintain the natural processes and balances as well as provide for human use
Effective Ground Cover	All living or dead herbaceous or woody materials and rock fragments greater than three-fourths of an inch in diameter in contact with the ground surface. Includes tree and shrub seedlings, grass, forbs, litter, woody biomass, chips, and rock fragments.
Egress	A means of going out: exit.
Embankment Pullback	Designated roads or segments shall have embankment (fillslopes) pulled back to designated limits and slopes. Excavated material shall be placed at designated locations against backslopes or on flats, sloped to drain, and left in an uncompacted condition.
Endangered Species	A native species found by the Secretary of the Interior to be threatened with extinction.
Engineering Hazard Analysis	An analysis to identify hazards associated with mixed use on the proposed project. Guidelines in FSH 7709.55 and 7709.59 - 59-1 Chapter 52.2, FSH R6 Supplement 7709.59 – 92-1
Escapement	Those fish that have survived all fisheries and will make up a spawning population.
Essential Fish Habitat	(from <a href="http://www.nmfs.noaa.gov/sfa/sfaguide/102.htm">http://www.nmfs.noaa.gov/sfa/sfaguide/102.htm</a> ) – those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.
Ethnographer	One who studies or is proficient in ethnography, which is the branch of anthropology that considers man geographically and descriptively, treating of the subdivision of races, the causes of migration etc.
Extirpated	Eliminated from a local area.
Fifth Field Watershed	A hierarchical catalog system designed by the US Geological Survey and the Water Resource Council comprised of Region, Subregion, Accounting Unit, and
Floodplain	Level lowland bordering a stream onto which the stream spreads at flood stage.
Forest Road	As defined in Title 23, Section 101 of the US Code (23 USC 101), any road wholly or partly within, or adjacent to, and serving the National Forest System and which is necessary for the protection, administration, and utilization of the National Forest System and the use and development of its resources.
Forest Transportation Facility	A classified road, designated trail, or designated airfield, including bridges, culverts, parking lots, log transfer facilities, safety devices and other transportation network appurtenances under Forest Service jurisdiction that is wholly or partially within or adjacent to National Forest System lands.
Forest Transportation System Management	The planning, inventory, analysis, classification, record keeping, scheduling, construction, reconstruction, maintenance, decommissioning, and other operations undertaken to achieve environmentally sound, safe, cost-effective, access for use, protection, administration, and management of National Forest System lands.
Four-wheel Motorized Vehicle	Intended to apply to all four-wheeled and four-wheel drive vehicles.
Fragmentation	The degree to which the landscape is broken into distinct patch types.
Fuel	Combustible material. Includes, vegetation, such as grass, leaves, ground litter, plants, shrubs and trees that feed a fire. (See Surface Fuels.)
Guild	A group of species aggregated together based on similarities in habitat requirements and anticipated response to changes in landscape conditions.
Habitat Conservation	Part of a network of habitat proposed by the Interagency Scientific committee to protect spotted owls. A contiguous block of habitat to be managed and conserved



