APPENDIX B – EFFECTS TO PHYSICAL AND BIOLOGICAL ENVIRONMENT

Botany

No known proposed, endangered, threatened, and sensitive vascular plant, bryophyte, lichen and fungi (PETS) species are present within the developed recreation sites. Campsites and other developed recreation sites are generally unsuitable habitat for PETS botanical species. Because the developed recreation sites are already disturbed areas, no change in management activities in the sites are proposed, and nothing other than minor ground disturbing activities would take place, general botany field reconnaissance was deemed unnecessary and not conducted.

Management Of Competing And Unwanted Vegetation – Invasive Plants:

The Record of Decision and Mediated Agreement (MA) for the "Managing Competing and Unwanted Vegetation" Final Environmental Impact Statement (FEIS) apply to invasive plants (sometimes called noxious weeds), unwanted native vegetation, brush control and fuel treatments. Invasive plant management is now covered by the 2005 Record of Decision for Preventing and Managing Invasive Plants (USDA Forest Service 2005) that amended the Forest Plan.

Invasive plants are species not native to a particular ecosystem that may cause economic or environmental harm. They are sometimes informally referred to as "weeds" and are listed in Appendix B of the Preventing and Managing Invasive Plants Final Environmental Impact Statement, 2005.

The *FEIS Site-Specific Invasive Plant Treatments for the Mt. Hood National Forest and Columbia River Gorge National Scenic Area* (USDA Forest Service 2008) is a guide to invasive plant treatments for the entire Forest, including developed recreation sites being considered in this analysis. The FEIS is available at the following website: http://www.fs.fed.us/r6/invasiveplant-eis/site-specific/MTH/.

Because of the amount of bare ground, the concentration of motor vehicles, camping equipment, and people, a campground has the potential to be a vector area for invasive plants. For example, Lazy Bend Campground along the Clackamas River off of Highway 224 is infested with herb Robert (Geranium robertianum). The plant now occupies much of the roadside in the campground. There may be other campgrounds that have invasive plant infestations. Volunteer groups have been used to handpull herb Robert at Lazy Bend Campground in summer, 2010, but as with most invasive plant species annual retreatment is needed. The Forest entered into a Challenge Cost Share Agreement with the Clackamas River Basin Council (CRBC) to survey for invasive plants at USFS campgrounds along the Clackamas River starting in summer, 2010. The Forest intends to work with staff and partners to survey the other campgrounds on the Forest to determine the extent of invasives in developed campgrounds. Treatment options could then be developed and prioritized.

There would be no change in developed recreation site management activities and nothing but minor ground disturbing activities in either alternative. Therefore, neither alternative would increase the risk of transport of weeds via equipment or the release of growing space for weeds to colonize. There would be no cumulative effects related to this project.

Wildlife

A review of the project indicates that there is suitable habitat for several of the species that are analyzed. There would be no cumulative effects to any of the species analyzed as a result of this project.

1. Northern Spotted Owls

There are spotted owl within 1.2 miles of the campgrounds but there would be no ground disturbing activity or any change in the ambient noise levels by this action so the effect determination is No Effect.

2. Red Tree Voles

Red Tree Voles may be present near the campgrounds but there would be no ground disturbing activities associated with this action, so there are no effects to Red tree voles.

3. Survey and Manage Terrestrial Mollusk and Great Gray Owls

No habitat disturbing activities that would affect any great gray owls or mollusk species occupancy of the site will take place as a result of this activity.

4. All Other Species Including MIS, Land Birds, Sensitive Species, and Special Status Species

Since there are no habitat disturbing activities associated with this action there are no effects to any of these species although there may be some present near campgrounds.

5. Forest Plan Standards and Guidelines

Mt. Hood Forest Plan References
Forest-wide Wildlife Standards and Guidelines – FW-170 through FW-186, page Four-69 and Four-70

The action alternatives are consistent with the following standards and guidelines

FW-176	Biological Evaluations have been prepared.
FW-186	None of the alternatives would occur within ¼ mile of an active peregrine falcon nest between April 1 and July 31st.

