APPENDIX C: Columbia River Gorge National Scenic Area Management Plan - Consistency Determination (CD-06-11-S) for the Site-Specific Invasive Plant Treatments for the Mt. Hood National Forest and the Columbia River Gorge National Scenic Area in Oregon

Prepared by Robin Dobson, Ecologist, Columbia River Gorge National Scenic Area, September 2006

FINDINGS OF FACT

The following findings of fact contain the applicable standards and guidelines from the Columbia River Gorge National Scenic Area Management Plan (Management Plan). The Management Plan, as revised and adopted in 2004, is in effect. Management Plan policy requires that projects on National Forest lands also be consistent with the Land and Resource Management Plans of the adjacent National Forests. The USDA Forest Service applies the more protective standard of either the Management Plan or the Land and Resource Management Plan. For this project, the applicable Land and Resource Management Plan is the Mt. Hood National Forest, Forest Plan. The applicable Forest Plan Standards and Guidelines are listed in Appendix B.

Project Proposal

The project proposal is described in Chapters 1 and 2 of the EIS. Appendix F – Site and Treatment Information, and Appendix O – Existing Condition Characteristics provide site specific information for the 7 treatment areas in the Scenic Area. The Management Plan does not apply regulations to herbicide use, per Special Management Area (SMA) Wildlife and Plants Policy 4: “County, state and federal regulations for air and water quality and for pesticide use shall be followed.” Herbicides are likewise not regulated by General Management Area (GMA) guidelines. The manual, mechanical and cultural treatment methods are subject to the Management Plan requirements, and are the subject of this review. The following table displays information relevant to the consistency determination.

Table C-1: Scenic Area Consistency Determination, Management Plan Information for Treatment Areas

Treat ID	Area	Co.	Acre	Location	LUD	LS	Scenic Standard (VQO)	Visible from Nearest KVA	Resources Present
22-01	Sandy River Delta	Mult	1573	T1N/R3E/S13 TL 100 T1N/R3E/S24 TL 100, 500 T1N/R3E/S25 TL 100 T1N/R4E/ TL 100, 200, 300	PR/OS	RB	VS/NVE	Fg: I-84, Sandy River, Columbia River	Wetlands, River, TES Fish, Planned Recreation
22-05	Wyeth Bench	Hood River	90	T2N/R8E/S5 TL 200, 900 – 31 ac T2N/R8E/S4 TL 201 – 20 ac T3N/R8E/S34 TL 400, 500, 600 – 28 ac T2N/R8E/S2 TL300, T3/R8/S35 TL200,300– 19 ac	UA/OS F PR, F F	CW/UA CW CW CW	NVE/Na NVE VS NVE	Fg: I-84 Fg: Wyeth Bench Road Fg: Wyeth Bench Road Fg: Wyeth Bench Road	Campground Pond none none
22-07	Wells Island	Hood River	21	T3N/R10E/S26 TL 200	OS	RB	NVE	Fg: Columbia River	River, TES Fish, Bald Eagle
22-08	East Pit	Hood River	24	T2N/R11E/S4 TL 100 T3N/R11E/S33 TL 101	OS GMA	GW – (GMA)	VS	Fg: HCRH	Pond, Bald Eagle, Peregrine, Endemic, Trail
22-11	Memaloose/ Rowena	Wasco	110	T2N/R12E/S5 TL 2400 - 13 ac T2N/R12E/S4 TL 201 - 9 ac T2N/R12E/S4 TL 800, S3C TL 500,600 - 25 ac T2N/R12E/S3 TL 400 - 33 ac T2N/R12E/ TL 400,500 - 24 ac	Ag Ag/OS Ag OS A1/Ag/OS	OW OW OW OW OW/GW	VS VS VS NVE VS/NVE	Fg: HCRH Fg: HCRH Mg: HRCH, Tom McCall Pt Fg: HCRH, Rowena Plateau Mg: HCRH	None Pond Buffer Pond Buffer Pond/Str,Peregrine,Lewis Pond/IntStream, Endemic
22-12	7 Mile Hill Rd Chenoweth Tbl	Wasco	81	T2N/R13E/S19 TL 300 - 55 ac T2N/R13E/S30 TL700, S31 TL200, 300,400 -26 ac	A-1 OS	G OW	VS NVE	Mg: I-84 Bg: Col River, SR14, I-84	Intermittent Stream Pond
22-17	Chamberlain Road/Corbett Women Forum Thors Heights	Mult	139	T1N/R4E/(S30) TL 400 – 19 ac T1N/R4E/S29CC TL 700 – 5 ac T1N/R4E/S29CC TL 300 – 5 ac T1N/R4E/S28D TL 700,600,500,400,100 – 28 ac T1N/R4E/S27 TL 1100,1000,900 – 40 ac T1N/R4E/S25CD TL 700,1100,1200,1000 – 9 ac T1N/R5E/S30C TL400, S30CC TL200,300 – 29 ac	Ag/A1/OS/R Ag Ag Ag/OS Ag/OS PR/OS F	P/CW/RR P P P/ CW P/ CW CW P	VS/NVE VS VS VS / NVE VS / NVE VS / NVE VS	Mg Col/Sandy Rvr, SR 14 Mg Columbia River Mg Columbia River Fg I-84 Fg I-84 Fg Women;s Forum, HCRH Fg Larch Mtn Rd	None None None None Intermittent Stream State Park Adjacent None

Key to Table C-1

LUD – Land Use Designation	**LS** – Landscape Setting	**Scenic Standard**	**KVA - Key Viewing Area**
PR – Public Recreation	RB – River Bottomlands	VS – Visual Subordinance (Partial Retention)	Fg: Foreground: up to ½ mile from KVA
OS – SMA Open Space	P – Pastoral	NVE. – Not Visually Evident (Retention)	Mg: Middleground: ½ to 3 miles from KVA
OS GMA – GMA Open Space	RR in P – Rural Residential in Pastoral (GMA)		Bg: Background: over 3 miles form KVA
Ag – SMA Agriculture	CW – Coniferous Woodland		I-84 – Interstate 84
A-1 GMA Large Scale Agriculture	GW – Gorge Walls, Canyon Lands and Wildlands		HRCH – Historic Columbia River Hwy
F – SMA Forest	OW – Oak Woodlands		Col Rvr – Columbia River
R – Residential (GMA)	G – Grasslands (GMA)		SR14 – Washington State Route 14
UA – Urban Area			

Table C-2: Consistency with Management Plan Guidelines

Land Use Designations The project is located in SMA Agriculture, Forest, Public Recreation and Open Space; GMA Agriculture and Open Space, and the Cascade Locks Urban Area (see Table C-1). All of these designations allow resource enhancement activities, and contain virtually the same review use language.	
Review Uses	**Findings**
Resource enhancement projects for the purpose of enhancing scenic, cultural, recreation and/or natural resources, subject to the guidelines in "Resource Enhancement Projects" (Part II, Chapter 7: General Policies and Guidelines). These projects may include new structures (e.g., fish ladders, sediment barriers) and/or activities (e.g., closing and revegetating unused roads, recontouring abandoned quarries).	☒ Project as described meets guideline ☐ Project requires the following condition to meet this guideline
Resource Enhancement Projects Guidelines - Applicable 1. Applications for resource enhancement projects must describe the goals and benefits of the proposed enhancement project. They must also thoroughly document the condition of the resource before and after the proposed enhancement project.	☒ Project as described meets guideline. Well described throughout EIS. ☐ Project requires the following condition to meet this guideline
SMA Open Space 1. An Open Space plan shall be completed by the primary managing agency or land owner prior to any new land uses or development, and shall be reviewed by the USDA Forest Service. The Open Space plan shall include the following: A. Direction for resource protection, enhancement, and management. B. Review of existing uses to determine compatibility with Open Space values. C. Consultation with members of the public and with agency and resource specialists.	☒ Project as described meets guideline. Applicable Open Space Plans address invasive plant treatment: ▪ Sandy River Delta FEIS: pages 2-15, 2-16 and Chapter 4. Sandy River Delta Plan pages 27-40. ▪ Columbia River Tribs West Watershed Analysis, pg 64-66. ▪ Columbia River Tributaries East Watershed Analysis, pg 69,72. ▪ Wells Island Open Space Plan, pages 9-12 ▪ Rowena Plan, page 51 ☐ Project requires the following condition to meet this guideline
2. F. Treatment of noxious weeds shall be permitted without completion of an SMA Open Space plan when the following criteria have been met: (1) Noxious weed infestation is new and eradication is still viable. (2) Delayed or deferred treatment could have widespread or major adverse impacts to one or more of the following resources: (a) Displacement of native and traditionally gathered plants;	☒ Project as described meets guideline. Open Space Plans have not been completed for Chenoweth Table and the Broughton Bluff. The EIS well describes 1) the state of noxious weed infestation, 2) the potential adverse resource impacts from delayed treatment, and 3) the treatment effects are thoroughly evaluated. ☐ Project requires the following condition to meet this guideline

