



Proposed Action and Preliminary Analysis

United States
Department of
Agriculture

Permit Re-issuance for Recreation Residences within the Cool Creek Tract

Forest Service

Pacific Northwest
Region

Mt. Hood National Forest
Zigzag Ranger District

June, 2009



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CHAPTER 1 - PURPOSE AND NEED FOR ACTION

1.1 Introduction

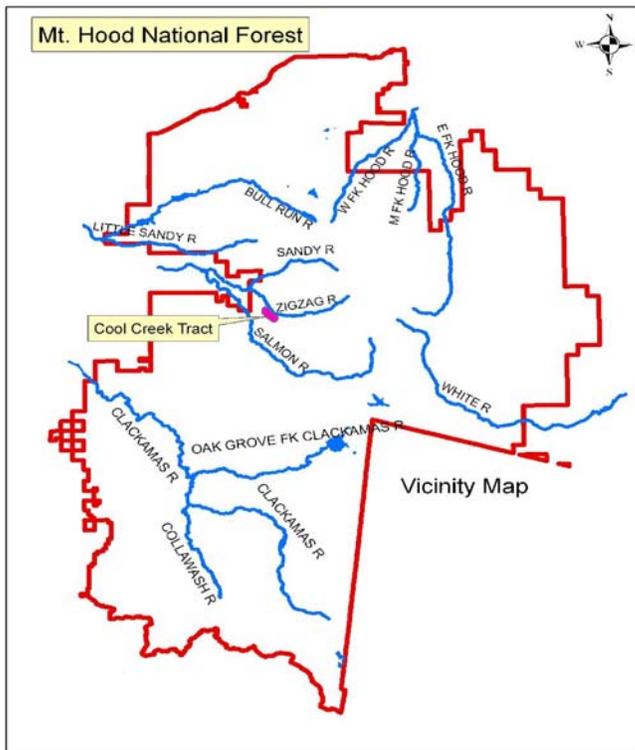
This Proposed Action and Preliminary Analysis describes the analysis of a proposed action to reissue 20-year term Special Use Permits for recreation residences (cabins) within the Cool Creek Recreation Residence Tract (Cool Creek Tract) (36 CFR 220.7(a)) (40 CFR 1508.9(a)(b)).

This EA is tiered to: the Final Environmental Impact Statement for the Mt. Hood National Forest Land and Resource Management Plan (Forest Plan), 1990, and the Final Environmental Impact Statement for the Northwest Forest Plan, 1994 (40 CFR 1502.20).

This document is written to fulfill the purposes and requirements of the National Environmental Policy Act (NEPA), as well as to meet policy and procedural requirements of the USDA Forest Service. The intent of NEPA, its implementing regulations, and Forest Service policy is to evaluate and disclose the effects of proposed actions on the quality of the human environment.

This document and all appendices are posted on the Mt. Hood National Forest web site under the “Projects and Plans section: <http://www.fs.fed.us/r6/mthood/projects/>.

Map 1 - Cool Creek Tract Vicinity Map



1.2 Background and History of the Recreation Residence Program

From its beginning in 1905 the Forest Service recognized the potential of the Mt. Hood area to provide a range of recreational opportunities on public lands. The Term Occupancy Act of 1915 not only allowed but encouraged private use and development of leased Forest Service lands, including summer residences, and the earliest cabins date from this period. The demand grew stronger in the 1920s with the completion of the Mt. Hood Loop Highway and the Forest Service responded by establishing a number of summer home tracts that could be developed in an orderly and consistent fashion.

Currently there are 554 recreation residences (also known as summer homes or cabins), separated into ten tracts, located on the Zigzag Ranger District of the Mt. Hood National Forest. These privately owned non-permanent residences, along with their associated improvements, are administered by the Forest Service under Special-Use Permits in order to provide a unique Forest based recreational opportunity. This grouping of recreation residences is among the largest in the nation. The Special Use-Permits are issued to the homeowners for a 20-year period. The Forest Service charges an annual fee for the Special-Use Permits based on the cabin's valuation. Many cabins have been owned by a single family, having been passed down through the generations. Most of the cabins are over 50 years old, however an analysis conducted in 2004 determined that these cabins are not eligible for inclusion on the National Register of Historic Places.

There are a number of partnerships in the management of the recreation residences beyond the inherent long-term, partnership between the owners, their summer home association and the Forest Service. Clackamas County is a valuable partner in insuring building codes are complied with, and sanitation and water quality issues are addressed. The State Historic Preservation Office aids in the preservation of the significant historic structures and the historic qualities of the summer home tracts. The Lady Creek and Rhododendron water associations provide domestic water to the cabins, and the Hoodland Fire Department is active in protecting the built environment and providing necessary emergency services.

1.3 Background and History of the Cool Creek Tract

The tract was named for Cool Creek that flows into Still Creek just upstream from the tract. The tract is located along Still Creek on the Zigzag Ranger District of the Mt. Hood National Forest, approximately ½ mile southeast of Rhododendron, Oregon. All of the cabins are located between Forest Service road 2612 and Still Creek. The legal description of the tract is T.3S., R.7E., Sections 13, 14, and 24, Willamette Meridian. The tract was designated in 1955 and was the last of the ten recreation residence tracts to be established on the Mt. Hood National Forest. The Cool Creek Tract is the only tract to be established on the Zigzag Ranger District after the 1940s. Twenty-five (25) individual residences (totaling approximately 13 acres) were constructed between 1957 and 1978. Typically, each lot is approximately 0.25 to 0.5 acres in size.

Other than clearing for the building site and the driveways, the lots remain in their natural forested condition. Extensive landscaping is prohibited by the terms of the Special-Use Permit. The cabins and natural environments are integrated and, for the most part, the cabins are screened from view from the road and each other by natural vegetation. Many of the cabins are located on the floodplain of Still Creek and some have suffered damage from past floods.