6. Deer and Elk Habitat (Management Indicator Species)

Deer and elk habitat is present throughout the Forest, adjacent to all the recreation developed sites considered in this analysis. None of the alternatives considered in this analysis would have anything but minor ground disturbance and there would be no change in use patterns or disturbance at the developed sites. Therefore, there would be no effect to deer and elk habitat in either alternative.

Fish and Water Quality

1. Introduction

Forest management activities that may alter the aquatic habitat or affect individuals or populations of PETS (Proposed, Endangered, Threatened, and Regional Forester's Special Status) fish and aquatic species require a Biological Evaluation to be completed (FSM 2671.44 and FSM 2670.32) as part of the National Environmental Policy Act process and Endangered Species Act to determine their potential effects on Regional Forester's Special Status , threatened or endangered species and designated critical habitat. The Biological Evaluation process (FSM 2672.43) is intended to conduct and document analyses necessary to ensure proposed management actions will not likely jeopardize the continued existence or cause adverse modification of habitat for species listed or proposed to be listed as endangered (E) or threatened (T) by the USDI-Fish and Wildlife Service or USDC-NOAA Fisheries, and their listed or proposed listed critical habitat.

The Biological Evaluation process (FSM 2672.41) is also intended to conduct and document analyses to ensure that Forest Service actions do not contribute to loss of viability of any native or desired non-native plant or contribute to animal species or trends toward Federal listing of any species for species listed as Regional Forester's Special Status (S) by USDA-Forest Service Region 6.

The Biological Evaluation (BE) addresses the effects of a concessionaire operation and maintenance of Forest campgrounds, on PETS aquatic species suspected or known to reside in the Sandy River, Hood River, White River, Fifteenmile Basin, and Clackamas River fourth field Watersheds located on the Forest. There are six federally threatened salmonid species present within those Watersheds: Lower Columbia River (LCR) Chinook, LCR steelhead, MCR Steelhead, Upper Willamette Chinook, Columbia River Bull Trout, and LCR coho. Additionally, redband trout (Forest Service Regional Forester's Special Status Species) occur within the White River, Fifteenmile, and Hood River Watersheds, and are suspected within the Upper Sandy River Watershed. Four aquatic invertebrate species on the Forest Service Regional Forester's Special Status Species list, Columbia dusky snail *(Colligyrus sp. nov. 1),* Barren Juga *(Juga hemphilli hemphilli),* Purple-lipped Juga *(Juga hemphilli maupinenis),* and Scott's Apatanian Caddisfly *(Allomvia scotti)* may also occur on the Zigzag Ranger District (Table 3.2).

Nothing but minor ground disturbing activities are planned under the alternatives (replacing a barrier post, installing a fire ring in a campsite, etc.). Other ground disturbing activities would be done under separate NEPA with additional BE analysis and documentation. Due to the

administrative nature of this project, no pre-field/field review was necessary to complete the PETS fisheries BE.

2. Effects by Alternatives

Alternative A: No Action: The Forest Service would continue to manage the campgrounds and developed sites listed in Table 1.1. There will be "No Effect" on TES species and "No Impact" on Forest Service Regional Forester's Special Status Species. There would be no cumulative effects related to the project.

Alternative B - Proposed Action: Determinations for the Proposed Action were made as a result of analysis at fifth field scales. The checklist for *Documenting Environmental Baseline and Effects of Proposed Action(s) on Relevant Indicators* was consulted for this project. There would be no measurable change from baseline conditions resulting from issuance of this special use permit and no adverse effect on aquatic habitat or listed species. The rationale for this is based on the administrative nature of this special use permit and the lack of on the ground activities associated with its issuance. There will be "No Effect" on TES species and "No Impact" on Forest Service Regional Forester's Special Status Species. Due to the administrative nature of this special use permit, no cumulative effects were identified.