(b) Degradation of wildlife habitat and forage; (c) Degradation or loss of agricultural uses of land, such as cropland or livestock forage; (d) Limitation of recreational uses. (3) For federal lands, treatment effects have been thoroughly evaluated in an environmental assessment.	

Scenic Resources

Table C-1 displays the scenic standard for each treatment area, and the closest Key Viewing Area. Scenic resources are discussed in Section 3.12, Scenery Management. SMA guidelines apply to most treatment areas. GMA guidelines apply to all of Treatment Area 22-08, about 19 acres of Area 22-11, 55 acres of Area 22-12 and 8 acres of Area 22-17. In addition, about 30 acres of Area 22-05 are in an Urban Area and not subject to Scenic Area guidelines. SMA guidelines are evaluated first, followed by GMA guidelines. Where SMA and GMA guidelines are essentially the same, they are combined.

SMA Scenic Resource Guidelines - Applicable	**Findings**
SMA Design Guidelines Based on Landscape Settings A. Pastoral: Pastoral areas shall retain the overall appearance of an agricultural landscape. (1) The use of plant species common to the landscape setting shall be encouraged. The use of plant species in rows, as commonly found in the landscape setting, is encouraged.	☒ Project as described meets guideline. See Site Restoration Strategies Section 2.1.3, and 2.1.4. ☐ Project requires the following condition to meet this guideline
B. Coniferous Woodland and Oak-Pine Woodland: Woodland areas shall retain the overall appearance of a woodland landscape. New developments and land uses shall retain the overall visual character of the natural appearance of the Coniferous Woodland and Oak-Pine Woodland landscape. (2) Use of plant species native to the landscape setting shall be encouraged. Where non-native plants are used, they shall have native-appearing characteristics.	☒ Project as described meets guideline. See Site Restoration Strategies Section 2.1.3, and 2.1.4. ☐ Project requires the following condition to meet this guideline
D. River Bottomlands: River Bottomlands shall retain the overall visual character of a floodplain and associated islands. (2) Use of plant species native to the landscape setting shall be encouraged. Where non-native plants are used, they shall have native-appearing characteristics.	☒ Project as described meets guideline. See Site Restoration Strategies Section 2.1.3, and 2.1.4. ☐ Project requires the following condition to meet this guideline
E. Gorge Walls, Canyonlands, and Wildlands: New developments and land uses shall retain the overall visual character of the natural-appearing landscape. (4) Use of plant species non-native to the Columbia River Gorge shall not be allowed	☒ Project as described meets guideline. See Site Restoration Strategies Section 2.1.3, and 2.1.4. ☐ Project requires the following condition to meet this guideline

SMA Guidelines for Development and Uses Visible from KVAs	
1. The guidelines in this section shall apply to proposed developments on sites topographically visible from key viewing areas. (GMA KVA Guideline 1)	As described in Table C-1, at least portions of all treatment areas are topographically visible from KVAs (source: GIS KVA layer).
2. New developments and land uses shall be evaluated to ensure that the required scenic standard is met and that scenic resources are not adversely affected, including cumulative effects, based on the degree of visibility from key viewing areas.	☒ Project as described meets guideline. See Section 3.12.3 ☐ Project requires the following condition to meet this guideline
4. In all landscape settings, scenic standards shall be met by blending new development with the adjacent natural landscape elements rather than with existing development	☒ Project as described meets guideline. See Section 3.12.3 ☐ Project requires the following condition to meet this guideline
5. Proposed developments or land uses shall be sited to achieve the applicable scenic standard. Develop-ment shall be designed to fit the natural topography, to take advantage of landform and vegetation screening, and to minimize visible grading or other modifications of landforms, vegetation cover, and natural characteristics. When screening of development is needed to meet the scenic standard from key viewing areas, use of existing topography and vegetation shall be given priority over other means of achieving the scenic standard such as planting new vegetation or using artificial berms.	☒ Project as described meets guideline. See Section 3.12.3 ☐ Project requires the following condition to meet this guideline
6. The extent and type of conditions applied to a proposed development or use to achieve the scenic standard shall be proportionate to its degree of visibility from key viewing areas. (GMA KVA Guideline 4.A. (1) through (5)) A. Decisions shall include written findings addressing the factors influencing the degree of visibility, including but not limited to: (1) The amount of area of the building site exposed to key viewing areas, (2) The degree of existing vegetation providing screening, (3) The distance from the building site to the key viewing areas from which it is visible, (4) The number of key viewing areas from which it is visible, and (5) The linear distance along the key viewing areas from which the building site is visible (for linear key viewing areas, such as roads).	☒ Project as described meets guideline. See Section 3.12.3 ☐ Project requires the following condition to meet this guideline Table C-1 identifies the closest KVA.
B. Conditions may be applied to various elements of proposed developments to ensure they are visually subordinate to their setting as seen from key viewing areas, including but not limited to: (GMA KVA Guideline 4.B. (1) through (4)) (1) Siting (location of development on the subject property, building orientation, and other elements),	☒ Project as described meets guideline. See Section 3.12.3 ☐ Project requires the following condition to meet this guideline

(2) Retention of existing vegetation, (3) Design (color, reflectivity, size, shape, height, architectural and design details and other elements), (4) New landscaping.	
7. Sites approved for new development to achieve scenic standards shall be consistent with guidelines to protect wetlands, riparian corridors, sensitive plant or wildlife sites and the buffer zones of each of these natural resources, and guidelines to protect cultural resources.	☒ Project as described meets guideline. See Section 3.12.3 ☐ Project requires the following condition to meet this guideline
8. Proposed developments shall not protrude above the line of a bluff, cliff, or skyline as seen from key viewing areas.	☒ Project as described meets guideline. See Section 3.12.3 ☐ Project requires the following condition to meet this guideline
SMA Guidelines for KVA Foregrounds and Scenic Routes 1. All new developments and land uses immediately adjacent to scenic routes shall be in conformance with state or county scenic route guidelines.	☒ Project as described meets guideline. See Section 3.12.3 ☐ Project requires the following condition to meet this guideline
GMA Scenic Resource Guidelines - Applicable	**Findings**
Overall Scenic Provisions 5. For all proposed development, the determination of compatibility with the landscape setting shall be based on information submitted in the site plan.	☒ Project as described meets guideline. See Section 3.12.3 ☐ Project requires the following condition to meet this guideline
Key Viewing Areas 2. Each development shall be visually subordinate to its setting as seen from key viewing areas.	☒ Project as described meets guideline. See Section 3.12.3 ☐ Project requires the following condition to meet this guideline
3. Determination of potential visual effects and compliance with visual subordinance policies shall include consideration of the cumulative effects of proposed developments.	☒ Project as described meets guideline. See Section 3.12.3 ☐ Project requires the following condition to meet this guideline
5. New development shall be sited to achieve visual subordinance from key viewing areas, unless the siting would place such development in a buffer specified for protection of wetlands, riparian corridors, sensitive plants, or sensitive wildlife sites or would conflict with guidelines to protect cultural resources. In such situations, development shall comply with this guideline to the maximum extent practicable.-	☒ Project as described meets guideline. See Section 3.12.3 ☐ Project requires the following condition to meet this guideline
6. New development shall be sited using existing topography and/or existing vegetation as needed to achieve visual subordinance from key viewing areas.	☒ Project as described meets guideline. See Section 3.12.3 ☐ Project requires the following condition to meet this guideline

