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**Appendix I**  
**Response to Comments**

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## Appendix I Response to Comments

The Notice of Availability (NOA) for the November 2007, Watdog Draft Supplemental EIS was published in the Federal Register by the Environmental Protection Agency on December 21, 2007, to commence the 45-day Comment Period. The Comment Period ended on February 10, 2008. Three comment letters were received. Each comment was reviewed and coded based first on content or subject, in this case representing a unique resource program organized by Subject Code, then by intent compiled and recorded using Category Code and Comment IDs.

Subject Code	Category Code	Comment ID	Comment	Forest Service Response
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**Table I-1.** Example of coding procedure for the Watdog FSEIS in response to comments received.

Comments are assembled by resource subject to enable the resource specialists to group similar responses in a concise manner for clarity. Subject Codes are abbreviated to fit the designed format within Appendix I. Categories were chosen for each resource to effectively and concisely organize comments.

The reader should note there is frequent overlap of similar comment subjects and intents between letters, which warranted extensive cross-referencing amongst multiple Subjects, Category and Comment ID codes. These responses may reference other response to comments without further explanation. Therefore, the reader may be required to read the response to comments in its entirety to gain relevant information for a specific subject area.

Comments from the letters received are extracted in “exact text” where possible, with small spelling and/or grammatical changes to fit within the format designed for these appendices. The Council on Environmental Quality (CEQ), regulation 40 CFR 1503.4, states that an agency preparing a final supplemental environmental impact statement (FSEIS) shall assess and consider comments both individually and collectively. The agency shall respond by one or more of the following means:

1. Modify alternatives
2. Develop and evaluate alternatives not previously given serious consideration
3. Supplement, improve, or modify its analyses
4. Make factual corrections
5. Explain why the comments do not warrant further agency response.

## Comment Coding Structure

As the comment letters were received, each was assigned a number for tracking purposes.

Letter Number	Commenter
1	Sierra Forest Legacy
2	U.S. Environmental Protection Agency
3	Frank Stewart

**Table I-1.** Coding Procedure

Comments from each letter were then sorted by Subject, Subject Code, Category and Category Code. The sequential coding system was employed solely to organize information and should not be construed as an indicator of relevancy or importance.

## Master Code List

Subject	Subject Code	Category	Category Code	Definition
Forest Resources	FOR	General	100	General comment
		Canopy cover	101	Specific to canopy cover and crown closure
		Group selection	102	Specific to group selection
		Individual tree selection / area thinning	103	Specific to ITS
		Upper diameter limits	104	Specific to fuel reduction objectives, forest health
		DFPZ / WUI	105	Specific to location, size, adequacy, purpose
		Seral stage / size class	106	Specific to effects on habitat
Wildlife	WILD	General	200	General comment
		TES	201	Specific to TES (includes PACs, SOHA, LOPs, HRCAs), habitat
		Forest carnivores	202	Specific to forest carnivores, habitat / habitat connectivity
		MIS/Neotropical	203	Specific to MIS/Neotropical
Hydrology	HYDRO	General	300	General comment
		Riparian areas	301	Specific to riparian areas, Riparian Habitat Conservation Areas, and Riparian Management Objectives
		Watersheds	302	Specific to watershed effects, restoration, Threshold of Concern, Cumulative Watershed Effects
Soils	SOIL	General Soil Disturbance	400	General comment
		Compaction	401	Specific to compaction

Subject	Subject Code	Category	Category Code	Definition
<b>Botany</b>	BOT	General	500	General comment
<b>Planning/ Process</b>	PLAN	General	600	General comment
		NFMA/ Forest Plan/ Framework	601	Specific to the 1988 Plumas National Forest Land and Resource Management Plan (Forest Plan) and the 2001 and 2004 Sierra Nevada Forest Plan Amendments (Frameworks) that amend the Forest Plan
		NEPA	602	Specific to the NEPA process
		HFQLG	603	Specific to HFQLG Act
		Proposed Action/ Alternatives	604	Adequacy, proposes new
		EIS	605	Overall analysis, content, maps, standards, and guidelines, indicator measures
<b>Fire/Fuels</b>	FUEL	General	700	General
		Air quality	701	Specific to effects from treatments (prescribed fire, mechanical treatments)
		Air quality standards	702	Meeting or exceeding ambient air quality standards
<b>Social/ Economics</b>	ECON	General	800	General economics/social comment
		Sawlog volume	801	Specific to economics of harvest methods
		Use of forest products / biomass	802	Specific to effects on local economy
<b>Other</b>	OTHER	General	900	General comment
		Transportation	901	Specific to system roads, OHV route designation process
		Scenery	902	Specific to scenery/viewsheds
		Recreation	903	Specific to recreation
		Heritage	904	Specific to heritage resources