The Cool Creek Tract is within the Forest Plan A10 Management Area. The goal for A10 lands is to “*Provide a range of high quality outdoor recreational opportunities for concentrated recreational use at readily accessible, appropriately designated developed sites*” (Forest Plan, Four-186). The B7 General Riparian Area is a Forest Plan Management Area that occurs within the A10 Management Area. The goal for B7 lands is to “*Achieve and maintain riparian and aquatic habitat conditions for the sustained, long-term production of fish, selected wildlife and plant species, and high quality water for the full spectrum of the Forest’s riparian and aquatic areas*” (Forest Plan, Four-253). Under the Northwest Forest Plan this tract is within Administratively Withdrawn and Riparian Reserve designations.

1.4 Purpose and Need for Action

The current 20-year Term Special Use Permits expired on December 31, 2008 (since that time one-year temporary permits were issued). A new recreation residence policy outlining procedures for issuance of new permits upon the expiration of current permits was published in the Federal Register on June 2, 1994. The first step in reissuing these permits was to conduct a Forest Plan Consistency Review (Consistency Review) to determine whether the ten tracts were consistent with Forest Plan direction. This Consistency Review was completed and signed on June 29, 2006, and found that all ten tracts are consistent, or can be made consistent, with the direction, management prescriptions, and Standards and Guidelines contained in the Forest Plan. The recreation residence tracts are also consistent with the management direction and Standards and Guidelines contained in the Record of Decision (ROD) for the Northwest Forest Plan of 1994.

Although the Finding of Consistency concluded that the Cool Creek Tract as a whole is consistent with the direction listed above, it also found that many cabins within the Cool Creek Tract may not be consistent with the direction. This analysis will address resource issues that were identified in the Consistency Review (and through public scoping efforts described in section 1.7 of this chapter) that may not be consistent with management direction (*36 CFR 220.7(b)(1)*).

1.5 Proposed Action

The Proposed Action would authorize continued recreation residence use for all cabins within the Cool Creek Tract for up to a 20-year period beginning January 1, 2010 (36 CFR 220.7(b)(2)).

1.6 Public Involvement

Scoping is an integral part of the environmental analysis. Scoping includes refining the Proposed Action, identifying the interdisciplinary team (IDT) and the preliminary issues and identifying interested and affected persons. The results of scoping are used to 1) identify public involvement methods; 2) refine the issues; and 3) explore alternatives to the Proposed Action and associated potential effects (36 CFR 220.4(e)(1)(2)).

Scoping for this project was first published in the spring, 2005 issue of the Mt. Hood National Forest Schedule of Proposed Actions (SOPA), and has appeared in each issue since then (the SOPA is published quarterly). In July, 2006 a letter and map describing the project was mailed to all recreation residence cabin owners on the Mt. Hood National Forest, as well as an additional list of 23 individuals, agencies and organizations that have been identified as being interested in projects on the Mt. Hood National Forest.

Additional scoping letters were mailed to recreation residence cabin owners in August, 2007, and July 2008. The public's responses to these scoping efforts have identified issues and concerns, and continued communication with cabin owners has been ongoing.

In addition, scoping letters, maps, and additional information related to the project are posted on the Mt. Hood Forest public web site in the "Projects and Plans section": <http://www.fs.fed.us/r6/mthood/projects/>.

A public meeting to discuss issues and options associated with the Cool Creek Tract was held on April 8, 2009, and was attended by approximately 50 members of the public. During this meeting, the preliminary Proposed Action and Analysis were discussed, as well as associated issues such as cabin owner permit compliance requirements and the availability of in-lieu lots.

1.7 Issues

As explained on section 1.4 of this chapter, initial issues were identified through the Consistency Review that was completed in 2006. These issues were further developed through the public scoping process described above in section 1.6. The issues and concerns were used to refine the Proposed Action and the Design Features listed in Chapter 2 of this document:

- Owners of cabins located on identified high-risk floodplains were concerned that the Forest Service may not reissue their new 20-year permits.
- Cabins and associated bank armoring structures located on high-risk floodplains could be adversely affecting critical fish habitat and stream channel migration.
- Cabins located on identified high-risk floodplains could be at risk from catastrophic flood damage.
- Cabins located on the high-risk floodplain may have open sewer systems (such as pit outhouses or non sealed septic tanks) that could affect water quality during high stream flow events.

CHAPTER 2 - ALTERNATIVES INCLUDING THE PROPOSED ACTION

2.1 Proposed Action and Design Features

Section 1.5 of Chapter 1 gives a summary statement of the Proposed Action “to authorize continued recreation residence use for all cabins within the Cool Creek Tract for up to a 20-year period beginning January 1, 2010 (36 CFR 220.7(b)(2)).” Chapter 2 provides a detailed description of the Proposed Action (see Map 2 - “Cool Creek Recreational Residence Tract, Located along Still Creek” on page 12 of this chapter).

The Proposed Action includes continued use of those cabins that exist on the high to moderate risk areas of the floodplain, channel migration zone, and debris torrent zones identified in Table 2 (below) of Appendix A: Cool Creek Track Fisheries Biological Evaluation and Assessment (USDA 2009).

Table 2. Cabins or lots within the Cool Creek Tract that are at moderate or high risk of damage due to floods or debris torrents (USDA 2009).

Lot number		
121	137	155
123	139	165
125	141	167
131	145	109*
133	153	

* Note. Cabin is outside of floodplain but is located within a debris flow zone and is at least at moderate risk of damage.

As part of the Proposed Action, the owners of cabins identified in Table 2 would be offered “in-lieu” lots that are not on the floodplain. Cabin owners who accept in-lieu lots would be issued a 10-year permit for their existing cabin. By the end of the 10-year term, the cabin owner would need to remove their existing cabin and associated infrastructures and construct a new structure on the in-lieu lot. Once a cabin owner has moved to an in-

lieu lot, their Special Use permit would be valid until the end of a 20-year period that began when the 10-year period started. The old lot would then need to be restored and planted with native trees and shrubs indigenous to the area.