7. Existing tree cover screening proposed development from key viewing areas shall be retained as specified in the Landscape Settings Design Guidelines section of this chapter.	☒ Project as described meets guideline. See Section 2.1.3. and Table 2-3; no existing trees are planned to be removed. ☐ Project requires the following condition to meet this guideline
Landscape Settings GMA Landscape Settings guidelines apply only to new structures and vegetation planted or retained for screening; the guidelines do not apply to this project.	n/a
Scenic Travel Corridors I-84 and the Historic Columbia River Highway are Scenic Travel Corridors in the vicinity of this proposal. The Scenic Travel Corridor guidelines apply only to buildings, view clearing in public rights-of-way, utilities, and quarries and therefore do not apply to this project.	n/a

Cultural Resources

The proposed treatment methods fall within the description of activities found to have no potential to affect heritage resources as determined within the 2004 Programmatic Agreement between the Pacific Northwest Region of the USDA Forest Service, The State Historic Preservation Office, and the Advisory Council on Historic Preservation (Appendix Y). See Section 3.13.1

The SMA and GMA requirements are essentially the same. Findings for the SMA requirements suffice for the GMA.

SMA Cultural Resource Policies – Applicable	Findings
1. New developments or land uses shall not adversely affect significant cultural resources.	☐ Project as described meets guideline ☒ Project requires the following condition to meet this guideline: "Should any historic or prehistoric cultural resources be uncovered during project activities, the applicant shall cease work and immediately notify the Scenic Area office and the Washington Office of Archeology and historical Preservation. The applicant should also notify the Indian Tribal governments within 24 hours if the resources are prehistoric or otherwise associated with Native American Indians."
7. The USDA Forest Service shall be responsible for performing steps 1 through 5 under guideline 4 for forest practices and National Forest system lands.	☒ Project as described meets guideline – See Section 3.13.1 ☐ Project requires the following condition to meet this guideline
8. The USDA Forest Service shall consult with the Indian tribal governments and other consulting parties in performing steps 1 through 5 under guideline 4.	☒ Project as described meets guideline (will continue throughout EIS process) ☐ Project requires the following condition to meet this guideline

Indian Tribal Treaty Rights and Consultation

The Confederated Tribes of Warm Springs, the Yakama Nation, the Nez Perce Tribe, the Confederate Tribes of the Umatilla Indian Reservation, as well as the Confederated Tribes of the Grand Ronde were given opportunity to comment on the project. USDA Forest Service staff met with members of the Warms Springs Tribe. Further opportunities for tribal consultation and comment will continue throughout the EIS process. Since this is a USDA Forest Service project and most of the affected area is within the SMA, the SMA treaty rights process has been utilized. The GMA sites are not located in the Columbia River or its fishbearing tributaries. Findings for the SMA requirements suffice for the GMA.

SMA Treaty Rights and Consultation Policies - Applicable	Findings
1. The USDA Forest Service shall consult with the Indian tribal governments to determine the effect of all new development or uses in the SMA on treaty rights and shall notify the county or reviewing agency of the determination.	☒ Project as described meets guideline ☐ Project requires the following condition to meet this guideline
6. New uses and development shall not affect or modify any treaty or other rights of the Indian tribal governments.	☒ Project as described meets guideline ☐ Project requires the following condition to meet this guideline
8. New developments or land use shall protect access to usual and accustomed tribal or Indian fishing sites or stations protected under treaty rights, and as established by court interpretations of those treaties	☒ Project as described meets guideline ☐ Project requires the following condition to meet this guideline
10. Federal land management agencies shall not deny Indian tribal governments, or individual members of Indian tribes, access to any area on federal or state land that is traditionally used in connection with tribal treaty or ceremonial rights or for traditional uses.	☒ Project as described meets guideline ☐ Project requires the following condition to meet this guideline

Natural Resources

Appendix O – Existing Condition Characteristics provides site specific information for the 7 treatment areas in the Scenic Area. Natural resources are discussed in Sections 3.6 – Botany; 3.8 – Soils; 3.9 – Water Quality; 3.10 – Aquatic Organisms and Habitats; and 3.11 - Wildlife. SMA guidelines apply to most treatment areas. GMA guidelines apply to all of Treatment Area 22-08, about 19 acres of Area 22-11, 55 acres of Area 22-12 and 8 acres of Area 22-17. In addition, about 30 acres of Area 22-05 are in an Urban Area and not subject to Scenic Area guidelines. The GMA portion of Area 22-17 has no sensitive natural resources. The other GMA areas contain water resources (ponds, streams), an endemic plant and a sensitive wildlife site. SMA guidelines are evaluated first, followed by GMA guidelines. Where SMA and GMA guidelines are essentially the same, they are combined.

SMA Natural Resource Policies – Applicable	**Findings**
Water Resources (Wetlands, Streams, Ponds, Lakes, and Riparian Areas)	
A. All Water Resources shall, in part, be protected by establishing undisturbed buffer zones as specified in 2.A.(2)(a) and 2(b) below. These buffer zones are measured horizontally from a wetland, stream, lake, or pond boundary as defined below.	☒ Project as described meets guideline. ☐ Project requires the following condition to meet this guideline
(1) All buffer zones shall be retained undisturbed and in their natural condition, except as permitted with a mitigation plan.	
(2) Buffer zones shall be measured outward from the bank full flow boundary for streams, the high water mark for ponds and lakes, the normal pool elevation for the Columbia River, and the wetland delineation boundary for wetlands on a horizontal scale that is perpendicular to the wetlands, stream, pond or lake boundary. On the main stem of the Columbia River above Bonneville Dam, buffer zones shall be measured landward from the normal pool elevation of the Columbia River. The following buffer zone widths shall be required:	Appendix O describes the proximity of the proposed activities to water resource buffers. Buffers will be entered to treat invasive plants and a Practicable Alternative Test and Mitigation Plan have been prepared. The Project Design Criteria (PDC) of Section 2.2 and Standards in Appendix A mitigate impacts to water resources.
(a) A minimum 200 foot buffer on each wetland, pond, lake, and each bank of a perennial or fish bearing stream, some of which can be intermittent.	
(b) A 50-foot buffer zone along each bank of intermittent (including ephemeral), non-fish bearing streams.	
3) The buffer width shall be increased for the following:	
(a) When the channel migration zone exceeds the recommended buffer width, the buffer width shall extend to the outer edge of the channel migration zone.	☒ Project as described meets guideline. ☐ Project requires the following condition to meet this guideline
(b) When the frequently flooded area exceeds the recommended riparian buffer zone width, the buffer width shall be extended to the outer edge of the frequently flooded area.	
(c) When an erosion or landslide hazard area exceeds the recommended width of the buffer, the buffer width shall be extended to include the hazard area.	