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Area (HCA)	for breeding spotted owl pairs, connectivity, and distribution of owls. Has been replaced by late successional reserves as the working management unit for protecting spotted owl habitat.
Health and Safety Need	A requirement that addresses a threat to human safety and health that requires immediate interim abatement and/or long-term permanent abatement.
Healthy Stock	A stock of fish experiencing production levels consistent with its available habitat and within the natural variations in survival for the stock.
Hibernacula	Sites where hibernation occurs.
Human Influence Zone	Areas of human activity (recreation sites, roads, trails, buildings, mines, hydropower operations, etc.) buffered by one-fourth mile around trails and one-half mile around roads and other sites.
Ingress	The act of going in: entering.
Inner Gorge	Consists of steep (50 percent or greater), continuous slopes immediately above a channel.
Interstitial Space	Is that space which occurs between two other things.
Iron Ranger	A secure, self-pay station often made of an iron tube.
Kiosk	A structure, or bulletin board, used to post notices and information.
Landslide	Any sudden movement of earth and rocks down a steep slope.
Large Woody Debris	Pieces of wood larger than 10 feet long and 6 inches in diameter located within a stream channel.
Late-Successional Forest	Late-successional forests are those forest seral stages that include mature and old-growth age classes. (ROD USDA-USDI, Standards and Guidelines 1994, B-1)
LS/OG Forest	Late-successional and / or old growth. Forests or stands consisting of trees and structural attributes and supporting biological communities and processes associated with old-growth and / or mature forests. FEMAT. All LS/OG are Late-Successional Reserve (LSR). Where LS/OG status is used to define the boundaries of a LSR, the boundaries are fixed, regardless of the future condition of those (or other) stands.
Lichen	A fungus and its photosynthetic partner growing together in a mutually controlled, symbiotic relationship.
Long-term	(as applied to soils resource) Used to describe duration of effects, lasting greater than 50 years, in contrast to short-term.
Maximum modification	Visual Quality Objective where management activities are dominant, but appear natural when seen as background.
Mitigation	Avoiding or minimizing impacts by limiting the degree or magnitude of the action and its implementation; rectifying the impact by repairing, rehabilitating, or restoring the effected environment; reducing or eliminating the impact by preservation and maintenance operations during the life of the action.
National Forest System Road	A classified forest road under the jurisdiction of the Forest Service. The term "National Forest System Road" is synonymous with the term "Forest Development Roads" as used in 23 USC 205.
Native Resident Fish	An indigenous stock of fish that has not been substantially impacted by genetic interactions with non-native stocks or by other factors, and is still present in all or part of its original range.
Neotropical Migrants	Birds that migrate from North America to regions south of the Tropic of Cancer (latitude 23 ½ degrees north) to winter.
Non-native Fish	A fish stock that has become established outside of its original range.

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Noxious Weeds	Invasive non-native plant species, some of which are toxic to livestock and/or wildlife as designated by the State Noxious Weed Board under the Washington State Noxious Weed Law RCW 17.10.
Objective Maintenance Level	The maintenance level to be assigned at a future date considering future road management objectives, traffic needs, budget constraints, and environmental concerns. The objective maintenance level may be the same as, or higher or lower than, the operational maintenance level.
Official Use	An employee, agent, or designated representative of the Federal Government or one of its contractors in the course of his/her employment, agency, or representation.
Off-Road Vehicles (ORV)	Any motorized vehicle designed for or capable of cross-country travel on or immediately overland, water, sand, snow, ice, marsh, swampland, or other terrain including but not limited to, such vehicles as four- wheel drive, motorcycle, snowmobile, amphibious, and air cushion vehicles; except that such term excludes (1) any registered motorboat, (2) any military, fire, emergency or law enforcement vehicle whose use is expressly authorized by the Chief, Forest Service, under a permit, lease, license, or contract.
Omnivore	Animal that feeds on both plants and animals.
Operational Maintenance Level	The maintenance level currently assigned to a road, considering today's needs, road condition, budget constraints, and environmental concerns.
Outsloping	Designated roads or segments shall be outsloped by pulling material from the road fill section towards the back slope. Pullback material shall be spread over the roadbed and ditch forming a minimum outslope equal to the grade and dimensions shown in the design criteria. Any existing ditches at the toe of the back slope shall be filled.
Partuition	The act or process of birth.
pH	A measure of the hydrogen ion concentration in a solution.
Project Area	The area in which project analysis occurs for proposed specific activities.
Recontouring	Consists of replacing the excavation material with the embankment material to approximate the original shape of the ground prior to road construction.
Redd	(from <a href="http://dictionary.reference.com/browse/redd">http://dictionary.reference.com/browse/redd</a> ) – a spawning nest made by a fish, especially a salmon or trout.
Resource Protection Need	A requirement that addresses a threat or risk of damage, obstruction, or negative impact to a natural resource.
Restoration	Treatments that restore vital soil functions to inherent range of variability. It is recognized that treatments may need to occur over a period of years and may need to be maintained.
Riparian Zone	Those terrestrial areas where the vegetation complex and microclimate conditions are products of the combined presence and influence of perennial and/or intermittent water, associated high water tables, and soils that exhibit some wetness characteristics. Normally used to refer to the zone within which plants grow rooted in the water table of these rivers, streams, lakes, ponds, reservoirs, springs, marshes, seeps, bogs, and wet meadows.
River Mile (RM)	Length of the river course extended from salt-water confluence to headwaters.
Road	A motor vehicle travelway over 50 inches wide, unless designated and managed as a trail. A road may be classified, unclassified, or temporary.
Road Construction	A new motor vehicle route over 50 inches wide, and a activity that results in the addition of forest classified system roads or temporary road miles.