The overall theme of the Proposed Action is to encourage permittee's whose cabins are located on identified high risk areas to secure in-lieu lots in other tracts outside of floodplains and allow natural fluvial and hillslope processes to dominate the landscape within the Cool Creek Tract. For those permittee's that do not select the in-lieu lot option; use would continue with the knowledge and understanding of the inherent hazards of continued occupancy of the area.

The Proposed Action contains the following Design Features that are an integral part of the Proposed Action. The Design Features incorporate applicable *standards and guidelines* from the Forest Plan which are designed to avoid, minimize or eliminate potential impacts of the Proposed Action.

A. The following Fisheries/Water Quality Design Features would apply to cabin owners listed in Table 2 who decide not to accept an in-lieu lot

- The Flood Plain Executive Order (E.O. 11988) that is part of the current special use permit would be in effect; cabins that were substantially damaged or destroyed during a flood event would not be allowed to be rebuilt and would need to be removed within 90 days of the flood.
- The Forest Service would not remove future in-stream logs or debris jams, nor permit cabin owners to remove logs or debris jams; even when those jams pose a risk to cabins located on the floodplain.
- Pit outhouses and other open type septic systems would no longer be allowed on floodplain lots identified in Table 2 and would need to be replaced with a modern sealed septic system that would not pose a risk to water quality at any time, including during catastrophic flood events.
- All unnatural open areas on recreational residence lots would be revegetated with conifer and hardwood trees and shrubs that are indigenous to the area.
- No new construction of dikes, gabion walls or rock revetments would be permitted. All existing structures can remain on the landscape until their design life has ended. Any future maintenance of these structures would require site specific analysis.

B. Special Use Permit Compliance Design Features related to Fisheries and Water Quality

District resource specialists identified special use permit compliance issues during field surveys. As part of the Proposed Action, permittee’s are required to correct compliance issues identified in Table 3 to mitigate negative resource impacts. Once these corrective measures are implemented and inspected, permittees would be compliant with the terms and conditions pertaining to aquatic resource of their new permit.

Table 3. Aquatic and Riparian Special Use Permit Compliance Issues for the Cool Creek Tract.

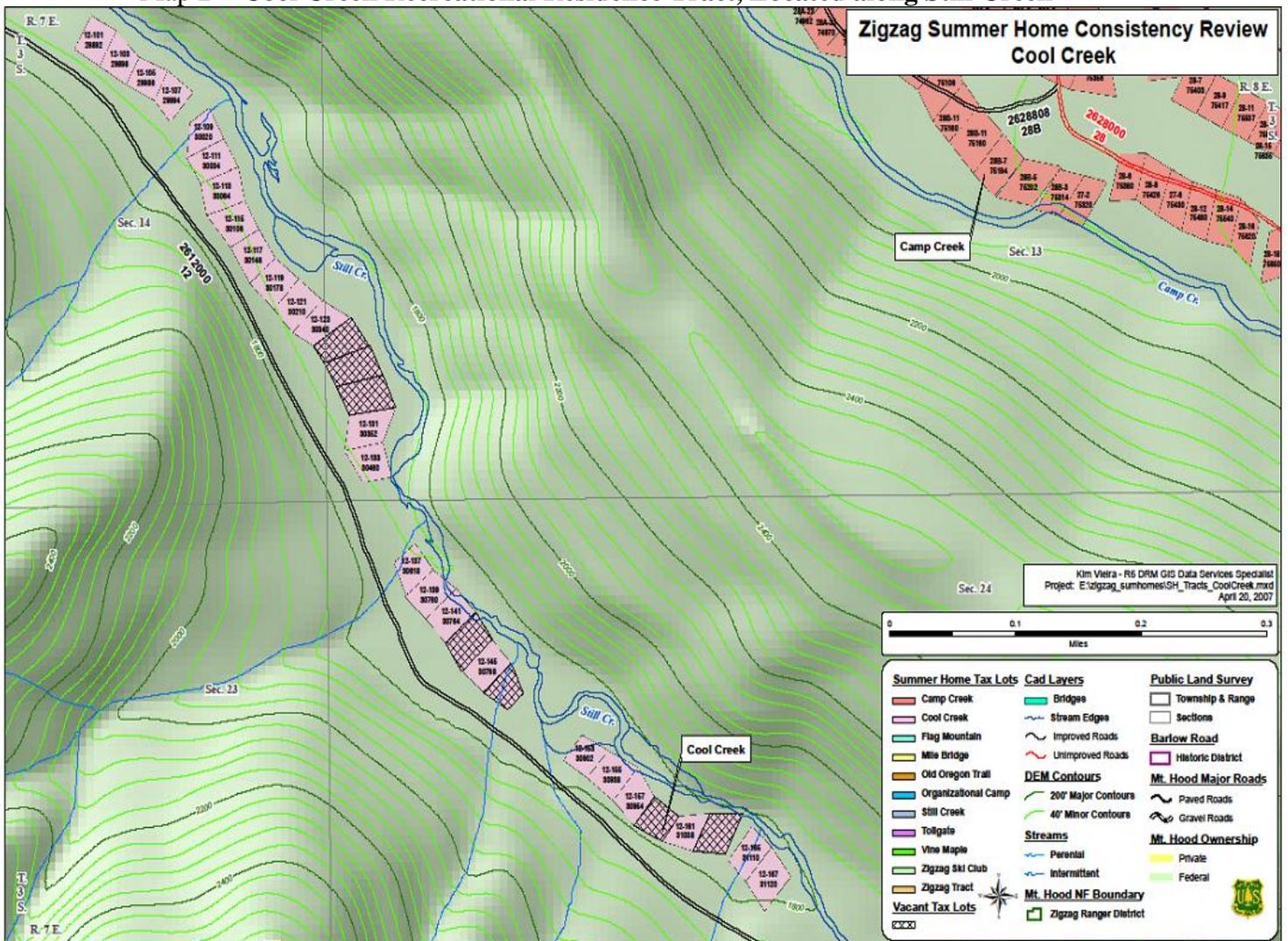
Road Number	Lot Number	Issue Identified	Corrective Measures Needed for Permit Compliance
2612	105	Water withdraw structure in Still Creek. Parking lot excessive in size.	Obtain State of Oregon water rights or connect to an approved water system. Decrease parking lot, decompact soil and replant with native shrubs and trees.
2612	107	Water withdraw structure in Still Creek. Parking lot excessive in size.	Obtain State of Oregon water rights or connect to an approved water system. Decrease parking lot, decompact soil and replant with native shrubs and trees.
2612	113	Areas of cleared vegetation affecting stand structure and composition.	Replant all open areas with native trees and shrubs.