(4) Buffer zones can be reconfigured if a project applicant demonstrates all of the following: (1) the integrity and function of the buffer zones is maintained, (2) the total buffer area on the development proposal is not decreased, (3) the width reduction shall not occur within another buffer, and (4) the buffer zone width is not reduced more than 50% at any particular location. Such features as intervening topography, vegetation, man made features, natural plant or wildlife habitat boundaries, and flood plain characteristics could be considered.	☒ Project as described meets guideline. The project applicant does not request a buffer reconfiguration. ☐ Project requires the following condition to meet this guideline
B. When a buffer zone is disturbed by a new use, it shall be replanted with only native plant species of the Columbia River Gorge.	☒ Project as described meets guideline. See PDC I.2. ☐ Project requires the following condition to meet this guideline
C. The applicant shall be responsible for identifying all water resources and their appropriate buffers (see above).	☒ Project as described meets guideline. ☐ Project requires the following condition to meet this guideline
D. Wetlands Boundaries shall be delineated using the following: (1) The approximate location and extent of wetlands in the Scenic Area is shown on the National Wetlands Inventory (U. S. Department of the Interior, 1987). In addition, the list of hydric soils and the soil survey maps shall be used as an indicator of wetlands. (2) Some wetlands may not be shown on the wetlands inventory or soil survey maps. Wetlands that are discovered by the local planning staff during an inspection of a potential project site shall be delineated and protected. (3) The project applicant shall be responsible for determining the exact location of a wetlands boundary. Wetlands boundaries shall be delineated using the procedures specified in the '1987 Corps of Engineers Wetland Delineation Manual (on-line Edition)'. (4) All wetlands delineations shall be conducted by a professional who has been trained to use the federal delineation procedures, such as a soil scientist, botanist, or wetlands ecologist.	☒ Project as described meets guideline. Sandy River Delta wetlands have been delineated. ☐ Project requires the following condition to meet this guideline
E. Stream, pond, and lake boundaries shall be delineated using the bank full flow boundary for streams and the high water mark for ponds and lakes. The project applicant shall be responsible for determining the exact location of the appropriate boundary for the water resource.	☒ Project as described meets guideline. ☐ Project requires the following condition to meet this guideline
G. Buffer zones shall be undisturbed unless the following criteria have been satisfied: (1) The proposed use must have no practicable alternative as determined by the practicable alternative test. Those portions of a proposed use that have a practicable alternative will not be located in wetlands, stream, pond, lake, and riparian areas and/or their buffer zone.	☒ Project as described meets guideline. A practicable alternative test has been completed. ☐ Project requires the following condition to meet this guideline

(3) Unavoidable impacts to wetlands and aquatic and riparian areas and their buffer zones shall be offset by deliberate restoration and enhancement or creation (wetlands only) measures as required by the completion of a mitigation plan.	☒ Project as described meets guideline. A mitigation plan has been completed. ☐ Project requires the following condition to meet this guideline
Wildlife and Plants A. Protection of sensitive wildlife/plant areas and sites shall begin when proposed new developments or uses are within 1000 ft of a sensitive wildlife/plant site and/or area. Sensitive Wildlife Areas are those areas depicted in the wildlife inventory and listed in Tables 4 and 7, including all Priority Habitats listed in this Chapter. The approximate locations of sensitive wildlife and/or plant areas and sites are shown in the wildlife and rare plant inventory.	☒ Project as described meets guideline. ☐ Project requires the following condition to meet this guideline Table C-1 and Appendix O describe the proximity of proposed activities to sensitive wildlife/plant areas and sites. Buffers will be entered to treat invasive plants. A Practicable Alternative Test and Mitigation Plan have been prepared. The PDC of Section 2.2 and Standards in Appendix A mitigate impacts to sensitive wildlife/plant areas and sites.
C. The USDA Forest Service wildlife biologists and/or botanists, in consultation with the appropriate state biologists, shall review the site plan and their field survey records. They shall: (1) Identify/verify the precise location of the wildlife and/or plant area or site, (2) Determine if a field survey will be required, (3) Determine, based on the biology and habitat requirements of the affected wildlife/plant species, if the proposed use would compromise the integrity and function of or adverse affects (including cumulative effects) to the wildlife or plant area or site. This would include considering the time of year when wildlife or plant species are sensitive to disturbance, such as nesting, rearing seasons, or flowering season, and	☒ Project as described meets guideline. See Sections 3.6, 3.10, 3.11 ☐ Project requires the following condition to meet this guideline
(4) Delineate the undisturbed 200 ft buffer on the site plan for sensitive plants and/or the appropriate buffer for sensitive wildlife areas or sites, including nesting, roosting and perching sites.	☒ Project as described meets guideline. See Sections 3.6, 3.10,3.11. ☐ Project requires the following condition to meet this guideline
D. The local government, in consultation with the State and federal wildlife biologists and/or botanists, shall use the following criteria in reviewing and evaluating the site plan to ensure that the proposed developments or uses do not compromise the integrity and function of or result in adverse affects to the wildlife or plant area or site: (1) Published guidelines regarding the protection and management of the affected wildlife/plant species. Examples include: the Oregon Department of Forestry has prepared technical papers that include management guidelines for osprey and great blue heron; the Washington Department of Wildlife has prepared similar guidelines for a variety of species, including the western pond turtle, the peregrine falcon, and the Larch Mountain salamander (Rodrick and Milner 1991).	☒ Project as described meets guideline. See Sections 3.6, 3.10,3.11. ☐ Project requires the following condition to meet this guideline

(2) Physical characteristics of the subject parcel and vicinity, including topography and vegetation. (3) Historic, current, and proposed uses in the vicinity of the sensitive wildlife/plant area or site. (4) Existing condition of the wildlife/plant area or site and the surrounding habitat and the useful life of the area or site. (5) In areas of winter range, habitat components, such as forage, and thermal cover, important to the viability of the wildlife must be maintained or, if impacts are to occur, enhancement must mitigate the impacts so as to maintain overall values and function of winter range. (6) The site plan is consistent with the "Oregon Guidelines for Timing of In-Water Work to Protect Fish and Wildlife Resources" (Oregon Department of Fish and Wildlife 2000) and the Washington guidelines when they become finalized. (7) The site plan activities coincide with periods when fish and wildlife are least sensitive to disturbance. These would include, among others, nesting and brooding periods (from nest building to fledgling of young) and those periods specified. (8) The site plan illustrates that new developments and uses, including bridges, culverts, and utility corridors, shall not interfere with fish and wildlife passage. (9) Maintain, protect, and enhance the integrity and function of Priority Habitats (such as old growth forests, talus slopes, and oak woodlands) as listed on the following Priority Habitats Table. This includes maintaining structural, species, and age diversity, maintaining connectivity within and between plant communities, and ensuring that cumulative impacts are considered in documenting integrity and function.	
E. The wildlife/plant protection process may terminate if the local government, in consultation with the USDA Forest Service and state wildlife agency or Heritage program, determines (1) the sensitive wildlife area or site is not active, or (2) the proposed use is not within the buffer zones and would not compromise the integrity of the wildlife/plant area or site, and (3) the proposed use is within the buffer and could be easily moved out of the buffer by simply modifying the project proposal (site plan modifications). If the project applicant accepts these recommendations, the local government shall incorporate them into its development review order and the wildlife/plant protection process may conclude. F. If the above measures fail to eliminate the adverse affects, the proposed project shall be prohibited, unless the project applicant can meet the Practicable Alternative Test and prepare a mitigation plan to offset the adverse effects by deliberate restoration and enhancement.	☒ Project as described meets guideline. See Sections 3.6, 3.10, 3.11. ☐ Project requires the following condition to meet this guideline Buffers will be entered to treat invasive plants and a Practicable Alternative Test and Mitigation Plan have been prepared. The PDC of Section 2.2 and Standards in Appendix A mitigate impacts to sensitive wildlife/plant areas and sites.

