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**Forest
Service**

**Pacific
Northwest
Region**

2005

Environmental Assessment

Camp White Branch Master Plan

Willamette National Forest

Table of Contents

(Appendices are not included in this document, but can be provided upon request.)

LIST OF FIGURES AND TABLES

CHAPTER I. PURPOSE AND NEED

This chapter explains the purpose, need and scope of the Camp White Branch Master Plan. It also includes a description of the scoping process and key issues assessed in the environmental analysis.

A. INTRODUCTION AND EXISTING CONDITIONS

Camp White Branch (Camp) is located on the McKenzie River Ranger District, Willamette National Forest (Forest), near the old McKenzie Highway (242), at approximately 2,800 feet in elevation (Figure 1). It is located in T16S, R6E, Sec 21, about one-half mile south of Highway 242, approximately seven miles from its intersection with Highway 126. It is approximately one and a half miles west of the Three Sisters Wilderness area.

Camp White Branch is one of seven private organization camps on the Forest. The Camp has operated as a group camp since 1935. The first structures at the camp, including the lodge, were built in 1935 to serve as a work camp for the Civilian Conservation Corps (CCC). Additional structures have been added in phases since that time. The Camp was purchased by the Association of the Churches of God in Oregon and Southwest Washington (Church of God) in 1957. It has been operated by the Church of God since that time as an organizational camp serving church groups, Boy Scouts, and other youth and family organizations. It operates on 17.4 acres pursuant to a 20-year US Forest Service (USFS) lease and Special Use Permit. No approved master plan currently exists. The existing Special Use Permit would expire in 2013.

The Church of God operates the Camp to provide an environment where people of all ages can experience a variety of personal and group development opportunities in an outdoor setting. The Camp provides its clients with the opportunity to rest, relax, experience nature, engage in spiritual worship, and recreate in a peaceful and beautiful natural setting.

The Camp currently has a capacity of approximately 156 campers, counselors, and staff. Existing facilities include 18 buildings, an in-ground swimming pool, several gravel parking areas, internal roads, a large open space, a snow tubing hill, and several small outdoor gathering areas. Buildings consist of an historic lodge, dining hall/dormitory, maintenance building, manager's house, office, assistant manager's house, restroom building, pool bathhouse, pumphouse, seven cabins, tent platforms and two small storage buildings. The Camp is fully utilized in the summer months (June – September). It also is frequently used by small groups and families in the winter and spring months (January through May). It also is used by outdoor schools during the fall and spring months. The Camp's snow play hill is open to the public as adequate snow coverage allows. The lodge at the Camp is used as a warming hut and snack bar during winter snow play operations. Additional information on existing facilities is provided in Section C, Alternative 1.

Figure 1: Vicinity Map

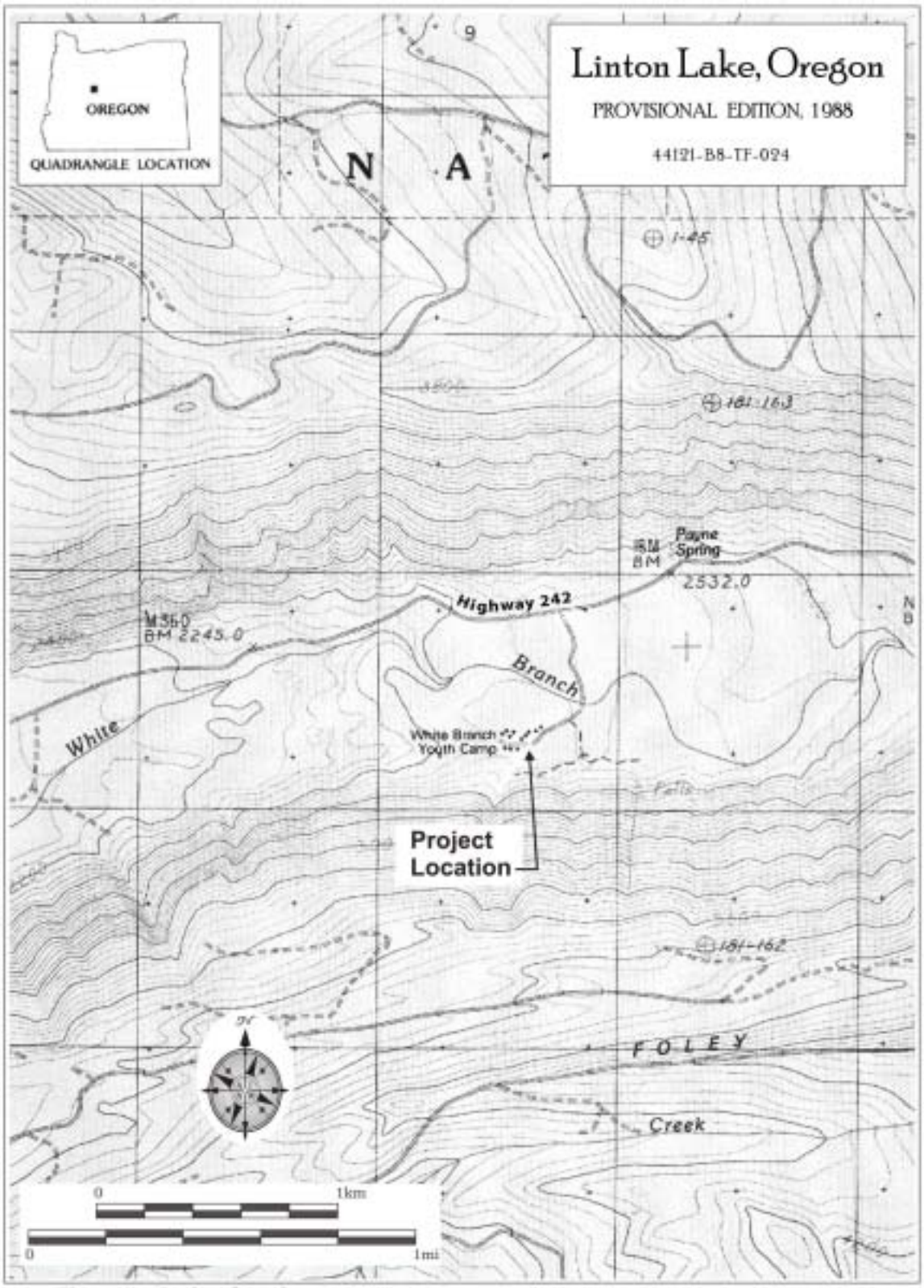


Figure 1. Project location.

B. DESIRED CONDITION

The 1990 Willamette National Forest Land and Resource Management Plan (WNF Plan), as amended by the 1994 Record of Decision (ROD) for the Final Supplemental EIS on Management of Habitat for Late Successional and Old Growth Related Species within the Range of the Northern Spotted Owl (Northwest Forest Plan), designates the project area as a Developed Recreation Area – Special Permits (12b). Developed Recreation Sites are managed to "provide developed recreation opportunities, such as downhill skiing, that are operated by private individuals under Forest Service permit." As a developed recreation site, Camp White Branch is expected to help the Forest meet current and future demand for developed recreation generally and for organization sites specifically.

The Desired Future Condition is the provision of a variety of recreation opportunities in an outdoor setting both through improvements to existing Camp facilities and construction of new facilities to accommodate demand. Access to recreational activities at the Camp is improved, particularly for youth and families. Non-exclusive use of the permit area is maintained.

Camp facilities provide adequate capacity and flexibility to meet the diverse needs of Camp users. The size and capacity of group facilities allows the Camp to serve more user groups at one time. More use is accommodated during the shoulder (spring/fall) and winter seasons when the Camp currently is not fully utilized.

Housing responds to the specific needs of user groups, e.g., groups with campers of varying age and gender distributions; temporary housing for seasonal construction workers, camp hosts and volunteers. Adequate health care is provided for campers through a centrally located facility. Accessibility improvements help the Camp meet ADA requirements. Facilities are designed to complement existing development.

Expanded recreational opportunities are provided through improvements to existing indoor and outdoor recreational facilities and construction of new facilities. Existing facilities meet current design and safety standards, and are desirable on orientation and appearance. The Camp's water slide continues to be used but is integrated with other facilities. Trails and interpretive signage is present both within the permit area and in the Camp vicinity.

Restoration, using native species of vegetation, rehabilitates disturbed areas within the permit area, for wildlife habitat and plant values. To the extent practicable, developed facilities blend with the surrounding natural setting. Environmental education is available through an environmental education center, interpretive signage, and other means.

Infrastructure meets state and county standards and long-term capacity needs. Transportation system accommodates pedestrian safety for a desirable sense of arrival for visitors to the Camp and overall aesthetics.

C. PURPOSE AND NEED FOR ACTION

PURPOSE

The purpose of this project is to authorize a long-term (approximately 20 years) Master Plan for Camp White Branch. No approved master plan currently exists. The purpose of the Master Plan is to guide short and long-term improvements to the Camp to meet the desired future condition.

In conjunction with a new Master Plan, a new 30-year Special Use Permit (SUP) would be issued to Camp White Branch for non-exclusive use and occupancy of the project area. While the Camp's current special use permit will not expire until December 31, 2013, reissuing this permit would allow the camp to continue to fulfill the needs of its users and help meet US Forest Service goals to enhance access to recreation and natural experiences for a broad range of people. It also would help the Camp to maintain and enhance partnerships with its client organizations.

NEED

A Master Plan is needed to identify improvements to occur at Camp White Branch over the next approximately 20 years. These improvements are needed to ensure a quality outdoor recreation experience in an area designated by the WNF Plan for developed recreation. Improvements to existing facilities, new facilities, and restoration activities are needed to enhance camper accessibility and housing, provide expanded on-site experiences for visitors, improve camp infrastructure, improve visitors' sense of arrival, and enhance the natural environment at the Camp. A Master Plan is needed to meet the following specific needs:

Meet the programming needs of Camp user groups.

Currently, the Camp is limited in its ability to provide services to its clients due to a lack of facilities that meet the programming needs of its users (i.e., worship services, meeting and other activities and programs offered by the Camp). In addition, several of the Camp's primary user groups (e.g., Church of God Youth Ministries and the Catholic Archdiocese) require larger facilities to meet the needs of their organizations. More large and small group meeting spaces, indoor recreational facilities, and large spaces for spiritual worship are needed. In addition, larger facilities are needed to enable the Camp to serve more than one smaller group at one time, improving the Camp's overall utilization. New cabins, meeting and multi-purpose facilities are needed to enable the Camp to accommodate outdoor school and other groups during the shoulder (spring/fall) and winter seasons when the camp currently is not fully utilized

New facilities are needed to provide the capacity and flexibility to meet the diverse needs of the large and small groups that use the Camp. Repair and renovation are needed to the facilities such as the pool and dining hall. A new multi-purpose building is needed for large worship services and recreation (see below). Accessibility improvements are needed to meet ADA requirements.

Improve housing options for campers to meet the specific needs of Camp users.

New housing options are needed to provide greater flexibility and more efficient utilization for a variety of Camp users. Existing cabins and dormitory space at the Camp do not provide for efficient use by Camp clients. Most church groups that use the Camp require at least two counselors in a given room with youth campers. These groups also require that boys and girls sleep in separate rooms or buildings. The current configuration of the existing cabins provides little flexibility for meeting the needs of groups with campers of varying age and gender distributions. In addition, the existing cabins do not lend themselves well to efficient, enjoyable use by families or small groups during the winter months.

Areas are also needed to accommodate recreational vehicles (RVs) used as temporary housing by seasonal construction workers, camp hosts, and some counselors or camp assistants.

Provide adequate health care facilities for campers.

The current first aid station is inadequate due its size, age and location. The Church of God has been authorized to construct a new combined first aid station and administrative housing building adjacent to the Lodge. However, this location would not be convenient for most campers, particularly during the summer months. A centrally located facility is needed to serve the health care needs of all persons on site in close proximity to cabins and administrative functions.

Improve recreational facilities for campers.

Currently, the Camp is lacking in both indoor and outdoor recreational facilities. Playing fields are in need of improvement (i.e., leveling and filling of holes) to address safety and use issues. No dedicated indoor recreational facilities (e.g., basketball, volleyball, table tennis, etc.) are available and there are no facilities specifically designed for crafts or environmental education.

A new multi-purpose building is needed to accommodate a variety of indoor group sports activities and meetings expected by Camp users. Replacement of the existing swimming pool is needed because of extensive repairs required, to meet current swimming pool design standards, and provide more efficient usage. Because the existing swimming pool is outdoors, it can be used for only a limited portion of the year. The existing amphitheater below the Lodge needs to be redesigned to improve its appearance and utility. The Camp's water slide needs to be modified or relocated to improve its appearance and integration with other facilities and to reduce its impact on the natural environment. Improvements to trails and interpretive signage are needed to enhance the recreational experience, minimize resource impacts, and increase environmental awareness.

Enhance the natural environment and increase awareness of environmental values

Restoration and planting of native vegetation is needed to rehabilitate areas within the Camp that have been denuded of vegetation or with soils compacted as a result of a long history of use.

Expand environmental education through establishment of an environmental education center, interpretive signage, and other means.

Existing environmental education programs are limited. Use of the historic lodge as an environmental education center during the summer months and shoulder seasons could provide space for educational displays and for environmental education activities.

Provide for adequate infrastructure and utilities.

With a capacity increase, the Camp's existing septic system and drainfield would require improvements to meet county and state standards. The Camp currently has a limited ability to suppress fires given a relatively small water storage reservoir and inadequate pumping equipment for using the Camp's swimming pool for fire suppression. Expansion of the Camp's water storage reservoir or installation of pumping equipment is needed to fight both wildfires and structural fires.

Improve pedestrian and vehicle traffic circulation, safety and convenience.

The entry road into the core area of the Camp needs to be redesigned to improve pedestrian safety and improve visitors' sense of arrival. The current roadway takes vehicles past the existing maintenance area and then down a hill into the core area of the Camp. This arrangement does not create a good first impression of the Camp. It also does not provide clear directions for people entering the Camp. During the winter, most visitors are required to park near Highway 242 and use the roadway to access the Camp for snow tubing or other activities, creating auto-pedestrian conflicts. Improvements to existing pedestrian pathways are needed to meet ADA accessibility requirements for grade or width. This would be apply only to trails within the Camp's permit area and specifically those linking the Historic Lodge with the proposed new Commons and Multipurpose buildings, as well as trails providing access to cabins. Trails outside the permit area are not proposed to be ADA accessible. To enhance the sense of arrival for visitors to the Camp, renovation of the existing Camp office to create a new gatehouse, reconfiguration of the entry road, and screening between the road and adjacent maintenance and staff housing buildings are needed.

Partner with the USFS to continue to meet diverse recreational needs on the Forest in an area designated for summer and winter use.

Proposed improvements at the Camp are needed to enhance access to recreational activities on the Forest, particularly for youth and families. Improvements also are needed to improve year-round recreational opportunities in an area that is designated for developed recreation.

D. PROPOSED ACTION

The proposed action is approval of a long-term Master Plan for Camp White Branch that identifies improvements to existing facilities, new facilities and uses, and restoration activities within the Camp's existing permit area. Proposed improvements would result in an increase in overall capacity from approximately 156 to 250 persons at one time. Specific improvements to be authorized would include the following:

New Buildings and Facilities

- Construction of seven to ten new camper cabins
- Construction of a new commons building (to replace the existing dining hall) with dining and kitchen facilities, small group meeting rooms, administrative and health care facilities and housing for staff
- Construction of a multi-purpose building for indoor recreation, large group meetings and worship services
- Relocation and improvement of the Camp's swimming pool
- Creation of a new parking area for recreational vehicles that provides temporary housing for camp hosts, seasonal workers or counselors
- Construction of six to eight additional parking spaces

Modifications or Improvements to Existing Buildings and Facilities

- Replacement of the existing sewage treatment facility with a new sand filter and drainfield
- Improvements to major trails and roadways to meet Americans with Disabilities Act (ADA) accessibility requirements and improve pedestrian and vehicle circulation and safety. [1]
- Renovation of the camp office to create a new gate house
- Reconstruction or renovation of the Assistant Manager's cabin
- Demolition of the existing first aid station
- Rehabilitation of open space/playing fields
- Renovation and improvement of the camp's ropes/challenge course
- Renovation of the camp's amphitheater

Restoration Activities

- Vegetation and soil restoration in previously disturbed areas, including replanting selected areas with native vegetation

Information about the phasing of improvements is found in Table 1 on page 22.

E. MANAGEMENT DIRECTION

Pursuant to 40 CFR 1502.21, this EA tiers to the Final Environmental Impact Statement (FEIS) for the 1990 WNF Plan, as amended by the 1994 Record of Decision (ROD) for the Final Supplemental EIS on Management of Habitat for Late Successional and Old Growth Related Species within the Range of the Northern Spotted Owl (Northwest Forest Plan). The WNF Plan provides long-term management direction for the Forest. Under the Forest Plan, land and resource management direction is expressed in terms of Forest Management Direction, Forestwide Standards and Guidelines, and Management Area Prescriptions and associated

[1] This would be apply only to trails within the Camp's permit area and specifically those linking the Historic Lodge with the proposed new Commons and Multipurpose buildings, as well as trails providing access to cabins. Trails outside the permit area are not proposed to be ADA accessible.

standards and guidelines. Management area Prescriptions contain management requirements specific to individual areas on the Forest.

Management direction in the WNF Plan includes guidance to "provide for a wide range of developed and dispersed recreation opportunities compatible with individual management area objectives and sensitive to public demand and/or use." (*Willamette National Forest Plan, Recreation Management Objective FW-001*). The project area is designated in the WNF Plan as a Developed Recreation Area – Special Permits (12b). Developed Recreation Sites are managed to "provide developed recreation opportunities, such as downhill skiing, that are operated by private individuals under Forest Service permit." A portion of the Camp is within a Riparian Reserve as mapped within the WNF Plan. The Riparian Reserve area is located along the Camp's snow play hill. Within Riparian Reserves, management direction is provided by the Aquatic Conservation Strategies of the Northwest Forest Plan.

The project area is designated by the Northwest Forest Plan as Matrix and is located in a Key Watershed. Matrix areas are managed pursuant to local Forest Plan direction, as well as additional standards and guidelines within the Northwest Forest Plan. In addition to these designations, the Northwest Forest Plan includes specific standards and guidelines for Spotted Owl habitat and Key Watersheds. The project area is within a Key Watershed. The project area also is within a Critical Owl Habitat Unit and within approximately one-half mile to one mile of mapped owl activity centers.

Portions of the analysis area outside the permit boundary also are within a Riparian Management Area (15) where additional management area standards and guidelines apply. The **analysis area** and **project area** are defined in Chapter 3.

Additional resource-specific management direction is addressed by topic area in Chapter III.

F. SCOPING AND CONSULTATION

1. SCOPING PROCESS

The scoping process was used to determine the issues and alternatives to be evaluated as part of this environmental assessment (EA). The formal scoping process began with an announcement and description of the project in the January 2004 issue of the Forest's planning newsletter, the *Willamette Forest Focus*. The process also included the following activities:

- **Mailing to interested parties**, March, 2004. Materials describing the proposed action and summarizing major elements of the master plan were mailed to approximately 120 groups or individuals, including: Tribal organizations; people who have previously expressed interest in decisions made on the Willamette National Forest; and county, state and federal elected officials and agency representatives. Information included a description of the proposed action, purpose and need for the project and maps and a narrative description illustrating improvements proposed as part of the Master Plan update.
- **Public meeting** conducted on April 3, 2004. District staff conducted this meeting to provide information about the Camp White Branch Master Plan/EA, as well as several other proposed projects within the District. The District provided copies of materials related to the Master Plan, including maps, a narrative description of alternatives and a project fact sheet.

- **Telephone contacts** with individuals and groups who had expressed an interest in the project.

As a result of scoping, two comments were received from the Confederated Tribes of the Warm Springs and the U.S. Fish and Wildlife Service (USFWS). These comments are discussed below; copies are available in the project record. Prior to scoping, a number of individuals representing groups that use Camp White Branch provided information about the need for new facilities at the camp. Fourteen (14) individuals provided written comments to the Camp in the form of a user survey response or via e-mail identifying future needs for improvements at the Camp, including improved dining and lodging facilities, additional bathrooms, and more meeting and activity space, including indoor recreational facilities. Commentors can view the project record at the McKenzie River Ranger District in McKenzie Bridge, OR. Contact Sandy Ratliff at 541-822-3381.

2. CONSULTATION

As noted above, Tribal groups identified by the Forest were advised of the project through a March 2004 mailing. In response, the Confederated Tribes of the Warm Springs identified concerns about the possible presence of cultural resources in the area and requested that a cultural resource inventory be conducted as part of the EA process, which was done. Additional consultation with Tribal groups by the Forest will occur as part of the EA public review process.

In its response to the scoping notice, the Oregon Department of Fish and Wildlife identified issues related to potential conflicts between humans and bears and cougars in the vicinity of the Camp, inquired about past conflicts, and recommended measures to reduce the risk of future conflicts. The Biological Evaluation (BE) prepared for wildlife and botanical species in conjunction with this EA (Appendix B) has determined that the project would have no effect on any federally-listed species. Consequently, there is no need for additional consultation with USFWS.

No formal consultation with the National Marine Fisheries Service (NMFS) has occurred due to the lack of essential fish habitat or presence of Threatened, Endangered and Sensitive fish species as determined by the Biological Evaluation (BE) prepared for fisheries in conjunction with this EA (Appendix B).

Consultation with the Oregon State Historic Preservation Officer (SHPO) and further consultation with Tribal organizations will occur as part of the EA public review process.

3. ISSUES

Comments received during scoping and from management concerns are the basis for issues that define the scope of the environmental analysis. These issues also were used to generate alternatives.

Key Issues

Key issues identified include the following:

OVERALL CAPACITY AND FACILITY NEEDS

Issue: How to accommodate the demand for expanded facilities to meet the programming and capacity needs of camp user groups.

Response: Proposed actions would meet those needs by expanding the sleeping capacity at the Camp, constructing new facilities such as a multi-purpose building and commons building to meet specific programming needs, and continuing to maintain and renovate existing facilities to preserve the function of those structures to meet future camper needs.

ENVIRONMENTAL IMPACTS AND RESTORATION

Issue: How impacts on the natural environment resulting from Master Plan improvements will be avoided or minimized. Efforts to enhance the environment should be considered as well.

Response: Opportunities to meet these objectives will include:

- Limit the footprint of new or expanded facilities through efficient design (e.g., two-story structures, maximum utilization of space, etc.)
- Focus improvements in disturbed areas
- Locate other improvements to avoid sensitive environmental resources
- Survey for and minimize impacts on federally listed species, including threatened, endangered and sensitive plants, wildlife and aquatic species
- Restore areas that have been impacted over time.
- Avoid or mitigate wetland and water quality impacts, consistent with requirements for Key Watersheds. For example, construction of any new roadway within the camp would require obliteration or decommissioning or an equivalent length of roadway elsewhere in the same key watershed.
- Use preventative measures to minimize the introduction of unwanted and competing vegetation (noxious weeds); use other measures to reduce or eliminate existing noxious weeds.

USES OCCURRING OUTSIDE THE EXISTING PERMIT AREA

Issue: How to manage Camp uses occurring outside the permit area. Over the years, a system of informal trails has been created outside the Camp's boundaries. Some of these trails provide potential linkages to the USFS trail system. Current and expected future use by camp visitors could have potential impacts on wildlife, vegetation and other resources. In addition, several other Camp uses occur outside the permit boundary, including gatherings at informal fire rings, use of an outdoor chapel, a ropes challenge course and water storage reservoir.

Response: The EA and the trails plan will identify trails and satellite fire rings designated for future use by camp visitors or to be closed to future use, obliterated and rehabilitated. Specifications for rehabilitation will be incorporated in a Trails Management Plan for the Camp. Additionally, a cooperative trail maintenance agreement will be developed between the USFS and Camp White Branch. As part of the SUP renewal, the permit area boundary will be corrected in the WNF Plan land allocation map (see Section G below) to incorporate within the permit area most of the uses currently outside the boundary. However, several trails and fire

rings used by Camp visitors are expected to remain outside the boundary. Mitigation of impacts attributable to Camp use will be developed and will include rehabilitation of areas impacted by fire rings or informal trails, as well as closure to selected fire rings and associated trails.

HISTORIC AND SCENIC CHARACTER

Issue: Ensuring that new development is compatible with the Camp's historic and scenic character. Construction of new facilities could impact the overall historic and scenic character of the Camp by increasing the number and scale of buildings, including construction of the new multi-purpose and commons buildings, as well as additional cabins.

Response: The design and scale of existing buildings at the Camp helps create a rustic and relatively unified visual character. The existing Lodge is a historic building eligible for the National Register of Historic Places. New development at the Camp will be designed to be compatible with and not jeopardize the Camp's existing character. This EA identifies effects on scenic quality and measures that will be used to mitigate them, including design and siting of buildings in already disturbed areas, selected removal of trees and other vegetation, and restoration of soils and vegetation in previously disturbed areas.

INTRODUCTION OF NOXIOUS WEEDS

Issue: Improvements proposed could increase the risk for introduction of competing and unwanted vegetation, especially noxious weeds, through the entry of vehicles and equipment into the Camp and soil disturbance activities.

Response: A variety of best management practices are identified in the EA to reduce the potential for introduction and proliferation of noxious weeds and other competing and unwanted vegetation.

Other Issues

A variety of other issues also are addressed in the EA.

OPPORTUNITIES FOR ENVIRONMENTAL EDUCATION AND INTERPRETATION

Most Camp users enjoy and appreciate the Camp because of its natural setting; many derive spiritual benefits through appreciation of the natural environment. The Camp offers a variety of opportunities for environmental education and interpretation that could be enhanced through master plan improvements, including development of an interpretive trail, designation of the historic lodge for environmental education activities, and increased use of the Camp for outdoor school in the shoulder seasons. While new and improved facilities are expected to provide opportunities for other recreational activities (e.g., indoor basketball or volleyball during rainy weather), the same improvements also will create opportunities for environmental education and interpretation.

PEDESTRIAN ACCESSIBILITY

Not all major pedestrian routes at the Camp are accessible to people with disabilities. Main trails linking housing, dining and medical facilities should have grades and surfaces that meet standards of the Americans with Disabilities Act (ADA).

SENSE OF ARRIVAL

The current Camp entry roadway takes vehicles past the existing maintenance area and then down a hill into the core area of the Camp. This arrangement does not create a good first impression of the Camp. Camp staff and visitors comment that it feels like one is coming in "through the back door." The current entrance also does not provide clear directions for people entering the Camp. Reconfiguration and design of the entry road and reconstruction of a gatehouse facility will be evaluated as part of the EA.

FIRE SUPPRESSION NEEDS

The Camp currently has a limited ability to suppress fires given a relatively small water storage reservoir and inadequate pumping equipment for using the camp's swimming pool for fire suppression. Options for expanding the Camp's reservoir to enhance fire suppression capabilities, including installation of a comprehensive sprinkler system for buildings at the Camp, will be evaluated as an option in the EA.

PHASING AND FLEXIBILITY

Flexibility is important to ensure that the Camp can respond to the changing needs of camp users, construct facilities in phases as financial resources and other conditions allow, and minimize disruption of existing uses and activities at the Camp. The Master Plan addresses the full range of services and facilities that are needed over the next 20 years. Phasing of improvements would allow the Camp to minimize disruptions, meet the most pressing needs in early stages, and maintain and enhance existing facilities while beginning work on priority improvements.

G. RESPONSIBLE OFFICIALS AND DECISIONS TO BE MADE

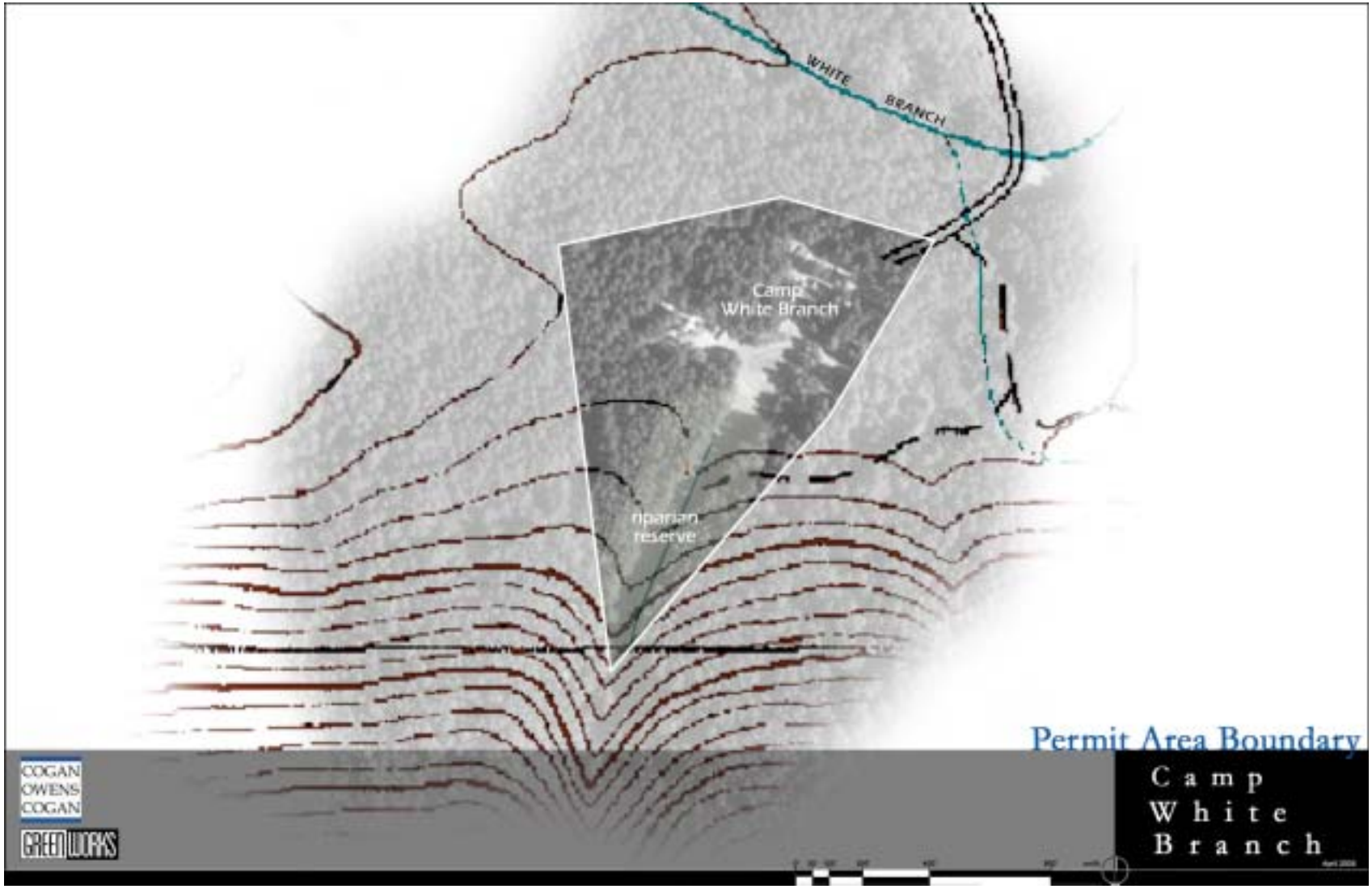
The Responsible Official for this proposal is the Forest Supervisor of the Willamette National Forest. While considering the purpose and need to meet Camp user needs and ensure a quality outdoor recreational experience for Forest users, the responsible official shall review the proposed action and the other alternative actions, and may decide to:

- select the proposed action, or
- select another action alternative that has been considered in detail, or
- modify an action alternative, or
- select the no-action alternative.

Selection of action Alternative II or III will include authorization of a long-term Master Plan for Camp White Branch and issuance of a new 30-year Special Use Permit.

The Responsible Official also would determine if the selected alternative is consistent with the Willamette Forest Plan or if the Forest Plan should be amended in this action.

Figure 2: Proposed Permit Area Boundary



CHAPTER II. ALTERNATIVES INCLUDING THE PROPOSED ACTION

A. DEVELOPMENT OF ALTERNATIVES

Alternatives for the Master Plan were developed through an iterative, collaborative process among representatives of the Camp, consulting team, and USFS. The process included site visits, meetings with and surveys of individual Camp White Branch Board members and user groups, a two-day master planning session with the Camp White Branch Board, preparation of preliminary Master Plan documents, and an iterative process of review and revision of those materials with Camp White Branch and USFS representatives. A range of alternatives was developed to meet the project's purpose and need including the following specific needs:

- Meet the programming needs of Camp user groups.
- Improve housing options for campers to meet the specific needs of Camp users.
- Provide adequate health care facilities for campers.
- Improve recreational facilities for campers.
- Enhance the natural environment and increase awareness of environmental values, including environmental education programs
- Provide for adequate infrastructure and utilities.
- Improve pedestrian and vehicle traffic circulation, safety and convenience.
- Partner with the USFS to continue to meet diverse recreational needs on the Forest in an area designated for summer and winter use.

In undertaking the master planning activities described above, the preferred alternative (Alternative 2) was developed based upon an evaluation of existing vegetation, disturbed areas, environmentally sensitive areas, camper and staff needs, architectural design considerations and USFS policies. A second action alternative (Alternative 3) was developed to identify alternatives to meeting the purpose and need for the project and to address issues raised during scoping related to impacts on vegetation, transportation and circulation, infrastructure needs, visual impacts and camper needs. Both action alternatives would meet the purpose and need for improvements.

B. ALTERNATIVES CONSIDERED BUT ELIMINATED

The following alternatives were considered but eliminated from detailed study:

- **Larger camp capacity**. Early meetings with the Camp White Branch Board and USFS staff included discussion of improvements that would result in a capacity of up to 400 campers. Based in part on concerns expressed by both the USFS and Camp Board members, action alternatives were scaled back substantially to reflect a planned capacity of 250 campers and

staff. These concerns included impacts on the permit area's carrying capacity, effects on use of trails and adjacent resources, and visual impacts of this level of development.

- **Major changes in permit boundary**. Some uses, including an informal trail system and gathering places (campfire rings) around the Camp, occur outside of the Camp's existing special use permit boundary. Initially, expansion of the boundary to include these areas was considered. However, the current proposed action includes only limited expansion of the Camp boundary to include a ropes/challenge course, small outdoor chapel area, and water storage reservoir. Ultimately, the Camp and USFS determined that it would not be beneficial to include those areas, which include riparian areas and resources, within the permit boundary. However, as part of the SUP renewal, the permit area boundaries will be corrected in the Willamette Forest Plan land allocation map. In the Forest's original land allocation map, the Camp was identified as Management Area 12b, but the mapping technology at the time limited tracking of the permit area to an approximately 22 square acre area. The Forest Plan map will be updated to show the actual permit area boundaries.
- **Creation of an open water wetland**. Preliminary draft action alternatives included creation of an open water wetland in an area currently occupied by a seasonal wetland on the eastern edge of the Camp (east of the base of the snow play area and south of the Camp's access road). Based on concerns about the impact and cost of this element, as well as permitting and other issues, Camp Board and USFS representatives agreed to eliminate this feature from the action alternatives prior to detailed evaluation.

C. ALTERNATIVES ANALYZED IN DETAIL

ALTERNATIVE 1. NO ACTION

As required by NEPA, a No Action alternative is included as a benchmark against which the action alternatives can be compared.

Permit Area

Under the No Action alternative, the Camp would continue to operate in its current facilities and within the existing special use permit area (17.4 acres).

Camp Facilities

There currently is no approved Master Plan for the Camp. This alternative assumes no expansion of or major improvements to current facilities at the Camp. Facilities would continue to be used as they are now and include the following:

- **Cabins and other sleeping accommodations**. There are seven cabins at the camp which accommodate a total of 82 people. Dormitory space within the Camp's dining hall can accommodate an additional 56 people. A manager's house and assistant manager's house are used for staff. Tent platforms are used in the summer to accommodate additional visitors.
- **Dining facilities**. The Camp's dining hall can accommodate between 120 and 150 people. A deck recently added to the dining hall allows for more diners, though kitchen facilities have not been expanded.

- **Recreational facilities**. The Camp has an in-ground swimming pool, a snow play hill, volleyball courts, and open area at the base of the snow play hill used for outdoor recreation. A network of informal trails and associated satellite campfire rings located around the Camp and outside its permit area also are used for recreation.
- **Historic Lodge**. The Camp's lodge, the first building constructed at the Camp is used for group activities and as a warming hut and snack bar in the winter during snow play activities.
- **Transportation and circulation**. Internal roads, trails and informal gravel parking area would continue to be used for circulation within the Camp. Some trails would meet ADA accessibility requirements, while others would not.
- **Other facilities**. Other buildings and facilities include a maintenance building, restroom building, pool bathhouse, pumphouse and two small storage buildings.

Under the No Action Alternative, the Camp would continue to have a capacity of approximately 156 campers, counselors and staff.

Special Use Permit

The existing SUP would expire in 2013.

Figure 3: Site Plan, Alternative 1 – No Action

ALTERNATIVE 2: PREFERRED ALTERNATIVE

Alternative 2 represents the proposed long-term Master Plan for the Camp. Based upon review of the potential environmental consequences, response to purpose and need, and response to key issues, Alternative 2 also has been identified as the agency's Preferred Alternative.

Permit Area

This alternative would include a modest adjustment of the special use permit area. The permit area would be adjusted on the Camp's northeast, northern edges as well as at the southern end to include a ropes/challenge course, small outdoor chapel area, and the Camp's water storage reservoir. The permit area would be increased by between one and two acres. USFS staff have determined that this minor adjustment to the boundary would not require an amendment to the Willamette National Forest Plan.

Master Plan

This alternative includes implementation of a Master Plan that identifies a variety of improvements proposed to upgrade facilities and services for campers, including actions to better meet the future needs of camp users; comply with Americans with Disabilities Act and other special requirements; enhance the natural environment; improve transportation circulation and access; provide additional recreational opportunities; and maintain the historic character of Camp White Branch. It includes construction of new facilities, modification of existing facilities, and retention of other existing facilities and uses as described below (see Figure 2). These improvements would result in an increase in overall capacity of the Camp from 156 to approximately 250 people.

NEW FACILITIES

The following new facilities and improvements to the existing Camp are proposed:

- **Ten new camper cabins**. These cabins would supplement existing cabins and replace dormitory space in the existing dining hall. Cabins would be approximately 600 square feet in size and would accommodate 16 campers and two counselors or staff members. They would meet ADA accessibility requirements. They would consist of a first floor with a single sleeping area for campers, a common area and a bathroom. A second story loft would accommodate counselors or staff. Three cabins would be sited just south of the existing Dogwood, Elm and Fir cabins. Three others would be located just south of the existing Alder, Birch and Cedar cabins. The remaining cabins would be located in the northwestern portion of the permit area. None of the existing cabins would be demolished in this alternative. Architectural design of the new cabins would be consistent with the character of historic structures at the Camp, including existing cabins. In constructing the new cabins, some vegetation, including trees, shrubs and other groundcover plants, would be impacted though effects would be minimized by siting and construction practices. Tables 4 and 5 summarize the approximate number and size of trees to be removed in concert with construction of these and other improvements.
- **Commons building**. This building would be approximately 9,000 square feet in size, with two stories and a footprint of 4,500 square feet. It would include new dining and kitchen facilities to accommodate 250 people, a lobby, administrative office, small conference room, check-in desk, nurses station, two sick rooms, a small gift shop, a restroom, eight rooms of staff housing, an assistant manager's apartment, and another small apartment for staff or

visitors (e.g., speakers). It would be located in approximately the same location as the existing Dining Hall. The exterior would be similar in design and appearance to the new camper cabins. This building would be located in an already disturbed area of the Camp.

- **Multipurpose building**. This building would be used for indoor recreation and meeting activities, including basketball, volleyball; environmental education; and large worship services. It would be large enough to accommodate a basketball court, sideline areas, a small stage and restrooms. When not being used for recreation, it could accommodate up to 250 people for large worship services or meetings. It would be approximately 9,000 square feet in size and located west of the existing Dining Hall in the area currently used for a large tent platform. It also could be used as an interim kitchen and dining facility until the Commons Building is completed. This building would be located in an already disturbed area of the Camp.
- **Swimming pool**. This would be located just north of the existing swimming pool and incorporated within the overall design of the new Commons Building/Multipurpose Building complex. It would be designed with a naturalistic theme. Provisions would be made to allow for the pool to be enclosed in the long term. The new pool would be located in an already disturbed area of the Camp.
- **Recreational vehicle area**. The area just east of the base of the snow play hill would be developed to accommodate up to six to eight recreational vehicles. This area would be screened from the entrance road, historic lodge and other facilities by vegetation to minimize its visual impact. Electrical and water hookups also would be screened with vegetation. Natural semi-pervious paving materials or reinforced turf also would be used to minimize visual and environmental impacts. The area proposed for this facility is already disturbed and cleared of most vegetation.
- **New parking spaces**. A limited number of new parking spaces would be added, including:
  - Six (6) staff spaces in the service court near the Camp entrance
  - Two (2) staff spaces near new commons building
  - Two (2) accessible spaces near new commons building

  Most visitors to the Camp would continue to be dropped off by buses or other vehicles or park in one of two overflow parking areas outside the Camp's permit area. One area is located adjacent to the entry to the Camp from Highway 242 and can accommodate a large number of vehicles. It is used for snow play parking in the winter season. The other area is a clearing located approximately ¼ mile west of Highway 242, south of the entry road (and east of gatehouse/camp entry) which could accommodate 35 – 40 cars. Parking spaces would be located primarily in existing disturbed areas or would represent a continuation of current practices (e.g., parking adjacent to Highway 242 for winter use).

EXISTING FACILITIES MODIFIED

The following modifications to existing facilities at the Camp are proposed:

- **Renovated septic drainfield.** The existing septic drainfield for the Camp would be reconstructed or replaced with a larger system to meet county and state standards. Any contaminated materials from the existing system would be disposed of at an approved landfill. A new drainfield would be constructed in approximately the same location and be designed to accommodate the new capacity of the Camp. Preliminary calculations indicate that approximately 44,000 square feet of space would be needed; adequate space is available at the base of the Camp's snow play hill. Use of a sand filter could increase the

efficiency of the drainfield and reduce the area requirements. In undertaking these improvements, the Camp would coordinate with and meet permitting, design, construction, and other requirements of state and county agencies, including the state Department of Environmental Quality and Lane County Planning and Public Works departments. The area proposed for this facility is already disturbed and cleared of most vegetation.