C. Botany Design Features Applicable to all Cool Creek Tract Lots

- Unnatural open areas (e.g., areas of bare ground or with sparse vegetation where ground disturbance has occurred due to human activity) on recreational residence lots would be revegetated with native trees (conifers and/or hardwoods) and shrubs that are indigenous to the area.
- All disturbed open areas are at risk of being colonized by non-native invasive plants (including noxious weeds listed by the Oregon Department of Agriculture). Cabin owners would be required to revegetate these areas with native plant species (trees, shrubs, and/or forbs) to reduce the risk of invasive plant introduction and spread.
- Cabin owners are prohibited from planting or cultivating non-native plants on their lots.

- Cabin owners are required to remove non-native plants (including invasive plants and noxious weeds) from their lots.
- Cabin owners need to be aware of the risk of transporting invasive plants (plant parts or seeds) from infested areas to their lots. Inspect vehicles and other equipment for weeds (leaves, stems, roots, and seed) picked up while driving along road shoulders (including highway shoulders), gravel roads, or other disturbed areas where weed infestations commonly occur. Clean vehicles with pressurized water, especially the wheels, tires, undercarriage, and front grille where weed plant parts or seeds can become lodged to avoid inadvertently transporting and spreading invasive plants.

Map 2 - Cool Creek Recreational Residence Tract, Located along Still Creek



2.2 Alternatives Considered but Eliminated from Detailed Study

National Environmental Policy Act (NEPA) regulations require this Proposed Action and Preliminary Analysis to discuss the reasons for eliminating any alternatives explored, but not developed in detail (*40 CFR 1502.14[a]*).

During the initial stages of alternative development the following additional alternatives were discussed and analyzed. These alternatives did not adequately meet the Purpose and Need for action; therefore they were eliminated from further analysis or incorporated into the design of the Proposed Action.

- Under the No Action Alternative, the 25 recreational residence permits for the Cool Creek Tract would be allowed to expire and use would not be authorized to continue. A 10-year grace period would be authorized to allow permittees to remove all structures from the landscape. Restoration of each lot with revegetation with native plants and trees would be required as well as removal of all septic systems and structures. Modification to the Mt. Hood National Forest Land and Resource Management Plan (LRMP) and the A10 land allocation may follow these actions during future review scheduled in 2010.

The No Action Alternative was eliminated because it does not address the Purpose and Need for Action identified in section 1.4 of Chapter 1 (see exception below); and because there are no unresolved conflicts concerning alternative uses of available resources. (*36 CFR 220.7(b)(2)(i)*)

Exception: the No Action Alternative would be considered for one cabin within the Cool Creek Tract: Lot 123, Rd 12. The Forest Service owns this cabin and it is on the high-risk floodplain.

- Allow cabin owners to move cabins and associated structures and systems that are in the high-risk floodplain to move their cabin to higher ground on their existing permitted lot. This alternative addresses alluvial deposit channel migration (see Appendix A: Cool Creek Track Fisheries Biological Evaluation and Assessment (USDA 2009). This alternative was eliminated because no suitable higher ground was found on the existing permitted lots.
- Allow cabin owners within the high-risk floodplain to rebuild cabins on elevated pile-driven stilts. This alternative addresses alluvial deposit channel migration (see Appendix A: Cool Creek Track Fisheries Biological Evaluation and Assessment (USDA 2009). Stilt construction is used in some areas of the world to protect structures on low elevation coastal beaches or structures that are located on floodplains, but are not located directly in a confined stream channels typical of the Cool Creek Tract. This alternative was eliminated because stilt construction is not adequate to protect structures from high flows, log jams, debris torrents that are associated with flooding in a stream channel. In addition, elevating cabins on stilts would not protect in-ground structures (such as septic systems) from flood waters.

CHAPTER 3 - ENVIRONMENTAL CONSEQUENCES

3.1 Introduction

This chapter summarizes the environmental impacts (effects), of the Proposed Action (*40 CFR 1508.9*). Effects includes ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect or cumulative.

An “impact” or “effect” is described as any change which directly or indirectly results from implementation of an action. Impacts may be adverse or beneficial, depending upon the type of change and resource area being discussed. (*40 CFR 1508.8(b)*) (*40 CFR 1508.27* (*36 CFR 220.7(b)(3)(iii)*) (*36 CFR 220.7(b)(3)(iv)*)).

The analysis provides the decision maker with information needed to compare the alternatives and select an appropriate course of action. The analysis is organized by resource area (Fisheries, Wildlife, Botany, etc.).

3.2 Fisheries and Aquatic Resources

A. Introduction - This section provides a summary of the environmental effects of the Proposed Action to fisheries and aquatic resources (*36 CFR 220.7(a)*) (*36 CFR 220.7(b)(3)(v)*). A detailed Fisheries Biological Evaluation and Assessment is included in Appendix A, and the Recreational Residence Aquatic Resource Assessment is included in Appendix B.

B. Fisheries Effects Summary Table

(see next page)

The following table summarizes the affects of the Proposed Action with Design Features, to Fisheries.