Soil Productivity	
A. Soil productivity shall be protected using the following guidelines: (1) A description or illustration showing the mitigation measures to control soil erosion and stream sedimentation.	☒ Project as described meets guideline. See PDC G.5. ☐ Project requires the following condition to meet this guideline
(2) New developments and land uses shall control all soil movement within the area shown on the site plan.	☒ Project as described meets guideline. See PDC G.5. ☐ Project requires the following condition to meet this guideline
(3) The soil area disturbed by new development or land uses, except for new cultivation, shall not exceed 15 percent of the project area.	☒ Project as described meets guideline. PDC G.5., Section 3.8 ☐ Project requires the following condition to meet this guideline
(4) Within 1 year of project completion, 80 percent of the project area with surface disturbance shall be established with effective native ground cover species or other soil-stabilizing methods to prevent soil erosion until the area has 80 percent vegetative cover.	☒ Project as described meets guideline. PDC G.5., I.1., I.2., Section 3.8 ☐ Project requires the following condition to meet this guideline
GMA Natural Resource Policies - Applicable	**Findings**
Streams, Ponds, Lakes, and Riparian Areas	
Approval Criteria for Other Review Uses in Aquatic and Riparian Areas 1. The uses identified in guideline 2 under "Review Uses," above, may be allowed only if they meet all of the following criteria: A. The proposed use is water-dependent, or is not water-dependent but has no practicable alternative. A local government may conclude that a practicable alternative to the proposed use does not exist if the "Practicable Alternative Test" in the "Wetlands" section of this chapter is satisfied, substituting the term "stream, pond, lake, or riparian area" as appropriate. B. The proposed use is in the public interest. In determining if a proposed use is in the public interest, the guidelines under "Public Interest Test" in the "Wetlands" section of this chapter shall be considered, substituting the term "stream, pond, lake, or riparian area" as appropriate. C. Measures have been applied to ensure that the proposed use results in minimum feasible impacts to water quality, natural drainage, and fish and wildlife habitat of the affected stream, pond, lake, and/or buffer zone. As a starting point, the following mitigation measures shall be considered when new uses are proposed in streams, ponds, lakes, and buffer zones:	☒ Project as described meets guideline. ☐ Project requires the following condition to meet this guideline Table C-1 and Appendix 0 describes the proximity of the proposed activities to water resource buffers. Buffers will be entered to treat invasive plants and a Practicable Alternative Test and Mitigation Plan have been prepared. The PDC of Section 2.2 and Standards in Appendix A mitigate impacts to water resources.

(1) Construction shall occur during periods when fish and wildlife are least sensitive to disturbance. In Oregon, work in streams, ponds, and lakes shall be conducted during the periods specified in *Oregon Guidelines for Timing of In-Water Work to Protect Fish and Wildlife Resources* (Oregon Department of Fish and Wildlife 2000), unless otherwise coordinated with and approved by the Oregon Department of Fish and Wildlife. In Washington, the Washington Department of Fish and Wildlife shall evaluate specific proposals and specify periods for in-water work. (2) All natural vegetation shall be retained to the greatest extent practicable, including aquatic and riparian vegetation. (3) Nonstructural controls and natural processes shall be used to the greatest extent practicable. (6) Temporary and permanent control measures shall be applied to minimize erosion and sedimentation when riparian areas are disturbed, including slope netting, berms and ditches, tree protection, sediment barriers, infiltration systems, and culverts. D. Groundwater and surface water quality will not be degraded by the proposed use. E. Those portions of a proposed use that are not water-dependent or that have a practicable alternative will be located outside of stream, pond, and lake buffer zones. F. The proposed use complies with all applicable federal, state, and local laws. G. Unavoidable impacts to aquatic and riparian areas will be offset through rehabilitation and enhancement.	
Stream, Pond, and Lake Buffer Zones 1. Buffer zones shall generally be measured landward from the ordinary high watermark on a horizontal scale that is perpendicular to the ordinary high watermark. On the main stem of the Columbia River above Bonneville Dam, buffer zones shall be measured landward from the normal pool elevation of the Columbia River. The following buffer zone widths shall be required: A. Streams used by anadromous or resident fish (tributary fish habitat), special streams, intermittent streams that include year-round pools, and perennial streams: 100 feet. B. Intermittent streams, provided they are not used by anadromous or resident fish: 50 feet.	☒ Project as described meets guideline. Buffers will be entered to treat invasive plants. ☐ Project requires the following condition to meet this guideline

C. Ponds and lakes: Buffer zone widths shall be based on the dominant vegetative community and shall use the same guidelines as in the "Wetlands Buffer Zones" section of this chapter, substituting the term "pond or lake" as appropriate. 2. Except as otherwise allowed, buffer zones shall be retained in their natural condition. When a buffer zone is disturbed by a new use, it shall be replanted with native plant species.	☒ Project as described meets guideline. See PDC I.2. ☐ Project requires the following condition to meet this guideline
Wildlife Habitat *Approval Criteria for Review Uses Near Sensitive Wildlife Areas and Sites* 1. Uses that are proposed within 1,000 feet of a sensitive wildlife area or site shall be reviewed by the Oregon Department of Fish and Wildlife or the Washington Department of Fish and Wildlife. The approximate locations of sensitive wildlife areas and sites are shown in the wildlife inventory. State wildlife biologists will help determine if a new use would adversely affect a sensitive wildlife area or site. 2. The local government shall submit site plans to the Oregon Department of Fish and Wildlife or Washington Department of Fish and Wildlife. State wildlife biologists shall review the site plan and their field survey records. They shall (1) identify/verify the precise location of the wildlife area or site, (2) ascertain whether the wildlife area or site is active or abandoned, and (3) determine if the proposed use may compromise the integrity of the wildlife area or site or occur during the time of year when wildlife species are sensitive to disturbance, such as nesting or rearing seasons. In some instances, state wildlife biologists may conduct field surveys to verify the wildlife inventory and assess the potential effects of a proposed use. 3. The following factors may be considered when site plans are reviewed: A. Biology of the affected wildlife species. B. Published guidelines regarding the protection and management of the affected wildlife species. The Oregon Department of Forestry has prepared technical papers that include management guidelines for osprey and great blue heron. The Washington Department of Fish and Wildlife has prepared similar guidelines for a variety of species, including the western pond turtle, the peregrine falcon, and the Larch Mountain salamander (Rodrick and Milner 1991). C. Physical characteristics of the subject parcel and vicinity, including topography and vegetation. D. Historic, current, and proposed uses in the vicinity of the sensitive wildlife area or site.	☒ Project as described meets guideline. Treatments are proposed within 1,000' of sensitive wildlife areas and sites. See Sections 3.10 and 3.11 for a complete description. The USDA Forest Service conducted analysis rather than Oregon Department of Fish and Wildlife. ☐ Project requires the following condition to meet this guideline

E. Existing condition of the wildlife area or site and the surrounding habitat and the useful life of the area or site. 4. The wildlife protection process may terminate if the local government, in consultation with the state wildlife agency, determines (1) the sensitive wildlife area or site is not active, or (2) the proposed use would not compromise the integrity of the wildlife area or site or occur during the time of year when wildlife species are sensitive to disturbance. 5. If the local government, in consultation with the state wildlife agency, determines that the proposed use would have only minor effects on the wildlife area or site that could be eliminated through mitigation measures recommended by the state wildlife biologist, or by simply modifying the site plan or regulating the timing of new uses, a letter shall be sent to the project applicant that describes the effects and measures needed to eliminate them. If the project applicant accepts these recommendations, the local government shall incorporate them into its development review order and the wildlife protection process may conclude. 6. The project applicant shall prepare a wildlife management plan if the local government, in consultation with the state wildlife agency, determines that the proposed use would adversely affect a sensitive wildlife area or site and the effects of the proposed use cannot be eliminated through site plan modifications or project timing.	
Wildlife Management Plans 1. Wildlife management plans shall be prepared when a proposed use is likely to adversely affect a sensitive wildlife area or site. Their primary purpose is to document the special characteristics of a project site and the habitat requirements of affected wildlife species. This information provides a basis for the project applicant to redesign the proposed use in a manner that protects sensitive wildlife areas and sites, maximizes his/her development options, and mitigates temporary impacts to the wildlife area or site and/or buffer zone.	☒ Project as described meets guideline. Per Sections 3.10.2.3 and 3.10.2.4, effects to aquatic organisms of non-herbicide treatments would be minimal. Per Sections 3.11.3 and Appendix X, effects to sensitive wildlife areas or sites of non-herbicide treatments are minimal. Therefore no wildlife management plan is necessary. ☐ Project requires the following condition to meet this guideline
Rare Plants *Approval Criteria for Review Uses Near Sensitive Plants* 1. Uses that are proposed within 1,000 feet of a sensitive plant shall be reviewed by the Oregon or Washington Natural Heritage Program. The approximate locations of sensitive plants are shown in the rare plant species inventory. State heritage staffs will help determine if a new use would invade	☒ Project as described meets guideline. Treatments are proposed within 1,000' of a sensitive plant. See Sections 3.6 for a complete description. The USDA Forest Service conducted analysis rather than Oregon Department of Fish and Wildlife. ☐ Project requires the following condition to meet this guideline