- **Trails**. Major trails within the Camp (e.g., between the Historic Lodge, dining hall and intervening cabins) would be improved to meet ADA accessibility requirements. This would entail slight relocations of these trails and changes in grade. Improvements to trails outside the permit area are described in a proposed Trails Plan (see Appendix D). Trails outside the permit area are not proposed to be ADA accessible. Several campfire rings and associated informal trails outside the permit boundary will be obliterated and rehabilitated.
- **Camp entry and gatehouse**. The main entry road to the camp would be modified slightly to improve the visual experience of entering the Camp. The alignment would be changed slightly to point the road more directly towards the main Camp road (see above) and away from the back of the Historic Lodge and service area. Vegetation would be added to better screen the existing assistant manager's cabin and maintenance building from the entry road. A new entry sign also would be added welcoming visitors to the Camp. The office associated with the manager's cabin would be renovated to create a gatehouse with an improved appearance, possibly by adding a peaked roof or other architectural elements. The gatehouse would then be used to greet visitors to the Camp using staff or posted information.
- **Reconstruction or renovation of the assistant manager's cabin**. This building currently does not meet the needs of the camp for staff housing. This building would be substantially renovated or reconstructed in the same approximate footprint of the existing building.
- **Demolition of existing first aid station**. The existing first aid station would be demolished. In the long term, a new first aid station would be constructed in the new Commons Building. In the interim, first aid facilities could be provided in the, office/gatehouse, dining hall or multi-purpose building once it is constructed.
- **Playing field**. In conjunction with replacing the Camp's drainfield, this area would be leveled and filled to improve its use as a playing field in the summer months.
- **Ropes/challenge course**. The existing ropes/challenge course would be renovated. This would involve some clearing of vegetation, improvement of existing facilities and installation of some new equipment.
- **Renovation of the Camp's amphitheater**. This area, located in front of the Historic Lodge, would be redesigned and reconstructed to improve the overall appearance of the camp and the historical appearance and integrity of the Historic Lodge.

EXISTING FACILITIES RETAINED WITHOUT MODIFICATION

The following facilities at the Camp would be retained in their existing condition and for their current uses:

- **Existing cabins**. These building would continue to be used for housing for campers and staff. No major alterations are planned or have been identified as needed to meet these needs. However, continued upkeep and maintenance is needed and would be undertaken.
- **Restroom/bath house**. This building would continue to be used with no modifications proposed.

- **Pumphouse**. No changes to this structure are proposed.

RESTORATION ACTIVITIES

- **Vegetation and soil restoration**. Existing areas previously impacted by construction or other development would be restored with native vegetation. About 10,000 – 15,000 square feet of existing disturbed areas would be restored/replanted. These restoration efforts would be coordinated with any related Forest or District-wide efforts.

PHASING

Improvements would be completed within 5 to 10 years of approval of the new Master Plan. First priority would be improvements and maintenance of existing facilities. A second priority would be construction of a new multipurpose building to provide facilities for indoor recreation and large worship services. In the short term, this building also would include a kitchen to replace the facilities in the existing dining hall while that building is replaced with the proposed commons building. Construction is expected to begin within two years of approval of the Master Plan and renewal of the SUP. A design review process for specific improvements would be conducted with USFS personnel, including cultural resource specialists, prior to construction.

This Master Plan identifies long-term proposed improvements for the Camp. These improvements are intended to meet the future needs of the Camp and its users, as well as minimize impacts on the surrounding natural environment. Changing financial and other conditions may result in future modifications to proposed improvements. For example, improvements may not be constructed as quickly as anticipated or the size of certain buildings may be reduced or otherwise modified to reflect changing needs. The Master Plan is intended to provide flexibility in the following ways:

- **Size and function of buildings or other improvements**. The Master Plan identifies the approximate size and location of facilities. Changes in the size of a facility or the specific activities conducted within it could be acceptable as long as the general purpose and approximate footprint of the building does not change. However, a change in the general location of a building, particularly if it entails development in an undisturbed natural area at the Camp, would necessitate additional environmental analysis.
- **Renovation vs. new structures**. It is expected that the Camp could choose to renovate an existing structure (e.g., the dining hall) rather than build a new one (e.g., the Commons Building) if the impacts of the renovation occur in the same general location as the new building and would not be greater than or differ substantially than they would for new construction.
- **Timing**. The Camp also will have flexibility in the timeframe for implementing the Master Plan, depending in large part on the ability to raise money to pay for proposed improvements. Many master plans are never fully implemented due to changing needs and financial resources. The Camp would not be required to build everything identified in the Master Plan. However, it is important for the Camp to generally continue to make progress toward implementation to avoid the need to reevaluate the environmental impacts of the alternatives.

While the Camp has flexibility in implementing the master plan, it is important to note that ultimately, the USFS, as the landowner and permitting agency, will determine what types and level of improvements and facilities can be undertaken. In addition, the USFS would require

additional environmental analysis if implementation is inconsistent in terms of the general location, function, size or other key features of improvements identified in the Master Plan.

Phasing of specific facilities and improvements would be as follows:

Table 1: Proposed Phasing of Master Plan Improvements

Begin Years 1 to 3	***Type of Action***
• Ongoing maintenance of existing facilities at the Camp per coordination with USFS staff and the camp's special use permit agreement	Maintenance
• Construction of a new multi-purpose building	New construction
• Vegetation and soil restoration in previously disturbed areas, including replanting selected areas with native vegetation (ongoing)	Restoration
• Rehabilitation of open space/playing fields (annually)	Renovation
• Demolition of the existing first aid station (one to two years)	Demolition
• Renovation of the camp office to create a new gate house (one to two years)	Renovation
• Begin construction of new camper cabins (one to five years)	New construction
• Creation of a new parking area for recreational vehicles that provides temporary housing for camp hosts, seasonal workers or counselors (one to five years)	New construction
• Renovation of the camp's amphitheater (two to four years)	Renovation
• Improvements and changes to trails and roadways (two to seven years)	Renovation
Begin Years 4 – 5	
• Relocation and improvement of the Camp's swimming pool	New construction
• Construction of six to eight additional parking spaces	New construction
• Reconstruction or renovation of the Assistant Manager's cabin	Renovation
• Improvements and changes to trails and roadways (two to seven years)	Renovation
• Replacement of the existing sewage treatment facility with a new sand filter and drainfield (3-7 years)	Renovation
• Complete construction of new camper cabins	New construction
Begin Years 6 – 10	
• Renovation and improvement of the camp's ropes/challenge course (four to eight years)	Renovation
• Construction of a new commons building (eight to ten years)	New construction

Special Use Permit

The Preferred Alternative would establish a new Master Plan for the Camp. A new 30-year SUP would be issued to Camp White Branch for non-exclusive use and occupancy of the project area.

Figure 4: Site Plan, Alternative 2 – Proposed Action

ALTERNATIVE 3. ALTERNATIVE ACTION

This alternative was developed to identify alternatives for the location, configuration and size of buildings within the camp in an effort to address issues raised by Camp and USFS representatives related to environmental and visual impacts of improvements. This alternative also includes a new alternative entry road and additional improvements to enhance fire suppression capabilities. One of the issues raised during scoping was the location of the proposed new multi-purpose building in relation to existing trees and vegetation. A second issue was the overall capacity increase and number of new structures proposed. A third issue was the visual impact of the new RV parking area. Alternative 3 was designed to address these and other design-related issues.

In Alternative 3, the new multi-purpose building would be located approximately where the existing bath house and swimming pool are now. It would be separated from the new commons building to reduce the total size of that complex of buildings, in comparison to Alternative 2. In Alternative 3, a smaller number of new cabins would be constructed, although each individual building would be larger than the new cabins in Alternative 2. The new RV parking area in Alternative 3 would be located in the northeastern corner of the Camp to better screen it from other facilities. It would be accessed by an existing gravel road, which would be expanded to accommodate RV access. Alternative 3 also includes construction of a larger water storage reservoir which could allow for installation of a looped water/sprinkler system and improved fire suppression capabilities. Following is a more detailed description of the different facilities proposed in Alternative 3.

- **Locations and size of new cabins**. Seven new cabins would be constructed. Cabins would be approximately 875 square feet in size and would accommodate 28 campers and two counselors or staff members. They would meet ADA accessibility requirements. They would be one-story structures with two single sleeping areas for 14 campers, a common area, two bathrooms, and a sleeping area for counselors or staff accessible to both camper sleeping areas. Three cabins would be sited to the east and west of the Dogwood, Elm and Fir cabins. Four others would be located in and around the area where the existing dining hall is currently located. The Dogwood, Elm and Fir cabins would be retained. However, the Alder, Birch and Cedar cabins would be demolished in this alternative. In other respects, the new cabins would be similar to those in Alternative 2.
- **Location of new Commons and Multipurpose buildings and swimming pool**. The new Commons Building would be located just west of the base of the snow play hill in this alternative. The new Multipurpose Building would be located in the approximate location of the existing Alder, Birch and Cedar cabins and swimming pool. A new enclosed swimming pool would be constructed just south of and integrated with the new Multipurpose Building.
- **Different parking facilities**. Slightly more parking spaces would be provided in this alternative in comparison to Alternative 2. Alternative 3 would include the following:
  - Eight (8) staff spaces in the service court near the Camp entrance
  - Two (2) accessible spaces near new commons building
  - Ten to fifteen (10-15) additional spaces in the core camp area

  As a result, fewer spaces would be needed in the offsite clearing located approximately ¼ mile west of the highway (25 – 30 cars).
- **Location of volleyball courts**. The existing volleyball court would be relocated to be just west of the new Multipurpose Building and in the approximate location of the existing large tent platform site.

- **Location of entry road**. A new road would enter the Camp to the south of the existing manager's cabin, providing more direct views of the Camp upon entering. The new entry road would be one-way, with an exit road in the location of the existing entry road.
- **Location of RV spaces**. These spaces and hookups would be located near the northwestern corner of the Camp, west of the existing tent platform areas.
- **New water storage reservoir**. A larger (approximately 20,000 gallon) storage tank would be constructed in approximately the same location as the existing storage tank (near the top and just west of the snow play hill area). This would allow creation of a pressurized water distribution and sprinkler system serving all buildings at the Camp.

All other facilities, uses, total capacity and proposals related to the permit boundary and special use permit for the Camp would be described as in Alternative 2.

Figure 5: Site Plan -- Alternative 3

CUMULATIVE ACTIONS

The USFS has requested that Camp White Branch prepare a programmatic trails plan as part of this Master Planning and Environmental Assessment process. This trail plan will identify the approximate location of existing trails proposed to be used by the Camp in the future that are outside the Camp's permit area. Additional recreational use of existing trails as a result of increased Camp capacity will be considered as direct impact in this EA. However, construction of trail improvements through implementation of the trails plan and construction of a new access road in Alternative 3 will be considered as cumulative actions and assessed in that manner in this EA. No other cumulative actions have been identified.

COMPARISON OF ALTERNATIVES

Following are tables comparing the elements and impacts of the alternatives, including the No Action alternative.

Table 2: Master Plan Elements by Alternative

FACILITIES/ IMPROVEMENTS	*Alternative*		
	1	***2***	***3***
Capacity	156 persons	250 persons	Same as 2
Entry Road	Use current location	• Use current location • Modify edges	• New entry road south of manager's house • One-lane road to service area
Residential	Retain existing cabins (80 beds) and dining hall dormitory space (62 beds)	• Retain existing cabins = 80 beds • Add 10 new small cabins (18 people each) = 180 beds	• Retain 3 existing larger cabins = 42 people • Add 7 new large cabins (30 people each) = 210 beds
Dining	Continued use of existing dining hall and new deck	• New 4,500 SF 2-story building in current location • Build new kitchen/M.P. building to west	• New 4,500 SF 2-story building S. of main road • Relocate volleyball courts
Staff Housing/ Admin	Continued use of managers cabin and dining hall dormitory space for temporary living quarters	All staff in new commons building except Assist. Mgr. in new house and manager in existing structure	Same as 2
Indoor recreation	None	New multipurpose building in existing tent assembly area	New multipurpose building S. of E. cabins/E. of new swimming pool
Outdoor Recreation	No changes; continued use of existing playing fields	• Renovate playing field area • New challenge course NE of service area • Redesign lodge amphitheater	• Same as 2, plus • Relocate volleyball courts to existing large tent site
Swimming Pool	Eventual repair and renovation of existing pool planned	New pool with natural theme in approximately same location; enclose pool in long-term	New enclosed pool in slightly different location, integrated with new Multipurpose building
Lodge	• Winter use – warming, snack bar • Continued summer use for miscellaneous visitor activities	• Winter use – warming, snack bar • Summer – nature center and snack bar	Same as 2
First Aid Station	Build new nurses station as currently permitted in location of existing assistant managers cabin	Temporary/interim facility in service area; long-term in Commons Building	Same as 2

Parking	• 4 – 5 parking spaces in service area • Informal parking spaces near dining hall and lower cabins • Continued use of parking area on highway near camp access road	• 6 staff spaces in service court • 2 staff spaces near new commons building • 2 accessible spaces near new commons building • 35 - 40 long-term spaces in existing clearing east of gatehouse/camp entry	• 8 staff spaces in service court • 2 accessible spaces near new commons building • 10 – 15 camper spaces in core camping area • 25 - 30 long-term spaces in existing clearing east of gatehouse/camp entry
Recreational Vehicles (RVs)	1 or 2 RVs without full hookups occasionally parked E. of snow play hill	6 – 8 full RV hookups E. of snow play hill; screen and minimize visual impacts	6 - 8 full RV hookups in existing tent platforms area
Natural Resources	Continued use and maintenance of existing areas	Restoration of existing impacted areas	Same as 2
Trails	• Continue use of existing trails • Create and implement new trails plan as separate action	• Make main pedestrian routes ADA accessible • Implement trails plan • Create new interpretive loop trail	Same as 2
Septic System	No changes	Reconstruction and expansion of existing drainfield	Same as 2
Water Supply/Fire Suppression	Use existing supply and practices (small reservoir and swimming pool)	Same as 1	Larger storage reservoir to support sprinkler system

Table 3: Comparison of Impacts by Alternative

Resource	Alternative		
	1	2	3
Watershed Values			
• Soils	• Minimal impacts from erosion through use of primary roads, trails and RV area • Landslide hazards at base of south slopes	Per Alternative 1, plus: • Erosion related to grading, clearing and construction; erosion control required • No activities close to White Branch Creek	Per Alternative 2, plus: • Increased parking • Impacts from new entry road
• Vegetation	• None • Existing building area is about 20, 000 sq. ft. Total cleared or disturbed areas equal 4 to 5 acres (about 23% of site)	• 23,525 sq. ft. of new impervious surfaces • 5,400 sq ft of semi-permeable/permeable surfaces • About 10,000 sq. ft. of revegetation • Minimal soil compaction	• 25,425 sq. ft. of new impervious surfaces • 5,400 sq ft of semi-permeable/permeable surfaces • About 15,000 sq. ft. of revegetation • Minimal soil compaction
• Hydrologic System	Limited runoff and impacts of RV and other compacted areas.	• Increase in impervious surfaces; very low overall associated impacts • Improved buffer between RV area & wetland	Per Alternative 2, except: • RV area to be relocated away from wetland
• Water Quality	Minimal impacts related to runoff/ sedimentation and risk of chemical spills (e.g., gas, cleaning supplies)	Per Alternative 1, plus: • Potential impacts of new septic drainfield; designed to meet water quality standards	Per Alternative 2, plus: • Increased parking • Impacts of new entry road
• Aquatic System	None	No anadromous species or habitat present; no effect (NE)	Per Alternative 2
Wildlife			
• Federally listed Species	Bald eagle – No impact (NI) Spotted Owl – NI Bull trout – NE Spring Chinook salmon - NE	Per Alternative 1	Per Alternative 1
• R6 Sensitive Species	• NI for all species	Per Alternative 1	Per Alternative 1

Resource	Alternative		
	1	2	3
• NW Forest Plan S&M Species	NI	Per Alternative 1	Per Alternative 1
Botany	No impact on listed species	Per Alternative 1	Per Alternative 1
Heritage Resources	None	• Camp not recommended for listing on National Register of Historic Places (except lodge); no adverse effect	Per Alternative 2
Traffic Circulation/Parking	• Continued poor sense of arrival	• Improved circulation and pedestrian access and safety. • Improved sense of arrival • Increase in formal and overflow parking spaces	Per Alternative 2, plus: • New entry road improves access, circulation and sense of arrival
Recreation	• Change in impacts to developed USFS facilities • No improvements in services provided • Continue to discourage direct access to wilderness areas	• Possible increase in usage of USFS facilities • Improved recreational opportunities, facilities and capacity • Greater emphasis on environmental education • Improved worship facilities • Cumulative impacts of increased trail use	Per Alternative 2
Scenic Resources	Continued visual impacts associated with entrance experience	• No effects on facilities outside of Camp • Visual impact of new buildings within camp; mitigate through siting, design and construction • Reduced visual impacts of swimming pool, RV and service areas	Per Alternative 2, except: • Less visual impact from RV area • More visual impact of new buildings
Air Quality	Minimal impacts associated primarily with vehicle use	Per Alternative 1, except short-term impacts associated with construction	Per Alternative 2
Noise	Low levels in conjunction with recreational activities and vehicular traffic	Per Alternative 1, except short-term increases associated with construction	Per Alternative 2

Table 4: Comparison of Impacts by Key Issue

Issue	Alternative		
	1	2	3
Capacity and facility needs	Does not meet identified needs of Camp representatives and users	• Meets future needs of camp users • Makes best use of existing facilities	• Meets future needs of campers • Includes demolition of more existing facilities
Environmental impacts and restoration	• No significant impact on federal or state listed species • Continued use of existing trails and satellite camp areas could impact environmental resources, including riparian areas	• No impact on federal or state listed species per biological evaluations • No major impacts identified • Most improvements concentrated in already disturbed areas • Some impacts to vegetation, primarily related to construction of new cabins • Opportunities for restoration of previously areas	• No impact on federal or state listed species per biological evaluations • No major impacts identified • Most improvements concentrated in already disturbed areas • Relatively more impacts on vegetation in comparison to Alternative 2 • Opportunities for restoration of previously disturbed areas
Uses occurring outside permit area	• Continued use of existing trails and satellite camp areas could impact . • Would result in continued use of areas outside permit area	• Increase in use could result in increased impacts on adjacent vegetation or other environmental resources • Closure of specific trails and satellite use areas would reduce impacts on most sensitive areas • Improvements to trails, including riparian area crossings would reduce future impacts • Would concentrate most camp uses inside slightly expanded permit area	Same as Alternative 2
Historic and scenic character	Would be no change in existing conditions and character	• Design of improvements, consistent with historic character of older buildings would enhance overall historic character of camp • Size and scale of buildings would increase • Visual impacts would be mitigated through siting, design and construction • Visual impacts of some facilities would be reduced (e.g., swimming pool and RV area)	Same as Alternative 2, except: • Less visual impact from RV area
Introduction of Noxious Weeds	Would be no change/effect	Mitigation measures and best practices would minimize introduction and improve existing condition	Same as Alternative 2

CHAPTER III. DESCRIPTION OF THE AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES

In describing the affected environment and evaluating environmental consequences, areas both within and outside the Camp's permit area were considered. As described within this EA, the **project area** is synonymous with the permit area because all improvements would be focused within that area, with the exception of potential improvements to trails around the Camp and outside the permit area. However, improvements potentially affect areas outside the project area. Resources outside the project area could be affected by proposed improvements (e.g., the riparian area adjacent to White Branch Creek). For this reason, the **evaluation area** extends beyond the permit area to include areas adjacent to White Branch Creek and to the informal trail system around the Camp.

A. WATERSHED VALUES

1. AFFECTED ENVIRONMENT

a. Vegetation

This section describes the characteristics of selected existing vegetation at the Camp White Branch site, including trees and plants that are not listed or sensitive. A separate Botany section describes conditions and impacts for listed or sensitive vascular plants, lichen and fungi, as well as noxious weeds. Sources include the McKenzie River Watershed Analysis (Willamette National Forest, 1995), field surveys conducted by Turnstone Environmental Consultants, Inc., in the spring and summer of 2002, and a Draft Biological Evaluation (Turnstone, 2003).

Camp White Branch lies within the Western Hemlock vegetation zone. The Western Hemlock Zone features diverse, productive forests high in biomass, dominated by Douglas fir in early successional stands and by Douglas fir and Western hemlock in late successional stands. Forest stands in the Camp White Branch area range in classification from mid to late seral, with the majority of the area characterized by late seral stage forests. The stand is multi-aged, with the oldest trees estimated at around 250 years. The stand structure is multi-layered, with large diameter Douglas fir (21-31.9" dbh), medium diameter Western hemlock (9-20.9" dbh), and saplings and pole trees (1-9" dbh) are predominantly Western hemlock.

Two plant communities characterize the Camp White Branch project area. The wetter areas in the eastern section of the camp are dominated by the Western hemlock/Devil's club/false soloman's seal (Tsuga heterophylla/Oplopanax horridum/Maiathemum stellata) association. The overstory here is dominated by Douglas fir and Western hemlock, also with a large component of Western red cedar. This community typically has well aerated soils that are saturated virtually year round (McCain and Diaz, 2002). A seasonal wetland about one acre in size is encompassed by the plant community, and is characterized by higher coverage of Western red cedar and dense red alder (Alnus rubra) in the overstory. The understory is characterized by the presence of red osier dogwood (Cornus stolonifera), skunk cabbage (Lysichiton americanum),

and several species of sedge (Carex sp.). Also within this community are the small streams and drainages crossed by the trails associated with the camp.

The vegetation on the less mesic, more upland areas immediately surrounding the camp lodge and cabins is characterized by the Western hemlock/dwarf Oregon grape/swordfern (Tsuga heterophylla/Mahonia nervosa/Polystichum munitum) plant association. This is a common plant association in the Old Cascades, occurring at mid-elevations in the Western hemlock zone (Franklin and Dyrness, 1988). Soils are characteristically well-drained, allowing for the presence of some drier site shrubs (McCain and Diaz, 2002). The overstory is dominated by Douglas fir with a cohort of Western hemlock, and also contains a component of Western red cedar and big leaf maple. The shrub layer is moderately well developed, a dominant shrubs in the understory are dwarf Oregon grape (Mahonia nervosa), vine maple (Acer circinatum), and sword fern (Polystichum munitum).

Trees and other vegetation have been removed from the site through past development, including construction of the existing camp. The trees remaining on site are located throughout the Camp, with the exception of cleared areas along and at the base of the Camp's snow play hill and around some camp buildings. Botany specialists did not observe any tree or root diseases at Camp White Branch during field surveys, although they did not conduct pathology surveys. The forest service does not have any tree diseases on record for the Camp.

b. Soils

The Soil Resource Inventory (SRI) of the Willamette National Forest identifies several dominant soil types within and immediately adjacent to the project area (WNF 1992). These are identified by the SRI as soil map units 62, 63, and 610. Map units 62 and 63 are valley bottom soils, while Map Unit 610 consists of soils and rock outcrops on steep slopes of the valley wall.

The valley bottom soils around Camp White Branch have developed primarily from basalt of the underlying lava flows. These soils are predominantly gravelly sandy loams and loams, and range in depth from shallow (<3 feet deep) to moderately deep (3-6 feet deep). Typically they are well- to excessively-drained soils that exhibit high infiltration rates and rapid permeability, relating to a comparatively low water holding capacity, low runoff potential, and a surface erosion hazard that is slight. Productivity of these valley bottom soils is considered to be relatively low as well, though they are capable of supporting dense forest vegetation. Most of the Camp is located on valley bottom soils, which underlie the area where the historic lodge, maintenance building, staff housing, amphitheater, adjacent cabins, swimming pool, dining hall, outdoor gathering area, and cook's cabin are presently located. Water draining through these soils is transported to the groundwater system.

Soils associated with the steep valley side wall developed mostly from colluvium of basalt and andesite. These soil types occupy the southern portion of the Camp, where the sled hill, volley ball courts, and adjacent cabins are located, as well as where the foot paths that cross the hillside are located. These are primarily very gravelly loams and silt loams that are typically shallow. However, the soils underlying the southern portion of the Camp are situated at the toe of the valley wall where colluvial materials accumulate, and so are markedly deeper. These are well-drained soils that also exhibit high infiltration rates and rapid permeability, yet since they occur on steep slopes, the runoff potential is greater than the valley bottom, and the hazard of surface erosion is moderately high.

The severity of slope of the valley side wall above and outside of the Camp correlates to a high inherent landslide hazard, particularly where soils are shallow. The hazard is greatest where slopes exceeding 70 percent are in direct association with headwalls and deep, confined drainageways. The outlets of these drainageways are sites where landslide materials are deposited, potentially in a devastating fashion, presenting a measure of concern regarding human safety. Several of the Camp's facilities are located at the outlets of two such features. These features include one of the fire rings where Camp users sometimes meet and which is located just to the east of the sled hill; and the existing cabins and volleyball court located on the west end of the Camp. In the western Cascades of Oregon, the frequency of naturally induced landslides is nearly always associated with heavy winter rains and storm events when annual soil moisture is at its greatest (Harr and Yee 1975).

There is another soil type associated with the Camp that is not recognized by the SRI because its extent was too small to delineate at the scale and resolution of available mapping data. It is included in the valley bottom soil identified as map unit 62. This is a hydric soil type associated with the wetland located along the eastern margin of the Camp near the manager's cabin and RV parking area. This soil exhibits a high water table; in winter standing water is present for a prolonged time. In the late summer and early fall, the water level recedes in most years. However, soils in this area remain saturated close to the surface during the dry season.

In and around the main Camp area, the buildings, footpaths, walkways, roads, parking areas, recreation areas and courtyards (i.e., sled hill and volleyball courts) are located on soils that have been disturbed, primarily as a result of the Camp's development and associated construction. These areas have been converted from what was once a densely forested condition to a more open condition to facilitate recreational uses and Camp activities. Beneath some surfaces such as roads, parking areas, and walkways, soils have been heavily compacted. On other surfaces, such as the sled hill and locations where structures and facilities were constructed, the original litter, duff, and topsoil layers were partially or wholly removed. Such alterations are collectively recognized as detrimental soil conditions, whereby effects to physical soil properties result in a diminished status of productivity. Within the Camp's permit boundary, these conditions account for an estimated 3 acres (about 15 percent of the permit area).

c. Hydrologic System

Camp White Branch is located within the 39,200 acre 6th-field subwatershed known as Lost Creek/White Branch, which comprises the southeastern portion of the larger Upper McKenzie 5th-field watershed, which comprises the eastern portion of the larger McKenzie River subbasin, which is tributary to the Willamette River Basin (USFS 1995).

In general, the climate in the immediate area is characterized as having wet, cold winters. Summers are typically warm and moist, but there are often periods of prolonged dryness, particularly in late summer and early fall. During most years, a snowpack of at least 2 or 3 feet accumulates at the Camp during winter, and generally persists into early spring. Average annual precipitation in the area ranges between about 70 to 80 inches (OCS 2004). Two thirds of the annual precipitation falls between November and March. In most years, winter storms typically bring the heaviest rains.

The hydrologic regime of the area is dominated by rain and snow. In general, the characteristic hydrograph for the area exhibits the lowest flows in late summer and early fall, increasing

steadily with the onset of the wet season. Flows are usually the highest during late fall, winter, and early spring. Flows recede gradually during spring and early summer as melt of the snowpack subsides. At 2,800 feet, the elevation of the Camp is considered to be within the transient snow zone (USFS 1995). Within this elevation band, it is not unusual for heavy winter rains to fall on snow accumulations, which results in high runoff that at times can lead to flooding.

Appendix E of the Willamette National Forest's (WNF) Land and Resource Management Plan (LRMP) designates a sensitivity rating to listed subdrainages. The rating assigned to the Lost/White Branch subwatershed is low, meaning that based on certain physical characteristics of the drainage, it exhibits a relatively low degree of sensitivity to disturbance (USFS 1990). Currently, disturbance in the form of created openings, such as those caused by clearcuts, roadways, or intense wildfire, are considered slight, and much of the subwatershed is considered intact. Since the level of disturbance in the subwatershed is considered slight, and its inherent sensitivity to disturbance is relatively low, the hydrologic regime is deemed to be functioning within its range of variability. Undesirable impacts to the hydrologic regime resulting from human disturbance are very low or undetectable at the subwatershed level.

d. Streams and Wetlands

There are several water bodies in close proximity to Camp White Branch. One is a medium sized stream several hundred feet east of the Camp's periphery, one is a small stream that flows down into the Camp from the south, and the other is a series of small seeps and connected wetlands that straddle the Camp's eastern boundary. The largest is White Branch Creek, which flows closest to the Camp along its eastern boundary. It is a tributary to Lost Creek, which flows to the McKenzie River near the intersection of State Highways 126 and 242. According to the Upper McKenzie Watershed Analysis (USFS 1995), White Branch Creek is categorized as a medium sized Class III and IV stream. Some reaches flow year-round, while others only flow seasonally. Intermittent reaches occur both upstream and downstream of the Camp. The reaches of White Branch Creek immediately adjacent to the Camp are perennially flowing, low gradient, pools, glides, and riffles with low, stable banks and a moderate degree of sinuosity. While White Branch Creek itself does not flow within the bounds of the Camp, it does flow under the Camp's access road through a flat bottomed, 5-foot diameter, corrugated metal culvert. In general, the reaches nearest the Camp are considered to be mostly intact, and there has only been a small degree of human-related disturbance to their attendant riparian zones. There has been little or no commercial timber harvest within the immediate vicinity, and there are few roads. A slight degree of disturbance in the form of walking trails and several dispersed fire rings where Camp users sometimes congregate is noticeable along several isolated segments of these reaches. At these sites, approximately 10 to 20 feet of the stream bank are bare and compacted as a result of excessive trampling. Combined, these sites are estimated to amount to less than 3 percent of the total length of the streambanks within the White Branch Creek reach closest to the Camp.

A small, unnamed stream flows into the Camp from the south. It is an ephemeral, Class IV stream that originates high above from the steep valley side wall, and enters the Camp near the top of the sled hill. The upper two-thirds of this stream flows in a debris slide channel, which is a steep, narrow, deeply incised and confined drainageway where periodically, heavy precipitation events can trigger landslides that scour the channel and sometimes transport sediment, rock, and woody materials to the valley floor. A forested and vegetated fan of deposited materials from past slide events is evident at the base of this drainageway. At times, the lower one-third of this stream has changed its position, and its channel has shifted periodically back and forth across the fan in response to slide events. Additionally, the location of the sled hill suggests that as a result of its construction, the lower third of this stream has been shifted to its current position, which currently flows through a relatively new channel that terminates just to the west of the existing cabins below. All of the surface flow from this stream, which is seasonal, infiltrates entirely into the ground, and there is no surface connection with White Branch Creek more than 1,000 feet to the north or any other water body.

To the east of the Camp, there are several other unnamed streams similar to the one previously described. These too are considered to be debris slide channels. They cross the undeveloped trail loop that leads to several of the dispersed sites where Camp users often meet, and to the small waterfall dubbed by Camp users as “White Branch Falls”, which is fed by a perennially flowing spring.

Near the existing pump house at the bottom of the sled hill, there are a number of small seeps and springs that issue from the base of the slope. These feed into a larger wetland about an acre in size located along the eastern boundary of the Camp, near where the existing RV parking area is located. It is a palustrine type of wetland as defined by Cowardin (1979), and consists primarily of a combination of emergent, shrub-scrub, and forested vegetation. During the wet season it is partially inundated with several feet of standing water, while in most summers it is not. From the base of the slope where the seeps and

springs are located, this wetland extends to the north where it connects with the riparian corridor of White Branch Creek. The Camp's RV parking area encroaches upon a portion of the wetland's southwestern edge.

e. Water Quality

Currently, there are no streams or stream segments in the Lost Creek/White Branch drainage or the project area that are on the DEQ 2002 303(d) list of water quality-impaired water bodies (DEQ 2003). The water quality of White Branch Creek is deemed high, since its origins and the origins of its tributaries arise from the relatively undisturbed Three Sisters Wilderness. It also is fed by many springs, both above and below ground, which are prime sources of clear, cold water. Based on observations during stream surveys, water temperatures in Lost Creek, as well as the perennially flowing reaches of White Branch Creek, ranged between 6 and 8 degrees centigrade. The water temperature of both streams is considered to meet the state standard of <14.4°C and the NMFS criteria of 10 to 13.9° C for listed beneficial uses related to fish (USFS, 2004).

The potential for human disturbance to adversely affect the water quality of White Branch Creek is considered to be relatively low. Principle uses in the subwatershed are semi primitive motorized, developed, dispersed, and wilderness recreation, conservation of aquatic habitat, and special permit use cabins. In the past, there has been little timber harvest, and there are very few existing road segments that are in contact with a water body. High up in the watershed, within the Three Sisters designated Wilderness Area, the use of livestock for trail use could have some effect to upper tributaries of White Branch Creek, but there are no known water samples from these streams to confirm or substantiate these possible effects. The use of livestock in the

Wilderness Area is limited primarily to the summer months, when several reaches downstream become dry at the surface, and flow is below ground, potentially limiting the downstream conveyance of livestock related contaminants.

Several trails and fire rings where Camp users meet are located on the banks and margins of White Branch Creek, its riparian zone, and the wetland on the eastern margin of the Camp. At these small sites, bare compacted soil is exposed and there is a potential for minor amounts of sediment to be delivered to water. But the amount of sediment contributed to the stream from these sites is believed to be well below the range of naturally occurring sediment that can potentially be contributed and routed through the watershed as a result of inherent processes such as landslides. Overall, the potential for deleterious effects to the water quality of White Branch Creek attributable to human activity are considered slight.

f. Aquatic System

FISH HABITAT

Habitat surveys were conducted individually for both Lost and White Branch Creeks in 2003. The Oregon Dept. of Fish and Wildlife conducted the surveys for Lost Creek, while the Forest Service conducted the surveys for White Branch Creek. Stream temperatures in perennially flowing reaches of both Lost and White Branch Creek that were sampled during surveys were very favorable for fish, ranging primarily between about 6 and 8 degrees Centigrade at the time of observation. Both streams are fed by many perennial springs, which provide a fairly constant input of clear, cold water. Consistent input from source springs also serves to moderate seasonal fluctuation of flow in both streams (USFS 1995). Stream surveys indicate that riparian vegetation along most of the length of these two streams is mostly intact except for a particular reach of White Branch Creek that flows through privately owned land. In nearly every reach there is an abundant supply of large woody debris, recruitment potential is excellent, and there is more than adequate shade (USFS 2004).

The gradient along most of the length of both Lost and White Branch Creek is relatively low. Along most reaches bank conditions are predominantly stable. Undercut banks are common and there is abundant side channel habitat. Overall, the habitat in both streams is highly complex, and considered to be in good condition on nearly all of the perennial reaches. Survey notes did indicate however, that there is a lack of large pool habitat, though perturbations attributable to humans are considered to be slight so the condition is largely natural.

Naturally occurring fine sediment is predominant in the substrate of most of the reaches of Lost and White Branch Creeks, although reaches comprised of excellent spawning gravel were observed in Lost Creek and certain bedrock controlled reaches of White Branch Creek. Soils that mantle the valley floor and sidewalls contain a high proportion of ash, and naturally occurring landslides function to deliver materials including fine sediment to the stream network. The low gradient of Lost and White Branch Creek relates to a low sediment transport capability, which in turn means that sediment retention in the system is high. Sediment attributable to human activity is considered to be negligible, as there are very few roads and road crossings, and there has been little past timber harvest in the subwatershed.

In White Branch Creek, there are several notable successive intermittent reaches where habitat is of low value. One reach in particular showed no apparent evidence of annual scour or deposition. The lower end of these reaches is marked by a seasonally dry, bedrock controlled

barrier falls at stream mile 0.7. The upper end is about 2 miles below Camp White Branch and is marked by beaver ponds fed by perennial flow.

Survey information of the perennial reach (Reach 8) of White Branch Creek closest to the camp indicates use by resident cutthroat trout and sculpin. These are mostly low gradient alluvial reaches with stable, often undercut banks, abundant small pools, copious amounts of in-channel large wood, and common side channel habitat. Riparian vegetation is mainly intact, relating to excellent potential for large woody recruitment, and shade is more than adequate (USFS 2004). Overall, the habitat for resident fish in Reach 8, the reach closest to the camp is described as being in good to excellent condition.

FISH PRESENCE

Lost Creek and White Branch Creek are the main fish bearing streams in the Lost Creek/White Branch 6th-field subwatershed. There are two fish species present in Lost Creek that are listed by NOAA Fisheries as "threatened", they are bull trout (*Salvelinus confluentus*) and spring chinook salmon (*Oncorhynchus tshawytscha*) (Rivera pers. comm. 2004). These species are also known to use the lowest reaches of White Branch Creek, roughly three miles below the Camp. These reaches extend from the confluence with Lost Creek roughly 0.7 miles upstream to a barrier falls. The Upper McKenzie Watershed Analysis (USFS 1995) indicates that Lost Creek is an important spawning and rearing stream for Chinook, and is used by bull trout for foraging. Bull trout, however, are not known to use Lost Creek for spawning and rearing. Within the larger Upper McKenzie River watershed there are other federally listed species that exist, but they are not known to utilize the Lost and White Branch tributaries. Other fish species that have been confirmed to use Lost Creek and the lower reaches of White Branch Creek include Coastal cutthroat trout (*Oncorhynchus clarki clarki*), rainbow trout (*Oncorhynchus mykiss*), and sculpin. The former two are designated by the Willamette National Forest Land and Resource Management Plan to be Management Indicator Species (MIS).

Resident fish have been observed in perennial reaches of White Branch Creek upstream of the natural barrier at stream mile 0.7 and the intermittent reaches that extend up to about stream mile 2.1. Within these perennial reaches, including the one closest to the Camp delineated as Reach 8, fish surveys indicate the presence of resident cutthroat trout and sculpin (USFS 2004). However, there are no fish bearing reaches within the Camp's permit area boundary.

Table 5: Federally Listed Fish Species in Lost Creek/White Branch Subwatershed

Species	Status	Listing Agency
Bull trout	Threatened	US Fish and Wildlife Service
Spring chinook salmon	Threatened	NOAA Fisheries

Source: USFS, Rivera, 2004

MOLLUSKS AND AMPHIBIANS

No sensitive, endangered, threatened, or survey & manage species are documented to occur and/or no habitat exists in the project area. Therefore, surveys for such species were not necessary or required.

2. MANAGEMENT DIRECTION

The Northwest Forest Plan (NWFP) (USDA/USDI 1994) includes directives intended to ensure the conservation of aquatic and riparian habitats. These directives address general and specific aquatic and riparian management strategies and objectives that are to be applied at a subwatershed-level of scale. At the project-level of scale, the consistency of proposed activities to these strategies and objectives is to be evaluated in terms of how they may affect aquatic and riparian conditions throughout an entire subwatershed. To be consistent with the directives contained in the NWFP, projects should not alter overall aquatic and riparian condition and function across a particular subwatershed.

The Aquatic Conservation Strategies (ACS) of the Northwest Forest Plan are also applicable. These are addressed individually in Section 4, Conformance to Management Direction.

The Willamette Forest Plan (USFS 1990) contains Standards and Guidelines (S&G's) that are intended to guide project planning on the National Forest. Those pertaining to water, soil, and riparian resources are aimed at minimizing or preventing undesirable impacts that could potentially result as a consequence of human activities, specifically proposed projects. Those interpreted to apply to the proposed action and project area include the WNF S&G's listed below, which are paraphrased for brevity. They include Forest Management Goals, Resource Management Goals, Forest Wide (FW) S&G's, and Management Area (MA) S&G's (MAs interpreted to be applicable to the Camp are 10c and 12b, which emphasize developed and dispersed recreation, special use sites, semi-primitive motorized use, and non-regulated timber harvest). They are identified by specific resource type.

a. Vegetation

The WNF provides the Forest-wide management direction related to silvicultural practices, consideration of noxious weeds and management of proposed, threatened, endangered and sensitive plant species. The Botany section of this EA describes management direction related to noxious weeds and (T, E and S species). Silvicultural standards and guidelines are oriented toward commercial timber harvest practices and projects. While the action alternatives include removal of selected trees where proposed new buildings would be located, these actions do not rise to the level of commercial timber harvest activities. Therefore, standards and guidelines related to timber harvest and silvicultural activities are not applicable.

b. Soils

Management direction for soils includes the following standards and guidelines:

- WNF MA-10C-13 and 14 – Structures and improvements shall facilitate use while protecting resource values, limit the amount of ground disturbance to that necessary for accommodating development
- FW-080 – Comply with other soil management objectives and forest management directives
- FW-086 – Manage areas prone to mass movement, public safety, and concerns regarding facilities and infrastructure
- FW-112 – Sewage treatment and disposal facilities shall be approved by DEQ

c. Hydrologic Systems

Appendix E of the WNF lists a measure useful for assessing cumulative effects to hydrologic functions, known as the Aggregate Retention Percentage (ARP). The value for the Lost

Creek/White Branch subwatershed is 70. Using the specified methodology, the ARP for this subwatershed should not exceed the listed value as a result of disturbance, particularly as a result of created openings attributable to human activities such as timber harvest and related road construction. Programmed timber harvest is not scheduled for the 10c WNF land allocation that entails the Lost Creek/White Branch subwatershed.