Table 1. List of Proposed, Endangered, Threatened, or Sensitive (PETS) Fish and Aquatic Mollusk Species found on the Mt. Hood National Forest and addressed under this Biological Evaluation:

	Date of Listing & Critical Habitat	Suitable Habitat Present	Species Present	Effects of Action Alternatives	
				No Action	Proposed Action
Endangered Species Act Listing by ESU/DPS					
Threatened					
Lower Columbia River steelhead & CH <i>(Oncorhynchus mykiss)</i>	1/06 9/05	Y	Y	LAA short term NE long term	LAA
Lower Columbia River Chinook & CH <i>(Oncorhynchus tshawytscha)</i>	6/05 9/05	Y	Y	LAA short term NE long term	LAA
Columbia River Bull Trout* <i>(Salvelinus confluentus)</i>	6/98	Y	N	NE	NE
Middle Columbia River steelhead & CH <i>(Oncorhynchus mykiss)</i>	1/06 9/05	N	N	NE	NE
Upper Willamette River Chinook & CH <i>(Oncorhynchus tshawytscha)</i>	6/05 9/05	N	N	NE	NE
Lower Columbia River coho* <i>(Oncorhynchus kisutch)</i>	6/05	Y	Y	LAA short term NE long term	LAA
Regional Forester's Special Status Species List					
Interior Redband Trout <i>(Oncorhynchus mykiss spp.)</i>	7/04	Y	UNK	MIIH short term NI long term	MIIH
Columbia duskysnail <i>(Colligyrus sp. nov. 1)</i>	1/08	Y	UNK	MIIH short term NI long term	MIIH
Barren Juga <i>(Juga hemphilli hemphilli)</i>	1/08	Y	UNK	MIIH short term NI long term	MIIH
Purple-lipped Juga <i>(Juga hemphilli maupinensis)</i>	1/08	Y	UNK	MIIH short term NI long term	MIIH
Scott's Apatanian Caddisfly <i>(Allomyia scotti)</i>	1/08	Y	UNK	MIIH short term NI long term	MIIH
Essential Fish Habitat				AE short term NAA long term	AE

Endangered Species Act Abbreviations/ Acronyms:		Essential Fish Habitat Abbreviations/ Acronyms:	
NE	No Effect	NAA	Not Adversely Affected
NLAA	May Affect, Not Likely to Adversely Affect	AE	Adverse Effects
LAA	May Affect, Likely to Adversely Affect		
Regional Forester's Sensitive Species List Abbreviations/ Acronyms:			
Unk	Species presence unknown but suspected		
NI	No Impact		
MIIH	May impact individuals or habitat, but will not likely contribute to a trend towards Federal listing or loss of viability to the population or species		

*critical habitat is not designated for these species on Federal lands

C. Fisheries and Aquatic Effects Analysis - The existing condition and the physical and biological processes operating within a watershed will be the baseline from which project proposals and analysis is based. As such, each of the existing 25 recreational residences that are present within the Cool Creek Tract is included as a component of the environmental baseline. Determinations of effects were made as a result of analysis at the project, fifth-field (Zigzag River), and sixth-field (Still Creek) scales. The checklist for *Documenting Environmental Baseline and Effects of Proposed Action(s) on Relevant Indicators* was used for formulating effects determinations for the Proposed Action. Potential effects to Proposed, Endangered and Threatened (PET) aquatic species and their habitat from both alternatives include direct, indirect and cumulative effects are summarized. Potential effects to designated critical habitat will also be discussed.

- **Direct Effects** - Direct effects typically follow a direct cause-and-effect relationship. An example would be cutting up and removing down logs in and adjacent to a stream channel directly effects in-stream large wood and the habitat that is provided by that structure.

Issuance of a 20-year Special Use Permit to each of the 25 recreational residences owners would continue the current use of each lot and associated structures. As part of the environmental baseline, several of these lots are located on the 100-year floodplain, debris torrent zones or in the channel migration zone of Still Creek. For a further in-depth analysis of associated effects see Appendix B; “Recreational Residence Aquatic Resource Assessment, 2009.”

Continued use of these lots (as on the face of their current special use permit) perpetuates degraded aquatic conditions. By implementing the design features outlined with the Proposed Action in Chapter 2 (section 2.1), beneficial changes to several aquatic habitat features could be realized. Though these design features would not directly improve conditions they would likely change the trajectory of existing conditions from a severely degraded state to that of an upward trend.

At least six cabins within the Cool Creek Tract have open outhouse or other open septic systems. These cabins are located mostly on broad floodplains where hyporheic flow is near the ground surface for at least part of the year. Some of these cabins are located on islands surrounded by side channel and main channel flow that accesses the floodplain and likely the open septic systems themselves during high water events. The likely result is fecal contamination of surface and sub-surface water from the contents of the septic system. These conditions likely continue until dilution by mixing with clean water renders it undetectable. Replacing existing open septic systems with fully sealed systems would alleviate this chronic infusion that occurs during most high water events. New systems need to be constructed in such a way and proximity so as to have minimal chances for failure during floods and other high water events.

As part of the Forest Service administrative process, when recreational residences are sold, the new owners are required to install a system that meets current

Clackamas County regulations. Examples of these regulations are a 100 foot minimum setback from all perennial streams, a fully contained system with no adverse effects to water quality. Replacing open septic systems with closed septic systems would decrease the amount and likelihood for pollution of surface and subsurface water, and improve baseline conditions.

Off-channel habitat and floodplain connectivity is in a currently degraded state within the depositional reaches of Still Creek, from River Mile (RM) 7.3 to 1.0. This is largely due to previous fire history in the watershed, construction of flood control boulder dikes, past timber harvest, channel cleanout and straightening and hazard tree cutting and removal. Incremental improvements to these two key habitat features were realized in the 1980's and 1990's soon after restoration actions added pieces of large wood into the floodplain, channel and side channels of Still Creek within and upstream of the recreational residence tracts. Design life for these structures was 20 years or less because they were largely made up of logs and rootwads. Decomposition of these structures is occurring at a rapid rate. Design Features of the Proposed Action include a moratorium of cutting up of all downed wood. This includes trees felled to mitigate potential over-head hazards and down wood that is deposited during debris flows from tributaries and from main river flow moving material from upstream reaches in Still Creek. Future restoration projects that mimic natural events would likely improve processes and functions in the stream and floodplain which would improve aquatic habitat. Cessation of cutting and removal of down wood would also reverse the trajectory of large wood storage and recruiting in the Cool Creek Tract to an upward trend toward recovery.