the buffer zone of sensitive plants. 2. The local government shall submit site plans to the state heritage program. The state heritage staffs will review the site plan and their field survey records. They will identify the precise location of the affected plants and delineate a 200-foot buffer zone on the project applicant's site plan. If the field survey records of the state heritage program are inadequate, the project applicant shall hire a person with recognized expertise in botany or plant ecology to ascertain the precise location of the affected plants. 3. The rare plant protection process may conclude if the local government, in consultation with the state heritage program, determines that the proposed use would be located outside of a sensitive plant buffer zone. 4. New uses shall be prohibited within sensitive plant species buffer zones, except for those uses that are allowed outright. 5. If a proposed use must be allowed within a sensitive plant buffer zone in accordance with the provisions in "Variances for Setbacks and Buffers" in Part II, Chapter 7, the project applicant shall prepare a protection and rehabilitation plan that complies with the guidelines in "Protection and Rehabilitation Plans" in this section. 6. The local government shall submit a copy of all field surveys and protection and rehabilitation plans to the Oregon or Washington Natural Heritage Program. The state heritage program will have 20 days from the date that a field survey is mailed to submit written comments to the local government. The local government shall record and address any written comments submitted by the state heritage program in its development review order. Based on the comments from the state heritage program, the local government will make a final decision on whether the proposed use would be consistent with the rare plant policies and guidelines. If the final decision contradicts the comments submitted by the state heritage program, the local government shall justify how it reached an opposing conclusion. 7. The local government shall submit all requests to reduce sensitive plant species buffer zones to the Oregon or Washington Natural Heritage Program. The state heritage program will have 20 days from the date that such a request is mailed to submit written comments to the local government. The local government shall record and address any written comments submitted by the state heritage program in its development review order. Based on the comments from the state heritage program, the local government will make a final decision on whether the reduced buffer zone is justified. If the final decision contradicts the	

comments submitted by the state heritage program, the local government shall justify how it reached an opposing conclusion.	
Sensitive Plant Buffer Zones 1. A 200-foot buffer zone shall be maintained around sensitive plants. Buffer zones shall remain in an undisturbed, natural condition. 2. Buffer zones may be reduced if a project applicant demonstrates that intervening topography, vegetation, manmade features, or natural plant habitat boundaries negate the need for a 200-foot radius. Under no circumstances shall the buffer zone be less than 25 feet. 3. Requests to reduce buffer zones shall be considered if a professional botanist or plant ecologist hired by the project applicant (1) identifies the precise location of the sensitive plants, (2) describes the biology of the sensitive plants, and (3) demonstrates that the proposed use will not have any negative effects, either direct or indirect, on the affected plants and the surrounding habitat that is vital to their long-term survival. All requests shall be prepared as a written report. Published literature regarding the biology of the affected plants and recommendations regarding their protection and management shall be cited. The report shall include detailed maps and photographs.	☒ Project as described meets guideline. Buffers will be entered to treat invasive plants. ☐ Project requires the following condition to meet this guideline
Protection and Rehabilitation Plans 1. Protection and rehabilitation plans shall minimize and offset unavoidable impacts that result from a new use that occurs within a sensitive plant buffer zone as the result of a variance. All plans shall meet the following guidelines: A. Protection and rehabilitation plans shall be prepared by a professional botanist or plant ecologist hired by the project applicant. B. Construction, protection, and rehabilitation activities shall occur during the time of year when ground disturbance will be minimized and protection, rehabilitation, and replacement efforts will be maximized. C. Sensitive plants that will be destroyed shall be transplanted or replaced, to the maximum extent practicable. Replacement is used here to mean the establishment of a particular plant species in areas of suitable habitat not affected by new uses. Replacement may be accomplished by seeds, cuttings, or other appropriate methods. Replacement shall occur as close to the original plant site as practicable. The project applicant shall ensure that at least 75 percent of the replacement plants survive 3 years after the date	☒ Project as described meets guideline. The PDC of Section 2.2 and Standards in Appendix A minimize and offset unavoidable impacts and fulfill the requirements of a GMA Rare Plant Protection and Rehabilitation Plan. ☐ Project requires the following condition to meet this guideline

they are planted. D. Sensitive plants and their surrounding habitat that will not be altered or destroyed shall be protected and maintained. Appropriate protection and maintenance techniques shall be applied, such as fencing, conservation buffers, livestock management, and noxious weed control. E. Habitat of a sensitive plant that will be affected by temporary uses shall be rehabilitated to a natural condition. F. Protection efforts shall be implemented before construction activities begin. Rehabilitation efforts shall be implemented immediately after the plants and their surrounding habitat are disturbed. 2. Protection and rehabilitation plans shall include maps, photographs, and text. The text shall: A. Describe the biology of sensitive plant species that will be affected by a proposed use. B. Explain the techniques that will be used to protect sensitive plants and their surrounding habitat that will not be altered or destroyed. C. Describe the rehabilitation and enhancement actions that will minimize and offset the impacts that will result from a proposed use. D. Include a 3-year monitoring, maintenance, and replacement program. The project applicant shall prepare and submit to the local government an annual report that documents milestones, successes, problems, and contingency actions.	

Recreation Resources Portland Women's Forum is located about 350' east of a treatment site in Area 22-17. Herman Creek Campground is location in Area 22-05. The Twin Tunnels Trail of the HRCH is adjacent to Area 22-08. Sandy River Delta (22-01), Memaloose/Rowena (22-11) and Chenoweth Table (22-12) have user developed trails. No recreation sites are located in the GMA; GMA guidelines do not apply.	
SMA Recreation Resource Guidelines - Applicable	**Findings**
1. New developments and land uses shall not displace existing recreational use.	☒ Project as described meets guideline (See Section 2.2 PDC D.1., D.2., D.3., D.4., D.5., D.6., and Standards #21, 23 Appendix A) ☐ Project requires the following condition to meet this guideline
2. Recreation resources shall be protected from adverse effects by evaluating new developments and land uses as proposed in the site plan. An analysis of both onsite and offsite cumulative effects shall be required	☒ Project as described meets guideline (See Section 2.2 PDC D.1., D.2., D.3., D.4., D.5., D.6., and Standards #21, 23 Appendix A) ☐ Project requires the following condition to meet this guideline
4. Mitigation measures shall be provided to preclude adverse effects on the recreation resource.	☒ Project as described meets guideline (See Section 2.2 PDC D.1., D.2., D.3., D.4., D.5., D.6., and Standards #21, 23 Appendix A) ☐ Project requires the following condition to meet this guideline

Invasive Plant Treatment within Sensitive Buffer Zones "Practicable" Alternative Test and Mitigation Plan

"Practicable" Alternative Test

As per the Management Plan Guidelines, this test is met because the proposed actions require, in instances where invasive plants are located within buffer zones, that the proposed treatments occur within the buffer zones in order to treat the invasive plants. It would not be possible to treat these invasive plants effectively or safely (especially, in terms of reducing adverse impacts to non-target flora) without entering the buffer zones. Thus, there is no other practicable alternative than to enter the buffer zones to achieve the proposed objectives of the site specific EIS for the Forest and Scenic Area.

This project has no "practicable" alternative and thereby meets this test to enter the buffer zones.

Mitigation Plan

The use of "NEPA" here refers to the Site-Specific Invasive Plant Treatments EIS completed for the Forest and Scenic Area.

1. Mitigation Plan shall be prepared when:

   A. The proposed development or use is within a buffer zone (wetland, pond, lakes, riparian areas, wildlife or plant areas and/or sites).