Since the Lost Creek/White Branch subwatershed is designated by the WNF as being within a Key Watershed, planned activities should be in accordance with standards and guidelines directed for that particular land allocation. At a subwatershed scale, the magnitude of effects attributable to the proposed actions should not jeopardize habitat for anadromous fishes. Therefore, the magnitude of existing and planned impacts to habitat components such as stream banks, slope stability, water quality, and riparian vegetation is to be minimized and prevented.

d. Streams and Wetlands

- WNF Forest Management Goal – Maintain ecological function of streams, wetlands, and associated riparian zones
- WNF Resource Management Goal – Maintain and enhance ecological values in floodplains, wetlands, and riparian areas
- FW-113 – Protect instream flow, streambanks, channel components, and streamside vegetation
- WNF Riparian Reserve S&Gs identify buffer width requirements around water bodies, and unstable and potentially unstable areas

e. Water Quality

- WNF Resource Management Goal – Maintain water quality
- FW-087 through FW-093 – Monitor and protect water quality and comply with existing laws
- FW-094 – Use Best Management Practices (BMP's) during road maintenance
- FW-099 – Follow erosion and pollution control specifications during construction
- FW-091 – Protect resources from chemical spills and hazardous materials
- FW112 – Ensure consistency of sewage and disposal facilities with other agency directives and laws

f. Aquatic System

- WNF Resource Management Goal – Minimize conflicts of human uses and activities with fish habitats
- FW121 – Manage habitat of fish indicator species in cooperation with state and federal agencies, and so that viable populations can be maintained

3. ENVIRONMENTAL CONSEQUENCES

This section addresses the potential direct, indirect, and cumulative effects of proposed activities associated with the alternatives on soils, vegetation, watersheds, hydrology, streams and wetlands, water quality and fisheries. Specific actions that are evaluated include ground disturbing activities, primarily associated with the construction of new facilities, and pertinent user activities.

The methodology used to evaluate the potential extent and magnitude of effects is primarily qualitative in character. To predict potential impacts, cause and effect relationships were discerned based on the extent and arrangement of ground disturbing activities and vegetation removal (grading and clearing) in relation to the characteristics and conditions of on-site resources, and the proximity to water bodies.

Direct and indirect impacts are discussed separately for each specific resource (soils, vegetation, watersheds, hydrology, streams and wetlands, water quality and fisheries). The discussion of cumulative impacts is combined for all these resources related to watershed values.

Direct and Indirect Impacts

A. VEGETATION

Effects Common to All Alternatives

There would be minor impacts on vegetation related to all alternatives associated with continued use of the Camp, including cutting of hazard trees, limited impacts as a result of trail use (e.g., trampling, compaction, etc.), and clearing and trimming to maintain areas around structures and trails.

Effects Common to Action Alternatives

Vegetation would be removed and/or cleared as a result of both action alternatives. Many of the proposed improvements to the Camp would take place in areas that have been cleared or otherwise disturbed through previous activities. However, some improvements would be constructed in existing wooded areas. The majority of the vegetation to be removed under these alternatives consists of shrubs and small trees at the site of the new camper cabins and other buildings or improvements. Approximately 35 - 68 trees, generally 4 to 12 inches in diameter would be removed at the site of the new cabins. In addition, 30 – 60 larger trees (averaging about 12 - 30 inches in diameter) would be removed during construction of these improvements. If desired by the USFS, these trees may be left on-site to increase the amount of woody debris in riparian areas. Some also could be used in construction of future new stream crossings during implementation of the Camp's Trails Plan. All buildings would be sited and constructed to minimize tree and other vegetation removal. However, none of these areas are within close proximity to White Branch Creek and none of the trees to be removed currently provide sources of shade or woody debris for the creek.

Restoration/ revegetation efforts would consist of replanting areas within the camp with native vegetation where vegetation has been adversely impacted in the past but would be unaffected in the future (e.g., around or between new cabins constructed in previously disturbed areas). Approximately 10,000 - 15,000 square feet of existing disturbed areas have been identified as potential areas for restoration/replanting. These restoration efforts would be coordinated with the McKenzie River Ranger District. The sum of the restored vegetation areas would be almost equal to the amount of vegetation to be cleared or removed, resulting in a very small amount of net vegetation loss for both action alternatives.

In coordination with the McKenzie River Ranger District, control and removal of invasive species would occur during the revegetation of riparian and other impacted areas. Native species would be used and planted at a density to allow successful competition with non-native invasive species.

Effects on listed, state sensitive and survey manage species, as well as on competing and unwanted vegetation are described in the *Botany* section of this chapter.

Alternative 2

Effects on vegetation related to specific improvements are summarized in Table 6.

Table 6: Impact of Proposed Camp White Branch Master Plan Improvements on Vegetation and Impervious Surfaces, Alternative 2

Proposed Action/Improvement	*QTY.*	*Unit size (sq. ft.)*	*Total size (sq. ft.)*	*Type, Number and Size of Vegetation to be Removed*
New cabins	10	600	6,000	30 - 40 small trees (4 – 12" dia.); 20 - 30 large trees (12 – 30" dia.)
New commons building	1	4,500	4,500	4 - 6 large trees (12 – 30" dia.)
New multipurpose building	1	9,000	9,000	4 - 6 small trees (4 – 12" dia.); 4 large trees (12 – 30" dia.)
New swimming pool	1	1,000	1,000	2 - 4 small trees (4 – 12" dia.); 2 - 3 large trees (12 – 30" dia.)
Renovated gate house	1	625	625	None
Parking areas	1	2,400	2,400	None
Total new impervious surface			**23,525**	
RV spaces (semi-permeable surface)	6 - 8	900	7,200	None
Total modified semi-permeable or permeable surface			**7,200**	
Total trees removed				36 - 50 small trees (4 – 12" dia.); 30 - 43 large trees (12 – 30" dia.)
Total restored/revegetated area			**10,000**	

While the total square footage of proposed improvements would be equal to about 2/3 of an acre, the net amount of vegetation lost or removed would be substantially lower, given that the largest buildings would be sited in areas that are already substantially disturbed or cleared (e.g.,

multipurpose and commons building) and given that approximately 10,000 square feet of area is proposed to be revegetated. Net loss of vegetation and tree cover over the long term would be approximately 5,000 – 10,000 square feet (less than 1/4 acre and about 1.5% of the Camp's permit area).

Alternative 3

Effects on vegetation related to specific improvements are summarized in Table 7.

Table 7: Impact of Proposed Camp White Branch Master Plan Improvements on Vegetation and Impervious Surfaces, Alternative 3

Proposed Action/Improvement	*QTY.*	*Unit size (sq. ft.)*	*Total size (sq. ft.)*	*Type, Number and Size of Vegetation to be Removed*
New cabins	7	875	6,125	14 - 20 small trees (4 – 12" dia.); 18 - 24 large trees (12 – 30" dia.)
New commons building	1	4,500	4,500	4 – 6 small trees (4 – 12" dia.); 4 - 6 large trees (12 – 30" dia.)
New multipurpose building	1	9,000	9,000	10 - 12 small trees (4 – 12" dia.); 8 - 10 large trees (12 – 30" dia.)
New swimming pool	1	1,000	1,000	2 - 3 small trees (4 – 12" dia.); 1 - 2 large trees (12 – 30" dia.)
Renovated gate house	1	625	625	None
New bath house	1	1,200	1,200	2 - 3 small trees (4 – 12" dia.); 1 - 2 large trees (12 – 30" dia.)
Expanded water storage reservoir*	1	600	600	4 - 6 small trees (4 – 12" dia.); 3 - 4 large trees (12 – 30" dia.)
Parking areas	1	2,400	2,400	4 – 6 small trees (4 – 12" dia.); 4 - 6 large trees (12 – 30" dia.)
Total new impervious surface			**25,450**	
RV spaces (semi-permeable surface)	6 - 8	900	7,200	10 - 12 small trees (4 – 12" dia.); 10 - 12 large trees (12 – 30" dia.)
Total modified semi-permeable or permeable surface			**7,200**	
Total trees removed				46 - 68 small trees (4 – 12" dia.); 49 - 60 large trees (12 – 30" dia.)
Total restored/revegetated area			**15,000**	

* Assumes 20,000 gallon storage tank, eight feet deep, and approximately 18 feet square, with a 6-foot buffer of cleared vegetation on each side; approximately 1/3 of the area already is devoid of vegetation.

While the total square footage of proposed improvements would be equal to about 3/4 of an acre, the net amount of vegetation lost or removed in the long term would be substantially lower, given that the largest buildings are sited in areas that would be currently substantially disturbed or cleared (e.g., multipurpose and commons building) and given that approximately 15,000 square feet of area is proposed to be revegetated. Net loss of vegetation and tree cover would be as described for Act 2.

B. SOILS

Conditions and proposed actions that could cause any potential effect to soil resources or alter erosion processes within the Lost Creek/White Branch subwatershed were analyzed. In particular, the extent of detrimental soil impacts directly affecting soil resources, the potential for accelerated erosion to indirectly affect water bodies, and the potential for unstable slope conditions were determined. The primary factors evaluated include existing facilities, ground disturbing activities related to new construction, clearing, site grading, and related Camp uses and activities.

Effects Common to All Alternatives

Currently, the majority of the Camp is located on soils that exhibit a surface erosion hazard that is considered slight. Nearly all of the proposed new construction and development would occur on soils exhibiting a slight surface erosion hazard.

Existing bare surfaces subject to accelerated erosion that potentially deliver sediment to a water body include the access road crossing over White Branch Creek, the existing foot trails and fire rings located directly on the banks of White Branch Creek, and the existing RV parking area immediately adjacent to the wetland just east of the manger's cabin. Combined, the extent of these contributing surfaces is small, amounting to slightly more than one-third of an acre. The amount of sediment generated from these sites is considered to be a minute fraction of that which is naturally produced by inherent erosion processes in the subwatershed, particularly mass wasting events.

Mitigation common to all alternatives is to eliminate some of the fire rings that are located directly on the bank of White Branch Creek and its tributaries, and to improve the foot trail crossings and restore the trampled vegetation there. These actions could reduce further the small fraction of sediment that enters the stream from these sites.

Several of the Camp's facilities are located at the outlets of steep, confined drainageways considered to be debris slide/flow corridors. A primary corridor is the source of the small unnamed ephemeral stream that enters the Camp from the south. The top of the sled hill and the existing cabins and volleyball court at the west end of the Camp are located below the outlet of this feature. A second parallel corridor is located about two-tenths of a mile to the east. One of the fire rings outside of the Camp's boundary where Camp users sometimes meet is located at its outlet. A third corridor is located about another two-tenths of a mile further east and is the drainageway where White Branch Falls is located. The outlets of these drainageways are sites where landslide materials are often deposited, potentially in a devastating fashion, presenting a measure of concern regarding human safety and potential damage to property. In response to the 1996 flood event, slide materials originating from the primary feature were deposited onto the sled hill, and extended to its base (pers. comm. Timmons).

No Action Alternative

In and around the main Camp area, the building footprints, footpaths, walkways, roads, parking areas, recreation areas and courtyards (i.e., sled hill and volleyball courts), etc. represent disturbed soils. These areas have been converted from what was once a densely forested condition to a more open condition to facilitate recreational uses and Camp activities. For this analysis, these alterations are recognized as detrimental soil conditions within the Camp's

permit boundary, and are estimated to amount to approximately 3 acres (17 percent of the permit area).

Effects Common to Action Alternatives

In and around the main Camp area, the existing and new building footprints, footpaths, walkways, roads, parking areas, recreation areas and courtyards (i.e., sled hill and volleyball courts), etc. represent, for this analysis, detrimental soil conditions associated with Alternatives 2 and 3. These would be areas where underlying soils have been heavily compacted or where organic and topsoil materials have been displaced. Within the Camp's permit boundary, the extent of these conditions could be expected to increase beyond the existing condition by a little less than an acre, for a total of approximately four acres (approx. 23 percent of the permit area). Most of the new construction, clearing, and site grading would occur on surfaces that have been impacted previously.

Under Alternatives 2 and 3, erosion control plans would be required as conditions of County building permits. As such, there would be no clearing and grading, or construction and development within the immediate and deliverable proximity of White Branch Creek or its riparian corridor. Erosion control structures would be required to contain sediment, preventing its mobilization and transport off-site. The potential for accelerated erosion and sedimentation to result in undesirable and adverse impacts to water bodies as a consequence of construction activities would be slight.

Neither of the Action Alternatives would be expected to appreciably increase the extent of bare surfaces and the amount of potentially deliverable sediment beyond the existing condition over the long-term. Thus, the existing level of accelerated surface erosion associated with the Camp would be expected to change little compared to the No Action Alternative, and the magnitude of sediment influx to water bodies attributable to the Action Alternatives would be expected to remain slight.

Under each of the Action Alternatives, new buildings and facilities are proposed to be located below the outlet of the primary feature, near where the existing cabins and volleyball courts occur. A fan of deposited materials immediately above these locations is apparent, indicating that slide events have occurred in the past. At present, a densely stocked, mid- to late-successional forest stand occupies much of this fan, suggesting that slide events of the recent past (last 60 to 80 years) have not been of a magnitude large enough to cause intense damage and heavy destruction.

The potential for naturally occurring slide events to be transported down these drainageways and debris slide corridors is very high. The frequency of such events will nearly always be associated with heavy winter rains and storm events when Camp users are typically few or vacant. The magnitude of such events and the probability that transported materials would cause damage to existing and proposed Camp facilities is less certain. Nevertheless, the potential for such damage to occur as a result of naturally occurring landslide events would be greatest where structures are located below or within the pathway of these types of terrain features.

Alternative 3

A segment of the access road proposed for construction under Alternative 3 would be located on the hydric soil inclusion associated with the existing wetland (approx. 1 acre) east of the manager's cabin. Approximately one- to two-tenths of an acre of this hydric soil would be cleared of vegetation and graded to facilitate the construction of the specified road segment. Construction of this road segment would diminish the capacity of these hydric soils to support wetland habitat.

In this Alternative, an expanded water storage tank would be located at the top of the snow play hill at the site of the existing water storage tank. The new tank would be substantially larger (approximately 20,000 gallons) and located in a concentrated footprint on a site noted for unstable soils, given steep slopes in this location. Additional engineering and site planning would be needed to demonstrate that location of the new water tank in this location would be feasible.

C. HYDROLOGIC SYSTEM

Conditions and proposed actions that could cause any potential effect or alteration to the hydrologic regime within the Lost Creek/White Branch subwatershed were analyzed, particularly with regards to effects on peak and base flows. The primary factors evaluated include created openings (i.e., open areas devoid of an effective, contiguous forested canopy), hardened and impervious surfaces, drainage routing, and any surface water withdraws or inputs.

Effects Common to All Alternatives

For any one of the individual alternatives, the potential for improvements and activities associated with the Actions Alternatives to alter any element of the hydrologic regime, either at a subwatershed scale or locally is considered to be very low.

Created openings and hardened or impervious surfaces are located around the main Camp area and include rooftops (building footprints), roads, parking areas, recreation and gathering areas, courtyards, sidewalks, and footpaths. Currently, the extent of created openings and hardened or impervious surfaces is estimated to amount to about 5 acres, or 29 percent of the permit area. At a subwatershed scale, these openings equate to less than two-one hundredths of one percent (<0.02%) of the total area in the Lost Creek/White Branch subwatershed. Neither of the Action Alternatives proposes to increase this amount substantially compared to the No Action Alternative.

Of the drainage and runoff generated from created openings and hardened or impervious surfaces, only a very small fraction of the total is available as runoff to White Branch Creek. Nearly all is lost eventually to evaporation or infiltration except for a short contributing segment of the Camp's access road that drains toward where it crosses the creek, and several short segments of a foot path. Combined, the extent of these contributing areas is very small, amounting to less than one tenth of one acre (0.05 acres). None of the Action Alternatives would result in a noticeable increase or decrease in the amount of potentially contributing area or runoff to White Branch Creek compared to the No Action Alternative.

There are no surface water withdrawals or direct discharge of any kind associated with the uses and activities of the Camp. Sprinklers and a small recreational water slide are sometimes used during the summer months. However, these additions are considered nominal because the

duration of use is limited to hot periods during summer months, and also because they are ground additions that infiltrate into the ground; they are not direct surface contributions to White Branch Creek. A water storage tank for the Camp located near the top of the snow play hill collects water from the ephemeral stream described on page 29. As the tank fills, water continues to flow through the tank, with no continuous change in the water supplied to this stream. Water from this reservoir is used for the Camp's water slide, swimming pool and fire suppression needs and only on an intermittent basis and does not represent a continuous withdrawal of surface water.

Since none of the alternatives would result in an appreciable change in the extent of created openings, or hardened and impervious surfaces, and there would be no permanent of continuous surface water withdraw or direct discharge, impacts or alterations to the peak/base flows and hydrologic regime of the Lost Creek/White Branch subwatershed would not be expected.

Alternative 3

As part of this alternative, the water storage tank located at the top of the snow play hill would be expanded from its current size to a capacity of about 20,000 gallons. The resulting tank would be used to supply a pressurize sprinkler system used in the event of a fire at the camp. The tank would continue to be supplied by water from the ephemeral stream at the top of the snow play hill. As the tank fills, water would continue to flow through the tank, with no continuous change in the water supplied to this stream. Water from this expanded tank would be used only for fire suppression and would not represent a continuous withdrawal of surface water. As a result, there would be no change to the hydrologic regime of the Lost Creek/White Branch subwatershed for this alternative.

D. STREAMS AND WETLANDS

Conditions and proposed actions that could cause any potential effect or alteration to the water bodies and wetland features associated with the Camp's facilities or its uses were analyzed, particularly with regards to effects upon channel morphology and riparian conditions. The primary factors evaluated in relation to the Camp White Branch Master Plan include existing facilities, proposed improvements and construction, and related uses and activities.

Effects Common to All Alternatives

Common to all alternatives, there would be no clearing and grading, or construction and development within the riparian corridor of White Branch Creek. The only potential effects to White Branch Creek are related to where the access road crosses the channel and where foot trails and fire rings are located directly on stream banks. It is currently estimated that about 3 percent of the total length of the streambanks within the White Branch Creek reach that is closest to Camp have been altered by the presence and use of foot paths, fire rings, and the road crossing. Conditions along the remainder of the streambanks are considered to be intact and relatively undisturbed. An action common to all alternatives would be to eliminate one or more of the fire rings that are located directly on the bank of White Branch Creek and its tributaries, improve the trail crossings, and restore trampled vegetation. These actions could reduce the amount of affected streambank and riparian vegetation, enhancing the nearly intact condition. There would be no undesirable or adverse effect to the channel configuration of White Branch Creek or its attendant riparian corridor as a result of the Camp's Master Plan.

No Action Alternative

The RV parking area currently impinges on a portion of the southwestern margin of the wetland located east of the manager's cabin. Its dirt and gravel surface is in close proximity to the wetland, and riparian vegetation consisting of a mix of large conifers, small hardwoods, and dense brush are believed to have once occupied the site. Due to the diminished cover and the proximity of the hardened surface, some of the gravel and dirt materials could potentially become available for transport to the wetland during heavy precipitation events. The contributing area, however, is not overly large (approx. one-third of an acre), and it is nearly level so the potential for runoff and sediment to be transported from the surface is considered nominal. There also is a narrow band of vegetation along this margin which functions as a partial buffer. Overall, the function and quality of the wetland is not judged to have been drastically altered or diminished as a result of the RV parking area.

Effects Common to Action Alternatives

For both action alternatives, there would be no impacts to water quality from use of the clearing north of the Camp's entry road for overflow parking. No improvements to this area are proposed and there would be no path for transport of sediment or other materials from this parking area to riparian areas within the analysis area.

A new septic drainfield would be constructed in the same location as the Camp's existing drainfield under both action alternatives. Preliminary calculations indicate that there is adequate space in this area for the new drainfield. However, a sand filter could be employed to increase efficiency and reduce the area needed for the drainfield. If a sand filter were used, there could be some irreversible conversion of surface soils to an artificial condition.

Alternative 2

Under Alternative 2, four of the new cabins that are proposed would be constructed in the immediate proximity of the lower end and terminus of the small unnamed stream that enters the Camp from the south. It is an ephemeral, Class IV, non-fish bearing stream that originates high above from the steep valley side wall. At present it flows through a relatively new and weakly defined channel that terminates just to the west of the existing cabins on the west side of the volleyball courts. All of the surface flow from this stream, which is seasonal, infiltrates entirely into the ground, and there is no surface connection with White Branch Creek more than 1,000 feet to the north or any other water body. Clearing and grading, and development and construction of these cabins could directly impact the lower end of the channel and would occur within the riparian corridor, which currently is only a faintly definable zone.

As a result of construction of the specified cabins, several potential effects could occur. The effects however, are not considered to be major from a functional aquatic and riparian perspective since the stream is unconnected by surface pathways to any other water bodies below. Additionally, because of infiltration, the stream's flow is contributed to the groundwater in the valley, which due to the underlying geologic formations is believed to be very large (Lund 1977). The fraction of groundwater this small ephemeral source contributes to the total annual recharge of the entire aquifer underlying the Lost Creek Glacial Trough is believed to be infinitesimal. For these reasons, the functional role of this individual small unnamed ephemeral

stream in the aquatic and riparian network of the subwatershed is considered to be relatively minor.

Of possibly greater concern, would be the potential effect of the small unnamed stream's seasonal flow upon any newly constructed cabins and facilities proposed for the west end of the Camp. Seasonal flow from the small unnamed stream could become diverted or concentrated as a result of construction. Depending on the direction it shifted or where it became concentrated, it could be diverted to a hardened surface on the west end of the Camp, where it could cause prolonged ponding and puddling during the winter, possibly inundating walkways and courtyards, and saturating the ground around foundations and supports, leading to diminished strength, comfort, and longevity of structures.

The proposed RV parking area under Alternative 2 would be developed further and enlarged slightly, and continue to be located near the southwestern edge of the wetland located east of the manager's cabin. Additional clearing of riparian vegetation could occur as part of this expansion. A reinforced turf surface is proposed to limit runoff and sedimentation, although some fine sediment from the surface could potentially become available for transport to the wetland during heavy precipitation events. The contributing area, however, would not be enlarged greatly (less than 6,000 square feet), and it would remain nearly level, so the potential for runoff and sediment from the surface to be delivered to the wetland would remain negligible. The band of vegetation between the parking area and the wetland would be retained and expanded so as to improve its function as a partial buffer. Overall, the function and quality of the wetland would not become substantially altered or diminished as a result of the development of the RV parking area proposed in Alternative 2.

Alternative 3

A segment of the access road proposed for construction under Alternative 3 would be located adjacent to the western portion of the existing wetland (approx. 1 acre) east of the manager's cabin. The alignment would follow an existing roadbed in this area that is approximately 15 – 30 feet north of the edge of the wetland. Trees and vegetation would be cleared and some grading or filling might be needed in this area but these activities would occur just outside of the wetland area. These activities could have minor impacts on the wetland (potential for increased erosion and resulting sediment transport both during construction and as a result of use of the road. However, these activities would not result in any displacement or filling of wetland areas.

Also, under this alternative, the existing RV parking area would be relocated to the western portion of the permit area and would no longer impact the wetland on the eastern edge of the Camp.

E. WATER QUALITY

Existing conditions and proposed actions that could cause any potential effect or alteration to the quality of water within the Lost Creek/White Branch subwatershed were analyzed, particularly in regards to beneficial uses related to fish and cold water sources as listed by DEQ. The primary factors evaluated include existing facilities, ground disturbing activities related to new construction, and related Camp uses and activities.

Effects Common to All Alternatives

There would not be any clearing of overstory/riparian vegetation within the immediate proximity of White branch Creek. The quantity and quality of existing riparian shade would remain intact and undisturbed. There would be no expected fluctuations in stream temperatures expected as a result of implementing the Camp's Master Plan.

Potential sediment inputs to a water body attributable to the Camp include the existing crossing of the access road over White Branch Creek, existing foot trails and fire rings located directly on the banks of White Branch Creek, and the existing RV parking area immediately adjacent to the wetland just east of the manger's cabin. Combined, the amount of sediment generated annually from these sites is considered to be minute since they are relatively small contributing surfaces. Neither of the Action Alternatives is expected to appreciably increase the magnitude of existing potentially deliverable sediment beyond the No Action Alternative over the long-term. Thus, the existing quality of water, particularly within the reach of White Branch Creek closest to the Camp is expected to change little as a result of the Master Plan, and effects downstream are not expected.

Within the Camp, small amounts of fluids and chemicals such as propane, motor oil, gasoline, and cleaning supplies are used. They are stored indoors in sealed or sealable containers. Since there are only small quantities of these substances, and their use is primarily confined to the grounds and facilities of the Camp, the risk for a potential spill to contaminate and threaten water quality is considered low. Small amounts of oil and grease from autos and motor vehicles could be expected to leak on the gravel and dirt surfaces of road segments and parking areas. However, these amounts are not expected to typically be of sufficient size to become mobilized and threaten water quality, and the risk of contamination is considered to be low.

No Action Alternative

The current septic system was installed some time during or after 1968 when it was permitted by the County. It likely was constructed in 1969. It currently is thought to be a standard system with a drainfield located at the base of the sled hill. Improvements to the drainfield were believed to have been made in the later 1970s to accommodate Camp improvements and upgrade system capacity. Presently, there have been no known recent incidents, or evidence that suggest that the system is in disrepair or is functioning improperly. The closest water body to the drainfield is the wetland on the east side of the manager's cabin approximately 225 feet away. White Branch Creek is more than 500 feet from the drainfield. There have been no known tests to determine whether or not the existing septic system has had any effect on the quality of ground or surface waters.

Effects Common to Action Alternatives

Under Alternatives 2 and 3, erosion control plans would be required as conditions of County building permits. As such, there would be no clearing and grading, or construction and development within the immediate or deliverable proximity of White Branch Creek or its riparian corridor. Erosion control structures would be required to contain sediment and prevent its mobilization and transport off-site. The potential for sedimentation to affect water quality as a consequence of construction activities would be slight.

Improvements to the septic system are proposed for Alternatives 2 and 3 to accommodate the increasing number of future users expected to occur and meet the needs of proposed new

facilities. The design and construction of these improvements would be dependent upon on-site soil limitations and capabilities as determined by a county percolation test. As such, provisions of county and DEQ regulations and permit requirements would dictate the type of septic system to install. Specific design features would be mandated to ensure a functional septic facility that properly treats the designed effluent loading rate, so that residence time renders it innocuous and prevents undesirable impacts to the quality of ground and surface water resources.

There would be no impacts to water quality from use of the clearing north of the Camp's entry road for overflow parking. No improvements to this area are proposed and there would be no path for transport of sediment or other materials from this parking area to riparian areas within the analysis area.

Alternative 3

Construction of the new entry road could affect water quality to some degree by increasing the risk of leaking fluids from motor vehicles entering the wetland on the eastern edge of the Camp. However, given conclusions already described above, impacts would be negligible.

F. AQUATIC SYSTEM

Conditions and proposed actions that could cause any potential effect or alteration to aquatic and riparian habitat within the Lost Creek/White Branch subwatershed were analyzed, particularly with regards to effects upon coarse wood availability, sedimentation, peak and base flows, and stream channels. The primary factors evaluated include existing facilities, ground disturbing activities related to new construction, and related Camp uses and activities.

Effects Common to All Alternatives

No adverse impacts to fish or fish habitat are expected as a result of existing Camp facilities and uses, or from new development and improvements. There would be no ground-disturbing activities or clearing within the immediate or deliverable proximity of the reaches of White Branch Creek and its riparian corridor closest to the Camp, which also is the nearest water body where fish are present. This reach only harbors resident cutthroat trout and sculpin; there is no anadromous use. The nearest presence of anadromous species is in lower reaches roughly three miles downstream. These reaches are separated from the reach closest to the Camp by a length of intermittent channel where in places there is no surface flow or discernible channel above ground.

Since no overstory or streamside/riparian vegetation would be removed, sources of streamside shade and coarse woody debris would remain intact along White Branch Creek and its banks, and riparian conditions would remain relatively undisturbed.

All sediment resulting from construction activities would be retained on-site, and there would be no pathways for delivery to White Branch Creek from the main Camp area. The minimal risk of increased erosion resulting from clearing, site grading, and new construction could be effectively mitigated using standard erosion control practices. A slight amount of sediment could be generated from several sites outside of the permit boundary and delivered to White Branch Creek. These include the crossing of the access road over the stream, and the existing foot trails and fire rings located directly on its banks. Combined, the amount of sediment generated annually from these sites is considered to be negligible compared to the natural sediment

regime of the Lost Creek/White Branch subwatershed. The sediment regime of the subwatershed would continue to function within its normal range of variability.

There are no expected impacts to peak/base flow because the geographic extent of the project is small in relation to the size of the Lost Creek/White Branch subwatershed. The extent of created openings and hardened or impervious surfaces would not increase appreciably above the existing condition, and forest canopy characteristics would remain largely unaltered. There is no existing or proposed withdraw or discharge associated with the Camp that could potentially affect peak/base flows. The hydrologic regime in the subwatershed would continue to function within its normal range of variability.

The quality of fish habitat, particularly within the reach of White Branch Creek closest to the Camp is expected to remain unchanged as a result of the Camp's Master Plan, and effects to anadromous habitat three miles downstream would be negligible.

CUMULATIVE IMPACTS

There are other uses on federal lands in the Lost Creek/White Branch subwatershed that, along with effects associated with the Camp's Master Plan potentially could contribute to cumulative effects to soil, water, aquatic, and riparian resources. These include: special permit sites, developed and dispersed recreation, and semi-primitive motorized use. In addition to the federal land, which comprises more than 98 percent of the subwatershed, there is a parcel of private land located along the lower reaches of White Branch Creek where rural residential development is ongoing. Also, State Highway 242 traverses the length of the subwatershed and is a major traffic thoroughfare during the summer.

At a subwatershed scale, conditions are considered to be relatively intact and the level of disturbance slight (USFS 1995). Nearly 75 percent of the subwatershed is in the Three Sisters Wilderness Area. In general, the primary uses on federal lands are considered to be non consumptive. Related activities do not result in substantial alterations to the landscape or the dense forest patches that cover the subwatershed. Uses are concentrated primarily where camping, hiking, and recreational opportunities are centered. The existing amount of roads and created openings is very low, and there are no large scale plans or objectives that would appreciably increase their extent in the future. The current Aggregate Recovery Percentage (ARP) for the subwatershed is well within the limits of the midpoint threshold assigned in Appendix E of the LRMP. Existing streamside impacts are limited to certain areas where recreation opportunities are concentrated, and aquatic and riparian habitat is considered to be in a good condition with few minor impacts. The sensitivity of the subwatershed to disturbance is rated by the LRMP as low.

The effects to soil, water, aquatic, and riparian resources potentially resulting from the Action Alternatives would be predicted to be low. Currently, the overall disturbance level in the subwatershed is minimal and resources are in good condition. Effects would not be expected to markedly increase the low degree of existing disturbance. Hence, cumulative effects to soil, water, aquatic, and riparian resources in the subwatershed would be expected to remain nominal.

Implementation of the Camp's proposed Trails Plan could have minor cumulative effects on streams, water quality, and fisheries as trails are improved and/or crossings over streams and wet areas are developed or reconstructed. Such activities could increase the flow of sediment

into White Branch Creek or affect riparian areas during construction. However, over the long term, these improvements would be intended to reduce the impacts of trails and water crossings on watershed values by stabilizing soils, improving drainage conditions, and reducing erosion and resulting sediment transport. In addition, best management practices would be used to minimize short term impacts and improvements would be constructed to USFS standards for such facilities. As a result, long term cumulative impacts from these activities would be either positive or negligible.

4. CONFORMANCE TO MANAGEMENT DIRECTION

Throughout this and other sections of this chapter, discussion of conformance to Management Direction generally will be applied only to the action alternatives (Alternatives 2 and 3). Because the No Action Alternative (1) does not assume any specific management action, it is not appropriate to consider its conformance or consistency with Management Direction.

a. Willamette National Forest Plan

Actions associated with the Camp White Branch Master Plan are not interpreted to be consumptive or extractive uses, and are not necessarily viewed as contrary to the management goals and objectives designated by the WNF for soil, water, riparian, and aquatic resources. The extent and magnitude of effects to these resources that could potentially occur as a result of implementing any of the alternatives is determined to be relatively slight, primarily because the aerial extent of proposed actions would not increase markedly beyond the existing uses. The proposed actions and predicted effects are interpreted to be consistent with applicable S&Gs and uses pertaining to designated Management Areas 10c and 12b. Specifically, Camp uses and improvements proposed under the Master Plan would be consistent with existing management of developed and dispersed recreation, special use sites, and semi-primitive motorized uses elsewhere in the subwatershed, particularly where these uses are in close proximity to aquatic and riparian resources.

b. Northwest Forest Plan Standards and Guidelines, including Aquatic Conservation Strategies (ACS)

Activities in the range of alternatives are not individually evaluated in the context of their consistency with ACS objectives. Rather, they are evaluated in the context of the existing conditions and the functionality of the aquatic and riparian system as a whole throughout the entire Lost Creek/White Branch subwatershed.

Actions in the range of alternatives are considered to be consistent with similar uses elsewhere in the Lost Creek/White Branch subwatershed, notably existing developed and dispersed campgrounds and special permit use sites. The majority of these are within Riparian Reserves and are managed in a manner consistent with the applicable standards, guidelines, and objectives set forth in the NWFP. As long as these uses do not appreciably degrade aquatic and riparian conditions, properly functioning conditions and essential habitat should be available over the long-term for aquatic and riparian dependent species, ensuring their persistence. Effects to aquatic and riparian resources attributable to the Camp's Master Plan would be minor. Thus, associated actions within Riparian Reserves would be consistent with objectives set forth by the NWFP and the ACS.

B. BOTANY

1. AFFECTED ENVIRONMENT

a. Threatened, Endangered, Proposed, Sensitive, and Former Survey and Manage Species

This project is within old-growth/late-successional habitat. There is potential habitat for former survey and manage vascular plants, bryophytes, and lichens. Surveys were conducted for these species.

A prefield review of the proposed project area for plant species listed on the 2004 Regional Forester's list and former Survey and Manage list for the Willamette National Forest was conducted. Vascular and non-vascular plant species formerly on the Willamette National Forest Survey and Manage list that have been moved to the Region 6 Sensitive list (July 2004) also were considered. Species formerly designated Survey and Manage category A and C were surveyed if they had been transferred to the USFS Region 6 Sensitive Plant list. These species are not discussed separately within this evaluation.

No known sensitive plant populations were found during the pre-field review. There is potential habitat for 20 species on the list: 13 vascular plants, 5 lichens, and 2 bryophytes. Species with potential habitat are: *Botrychium minganense, B. montanum, Carex scirpoidea var. stenochlaena, Cimicifuga elata, Coptis triflora, Corydalis aqua-gelidae, Ilimna latibracteata, Montia howellii, Ophioglossum pusillum, Scheuchzeria palustris, Uticularia minor, Wolffia borealis, Wolffia columbiana, Hypogymnia duplicata, Leptogium cyanescens, Lobaria linita, Nephroma occultum, Pseudocyphellaria rainierensi, Schistostega pennata,* and *Tetraphis geniculata.* A copy of the sensitive plant list dictating presence and absence of habitat for each species and species surveyed is found in Table 8 below.

Table 8. Regional Forester's list of sensitive plant species on the Willamette National Forest

Species	Federal Status	Oregon Status	Habitat present?	Effects, impacts and required mitigation
Vascular Plants				
Agoseris elata			N	NI. No suitable habitat present.
Arabis hastatula			N	NI. No suitable habitat present.
Arnica viscosa			N	NI. No suitable habitat present.
Asplenium septentriole			N	NI. No suitable habitat present.
Aster gormanii	SoC	C	N	NI. No suitable habitat present.
Botrychium minganense			Y	NI. Suitable habitat exists but no species located.
Botrychium montanum			Y	NI. Suitable habitat exists but no species located.
Botrychium pumicola	SoC	LT	N	NI. No suitable habitat present.
Calamagrostis brewerii			N	NI. No suitable habitat present.
Carex livida			N	NI. No suitable habitat present.
Carex scirpoidea var. stenochlaena			Y	NI. Suitable habitat exists but no species located.
Cimicifuga elata	SoC	C	Y	NI. Suitable habitat exists but no species located.

Species	Federal Status	Oregon Status	Habitat present?	Effects, impacts and required mitigation
Coptis trifolia			Y	NI. Suitable habitat exists but no species located.
Corydalis aquae-gelidae	SoC	C	Y	NI. Suitable habitat exists but no species located.
Eucephalus vialis	SoC	LT	N	NI. No suitable habitat present.
Frasera umpquaensis	SoC	C	N	NI. No suitable habitat present.
Gentiana newberryi			N	NI. No suitable habitat present.
Iliamna latibracteata			Y	NI. Suitable habitat exists but no species located.
Lewisia columbiana var. columbiana			N	NI. No suitable habitat present.
Lycopodiella inundata			N	NI. No suitable habitat present.
Montia howelli	SoC	C	Y	NI. Suitable habitat exists but no species located.
Ophioglossum pusillum			Y	NI. Suitable habitat exists but no species located.
Pellaea andromedaefolia			N	NI. No suitable habitat present.
Polystichum californicum			N	NI. No suitable habitat present.
Potentilla villosa			N	NI. No suitable habitat present.
Romanzoffia thompsonii			N	NI. Suitable habitat exists but no species located.
Scheuchzeria palustris			Y	NI. No suitable habitat present.
Sisyrinchium sarmentosum	SoC	C	N	NI. No suitable habitat present.
Utricularia minor			Y	NI. Suitable habitat exists but no species located.
Wolffia borealis			Y	NI. Suitable habitat exists but no species located.
Wolffia columbiana			Y	NI. Suitable habitat exists but no species located.
Lichens				
Hypogymnia duplicata			Y	NI. Suitable habitat exists but no species located.
Leptogium cyanescens			Y	NI. Suitable habitat exists but no species located.
Lobaria linita			Y	NI. Suitable habitat exists but no species located.
Nephroma occultum			Y	NI. Suitable habitat exists but no species located.
Pseudocyphellaria rainierensis			Y	NI. Suitable habitat exists but no species located.
Bryophytes				
Schistostega pennata			Y	NI. Suitable habitat exists but no species located.
Tetraphis geniculata			Y	NI. Suitable habitat exists but no species located.
Fungi				
Bridgeoporous nobilissimus			N	NI. No suitable habitat present.

Species Status

SoC- Species of Concern
C- Candidate
LT- Threatened

b. Competing and Unwanted Vegetation

There is some evidence of competing and unwanted vegetation (noxious weeds) near the project area. There is spotted knapweed (*Centaurea maculosa*) and false broome (Brachypodium sylvaticum) on highway 242. However, these sites are not directly adjacent to the Camp White Branch property and no noxious weeds were observed at the Camp during botanical surveys.

2. MANAGEMENT DIRECTION

a. Northwest Forest Plan

Relevant Northwest Forest Plan S&Gs include those for Riparian Reserves and former S&M Species.

b. Willamette National Forest Plan

The WNF provides Forest-wide management direction related to consideration of noxious weeds (see Botany section). Specifically, proposed activities should be designed and monitored to reduced the risks of spreading and introducing noxious weeds.

Forest-wide management direction also is provided for threatened, endangered and sensitive plants and animals (FW-154 through FW-161), including the following general requirements:

- Manage T, E & S species consistent with the Federal Endangered Species and Oregon Endangered Species Acts.
- Prepare biological evaluations for T, E & S species.
- Consult with USFWS for T, E & S species.

3. ENVIRONMENTAL CONSEQUENCES

Direct and Indirect Impacts

<u>THREATENED, ENDANGERED, PROPOSED, SENSITIVE, AND FORMER SURVEY AND MANAGE SPECIES</u>

Effects Common to All Alternatives

Surveys of the proposed project area for sensitive plants were conducted in the spring/summer of 2004 by Turnstone Environmental, Inc. No sensitive plants were observed during the surveys. Effects for these species are described in Table 8 on page 50-51.

Effects Common to Action Alternatives

Because no habitat for T, E, S and former S and M species and/or the species themselves were not found to be present at the Camp, there would be no effect on these species for the action

alternatives.

COMPETING AND UNWANTED VEGETATION

Effects Common to All Alternatives

Ongoing maintenance and operation of the camp could increase the risk for introduction of competing and unwanted vegetation through entry of vehicles and equipment into the camp and soil disturbance activities.

Effects Common to Action Alternatives

The potential to introduce competing and unwanted vegetation through entry of vehicles and equipment into the camp and soil disturbance activities would be greater under the action alternatives than under the no action alternative. Best management practices would be required to minimize the potential for intrusion and are described in Appendix A. There would be no measurable difference in the potential for intrusion of unwanted species among the two action alternatives.

Cumulative Impacts

THREATENED, ENDANGERED, PROPOSED, SENSITIVE, AND SURVEY AND FORMER MANAGE SPECIES

There would be no additional cumulative impacts for any of the botanical species or those listed in section (a) as no species were found during botanical surveys.

COMPETING AND UNWANTED VEGETATION

Revegetation of disturbed areas could increase the potential for introduction of competing and unwanted vegetation

4. CONFORMANCE TO MANAGEMENT DIRECTION

a. Alternatives 2 and 3

THREATENED, ENDANGERED, PROPOSED, SENSITIVE, AND FORMER SURVEY AND MANAGE SPECIES

Both Alternatives 2 and 3 would conform to all applicable management direction. The following actions and procedures would be undertaken to ensure conformance with management direction:

- Federally listed species would be managed consistent with the Federal Endangered Species and Oregon Endangered Species Acts.
- Biological evaluations and/or assessments for federally listed species have been prepared pursuant to NEPA and USFS guidelines. No federally listed species were observed in the project area during field surveys.
- Consultation with other federal agencies was not required, given findings of no effect for federally listed species.

- No hardwood communities would be affected by the proposed improvements.

COMPETING AND UNWANTED VEGETATION

Management direction requires that intrusion of noxious weeds and unwanted vegetation be minimized during project implementation. A variety of best management practices (BMPs) are recommended to be undertaken during the course of improvements where applicable to reduce the potential for introduction and proliferation of competing and unwanted vegetation. These BMPs are described in Appendix A.

C. WILDLIFE

1. AFFECTED ENVIRONMENT

Pre-field reviews were conducted with resource area biologists to determine which species from the Regional Forester's 2004 Sensitive Species List and 1994 Survey and Manage Species List for the Willamette National Forest are known to occur in the project area. Suitable habitat for these species was also considered within and adjacent to the project area. Table 9 displays the summary of effects/impacts for these wildlife species.