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Road Maintenance Levels	One of five levels assigned based on the maintenance required to provide the desired type of access.
Road Maintenance Level 1 (ML1)	Intermittent service roads managed as closed to vehicular traffic, and kept in storage until the next project access need; the closure period must exceed one year.
Road Maintenance Level 2 (ML2)	Roads open for use by high clearance vehicles. Passenger car traffic is not a consideration. Traffic is normally minor, usually consisting of one or a combination of administrative, permitted, dispersed recreation or other specialized uses.
Road Maintenance Level 3 (ML3)	Roads open and maintained for travel by a prudent driver in a standard passenger car. Roads are typically low speed, single lane with turnouts and spot surfacing.
Road Maintenance Level 4 (ML4)	Roads that provide a moderate degree of user comfort and convenience at moderate travel speeds. Most roads are double lane and aggregate surfaced; however, some may be single lane. Paved surfaces or dust abatement may be used.
Road Maintenance Level 5 (ML5)	Roads that provide a high degree of user comfort and convenience. These roads are normally double lane and paved, although some may be aggregate surfaced and dust abated.
Road Decommissioning Treatment	Treatment (including obliteration) applied to some roads no longer needed, which if treatment is not performed, present an unacceptable hazard to habitats and watershed condition. It removes those elements of a road and reroute or impede hillslope drainage and present slope stability hazards.
Road Management Objectives (RMO)	The intended purpose of an individual road based on management area direction and access management objectives. Road management objectives contain design criteria, operation criteria, and maintenance criteria.
Road Maintenance	The ongoing upkeep of a road and appurtenances necessary to retain or restore the road to the approved road management operational level.
Road Obliteration	Full physical site restoration that attempts to re-contour slopes with the intent to completely remove the road from the landscape.
Road Reconstruction	An existing road rebuilt to its approved operational level or will be improved to increase safety, operational efficiency or resource protection.
Road Subject to Highway Safety Act	National Forest System roads that are open to use by the public for standard passenger cars. This includes roads with access restricted on a seasonal basis and roads closed during extreme weather conditions or for emergencies, but which are otherwise open for general public use.
Roaded Modified and Roaded Natural Classes	Site modification moderate. Contemporary/rustic design of improvements is usually based on use of native materials. Inconspicuous vehicular traffic controls usually provided. Roads may be hard surfaced and trails formalized. Development density about 3 family units per acre. Primary access may be over high standard roads. Interpretive services informal, but generally direct.
Recreation Opportunity Spectrum (ROS)	Range of opportunities for recreationists by combining variations of qualities provided by nature (vegetation, landscape, topography, scenery), qualities associated with recreational use (levels, types of use), and conditions provided by management (developments, roads, regulations). Includes Primitive, Semi-primitive Non-motorized, Semi-primitive Motorized, Roaded Natural, Roaded Modified, Rural, Urban, etc.
Salmonid	Any member of the taxonomic family Salmonidae, which includes all species of salmon, trout, and char.
Security Habitat	Habitat that is outside of human influence zones.
Sensitive Species	A species that occurs on the Regional Forester's Sensitive Species list (Forest Service Manual 2670). Includes species that are candidates for listing under the