   B. There is no practicable alternative (see the "practicable alternative" test).

   See Practicable Alternatives Test above.

2. In all cases, Mitigation Plans are the responsibility of the applicant and shall be prepared by an appropriate professional (botanist/ecologist for plant sites, a wildlife/fish biologist for wildlife/fish sites, and a qualified professional for water resource sites).

   Prepared by USDA Forest Service Ecologist

3. The primary purpose of this information is to provide a basis for the project applicant to redesign the proposed use in a manner that protects sensitive water resources, and wildlife/plant areas and sites, that maximizes his/her development options, and that mitigates, through restoration, enhancement, and replacement measures, impacts to the water resources and/or wildlife/plant area or site and/or buffer zones.

   See discussion below.

4. The applicant shall submit the mitigation plan to the local government. The local government shall submit a copy of the mitigation plan to the Forest Service, and appropriate state agencies. If the final decision contradicts the comments submitted by the state and federal wildlife agency/heritage program, the local government shall justify how it reached an opposing conclusion.

   Not applicable to this project.

5. A project applicant shall demonstrate sufficient fiscal, technical, and administrative competence to successfully execute a mitigation plan involving wetland creation.

   Not applicable to this project.

6. Mitigation plans shall include maps, photographs, and text. The text shall:

   A. Describe the biology and/or function of the sensitive resources (e.g. Wildlife/plant species, or wetland) that will be affected by a proposed use. An ecological assessment of the sensitive resource to be altered or destroyed and the condition of the resource that will result after restoration will be required. Reference published protection and management guidelines.

      See Invasive Plant NEPA

   B. Describe the physical characteristics of the subject parcel, past, present, and future uses, and the past, present, and future potential impacts to the sensitive resources. Include the size, scope, configuration, or density of new uses being proposed within the buffer zone.

      See Invasive Plant NEPA

   C. Explain the techniques that will be used to protect the sensitive resources and their surrounding habitat that will not be altered or destroyed (for examples, delineation of core habitat of the sensitive wildlife/plant species and key components that are essential to maintain the long-term use and integrity of the wildlife/plant area or site).

      See Invasive Plant NEPA, and mitigation measures of 6(D) below.

D. Show how restoration, enhancement, and replacement (creation) measures will be applied to ensure that the proposed use results in minimum feasible impacts to sensitive resources, their buffer zones, and associated habitats.

The Invasive Plant NEPA has a large number of Project Design Criteria (PDC) which provide and ensure that sensitive resources shall be impacted to the minimum extent possible. A few examples are given below, but for a complete list the NEPA document should be referenced.

1. ***Comply with herbicide application buffers on "live" streams, intermittent steams, and lakes, ponds or wetlands in the NEPA document.***

2. ***Where an invasive plant species is to be treated within 5-feet of a sensitive plant species, the invasive plant should be either manually treated or the sensitive plant should be covered with a barrier.***

3. ***Restoration would be considered for any site within the treatment area with soil disturbance or vegetative density low enough to allow re-infestation or introduction of other invasive plants…***

The above measures and those in the NEPA document will be followed and with the successful implementation of these measures, the disturbance to the buffer would be adequately mitigated.

E. Show how the proposed restoration, enhancement, or replacement (creation) mitigation measures are NOT alternatives to avoidance. A proposed development/use must first avoid a sensitive resource, and only if this is not possible should restoration, enhancement, or creation be considered as mitigation. In reviewing mitigation plans, the local government, appropriate state agencies, and Forest Service shall critically examine all proposals to ensure that they are indeed last resort options.

See Invasive Plant NEPA and 6(D) above.

7. At a minimum, a project applicant shall provide to the local government a progress report every 3-years that documents milestones, successes, problems, and contingency actions. Photographic monitoring stations shall be established and photographs shall be used to monitor all mitigation progress.

See Monitoring within the NEPA document.

8. A final monitoring report shall be submitted to the local government for review upon completion of the restoration, enhancement, or replacement activity. This monitoring report shall document successes, problems encountered, resource recovery, status of any sensitive wildlife/plant species and shall demonstrate the success of restoration and/or enhancement actions. The local government shall submit copies of the monitoring report to the Forest Service; who shall offer technical assistance to the local government in helping to evaluate the completion of the mitigation plan. In instances where restoration and enhancement efforts have failed, the monitoring process shall be extended until the applicant satisfies the restoration and enhancement guidelines.

   See Monitoring in the NEPA Document.

9. Mitigation measures to offset impacts to resources and/or buffers shall result in no net loss of water quality, natural drainage, fish/wildlife/plant habitat, and water resources by addressing the following:

   A. Restoration and enhancement efforts shall be completed no later than one year after the sensitive resource or buffer zone has been altered or destroyed, or as soon thereafter as is practicable.

      See above mitigation measures 6(D) and other PDC in the NEPA Document.

   B. All natural vegetation within the buffer zone shall be retained to the greatest extent practicable. Appropriate protection and maintenance techniques shall be applied, such as fencing, conservation buffers, livestock management, and noxious weed control. Within five years, at least 75 percent of the replacement vegetation must survive. All plantings must be with native plant species that replicate the original vegetation community.

      See NEPA. There are specific PDC that relate to the restoration after Invasive Plant treatment. Follow-up restoration shall use native plants to the maximum extent possible.

   C. Habitat that will be affected by either temporary or permanent uses shall be rehabilitated to a natural condition. Habitat shall be replicated in composition, structure, and function, including tree, shrub and herbaceous species, snags, pool-riffle ratios, substrata, and structures, such as large woody debris and boulders.

      See NEPA. Treatment of invasive plants will be completed hand-in-hand with restoration to ensure habitat enhancement. The habitat will be impacted to the minimum extent possible when treatment is being considered.

D. If this standard is not feasible or practical because of technical constraints, a sensitive resource of equal or greater benefit may be substituted, provided that no net loss of sensitive resource functions occurs and provided the County, in consultation with the appropriate State and Federal agency, determine that such substitution is justified.

Not applicable to this project.

E. Sensitive plants that will be destroyed shall be transplanted or replaced, to the maximum extent practicable. Replacement is used here to mean the establishment of a particular plant species in areas of suitable habitat not affected by new uses. Replacement may be accomplished by seeds, cuttings, or other appropriate methods.

Replacement shall occur as close to the original plant site as practicable. The project applicant shall ensure that at least 75 percent of the replacement plants survive 3 years after the date they are planted.

Not applicable to this project – Treatments are designed to not impact sensitive plants to the extent that they would be destroyed.

F. Nonstructural controls and natural processes shall be used to the greatest extent practicable.

See NEPA. Within the NEPA, treatments are designed using the least intrusive methods first and only if effectiveness is not achievable, will more impacting designs be considered.

(1) Bridges, roads, pipeline and utility corridors, and other water crossings shall be minimized and should serve multiple purposes and properties.

Not applicable to this project.

(2) Stream channels shall not be placed in culverts unless absolutely necessary for property access. Bridges are preferred for water crossings to reduce disruption to hydrologic and biologic functions. Culverts shall only be permitted if there are no practicable alternatives as demonstrated by the 'Practical Alternative Test'.

Not applicable to this project.

(3) Fish passage shall be protected from obstruction.

Not applicable to this project.

(4) Restoration of fish passage should occur wherever possible.

Not applicable to this project.

.(5) Show location and nature of temporary and permanent control measures that shall be applied to minimize erosion and sedimentation when riparian areas are disturbed, including slope netting, berms and ditches, tree protection, sediment barriers, infiltration systems, and culverts.

Not applicable to this project.

(6) Groundwater and surface water quality will not be degraded by the proposed use. Natural hydrologic conditions shall be maintained, restored, or enhanced in such a manner that replicates natural conditions, including current patterns (circulation, velocity, volume, and normal water fluctuation), natural stream channel and shoreline dimensions and materials, including slope, depth, width, length, cross-sectional profile, and gradient.

See NEPA and PDC. There are specific PDC related to protecting water quality.