Table 9: Threatened, Endangered, Proposed, Sensitive, and Survey and Manage Species with Potential to Occur Within Project Area

TES & SM Species	Oregon Status	Federal Status	Habitat present?	Effects/Impacts and Required Mitigation
Least Bittern ***Ixobrychus exilis***	None	SP	No Habitat	NI. No documented sightings in WNF but suspected to occur. No open marshes present at site.
Bufflehead ***Bucephala albeola***	None	SU	No Habitat	NI. No open waterways at site which is a habitat requirement of species.
Harlequin Duck ***Histrionicus histrionicus***	None	SU	No Habitat	NI. No fast moving waters with loafing at site which is prefered by species.
Yellow Rail ***Coturnicops noveboracensis***	None	SC	No Habitat	NI. No documented occurances in WNF but suspected to occur. No presence of wet meadows or marshes.
Black Swift ***Cypseloides niger***	None	SP	No Habitat	NI. No documented occurances in WNF but suspected to occur. No cliffs present at site for foraging/nesting.
Baird's Shrew ***Sorex bairdii permiliensis***	None	None	No Habitat	NI. Listed on the heritage ranking sytem as T3 = Subspecific taxon is either very rare throughout its range or found locally in a restricted range.
Pacific Shrew ***Sorex pacificus cascadensis***	None	None	No Habitat	NI. Listed on the heritage ranking sytem as T3 = Subspecific taxon is either very rare throughout its range or found locally in a restricted range.
California wolverine ***Gulo gulo***	None	T	No Habitat	NI. Avoid human contact and prefer higher elevation. Would likely avoid site.
Pacific Fisher ***Martes pennanti***	SC	None	No Habitat	NI. Few documented sightings in WNF. Most observations at high elevations but can be found at mid elevations. Would likely avoid site to escape human contact.
Pacific Fringe-tailed bat ***Myotis thysanodes vespertinu***	None	None	No Haitat	NI. Listed on the heritage ranking system as T2 = Subspecific taxon is imperiled globally.
Townsend's Big-eared Bat	None	SC	No	NI. Most occurances are at lower

TES & SM Species	Oregon Status	Federal Status	Habitat present?	Effects/Impacts and Required Mitigation
Corynorhinus townsendii			Habitat	elevations. Prefer caves, mines or buildings with humid conditions.
Oregon Slender Salamander ***Batrachoseps wrighti***	None	SU	Habitat	NI. Mostly found in lower elevations but is within the range that the species can be found.
Cascade Torrent Salamander ***Rhyacotriton cascadae***	None	SV	Habitat	NI. Found in cold springs, seeps and headwater streams.
Foothill Yellow-legged Frog ***Rana boylii***	None	SV	No Habitat	NI. No documented habitat or sightings on district.
Oregon Spotted Frog ***Rana pretiosa***	C	SC	No Habitat	NI. Preferences to marshes and slow moving warm water which is not available at site.
Northwestern Pond Turtle ***Clemmys marmorata marmorata***	None	SC	No Habitat	NI. Associtated with moderately deep water and slow moving water which is not present at site.
North American Lynx ***Felis lynx canadensis***	T	None	No Habitat	NI. No documented sighting on district. Prefer higher elevations of subalpine fir and lodgpole pine where snowshoe prey is available.
Northern Spotted Owl ***Strix occidentalis***	T	T	Habitat	NE. Older forest stands present. All documented activity centers are at least 0.5 miles from project area.
Peregrine Falcon ***Falco peregrinus anatum***	None	E	No Habitat	NE. No cliff habitat available at site.
Bald Eagle ***Haliaeetus leucocephalus***	T	T	Habitat	NE. Seasonal restriction January 1 – August 31 to minimize disturbance during the critical nesting period if nest or roost is discovered.
Crater Lake Tightcoil ***Pristiloma arcticum crateris***	None	S1	No Habitat	NI. No documented occurances in WNF but suspected to occur. Originally on survey and manage list then put on sensitive list March 2004.
Great Gray Owl ***Strix nebulosa***	None	None	Habitat	NI. Listed on SM species list which was dropped March 2004. No special status. Nesting and foraging habitat present but no documented species located at site.
Red Tree Vole ***Arborimus longicaudus***	None	S1	Habitat	Listed on SM species list which was dropped March 2004. Now considered Sensitive in NW Coast. Habitat present but no documented species located at site.

Effects/Impacts and Required Mitigation

NI / **NE=** **N**o **I**mpact for Sensitive species. **N**o **E**ffect for Threatened or Endangered species.

NLCT = May impact individuals or their habitat, but the action will **N**ot **L**ikely **C**ontribute to a **T**rend towards Federal Listing or loss of viability to the population or species.

MANLAA= **M**ay **A**ffect, **N**ot **L**ikely to **A**dversely **A**ffect.

MCT = May impact individuals or their habitat, with a consequence that the action **M**ay **C**ontribute to a **T**rend towards Federal Listing or a loss of viability to the population or species.

BI = **B**eneficial **I**mpact.

Species Status

SC=Sensitive species, critical category

SV=Sensitive species, vulnerable category

SP=Sensitive species, peripheral or naturally rare category

SU=Sensitive species, undetermined status

S1=Critically imperiled in respective state
E=Listed as endangered
T=Listed as threatened

a. Federally-Listed Species

BALD EAGLE

The bald eagle requires habitat consisting of scattered old-growth conifer trees in proximity to available food sources, such as lakes, reservoirs and rivers (USDI 1990). Scattered old-growth conifer trees are present for nesting at the camp. However, foraging opportunities are limited. Since bald eagles prefer roosting and nesting sites in the close proximity to foraging areas it is unlikely that bald eagles would use the available habitat. No nest or roost sites have been documented on or adjacent to the camp. Numerous sightings of bald eagles have occurred on the Mckenzie River approximately 7 miles to the north.

NORTHERN SPOTTED OWL

In general, northern spotted owl activity primarily occurs in the interior of older timber stands (see Attachment 1). These habitats provide the structural characteristics required by the owls for food, cover, nest sites and protection from weather and predation. Forest structure within and adjacent to Camp White Branch provides many of the necessary requirements needed for the spotted owl to survive. The project area is identified as within a Spotted Owl Critical Habitat Unit area. However, there are no known identified nesting sites within the Camp White Branch. Several spotted owl activity centers are located within ½ mile to one mile of the Camp.

Owl biologists from the H.G. Andrews Experimental Forest are currently conducting a demography study in areas adjacent to the project site. Based on field reconnaissance of the project area, it was determined that potential habitat was present for the northern spotted owl. The need for northern spotted owl surveys was discussed in meetings prior to the survey season. Under the advisement of the acting District Ranger, no northern spotted owl surveys were conducted. It was stated that sufficient historical information on northern spotted owl provincial home ranges in the project area was available and that additional surveys were not necessary.

b. State Sensitive and Northwest Forest Plan S&M Species

Potential habitat within the project area is limited to the following R6 sensitive species. No potential habitat exists for other sensitive species listed in Table 5.

CRATER LAKE TIGHTCOIL SNAIL

Although crater lake tightcoil snails have never been identified in the McKenzie River Ranger District, it is suspected by mollusk experts to have the available habitat. This mollusk requires wet areas at elevations above 2000 ft. (Duncan, et al. 2003). Camp White Branch is located at 2,800 ft with seasonally wet areas present, within the habitat requirements needed for the crater lake tightcoil snail.

Mollusk surveys were conducted in May and June of 2004 following Forest Service protocol, with no crater lake tightcoil snails identified.

CASCADE TORRENT SALAMANDER

The torrent salamander prefers very cold, clear springs, seeps, headwater streams and waterfall splash zones. They forage in moist forests adjacent to these areas. They lay their eggs in rock crevices in seeps, mostly in the spring. No cascade torrent salamanders have been documented at the camp although habitat is present near hiking trails just outside the boundaries of Camp White Branch.

OREGON SLENDER SALAMANDER

The Oregon slender salamander is a terrestrial species that prefer old-growth conifer forests with large numbers of down logs. They lay their eggs under thick bark, inside crevices of decaying wood and in talus. No Oregon slender salamanders have been documented within the project area although habitat is present near hiking trails just outside the boundaries of Camp White Branch.

RED TREE VOLE

The Oregon red tree vole is endemic to moist coniferous forests of western Oregon and northwestern California. Optimal habitat has been identified as old growth Douglas fir forests. Red tree voles occur in old growth forests much more often than in younger forests (Biswall, et al 2002). These habitat characteristics were present at Camp White Branch which triggered a survey effort for the Oregon red tree vole.

These surveys occurred prior to a March 2004 Record of Decision to remove or modify the S & M Mitigation Measure S & Gs. Now, only appropriate habitat in the northwest Oregon Coast Range is required to be surveyed.

Surveys concluded that no Oregon red tree voles were present in or adjacent to Camp White Branch. The Oregon tree vole is no longer considered a sensitive species on the Willamette National Forest; therefore, no potential impacts on the species due to proposed activities are addressed.

GREAT GRAY OWL

Great gray owls are associated with mature stands for nesting and roosting in close proximity to open, grassy areas for foraging. These habitat types are found within and adjacent to Camp White Branch. Great gray owls have not been observed at the camp but have been observed in nearby drainages by Forest Service biologists.

The presence of potential habitat triggered surveys prior to the S & M Record of Decision. No great gray owls were detected during six site visits in spring 2004. A second year six-site visit is required in 2005 according to the Survey and Protocol for the Great Gray Owl. However, the March 2004 ROD eliminated the great gray owl as a S & M species and it has not been re-listed as a sensitive species. Therefore, the second year survey for great gray owls is no longer required.

OTHER STATE SENSITIVE AND SURVEY AND MANAGE SPECIES

Information about the presence of habitat and/or individuals for other species is summarized in Table 7. For these species, no habitat exists within the project area.

2. MANAGEMENT DIRECTION

a. Northwest Forest Plan

As a Matrix area, management direction for the project area is oriented toward protecting and minimizing late-successional reserve areas. The Northwest Forest Plan indicates that development of facilities within Matrix areas, such as recreational sites, will be approved on a case-by-case basis if effects on late-successional reserves and wildlife habitat within them can be minimized. The Northwest Forest Plan also requires the following:

- Protect 100 acres of late-successional habitat around owl activity centers that were known as of January 1, 1994.
- Manage known sites for rare organisms.
- Survey for the presence of rare organisms prior to ground-disturbing activities.

b. Willamette National Forest Plan

Applicable WNFP standards and guidelines include FW 127, 154, 156 and 158. Other standards and guidelines related to nesting sites, deer and elk habitat emphasis areas, are not directly applicable as these areas are not present at or in close proximity to the camp. Applicable standards and guidelines generally require identification and management of habitat for proposed, endangered, threatened or sensitive (PETS) species. FW 162 – 175 address requirements for specific PETS species and their habitats. Specific requirements are related to the following:

- Implementation of recovery efforts for threatened and endangered species.
- Protection of bald eagle, spotted owl and great gray owl nesting habitat
- Protection or improvement of habitat for other T, E & S species.
- Management of T, E & S species consistent with the Federal Endangered Species and Oregon Endangered Species Acts.
- Preparation of biological evaluations for T, E & S species.
- Consultation with USFWS for T, E & S species.

3. ENVIRONMENTAL CONSEQUENCES

Direct and Indirect Impacts

FEDERALLY LISTED SPECIES

Effects Common to All Alternatives

Bald Eagle

There are no expected effects to bald eagle occupied nesting habitat since there are no known nest sites in the proposed project area. The Willamette National Forest Plan indicates that potential roosting, nesting and foraging habitat has been designated within 1.1 miles of specific

reservoirs, lakes and rivers. Camp White Branch is more than three miles from the nearest of these features (the McKenzie River). Consequently, disturbances or activities associated with this project, including continued use of the Camp as part of the No Action alternative and improvements proposed as part of the action alternatives, would have no effect on bald eagles. If a nest or roost site is discovered within the project area in the future, then a seasonal restriction from January 1 to August 31 could be required to limit the potential effects from noise disturbance associated with this project.

Northern Spotted Owl

As noted in Section 2, the 1994 Record of Decision (ROD) for the Northwest Forest Plan vacated previous management direction and amended the Willamette National Forest Land Management Plan (1990). The 1994 ROD includes a network of large Late Successional Reserves (LSR) distributed throughout the owl's range, totaling approximately 7.4 million acres. It also includes 100-acre LSR's to be designated around owl sites known as of Jan. 1, 1994. The 1994 ROD, which also includes additional protection for riparian areas and other species, was assessed by the USFWS, and a determination was made that it would not jeopardize the northern spotted owl.

Old growth forest structure is currently present for northern spotted owls which provide foraging, nesting and roosting habitat in and adjacent to the camp. With minimal impacts to habitat within the boundaries of the camp and no manipulation of trees or habitat outside the Camp the forest will continue to evolve into old growth forest structure. Managing Forest Service lands consistent with the 1994 ROD will minimize the direct effects of the proposed action on the spotted owl. Avoiding activities that result in “incidental take” of owls will further mitigate adverse effects.

The project area is identified as within a Spotted Owl Critical Habitat Unit area. However, there are no known identified nesting sites within the Camp White Branch. Potential disturbances occurring within the boundaries of the camp will not affect any constituent habitat elements. All activities will occur in the close proximity of established structures in disturbed habitats. Known spotted owl activity centers have been located near the project area but no closer than 0.5 miles. As a result, disturbances and activities associated with this project, including continued use of the camp as part of the No Action alternative and improvements proposed as part of the action alternatives, will have no effect on northern spotted owls or the habitat they use to survive.

STATE SENSITIVE SPECIES

Crater Lake Tightcoil Snail

As noted above, crater lake tightcoil snails have never been identified in the McKenzie River Ranger District, though it is suspected by mollusk experts to have the available habitat. In addition, no crater lake tightcoil snails identified in biological surveys conducted in May and June, 2004 as part of field visits and preparation of a biological evaluation for this project. As a result, it is determined that the alternatives will not negatively impact the crater lake tightcoil snail or the crater lake tightcoil snail habitat.

Cascade Torrent Salamander

As noted above, no cascade torrent salamanders have been documented at the camp during wildlife field surveys conducted for this project, although habitat is present near hiking trails just outside the boundaries of Camp White Branch. As a result, ground disturbing activities within the permit boundary would have no impact on the cascade torrent salamander or its habitat. In addition, continued use of the trails outside the boundary would not be likely to adversely impact this species.

Oregon Slender Salamander

As noted above, no Oregon slender salamanders have been documented at the site although habitat is present near hiking trails just outside the boundaries of Camp White Branch. As a result, ground disturbing activities within the permit boundary would have no impact on the cascade torrent salamander or its habitat. Continued use of the trails outside the boundary would not be likely to adversely impact this species. Impacts could be further minimized by minimizing the collection of down wood for use at campfires or lodge fires and decreasing off-trail compaction of vegetation with proper signage encouraging hikers to stay on established trails.

Red Tree Vole

As noted previously, surveys conducted prior to January of 2004 concluded that no Oregon red tree voles were present in or adjacent to Camp White Branch. The Oregon tree vole is no longer considered a sensitive species on the Willamette National Forest. Therefore, no potential impacts on the species due to proposed activities are required to be addressed.

Great Gray Owl

As noted previously, no great gray owls were detected during any of the six site visits. A second year six-site visit is required in 2005 according to the Survey and Protocol for the Great Gray Owl within the Range of the Northwest Forest Plan Prepared by the USDA Forest Service and USDI Bureau of Land Management January 12, 2004. However, the ROD March 2004 eliminated the great gray owl as a survey and manage species and it has not been re-listed as a sensitive species. Therefore, the second year survey for great gray owls is no longer required and no further evaluation of impacts is needed.

Cumulative Impacts

There would be no additional cumulative impacts for bald eagles, northern spotted owls, great gray owls, red tree voles, or crater lake tightcoil snails.

There would be a potential for cumulative impacts to sensitive amphibian species (Oregon Slender Salamanders and Cascade Torrent Salamanders) related to the future implementation of the Camp's proposed trails plan (e.g., construction of small creek or stream crossings and trail drainage or stabilization improvements). However, given that no occurrences of these species were documented during surveys of these areas, these activities, would not be likely to adversely impact these species.

4. CONFORMANCE TO MANAGEMENT DIRECTION

All Alternatives

All alternatives would conform to applicable management direction. The following actions and procedures would be or have been undertaken to ensure conformance with management direction:

- No effects on bald eagle nesting habitat or spotted owl nesting sites or critical habitat have been identified.
- Biological evaluations and/or assessments for federally listed or state sensitive species have been prepared pursuant to NEPA and USFS guidelines. No federally-listed species were observed in the project area during field surveys.
- Federally-listed species would be managed consistent with the Federal Endangered Species and Oregon Endangered Species Acts.
- Consultation with USFWS was not conducted based on a finding of no effect on federally listed-species in biological evaluations prepared for this EA.

D. HERITAGE RESOURCES

1. AFFECTED ENVIRONMENT

Following is a summary of historical use of the project area by native peoples, early Euroamerican settlers, historical development of the Camp White Branch facilities and condition of historical elements of the project area.

Native Peoples

The cultural chronology of the Western Cascades is not yet well understood. The archaeological record has been variously interpreted to reflect use of the Cascades by people from the Willamette Valley to the west, by people from east of the Cascades, by people from both the Willamette Valley and from east of the Cascades, and by a separate group indigenous to the Cascades (Minor et al. 1987:59). Minor (1987:59) suggests that before about 5,000 years ago, people from both west and east of the Cascades traveled into the mountains to use upland resources. However, after 5,000 years ago, the archaeological record may indicate occupation of the upland Cascades by a group not strongly related to cultures on either side of the mountains.

The region now known as the McKenzie River Ranger District of the Willamette National Forest was traditionally used by the Upper Santiam division of the Molala (Churchill and Jenkins 1989:17; Minor et al. 1987). Although they occupied the Cascades at the time of contact with Euroamericans, very little ethnographic information exists about the Molala, and it remains unclear how long the Molala inhabited the region (Churchill and Jenkins 1989; Minor et al. 1987; Rigsby 1969). It has been suggested that the Molala were recent immigrants to the Cascades, pushed west by pressure from other groups; however, Rigsby (1969) suggests that they had inhabited the region for at least the last 1,000 years.

The Molala are believed to have practiced seasonal migration, living in low-elevation winter villages and moving to higher elevations in the spring and summer to take advantage of seasonally available resources. They are reported to have traveled east to the Deschutes River

to fish, and they traded smoked meat, berries, skins, and bear grass at Willamette Falls (Rigsby, 1969).

Numerous cultural resource surveys have been conducted, mainly for timber sales, within 1.6 km (1 mi) of Camp White Branch (Survey Report Numbers 3041, 3042, 5415, 6702, 8224, and 11141). Although many of the surveys in the vicinity of Camp White Branch recorded no cultural resources, archaeological sites are relatively common on ridges and along creeks, particularly north of the McKenzie Highway. Obsidian debitage, representing lithic reduction sites, is commonly found in this region because Obsidian Cliffs, a major source of obsidian, is located only 14 km (8.5 mi) east of Camp White Branch. The obsidian found within the McKenzie sub-basin is dominated by the Obsidian Cliffs geologic source, which was quarried and then transported and traded throughout Oregon and the Pacific Northwest (Skinner and Winkler, 1994).

One archaeological resource has been documented within 1.6 km (1 mi) of the project area. The Lone Cedar site (35LA616) was a short-term occupation site represented by 291 pieces of obsidian debitage and three formed artifacts (Churchill and Jenkins, 1989). Cultural materials were found to a depth of 70 centimeters (cm) (28 inches [in]).

On November 1, 2004, cultural resource specialists conducted a pedestrian survey of the proposed Camp White Branch Master Plan project area. The entire project area was surveyed by walking irregular transects spaced approximately 10 to 15 m (33 to 50 ft) apart (Figure 3). Shovel scrapes, measuring approximately 0.5 m (2 ft) in diameter, were conducted in areas where the probability for archaeological resources was considered high, including areas near White Branch Creek and on relatively flat surfaces across the entire project area. Close attention was paid to backdirt piles from rodent holes, which often contain artifacts. No prehistoric or historic-period cultural materials were encountered during the survey.

Historical Overview

The first documented Euroamerican exploration of Lane County was conducted in 1812 when Donald McKenzie of the Northwest Company led a party up the Columbia and Willamette rivers from Astoria (Zenk 1990). Missionaries and Euroamerican settlers made their presence known in the Willamette Valley in the 1830's, but it was not until the 1840's that large numbers of Euroamericans began arriving from the East to settle (Zenk 1990). The Donation Land Act of 1850 spurred rapid settlement of the agriculturally rich Willamette Valley, and by the time the Homestead Act was passed in 1862, Euroamericans were increasingly filing claims on more agriculturally marginal lands, including tracts in the Western Cascades.

The Cascade Range Forest Reserve, extending from the Columbia River to the California border, was established in 1893. It was divided into several National Forests in 1908, and in 1933 the Willamette National Forest was organized, combining the Cascade and the Santiam National Forests (Donovan and Willingham 2000; Rakestraw and Rakestraw 1991:70). Recreation in National Forests increased with the introduction of automobile travel, and roads were planned to accommodate this new mode of transportation. National Forests addressed public demand for summer camps, cottages, and auto camps through the Term Occupancy Act of 1915, which allowed for private use and development of USFS lands through leases for building recreational residences, stores, hotels, or resorts (Tweed, 1980:6).

Recreational facilities on USFS lands were slow to expand through the 1920s and the early 1930s due to funding. Recreational facilities were primarily established by private groups and through the development of recreational cabin tracts. Reforms initiated by Franklin Delano Roosevelt's administration in 1933 immediately impacted the Forest Service's recreation program and its ability to expand recreational opportunities within the forests. The Copeland Report, "A National Plan for American Forestry," prepared by the USFS in 1933, provided the framework for recreational developments that were carried out by the CCC [Throop 2002:4]. Ferdinand Silcox was appointed the USFS Chief in 1933 and he was sympathetic in promoting the benefits of outdoor recreation for the underprivileged, and in advocating for the social functions the forests could serve (Cox, 1988:6; Throop, 2002:5).

Camp White Branch Historical Development

Camp White Branch was an immediate result of these factors and it was also the first ski area developed in the Willamette National Forest. William Parke, a newly hired USFS recreation planner, who selected sites and designed the layouts of a number of recreation sites, conceived the White Branch Winter Sports Area and designed the lodge (Cox 1988:7). A local ski group, the Obsidians Outdoor Club, also played a role in the development of the winter sports facility (Cox 1988:7). CCC workers stationed at nearby Camp Belknap, working under the USFS, constructed a lodge, two restrooms, a storage shed, water system, and four ski runs at the winter sports facility in 1934-1935. Timber cleared from the ski runs was used in constructing the buildings.

The success of the White Branch Winter Sports Area was modest at best due to its placement in the lower elevations, and the competition of other ski facilities that were erected during the 1930s. Comparing numbers of visitors in 1938-1939, Timberline had a total of 72,000 visitors and White Branch had 1,915 (Cox 1988:13). The recreation facility at White Branch operated through the 1930s and 1940s renting skis and toboggans.

Camp White Branch has operated as an organizational camp (a Forest camp group) since 1948 and prior to this, from 1934 to 1947, the camp operated as a winter-sports facility. It presently includes 21 buildings, structures, and other associated features. One building, the main lodge, dates from 1934 when the Civilian Conservation Corps (CCC) constructed the White Branch Winter Sport Area. This buildings were determined eligible for listing in the National Register of Historic Places (NRHP) in 1988 (Cox 1988). The ski-slide/snow tubing hill is the remaining ski run of four that were built during the CCC era of construction and was determined to lack historic integrity in 1988. The facility was purchased by the Church of the Nazarene and converted into an organizational camp, after World War II in 1948. The Church of the Nazarene constructed approximately 14 buildings during their ownership between 1948 and 1957. Of those that were built by the Church of the Nazarene, ten remain, including a dining hall, caretaker's cottage, cook's cabin, power house, and 6 dormitory cabins.

The White Branch Winter Sports Area was converted to a church-affiliated organizational camp facility in 1948, when the lease was transferred to the Church of the Nazarene (Friends of White Branch History Committee n.d.:19). As the camp was initially conceived in a conceptual site plan, the Nazarenes planned to incorporate the CCC constructed lodge, toilets, and wood shed with eight dormitory cabins, two staff cabins, a caretaker's cabin, a chapel and a mess hall. Between 1947 and 1948, $2,000 was spent to get the facility ready and prepare the plans for building the "essential buildings" in the summer of 1948. The camp began to operate (?) in 1948 when the newly constructed mess hall/dormitory building was constructed (Friends of White Branch History Committee n.d.:19). The caretaker's cabin and the three dormitory cabins soon followed (ca. 1949) (Friends of White Branch History Committee n.d.:33). By 1957-1958, three other dormitory cabins, two toilets, a shower, guest cabin, and powerhouse had been added to the youth camp facility (USFS, 1958).

After the Church of God took over the facility in 1957, a swimming pool and pool house (ca. 1961), restroom building (ca. 1970), manager's house (ca. 1988), garage/gatehouse (ca. 1988), shop/storage (1995), pump house (1980), nurse's cabin (post 1960), and more temporary features such as two amphitheaters (post 1960), tent platforms and trailers were added.

Description and Status of Historic Structures and Features

The types of historic period buildings at Camp White Branch fit within the early rustic styles associated with the U.S. National Forests, especially the previously determined eligible lodge and storage building. The other camp buildings are a more modest 1940s-1950s type of rustic interpretation. The simple modest forms evolved from the labor-intensive Depression-era Rustic style and emphasize "modest functional design" that harmonized with nature and was less labor intensive (Throop 1979:68). The elements associated with the later Rustic-style interpretation are multi-paned windows varying in size and placement, varied exterior materials, contrasting exterior textures, simple gable roof forms, and minimal decorative elements.

There are 20 buildings, structures or other features within Camp White Branch (see Table 8). Of these, 12 buildings and structures are known or are likely to be 50 years old or older and were therefore assessed for their historic integrity and status during research and field surveys and analysis. As noted above, one constructed in 1935 by the CCC and has been determined eligible for the National Register of Historic Places (NRHP) in 1989 – Historic Lodge. A second building (storage shed) also was identified as potentially eligible for the NRHP at the same time. However, this structure was removed during construction of the Camp's new maintenance building in 1995. A new storage building was constructed west of the lodge in 1996-1998. These actions were coordinated with USFS staff. Several other potentially historic structures were constructed in 1948-49 when the Church of the Nazarene first acquired the camp (three "girls" cabins, dining hall and caretaker's cottage/assistant manager's house). The others (three other "boy's" cabins, cook's cabin and generator house/lifeguard's cabin) were constructed between 1949 and 1957. Remaining structures at the Camp have been built since 1957 and are considered non-historic.

Structures at the Camp have undergone a variety of modifications over the last 50 years. In some cases, changes are primarily interior and do not affect the outward appearance of the buildings or their basic function. In other cases, more major changes have occurred, compromising the historical integrity of the buildings (see Appendix C for a detailed description of the historic period buildings at the camp). As a result, eight structures are recommended to be designated as "historic-contributing," while three are recommended to be designated as "historic non-contributing." In sum, from a total of 20 remaining recorded buildings and features, 9 are considered historic contributing and 11 others are recommended either historic non-contributing or non-historic (see Table 8).

Camp White Branch fits the siting and layout patterns of organizational camps, such as having all administrative buildings near the entrance and general uses grouped together. It conforms in its placement of the historic buildings by using natural contours and vegetation to minimize visual impacts. Modifications made to the camp's entrance since the 1960s have compromised the integrity of the entrance's historic character by the addition of other non-historic administrative buildings and severe modifications made to the former care taker's house. Features that have been developed since the early 1960's are the platform tents, meeting tent, volleyball courts, ropes/challenge course, and water slide. The water-slide placement directly in front of the historic lodge compromises the lodge's historic setting.

The buildings constructed when Camp White Branch was converted into an organizational camp, conform to the types typically found in Oregon National Forests during this time period. The labor-intensive Rustic styles of the Depression era had given way to a more modest interpretation, using modern materials, juxtaposed siding textures, minimal ornamentation, and multi-light windows. Camp White Branch buildings dating from the historic period (1948 to 1957) are representative of this Oregon National Forest type. Buildings added in the 1960's and 1970's did not adhere to these principals and generally compromise Camp White Branch's historic character.

As an ensemble, the camp was evaluated under Criterion A for its association and use as an organizational church camp representing the pattern of outdoor recreational uses that increased after World War II in the National Forests. The camp was also evaluated under Criterion C to determine whether the building types used at Camp White Branch were representative of the types in use in Oregon National Forests in this historic time period. Camp White Branch's evaluation was conducted using criteria in use in other National Forests. When determining eligibility for listing in the NRHP, at least 60 percent of the buildings in an organization camp must meet integrity standards; these have been designated as historic contributing. The number of Camp White Branch buildings and structures designated historic contributing do not total 60 percent but slightly more than 50 percent. Due to the modern buildings that compromise the camp's layout, the historic character of the camp and its entrance, and modifications to historic buildings, Camp White Branch is recommended **not eligible** for listing in the NRHP.

Table 8: Camp White Branch Historic Resources

Number	*Resource*	*Classification/ Function*	*Date*	*Evaluation*
1	Historic Lodge	Rustic/ Lodge	1934	**Determined Eligible**
2	Storage Bldg.	Rustic/ Shed	1996-1998	**Non-Historic**
3	Ski Slide/Snow Tubing Hill	Landscape feature	1934	Historic Non-Contributing
4	Cabin 1/Alder	Vernacular Rustic/ Cabin	1948-1949	**Historic-Contributing**
5	Cabin 2/Birch	Vernacular Rustic/ Cabin	1948-1949	**Historic- Contributing**
6	Cabin 3/Cedar	Vernacular Rustic/ Cabin	1948-1949	**Historic- Contributing**
7	Cabin 4/Dogwood	Vernacular Rustic/ Cabin	1950 to 1957	**Historic- Contributing**
8	Cabin 5/Elm	Vernacular Rustic/ Cabin	1950 to 1957	**Historic- Contributing**
9	Cabin 6/Fir	Vernacular Rustic/ Cabin	1950 to 1957	**Historic- Contributing**
10	Dining Hall/Dormitory	Vernacular Rustic/ Dining hall	1948-1948	**Historic- Contributing**
11	Cook's Cabin	Vernacular Rustic/ Cabin	1950 to 1957	Historic Non-Contributing
12	Generator House/ Lifeguard's Cabin	Vernacular Rustic/ Generator house	1949 to 1957	**Historic- Contributing**
13	Original Caretaker's Cottage	Altered Vernacular Rustic/House	1949 to 1957	Historic Non-Contributing
14	Modern Caretaker's House	Contemporary/House	1988	Non-Historic
15	Garage/ gate house	Vernacular Rustic/ Garage	Ca. 1988	Non-Historic
16	Shop/storage	Vernacular/Shop	1995	Non-Historic
17	Nurse's Cabin	Vernacular/Cabin		Non-Historic
18	Pump house	Vernacular/ Pump house	1980	Non-Historic
19	Pool house	Vernacular/ Pool house	1961	Non-Historic
20	Pool	Utilitarian/Pool	1961	Non-Historic
21	Restroom	Vernacular/ Restroom	Ca. 1970	Non-Historic

2. MANAGEMENT DIRECTION

Forestwide standards require that professionally supervised cultural resource inventories be conducted for all activities that might affect cultural resources or those that could be eligible for the NRHP (FW-263-265). Resources identified as eligible for the NRHP shall be protected from adverse depredation and natural destruction and periodically inventoried to discover possible

vandalism, artifact theft or unauthorized use (FW-268-270). Consultation with other agencies such as the State Historic Preservation Office (SHPO), Advisory Council on Historic Preservation and Indian tribes also must be conducted (FW-267, 274). Other Forestwide standards and guidelines govern interpretation, management and maintenance of eligible resources, sites and trails.

3. ENVIRONMENTAL CONSEQUENCES

a. Alternative 1: No Action

DIRECT AND INDIRECT IMPACTS

Effects Common to All Alternatives

Cultural Resources

Because no archaeological resources were found during the pedestrian survey, the proposed project would not be likely to affect any archaeological resources. Based on these findings, a "no historic properties affected" determination is recommended for the archaeological portion of the project.

Should unanticipated archaeological or historical resources different from those recorded during archaeological survey for this project be encountered during project construction, however, all ground-disturbing activity in the vicinity of the find would be halted and the USFS and the SHPO would be promptly notified to assure compliance with relevant state and federal laws and regulations.

Historic Resources

Because the Camp has not been identified as eligible for the NRHP and no changes would be made to eligible structures at the Camp (Historic Lodge), there would be no impact on historic resources for any of the alternatives.

CUMULATIVE IMPACTS

No cumulative impacts have been identified.

Effects Common to Action Alternatives

DIRECT AND INDIRECT IMPACTS

Alternatives 2 and 3 would include removal of several buildings designated as historic contributing; no modifications would be made to the Historic Lodge or associated storage building. Because the Camp has not been identified as eligible for the NRHP and the structures identified as historic contributing by themselves do not warrant a finding of eligibility for the Camp, there would be no impact on historic resources.

CUMULATIVE IMPACTS

No cumulative impacts have been identified.

4. CONFORMANCE TO MANAGEMENT DIRECTION

As noted above, because the Historic Lodge and storage building have been determined to be eligible for the NRHP, these structures will need to be protected from adverse depredation and natural destruction and periodically inventoried to discover possible vandalism, artifact theft or unauthorized use (FW-268-270). Consultation with other agencies such as the State Historic Preservation Office (SHPO) and the Advisory Council on Historic Preservation also must be conducted (FW-267, 274) regarding any proposed modifications to these buildings. Consultation with these groups regarding proposed action alternatives is being conducted as part of the agency and public review process.

Cultural and historic resource surveys were conducted to assess possible effects to cultural or historic resources of all alternatives. As a result, no other cultural resources were identified and it was recommended that the Camp not be designated as eligible for listing in the NRHP. Consequently no other actions are required for these resources. However, design and construction of future improvements will continue to be subject to USFS review and approval and requirements for use of specific materials types and color schemes. These standards are intended to ensure that future improvements continue to contribute to the historic character of the Camp.

E. TRAFFIC CIRCULATION AND PARKING

1. AFFECTED ENVIRONMENT

Visitors entering Camp White Branch enter via the main entrance at its intersection with Highway 242. The entrance road is approximately one-third of a mile long. The entrance road passes the camp manager's cabin on the left before taking a sharp left and heading downhill to the core area of the camp. Alternatively, visitors may park in the upper "service area" for the camp, adjacent to the camp's maintenance building, assistance caretaker's residence and the back side of the historic lodge. This area and the managers cabin are the most prominent features people see when they first enter the camp. The appearance of this area and lack of gateway signs or other entrance features give the impression of "entering through the back door" of the camp.

During the summer and shoulder season months, most visitors to the camp are dropped off by bus or automobile either at the service area or in the core area of the camp near the dining hall and cabins. In the winter months, visitors park in a large gravel parking area adjacent to Highway 242 and the camp's entrance road. Highway 242 is closed from this point forward during the winter, allowing for parking in this area without the potential for conflicts with vehicles using the highway. This parking area is approximately 15,000 square feet in size can accommodate a large number of vehicles, including buses and other large vehicles.

Informal parking areas are located in the service area, adjacent to the dining hall and in front of the existing Dogwood Elm and Fir cabins. A clearing, located south of the entrance road and approximately 1,100 feet from its intersection with Highway 242, also provides space for overflow parking. It is approximately 10,000 square feet in size and could accommodate 35 to 40 vehicles. An informal parking area for RVs is located within the Camp east of the base of the snow play hill. It is approximately one-quarter acre in size. It does not include any existing water or sewage disposal facilities.

In addition to the roads that provide access for vehicles within the camp, several paths and foot bridges provide pedestrian access. These include paths between the historic lodge, dining hall and the cabins between them (Alder, Birch and Cedar cabins), as well as open areas and paths to the Cook's Cabin and tent platform areas, and a small amphitheater in the western end of the camp. The path between the lodge and dining hall is relatively flat, although some sections of it have grades that would not meet ADA accessibility requirements. A moderately steep trail serves the camp's snow play hill and is located within the trees to the west of the hill.

Additional informal recreational trails are located outside the camp's permit boundary and used by camp visitors. These trails are described in more detail in the Recreation section of this document.

2. MANAGEMENT DIRECTION

Applicable standards and guidelines include FW-094 and MA-15-36 through MA-15-40 for development of facilities in riparian areas. FW-094 requires use of best management practices to maintain water quality in the process of designing, constructing and maintaining roads. Standards and guidelines for riparian areas further require that roads and stream crossings minimize impacts on riparian areas (including sedimentation), be consistent with riparian area objectives and allow for passage of adult and juvenile anadromous fish.

3. ENVIRONMENTAL CONSEQUENCES

a. Direct and Indirect Impacts

Effects Common to All Alternatives

For all alternatives, it is assumed that a majority of visitors to the camp would continue to be dropped off within the camp or at the entrance road, rather than parking within the core area of

the camp. The parking area adjacent to Highway 242 would continue to be used for snow play and other camp uses during the winter months. No major increases in the number of parking spaces within the permit area would occur, although some new spaces would be developed as part of the action alternatives as described below. Road improvements would not include any new stream crossings.

Effects Common to Action Alternatives

Impacts would include the following:

- **Improved sense of arrival** for visitors to the camp via improvements to the existing entrance road and/or development of a new entry road (see detailed information in the following sections regarding differences between the two action alternatives).
- **Increased traffic on the camp's entrance road and within the camp**. While the proposed improvements to the camp would increase it's capacity by approximately 60%, the camp would expect to utilize its full capacity during only a few weeks during the year, primarily during the summer months. Therefore, overall impacts on traffic levels would be substantially less than 60%. Impacts would be concentrated at the beginning and end of the week during the summer when large group camp sessions begin and end.
- **Improved accessibility along trails** between major traffic generators within the camp (i.e., between the new multipurpose and commons buildings, camper cabins, and the historic lodge. These trails would be improved to meet ADA accessibility requirements in terms of grade and width.
- **Increase in number of formal parking spaces within the camp** and better delineation and definition of parking areas.
- **Increased area used for recreational vehicle (RV) parking and hookup.** Impacts of RV parking areas on vegetation and other resources are described in those resource sections.
- **Increase in the supply of overflow parking spaces** with the potential use of the clearing located between Highway 242 and the camp service/entry area.

Alternative 2

This alternative would have the following effects in comparison to the No Action alternative.

- Improve auto accessibility and sense of arrival into the core area of the camp. This would be accomplished by creating a gentler curve where the road turns into the core camp area past the managers cabin and by planting vegetation between the entry road and service area to make the service area less visible.
- Create 10 new formal parking spaces within the camp located in the service area and adjacent to the commons and multi-purpose buildings.
- Create six to eight new parking spaces and hookups for recreational vehicles (RVs) located to the east of the base of the snow play hill. This location would result in less travel by RVs within the camp, in comparison to Alternatives 1 and 3. Other impacts of this element are described in sections related to Watershed Resources and Visual Impacts.

Alternative 3

This alternative would have the following additional effects in comparison to the No Action alternative.

- Improve auto accessibility and sense of arrival into the core area of the camp by creating a new entry road section located north of the managers cabin. This would result in a one-way looped entry/exit road with camp visitors exiting via the existing entry road. With the new entry road, visitors would have a broader view of the camp and its facilities as they enter, including the new multipurpose and commons buildings, historic lodge and camper cabins, rather than the service buildings and managers house. The new entry road also could be graded to be less steep than the existing entry, providing an alternative exit route in the winter for emergency medical vehicles. This would improve the ability to transport injured visitors to medical facilities during the snow play season.

- Create 20-25 new formal parking spaces within the camp located in the service area and adjacent to the commons and multipurpose buildings.
- Create six new parking spaces and hookups for RVs located in the western portion of the camp. This location would results in more travel by RVs within the camp, in comparison to Alternatives 1 and 2. Other impacts of this element are described in sections related to Watershed Resources and Visual Impacts.

b. Cumulative Impacts

No cumulative impacts have been identified.

4. CONFORMANCE TO MANAGEMENT DIRECTION

a. Alternative 1: No Action

No proposed new roads or other transportation improvements are proposed as part of this alternative. Within the Camp, motor vehicles would continue to be confined to roads and parking areas. Non-motorized travel by campers and others is encouraged within the camp. This alternative would comply with management direction.

b. Alternative 2: Proposed Action

No new roads are proposed as part of this alternative although minor changes would be made to the alignment of the entrance road in the vicinity of the Camp's service area. These improvements and construction of the new parking areas would minimize tree removal and focus parking in already disturbed areas away from existing vegetation. Within the Camp, motor vehicles would continue to be confined to roads and parking areas. Non-motorized travel by campers and others would be encouraged by creation of a pedestrian-oriented main road within the camp and construction of ADA accessible trails. This alternative would comply with management direction.

c. Alternative 3

A new entry road section, approximately 300 feet long, would be constructed as part of this alternative. The road would be built to minimize impacts on the adjacent wetland and riparian area though its construction could have some impacts on this area (see Watershed Resources section). Within the rest of the camp, motor vehicles would continue to be confined to existing roads and existing or new formal parking areas. Non-motorized travel by campers and others would be further encouraged by creation of a pedestrian-oriented main road within the camp and construction of ADA accessible trails. This alternative would comply with management direction.

F. RECREATION

1. AFFECTED ENVIRONMENT

Camp White Branch plays an important role in providing recreational opportunities on National Forest lands in accordance with the Forest Service's National Recreation Strategy. This strategy, a result of the 1987 President's Commission for Americans Outdoors, is an effort by the Forest Service to foster public/ private partnerships for the provision of winter and summer recreational opportunities on National Forest lands (USFS, 1988). The Camp serves an important function within the Willamette National Forest, as it provides access to outdoor experiences to a variety of individuals including youth and families. It also provides a family-oriented winter recreation opportunity during times when its snow play hill is operating.