Existing boulder structures were purposefully constructed to keep the channel within its banks and to arrest lateral migration. As part of the Proposed Action these structures would continue in their current state but no new structures would be allowed to be constructed. Maintenance of these structures would also only be allowed until the end of their design life. Over time, allowing Still Creek to have better (and sometimes full) connectivity to its floodplain would improve fluvial processes and function at the site scale while improving habitat for aquatic species. This would also rejuvenate side channels that have been degraded over time, improving spawning and rearing habitat for anadromous and resident salmonids.

- **Indirect Effects** - Possible indirect effects to aquatic species or their habitat could occur from altered processes such as habitat that is created from tributary or upstream inputs of gravel, sediment and organic material moved during floods or high water events. This could indirectly affect pool frequency and quality, available spawning substrate and refugia. Baseline riparian stand conditions throughout the Cool Creek Tract are that of simplified structure with decreased species composition, lacking old growth size trees and multi-layered canopy. This simplified stand structure can indirectly affect aquatic habitat by decreased

Current degraded aquatic conditions are also part of the environmental baseline. Fully implementing the Design Features of the Proposed Action would restore open areas on each lot within the Cool Creek Tract with native conifer trees and scrubs. This would improve riparian stand conditions over the long term by restoring native species composition to riparian areas. Over time, these trees would become mature and begin contributing to multi-layer conditions as well as be available to be recruited into the channel and floodplain as structural components of the aquatic system.

- **Cumulative Effects** - No cumulative effects were identified.

D. Fisheries and Aquatic Effects Conclusion - The Proposed Action would authorize continued recreation residence use of the Cool Creek Tract for up to a 20-year period beginning January 1, 2010. As such, occupancy of these lots are part of the baseline environmental conditions as the Forest Service has deemed this activity is the best use of these lands and provides management direction in the Forest Plan, specifically in the A10 Developed Recreation and B7 General Riparian Area Management Land Allocations. Identified compliance issues in Table 3 (see Chapter 2, section 2.2) must be corrected.

Several recreational residence within the Cool Creek Tract identified in Table 1 (see Chapter 2, section 2.2) have moderate or high risk of damage due to floods or debris torrents or are located on floodplains that are likely contributing to degraded conditions. Design features outlined in the Proposed Action (see Chapter 2, section 2.2) would improve several habitat or NOAA Fisheries Pathway Indicators (see Appendix A, page 23). The Proposed Action would allow permittees listed in Table 2 (see Chapter 2, section 2.1) to select in-lieu lots that are located in other recreational residence tracts that have less to no impact to aquatic resources. Selecting this option would improve conditions in Still Creek in the long term after adverse effects associated with cabin and infrastructure removal have subsided.

- Lower Columbia River (LCR) Steelhead, Chinook, and coho salmon - Implementation of the Proposed Action with Design Features warrants a May Effect, Likely Adversely Affect (LAA) LCR steelhead, LCR Chinook and coho salmon and their designed critical habitat.
- Columbia River Bull Trout - Implementation of the Proposed Action with Design Features would have No Effect (NE) to CR Bull Trout and their habitat.
- Redband trout, Basalt Juga, Barren Juga, Purple-lipped Juga, and Scott's Apatanian Caddisfly - Implementation of the Proposed Action with Design Features May Impact Individuals or Habitat But Will Likely Not Cause a Trend Towards Federal Listing (MIIH) for Regional Foresters Special Status Species of Redband trout, Basalt Juga, Barren Juga, Purple-lipped Juga and Scott's Apatanian Caddisfly.

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

Salmon fishery EFH includes all those streams, lakes, ponds, wetlands, and other water bodies currently, or historically accessible to coho and Chinook salmon in Washington, Oregon, Idaho, and California, except above the impassable barriers identified by PFMC (PFMC 1999). Salmon EFH excludes areas upstream of longstanding naturally impassable barriers (i.e. natural waterfalls in existence for several hundred years). Three salmonids species are identified under the MSA, Chinook salmon, coho salmon and Puget Sound pink salmon. The Proposed Action (with Design Features) to issue a new 20-year Special Use Permit to each of the 25 permit holders within the Cool Creek Tract would allow currently degraded conditions to persist. Implementing the Proposed Action Design Features would improve some habitat elements while allowing natural fluvial processes to return in a limited fashion. For these reasons the Proposed Action would have Adverse Effect (AE) on EFH for Chinook and coho salmon under the 1996 Amendment to the Magnuson-Stevens Fishery Conservation and Management Act (MSA).

3.3 Wildlife

A. Introduction - This section provides a summary of the environmental effects of the Proposed Action to Wildlife resources. A detailed Wildlife Biological Evaluation and Assessment (BE) is included in Appendix C.

B. Wildlife Effects Summary Tables

The following table summarizes the affects of the Proposed Action with Design Features, to wildlife.

(see next page)

Table 1. Summary of effects to Westside Cascades “Proposed, Endangered, Threatened and Sensitive species * program.” (T=Threatened; E=Endangered; S=Sensitive; P=Proposed), rare and uncommon species.