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	Federal Endangered Species Act.
Sensitive	(from <a href="http://www.fs.fed.us/r6/sfpnw/issssp/agency-policy">http://www.fs.fed.us/r6/sfpnw/issssp/agency-policy</a> )—For Region 6 of the Forest Service, those plant and animal species identified by the Regional Forester for which population viability is a concern, as evidenced by significant current or predicted downward trends in population numbers or density and habitat capability that would reduce a species' existing distribution (FSM 2670.5).
Seral	Of or pertaining to the series of stages in the process of ecological succession.
Short-term	(as applied to the soils resource) Used to describe duration of effects, lasting less than 50 years, in contrast to short-term.
Silt	A soil particle between 0.05 and 0.002mm in diameter.
Soil Compaction	Compaction of soil increases soil bulk density and soil strength and decreases porosity as a result of the application of forces such as weight and vibration.
Soil Displacement	Soil displacement is the lateral movement of soil from one place to another by mechanical forces such as equipment blades, vehicle traffic, or logs being yarded.
Soil Mass Wasting	Is the detachment and movement of soil or surface mantle material by gravity. Some landslides fail in a single mass or single event and move downslope to cause debris slides and avalanches. Other landslides detach and move slowly over a period of years.
Soil Puddling	Is a physical change in soil properties, under moist conditions, due to shearing forces that destroy soil structure and reduce porosity. It occurs in slightly plastic, plastic, and very plastic soils.
Soil Quality	The capacity of a specific soil to function within natural or altered land use boundaries to sustain or improve plant or animal productivity, water quality and flows, air quality, and human health and habitation. Soil quality is maintained when soil compaction, displacement, puddling, burning, erosion, loss of organic matter and altered soil moisture regimes are maintained within defined standards and guidelines.
Spawn	(from <a href="http://dictionary.reference.com/browse/spawn">http://dictionary.reference.com/browse/spawn</a> )—to deposit eggs or sperm directly into the water, as fishes
Stock status	The current condition of a stock, which may be based on escapement, run size, survival, or fitness level.
Stock	(from WDF et al. 1992)—the fish spawning in a particular lake or stream(s) at a particular season, which fish to a substantial degree do not interbreed with any group spawning in a different place, or in the same place at a different season.
Suitable Habitat	Habitat in which an animal or plant can meet all or some of its life history requirements.
Surface Erosion	Is the detachment and transport of individual soil particles by wind, water, or gravity. Surface erosion can occur as the loss of soil in a fairly uniform layer (sheet erosion, dry ravel) or rills or gullies.
TCA Class	The impact classes designated for the trail condition assessment of the Project Area using modified system of impact classes from Kevin Meyers's multi-agency publication "Managing degraded off-highway vehicle trail in wet, unstable, and sensitive environments".
Taxa	Plural of taxon – (biology) a taxonomic category or group, such as phylum, order, family, species or genus.
Temporary Road	Road authorized by contract, permit, lease, other written authorization, or emergency operation not intended to be part of the forest transportation system and not necessary for long-term resource management.
Threatened species	A native species likely to become endangered within the foreseeable future.

Trail	A designated path or way of varying width which is commonly use by and maintained for hikers, horsemen, snow travelers, bicyclists, or for motorized vehicles with a total width of 40 inches or less.
Turbidity	An expression of the optical properties of a sample, which causes light rays to be scattered and absorbed rather than transmitted through the sample. Measured in nephelometric turbidity units (NTUs).
Two-wheeled Motorized Vehicle	Intended to apply to all two wheel motorized vehicles and to smaller three wheeled vehicles which are 40 inches or less in width.
Ungulate	Hooved mammal.
Unknown Stock	(from WDF et al. 1992) – description applied to stocks where there is insufficient information to identify stock origin or stock status with confidence.
Water Quality	(for this report) Changes in water conditions from erosion, sedimentation and nutrient enrichment.
Wetland	Lands where saturation with water is the major factor in determining soil development and the types of plants that grow there.