Camp White Branch is approximately 1.5 miles west of the Three Sisters Wilderness boundary. It is about two miles from Proxy Falls (Trail #3532), within the Three Sisters Wilderness. Other designated USFS trails within the vicinity include the following:

- Linnton Lake Trail #3519,located four miles east of Camp White Branch along Highway 242
- Rainbow Falls Trail #3543 accessible from Foley Ridge Road, located approximately 12 miles by car from Camp White Branch but just one to two miles due south
- Separation Lake Trail #3536 accessible from Foley Ridge Road and USFS Road #480, located approximately 16 miles by car from Camp White Branch but just three to four miles directly southeast
- Foley Ridge Trail #3511 accessible from Foley Ridge Road, located approximately 16 miles by car from Camp White Branch but just two to three miles directly southeast

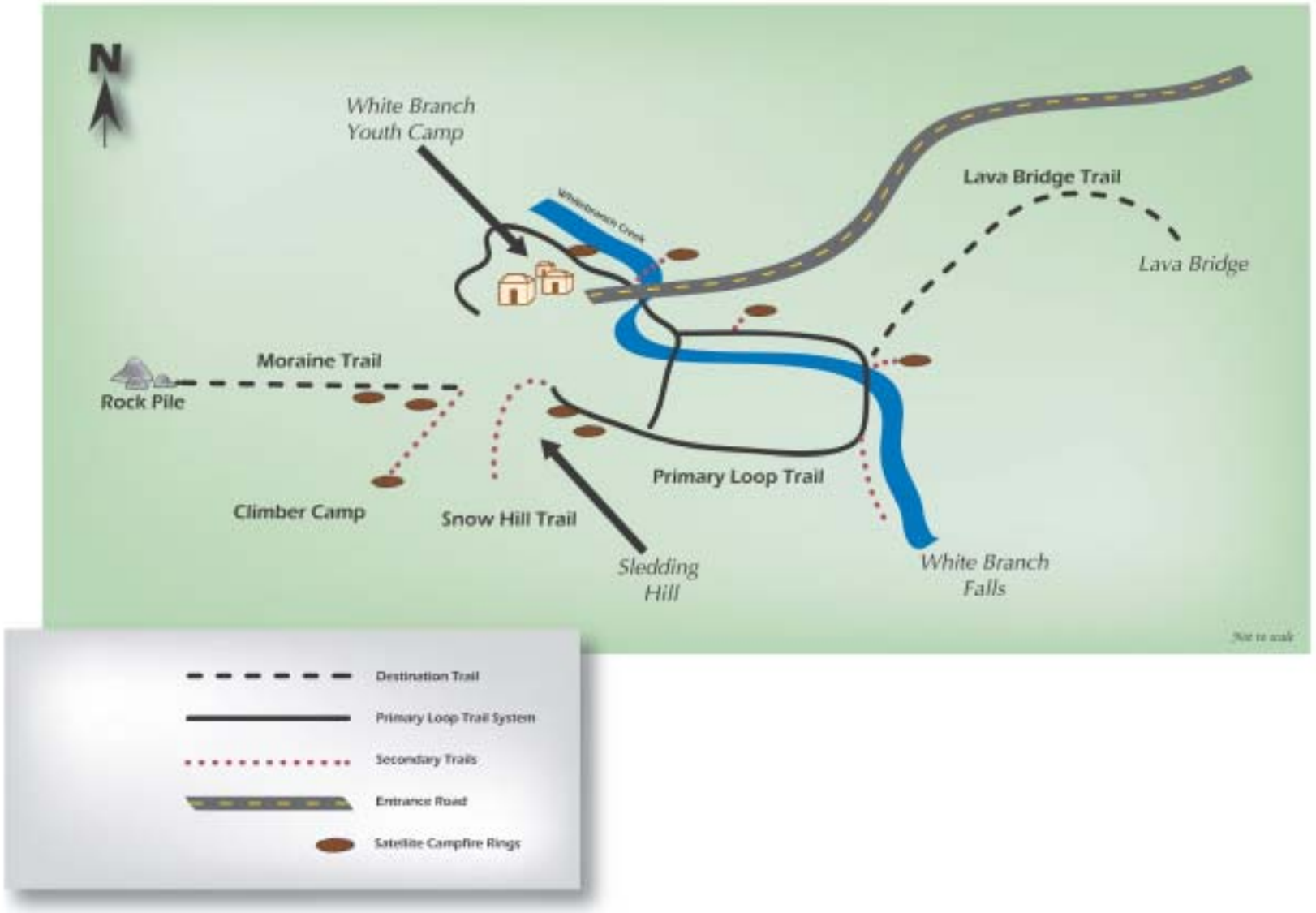
During summer months, groups from the Camp periodically use these and other trails for organized hikes. The Camp works with USFS personnel to obtain necessary permits for group use of trails within Wilderness areas. Typically, groups from the Camp currently use designated USFS facilities within the Wilderness about four times per year during the summer months. Proxy Falls Trail 3532 and Linton Lake Trail 3519 currently are among the most heavily used trail within the Three Sisters Wilderness. Current levels of use are at or exceed Forest Plan Standards for trail encounters. Any additional use generated by increased Camp capacity would need to be evaluated and limits set on time, frequency of use and group size.

Other recreational facilities near the camp include the Limberlost Campground, which is approximately four miles west of Camp White Branch on Highway 242, and the Alder Springs

campground, which is approximately two miles east of the Camp on Highway 242. Both campgrounds are relatively small (less than 15 campsites each). No other developed recreation sites or trails are within close proximity to the Camp (less than two miles). Camp White Branch is not visible from any of these facilities or from the trails described above.

In addition to formally designated USFS trails near the Camp, a small network of informal trails has been developed in the area surrounding the Camp but outside its permit area. These trails form a loop system around the camp and also provide hikes to two destinations – "White Branch Falls," which is approximately one-half mile east of the camp, and a natural lava bridge which is approximately one to two miles east of the Camp. In addition to these trails, a series of gathering areas or campfire rings are located around the camp. Figure 6 indicates the approximate location of these trails and campfire rings.

Figure 6: Existing Trails and Satellite Campfire Rings



Historically, camp visitors have used the informal trails and campfire rings around the camp to enjoy the natural surroundings and engage in small group worship or educational activities.

Typically during the summer months, approximately 12 small groups use these trails and gathering places each week. Groups range in size from 8 to 20 people. Smaller numbers of people and groups use these areas in the shoulder seasons, with little to no use during the winter. As part of this Master Planning and EA process, the Camp has developed a trails plan to do the following:

- Formalize a network of trails with specific trail designations.
- Agree on maintenance standards and responsibilities for future trail improvements.
- Identify use of a specific number of satellite campfire rings or gathering places with closure of two existing areas and associated trails located in sensitive natural areas (Honey Creek Falls and George Washington Bridge sites), and possible designation of other new, less sensitive areas.

A proposed trails plan has been prepared and included as an appendix to this EA (see Appendix D). Implementation of this plan will be addressed as a separate cumulative action, with evaluation of related impacts as cumulative effects.

The camp currently uses a water slide for recreation. It is located along the slope south of the Historic Lodge and is an important element of the recreational opportunities provided at the Camp.

In the winter months, when there is adequate snow cover, Camp White Branch operates a snow play hill. Historically, the hill is open to members of the public and groups that are staying overnight at the Camp. The Camp rents inner tubes and provides snacks and beverages in the historic lodge, which also serves as a warming hut in the winter. Basic first aid services also are provided, though visitors with more serious injuries must be transported to offsite medical facilities. On a typical weekend day with good snow cover, as many as 100 people may use the snow play hill. As mentioned in the transportation section, visitors park in a large parking area adjacent to Highway 242 and walk along the Camp's entrance road to reach the snow play area. A trail parallel and to the west of the snow play hill provides access to the top of the hill.

2. MANAGEMENT DIRECTION

a. Willamette National Forest Plan

The WNFP includes a variety of Forest-wide standards and guidelines related to developed recreation (FW-006 through FW-014). These standards and guidelines include provisions for:

- Need to offer recreational opportunities throughout the Forest commensurate with projected need and in partnership with other recreation providers.
- Preparation of detailed site plans and vegetation management plans prior to construction of new facilities. Site plans are intended to describe the location and design of facilities and address traffic management, safety, site protection, use distribution and other factors.
- Analysis of sites to ensure that intended functions and needs are being served.
- Design of sites to minimize annual maintenance and operating costs.

Additional Forest-wide standards and guidelines address administration, operation, maintenance and resource management at developed recreation sites.

The WNFP also includes a number of management area guidelines for Riparian Areas that are pertinent to this project. They include guidelines to ensure compatibility with other riparian area objectives, reduce safety hazards from dead, defective or hazardous trees, and ensure that water withdrawn from streams or lakes will not have adverse effects on riparian resources.

b. National Recreation Strategy

Guidelines from the National Recreation Strategy (USFS, 1988) that relate to this project include:

- Provide interpretation, information, and environmental education as an important part of outdoor recreation. Promote a better understanding of the long-term compatibility of people living in harmony with nature.
- Provide outdoor recreation opportunities to all the people, strengthening our service to urban residents, ethnic minorities, the disabled and disadvantaged, and the elderly and the young.
- Through partnership arrangements, encourage, establish, and sustain a diverse and balanced range of recreational services and facilities on the National Forests.
- Seek partnerships with groups representing ethnic minorities, the elderly, the disabled, the economically disadvantaged, and youth.

3. ENVIRONMENTAL CONSEQUENCES

a. Direct and Indirect Impacts

Effects Common to All Alternatives

Continued operation would help the Camp and USFS to provide access to recreational experiences per Camp and Forest Service objectives and the National Recreation Strategy, particularly for youth. Camp White Branch currently provides for nature-oriented recreational experiences for a variety of groups and people, including people from urban area who otherwise might not take advantage of such experiences. There are no similar facilities in this part of the Forest (i.e., within approximately 30 or more miles) and in such close proximity to the Eugene/Springfield urban area. Continued operation of the Camp under all alternatives would help the Camp and USFS meet the needs of these users. Operation of the Camp's snow play hill also would help the Camp and USFS meet a diverse set of winter recreational needs.

Effects Common to Action Alternatives

Impacts on recreation are identical with the two action alternatives and would include the following:

- Increased capacity and number of visitors to the camp would be expected to result in increased use of USFS facilities outside the permit boundary, including designated trails within the Three Sisters Wilderness area. However, there currently are no direct connections from the camp to other USFS facilities. Furthermore, per USFS direction, informal trails just east have been treated and signed in the past to discourage entry into the Three Sisters Wilderness. Camp use of designated USFS facilities (trails and campgrounds) within and outside the Wilderness boundary would continue to occur through the USFS's permit process and effects would not be significant.
- Increased capacity and number of visitors to the camp would increase the use of informal trails and other areas around the camp and outside its permit boundary. While the capacity of the camp would increase by 60%, overall use would not increase by the same amount, given that the camp does not expect to reach capacity during most times of the year. On average, during the summer months, it is estimated that the number of people and groups using the trails and campfire areas would increase from approximately 12 groups of 8 to 20 people each to about 18 groups of a similar size each week. This level of use would not lead to overcrowding on trails. It would have some impacts on compaction and possible off-trail use. However, these impacts would be discouraged and mitigated through trail improvements, reduction of hiker group sizes, and public education efforts. For example, USFS staff recommend the following strategies:
  - Reconstruct and re-vegetate sections of trails that currently exceed standards for trail width.
  - Reduce hiker group sizes to reduce future impacts as group members stray off pathways.
  - Monitor trail conditions and construct approved barriers, as needed to channel the use onto designated pathway surfaces.
  - Provide education material on hiking in large groups and it's effect on forest conditions.
- Impacts on riparian and other resources associated with this increased usage are described in other sections of this EA related to those resources.

- Construction of a multi-purpose building would enhance the variety of recreational opportunities available at the camp, consistent with the needs and desires of today's camp users and those identified by groups who currently use the camp or have expressed an interest in doing so. Provision of indoor recreational opportunities also would reduce outdoor recreational uses and activities to some degree.
- Renovation and improvement of the ropes/challenge course would enhance the variety of recreational opportunities available at the camp. It also would focus some outdoor recreational use in a more concentrated, already disturbed area.
- Improvements to the playing fields at the base of the snow play hill would focus additional outdoor recreational use in a more concentrated, already disturbed area. It also would increase recreational opportunities and the quality of facilities overall.
- Emphasis on use of the historic lodge as an environmental educational facility would enhance opportunities for environmental education and appreciation of the natural environment.
- Construction of common areas within the new camper cabins would increase opportunities for small group activities, including worship. Construction of a new multipurpose building also would improve opportunities and facilities for large group worship services. While worship may not typically be considered a recreational opportunity, it is an important element of the Camp's mission and is linked closely with the appreciation of the natural beauty and surroundings at the Camp.

b. Cumulative Impacts

Implementation of a new Trails Plan would affect recreational opportunities and impacts on recreation and natural areas outside the permit boundary. Impacts of increased use of trails and campfire rings would be mitigated by revegetation, drainage improvements and/or other improvements. In addition, it is expected that some existing campfire rings would be located to avoid proximity to riparian or other natural sensitive areas. Trail and water crossing improvements developed through implementation of the Trails Plan would have cumulative impacts on soil, wildlife and riparian resources as described in the Watershed Resources section of this EA. Some sections of existing off Permit trail segments will need to be relocated to avoid wet area and provide a more stable trail surface. All signage will be placed on post, not on trees. Sign design and style will be covered in the Trails Plan.

4. CONFORMANCE TO MANAGEMENT DIRECTION

Effects Common to All Alternatives

Use of the Camp under all alternatives would help the Camp and USFS to provide access to recreational experiences per Camp and Forest Service objectives and the National Recreation Strategy, particularly for youth.

Effects Common to All Action Alternatives

Increased capacity and use of the camp as proposed in Alternatives 2 and 3 also would provide recreational opportunities to more people, helping further goals of the camp and the USFS, including those contained in the National Recreation Strategy. Implementation of these alternatives would conform to management direction.

G. SCENIC RESOURCES

1. AFFECTED ENVIRONMENT

Camp White Branch is located approximately one-third mile from Highway 242 and situated on the southern margin of an east-west trending valley, at the base of a steep, north facing sideslope that extends upward for about a thousand feet. In and around the Camp, the terrain of the valley floor is undulating with hillocks interspersed by nearly level depressions; immediately to the south of the Camp is the toe of the adjacent valley sidewall. Given this location and topography and the relative distance from other USFS trails and facilities (see Recreation section), the Camp is not visible from any USFS trails or facilities or from Highway 242. Visual/scenic impacts of the Camp and any changes to it would be confined to visitors to the Camp. The Camp is not within a designated scenic viewshed.

Most of the buildings at the Camp are similar in architectural style and material; most have been constructed or painted to blend in with the surrounding natural environment (e.g., historic lodge, dining hall, and cabins, storage buildings, new maintenance building and pump house). Other buildings are somewhat less consistent in design or building materials (e.g. caretaker's house, assistance manager's house, and pool building). The Camp makes use of temporary tent platform structures which also are less similar in appearance to the older buildings at the Camp.

Structures at the camp are described in more detail in the Historic and Cultural Resources section.

The Camp is dominated by a mix of large open areas (the snow play hill and playing fields at its base, main camp road, and slope in front of the

historic lodge) and wooded areas. Trees include Douglas fir, Western hemlock, and Western red cedar with a range of sizes and ages. Understory plants include Oregon grape, vine maple, sword ferns and other shrubs and ground cover plants, with additional species found in the wetland located at the eastern edge of the Camp.

2. MANAGEMENT DIRECTION

Primary management direction is provided by the WNFP visual quality objectives. As a developed recreation site, actions must be consistent with a visual quality objective of "Partial Retention." Standards and guidelines for this objective include FW 065 and FW 066 which require that "activities should repeat the form, line, color or texture common to the characteristic landscape" and that changes to features or facilities should be "visually subordinate to the visual strength of the characteristic landscape." FW 066 also requires that mitigation treatments for impacts to visual resources be completed as soon after project completion as possible or within one year.

Visual quality objectives for areas around the camp (Riparian and Disperse Recreation) also call for partial retention.

3. ENVIRONMENTAL CONSEQUENCES

a. Direct and Indirect Impacts

Effects Common to All Alternatives

There would be no impacts common to all alternatives.

No Action Alternative

The No Action alternative would have some impacts on scenic resources. Construction of a new first aid building in the service area would have some impacts, although this portion of the Camp is already visually impacted. The No Action Alternative would continue to have a somewhat negative impact on visitors' first impression of the Camp, given the orientation of the Camp's entry.

Effects Common to Action Alternatives

As noted above, none of the improvements or new facilities at the Camp would be visible from any highway, USFS road, viewpoint or designated trail. All visual impacts would be confined to the core area of the Camp and would affect only visitors to the Camp.

Construction of new buildings at the camp, particularly the largest two buildings – the new commons and multipurpose buildings – would increase the total square footage and average size of structures at the camp and would have visual impacts. Construction of new cabins and areas for RV parking also would have visual impacts, as would removal of trees and other vegetation in selected areas. A number of approaches have been and would be used to mitigate these effects, including:

- Proposed new buildings have been sited in already cleared or disturbed areas to the greatest extent possible. Further steps would be taken to minimize removal of trees and other vegetation via siting and construction of individual structures. Removal of trees would

represent a small percentage of the total number of large trees within the core area of the Camp and the Camp as a whole.

- New buildings at the Camp would be designed and built to ensure consistency with the character of existing historic buildings at the camp.
- Materials and colors would be those approved for use at the Camp by the USFS. These materials, structures and colors would repeat the form, line, color or texture common to the characteristic landscape, consistent with Management Direction.
- While new structures would increase the overall level of development at the Camp, structures and parking areas would continue to make up a relatively small proportion of the permit area (approximately 5%, compared to an existing 3%). In addition, given the size of trees at the camp, the overall landscape would continue to be dominated by natural features.
- New entry signs and other improvements would improve the visual experience of entering the camp.
- The new swimming pool would be designed and sited to be less visually intrusive than the existing swimming pool and pool building. In both action alternatives, it would be integrated with other buildings, have a more naturalistic design theme and be less visible, particularly as visitors enter the camp.
- The amphitheater area in front of the historic lodge would be redesigned to reduce its visual impact.

As a result, all action alternatives would be expected to result in an overall improvement in the project area's quality.

Alternative 2

In addition to the effects and mitigation measures described for all action alternatives, this alternative would have the following effects:

- Location of the RV area would be more visually prominent in this alternative (in comparison to Alternative 3). However, vegetation would be planted to screen this area, particularly from the main entry to the Camp and a naturalistic, low-impact design would be used (e.g., reinforced turf, rather than paving, and screened hookup facilities). In addition, the RV area would be fully utilized only during a few months of the year.
- Cabins constructed as part of this alternative would be more numerous but smaller, balancing their visual impact in comparison to Alternative 3.
- The location of the new commons and multipurpose buildings would be less visually prominent in this alternative (as compared to Alternative 3) as they would be concentrated in a single location, with the commons building screening the multipurpose building to some degree.

Alternative 3

In addition to the effects and mitigation measures described for all action alternatives, this alternative would have the following effects:

- Location of the RV area would be less visually prominent in this alternative (in comparison to Alternative 2).

- Cabins constructed as part of this alternative would be more fewer but larger, balancing their visual impact in comparison to Alternative 2.
- The location of the new commons and multipurpose buildings would be more visually prominent in this alternative (as compared to Alternative 2) as they would be located in two spots and represent a larger profile from most vantage points within the Camp.

b. Cumulative Impacts

No cumulative impacts have been identified for the No Action alternative. For the action alternatives, there would be some cumulative impacts associated with trail improvements such as water crossings constructed through implementation of the Camp's proposed Trails Plan. However, impacts would be minor and improvements would be designed to mirror the characteristics of the natural landscape. There would be positive visual impacts associated with removal of selected campfire rings in sensitive areas.

4. CONFORMANCE TO MANAGEMENT DIRECTION

a. Alternative 1: No Action

As no additional structures or improvements that would affect visual resources are proposed, visual quality objectives would continue to be attained and this alternative would comply with management direction. Similarly, areas adjacent to the Camp would continue to attain a VQO of partial retention.

b. Action Alternatives 2 and 3

Location, design, and construction of new facilities at the Camp would minimize visual impacts and repeat the form, line, color or texture common to the characteristic landscape. Given the dominance of the natural landscape features and concentration of proposed improvements within a relatively small portion of the Camp, resulting facilities would remain visually subordinate to the visual strength of the characteristic landscape. The action alternatives would conform to management direction and attain a VQO of partial retention. Similarly, areas adjacent to the Camp would continue to attain a VQO of partial retention.

H. AIR QUALITY

1. AFFECTED ENVIRONMENT

Due to its isolation from major sources of emissions, the types of uses that occur at the Camp, and the limited number of vehicles at any one time, the Camp's overall air quality is generally excellent. No known violations of federal and state air quality standards have been recorded. No air quality monitoring occurs within the vicinity.

Primary sources of air pollution within the project area are motor vehicle exhaust, maintenance equipment operation, and campfires. All of these are minor sources and concentrations of air pollutants.

2. MANAGEMENT DIRECTION

National Ambient Air Quality Standards are established by the 1963 Clean air Act and subsequent amendments and administered by the Oregon Department of Environmental Quality. Forest Plan standards for air quality generally defer to the state's program (FW-039 to 044).

3. ENVIRONMENTAL CONSEQUENCES

a. Direct and Indirect Impacts

No Action Alternative

The primary source of air pollution within the project area would continue to be motor vehicle exhaust. No increase over current levels of pollution would be expected and no adverse air quality impacts would be expected.

Effects Common to Action Alternatives

In the short-term, localized air quality impacts (equipment emissions and dust) would occur in conjunction with construction activities. Development of a dust control plan would help to minimize dust associated with these construction activities. In the long-term, increases in capacity and associated increase in traffic would have some impacts on emissions. However, overall impacts would not be significant.

b. Cumulative Impacts

No cumulative impacts have been identified.

4. CONFORMANCE TO MANAGEMENT DIRECTION

All alternatives would be conformance with federal and state air quality standards.

I. NOISE

1. AFFECTED ENVIRONMENT

Noise sources within the project area are associated with recreational activities, Camp maintenance operations and vehicular use. The Camp is relatively isolated and offers opportunities for relative quiet and solitude most of the year. During "season", day-time recreational activities generate moderate noise levels on site. No noise monitoring is in effect within or in the vicinity of the Camp, and there are no known violations of noise standards.

Noise effects on wildlife are addressed in Section B of this chapter.

2. MANAGEMENT DIRECTION

There is no specific Forest Plan management direction for noise. Lane County regulates excessive noise pursuant to Lane County Code Chapter sections 5.600 through 5.635.

3. ENVIRONMENTAL CONSEQUENCES

a. Direct and Indirect Impacts

Effects Common to All Alternatives

Existing noise levels would continue to be typical for recreational camps and would not be expected to adversely impact Camp visitors or staff. Noise generation would typically be greatest during drop-off and pickup of Camp attendees. Noise generation would be expected to generally be confined to the Camp and have minimal effect on other Forest users within the immediate vicinity of the Camp.

Effects Common to Action Alternatives

The proposed increase in Camp capacity would elevate noise levels to some degree. It is assumed that all major equipment will be housed inside well-constructed buildings and have minimal noise impacts. However, as with all alternatives, noise generation would be expected to generally be confined to the Camp and have minimal effect on other Forest users given the distance from the Camp to recreational and other Forest uses outside the Camp. In the short term, increases in day-time noise levels would be associated with construction activities.

b. Cumulative Impacts

Implementation of the Camp's Trails Plan could increase noise levels slightly during trail construction and improvement activities. Impacts would be intermittent and associated with relatively brief construction periods.

4. CONFORMANCE TO MANAGEMENT DIRECTION

All alternatives would be expected to conform to County noise standards.

J. ADDITIONAL REQUIRED DISCLOSURES

1. EFFECTS OF ALTERNATIVES ON PRIME FARM LAND, RANGELAND AND FOREST LAND

All alternatives would be in keeping with the intent of Secretary of Agriculture Memorandum 1827 for prime land. The project area does not contain any prime farm lands or rangelands. "Prime" forest land does not apply to lands within the National Forest system.

2. ENERGY REQUIREMENTS OF ALTERNATIVES

There would be no unusual energy requirements for implementing any of the alternatives. Electrical power is currently available from Lane Electrical Co-operative and is augmented with propane. Energy demands would increase over current levels but utilities available to the Camp would be adequate to meet these increased needs.

3. EFFECTS ON ENVIRONMENTAL JUSTICE

Executive Order 12898 of February 11, 1994 as amended by Executive Order 12948, provides that "each federal agency make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health and environmental effects of its programs, policies, and activities on minority populations and low-income populations." Environmental Justice "is achieved when everyone, regardless of race, culture, or income, enjoys the same degree of protection from environmental and health hazards and equal access to a healthy environment in which to live, work, and play" (Whorton and Sohocki 1996).

The Confederated Tribes of the Grande Ronde, Siletz Indians, and Warm Springs Reservation, and the Klamath Tribes have been contacted about the proposed Master Plan. The Confederated Tribes of the Warm Springs identified the potential for existence of tribal or cultural resources in the area and requested that a cultural resources survey be undertaken as part of the EA. A cultural resource survey was completed (see Chapter III); no cultural resources were found. There are no known areas of religious significance in the project area. The alternatives would all comply with Executive Order 12898 as amended and there would be no disproportionate effects on minority or low-income populations or Indian Tribes as a result of implementing any of the alternatives.

4. EFFECTS ON WETLANDS AND FLOODPLAINS

Effects on and protection of wetlands and riparian areas are described in Chapter III. There would be do direct impacts on a wetland or wetland function located in the eastern portion of the Camp. These impacts are described in the Watershed Resources section of Chapter 3. Alternative 3 would result in some indirect impacts to wetlands as described in Chapter 3.

Floodplains have not been mapped within the project area. Because of stream gradients, topography and soil conditions at the Camp, the area is not prone to flooding and there has been no documented incidence of flooding in the Camp's history, with the exception of occasional standing or pooling water in or adjacent to compacted areas of the Camp. These conditions area described further in Chapter 3, Watershed Resources.

5. COMPLIANCE WITH SECTION 504 OF THE VOCATION REHABILITATION ACT AND THE AMERICANS WITH DISABILITIES ACT (ADA)

As noted under Purpose and Need (Section I.B) and in the Transportation section of this chapter, one of the purposes of the proposed Master Plan is to bring Camp facilities into compliance with ADA requirements. Compliance with Section 504 and the ADA would be monitored through review of all construction plans and annual Operating Plans. A new special use permit would also include Section 504 and ADA compliance and monitoring provisions.

K. SUMMARY OF ADVERSE IMPACTS WHICH CANNOT BE AVOIDED

Implementation the proposed action (Alternative 2) or Alternative 3 would result in some adverse impacts to the physical and biological environment and the human environment. Many of these impacts can be minimized and/or mitigated, as described previously. The impacts described below represent those that would occur after application of mitigation measures. The

degree of impact would be proportional to the amount of construction, operation and maintenance actually undertaken.

WATERSHED VALUES, FISH AND WILDLIFE HABITAT, AND SOILS

Hardened and impervious surfaces associated with new buildings and their footprints, walkways, courtyards, and etc. would render about 4 acres of the project area incapable of supporting forest vegetation. Site productivity would be diminished for the as long as the Camp's facilities and structures remain in place.

VEGETATION

Construction of new facilities would result in unavoidable impacts to vegetation in selected areas where it is removed to construct new facilities, including new camper cabins, commons and multipurpose buildings, and a new RV use area. However, in the long term, these impacts would be offset to a large degree by restoration of vegetation in other areas within the Camp and would represent a small change in the vegetation cover overall.

HISTORIC RESOURCES

There would be some impacts to historic structures at the Camp as two structures more than 50 years old are proposed to be demolished as part of the proposed improvements (Front and Back Cabins). However, neither these structures nor the Camp as a whole are recommended as eligible for listing on the National Register of Historic Places. Therefore, there would be no adverse impact to historic resources.

RECREATION

For the Action Alternatives, there would be an increase in use of trails surrounding the Camp's permit area. Effects of these impacts on other resources would be mitigated through trail management, maintenance and improvements, as well as signage used to discourage off-trail use. It is expected that some sections of existing off Permit trail segments will need to be relocated to avoid wet area and provide a more stable trail surface. In addition, all signage will be placed on post, not on trees. Sign design and style will be covered in the Trails Plan (see Appendix D).

AIR AND NOISE

For the Action Alternatives, increases in capacity would have some increase on impacts from air and noise. However, these impacts would not be significant outside the immediate vicinity of the Camp.

L. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Irreversible commitment of resources refers to non-renewable resources, such as cultural resources, or to those factors which are renewable only over long time spans, such as soil productivity. Irretrievable commitment applies to losses of production, harvest or use of renewable natural resources. For example, the timber production capability of the area is

irretrievably lost while the area is used as a recreation site. The production lost is irretrievable but the action is not irreversible.

Hardened and impervious surfaces associated with new buildings and their footprints, walkways, courtyards, and etc. will render about 4 acres of the project area incapable of supporting forest vegetation. Site productivity will be diminished for the as long as the Camp's facilities and structures remain in place.

Construction of new improvements at the Camp and continued use of the Camp for recreational purposes would result in an irretrievable loss of timber production at the site during the life of the Camp. In addition, continued use of the Camp for recreation also would result in a loss of wildlife habitat in disturbed areas within the Camp during its use.

Most of the proposed actions, including continued use of the Camp, could be reversed through future discontinuation of use and demolition over time if the Camp did not continue to meet the recreation needs of the populations it serves. There would be no irreversible impacts on hydrology, water quality or other watershed values. There could be some irreversible losses of vegetation or wildlife habitat if the ability to grow vegetation in compacted areas were affected to the degree that it could not be reversed over time.

CHAPTER IV. LIST OF PREPARERS

This environmental assessment was prepared by a consultant team led by Cogan Owens Cogan (COC) in cooperation and collaboration with USFS staff. Subconsultants to COC included Archeological Investigations Northwest (AINW) (cultural and historical surveys and analysis), GreenWorks P.C. (landscape architecture and design), Turnstone Environmental (environmental resource surveys and preparation of biological assessments and evaluations for botanical and wildlife species), Rob Gill and Todd Reinwald (hydrology, solids, streams, wetlands, and fisheries habitat and species). Consultant and USFS team members are listed below.

USFS STAFF

Mary Allison	McKenzie River Ranger District, District Ranger
Eric Bergland	McKenzie River Ranger District, Archeologist
Shane Kamrath	McKenzie River Ranger District, Wildlife Biologist
Dave Kretzing	McKenzie River Ranger District, Hydrologist
Diane Mercer	McKenzie River Ranger District, Special Uses Administrator
Steve Otoupalik	McKenzie River Ranger District, Recreation and Trails Specialist
Sandra Ratliff	USFS Project Manager, McKenzie River Ranger District, Recreation Specialist
Ray Rivera	McKenzie River Ranger District, Fisheries Biologist
Susan Stearns	McKenzie River Ranger District, Botanist
Doris Tai	Willamette National Forest, Recreation Staff

CONSULTANT TEAM

Cogan Owens Cogan, LLC

Matt Hastie	COC Principal, Project Manager and technical analysis and writing, agency coordination
Jennifer McReynolds	COC Graphic Designer, Graphic design and report preparation
Jim Owens	COC Principal, senior advisor, NEPA analysis, agency coordination
Damian Pitt	COC Associate, EA preparation/technical writing

GreenWorks, PC

Mike Abbate	GW Principal, landscape architecture and design, site analysis
Corey Gallo	GW Associate, site planning and mapping
Michelle Guthrie	GW Associate, mapping

Turnstone Environmental

Katie Arhangelsky	Botanist, Resource surveys and analysis for botanical species; assistance in evaluation of impacts on vegetation; preparation of biological evaluation for wildlife
Jeff Reams	Biologist, Resource surveys and analysis for wildlife species; preparation of biological evaluation for wildlife
Tom Williamson	Project Manager/Biologist, Environmental surveys and analysis, preparation of biological assessments and evaluations

Archeological Investigations Northwest (AINW)

John L. Fagan, Ph.D., R.P.A.	Archeological and cultural field surveys, research and documentation
Nicholas J. Smits, M.A., R.P.A.	Archeological and cultural field surveys, research and documentation
Elizabeth J. O'Brien, B.A.	Historical field surveys, research and documentation

Hydrology, Streams, Wetlands, Soils and Fisheries Specialits

Rob Gill, MS	Project Manager for Fisheries and Hydrology, Environmental surveys and analysis, preparation of Fisheries and hydrology assessments
Todd Reinwald, BS	Soil Scientist, Environmental surveys and analysis, preparation of soils, hydrology, watershed, and water quality assessments

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Note: Additional resources are identified in documents referenced above prepared by Turnstone Environmental Consultants, Archeological Investigations Northwest, and Rob Gill/Todd Reinwald.

APPENDIX A. MANAGEMENT OF COMPETING AND UNWANTED VEGETATION

To minimize the spread of noxious weeds, the following actions should be taken during the course of improvements where applicable:

a. Control weeds as necessary at project sites.

b. To reduce risk of spreading weed infestations, begin project operations in uninfested areas before operating in weed-infested areas.

c. Locate and use weed-free project staging areas. Avoid or minimize all types of travel through weed-infested areas, or restrict to those periods when spread of seed or propagules are least likely.

d. Determine the need for, and when appropriate, identify sites where equipment can be cleaned. The cleaning requirement applies to equipment or vehicles that are used off roads or are used in the maintenance or reconstruction of roads. Service vehicle, water trucks, pickups, cars, and similar vehicles would not need to be cleaned. Clean equipment before entering National Forest System lands; a Forest Officer, in coordination with the Unit Invasive Species Coordinator, would approve use of on-Forest cleaning sites in advance. Seeds and plant parts would be collected when practical and incinerated. Remove mud, dirt, and plant parts from equipment before moving it into a project area.

e. Clean equipment, before leaving the project site, if operating in areas infested with weeds. Determine the need for, and when appropriate, identify sites where equipment can be cleaned. Seeds and plant parts would be collected when practical and incinerated.

f. Workers would inspect, remove, and properly dispose of weed seed and plant parts found on their clothing and equipment. Proper disposal means bagging the seeds and plant parts and incinerating them.

g. Evaluate options, including closure, to regulate the flow of traffic on sites where desired vegetation needs to be established.

h. Inspect and document the area where material from treated weed-infested sources is used, annually for at least three years after project completion, to ensure that any weeds transported to the site are promptly detected and controlled.

i. Maintain stockpiled, uninfested material in a weed-free condition.

j. Retain native vegetation in and around project activity to the maximum extent possible consistent with project objectives.

k. Minimize soil disturbance to the extent practical, consistent with project objectives.

l. Revegetate disturbed soil (except travelways on surfaced projects) in a manner that optimizes plant establishment for that specific site. Define for each project what constitutes disturbed soil and objectives for plant cover revegetation.

m. Revegetation may include topsoil replacement, planting, seeding, fertilization, and weed-free mulching as necessary. Plant seed and plant material will be native. Genetically local material will be used when available. Material such as dirt, fill, and gravel will be weed free. The source of the material ie., rock pit, stock pile, will be examined for weeds prior to purchase. Use certified weed-free or weed-seed-free hay or straw where certified materials are required and/or are reasonably available. Always use certified materials in areas closed by administrative order. Where practical, stockpile weed-seed-free topsoil and replace it on disturbed areas (e.g., road embankments or landings)

n. Use local seeding guidelines to determine detailed procedures and appropriate mixes. To avoid weed-contamination, a certified seed laboratory needs to test each lot against the all-State noxious weed list to Association of Seed Technologists and Analysts (AOSTA) standards, and provide documentation of the seed inspection test. There are plant species not on State and Federal noxious weed lists that the Forest Service would consider non-native invasive weeds. Check State and Federal lists to see if any local weeds need to be added prior to testing. Seed lots labeled as certified weed free at time of sale may still contain some weed seed contamination. Non-certified seed should first be tested before use.

o. Inspect and document all limited term ground-disturbing operations in noxious weed infested areas for at least three (3) growing seasons following completion of the project. For on-going projects, continue to monitor until reasonable certainty is obtained that no weeds have occurred. Provide for follow-up treatments based on inspection results.

p. Avoid moving aquatic weed plants from one body of water to another.

q. Annually inspect parking areas for noxious weeds.

BIOLOGICAL EVALUATION

CAMP WHITE BRANCH IMPROVEMENTS

BIOLOGICAL EVALUATION OF THREATENED, ENDANGERED, PROPOSED, SENSITIVE, SURVEY AND MANAGE WILDLIFE AND BOTANICAL SPECIES

Prepared by:

Turnstone Environmental Consultants Inc

Revised March 25, 2005

DOCUMENTATION FOR ENVIRONMENTAL BASELINE AND EFFECTS OF PREFERRED ACTION(S) ON RELEVANT INDICATORS

Camp White Branch

TABLE OF CONTENTS

I. Introduction

Cogan Owens Cogan with guidance from Camp White Branch retained the services of Turnstone Environmental Consultants, Inc. (TECI) to perform a Biological Assessment and Evaluation as part of the proposed Master Plan at Camp White Branch. TECI performed surveys, assessments and evaluations for potentially impacted wildlife and botanical species and their respective habitats in consultation with Cogan Owens Cogan and the USFS.

Camp White Branch has been managed and operated by the Church of God since 1957. The 17.4-acre year-round camp caters to church groups, Boy Scouts and other family-related organizations. The camp currently is able to accommodate 156 campers and staff. Since the church membership and other users of the camp have grown, the need for larger facilities has necessitated the creation of a new Master Plan for Camp White Branch. This Master Plan would increase accommodations to 250 campers and staff. Increasing the capacity of the camp by nearly 100 patrons would require constructing of new facilities, updating current facilities and enhancing many of the environmental attributes of the camp.

Proposed actions addressed in the new Master Plan at Camp White Branch would result in potential environmental impacts in excess of what the current Forest Service lease and Special Use Permit currently allow. Any forest management activities that potentially effect populations of or alter habitat for PETS (proposed, endangered, threatened, or sensitive) species require a Biological Evaluation (FSM 2671.44) to be completed. The Biological Evaluation process (FSM 2672.43) is used to assist in the determination of possible effects that the proposed management activities may have on:

A. Species listed or proposed to be listed as endangered (E) or threatened (T) by the U.S. Fish and Wildlife Service (FWS).
B. Species listed as sensitive (S) by the USDA Forest Service, Region 6 or suspected to occur on the Willamette National Forest.

A summary of biological background information on PETS and SM species can be found at the end of this document in Attachment 1.

II. Project Location and Description

This project is located on the Willamette National Forest, McKenzie River Ranger District. The project area is located about one-half mile south of Highway 242, approximately seven miles South East of Highway 126. The project legal is T16S R6E Sec 21.

III. Project Purpose

Cogan Owens Cogan, in partnership with Camp White Branch, has developed a new long-term Master Plan for Camp White Branch. The new Master Plan would increase the overall capacity of the Camp by about 100 persons to approximately 250 persons. Implementation of the Master Plan would require construction and other activities resulting potential environmental impacts. One of the specific objectives of this project is to improve the environmental quality of the site with the goal that many of the impacts would be beneficial to the natural environment in comparison to the existing configuration and condition of the camp. The purpose of this project is to receive authorization from the US Forest Service for a new long-term Master Plan for Camp White Branch.

A new 30-year Special Use Permit (SUP) would be issued to Camp White Branch, in conjunction with a new Master Plan, for non-exclusive use and occupancy of the project area. While the Camp's current special use permit will not expire until December 31, 2013, renewing this permit would allow the camp to continue to fulfill the needs of its users and help meet US Forest Service goals to enhance access to recreation and natural experiences for a broad range of people. It also would help the Camp to maintain and enhance partnerships with its client organizations.

Specific needs addressed by the new Master Plan include:

- *Meet the programming needs of camp user groups.*

  Current facilities do not meet the needs of many of the camp's most significant user groups, including the Church of God Youth Ministries and the Catholic Church. Several groups require larger facilities to accommodate their entire membership. They also require more large and small group meeting spaces, indoor recreational facilities, and large spaces for spiritual worship. In addition, larger facilities would allow the camp to serve more than one small group at one time, improving the camp's overall utilization. Upgraded cabins, meeting and multi-purpose facilities also would allow for more use by outdoor school and other groups during the shoulder (spring/fall) and winter seasons when the camp currently is not fully utilized

  Proposed new facilities would provide more capacity and flexibility to meet the diverse needs of the large and small groups that use the camp. This would result in needed improvements to facilities in need of repair and renovation such as the pool and dining hall. Accessibility improvements also would meet ADA requirements.

- *Improve housing options for campers to meet the specific needs of camp users.*

  Proposed new cabins would provide flexibility and efficient utilization for a variety of camp users. They also would include small common areas that would meet important

needs for small group meeting areas. Between seven and 10 new cabins would be constructed at the camp (size and number varies by proposed action alternative).

In addition to more flexible cabin facilities, areas are needed to accommodate recreational vehicles (RVs) used as temporary housing by seasonal construction workers, camp hosts and some camp counselors or assistants.

The proposed new RV area would provide temporary housing for selected camp users. It would be designed to minimize visual and other impacts and would be used only during a few short periods of the year.

- *Provide adequate health care facilities for campers.*

The current first aid station is inadequate. A new combined first aid station and administrative housing building has been authorized to be constructed adjacent to the lodge. However, this location would not be convenient for most campers, particularly during the summer months.

The proposed Master Plan includes a new health care facility within the proposed new Commons building. It would provide a centrally located facility to serve the health care needs of all persons on site in close proximity to cabins and administrative functions. Because a first aid station represents a short-term need for the camp, an interim/short-term facility would be provided in the camp's service area (near the authorized location).

- *Improve recreational facilities for campers.*

Currently, the camp is lacking in both indoor and outdoor recreational facilities. Playing fields are in need of improvement (i.e., leveling and filling of holes) to address safety and use issues. No dedicated indoor recreational facilities (e.g., basketball, volleyball, table tennis, etc.) are available and there are no facilities specifically designed for crafts or environmental education. The camp's swimming pool requires renovation to repair leaks and meet current swimming pool design standards. In addition, because the existing swimming pool is outdoors, it can be used for only a limited portion of the year.

A new multi-purpose building would be large enough for a high-school sized basketball court and volleyball courts. It also would include a stage and space for spectators, as well as for crafts activities. A recreation room with pool and ping pong tables would be incorporated into the new Commons building.

The existing playing field would be leveled and filled to enhance safety and usability. The existing amphitheater below the lodge would be redesigned to improve its appearance and utility.

The pool and pool building would be relocated and rebuilt to address repair issues, meet current design and safety standards, and improve its orientation and appearance. It

would be enclosed for future winter use. The camp's water slide would continue to be used but could be redesigned somewhat to improve its appearance and integration with other facilities.

Implementation of the Master Plan would include improvements to trail maps and signage, including identifying connections between informal trails in and around the camp to nearby USFS trail systems.

The camp's snow-play hill would continue to be open to the public.