Species	Suitable Habitat Presence	Impact of Proposed Action
Northern Spotted Owl (T)	Yes	NLAA-To Owls or Habitat. NLAA-Disturbance
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	No	No Impact
Oregon Slender Salamander (<i>Batrachoseps wrightii</i>)	Yes	MII-NLFL
Larch Mountain Salamander (<i>Plethodon larselli</i>)	No	No Impact
Cope’s Giant Salamander (<i>Dicamptodon copei</i>)	No	No Impact
Oregon Spotted Frog (<i>Rana pretiosa</i>)	No	No Impact
Bufflehead (<i>Bucephala albeola</i>)	No	No Impact
Harlequin Duck (<i>Histrionicus histrionicus</i>)	No	No Impact
American Peregrine Falcon (<i>Falco peregrinus anatum</i>)	No	No Impact
Townsend’s Big-eared bat (<i>Corynorhinus townsendii</i>)	Yes	MII-NLFL
Fringed Myotis (<i>Myotis thysanodes</i>)	Yes	MII-NLFL
California Wolverine (<i>Gulo gulo luteus</i>)	No	No Impact
Johnson’s Hairstreak (<i>Callophrys johnsoni</i>)	Yes	No Impact
Mardon Skipper (<i>Polites mardon</i>)	No	No Impact
Puget Oregonian (<i>Cryptomastix devia</i>)**	Yes	MII-NLFL
Columbia Oregonian (<i>Cryptomastix hendersoni</i>)**	Yes	MII-NLFL
Evening Fieldslug (<i>Deroceras hesperium</i>)**	No	No Impact
Crater Lake Tightcoil (<i>Pristiloma arcticum crateris</i>)**	No	No Impact
Crowned Tightcoil (<i>Pristiloma pilsbryi</i>)	Yes	MII-NLFL
Red tree voles (<i>Phenacomys longicaudus</i>)	Yes	MII-NLFL
Great gray owls (<i>Strix nebulosa</i>)	No	No Impact

“MII-NLFL” = May Impact Individuals, but not likely to Cause a Trend to Federal Listing or Loss of Viability to the Species

“LFL” denotes likely to cause a trend to federal listing or loss of viability

“NE” denotes a No Effect

“NLAA” denotes a May Affect, Not Likely to Adversely Affect

“LAA” denotes a May Affect, Likely to Adversely Affect

* R6 Regional Forester’s sensitive species list, January 2008

Management Indicator Species (MIS)

The Forest Plan, which includes the Scenic Area lands in Oregon, utilized a strategy of Management Indicator Species (MIS) to represent other species: these species require special wildlife considerations. These species presumably are representative of the habitat needs of other species because they have similar biological traits. The species selected

were elk, deer, pileated woodpecker, American marten, spotted owl, silver gray squirrel, and Merriam’s turkey. All of these species are analyzed except Merriam’s turkey and silver gray squirrel because there is no habitat for them in the action area.

Management Indicator Species (MIS) and Land Birds

Species	Habitat Present	Impacts of Proposed Action
Pileated Woodpecker	Yes	Minor negative effect from reduction of snags and down wood from residents for safety
Deer and Elk	Yes	Negative effect from disturbance of animals that results in loss of habitat utilization.
American Marten	Yes	No effect due to lack of high elevation habitat normally associated with marten on the Forest.
Gray Squirrel	No	NA
Wild Turkey	No	NA
Hermit warbler	Yes	No effect
blue grouse	Yes	Decrease in individuals due to domestic animals and disturbance
Band-tailed pigeons	Yes	Decrease in individuals due to domestic animals and disturbance
willow flycatcher	Yes	Decrease in individuals due to domestic animals and disturbance
olive-sided flycatcher	Yes	No effect

C. Wildlife Effects Conclusion

1. Northern Spotted owl - The effects determination for spotted owls is May Affect but Not Likely to Adversely Affect the northern spotted owl. This applies to the species themselves, their habitat, critical habitat, their prey, and effects from disturbance. This analysis is based on current research, including recent workshops on northern spotted owls in 2005 and 2006.
2. Bald Eagle - There are No Effects to bald eagles because there is no nesting or foraging habitat in the action area.
3. Oregon Slender Salamander - The presence of people residing in the area will reduce populations of Oregon slender salamanders in those areas. At the same time people will often have scrap wood or debris that is around the house that will act as cover for the salamanders. Habitat is still present and the occupancy of the homes will not be detrimental to the local population. The

4. Townsend's Big-eared bats - There is a low potential for impacts to Townsend's Big-eared bats from this alternative. The species has not been documented in this area. The presence of homes in the area of forest and stream may actually be a benefit to the bat since they will use houses for roost sites and maternity colonies. Lights around homes also attract insects and could aid in providing a concentration of a food source if the bats are roosting nearby. The greatest impact would be residence who discover a colony and try to eliminate it. This is remote since this species does not produce large colonies so often go undetected. *The effect determination is May Impact Individual but not likely to Cause a Trend to Federal Listing or Loss of Viability of Townsend's Big Eared Bat or their habitat.*
5. Fringed myotis - There is a low potential for impacts to Pacific Fringe-tailed bats from this alternative. The species has not been documented in this area. The presence of homes in the area of forest and stream may actually be a benefit to the bat since they will use houses for roost sites and maternity colonies. Lights around homes also attract insects and could aid in providing a concentration of a food source if the bats are roosting nearby. The greatest impact would if humans discovered a colony and tried to eliminate it. This is remote since this species does not produce large colonies so often go undetected. *The effect determination is May Impact Individual but not likely to Cause a Trend to Federal Listing or Loss of Viability of Pacific Fringe-tailed Bat or their habitat.*
6. Puget Oregonian, Crowned tightcoil, and Columbia Oregonian - No effects to are predicted with this alternative. These snails are not found in many locations on the Forest. Nancy Duncan has explained that early voucher specimens of this species were confirmed for *Cryptomastix hendersonii* on the Clackamas River Ranger District.
7. Puget Oregonian, Crowned tightcoil, and Columbia Oregonian - The down wood and maple leaf component is in sufficient amounts to maintain populations of these species if they do exist in the recreation residence area. Any loss of habitat for these species was primarily during the building of the recreation residences initially. As long as sufficient down wood maintains at current levels there is sufficient habitat to maintain any potential local population. *The effects determination is May Impact Individuals but not likely to cause a trend to federal listing or loss of viability for Puget Oregonian, Crowned tightcoil, and Columbia Oregonian or their habitat.*
8. Summary for All Wildlife Species - The anticipated risk to all of the wildlife species both included in this analysis and considered through the proxy of

9. Red tree voles are arboreal species and there are no changes that would affect this species or it's habitat due to the ecology of this vole. The Proposed Action to reissue permits to the Cool Creek cabins means that hazard trees may need to be removed on occasion. This action May Impact Individuals, but is not likely to Cause a Trend to Federal Listing or Loss of Viability to the Species.