## Appendix K - Acronyms

ACS	Aquatic Conservation Strategy	NHPA	National Historic Preservation Act
APE	Area of Potential Effect	NMFS	National Marine Fisheries Service
ATM	Access and Travel Management	NOAA	National Oceanic & Atmospheric Administration
ATV	All Terrain Vehicle	NRCS	Natural Resources Conservation Service
BA	Biological Assessment	NRHP	National Register of Historic Places
BE	Biological Evaluation	NRIS	Natural Resource Inventory System
BO	Biological Opinion	NWFP	Northwest Forest Plan
BMP	Best Management Practice	OG	Old Growth
CEQ	Council on Environmental Quality	OHV	Off Highway Vehicle
CFR	Code of Federal Regulations	ORV	Off Road Vehicle
CHU	Critical Habitat Unit	PNW4WDA	Pacific NW 4-Wheel Drive Association
CWA	Clean Water Act	POAT	Persons At One Time
DN	Decision Notice	RCO	Recreation Conservation Organization (formerly IAC)
DNR	Department of Natural Resources	RCW	Revised Code of Washington
DSR	Damage Survey Report	RM	River Mile
DPS	Distinct Population Segment	RNV	Range of Natural Variability
EA	Environmental Assessment	ROD	Record of Decision
EFH	Essential Fish Habitat	ROS	Recreation Opportunity Spectrum
EIS	Environmental Impact Statement	S&G	Standards and Guidelines
EO	Executive Order	SEIS	Supplemental Environmental Impact Statement
ERFO	Emergency Relief Federally Owned Roads	SHPO	State Historic Preservation Office
ESA	Endangered Species Act	SOPA	Schedule of Proposed Action
FEIS	Final Environmental Impact Statement	SR	State Route
FHA	Federal Highway Administration	SRI	Soil Resource Inventory
FMP	Fire Management Plan	SVR	Standard Visual Range
FONSI	Finding of No Significant Impact	TES	Threatened, Endangered and Sensitive Species
FS	Forest Service	US	United States
FSH	Forest Service Handbook	USACE	United States Army Corp of Engineers
FSM	Forest Service Manual	USDA	United States Dept. of Agriculture
FSR	Forest Service Road	USDI	United States Dept. of Interior
FWS	Fish and Wildlife Service	USFWS	United States Fish & Wildlife Service
GIS	Geographic Information System	USFS	United States Forest Service
HPA	Hydraulic Project Approval	USGS	United State Geological Service
HUC	Hydrologic Unit Code (USGS)	VOAT	Vehicles At One Time
IAC	Interagency Committee	WDF	Washington Dept. of Fisheries (WDFW)
IDT	Interdisciplinary Team	WDFW	Washington State Dept. of Fish and Wildlife
LEO	Law Enforcement Officer	WDOE	Washington Dept. of Ecology
LMRP	Land and Resource Management Plan	WSDOT	Washington State Dept. of Transportation
LSR	Late Successional Reserve	WDW	Washington Dept. of Wildlife (WDFW)
LS/OG	Late Successional and Old Growth	WEPP	Water Erosion Protection Project Model
LWD	Large Woody Debris	WRIA	Water Resource Inventory Area
MA	Management Area	WSA	Watershed Analysis
MLA	Merged Land Allocation		
MBSNF	Mt. Baker-Snoqualmie National Forest		
MIS	Management Indicator Species		
ML	Maintenance Level		
MP	Milepost		
MOU	Memorandum of Understanding		
NEPA	National Environmental Policy Act		
NFMA	National Forest Management Act		
NFS	National Forest System		

## **Appendix L – Campground & Day-Use Concept Plan**

[Insert drawing of the Campground & Day-Use Concept Plan]

## **Appendix M – Entrance Facility Concept Plan**

[Insert drawing for Entrance Facility Concept Plan]