- *Enhance the natural environment and increase awareness of environmental values*

  Some areas within the camp have been denuded of vegetation, with soils compacted as a result of a long history of use. These areas would be restored using native species of vegetation. Restoration and planting of native vegetation would rehabilitate disturbed areas within the permit area, improving wildlife habitat and plant values.

  The existing Lodge would be used as an environmental education building. It could include educational displays and space for environmental education activities. This designated function would enhance the profile of these activities and ensure long-term use and vitality of the lodge.

- *Provide for adequate infrastructure and utilities.*

  The camp's existing septic system and drainfield would require improvements to meet proposed increases in capacity and ensure adequate protection of water quality in and around the camp. The camp currently has a limited ability to suppress fires given a relatively small water storage reservoir and inadequate pumping equipment for using the camp's swimming pool for fire suppression.

  The camp's existing septic system would be replaced and expanded to meet long-term future capacity needs.

  Expansion of the camp's water storage reservoir or installation of pumping equipment to fight fires would help protect buildings at the camp and the surrounding forest in the event of a fire. Expansion of the storage reservoir would allow for installation of a looped water distribution system and sprinkler systems in new buildings.

  The camp's existing well would continue to be used for domestic water needs.

- *Improve pedestrian and vehicle traffic circulation, safety and convenience.*

  The current camp entry roadway takes vehicles past the existing maintenance area and then down a hill into the core area of the camp. Most camp users arrive by bus or are dropped off at the camp, with relatively limited needs for long-term parking during the summer months. During the winter, most vehicles are required to park near Highway

242 and walk to the camp for snow tubing or other activities. Some major pedestrian pathways at the camp do not meet ADA accessibility requirements for grade or width.

The proposed Master Plan would improve safety and aesthetics for campers by discouraging long-term parking of vehicles in the core area of the camp. In addition, the entry road into the core area of the camp would be redesigned to emphasize its use as a pedestrian roadway. Primary pedestrian paths between the Lodge, new Commons and Multipurpose buildings and cabins would be designed to meet ADA requirements.

Construction of a new gatehouse, reconfiguration of the entry road and screening between the road and adjacent maintenance and staff housing buildings would enhance the sense of arrival for visitors to the camp.

- *Help the USFS continue to meet diverse recreational needs on the Forest in an area designated for summer and winter use.*

  Proposed improvements at the camp would enhance opportunities to provide access to recreational activities on the Forest. They would provide access to more individuals, particularly youth and families in all seasons, including in the spring, fall and winter seasons. Improvements would allow for continued use of an area that is already developed. Future use and enhancements at the camp, including those to adjacent, informal trails, also would allow for exposure to USFS trail facilities outside the camp. The improvements would help implement the Willamette National Forest Plan, including general guidance to "provide for a wide range of developed and dispersed recreation opportunities compatible with individual management area objectives and sensitive to public demand and/or use." (*Willamette National Forest Plan, Recreation Management Objective FW-001*)

IV. Wildlife Assessment and Evaluation

A. Wildlife Assessment and Survey of the Project Area

Pre-field reviews were conducted with resource area biologists to determine which species from the Regional Forester's 2004 Sensitive Species List and 1994 Survey and Manage Species List for the Willamette National Forest are known to occur in the project area. Suitable habitat for these species was also considered within and adjacent to the project area. Table 1 displays the summary of effects/impacts for these wildlife species.

Initial consultation with the acting district ranger and wildlife biologist occurred prior to the Survey and Manage Mitigation Measure Standards and Guidelines Record of Decision to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines in March 2004. Turnstone Environmental Consultants Inc. consulted with regional Forest Service biologists regarding the appropriate course of action for handling the survey efforts. Under the recommendation of federal agency professionals, TECI was advised to complete the survey

effort if surveys were underway at the time of the discontinuation of the SM program. Accordingly, TECI completed to protocol all necessary mollusk and red tree vole surveys. The first year of a two-year survey effort was completed for great gray owls. Survey and Manage species located during the surveys are considered in this report. Table 1 displays the summary of the impacts for those wildlife species.

Table 1. Threatened, Endangered, Sensitive, Survey and Manage Wildlife Species Known to Occur on The Willamette National Forest and The Potential Effects/Impacts to Those Species. (The Regional Forester's Sensitive Animal List Updated July 2004).

TES & SM Species	Oregon Status	Federal Status	Habitat present?	Effects/Impacts and Required Mitigation
Least Bittern ***Ixobrychus exilis***	**SP**	**None**	**No Habitat**	**NI. No documented sightings in WNF but suspected to occur. No open marshes present at site.**
Bufflehead ***Bucephala albeola***	**SU**	**None**	**No Habitat**	**NI. No open waterways at site which is a habitat requirement of species**
Harlequin Duck ***Histrionicus histrionicus***	**SU**	**None**	**No Habitat**	**NI. No fast moving waters with loafing at site which is prefered by species**
Yellow Rail ***Coturnicops noveboracensis***	**SC**	**None**	**No Habitat**	**NI. No documented occurances in WNF but suspected to occur. No presence of wet meadows or marshes**
Black Swift ***Cypseloides niger***	**SP**	**None**	**No Habitat**	**NI. No documented occurances in WNF but suspected to occur. No cliffs present at site for foraging/nesting**
Baird's Shrew ***Sorex bairdii permiliensis***	**None**	**None**	**No Habitat**	**NI. Listed on the heritage ranking sytem as T3 = Subspecific taxon is either very rare throughout its range or found locally in a restricted range**
Pacific Shrew ***Sorex pacificus cascadensis***	**None**	**None**	**No Habitat**	**NI. Listed on the heritage ranking sytem as T3 = Subspecific taxon is either very rare throughout its range or found locally in a restricted range**
California wolverine ***Gulo gulo***	**T**	**None**	**No Habitat**	**NI. Avoid human contact and prefer higher elevation. Would likely avoid site**
Pacific Fisher *Martes pennanti*	**SC**	**None**	**No Habitat**	**NI. Few documented sightings in WNF. Most observations at high elevations but can be found at mid elevations. Would likely avoid site to escape human contact**
Pacific Fringe-tailed bat ***Myotis thysanodes vespertinu***	**None**	**None**	**No Haitat**	**NI. Listed on the heritage ranking system as T2 = Subspecific taxon is imperiled globally.**
Townsend's Big-eared Bat ***Corynorhinus townsendii***	**SC**	**None**	**No Habitat**	**NI. Most occurances are at lower elevations. Prefer caves, mines or buildings with humid conditions**
Oregon Slender Salamander ***Batrachoseps wrighti***	**SU**	**None**	**Habitat**	**NI. Mostly found in lower elevations but is within the range that the species can be found.**
Cascade Torrent Salamander ***Rhyacotriton cascadae***	**SV**	**None**	**Habitat**	**NI. Found in cold springs, seeps and headwater streams.**
Foothill Yellow-legged Frog ***Rana boylii***	**SV**	**None**	**No Habitat**	**NI. No documented habitat or sightings on district**
Oregon Spotted Frog ***Rana pretiosa***	**SC**	**C**	**No Habitat**	**NI. Preferences to marshes and slow moving warm water which is not available at site**

TES & SM Species	Oregon Status	Federal Status	Habitat present?	Effects/Impacts and Required Mitigation
Northwestern Pond Turtle ***Clemmys marmorata marmorata***	**SC**	**None**	**No Habitat**	**NI. Associtated with moderately deep water and slow moving water which is not present at site**
North American Lynx ***Felis lynx canadensis***	**None**	**T**	**No Habitat**	**NI. No documented sighting on district. Prefer higher elevations of subalpine fir and lodgpole pine where snowshoe prey is available**
Northern Spotted Owl ***Strix occidentalis***	**T**	**T**	**Habitat**	**NE. Older forest stands present. All documented activity centers are at least .5 miles from project area.**
Peregrine Falcon ***Falco peregrinus anatum***	**E**	**None**	**No Habitat**	**NE. No cliff habitat available at site**
Bald Eagle ***Haliaeetus leucocephalus***	**T**	**T**	**Habitat**	**NE. Seasonal restriction January 1 – August 31 to minimize disturbance during the critical nesting period if nest or roost is discovered.**
Crater Lake Tightcoil ***Pristiloma arcticum crateris***	**S1**	**None**	**No Habitat**	**NI. No documented occurances in WNF but suspected to occur. Originally on survey and manage list then put on sensitive list March 2004**
Great Gray Owl ***Strix nebulosa***	**None**	**None**	**Habitat**	**NI. Listed on SM species list which was dropped March 2004. No special status. Nesting and foraging habitat present but no documented species located at site**
Red Tree Vole ***Arborimus longicaudus***	**S1**	**None**	**Habitat**	**Listed on SM species list which was dropped March 2004. Now considered Sensitive in NW Coast. Habitat present but no documented species located at site**

Effects/Impacts and Required Mitigation
NI / **NE=** **N**o **I**mpact for Sensitive species. **N**o **E**ffect for Threatened or Endangered species.
NLCT = May impact individuals or their habitat, but the action will **N**ot **L**ikely **C**ontribute to a **T**rend towards Federal Listing or loss of viability to the population or species.
MA/NLAA=May **A**ffect, **N**ot **L**ikely to **A**dversely **A**ffect.
MCT = May impact individuals or their habitat, with a consequence that the action **M**ay **C**ontribute to a **T**rend towards Federal Listing or a loss of viability to the population or species.
BI = **B**eneficial **I**mpact.

Species Status
SC=Sensitive species, critical category
SV=Sensitive species, vulnerable category
SP=Sensitive species, peripheral or naturally rare category
SU=Sensitive species, undetermined status
S1=Critically imperiled in respective state
E=Listed as endangered
T=Listed as threatened

B. Proposed Project Alternatives

GreenWorks and Cogan Owens Cogan have refined three alternatives after thourogh discussions with members of the Camp White Branch Board. The board members have stated Alternative A would best fit the long term goals of the camp. The specific actions of the

proposed alternatives and their Effects/Impacts on PETS and SM wildlife species are found in Tables 2 & 3. No PETS or SM species have been identified in and/or adjacent to Camp White Branch. Only species that are suspected to be present are addressed in the tables below. Option C is the no action alternative and is not addressed in the tables.

Table 2. Proposed Alternative A and Determination of Effects/Impacts on PETS Species where Habitats are Present

Prosed Features	Alternative A	Bald Eagle *Haliaeetus leucocephalus*	Northern Spotted Owl *Strix occidentalis*	Cascade Torrent Salamander *Rhyacotriton cascadae*	Oregon Slender Salamander *Batrachoseps wrighti*
Entry Road	Use current location Modify edges	NE	NE	NI	NI
Residential	Retain existing cabins = 80 beds) Add 10 new small cabins (18 people each) = 180 beds	NE Seasonal restriction January 1 – August 31 to minimize disturbance during the critical nesting period if nest or roost is discovered.	NE. Cabins will be positioned in a manner that will not effect CHU	NI	NI
Commons Building	New 4,500 SF 2-story building in current location Build new kitchen/M.P. building to west	NE	NE	NI	NI
Staff Housing/ Admin	All staff in new commons building except Assist. Mgr. in new house and manager in existing structure	NE	NE	NI	NI
Multipurpose Building	New building in existing tent assembly area Include new kitchen	NE	NE	NI	NI
Outdoor Recreation	Renovate playing field area New challenge course NE of service area	NE	NE	NI	NI
Swimming Pool	New pool with natural theme in approximately same location; enclose pool in long-term	NE	NE	NI	NI
Lodge	Winter use – warming, snack bar Summer – nature center and snack bar	NE	NE	NI	NI
First Aid Station	Temporary/interim facility in service area; long-term in Commons Building	NE	NE	NI	NI
Parking	6 staff spaces in service court 2 staff spaces near new commons building 2 accessible spaces near new commons building 38 long-term spaces in existing clearing east of gatehouse/camp entry	NE. Seasonal restriction January 1 – August 31 to minimize disturbance during the critical nesting period if nest or roost is discovered.	NE. Cabins will be positioned in a manner that will not effect CHU	NI	NI
Recreational Vehicles (RVs)	6 full RV hookups E. of snow play hill; screen and minimize visual impacts	NE	NE	NI	NI
Natural Resources	Restoration of existing impacted areas	NE	NE	NI	NI

Prosed Features	Alternative A	Bald Eagle *Haliaeetus leucocephalus*	Northern Spotted Owl *Strix occidentalis*	Cascade Torrent Salamander *Rhyacotriton cascadae*	Oregon Slender Salamander *Batrachoseps wrighti*
Trails	Make main pedestrian routes ADA accessible Create new interpretive loop trail	NE	NE	NI. Keep Trails away from splash zones in headwater streams	NI
Water Supply/Fire Suppression	Use existing supply and practices (small reservoir and swimming pool)	NE	NE	NI	NI

Table 3. Proposed Alternative B and Determination of Effects/Impacts on PETS Species where Habitat is Present

Prosed Features	Alternative B	Bald Eagle *Haliaeetus leucocephalus*	Northern Spotted Owl *Strix occidentalis*	Cascade Torrent Salamander *Rhyacotriton cascadae*	Oregon Slender Salamander *Batrachoseps wrighti*
Entry Road	New entry road south of manager's house One-lane road to service area	NE. Seasonal restriction January 1 – August 31 to minimize disturbance during the critical nesting period if nest or roost is discovered.	NE. Cabins will be positioned in a manner that will not effect CHU	NI	NI
Residential	Retain 3 existing larger cabins = 42 people Add 7 new large cabins (30 people each) = 210 beds	NE. Seasonal restriction January 1 – August 31 to minimize disturbance during the critical nesting period if nest or roost is discovered.	NE. Cabins will be positioned in a manner that will not effect CHU	NI	NI
Commons Building	New 4,500 SF 2-story building S. of main road Relocate volleyball courts	NE	NE	NI	NI
Staff Housing/ Admin	Same as A	NE	NE	NI	NI
Multipurpose Building	New building S. of E. cabins/E. of new swimming pool	NE	NE	NI	NI
Outdoor Recreation	Renovate playing field area New challenge course E. of service area Relocate volleyball courts to existing large tent site	NE	NE	NI	NI
Swimming Pool	New enclosed pool in slightly different location, integrated with new Multipurpose building	NE	NE	NI	NI
Lodge	Same as A	NE	NE	NI	NI
First Aid Station	Same as A	NE	NE	NI	NI
Parking	8 staff spaces in service court 2 accessible spaces near new commons building 10 – 15 camper spaces in core camping area 25 - 30 long-term spaces in existing clearing east of gatehouse/camp entry	NE	NE	NI	NI
Recreational Vehicles (RVs)	6 full RV hookups in existing tent platforms area	NE	NE	NI	NI

Prosed Features	Alternative B	Bald Eagle *Haliaeetus leucocephalus*	Northern Spotted Owl *Strix occidentalis*	Cascade Torrent Salamander *Rhyacotriton cascadae*	Oregon Slender Salamander *Batrachoseps wrighti*
Natural Resources	Same as A	NE	NE	NI	NI. To eliminate impacts leave all large down wood alone while restoring trails
Trails	Same as A	NE	NE	NI. Keep Trails away from splash zones in headwater streams	NI
Water Supply/Fire Suppression	Larger storage reservoir to support sprinkler system	NE	NE	NI	NI

Effects/Impacts and Required Mitigation
NI / **NE**== **N**o **I**mpact for sensitive species. **N**o **E**ffect for TE species.
NLCT = May impact individuals or their habitat, but the action will **N**ot **L**ikely **C**ontribute to a **T**rend towards Federal Listing or loss of viability to the population or species.
MA/NLAA=May **A**ffect, **N**ot **L**ikely to **A**dversely **A**ffect.
MCT = May impact individuals or their habitat, with a consequence that the action **M**ay **C**ontribute to a **T**rend towards Federal Listing or a loss of viability to the population or species.
BI = **B**eneficial **I**mpact.

C. Potential Effects on PETS Species

NORTHERN SPOTTED OWL (*Strix occidentalis*)
Federal Threatened
State Threatened

Habitat Availability

In general, northern spotted owl activity primarily occurs in the interior of older timber stands (see Attachment 1). These habitats provide the structural characteristics required by the owls for food, cover, nest sites and protection from weather and predation. Forest structure within and adjacent to Camp White Branch provides many of the necessary requirements needed for the spotted owl to survive. Owl biologists from the H.G. Andrews Experimental Forest are currently conducting a demography study in areas adjacent to the project site. After a field reconnaissance of the project area, TECI concluded that potential habitat was present for the northern spotted owl. The need for northern spotted owl surveys was discussed in meetings prior to the survey season. Under the advisement of the acting district ranger, no northern spotted owl surveys were conducted by TECI. It was stated that sufficient historical information on northern spotted owl provincial home ranges in the project area was available and that additional surveys were not necessary.

Habitat Trends
Old growth forest structure is currently present for northern spotted owls which provide foraging, nesting and roosting habitat in and adjacent to the camp. With only minimal impacts to disturbed habitats adjacent to established structures within the boundaries of the camp and no manipulation of trees or habitat outside the 17.4 acre camp the forest will continue to evolve into old growth forest structure.

Direct/Indirect/Cumulative Effects
On April 13, 1994, the Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl (1994 ROD) was signed by the Forest Service and other Federal agencies. This 1994 ROD vacated previous direction and amended the Willamette National Forest Land Management Plan (1990). The 1994 ROD includes a network of large Late Successional Reserves (LSR) distributed throughout the owl's range, totaling approximately 7.4 million acres. It also includes 100 acre LSR's to be designated around owl sites known as of Jan. 1, 1994. The 1994 ROD, which also includes additional protection for riparian areas and other species, was assessed by the USFWS, and a determination was made that it would not jeopardize the northern spotted owl.

Analysis of the proposed alternatives indicates that no conflict exists between any action or no action alternative and the implementation of the 1994 ROD:

- One hundred-acre late success ional reserves have been designated around all owl sites known prior to 1994. No stands greater than 80 years old within 100-acre or "large" LSR's will be treated with any action alternative.
- All applicable standards and guidelines described in the 1994 ROD will be implemented for all action alternatives.

Action Alternatives
Managing Forest Service lands consistent with the 1994 ROD will minimize the direct effects of the proposed action on the spotted owl. Avoiding activities that result in “incidental take” of owls will further mitigate adverse effects.

Conclusion
Information from the USFS indicates that Critical Habitat Units are located within the boundaries of Camp White Branch. Although, potential disturbances occuring within the boundaries of the camp will not effect any constituate habitat elements. All activities will occur in the close proximity of established structures in disturbed habitats. Known spotted owl activity centers have been located near the project area but no closer than .5 miles. As a result, disturbances and activities associated with this project, including continued use of the camp as part of the No Action alternative and improvements proposed as part of the action alternatives, will have no effect on northern spotted owls or the habitat they use to survive.

Conclusion
The disturbances associated with this project will have no effect on northern spotted owls or the habitat they use to forage, nest or roost.

BALD EAGLE (*Haliaeetus leucocephalus*)
Federal Threatened
State Threatened

Habitat Availability
The bald eagle requires habitat consisting of scattered old-growth conifer trees in proximity to available food sources, such as lakes, reservoirs and rivers (USDI 1990). Scattered old-growth conifer trees are present for nesting at the camp; however, foraging opportunities are limited. Since bald eagles prefer roosting and nesting sites in the close proximity to foragaing areas it is unlikely that bald eagles would use the available habitat. No nest or roost sites have been documented on or adjacent to the camp. Numerous sightings of bald eagles have occurred on the Mckenzie River approximately 7 miles to the north.

Habitat Trends
Bald eagle habitat is expected to increase in the area as stands continue to develop old growth structures. Water quality in the lakes and rivers is currently good and this trend is expected to continue. The greatest risk to future bald eagle use is increased human use and unexpected impacts to fish and water quality.

Direct/Indirect/Cumulative Effects
In the absence of wildfire disturbance, forest stands will continue to succeed into older forests, providing additional nesting and roosting structure for the bald eagle in the future. No direct or indirect cummulative effects will occur that will reduce water quality or flucuations in fish populations that would reduce the bald eagle's ability to forage successfully.

Action Alternatives
There are no expected effects to bald eagle occupied nesting habitat since there are no known nest sites in the proposed project area. Furthermore, the Willamette National Forest Plan indicates that potential roosting, nesting and foraging habitat has been designated within 1.1 miles of specific reservoirs, lakes and rivers. Camp White Branch is more than three miles from the nearest of these features (the McKenzie River). Water quality will continue to be maintained on this landscape under all action alternatives. If a nest or roost site is discovered within the project area in the future, then a seasonal restriction from January 1 to August 31 could limit the potential effects from noise disturbance associated with this project.

Conclusion
The disturbances associated with this project will have no effect to bald eagles.

OREGON SLENDER SALAMANDER (*Batrachoseps wrighti)*
State Sensitive, undetermined status

Habitat Availability
The Oregon slender salamander is a terrestrial species that prefers old-growth conifer forests with large numbers of downed logs. They lay their eggs under thick bark, inside crevices of decaying wood and in talus. No Oregon slender salamanders have been documented at the site although habitat is present near hiking trails just outside the boundaries of Camp White Branch.

Habitat Trends
Downed and decaying wood will continue to exist as mature and old-growth forests evolve. These habitat attributes are an integral part of the Oregon slender salamander's survival. If surrounding forests go undisturbed, the Oregon slender salamander habitat will continue to be available, assuring the survival of the species.

Direct/Indirect/Cumulative Impacts
Oregon slender salamanders rely on downed wood for shelter and reproduction. Minimizing the collection of downed wood for use at campfires or lodge fires would decrease cumulative impacts to the species. Decreasing off-trail compaction of vegetation with proper signage encouraging hikers to stay on established trails will also benefit the species and decrease cumulative impacts.

Action Alternatives
Actions will not negatively impact Oregon slender salamanders, future populations or the Oregon slender salamander habitat.

Conclusion
The disturbances associated with this project will have no impact to Oregon slender salamanders or their habitat.

CASCADE TORRENT SALAMANDER (*Rhyacotriton cascadae)*
State Sensitive, vulnerable category

Habitat Availability
The torrent salamander prefers very cold, clear springs, seeps headwater streams and waterfall splash zones. They forage in moist forests adjacent to these areas. They lay their eggs in rock crevices in seeps, mostly in the spring. No cascade torrent salamanders have been documented at the camp although habitat is present near hiking trails just outside the boundaries of Camp White Branch.

Habitat Trends
Reinforcing many of the trails near headwater streams and seeps will reduce erosion and slow

silt deposition into waterways. With the exception of fire, moist forest environments with headwater streams and seeps necessary to the cascade torrent salamander's survival will continue to be available today and into the future.

Direct/Indirect/Cumulative Impacts
Proper signage encouraging hikers to stay on established trails discouraging walking in splash zones adjacent to headwater streams and seeps where cascade torrent salamanders live and breed will decrease cumulative impacts.

Action Alternatives
Actions will not negatively impact cascade torrent salamanders, future populations or cascade torrent salamander habitat.

Conclusion
The disturbances associated with this project will have no impact to the cascade torrent salamander or their habitat.

CRATER LAKE TIGHTCOIL SNAIL *(Pristiloma Arcticum crateris)*
State Sensitive, critically imperiled

Habitat Availability
Although crater lake tightcoil snails have never been identified in the McKenzie River Ranger District, it is suspected by mollusk experts to have available habitat. This mollusk requires wet areas at elevations above 2000 ft. (Duncan, et al. 2003). Camp White Branch is located at 2,800 ft with seasonally wet areas present, within the the habitat requirements needed for the crater lake tightcoil snail.

Mollusk surveys were conducted in 2004 following the strict environmental and time parameters established in the Forest Service protocol. Two visits to a project area during the wet seasons were required. For each visit, a total of one hour of survey time for every ten acres of affected habitat was completed using a combination of two survey methods. Opportunistic "point searches" constituted one-third of the total search time in the project area. This method samples key habitat features along a survey route. The remaining two-thirds of survey time was spent in a more intensive search of a few small, well defined sample areas. The two surveys visits were conducted in May and June of 2004 with no crater lake tightcoil snails identified.

Habitat Trends
Seasonally wet areas will continue to persist along with elevations above 2000 ft providing habitat for this species now and in the future.

Direct/Indirect/Cumulative Impacts
The crater lake tightcoil snail was not identified in the project area nor has it been identified in the McKenzie River Ranger District. Therefore, the proposed actions of the camp will have no cumulative impacts on the species.

Action Alternatives
This action will not negatively impact the crater lake tightcoil snail or the crater lake tightcoil snail habitat.

Conclusion
The disturbances associated with this project will have no impact to crater lake tightcoil snail.

RED TREE VOLE *(Borimus longicaudus)*
State Sensitive, critically imperiled in NW Coast

Habitat Availability
The Oregon red tree vole is endemic to moist coniferous forests of western Oregon and northwestern California. Optimal habitat has been identified as old growth Douglas fir forests. Red tree voles occur in old growth forests significantly more often than in younger forests (Biswall, et al 2002). These habitat characteristics were present at Camp White Branch which triggered a survey effort for the Oregon red tree vole.

These surveys occurred prior to the Survey and Manage Mitigation Measure Standards and Guidelines Record of Decision to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines. Now, only appropriate habitat in the northwest Oregon Coast Range is required as per the Final Supplemental Environmental Impact Statement To Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines (January 2004).

The protocol for Oregon red tree vole surveys outlines two survey methods - a modified line transect method and the individual tree examination method. The modified line transect method establishes transects with a width of 15 meters on either side of the transect line and a length of at least 90 m. The individual tree examination method requires surveyors to choose the most appropriate trees, usually those at least 16 inches in diameter or greater. A visual search in and near the entire live crown of all trees is conducted from several viewpoints with binoculars. All site visits were conducted using a combination of the two survey methods.

The surveys conducted prior to January of 2004 concluded that no Oregon red tree voles were present in or adjacent to Camp White Branch. The Oregon tree vole is no longer considered a sensitive species on the Willamette National Forest; therefore, no potential impacts on the species due to proposed activities are required to be addressed.

GREAT GRAY OWL (*Strix nebulosa)*
No State Status

Habitat Availability
Great gray owls are associated with mature stands for nesting and roosting in close proximity to open, grassy areas for foraging. These habitat types are found within and adjacent to Camp White Branch. Great gray owls have not been observed at the camp but have been observed in nearby drainages by Forest Service biologists.

The presence of potential habitat triggered surveys prior to the Survey and Manage Mitigation Measure Standards and Guidelines Record of Decision to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines (March 2004). A total of six site night-time visits were preformed in the spring of 2004. No great gray owls were detected during any of the six site visits. A second year six-site visit is required in 2005 according to the Survey and Protocol for the Great Gray Owl within the Range of the Northwest Forest Plan Prepared by the USDA Forest Service and USDI Bureau of Land Management January 12, 2004. However, the ROD March 2004 eliminated the great gray owl as a survey and manage species and it has not been re-listed as a sensitive species. Therefore, the second year survey for great gray owls is no longer required.

V. Botanical Assessment and Evaluation

A. Botanical Assessment and Survey of the Project Area

A prefield review of the proposed project area for plant species listed on the 2004 Regional Foresters list for the Willamette National Forest was conducted. Vascular and non-vascular plant species formerly on the Willamette National Forest Survey and Manage list that have been moved to the Region 6 Sensitive list (July 2004) were also considered. Species formerly designated Survey and Manage category A and C were surveyed for if they had been transferred to the USFS Region 6 Sensitive Plant list. These species are not discussed separately within this evaluation.

This project is within old-growth/late-successional habitat. There is potential habitat for former survey and manage vascular plants, bryophytes, and lichens. Surveys were conducted for these species.

No known sensitive plant populations were found during the prefield review. There is potential habitat for 20 species on the list: 13 vascular plants, 5 lichens, and 2 bryophytes. Species with potential habitat are: *Botrychium minganense, B. montanum, Carex scirpoidea var. stenochlaena, Cimicifuga elata, Coptis triflora, Corydalis aqua-gelidae, Ilimna latibracteata, Montia howellii, Ophioglossum pusillum, Scheuchzeria palustris, Uticularia minor, Wolffia borealis, Wolffia columbiana, Hypogymnia duplicata, Leptogium cyanescens, Lobaria linita,*

Nephroma occultum, Pseudocyphellaria rainierensi, Schistostega pennata, and *Tetraphis geniculata.* A copy of the sensitive plant list dictating presence and absence of habitat for each species and species surveyed is found in Table 4 below.

Table 4. Regional Forester's list of sensitive plant species on the Willamette National Forest Vascular Plants

Species	Federal Status	State Status	Habitat present?	Survey?	Species located?
Agoseris elata			N	N	N
Arabis hastatula			N	N	N
Arnica viscosa			N	N	N
Asplenium septentriole			N	N	N
Aster gormanii	SoC	C	N	N	N
Botrychium minganense			Y	Y	N
Botrychium montanum			Y	Y	N
Botrychium pumicola	SoC	LT	N	N	N
Calamagrostis brewerii			N	N	N
Carex livida			N	N	N
Carex scirpoidea var. stenochlaena			Y	Y	N
Cimicifuga elata	SoC	C	Y	Y	N
Coptis trifolia			Y	Y	N
Corydalis aquae-gelidae	SoC	C	Y	Y	N
Eucephalus vialis	SoC	LT	N	N	N
Frasera umpquaensis	SoC	C	N	N	N
Gentiana newberryi			N	N	N
Iliamna latibracteata			Y	Y	N
Lewisia columbiana var. columbiana			N	N	N
Lycopodiella inundata			N	N	N
Montia howelli	SoC	C	Y	Y	N
Ophioglossum pusillum			Y	Y	N
Pellaea andromedaefolia			N	N	N
Polystichum californicum			N	N	N
Potentilla villosa			N	N	N
Romanzoffia thompsonii			N	N	N
Scheuchzeria palustris			Y	Y	N
Sisyrinchium sarmentosum	SoC	C	N	N	N
Utricularia minor			Y	Y	N
Wolffia borealis			Y	Y	N
Wolffia columbiana			Y	Y	N

Lichens

Species	Federal Status	State Status	Habitat present?	Survey?	Species located?
Hypogymnia duplicata			Y	Y	N
Leptogium cyanescens			Y	Y	N
Lobaria linita			Y	Y	N
Nephroma occultum			Y	Y	N
Pseudocyphellaria rainierensis			Y	Y	N

Bryophytes

Species	Federal Status	Status	Habitat present?	Survey?	Species located?
Schistostega pennata			Y	Y	N
Tetraphis geniculata			Y	Y	N

Fungi

Species	Federal Status	State Status	Habitat present?	Survey?	Species located?
Bridgeoporous nobilissimus			N	N	N

Species Status
SoC- Species of Concern
C- Candidate
LT- Threatened

B. Project Area Habitat and Vegetation Description

Camp White Branch lies within the Western Hemlock vegetation zone. The Western Hemlock Zone features diverse, productive forests high in biomass, dominated by Douglas fir in early successional stands and by Douglas fir and Western hemlock in late successional stands. Forest stands in the Camp White Branch area range in classification from mid to late seral, with the majority of the area characterized by late seral stage forests. The stand is multi-aged, with the oldest trees estimated at around 250 years. The stand structure is multi-layered, with large diameter Douglas fir (21-31.9" dbh), medium diameter Western hemlock (9-20.9" dbh), and saplings and pole trees (1-9" dbh) are predominantly Western hemlock.

Two plant communities characterize the Camp White Branch project area. The wetter areas in the eastern section of the camp are dominated by the Western hemlock/Devil's club/false soloman's seal (*Tsuga heterophylla/Oplopanax horridum/Maiathemum stellata)* association. The overstory here is dominated by Douglas fir and Western hemlock, also with a large component of Western red cedar. This community typically has well aerated soils that are saturated virtually year round (McCain and Diaz, 2002). A seasonal wetland about 1 acre in size is encompassed by the plant community, and is characterized by higher coverage of Western red cedar and dense red alder *(Alnus rubra)* in the overstory. The understory is

characterized by the presence of red osier dogwood *(Cornus stolonifera)*, skunk cabbage *(Lysichiton americanum)*, and several species of sedge *(Carex sp.)*. Also containing this community are the small streams and drainages crossed by the trails associated with the camp.

The vegetation on the less mesic, more upland areas immediately surrounding the camp lodge and cabins is characterized by the Western hemlock/dwarf Oregon grape/swordfern *(Tsuga heterophylla/Mahonia nervosa/Polystichum munitum)* plant association. This is a common plant association in the Old Cascades, occurring at mid-elevations in the Western hemlock zone (Franklin and Dyrness, 1988). Soils are characteristically well-drained, allowing for the presence of some drier site shrubs (McCain and Diaz, 2002). The overstory is dominated by Douglas fir with a cohort of Western hemlock, and also contains a component of Western red cedar and big leaf maple. The shrub layer is moderately well developed, a dominant shrubs in the understory are dwarf Oregon grape *(Mahonia nervosa)*, vine maple *(Acer circinatum)*, and sword fern *(Polystichum munitum)*.

C. Potential Effects on Sensitive Species: Habitat, Survey Effort, and Results

Survey Results
Surveys of the proposed project area for sensitive plants were conducted in the spring/summer of 2004 by Katie Arhangelsky. No sensitive plants were observed during the surveys. Following is a description of the results of the habitat review and survey efforts.

Vascular Plants

Agoseris elata
Region 6 Sensitive, ONHDB S2
Habitat: meadows, open woods. Prefers little canopy cover with a dominate herbaceous layer. No suitable habitat for this species is present in the project area.
Result: No surveys were conducted.

Arabis hastatula
Region 6 Sensitive, ONHDB S1
Habitat: basalt outcrops and cliffs at moderate to high elevations.
Result: No suitable habitat for this species is present in the project area. No surveys were conducted.

Arnica viscosa
Region 6 Sensitive, ONHDB S2
Habitat: rock outcrops, rocky upland areas.
Result: No suitable habitat for this species is present in the project area. No surveys were conducted.

Asplenium septentrionale
Region 6 Sensitive: ONHDB S2
Habitat: rock outcrops, rocky upland areas.

Result: No suitable habitat for this species is present in the project area. No surveys were conducted.

Aster gormanii
Region 6 Sensitive, Federal Species of Concern, State Candidate for listing, ONHDB S1
Habitat: open or sparsely timbered areas, rocky ridgetops, and meadows.
Result: No suitable habitat for this species is present in the project area. No surveys were conducted.

Botrychium minganense
Region 6 Sensitive, ONHDB S2
Habitat: riparian zones in dense shade, thick duff layer.
Result: Suitable habitat exists for this species in the project area. Surveys were conducted; no individuals were located.

Botrychium montanum
Region 6 Sensitive, ONHDB S2
Habitat: dark coniferous forests, near swamps or streams. Closely associated with old growth, usually at elevations between 3300-9000 feet.
Result: Although the project area is a bit low in elevation for this species, it was determined that the other habitat qualities closely fit the requirements. Surveys were conducted; no individuals were located.

Botrychium pumicola
Region 6 Sensitive, Federal Species of Concern, State Threatened, ONHDB S1
Habitat: pumice, volcanic peaks, high elevations.
Result: No suitable habitat exists for this species in the project area. No surveys were conducted.

Calamagrostis breweri
Region 6 Sensitive, ONHDB S2
Habitat: subalpine in moist, grassy areas.
Result: No suitable habitat exists for this species in the project area. No surveys were conducted.

Carex livida
Region 6 Sensitive, ONHDB S2
Habitat: cold, calcareous bogs, wet, peaty ground.
Result: No suitable habitat exists for this species in the project area. No surveys were conducted.

Carex scirpoidea var. stenochlaena
Region 6 Sensitive, ONHDB S2
Habitat: meadows, streambanks, rocky slops, at moderate to high elevations.
Result: Marginal habitat exists for this species in the project area. Surveys were conducted along small streams; no individuals were located.

Cimicifuga elata
Region 6 Sensitive, Federal Species of Concern, State Candidate for listing, ONHDB S1
Habitat: mesic forest, areas of open, mixed coniferous and deciduous forests.
Result: Suitable habitat exists for this species in the project area. Surveys were conducted; no individuals were located.

Coptis trifolia
Region 6 Sensitive, ONHDB S2
Habitat: forested wet and mesic areas.
Result: Suitable habitat exists for this species in the project area. Surveys were conducted, no individuals were located.

Corydalis aqua-gelidae
Region 6 Sensitive, Federal Species of Concern, State Candidate, ONHDB S1
***Habitat*:** forested wet areas, streambanks, cold springs.
Result: Suitable habitat exists for this species in the project area. Surveys were conducted; no individuals were located.

Eucephalus vialis
Region 6 Sensitive, Federal Species of Concern, State Threatened, ONHDB S1
Habitat: typically found in relatively dry upland sites dominated by Douglas-fir with associated hardwoods- Madrone, Oregon white oak, golden chinquapin.
Result: No suitable habitat exists for this species in the project area. The forest is more mesic than this species typically prefers, and canopy cover too dense. No surveys were conducted.

Frasera umpquaensis
Region 6 Sensitive, Federal Species of Concern, State Candidate, ONHDB S1
Habitat: occurs at 4000-6000 feet elevation, in meadows, edge habitats, or small openings.
Result: No suitable habitat exists for this species in the project area, and additionally project location is below elevation requirements. No surveys were conducted.

Gentiana newberryi
Region 6 Sensitive, ONHDB S2
Habitat: occurs in alpine meadows between 4500-7000 feet elevation.
Result: No suitable habitat exists for this species in the project area. No surveys were conducted.

Iliamna latibracteata
Region 6 Sensitive, ONHDB S2
Habitat: predominantly along streams in moist, shaded areas.
Result: Suitable habitat exists for this species in the project area. No surveys were conducted.

Lewisia columbiana var. columbiana
Region 6 Sensitive, ONHDB S2
Habitat: dry cliffs, talus, rocky outcrops and gravelly slopes from middle to high elevations.

Results: No suitable habitat exists for this species in the project area. No surveys were conducted.

Lycopodiella inundata
Region 6 Sensitive, ONHDB S2
Habitat: wet bogs/meadows, borrow pits.
Result: No suitable habitat present for this species in the project area. No surveys were conducted.

Montia howellii
Region 6 Sensitive, Federal Species of Concern, State Candidate, ONHDB S1
Habitat: moist/dry lowlands, open, gravelly, disturbed areas.
Result: Suitable habitat is present for this species in the project area. Surveys were conducted; no individuals were located during surveys.

Ophioglossum pusillum
Region 6 Sensitive, ONHDB S2
Habitat: vernally wet areas.
Result: Suitable habitat is present for this species in the project area. Surveys were conducted; no individuals were located during surveys.

Pellaea andromedaefolia
Region 6 Sensitive, ONHDB S2
Habitat: rock crevices.
Result: No suitable habitat is present for this species in the project area. No surveys were conducted.

Polystichum californicum
Region 6 Sensitive, ONHDB S2
Habitat: rock crevices, ledges.
Result: No suitable habitat is present for this species in the project area. No surveys were conducted.

Potentilla villosa
Region 6 Sensitive, ONHDB S1
Habitat: rocky scree, rock outcrops.
Result: No suitable habitat is present for this species in the project area. No surveys were conducted.

Romanzoffia thompsonii
Region 6 Sensitive, ONHDB S1
Habitat: vernally wet, rocky areas, rocky slopes, scree.
Result: No suitable habitat is present for this species in the project area. No surveys were conducted.

Scheuchzeria palustris
Region 6 Sensitive, ONHDB S2
Habitat: aquatic, ponds and streams.
Result: Suitable habitat is present for this species in the project area. Surveys were conducted; no individuals were located during surveys.

Sisyrinchium sarmentosum
Region 6 Sensitive, Federal Species of Concern, State Candidate, ONHDB S1
Habitat: drier sections of open, wet meadows in forest openings.
Result: No suitable habitat is present for this species in the project area. No surveys were conducted.

Utricularia minor
Region 6 Sensitive, ONHDB S2
Habitat: aquatic, ponds, shallow water.
Result: Suitable habitat is present for this species in the project area. Surveys were conducted; no individuals were located during surveys.

Wolffia borealis
Region 6 Sensitive, ONHDB S2
Habitat: aquatic, quiet streams and ponds.
Result: Suitable habitat is present for this species in the project area. Surveys were conducted; no individuals were located during surveys.

Wolffia columbiana
Region 6 Sensitive, ONHDB S2
Habitat: aquatic, quiet streams and ponds.
Result: Suitable habitat is present for this species in the project area. Surveys were conducted; no individuals were located during surveys.

Non-Vascular Plants

Lichens
Hypogymnia duplicata
Region 6 Sensitive (former Survey and Manage), ONHDB S2
Habitat: epiphyte on conifers in forests of a later seral stage.
Result: Suitable habitat is present for this species in the project area. Surveys were conducted; no individuals were located during surveys.

Leptogium cyanescens
Region 6 Sensitive (former Survey and Manage), ONHDB S2
Habitat: mixed conifer stands, on bark, rotten logs, and rocks.
Result: Suitable habitat is present for this species in the project area. Surveys were conducted; no individuals were located during surveys.

Lobaria linita
Region 6 Sensitive (former Survey and Manage), ONHDB S1
Habitat: lower boles, trunks, and branches of conifers and deciduous trees.
Result: Suitable habitat is present for this species in the project area. Surveys were conducted; no individuals were located during surveys.

Nephroma occultum
Region 6 Sensitive (former Survey and Manage), ONHDB S3
Habitat: epiphytic in mid to upper canopy of conifers.
Result: Suitable habitat is present for this species in the project area. Surveys were conducted; no individuals were located during surveys.

Pseudocyphellaria rainierensis
Region 6 Sensitive (former Survey and Manage), ONHDB S3
Habitat: epiphytic on conifer trees in cool, humid, old growth to climax forests.
Result: Suitable habitat is present for this species in the project area. Surveys were conducted; no individuals were located during surveys.

Bryophytes

Schistostega pennata
Region 6 Sensitive (former Survey and Manage), ONHDB S2
Habitat: conifers, rootwads, mineral soil substrate.
Result: Suitable habitat is present for this species in the project area. Surveys were conducted; no individuals were located during surveys.

Tetraphis geniculata
Region 6 Sensitive, ONHDB S1
Habitat: conifers, coarse woody debris.
Result: Suitable habitat is present for this species in the project area. Surveys were conducted; no individuals were located during surveys.

Fungi

Bridgeoporous nobilissimus
Region 6 Sensitive, ONHDB S2
Habitat: large diameter true fir snags.
Result: No suitable habitat is present for this species in the project area. No surveys were conducted.