ESA cumulative effects are those effects of future State or private activities, not involving Federal activities, which are reasonably certain to occur within the action area of the Federal action subject to consultation [50CFR section 402.02]. Due to the administrative nature of this special use permit, no cumulative effects were identified

Secondary impacts include interrelated projects that have no independent utility apart from the proposed action, and interdependent projects that are a part of a larger action and depend on the larger action for justification. There are no interrelated or interdependent actions for the proposed action.

Consistency with Aquatic Conservation Strategy (ACS) of the Northwest Forest Plan and Essential Fish Habitat: The proposed action meets the attainment of ACS Objectives in the long term at the landscape level by maintaining all of the features addressed by the ACS.

3. Determination of Effects to Essential Fish Habitat

Public law 104-267, the Sustainable Fisheries Act of 1996, amended the Magnuson-Stevens Fishery Conservation and Management Act (MSA) to establish new requirement for Essential Fish Habitat (EFH) descriptions in Federal fishery management plans and to require Federal agencies to consult with NMFS on activities that may adversely affect EFH. "Essential Fish Habitat" means those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity (Magnuson-Stevens Act). The Pacific Fisheries Management Council (PFMC) has recommended an EFH designation for the Pacific salmon fishery that would include those waters and substrate necessary to ensure the production needed to support a long-term sustainable fishery (i.e. properly functioning habitat conditions necessary for the long-term survival of the species through the full range of environmental variation).

Salmon fishery EFH includes all those streams, lakes, ponds, wetlands, and other water bodies currently, or historically accessible to coho and Chinook salmon in Washington, Oregon, Idaho, and California, except above the impassable barriers identified by PFMC (PFMC 1999). Salmon EFH excludes areas upstream of longstanding naturally impassable barriers (i.e. natural waterfalls in existence for several hundred years). Three salmonids species are identified under the MSA, Chinook salmon, coho salmon and Puget Sound pink salmon.

Due to the administrative nature of the actions considered in the alteratnives, both the No Action and the Proposed Action to issue concessionaire permits would have No Adverse Affect on Essential Fish Habitat for Chinook and coho salmon under the 1996 Amendment to the Magnuson-Stevens Fishery Conservation and Management Act (MSA).

There would be no cumulative effects related to the project.

4. The Clean Water Act and Best Management Practices

Sections 208 and 319 of the Clean Water Act of 1972, as amended (1977 and 1987), acknowledge land treatment measures as being an effective means of controlling nonpoint sources of water pollution and emphasizes their development. These land treatment measures are known as Best Management Practices (BMPs). BMPs are used to control or prevent nonpoint sources of pollution from resource management activities, and to ensure compliance with the Forest Plan, as amended, the Clean Water Act, as amended, the Oregon Administrative Rules (OAR Chapter 340-41-0004,0028, and 0036), Department of Environmental Quality (DEQ), and the Memorandum of Understanding between the Oregon DEQ and the USDA, Forest Service. General BMPs are described in the document General Best Management Practices, USDA Forest Service, Pacific Northwest Region (11/88). The BMPs are flexible in that they are tailored to account for diverse combinations of physical and biological environmental circumstances. The Forest has documented typical BMPs and assessed their effectiveness (USDA Forest Service 2004a).

Other Standards and Guidelines - FW-054 to FW-079, FW-080 to FW-136, FW-137 to FW-147, B6-001 to B6-042, B7-001 to B7-070, and A9-033 to A9-040

Both of the alternatives are consistent with these Forest Plan Standards and Guidelines.

Other Legal Considerations (40 CFR 1502.16 and 40 CFR 1508.27)

1. Farm and Prime Range Land

There would be no effect upon prime farmland or prime rangeland. There are grazing allotments around some of the proposed campgrounds, however no change in general operations and management of the site are planned.

2. Flood Plains or Wetlands

No flood plains or wetlands are affected by the alternatives.

3. Laws, Plans and Policies

There are no identified conflicts between the proposed action and the objectives of Federal, Regional, State laws and local land use plans, or policies.

4. Productivity

The relationship between short-term uses and the maintenance of long-term productivity: no reductions in long-term productivity are expected.

5. Irreversible and Irretrievable Commitments

None were identified.