3.4 Botany

A. Introduction - This section provides a summary of the environmental effects of the Proposed Action to Botany resources. A detailed Botany Biological Evaluation and Assessment (BE) is included in Appendix D.

The Botany BE is also available for public review in the project planning record located at the Zigzag Ranger Station in Zigzag, Oregon.

B. Botany Effects Analysis -

- No ground- or habitat-disturbing action is proposed as part of the summer home consistency review. Therefore, there would be no impact to individuals or the habitat of Proposed, Endangered, Threatened, or Sensitive (PETS) or Survey and Manage botanical species (vascular plants, bryophytes, lichens, and fungi).
- Invasive plants and noxious weeds - The Proposed Action to reissue permits for continued recreation residence use has the potential to introduce invasive plants and noxious weeds to the project area. This potential would be minimized with the required Botany Design features that are part of the Proposed Action; therefore there would be no adverse impacts from invasive plants or noxious weeds.

3.5 Heritage Resources

A Forest Service archaeologist completed a Heritage Resources Resource Inventory report (see Appendix E).

The Heritage Report concluded that the Proposed Action with Design Features would have “No Potential to Cause Effects.” Neither the Cool Creek Tract or individual cabins within the tract meet the criteria for National Register eligibility. In 2004 the tract and the cabins were determined to be not eligible for inclusion on the National Register of Historic Places with which the Oregon State Historic Preservation Office concurred. Existing stipulations in the permit are sufficient to protect any historic properties that may be involved and is subject to Stipulation III.C.14 of the 2004 Cultural Resources Programmatic Agreement.

3.6 Environmental Justice - Civil Rights

Executive Order 12898 directs agencies to identify and address disproportionately high and adverse human health or environmental effects of projects on certain populations. This includes Asian Americans, African Americans, Hispanics, American Indians, low income populations and subsistence uses. The Civil Rights Act of 1964 prohibits discrimination in program delivery and employment. No adverse civil rights impacts were identified. There would be no meaningful or measurable direct, indirect or cumulative effects to environmental justice or civil rights.

3.7 Other (40 CFR 1502.16 and 40 CFR 1508.27)

- **Farm And Prime Range Land** - The Proposed Action would not result in effects to prime farmland or prime rangeland. None are present.
- **Laws, Plans and Policies** - There are no identified conflicts between the Proposed Action and the objectives of Federal, Regional, State laws and local land use plans, or policies.
- **Productivity** - The Proposed Action would not effect the relationship between short-term uses and the maintenance of long-term productivity.
- **Irreversible and Irretrievable Commitments** - None were identified.

CHAPTER 4 - Agencies and Persons Consulted

The Forest Service consulted the following Federal, State, and local agencies during the development of this analysis (36 CFR 220.7(b)):

FEDERAL AGENCIES

U.S. Fish & Wildlife Service
NOAA Fisheries
Senator Ron Wyden
Senator Gordon Smith
Representative Earl Blumenauer
Representative David Wu

STATE AGENCIES

Oregon Department of Fish and Wildlife
Oregon Department of Environmental Quality

LOCAL AGENCIES

Clackamas County

OTHERS

Mt. Hood Forest Homeowners Association
Oregon Forest Homeowners' Association
554 Cabin owners of the Zigzag Ranger District Recreation Residences
Oregon Natural Resources Council
Lady Creek Water System
Mitch Williams
Bull Run Interest Group
Sandy River Basin Watershed Council
Char & Dave Corkran
Rhododendron Summer Home Owners Association
Western Rivers Conservancy
Native Plant Society of Oregon
Michael P. Jones
Friends of Mt. Hood
Mountain Times

CHAPTER 5 - List of Preparers

Contributor	Education and Experience	Contribution
Mike Malone ID Team Leader	Associate in Science - Forest Technology, Chemeketa Community College, 1977 Forest Engineering Institute - Oregon State University, 1984; 31 years with the Forest Service	IDT Leader, EA Writer/Editor, NEPA Coordinator
Todd Parker Hydrologist	BS in Forest Management and BS in Business Management. Oregon State U, 1981. Hydrologist on Columbia Gorge and Zigzag Ranger Districts since 1992	Watershed Resources, GIS, Analyst
Duane Bishop Fisheries Biologist	BS in Forest Management and minor degrees in Fisheries and Wildlife Management, Oregon State University,	Fisheries Biologist

	1989. He has also completed graduate studies at Utah State University and course work in fluvial geomorphology. He has worked on the Mt. Hood National Forest since 1988 on the Clackamas, Estacada, Barlow, Bear Springs, Hood River and Zigzag Ranger Districts. He has also completed work details to the Tongass NF, Gifford Pinchott NF and the Dixie NF.	
Alan Dyck Wildlife Biologist	BS in Wildlife Management from Humboldt State University, 1980. Wildlife Administrator Ft. Pickett, VA 1984-1996. Wildlife Biologist NRCS, VA, 1996-2000. Forest Wildlife Biologist Mt Hood National Forest, since 2000.	Wildlife Biologist
Debbie Archeologist	M.A. from New Mexico State University 2009. FS - SCEP Archaeologist 2 years experience with Hood River RD.	Archeologist
David Lebo Botanist	M.S. Forest Ecology - University of Washington. Survey and Manage Specialist – Regional Office and Mt. Hood National Forest (2001-2004). Interagency Ecologist – Winema National Forest and BLM-Klamath Falls Resource Area (1995-2000). 23+ years with U.S. Forest Service.	Botanist