VI. Effects Determinations

Wildlife Species

The implementation of the proposed activities of Alternatives A or B will have no effect on threatened or endangered wildlife species and their habitat. TECI has also determined that this project will have no impact on sensitive wildlife species or their habitat.

Botanical Species

Effects Analysis/Determination

Implementation of this project will have no direct or indirect effect on sensitive plant species or their habitat because they are not present in the project area. TECI has determined that the proposed actions will have no cumulative effects on sensitive plant species or their habitat because no sensitive plants are located within the project area.

Prepared by: Jeff Reams, Biologist Date: 3/25/2004
Katie Arhangelsky, Botanist Date: 3/25/2004
Turnstone Environmental Consultants, Inc.

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Attachment 1: Summary of Biological Background for Animal Species on the 2004 Regional Forester's Sensitive Species List, Willamette National Forest.

Species	**Habitat**
Northern Spotted Owl ***Strix occidentalis*** ***Status: Threatened***	Occur primarily in the interior of older timber stands with structure required for food, cover, nest sites, and protection from weather and predation. Reproductive habitat = forest w/ canopy closure 60 – 80%; multi-layered, multi-species canopy dominated by large overstory trees (> 30"dbh); abundant large trees w/deformities (e.g. large cavities, broken tops, dwarf-mistletoe infections, decadence); abundant large snags/down logs; and sufficient open flying space below the canopy. Foraging habitat = forest w/ > 2 canopy layers; overstory trees > 21" DBH; abundant snags/down wood; and a 60-80% canopy closure. Dispersal habitat = forest w/ > 11" DBH trees and > 40% canopy closure. Numerous sightings recorded on the McKenzie River RD.
Bald Eagle ***Haliaeetus leucocephalus*** ***Status: Threatened***	Use scattered old-growth conifer trees in proximity to rivers, lakes, and reservoirs with plentiful prey. Feed primarily on fish, but will also eat waterfowl and carrion. On the McKenzie River RD, they currently nest at Clear Lake and Blue River Reservoir. There have been sightings at Trailbridge, Cougar, and Smith Reservoirs, Fish, Linton and Lost Lakes and along the McKenzie River.
American Peregrine Falcon ***Falcon peregrinus anatum***	Preferred nesting sites are sheer cliffs 75 ft. or more in height. They forage within a variety of forest types. Numerous potential and occupied habitat occurs on the McKenzie River RD.
Least Bittern ***Ixobrychus exilis***	Freshwater or brackish marshes with tall vegetation. Stalks through the weeds to find prey. Eats small fish, frogs, insects, small mammals, and sometimes bird eggs and chicks. Nests is small platform of sticks and live or dead vegetation, placed in cattails, bulrushes, or bushes 8-14" above water. Sightings of individuals at Fern Ridge and Salem. No recorded sightings or habitat on the McKenzie River RD.
Bufflehead ***Bucephala albeola***	Summers on wooded lakes and rivers, winters on lakes and coastal waters. Nesting normally occurs near lakes in tree cavities 5-50 feet high. Dives underwater and eats small mollusks, fish, snail, and crustaceans. Also eats aquatic insects. Only documented wintering on McKenzie River RD.
Harlequin Duck ***Histrionicus histrionicus***	During nesting (April-June) adults require fast-flowing water with one + loafing sites nearby, dense shrub or timber/shrub mosaic vegetation on the bank, and an absence of human disturbance. Nest on ground under the shelter of vegetation, rocks, or large woody debris. Midstream loafing sites are very important. Broods prefer low gradient streams with adequate macroinvertebrate abundance. Recorded breeding/foraging in tributaries to the McKenzie River and foraging in the McKenzie River.
Yellow Rail ***Coturnicops noveboracensis***	Feeds in shallow water, eating snails, insects, and some seeds and grasses. Summers on wet meadows, marshes, winters on grasslands, fields, coastal marshes. No documented habitat on McKenzie River RD.
Black Swift ***Cypseloides niger***	Found near cliffs in mountainous regions. Feeds on-the-wing eating flying insects. Nests in small colonies on ledges or mountain crevices, often behind a waterfall. There are historical summer records in the Santiam Pass area, Linn County, which suggests breeding in that area. No current sightings on the McKenzie River RD.

Tricolored Blackbird ***Agelaius tricolor***	Found in freshwater marshes w/cattails and dense shrubs, grain fields. Feeds on the ground, eating insects, grains, and weed seeds. Nests in large colonies. Nest of coarse reeds and grasses lined with finer material placed in reeds above ground or water. Breeds locally in eastern Rogue Valley, S. Klamath Co, and mainly in north-centeral Oregon. Scattered summer reports in Willamette Valley. No documented sightings on the McKenzie River RD.
Baird's Shrew ***Sorex bairdii permiliensis***	Not much is known of its habitat, but in 1986, 2 specimens were trapped from an open Douglas-fir forested area with numerous rotting logs in Polk Co. It has been trapped on the McKIenzie River RD in the Mill Creek area and south as well as in the Blue River watershed.
Pacific Shrew ***Sorex pacificus cascadensis***	Generally found in wet or marshy areas along class III-IV streams w/red alder-salmonberry-skunk cabbage and banks with abundant down material. Occasionally found in adjacent conifer forest w/moist abundant decaying logs and brush. Nests made of grasses, mosses, lichens, or leaves. Feed on slugs, snails, insects, and sometimes vegetation. No documented sightings on the McKenzie River RD.
Pacific Fisher ***Martes pennanti***	Found in a wide variety of densely forested habitats at low to mid-elevations. Diet consists of small and medium-sized forest mammals (porcupines, snowshoe hares, tree squirrels, mice, and voles most common). Also eat carrion, and will seasonally eat birds, bird eggs, amphibians, fish, and insects. Use ground burrows, tree cavities, witches'-brooms or other clumped growth, or occasionally bird or small mammal nests as resting sites. Tree cavities are used by most maternal females with young and ground burrows are used mostly in winter. Data suggests they do better in areas with minimized fragmentation of old growth, second-growth, and riparian area and in areas with abundant down and standing woody material important. Few documented sighitings on the McKenzie River RD, mostly in the higher elevations.
California Wolverine ***Gulo gulo***	Found primarily in wilderness or remote country where human activity is limited. High elevation areas appear to be preferred in summer, which may effectively separate wolverines and intensive human disturbance in most areas. In winter, wolverines move to lower elevations which are snowbound with very limited human activity. They do not significantly use young, dense stands of timber or clearcuts. The majority of activity occurs in large expanses of scattered mature timber, with some use of ecotonal areas such as small timber pockets, and rocky, broken areas of timbered benches. Heavy use of openings w/ good winter populations of big game, a principal source of carrion which makes up much of the wolverine's diet. They also feed on marmots, snowshoe hares, various rodents, insects, insect larvae, eggs, and berries. Rare documented sightings on the McKenzie River RD, mostly at higher elevations.
Canada Lynx **Felis lynx canadensis** Status: Threatened	At this time, the Regional Forester's Sensitive Species List (2002) designated the lynx as suspected to occur on the Willamette National Forest. This species uses high elevation forested habitats that often coincide with populations of snowshoe hare. Forest conditions are generally lodgepole pine and subalpine fir.
Pacific Fringe-tailed Bat ***Myotis thysanodes vespertinu***	Rare in Oregon. Very little known about habitat in Oregon. Three captured in 1971 were associated with young coniferous forest. They are known to use caves, mines, rock crevices, and buildings as both day and night roosts. Nothing is known about habits in winter. Diet of moths, leafhoppers, lacewings, daddy-loglegs, crickets, flies, true bugs, and spiders. No recorded sightings on the McKenzie River RD.

Oregon Slender Salamander ***Batrachoseps wrighti***	Live in forested areas, especially old-growth Douglas-fir and younger stands with abundant downed large logs. They lay their eggs under thick bark, inside a crevice in a log, or in talus. Juveniles and adults live under thick bark, inside partially decayed logs, or in debris piles around the bases of large snags. They also occur in moist talus w/ abundant woody debris. Documented sightings are scattered throughout McKenzie River RD at lower elevations.
Cascade Torrent Salamander ***Rhyacotriton cascadae***	Live in very cold, clear springs, seeps, headwater streams, and waterfall splash zones. Forage in moist forests adjacent to these areas. Eggs are laid in rock crevices in seeps. Larve and adults live in gravel or under small cobbles in silt-free, very shallow water that is flowing or seeping. Adults may be found under debris on streambanks or in streamside forests and talus during rainy periods. Documented sightings from class IV stream headwater areas on McKenzie River RD.
Foothill Yellow-legged Frog ***Rana boylii***	Live in sections of low-gradient streams with exposed bedrock or rock and gravel substrates. Attach eggs to the bottom of quiet scour-pools or riffles in gentle-gradient streams, often where there is only slight flow from the main river. Hatchlings cling to egg masses initially and then to rocks. Nearest known sightings are on private land adjacent to the Sweet Home RD to the northwest. No documented habitat or sightings on the McKenzie River RD.
Oregon Spotted Frog ***Rana pretiosa***	Favor lakes and slow moving streams associated w/a permanent water source w/ a soft and muddy bottom. A marsh specialist w/strong preference/requirement for warmer waters; more aquatic than other ranids; often found in water or water's edge floating on the surface or resting on aquatic vegetation. Diet is invertebrates caught above and below the surface. Early breeders: egg massess are typically deposited on top of one another in a communal fashion, not attached to vegetation, and deposited in warmer shallow water, making them suseptible to mortality due to freezing or drying. The only documented population on the McKenzie River RD occurs in and around Penn Lake in the Three Sisters Wilderness Area.
Northwestern Pond turtle ***Clemmys marmorata marmorata***	Inhabits marshes, sloughs, moderately deep ponds, slow moving portions of creeks and rivers. Observed in altered habitats including reservoirs, abandoned gravel pits, stock ponds, and sewage treatment plants. Occur from sea level to about 1,830 meters. Require basking sites, such as partially submerged logs, vegetation mats, rocks and mud banks, and may even climb a short way onto tree branches that dip into the water. They use uplands for egg laying, overwintering, and dispersal. They may move up to 500 meters and possibly more for overwintering where they burrow into leaf litter or soil. Nest distances from the water course ranges from 3 meters to over 402 meters. Most nesting areas are characterized by sparse vegetation, usually short grasses or forbs. Documented sightings on the McKenzie River RD are in lower elevation side-channels of the McKenzie River.
Mardon Skipper ***Polites mardon***	The USFWS latest review indicated this species occurs in the puget sound and southern Cascades area of Washington, in the Siskiyou Mountains of Oregon, and in isolated remnants on serpentine grasslands in Del Norte County, California. They generally occur in grassy openings in subalpine coniferous forests in mountain regions.

Attachment 2: Conclusions Of Effects For Use In Biological Evaluations and Assessments USDA Forest Service - Regions 1, 4, and 6 August, 1995

Listed Species:

1. No Effect

   Occurs when a project or activity will not have any "effect", on a listed species, or critical habitat.

2. May Affect - Likely to Adversely Affect (LAA)

   If the determination in the biological assessment is that the project May Affect - Likely to Adversely Affect a listed species or critical habitat, formal consultation must be initiated (50 CFR 402.12). Formal consultation must be requested in writing through the Forest Supervisor (FSM 2670.44) to the appropriate FWS Field Supervisor, or NOAA Fisheries office.

3. May Affect - Not Likely to Adversely Affect (NLAA)

   If it is determined in the biological assessment that there are "effects" to a listed species or critical habitat, but that those effects are not likely to adversely affect listed species or critical habitat, then written concurrence by the FWS or NOAA Fisheries is required to conclude informal consultation (50 CFR 402.13).

4. Beneficial Effect

   Written concurrence is also required from the FWS or NOAA Fisheries if a beneficial effect determination is made.

   Requests for written concurrence must be initiated in writing from the Forest Supervisor to the State Field Supervisor (FWS or NOAA).

Proposed Species:

Whenever serious adverse effects are predicted for a proposed species or proposed critical habitat, conferencing is required with the FWS or NOAA Fisheries.

1. No Effect

   When there are "no effects" to proposed species, conferencing is not required with FWS or NOAA.

2. Not Likely to Jeopardize the Continued Existence of the Species or Result in Destruction or Adverse Modification of Proposed Critical Habitat

   This conclusion is used where there are effects or cumulative effects, but where such effects would not have the consequence of losing key populations or adversely affecting "proposed critical habitat". No conferencing is required with FWS or NOAA if this conclusion is made. However, for any proposed activity that would receive a "Likely to

Adversely Affect" conclusion if the species were to be listed, conferencing may be initiated.

3. Likely to Jeopardize the Continued Existence of the Species or Result in Destruction or Adverse Modification of Proposed Critical Habitat

This conclusion must be determined if there are significant effects that could jeopardize the continued existence of the species, result in adverse modification or destruction of proposed critical habitat, and/or result in irreversible or irretrievable commitments of resources that could foreclose options to avoid jeopardy, should the species be listed. If this is the conclusion, conferencing with FWS or NMFS is required.

Sensitive Species:

1. No Impact (NI)

A determination of "No Impact" for sensitive species occurs when a project or activity will have no environmental effects on habitat, individuals, a population or a species.

2. May Impact Individuals or Habitat, but Will Not Likely Contribute to a Trend towards Federal Listing or Cause a Loss of Viability to the Population or Species (MIIH)

Activities or actions that have effects that are immeasurable, minor or are consistent with Conservation Strategies would receive this conclusion. For populations that are small - or vulnerable - each individual may be important for short and long-term viability.

3. Will Impact Individuals or Habitat with a Consequence That the Action May Contribute to a Trend Towards Federal Listing or Cause a Loss of Viability to the Population or Species (WIFV)

Loss of individuals or habitat can be considered significant when the potential effect may be:

1. Contributing to a trend toward Federal listing (C-1 or C-2 species);
2. Results in a significantly increased risk of loss of viability for a species; or,
3. Results in a significantly increased risk of loss of viability for a significant population (stock).

4. Beneficial Impact (BI)

Projects or activities that are designed to benefit, or that measurably benefit a sensitive species should receive this conclusion.

CAMP WHITE BRANCH MASTER PLAN ENVIRONMENTAL ASSESSMENT

BIOLOGICAL EVALUATION/ASSESSMENT OF THREATENED, ENDANGERED, PROPOSED, AND SENSITIVE FISH SPECIES

Prepared by:

Robert Gill

Upstream Environmental, Inc.

March 30, 2005

DOCUMENTATION FOR ENVIRONMENTAL BASELINE AND EFFECTS OF PREFERRED ACTION(S) ON RELEVANT INDICATORS

Purpose

The purpose of this biological assessment/biological evaluation (BA/BE) is to document the potential effects of the proposed action on listed species. The two species that will be evaluated are bull trout (*Salvelinus confluentus*) and Upper Willamette spring chinook salmon (*Oncorhynchus tshawytscha*). Both of these species are listed as threatened under the Endangered Species Act.

Project Area Description

The proposed project area is the Camp White Branch youth camp located on the McKenzie River Ranger District within the Willamette National Forest. The project area is located about one-half mile south of Highway 242, approximately seven miles South East of Highway 126. The project legal tax section is T16S R6E Sec 21.

Camp White Branch lies within the Western Hemlock vegetation zone. Forest stands in the Camp White Branch area range in classification from mid to late seral, with the majority of the area characterized by late seral stage forests. The stand is multi-aged, with the oldest trees estimated at around 250 years. The stand structure is multi-layered, with large diameter Douglas fir (21-31.9" dbh), medium diameter Western hemlock (9-20.9" dbh), and saplings and pole trees (1-9" dbh) are predominantly Western hemlock. The Soil Resource Inventory (SRI) of the Willamette National Forest identifies several dominant soil types within and immediately adjacent to the project area (WNF 1992). These are identified by the SRI as soil map units 62, 63, and 610. Map units 62 and 63 are valley bottom soils, while Map Unit 610 consists of soils and rock outcrops on steep slopes of the valley wall.

There are several water bodies in close proximity to Camp White Branch. One is a medium sized stream several hundred feet east of the Camp's periphery, one is a small stream that flows down into the Camp from the south, and the other is a series of small seeps and connected wetlands that straddle the Camp's eastern boundary. The largest is White Branch Creek, which flows closest to the Camp along its eastern boundary. It is a tributary to Lost Creek, which flows to the McKenzie River near the intersection of State Highways 126 and 242. According to the Upper McKenzie Watershed Analysis (USFS 1995), White Branch Creek is categorized as a medium sized Class III and IV stream. Some reaches flow year-round, while others only flow seasonally. Intermittent reaches occur both upstream and downstream of the Camp.

Lost Creek and White Branch Creek are the main fish bearing streams in the Lost Creek/White Branch 6th-field subwatershed. Two fish species present in Lost Creek are listed as "threatened" Under the Endangered Species Act. They are bull trout (*Salvelinus confluentus*) and spring chinook salmon (*Oncorhynchus tshawytscha*) (Rivera pers. comm. 2004). These species are also known to use the lowest reaches of White Branch Creek, roughly three miles below the Camp. These reaches extend from the confluence with Lost Creek roughly 0.7 miles upstream to a barrier falls. The Upper McKenzie Watershed Analysis (USFS 1995) indicates that Lost Creek is an important spawning and rearing stream for Chinook, and is used by bull trout for foraging. Bull trout, however, are not known to use Lost Creek for spawning and rearing. Within the larger Upper McKenzie River watershed there are other federally listed species that exist, but they are

not known to utilize the Lost and White Branch tributaries. Other fish species that have been confirmed to use Lost Creek and the lower reaches of White Branch Creek include Coastal cutthroat trout (*Oncorhynchus clarki clarki*), rainbow trout (*Oncorhynchus mykiss*), and sculpin. The former two are designated by the Willamette National Forest Land and Resource Management Plan to be Management Indicator Species (MIS).

Resident fish have been observed in perennial reaches of White Branch Creek upstream of the natural barrier at stream mile 0.7 and the intermittent reaches that extend up to about stream mile 2.1. Within these perennial reaches, including the one closest to the Camp delineated as Reach 8, fish surveys indicate the presence of resident cutthroat trout and sculpin (USFS 2004). However, there are no fish bearing reaches within the Camp's permit area boundary.

Proposed Action

Camp White Branch proposes to implement a Master Plan which would entail a number of ground-disturbing activities, including construction of new facilities and renovation of existing structures and pathways within the Camp. Proposed activities include the following:

<u>New Buildings and Facilities</u>

- Construction of seven to ten new camper cabins
- Construction of a new commons building (to replace the existing dining hall) with dining and kitchen facilities, small group meeting rooms, administrative and health care facilities and housing for staff
- Construction of a multi-purpose building for indoor recreation, large group meetings and worship services
- Relocation and improvement of the Camp's swimming pool
- Creation of a new parking area for recreational vehicles that provides temporary housing for camp hosts, seasonal workers or counselors
- Construction of six to eight additional parking spaces

<u>Modifications or Improvements to Existing Buildings and Facilities</u>

- Replacement of the existing sewage treatment facility with a new sand filter and drainfield
- Improvements to major trails and roadways to meet Americans with Disabilities Act (ADA) accessibility requirements and improve pedestrian and vehicle circulation and safety
- Renovation of the camp office to create a new gate house
- Reconstruction or renovation of the Assistant Manager's cabin
- Demolition of the existing first aid station
- Rehabilitation of open space/playing fields
- Renovation and improvement of the camp's ropes/challenge course
- Renovation of the camp's amphitheater

Other Actions

- Vegetation and soil restoration in previously disturbed areas, including replanting selected areas with native vegetation

Effects Analysis

No Action Alternative

The no action alternative, if selected, would have no effect on listed fish species.

Proposed Action

There would be no effect to listed fish species or fish habitat as a result of continued use of Camp facilities and uses, or from the proposed action, including new development and improvements. There would be no ground-disturbing activities or clearing within the immediate or deliverable proximity of the reaches of White Branch Creek and its riparian corridor closest to the Camp, which also is the nearest water body where fish are present. This reach only harbors resident cutthroat trout and sculpin; there is no anadromous use. The nearest presence of anadromous species is in lower reaches roughly three miles downstream. These reaches are separated from the reach closest to the Camp by a length of intermittent channel where in places there is no surface flow or discernible channel above ground.

Since no overstory or streamside/riparian vegetation would be removed, sources of streamside shade and coarse woody debris would remain intact along White Branch Creek and its banks, and riparian conditions would remain relatively undisturbed.

All sediment resulting from construction activities would be retained on-site, and there would be no pathways for delivery to White Branch Creek from the main Camp area. The minimal risk of increased erosion resulting from clearing, site grading, and new construction could be effectively mitigated using standard erosion control practices. A slight amount of sediment could be generated from several sites outside of the permit boundary and delivered to White Branch Creek. These include the crossing of the access road over the stream, and the existing foot trails and fire rings located directly on its banks. Combined, the amount of sediment generated annually from these sites is considered to be negligible compared to the natural sediment regime of the Lost Creek/White Branch subwatershed. The sediment regime of the subwatershed would continue to function within its normal range of variability.

There are no expected impacts to peak/base flow because the geographic extent of the project is small in relation to the size of the Lost Creek/White Branch subwatershed. The extent of created openings and hardened or impervious surfaces would not increase appreciably above the existing condition, and forest canopy characteristics would remain largely unaltered. There is no existing or proposed withdraw or discharge associated with the Camp that could potentially affect peak/base flows. The hydrologic regime in the subwatershed would continue to function within its normal range of variability.

The quality of fish habitat, particularly within the reach of White Branch Creek closest to the Camp is expected to remain unchanged as a result of the Camp's Master Plan, and no effects to anadromous habitat three miles downstream are expected .

Recommended Mitigation Measures

Although there would be no effects on fish species as a result of proposed improvements in the project area, best practices would be used to minimize erosion and sediment transport, including:

- Erosion control and management practices.
- Siting improvements in previously disturbed areas to minimize impacts on soil and vegetation.
- Retaining large woody debris on site to add to riparian areas, if needed in the future.

Effects Determination and Consistency with Programmatic Biological Opinion

The no action alternative, if selected, would have **no effect** on listed fish species.

The proposed action alternative, if selected, is consistent with the "typical effects" found in the Biological Opinion (February 25, 2003) that have the effects determination of "may affect, but not likely to adversely affect" listed fish species and their designated critical habitat. Although this proposed action is consistent with a "not likely to adversely affect" determination, the proposed action would have no effect on listed fish species or their designated critical habitat. The following rationale is provided for this effects determination of **"no effect."**

- This project will not transmit effects to stream channels where listed species are present, and would not disturb a substantial amount of woody vegetation in riparian reserves, and would not decrease stream shade, or bank stability.

- There would be no ground-disturbing activities or clearing within the immediate or deliverable proximity of the reaches of White Branch Creek and its riparian corridor closest to the Camp, which also is the nearest water body where fish are present. This reach only harbors resident cutthroat trout and sculpin; there is no anadromous use, or use by bull trout.

- All sediment resulting from construction activities would be retained on-site, and there would be no pathways for delivery to White Branch Creek from the main Camp area. The minimal risk of increased erosion resulting from clearing, site grading, and new construction could be effectively mitigated using standard erosion control practices.

- There are no expected impacts to peak/base flow because the geographic extent of the project is small in relation to the size of the Lost Creek/White Branch subwatershed. The extent of created openings and hardened or impervious surfaces would not increase appreciably above the existing condition, and forest canopy characteristics would remain largely unaltered.

- There is no existing or proposed withdraw or discharge associated with the Camp that could potentially affect peak/base flows. The hydrologic regime in the subwatershed would continue to function within its normal range of variability.

Magnuson-Stevens Fishery Conservation Act

Given the above rationale for the effects determination under the Endangered Species Act, this project will not adversely affect Essential Fish Habitat as designated by the Magnuson-Steven Act.

Prepared by:	Reviewed by:
ROBERT GILL	RAMON RIVERA
Fisheries Biologist	Supervisory Fisheries Biologist
Upstream Environmental, Inc.	McKenzie River Ranger District

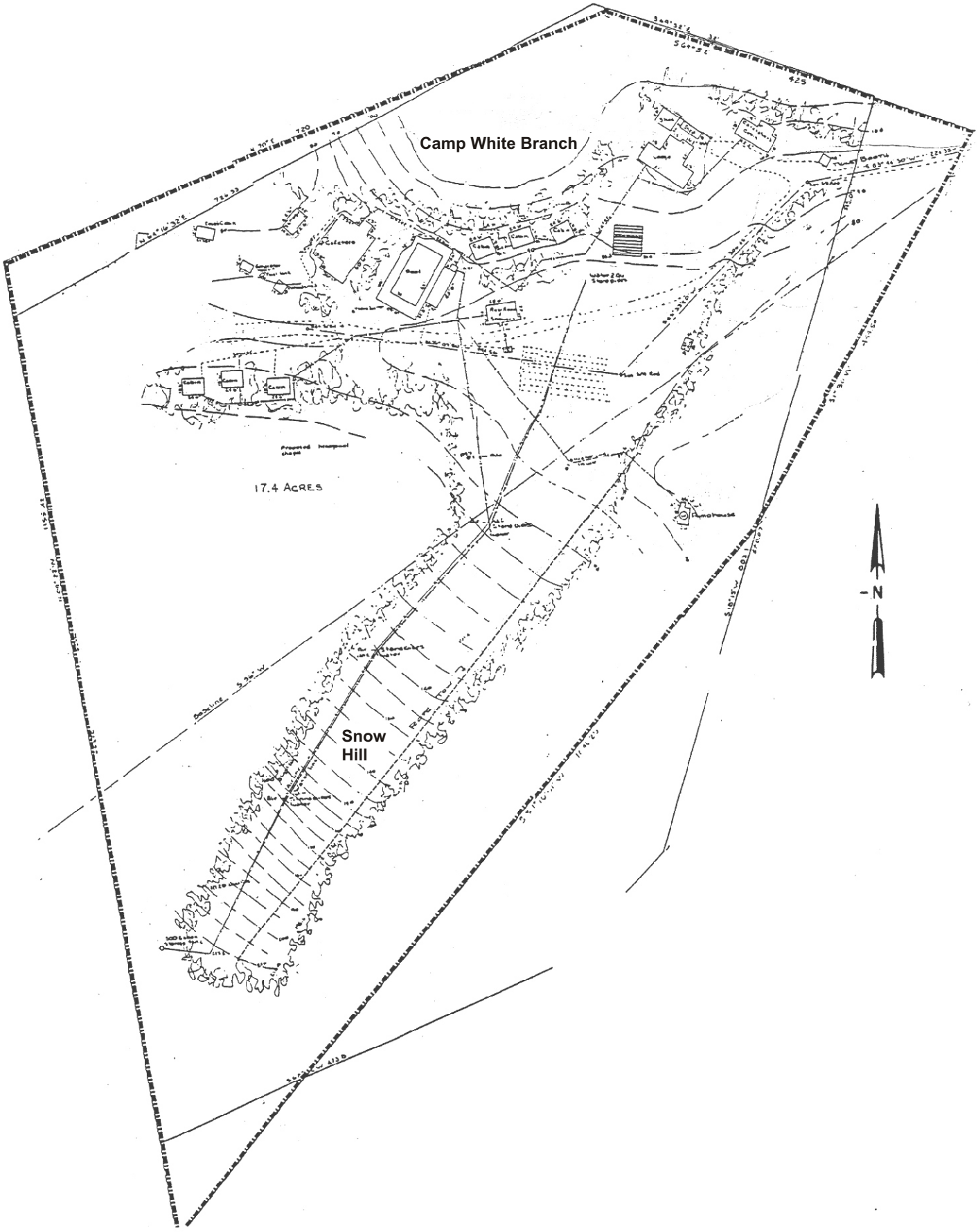

Figure 2. Current site plan for Camp White Branch (Cox 1998:4).

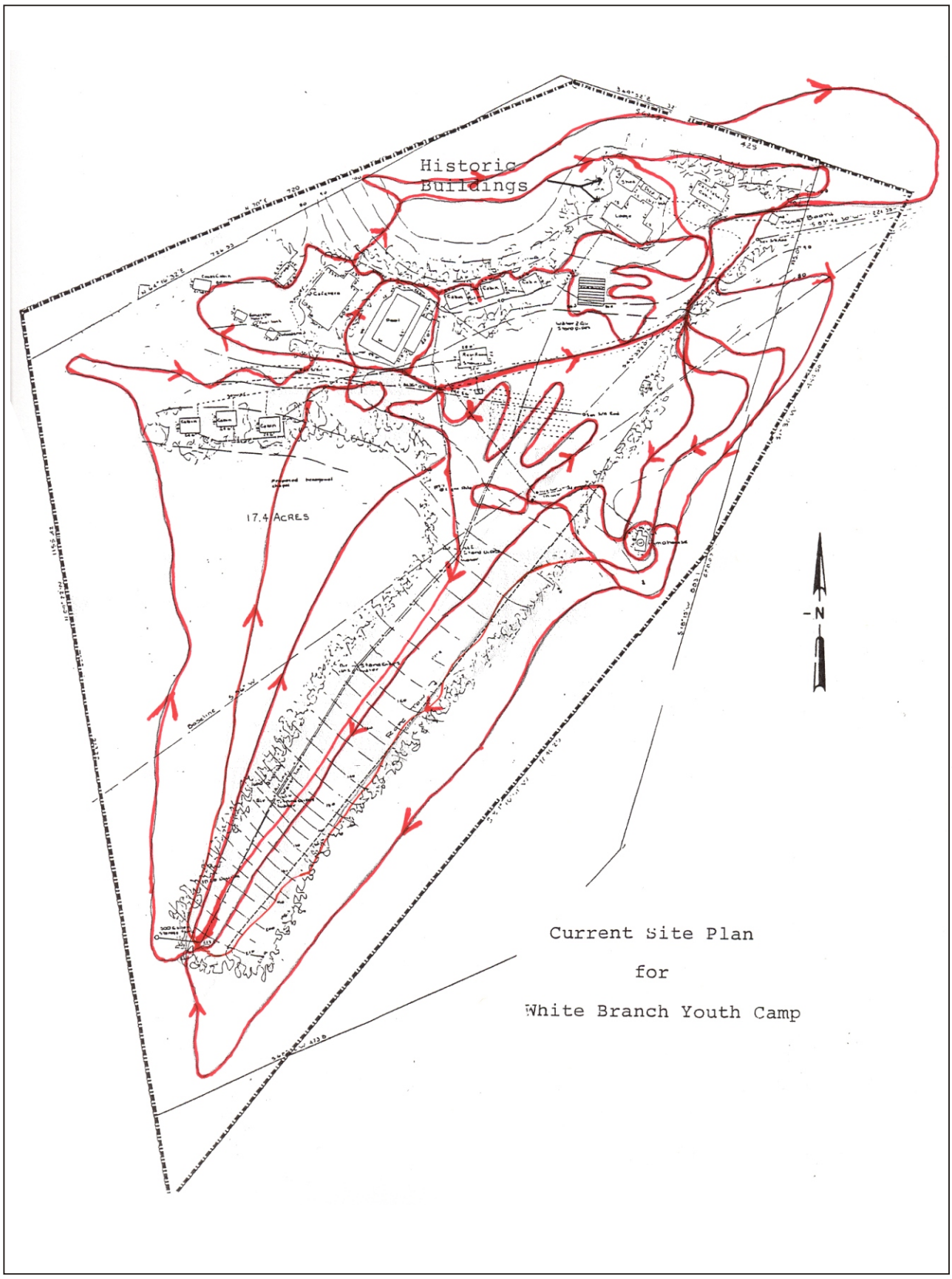

Figure 3. Camp White Branch plan showing archaeological survey transects in red.

Photo 1. View of the Dining Hall and surrounding area. The view is to the west.

Photo 2. Camp White Branch snow hill. The view is to the southwest.

Photo 3. Volleyball court and play area. Cabins in background. The view is to the southwest.

Photo 4. Recreational fields and open space at the base of the snow hill. The view is to the west.

OREGON INVENTORY OF HISTORIC PROPERTIES

SECTION 106 DOCUMENTATION FORM

Potential Historic Districts

Agency/Project: Cogan Owens Cogan/Greenworks/Camp White Branch	City, County: Lane
Address/Location: USFS Road 240/Willamette National Forest	
USGS Quad Name: *Linton Lake, Oregon* Township: 16 S Range: 7 E Section: 21 Tax Lot #:	District, Grouping or Ensemble? Yes Name: Camp White Branch Historic District

Construction Dates: 1934; 1948-1959; ca. 1960; ca. 1970; ca. 1980	
Architectural Classification/Resource Type: Rustic, Vernacular/cabins, houses, lodge, shop, generator shed, pump house, pool house	Alterations & Dates: See individual descriptions
Outbuildings and Landscape Features: pool, snow hill, volleyball courts, amphitheatres, outdoor chapel, water slide	Approximate Acreage/Number of Resources: 17.4 acres/ 21
Overall Condition: ☐ Excellent ☐ Good ☒ Fair ☐ Poor	Overall Integrity: ☐ Excellent ☐ Good ☒ Fair ☐ Poor

The oldest dormitory cabins dating from ca. 1949, looking west.

Preliminary National Register Findings:

☐ National Register listed

☐ Potentially Eligible

☒ Not Eligible: ☒ In current state ☐ Irretrievable integrity loss ☐ Lacks Distinction ☐ Not 50 Years

State Historic Preservation Office Comments:

☐ Concur ☐ Do Not Concur:

☐ Potentially Eligible ☐ Not Eligible

Signed _____ Date _____

Comments:

OREGON INVENTORY OF HISTORIC PROPERTIES

SECTION 106 DOCUMENTATION FORM

Potential Historic Districts

Name of District, Grouping or Ensemble: Camp White Branch	
City, County: Lane	
Architect, Builder or Designer (if known): Unknown	Property Categories: ☐ Building ☐ Structure ☒ District ☐ Site ☐ Object

Owner:

☒ Private ☐ Local Government ☐ State ☐ Federal ☐ Other

Name: Church of God

Address:

City, State, Zip:

Phone:

Description of Property (including exterior alterations & approximate dates), Significance Statement, and Sources. (Use continuation sheets if necessary):

Physical Description

Camp White Branch is located in the western Cascade Range in the Willamette National Forest. The camp straddles a hollow south of White Branch Creek on 17.4 acres in the W ½ of the NE ¼ of Section 21, T. 16S, R. 7E, Willamette Meridian, approximately 60 miles east of Eugene, Oregon.

Camp White Branch has operated as an organizational camp (a Forest camp group) at this location since 1948 and prior to this, from 1934 to 1947, the camp operated as a winter-sports facility. It presently includes 21 buildings, structures, and other associated features. Two buildings, the main lodge and a storage shed, date from 1934 when the Civilian Conservation Corps (CCC) constructed the White Branch Winter Sport Area. These two buildings were determined eligible for listing in the National Register of Historic Places (NRHP) in 1988 (Cox 1988). However, the storage building was removed during construction of the Camp's new maintenance building in 1995. These actions were coordinated with the USFS. Additional information about this process can be provided in a subsequent draft of this document, if needed. A new wood shed (west of the lodge) was constructed between 1996-1998. The ski-slide/snow tubing hill is the remaining ski run of four that were built during the CCC era of construction and was determined to lack historic integrity in 1988. The facility was purchased by the Church of the Nazarene and converted into an organizational camp, after World War II in 1948. The Church of the Nazarene constructed approximately 14 buildings during their ownership between 1948 and 1957. Of those that were built by the Church of the Nazarene, ten remain, including a dining hall, caretaker's cottage, cook's cabin, power house, and 6 dormitory cabins. After the Church of God took over the facility in 1957, a swimming pool and pool house (ca. 1961), restroom building (ca. 1970), manager's house (ca. 1988), garage/gatehouse (ca. 1988), shop/storage (1991-1992), pump house (1980), nurse's cabin (post 1960), and more temporary features such as two amphitheaters (post 1960), in 1995 tent platforms and trailers were added.

The Camp White Branch buildings are arranged along a drive that extends from U.S. Forest Service (USFS) Road 240, which forks off of the old McKenzie Highway (USFS Road 242). The access road into the camp follows the natural topography into a clearing adjacent to the south and north facing slopes. The main lodge and the other administration buildings (garage/gatehouse, modern caretaker's house, former caretaker's cottage, and shop) are grouped near the camp's entrance. From the historic lodge, there are vistas of open fields up to the former ski run. The other buildings that are used for sleeping, eating and recreation extend west of the historic lodge and are oriented on both sides of the main pathway and placed on adjacent terraces among the trees. Trails interconnect buildings, and the activity and camping areas located within the camp property.

Camp White Branch's layout and location reflects its evolution from a 1930s resort typical of USFS resort facilities to its conversion to an organizational camp. A USFS handbook for planning and design notes that the lodge at a resort facility should provide the central focus and gateway to the facility, and originally the layout worked in this fashion. After the camp was converted into an organizational camp, it appears that the USFS guidelines for planning and designing organization camps were used. The guidelines in the handbook suggest that similar uses be grouped together and that facilities used primarily in the summer, could be spread apart, with no concern needed for the concentration of services and amenities

(Throop 2002:35, 40). At Camp White Branch, the administration buildings are near the entry, and the boys dormitory cabins are placed between the administration buildings and the dining hall. The powerhouse, wood house, and cook's house are near the dining hall and three dormitory cabins for girls are on the opposing side of the main pathway. In addition, organizational camps were prioritized after public forest camps and resorts sites, and were generally allocated properties on less visible sites on secondary roads (Throop 2002:37).

Camp White Branch operates under a 20-year lease and Special Use permit issued from the USFS. In order to meet the programming and capacity needs of its users, the Church of God is presently in the process of preparing a long-term Master Plan to identify improvements to be phased in over a 15 to 20-year period. Implementation of the Master Plan would require construction, and other activities, and because the camp is situated on USFS land the environmental impacts of the project are being evaluated and documented.

Property Types

The types of historic period buildings at Camp White Branch fit within the early rustic styles associated with the U.S. National Forests, especially the previously determined eligible lodge and storage building. The other camp buildings are a more modest 1940s-1950s type of rustic interpretation. The simple modest forms evolved from the labor-intensive Depression-era Rustic style and emphasize "modest functional design" that harmonized with nature and was less labor intensive (Throop 1979:68). The elements associated with the later Rustic-style interpretation are multi-paned windows varying in size and placement, varied exterior materials, contrasting exterior textures, simple gable roof forms, and minimal decorative elements.

In the first construction phases of the organizational camp, contrasting siding textures were chosen using horizontal half-log siding and board-and-batten siding in the gable ends. The pre-manufactured half-log siding had become popular by the 1930s and was used for its ease in application and its pleasing rustic look. The vertical board-and-batten applied to the gable ends provided a contrasting texture to otherwise plain wall elevations, and it was popular for its low cost, ease of application, and for providing warm draft-free spaces (White 1939:16). Multi-lighted windows were also incorporated into all the 1940s and 1950s buildings, although some have replacement aluminum sliding windows, usually on the rear or on less visible elevations.

Some of the recent building types within the camp conform to rustic qualities defined by the USFS and others do not. The shop and new caretaker's house fit some of these qualities, but the gate house, pool house, restroom, and nurse's cabin did not undergo this level of design review. Most of these buildings were constructed in the 1960s and 1970s.

Cabins

The cabins constructed during the Church of the Nazarene's tenure, the first cabins built at the camp, were built as rustic summer sleeping quarters with open ceilings, wood stoves and minimal wiring. Each initially had a number designation. The earliest three cabins constructed circa 1949 are thought to be those located between the lodge and dining hall and are named Alder, Birch, and Cedar. These cabins became the boys sleeping quarters. They are located on the south facing slope overlooking the recreational open area. Another grouping of three cabins named Dogwood, Elm, and Fir, were constructed later, sometime between 1950 and 1957, before the property was transferred to the Church of God, and they were the dormitories for girls.

The six cabins are essentially the same in design and size. They all measure 24 ft. 6 in. in length and 18 ft. 6 in. in width. All six are one-story, side-gabled, wood-framed buildings, having wood-shake medium gable roofs with overhanging eaves, barge boards, and exposed rafter tails. Two textures cover the exterior walls, horizontal half-log siding, and board-and-batten covering the gable ends with corner board trim. All have a central-recessed open entry with variations seen in the wood steps and the inclusion of landings and wheel chair ramps. Variations are also apparent in foundation skirting, window types and placement, and interior modifications. Originally the interior spaces were completely open and furnished with bunk beds. Kitchenettes were installed in 1977 in the center of each cabin, but were replaced with bathrooms in 2000 (Timmons 2004).

Cabin 1/Alder

The 1948-1949 Cabin 1/Alder is lighted by eight-over-eight wood sash and eight-light single sash windows. A recessed porch is centered on the main south-facing façade that is accessed from a wood walkway, steps and wheel-chair ramp. The building has undergone minimal modification to its exterior. An American with Disabilities Act (ADA) accessible ramp/ walkway with

wood steps provide the primary access. The foundation skirting area is open. Corner board trim is missing from the northeast corner. The interior has been modified by sheet-rocked walls and ceiling, and a bathroom was added. Alder is among the three oldest cabins located in between the lodge and dining hall. Constructed on a south facing slope, the cabin overlooks the recreational fields to the south. Due to minimal exterior modifications, Cabin 1/Alder is recommended historic-contributing.

Cabin 2/Birch

The 1948-1949 Cabin 2/Birch is lighted by eight-over-eight wood sash and eight-light single sash windows. A recessed porch centered on the south facing façade is accessed from wood steps.

The building has undergone minimal modification to its exterior. Window lights from one of the eight-light sashes have been repaired and the number of lights reduced. The foundation skirting is partially encased in plastic, and otherwise open. The interior has been modernized with sheet-rocked walls and ceiling, and a bathroom has been added. Due to minimal modifications to its exterior, Cabin 2/Birch is recommended historic-contributing.

Cabin 3/Cedar

The 1948-1949 Cabin 3/Cedar is lighted by eight-over-eight wood sash and eight-light single sash windows. A recessed porch centered on the south facing façade is accessed from wood steps with a wood railing. The building has undergone minimal modification to its exterior. The foundation skirting is partially encased in corrugated metal, and otherwise open. The interior has been modernized by sheet rocked walls and ceiling. In consideration of minimal modifications to its exterior, Cabin 3/Cedar is recommended historic-contributing.