(7) Those portions of a proposed use that are not water-dependent or that have a practicable alternative will be located outside of stream, pond, and lake buffer zones.

Not applicable to this project.

(8) Streambank and shoreline stability shall be maintained or restored with natural revegetation.

See NEPA, PDC, and 6(D) above.

(9) The size of restored, enhanced, and replacement (creation) wetlands shall equal or exceed the following ratios. The first number specifies the required acreage of replacement wetlands, and the second number specifies the acreage of wetlands altered or destroyed.

Restoration: 2: l

Creation: 3: l

Enhancement: 4: l

Not applicable to this project.

G. Wetland creation mitigation shall be deemed complete when the wetland is self-functioning for 5 consecutive years. Self-functioning is defined by the expected function of the wetland as written in the mitigation plan. The monitoring report shall be submitted to the local government to ensure compliance. The Forest Service, in consultation with appropriate state agencies, shall extend technical assistance to the local government to help evaluate such reports and any subsequent activities associated with compliance.

Not applicable to this project.

H. Wetland restoration/enhancement can be mitigated successfully by donating appropriate funds to a non-profit wetland conservancy or land trust with explicit instructions that those funds are to be used specifically to purchase protection easements or fee title protection of appropriate wetlands acreage in or adjacent to the Columbia River Gorge meeting the ratios given above in guideline. These transactions shall be explained in detail in the Mitigation Plan and shall be fully monitored and documented in the monitoring report.

Not applicable to this project.

Additional GMA Guidelines

Key guidelines not covered by the SMA guidelines are covered below and are predominantly related to entering protected buffer zones.

Wetlands

1. No Practicable Alternative Test.

   (See SMA section)

2. Public Interest Test.

   The following factors shall be considered when determining if a proposed use is in the public interest:

   A. The extent of public need for the proposed use

      The treatment of invasive plants within the buffer zones of wetlands is decidedly within the public interest. Without treatment, the functionality of these wetlands could be compromised and those same invasive plants could become detrimental to the adjacent uplands. Invasive plant (aka noxious weed) control is widely practiced by most county governments.

   B. The extent and permanence of the beneficial or detrimental effects that the proposed use may have on the public and private uses for which the property is suited.

      Impacts from non-herbicide treatments are minimal. The long-term beneficial effects of treatment could last for years with prolonged increases in wetland function.

   C. The functions and size of the wetland that may be affected

      In this particular case, the size and function of the wetland will vary depending on the wetland to be treated.

   D. The economic value of the proposed use to the general area.

      The economic value could come in terms of enhanced recreation, increase in wetland function (flood control), or in terms of plant diversity, to mention a few. The value of these is highly variable and difficult to enumerate; but is generally given a high value by the public.

E. The ecological value of the wetland and probable effect on public health and safety, fish, plants, and wildlife.

The ecological value is extremely high for most wetlands, but generally increases with size and function of the wetland. In most cases, wetlands are becoming recognized for their very high value in maintaining viable natural resources.

In all cases where this guideline is invoked, the values associated with the wetland, stream, pond or lake clearly meet all of the above guidelines and thus meet the Public Interest Test.

3. Measures will be applied to ensure that the proposed use results in the minimum feasible alteration or destruction of the wetland's functions, existing contour, vegetation, fish, and wildlife resources, and hydrology.

The inclusion and development of the PDC and Standards in Appendix A were specifically developed to minimize all impacts to wetlands, native plants, fish, wildlife, and hydrological systems. No grading or loss of contours will occur in this project.

4. Groundwater and surface-water quality will not be degraded by the proposed use.

The inclusion and development of the PDC and Standards in Appendix A were specifically developed to protect groundwater and surface-water quality.

5. Those portions of a proposed use that are not water-dependent or that have a practicable alternative will not be located in wetlands or wetlands buffer zones.

Treatment is proposed where invasive plants occur; both within and outside of buffers.

6. The proposed use complies with all applicable federal, state, and local laws.

The invasive plant treatments are design to comply with all applicable federal laws.

7. Areas that are disturbed during construction of the proposed use will be rehabilitated to the maximum extent practicable.

Restoration with native species is required on treated areas.

8. Unavoidable impacts to wetlands will be offset through the deliberate restoration, creation, or enhancement of wetlands. Wetlands restoration, creation, and enhancement are not alternatives to the guidelines listed above; they shall be used only as a last resort to offset unavoidable wetlands impacts.

A Wetlands Compensation Plan is not necessary because effects to wetlands are minimal.

Streams, Ponds, Lakes and Riparian Areas

1. No Practicable Alternative Test.

   See "Wetlands" above.

2. Public Interest Test.

   See "Wetlands" above.

3. Measures have been applied to ensure that the proposed use results in minimum feasible impacts to water quality, natural drainage, and fish and wildlife habitat of the affected stream, pond, lake, and/or buffer zone.

   As a starting point, the following mitigation measures shall be considered when new uses are proposed in streams, ponds, lakes, and buffer zones:

   (1) Construction shall occur during periods when fish and wildlife are least sensitive to disturbance. In Oregon, work in streams, ponds, and lakes shall be conducted during the periods specified in *Oregon Guidelines for Timing of In-Water Work to Protect Fish and Wildlife Resources* (Oregon Department of Fish and Wildlife 2000), unless otherwise coordinated with and approved by the Oregon Department of Fish and Wildlife. In Washington, the Washington Department of Fish and Wildlife shall evaluate specific proposals and specify periods for in water work.

   No in-water work is proposed in this project.

   (2) All natural vegetation shall be retained to the greatest extent practicable, including aquatic and riparian vegetation.

   The PDC and Standards in Appendix A require native vegetation to be retained to the greatest extent practicable.

   (3) Nonstructural controls and natural processes shall be used to the greatest extent practicable.

   No structural controls are proposed.

   (4) Bridges, roads, pipeline and utility corridors, and other water crossings shall be minimized and should serve multiple purposes and properties.

   Not applicable to this project.

(5) Stream channels shall not be placed in culverts unless absolutely necessary for property access. Bridges are preferred for water crossings to reduce disruption to streams, ponds, lakes, and their banks. When culverts are necessary, oversized culverts with open bottoms that maintain the channel's width and grade should be used.

Not applicable to this project.

(6) Temporary and permanent control measures shall be applied to minimize erosion and sedimentation when riparian areas are disturbed, including slope netting, berms and ditches, tree protection, sediment barriers, infiltration systems, and culverts.

Bare soils, which do not vegetate naturally, will be seeded with native plants.

4. Groundwater and surface water quality will not be degraded by the proposed use.

The inclusion and development of the PDC and Standards in Appendix A were specifically developed to protect groundwater and surface-water quality.

5. Those portions of a proposed use that are not water-dependent or that have a practicable alternative will be located outside of stream, pond, and lake buffer zones.

Treatment is proposed where invasive plants occur; both within and outside of buffers.

6. The proposed use complies with all applicable federal, state, and local laws.

The invasive plant treatments are designed to comply with all applicable federal laws.

7. Unavoidable impacts to aquatic and riparian areas will be offset through rehabilitation and enhancement.

A Rehabilitation and Enhancement Plan is not necessary because effects to water resources are minimal.

Wildlife Habitat

All GMA guidelines are covered under the SMA guidelines. The development and design of the PDC and Standards in Appendix A were completed to ensure that this project would not adversely affect, as defined by the Management Plan, any sensitive wildlife areas and sites. Thus a 'Wildlife Management Plan', as described in the GMA Guidelines is not required.

Rare Plants

Again the PDC and Standards in Appendix A were specifically designed to ensure that this project would not adversely affect any sensitive flora and, thus, no 'Protection and Rehabilitation Plan', as defined in the Management Plan, is required.

Natural Areas

There are no lands under USDA Forest Service control within the Scenic Area that are designated "Agricultural—Special", as defined by the Management Plan.

/s/ *Robin Dobson* 9/15/2006

Prepared by:
Robin Dobson
Ecologist, Columbia River Gorge National Scenic Area