Cabin 4/Dogwood

The ca. 1950-1957 Cabin 4/Dogwood is lighted by six-over-six vinyl sash windows on the north facing facade and aluminum sliding windows (south) on the rear elevation. Windows on the side elevations have been infilled with split-log siding. Wood steps lead to the recessed entry. The post and beam foundation is open. The windows are four-over-four double-hung wood sash. Since the overall historic integrity of the exterior remains intact, Cabin 4/Dogwood is recommended as historic-contributing.

Cabin 5/Elm

The ca. 1950-1957 Cabin 5/Elm is lighted by four-over-four wood sash windows on the north facing facade and aluminum sliding windows (south) on the rear elevation. The windows on the side elevations have been infilled with split-log siding. Access is from wood steps and a wood wheel chair ramp to the recessed entry. The post and beam foundation is open. The exterior retains sufficient integrity and therefore Cabin 5/Elm is recommended historic-contributing.

Cabin 6/Fir

The ca. 1950-1957 Cabin 6/Elm is lighted by four-over-four wood sash windows on the north facing facade and aluminum sliding windows (south) on the rear elevation. Windows on the side elevations have been infilled with split-log siding. Access is from a wood platform to the recessed entry. The post and beam foundation is open. The interior has two sleeping areas with a bathroom in between. The exterior of Cabin 6/Fir retains sufficient integrity to be recommended as historic-contributing.

Dining Hall/Dormitory

The 1948-1949 Dining hall/Dormitory is a one-and-one-half story, rectangular shaped wood-framed building with a medium-pitched cross-gable metal roof with overhanging eaves, and exposed rafter tails. The overall dimension of the building's main mass is 60 ft. 6 in. in length and 30 ft. 4 in. in width. The Dining Hall/Dormitory is lit and ventilated by two sizes of eight-light wood sash, eight-over-eight wood sash windows, aluminum sliding windows, and one-over-one sash windows. Two types of siding cover the exterior walls, horizontal half-log siding, and board and batten siding covering the gable ends. The primary entry is sheltered by a new shed porch roof supported by two wood posts with an expansive wood deck (2004). Fire escapes are located on the southwest, northwest and northeast elevations. They are constructed of wood, and the southwest and

northwest fire escapes are sheltered by gable roofs with one slope extending downward over the steps. One-story shed roof attachments are attached to the back gable. On the southeast elevation, a one-story gable has been constructed.

The building has undergone a number of modifications since it was erected in 1949. In its original configuration it was an approximately 30 ft by 60 ft mass with a one-story back attachment. There was no covered entry but steps lead to the entry doorway. Not long after the camp was leased by the Church of God organization, an entry porch was added (circa 1960), and it has been modified at least one other time into the current shed roof configuration. A series of one-story attachments have been added to the rear (northwest) and side (southeast) elevations. The attachments have been covered with horizontal split log siding. The side attachment is the only one visible to the public. The fire escapes originally were uncovered and the southwest fire escape featured a slide from the second floor that projected to the southeast. Some of the kitchen modifications included converting the wood cook stove to gas in 1962. More improvements were made in 1964, when a kitchen setup was sold to the camp for $1,000 by the Mensha Corporation (Friends of White Branch History Committee n.d.:29). The interior spaces were modernized with sheet rock in 1980-1981. Modern lighting and plastic laminate flooring have also been installed. The large wood deck projecting from the façade was constructed in 2004 (Timmons 2004).

The Dining Hall was one of the first buildings constructed by the Church of the Nazarene when the White Branch property was leased from the USFS. The building served multiple functions as a dining area, kitchen, and on the second floor, a dormitory space that slept 40 people (Friends of White Branch History Committee n.d.:19). It continues to serve these functions at the camp facility. Modifications to the building have compromised the exterior appearance of the building, but the most visible modifications, such as the deck addition and the shed-roof porch along the façade, could be removed, and the historic appearance restored. Under these considerations, the dining hall/dormitory is recommended as historic-contributing.

Miscellaneous Cabin Grouping

Across from the Fir, Elm, and Dogwood cabin group on the north facing slope are three buildings which vary in design and use. These three buildings maintain the overall rustic theme of Camp White Branch in the use of split-log siding and simple gable forms. Two of these buildings date from the Church of the Nazarene period: the cook's cabin/guest cabin and a generator house/lifeguard cabin. The other, a wood shed/storage building, does not appear on the 1958 Site Plan map and dates from a later period.

Cook's Cabin/Guest Cabin

The Cook's cabin was constructed sometime between 1949 and 1957. The cabin is a one-story, front-gable wood-framed building, having wood-shake covered medium-pitched gable roof with overhanging eaves, barge boards, and exposed rafter tails. It measures 21 ft. 10 in. in length and 12 ft. 4 in. in width. The porch is sheltered by a gable roof that extends from the main gable. It is supported by two wood posts with wood steps and landing. The exterior walls are covered with horizontal half-log siding, board-and-batten covering the gable ends, and corner board trim. The cabin is lighted by a combination of six-over-six sash, two-over-two sash, and aluminum sliding windows.

Modifications made to the cabin include an extension to the rear that matches the main form in massing and roof structure. The siding is the same half-log split type, but more narrow in scale. An aluminum sliding window is found at the north elevation's west end. Metal siding covers the foundation at the building's west end. The front porch roof was added in the late 1980s along with new porch posts, wood steps, and landing (Bissett 2004). Windows on the sides and rear differ in composition with the horizontally scaled two-over-two windows, but appear to date from the original period of construction. Due to modifications to the façade and the rear, the Cook's Cabin does not retain sufficient integrity, and therefore is considered as historic non-contributing.

Generator house/Lifeguard Cabin

The Generator house/Lifeguard Cabin was constructed sometime between 1948 and 1957. It is a one-story, front-gable wood-framed building with a metal-clad medium-pitched gable roof with overhanging eaves, and exposed rafter tails. It measures 21 ft. 10 in. in length and 12 ft. 4 in. in width. The porch is sheltered by an overhanging gable and consists of the wood platform accessed by wood steps. The walls are covered by half-log split siding, and vertical board-and-batten siding covers the gable ends. The post-and-beam foundation is exposed.

Formerly identified as the powerhouse or generator house, the generator was housed in this building until electrical power was brought in to the camp. After power was installed, the building served as the lifeguard's dormitory cabin. Modifications include the addition of modern double doors, and it appears the loading area has been rebuilt. The generator house/lifeguard cabin maintains sufficient architectural integrity and therefore is considered as historic-contributing.

Administrative Buildings

Near the entry of Camp White Branch at the camp's east end are eight administrative buildings. Three of these buildings were constructed within the historic period. Two of these were determined eligible for listing in the NRHP in 1988: the CCC constructed lodge and the storage building (1934) (Cox 1988). The storage building has been replaced by a modern wood shed. The original caretaker's cottage, constructed in 1948-1949, has been severely modified. Other buildings near the entry are the new caretaker's house (1988), garage/gate house (ca. 1988), shop/storage building (1991-1992), the nurse's cabin/first-aid building (post 1960), and a pump house (1980). These building were constructed after the 1960s and are non-historic.

Other buildings and structures not previously mentioned are the swimming pool (1961), pool house (1961) and a restroom building (ca. 1970). Due to their recent build date, they are recommended non-historic.

Caretaker's Cottage/Assistant Manager's House and Storage Building

Constructed in 1948-1949 as the Caretaker's Cottage, the one-story side-gabled wood-framed building has a medium-pitched wood shingle roof with shallow eaves. It is covered with shake siding and is lighted by aluminum sliding and fixed windows. Originally measuring 12 feet by 18 feet, the building was expanded in the early 1960s by caretakers Wade and Mabel Donovan. The original section was also placed on a concrete foundation (Friends of White Branch History Committee n.d.). A shed roof attachment has also been added to the west end.

Modifications to the Caretaker's Cottage have been extensive and the addition has doubled the original cottage's length. The original windows have been replaced by aluminum sliders that do not match the building's historic character. Since the Caretaker's Cottage has been extensively modified, it is recommended historic non-contributing.

As noted previously, a new storage/ maintenance building was constructed in 1995 and a wood shed was constructed to the west of the lodge between 1996-1998. The wood shed building is rustic in appearance in keeping with surrounding structures at the camp.

Overview History

The Cascade Range Forest Reserve, extending from the Columbia River to the California border, was established in 1893. It was divided into several National Forests in 1908, and in 1933 the Willamette National Forest was organized, combining the Cascade and the Santiam National Forests (Donovan and Willingham 2000; Rakestraw and Rakestraw 1991:70). Recreation in National Forests increased with the introduction of automobile travel, and roads were planned to accommodate this new mode of transportation. National Forests addressed public demand for summer camps, cottages, and auto camps through the Term Occupancy Act of 1915, which allowed for private use and development of USFS lands through leases for building recreational residences, stores, hotels, or resorts (Tweed 1980:6).

Recreational facilities on USFS lands were slow to expand through the 1920s and the early 1930s due to funding. Recreational facilities were primarily established by private groups and through the development of recreational cabin tracts. Reforms initiated by Franklin Delano Roosevelt's administration in 1933 immediately impacted the Forest Service's recreation program and its ability to expand recreational opportunities within the forests. The Copeland Report, "A National Plan for American Forestry," prepared by the USFS in 1933, provided the framework for recreational developments that were carried out by the CCC [Throop 2002:4]. Ferdinand Silcox was appointed the USFS Chief in 1933 and he was sympathetic in promoting the benefits of outdoor recreation for the underprivileged, and in advocating for the social functions the forests could serve (Cox 1988:6; Throop 2002:5).

Camp White Branch was an immediate result of these factors and it was also the first ski area developed in the Willamette National Forest. William Parke, a newly hired USFS recreation planner, who selected sites and designed the layouts of a

number of recreation sites, conceived the White Branch Winter Sports Area and designed the lodge (Cox 1988:7). A local ski group, the Obsidians Outdoor Club, also played a role in the development of the winter sports facility (Cox 1988:7). CCC workers stationed at nearby Camp Belknap, working under the USFS, constructed a lodge, two restrooms, a storage shed, water system, and four ski runs at the winter sports facility in 1934-1935. Timber cleared from the ski runs was used in constructing the buildings. The buildings and developments of the winter sports area were evaluated and more thoroughly documented as a part of the *White Branch Youth Camp Determination of Eligibility* by James B. Cox in 1988 for the Willamette National Forest. From this evaluation it was determined that the remaining buildings from this period, the lodge and shed, were eligible for listing in the NRHP.

The success of the White Branch Winter Sports Area was modest at best due to its placement in the lower elevations, and the competition of other ski facilities that were erected during the 1930s. Comparing numbers of visitors in 1938-1939, Timberline had a total of 72,000 visitors and White Branch had 1,915 (Cox 1988:13). The recreation facility at White Branch operated through the 1930s and 1940s renting skis and toboggans.

Camp White Branch

The White Branch Winter Sports Area was converted to a church-affiliated organizational camp facility in 1948, when the lease was transferred to the Church of the Nazarene (Friends of White Branch History Committee n.d.:19). As the camp was initially conceived in a conceptual site plan, the Nazarenes planned to incorporate the CCC constructed lodge, toilets, and wood shed with eight dormitory cabins, two staff cabins, a caretaker's cabin, a chapel and a mess hall. Between 1947 and 1948, $2,000 was spent to get the facility ready and prepare the plans for building the "essential buildings" in the summer of 1948. The camp began to operate in 1948 when the newly constructed mess hall/dormitory building was constructed (Friends of White Branch History Committee n.d.:19). The caretaker's cabin and the three dormitory cabins soon followed (ca. 1949) (Friends of White Branch History Committee n.d.:33). By 1957-1958, three other dormitory cabins, two toilets, a shower, guest cabin, and powerhouse had been added to the youth camp facility (USFS 1958).

The camp was constructed and run with the help of many volunteers. Lowell C. Ellis was the camp's first director. Wade and Mabel Donovan were the next caretakers of the camp. Mr. Donovan made improvements to the mess hall by adding a front porch, kitchen porches, and an addition to the caretaker's cabin (Friends of White Branch History Committee n.d.:33). Most of the construction projects at Camp White Branch were carried out with volunteer labor. The swimming pool was constructed by Henry Miller Construction of Roseburg with help from volunteers, and Wendell Wallace constructed the concrete-block pool house (Friends of White Branch History Committee n.d.:32). Alva Hudson, a caretaker, constructed the restrooms ca. 1970.

The Church of the Nazarene's district assembly voted to move their camp and meeting facility to another site in Clackamas in 1957, and discontinued the youth-camp operation at Camp White Branch (Friends of White Branch History Committee n.d.:19). The Church of God took over the facility in 1957, and has since operated the camp serving church, Boy Scout, youth, and family groups.

Camp White Branch is currently used primarily in the summer months, but outdoor school is conducted at the facility in the fall and spring, and other groups use the facility in the winter months. When enough snow has accumulated, the facility is open to the public for winter snow play. When the camp is open for winter recreation, the lodge is open to the public for warming, and snacks (Cogan Owens Cogan and Greenworks 2004: 1).

Summary Statement of Significance

Camp White Branch, an organizational youth camp, is located approximately ¾-mile south of the old McKenzie Highway (USFS Road 242) in the western Cascades in the Willamette National Forest. The camp contains an assemblage of nineteen buildings, one feature, and one structure that was built in several episodes between 1934 and the 1980s. Two buildings, the 1934 main lodge and a storage building were determined eligible for listing in the NRHP as part of the White Branch Winter Sports Area in 1988. A 1934-1935 ski slide/snow tubing hill was determined not eligible in that same 1988 study. The other buildings did not meet the 50-year old evaluation criteria at that time, and "evaluation as an historic district was deemed inappropriate due to substantial modification of the remainder of the site" (Cox 1988:ii).

Name of District, Grouping or Ensemble: Camp White Branch
City, County: Lane

A walk-through of the camp and research at the U.S. Forest Service McKenzie Ranger District office was conducted in July 2004 as a part of a re-evaluation of Camp White Branch to determine whether the organizational camp currently meets the NRHP eligibility criteria. Additional information and photographs provided by Cogan Owens Cogan, and Camp White Branch representatives were used in the preparation of this report. In addition to the NRHP criteria, Criteria for Evaluating Historic Properties from Gail Throop's *Recreation Development in the National Forests in Oregon and Washington 1905-1945* were also used in evaluating the Camp White Branch facility as an organizational camp grouping.

The development and use of Camp White Branch as an organizational camp began after World War II in 1948 when it was leased to the Church of the Nazarene. Between 1945 and 1955 there was incredible growth in the use of National Forests by Americans (USFS 2004:9). At least 14 buildings were constructed by the Church of the Nazarene within the first 9 years of the camp's use as an organizational camp, between 1948 and 1957. Of these 14 buildings, ten remain standing, and eight of these remaining buildings retain sufficient integrity to be considered historic contributing. The two other buildings from this period do not retain sufficient integrity, and the snow slide/snow tubing hill dating from the CCC era also lack historic integrity and are considered historic, non-contributing. Buildings constructed after the camp was acquired by the Church of God in 1957 are considered non-historic. In sum, from a total of 21 recorded buildings and features, 10 are considered historic contributing and 11 others are recommended either historic non-contributing or non-historic.

Camp White Branch fits the siting and layout patterns of organizational camps, such as having all administrative buildings near the entrance and general uses grouped together. It conforms in its placement of the historic buildings by using natural contours and vegetation to minimize visual impacts. Modifications made to the camp's entrance since the 1960s have compromised the integrity of the entrance's historic character by the addition of other non-historic administrative buildings and severe modifications made to the former care taker's house. Features that have been developed since the early 1960s are the platform tents, meeting tent, volleyball courts, ropes/challenge course, and water slide. The water-slide placement directly in front of the historic lodge compromises the lodge's historic setting.

The buildings constructed when Camp White Branch was converted into an organizational camp, conform to the types typically found in Oregon National Forests during this time period. The labor-intensive Rustic styles of the Depression era had given way to a more modest interpretation, using modern materials, juxtaposed siding textures, minimal ornamentation, and multi-light windows. Camp White Branch buildings dating from the historic period (1948 to 1957) are representative of this Oregon National Forest type. Buildings added in the 1960s and 1970s did not adhere to these principals and generally compromise Camp White Branch's historic character.

As an ensemble, the camp was evaluated under Criterion A for its association and use as an organizational church camp representing the pattern of outdoor recreational uses that increased after World War II in the National Forests. The camp was also evaluated under Criterion C to determine whether the building types used at Camp White Branch were representative of the types in use in Oregon National Forests in this historic time period. Camp White Branch's evaluation was conducted using criteria in use in other National Forests. When determining eligibility for listing in the NRHP, at least 60 percent of the buildings in an organization camp must meet integrity standards; these have been designated as historic contributing. The number of Camp White Branch buildings and structures designated historic contributing do not total 60 percent but slightly more than 50 percent. Due to the modern buildings that compromise the camp's layout, the historic character of the camp and its entrance, and modifications to historic buildings, Camp White Branch is recommended **not eligible** for listing in the NRHP.

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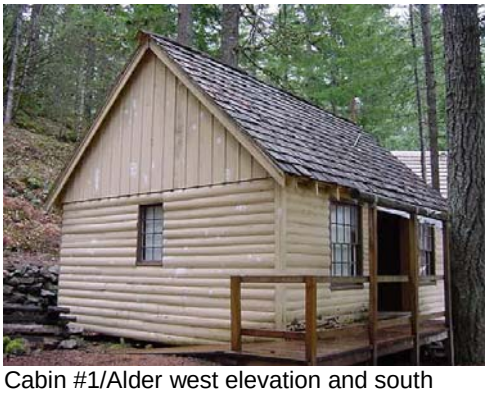
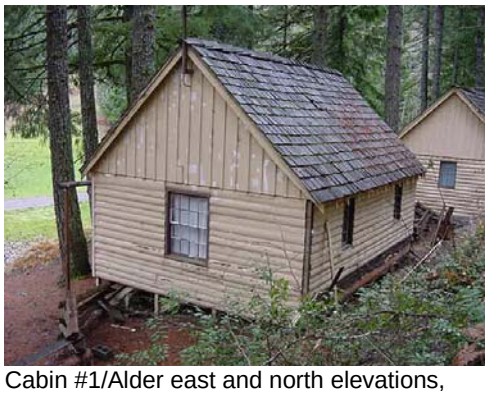
City, County: Lane



Cabin #1/Alder west elevation and south facade.



Cabin #1/Alder east and north elevations, demonstrating typical cabin rear.

Cabin #2/Birch west elevation and south facade.

Cabin #3/Cedar west elevation and south facade.

Cabin #4/Dogwood east elevation and north facade.

Cabin #5/Elm east elevation and north facade.

OREGON INVENTORY OF HISTORIC PROPERTIES

SECTION 106: SUPPLEMENTAL PHOTOGRAPHS

Potential Historic District

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Cabin #5/Elm west and south elevations, demonstrates alterations to the cabins' rear.

Cabin #6/Fir east elevation and north facade.

Mess Hall/Dormitory southwest elevation and southeast facade.

Mess Hall/Dormitory northwest (rear) elevation.

Cook's Cabin/Guest Cabin south elevation and east facade.

Cook's Cabin/Guest Cabin north and west elevations.

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Generator House/Lifeguard Cabin north elevation and west facade.

Wood shed south and east elevations

Caretaker's Cabin/Assistant Manager's House west elevation and south facade.

The historic lodge west elevation and south facade.

The storage building south and east elevations. This is the wood shed constructed between 1996- 1998. Not historic.

New caretaker residence and garage/gate house, looking west.

OREGON INVENTORY OF HISTORIC PROPERTIES

SECTION 106: SUPPLEMENTAL PHOTOGRAPHS
Potential Historic District

Name of District, Grouping or Ensemble: Camp White Branch
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Shop/Storage Building east facade, looking west.

First Aid Trailer and Nurse's Cabin, view to east.

The pool house and swimming pool. view to the south.

ARCHAEOLOGICAL SURVEY FOR THE PROPOSED CAMP WHITE BRANCH MASTER PLAN, MCKENZIE RIVER RANGER DISTRICT, WILLAMETTE NATIONAL FOREST, OREGON

Prepared for
Cogan Owens Cogan, LLC,
Portland, Oregon

March 14, 2005

REPORT NO. 1451

Archaeological Investigations Northwest, Inc.

E-mail: ainw@ainw.com
Vancouver Phone 360 696-7473

2632 SE 162nd Ave. ● Portland, OR ● 97236
Phone 503 761-6605 ● Fax 503 761-6620

ARCHAEOLOGICAL SURVEY FOR THE PROPOSED CAMP WHITE BRANCH MASTER PLAN, MCKENZIE RIVER RANGER DISTRICT WILLAMETTE NATIONAL FOREST, OREGON

PROJECT SITE: Camp White Branch

LOCATION: NE ¼ of Section 21, Township 16 South, Range 7 East, Willamette Meridian

COUNTY: Lane

PROJECT: Camp White Branch Master Plan, 17.4 acres

FINDINGS: No archaeological resources were recorded.
No further work is recommended.

PREPARERS: Nicholas J. Smits, M.A., R.P.A., and John L. Fagan, Ph.D., R.P.A.

INTRODUCTION

Camp White Branch, located within the McKenzie Ranger District of the Willamette National Forest, is an organizational camp that serves church groups, Boy Scouts, and other youth and family organizations as well as members of the general public (Figure 1). The camp operates on 17.4 acres pursuant to a 20-year United States Forest Service (USFS) lease and Special Use Permit. In order to meet the programming and capacity needs of its users, the camp is preparing a long-term Master Plan to identify improvements to be phased in over a 15- to 20-year period. Implementation of the Master Plan would require construction and other activities, and because the camp is situated on USFS land, environmental impacts of the project must be evaluated and documented in an Environmental Assessment (EA). The proposed project is therefore subject to federal laws and regulations concerning cultural resources.

Archaeological Investigations Northwest, Inc. (AINW), was sub-contracted through Cogan Owens Cogan, LLC, to conduct a cultural resource study to address the proposed Master Plan's possible effects on historic properties, including archaeological resources. AINW archaeologists examined records at the Oregon State Historic Preservation Office (SHPO) and conducted a systematic pedestrian survey of the Camp White Branch Master Plan project area. AINW archaeologists surveyed the project area for archaeological resources in compliance with Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations (36 CFR 800). The work was also done according to the requirements of the Secretary of the Interior's Standards and Guidelines for archaeology and historic preservation.

No prehistoric (Native American) or historic-period archaeological resources were encountered during the survey, nor did AINW identify any locations considered to have a high probability for such resources. The historic buildings within the project area are documented and evaluated in another report (O'Brien 2004). Based on the results of the archaeological fieldwork, a determination of "no historic properties affected" is recommended for the archaeology portion of the project.

PROJECT DESCRIPTION

As presently proposed, the Camp White Branch Master Plan project will involve a number of improvements to provide larger facilities, enhance camper accessibility and housing, provide expanded on-site experiences for visitors, improve camp infrastructure, improve visitors' sense of arrival, and enhance the natural environment at the camp. Specific improvements on the 17.4-acre parcel include:

- Construction of seven to ten new camper cabins
- Construction of a multi-purpose building for indoor recreation, large group meetings, and worship services
- Construction of a new commons building (to replace the existing dining hall)
- Renovation of the camp office to create a new gate house
- Relocation and improvement of the camp's swimming pool
- Creation of a new parking area for recreational vehicles
- Reconstruction or renovation of the Assistant Manager's cabin
- Rehabilitation of open space/playing fields
- Renovation of the camp's amphitheater
- Improvements to major trails and roadways
- Rehabilitation of disturbed areas with native vegetation
- Replacement of the existing sewage treatment facility with a new sand filter and drainfield
- Improvement of water storage and conveyance facilities
- Restoration and improvement of the historic lodge

LOCATION AND SETTING

Camp White Branch is located in the Western Cascades physiographic province in eastern Lane County, Oregon (Franklin and Dyrness 1988). The camp is located within the McKenzie River Ranger District of the Willamette National Forest, approximately 96 kilometers (km) (60 miles [mi]) east of Eugene. Camp White Branch lies about 1.2 km (0.75 mi) south of Highway 242 (McKenzie Highway), approximately 11 km (7 mi) east of its junction with Highway 126. The camp is situated in a moderately flat valley floor north of Foley Ridge and south of White Branch Creek, which is a tributary of the McKenzie River. The surrounding topography consists of steep ridge and ravine terrain.

The Camp White Branch complex of buildings and facilities is located in the north-central portion of the project area (Figure 2). To the south and west of the complex lies a former ski hill, which is used by the camp as a snow tubing hill, and an open clearing, which is used as a recreational field. Much of the project area has been modified by construction of buildings, roads, trails, parking lots, and facilities associated with the camp; however, the landscape surrounding the complex remains relatively undisturbed. The camp lies at an elevation of approximately 853 meters (m) (2,800 ft [ft]) above mean sea level.

Although much of the native vegetation within the project area has been cleared for construction and use of the camp, the project area was historically in the western hemlock (*Tsuga heterophylla)* zone (Franklin and Dyrness 1988). Consisting mainly of Douglas-fir, western hemlock, and western redcedar, the western hemlock zone also includes some deciduous hardwood trees and some grasslands. Riparian areas include red alder, Oregon ash, bigleaf maple, and blackberry and a variety of ferns and shrubs.

Soils in the vicinity of Camp White Branch consist mainly of the Keel and Klickitat series. The Keel series is characterized by moderately deep, well-drained clay loam that formed in weathered colluvium and volcanic ash. The Klickitat series is characterized by deeper, well-drained stony loam on sideslopes and ridges in the upland Cascades (Patching 1987). Soils within the project area have been heavily disturbed during construction and use of the camp. The majority of the ground surface within the camp complex is covered with buildings, roads, trails, parking lots, grass lawns, and recreational areas. Needles from coniferous trees provide a thick layer of forest duff. The soils near the borders of the project area, particularly to the south and west away from the camp proper, remain relatively undisturbed. In these areas, the terrain is steep, and soils consist of shallow, stony loam formed out of colluvium.

CULTURAL CONTEXT

Native Peoples

The region now known as the McKenzie River Ranger District of the Willamette National Forest was traditionally used by the Upper Santiam division of the Molala (Churchill and Jenkins 1989:17; Minor et al. 1987). Although they occupied the Cascades at the time of contact with Euroamericans, very little ethnographic information exists about the Molala, and it remains unclear how long the Molala inhabited the region (Churchill and Jenkins 1989; Minor et al. 1987; Rigsby 1969). It has been suggested that the Molala were recent immigrants to the Cascades, pushed west by pressure from other groups; however, Rigsby (1969) suggests that they had inhabited the region for at least the last 1,000 years.

Most of what is known about the Molala has been extrapolated from neighboring groups or linguistic evidence (Rigsby 1969). They are believed to have practiced seasonal migration, living in low-elevation winter villages and moving to higher elevations in the spring and summer to take advantage of seasonally available resources. They are reported to have traveled east to the Deschutes River to fish, and they traded smoked meat, berries, skins, and bear grass at Willamette Falls (Rigsby 1969).

The cultural chronology of the Western Cascades is not yet well understood. The archaeological record has been variously interpreted to reflect use of the Cascades by people from the Willamette Valley to the west, by people from east of the Cascades, by people from both the Willamette Valley and from east of the Cascades, and by a separate group indigenous to the Cascades (Minor et al. 1987:59). Minor (1987:59) suggests that before about 5,000 years ago, people from both west and east of the Cascades traveled into the mountains to use upland resources. However, after 5,000 years ago, the archaeological record may indicate occupation of the upland Cascades by a group not strongly related to cultures on either side of the mountains. This interpretation is consistent with the limited linguistic and ethnographic information available on the Molala.

Euroamerican History

The first documented Euroamerican exploration of Lane County was conducted in 1812 when Donald McKenzie of the Northwest Company led a party up the Columbia and Willamette rivers from Astoria (Zenk 1990). Missionaries and Euroamerican settlers made their presence known in the Willamette Valley in the 1830s, but it was not until the 1840s that large numbers of Euroamericans began arriving from the East to settle (Zenk 1990). The Donation Land Act of 1850 spurred rapid settlement of the agriculturally rich Willamette Valley, and by the time the Homestead Act was passed in 1862, Euroamericans were increasingly filing claims on more agriculturally marginal lands, including tracts in the Western Cascades.

In 1862, Felix Scott, Jr., and a crew of about 60 men began construction of a road between Eugene and central Oregon via McKenzie Pass (Minor et al. 1987:83). However, the road's use was limited because the high elevation made it prone to large amounts of snowfall. The road, now Highway 242, was often used in summer to drive livestock east from the Willamette Valley to central Oregon.

Camp White Branch was constructed in 1934 as a ski area by the Civilian Conservation Corps (CCC). The CCC crew, stationed at Camp Belknap, cleared several ski runs and constructed a log lodge, a storage shed, and other facilities (Cox 1988). Over 1,200 people were present at Camp White Branch's dedication ceremony in 1935 (Cox 1988). However, the ski resort was not built in an ideal location; at 853 m (2,800 ft) above mean sea level, it received far less snowfall than necessary to keep the runs open. In 1948, the ski area was converted to an organization camp, and it has since been held under a special use permit by church groups and other organizations.

LITERATURE REVIEW AND RESULTS OF PREVIOUS INVESTIGATIONS

Records from the Oregon SHPO were checked to determine if archaeological sites had been recorded or if archaeological surveys had been conducted within the vicinity of the proposed project area. General Land Office (GLO) maps were reviewed to determine if historic-period structures or features were present within the proposed project area. Historical maps and published secondary sources, on file at AINW, were also reviewed. A review of the National Register of Historic Places was conducted to determine if any listed historic properties are within or near the proposed project area, and the results indicated that no archaeological historic properties are present, except for the lodge and associated storage shed, which have been determined eligible for listing in the National Register of Historic Places.

Numerous cultural resource surveys have been conducted, mainly for timber sales, within 1.6 km (1 mi) of Camp White Branch (Survey Report Numbers 3041, 3042, 5415, 6702, 8224, and 11141). Although many of the surveys in the vicinity of Camp White Branch recorded no cultural resources, archaeological sites are relatively common on ridges and along creeks, particularly north of the McKenzie Highway. Obsidian debitage, representing lithic reduction sites, is commonly found in this region because Obsidian Cliffs, a major source of obsidian, is located only 14 km (8.5 mi) east of Camp White Branch. The obsidian found within the McKenzie sub-basin is dominated by the Obsidian Cliffs geologic source, which was quarried and then transported and traded throughout Oregon and the Pacific Northwest (Skinner and Winkler 1994).

One archaeological resource has been documented within 1.6 km (1 mi) of the project area. The Lone Cedar site (35LA616) was a short-term occupation site represented by 291 pieces of obsidian debitage and three formed artifacts (Churchill and Jenkins 1989). Cultural materials were found to a depth of 70 centimeters (cm) (28 inches [in]).

FIELD INVESTIGATIONS

On November 1, 2004, AINW archaeologists Todd B. Ogle, M.A., R.P.A., Nicholas J. Smits, M.A., R.P.A., and John L. Fagan, Ph.D., R.P.A., conducted a pedestrian survey of the proposed Camp White Branch Master Plan project area. The entire project area was surveyed by walking irregular transects spaced approximately 10 to 15 m (33 to 50 ft) apart (Figure 3). Much of the proposed project area consisted of open areas around buildings and camp facilities (Photo 1). The survey area surrounding the camp complex, particularly the area to the south

and west adjacent to the snow tubing hill, consisted of densely vegetated, steep terrain (Photo 2). At the base of the snow hill, the terrain was relatively level and open (Photos 3 and 4). Because most of the project area was densely vegetated, ground surface visibility was approximately 0 to 5%. Mineral soil was visible on portions of the snow tubing hill, which was cleared of most vegetation, and in areas of bioturbation in the recreational fields. Shovel scrapes, measuring approximately 0.5 m (2 ft) in diameter, were conducted in areas where the probability for archaeological resources was considered high, including areas near White Branch Creek and on relatively flat surfaces across the entire project area. Close attention was paid to backdirt piles from rodent holes, which often contain artifacts. No prehistoric or historic-period cultural materials were encountered during the survey.

SUMMARY AND RECOMMENDATIONS

The cultural resource investigation, including archival research and pedestrian survey, did not identify any evidence of prehistoric or historic-period archaeological resources within the proposed Camp White Branch Master Plan project area. It is the opinion of AINW that the proposed project is not likely to affect any archaeological resources. Based on these findings, we recommend a "no historic properties affected" determination for the archaeological portion of the project.

Should unanticipated archaeological or historical resources different from those recorded during the AINW survey be encountered during project construction, however, all ground-disturbing activity in the vicinity of the find should be halted and the USFS and the SHPO should be promptly notified to assure compliance with relevant state and federal laws and regulations. Please contact our office if you have any questions regarding the survey or this report.

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CAMP WHITE BRANCH
PROPOSED TRAILS PLAN

This plan includes information about the following:

- Inventory of trails developed for use by Camp White Branch visitors, including approximate location, length and classification of trails.
- Recommended trail improvements and standards for implementing them.
- Proposed responsibilities for maintaining and improving trails.
- Restrictions on future use and/or improvement of selected trails.

In general, Camp White Branch does not proposed to extend its outside permit area to include trails identified in this Trails Plan. The Camp expects to use only existing trails which have been developed in close proximity to the Camp's boundary. The only exception to this may be to develop one or more short trails to new satellite campfire areas which may be created in exchange for closing existing campfire areas in environmentally sensitive areas.

Furthermore, Camp users will be discouraged from using these trails to enter the Three Sisters Wilderness; potential connections to trails within the Wilderness will continue to be closed and posted as such.

TRAIL SYSTEM

Trails within the system include the following (see accompanying trail map, page three).

- **Destination trails**, including:
  - **Lava bridge trail**. This one-way trail travels east from the Camp, beginning with the southeastern portion of the primary loop trail system. It traverses several small seeps and streams and provides views of White Branch Falls and is about 1.5 miles long. Some portions traverse the steep slope south of the Camp. This trail is approximately two - four feet wide. Rehabilitation and closure of some sections will be needed to meet USFS trail standards (see accompanying USFS trail improvement standards). This would be considered a Class 3 trail per USFS trail standards.
  - **Moraine trail**. This one-way trail travels approximately due west of the Camp, starting from the west end of the primary loop trail system around the Camp. This trail is approximately two to four feet wide and most sections currently meet USFS trail standards (see accompanying USFS trail improvement standards). This would be considered a Class 3 trail per USFS trail standards.
- **Short primary loop trail system** around camp. This system includes approximately three miles of trails. It encircles the Camp and includes several shorter loops. Trails within this loop are generally flat and between two and four feet wide; several sections parallel and/or cross White Branch Creek. This system also provides access to secondary trails to satellite campfire rings. Improvements to some sections of the primary loop system may be needed to improve drainage and replace crossings over streams, seeps or wet areas to meet USFS standards for such crossings (see accompanying USFS trail improvement standards). The main loop trail would be considered a Class 3 trail per USFS trail standards. Other trail sections within this loop system would be considered Class 2 trails.

- **Secondary trails to satellite campfire rings**. These trails vary from 1/8 to 1/4 mile in length. Most are relatively flat though some have slight to moderate uphill grades. They are typically two to three feet wide and do not require improvements to meet USFS standards. Some existing secondary trails may be closed. Others will remain open and some additional secondary trails may be developed to provide access to new satellite campfire rings to replace those that are closed. These would be considered Class 2 trails per USFS trail standards.

The majority of these trails are or will be located outside the Camp's permit boundary. The majority are existing trails, with the exception of possible new satellite trails to fire rings to replace those fire rings proposed for closure. All of these trails are expected to be for hikers only. None are expected to be used for mountain-biking and none are expected to meet ADA standards.

IMPROVEMENT NEEDS

Potential needed improvements to trails described above include the following.

- **Possible realignment and stabilization** in wet area east of permit boundary. This section of trail traverses several small seeps, streams and wet areas. Portions of this section of trail may need to be realigned or reconstructed to avoid these wet areas and slopes in the vicinity to minimize impacts on these areas, including trail erosion.
- **Improvements to meet USFS standards at all water crossings**. As noted above, the southeastern section of the primary loop trail traverses several small seeps, streams and wet areas. Wooden crossings have been constructed to minimize foot traffic through these wet areas. Some of these structures may need to be replaced to meet USFS standards and practices. In addition, the primary loop trail system crosses White Branch Creek in two places. One or two or these crossings may need to be reconstructed to meet USFS standards.
- **Improvements in vicinity of White Branch Creek** to ensure proper drainage. Some sections of the primary loop trail located in close proximity to White Branch Creek may require drainage improvements to reduce runoff and resulting sedimentation into the creek. Drainage improvements would be constructed to USFS standards (see accompanying USFS trail improvement standards).
- **Abandonment or obliteration of selected secondary trails**. Some trails to selected satellite campfire rings are expected to be targeted for closure, depending on assessment of possible impacts of further use of these areas. USFS personnel have raised concerns about future use of the "Honeycreek Falls" and "George Washington Bridge" sites. The Honeycreek Falls site is in a potentially environmentally sensitive area which also includes hazard trees. The George Washington Bridge site is located very close to White Branch Creek and use may lead to steambank undercutting. These two sites will need to be either closed or rehabilitated to address these concerns. As a result, satellite trails to these areas may be obliterated, if needed.
- **Development of a sign plan**. Destination trails and the primary loop trail may be signed. Signs placed outside the permit area will require USFS approval. Mounting will be allowed on posts only, not on trees. Basic sign design standards are as follows:

Material	*Color/Finish*	*Sign Support*	*Finish*
Solid Wood (or appearing so)	*Natural or Stained*	*Rustic round or 4x4*	*Natural or Stained*

TRAIL CONSTRUCTION, IMPROVEMENTS AND MAINTENANCE

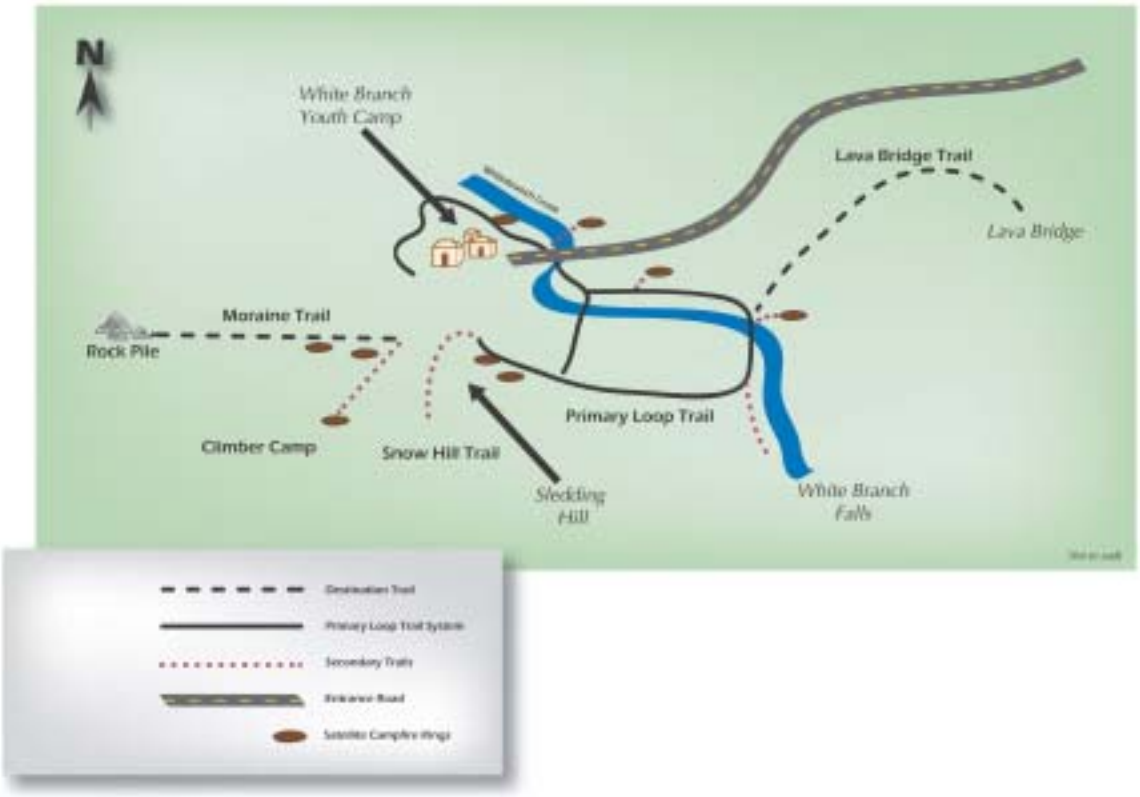
Future construction, improvement and maintenance of trails will be to USFS standards for all trails. Camp White Branch is expected to be responsible for routine maintenance; responsibility for trail maintenance will be addressed in the Camp's updated Special Use Permit. Prior to approval of any construction or major trail improvements, the Camp will need to submit a design packet to the USFS for approval. The design packet will include specification drawings, a site survey, and describe on-the-ground marked sections of trail construction or reconstruction needs, as well as a timeline for project implementation. All work items will be pre-approved by the Forest Service and the Forest Service will conduct periodic inspections during construction. Prior to development of a design packet a on the ground review of both off permit trails will be conducted by the Trails Manager, McKenzie River RD and Camp White Branch Administrators. Sample specifications are included in this appendix.

RESOURCE SURVEYS AND IMPACTS

In conducting surveys for threatened, endangered and sensitive plant and wildlife species, resources specialists conducted surveys in the following areas around the trails identified in this draft Trails Plan.

- Trails targeted for realignment or stabilization: Surveyed within 30 – 50 feet of trail per serpentine route.
- Trails targeted for minor drainage improvements: Surveyed within five to ten feet on either side of trail.
- Trails targeted for no improvement: Surveys were limited to existing trail edges only.

No threatened, endangered or sensitive species were identified in the vicinity of these trails during surveys. Surveys covered federal and state listed species, as well as survey and manage species. Impacts of trail and campfire ring usage have been addressed as part of the Environmental Assessment (EA) prepared for the Camp White Branch Master Plan. The EA indicates that continued use of these trails and campfire ring areas could have impacts on riparian resources in the form of erosion and resulting sediment transport to White Branch Creek and other small streams and seeps. However, these impacts would be minor and much less significant than sediment transport associated with rainfall and other natural conditions, particularly storm events.


N
White Branch
Youth Camp
Lava Bridge Trail
Lava Bridge
Moraine Trail
Rock Pile
Primary Loop Trail
Climber Camp
Snow Hill Trail
Sledding
Hill
White Branch
Falls