**Table I-2.** Master Code List.

Forest - General																													
FOR	102	1-2	<p>We are especially concerned about proposed logging within relatively high quality old forest habitat.</p> <p>Based on our field review of many marked units, we object to the location of group selection units within higher quality (CWHR 5D, 5M, and 4D) habitat, which will eliminate the suitability of these areas as habitat for old forest species.</p>	<ol style="list-style-type: none"> <li>1. The Herger-Feinstein Quincy Library Group (HFQLG) Forest Recovery and Economic Stability Act of 1997 directed group selection harvest “on an average acreage of 0.57 percent of the pilot project area land each year of the pilot project”. Within the HFQLG Act, certain lands were excluded from group selection harvest, including all spotted owl habitat areas (SOHAs), protected activity centers (PACs), roadless areas, and lands designated as “Offbase” or “Deferred”.</li> <li>2. In addition, the HFQLG Final Environmental Impact Statement (1999) and the Sierra Nevada Forest Plan Amendment (SNPFA) Final Supplemental Environmental Impact Statement (2004) provided standards and guidelines for each land allocation. Group selection harvests were excluded from Offbase and deferred, late successional old growth (LSOG) rank 4 and 5, SOHAs, PACs, riparian habitat conservation areas (RHCAs), and botanical and cultural resources controlled areas. However, under HFQLG, group selection harvests within California Wildlife Habitat Relationship (CWHR) size classes 4 and 5 were not excluded from the landbase.</li> <li>3. According to Appendix B (CWHR Analysis) of the Watdog Silviculture Report, group selection units would affect less than 8 percent of the total CWHR 4 and 5 acres that are located within the DFPZ and Group Selection treatment units.</li> </ol> <table border="1" data-bbox="856 987 1906 1198"> <thead> <tr> <th>DFPZ &amp; Group Stands</th> <th>CWHR Type</th> <th>Total Ac (Acres)</th> <th>2-ac Groups (Acres)</th> <th>Groups (%)</th> </tr> </thead> <tbody> <tr> <td></td> <td>5D/5M</td> <td>916.1</td> <td>72.4</td> <td>7.9%</td> </tr> <tr> <td></td> <td>4D/4M</td> <td>2,031.40</td> <td>157.7</td> <td>7.8%</td> </tr> <tr> <td></td> <td>Other</td> <td>1,432.90</td> <td>1.3</td> <td>0.1%</td> </tr> <tr> <td></td> <td>Totals</td> <td><b>4,380.40</b></td> <td><b>231.4</b></td> <td><b>5.3%</b></td> </tr> </tbody> </table> <p>Refer to responses under the WILDLIFE sections below, specifically the American marten and California spotted owl which address treatments within these habitat types. Refer to responses under the WILDLIFE section 1-19, specifically the American marten and California spotted owl which address treatments within these habitat types. Also, the CWHR 5D, 5M and 4D habitat</p>	DFPZ & Group Stands	CWHR Type	Total Ac (Acres)	2-ac Groups (Acres)	Groups (%)		5D/5M	916.1	72.4	7.9%		4D/4M	2,031.40	157.7	7.8%		Other	1,432.90	1.3	0.1%		Totals	<b>4,380.40</b>	<b>231.4</b>	<b>5.3%</b>
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Subject Code	Category Code	Comment ID	Comment	Forest Service Response
FOR	106	1-36	<p>The DSEIS includes analysis of projects intending to remove hazard trees in and adjacent to the Watdog Project. This analysis also misses the point that the existing condition must be characterized in order to evaluate the effects of removing hazard trees, including snags, from the analysis area.</p> <p>The analysis of hazard trees erroneously focuses on comparing the removal of hazard trees to the total number of live trees in the analysis area. The issue is the effect that removing hazard trees has on the existing level of snags in the project area.</p> <p>For instance, if snag levels are low even small reductions could result in significant adverse effects. Without a characterization of the existing levels of snags, as required by the forest plan, there is no basis for evaluating the relative effect of removing snags from the project area.</p>	<p>4. From the Watdog Hazard Tree Cumulative Effects Supplement, Table 5 quantitatively displays the proportional impact of each hazard tree removal project by management areas and subwatersheds. Hazard tree removal projects only accounts for 1.2 percent (i.e., Lost Creek MA) to 4.1 percent (i.e., Pinchard MA) of a management area. On a subwatershed level, hazard tree removal projects only accounts for 0.5 percent (Mountain House Creek) to 3.1 percent (Pinchard Creek). Using the wildlife cumulative effects analysis area (320,857 acres), hazard tree removal projects (1,790 ac.) only accounts for 0.6 percent of the analysis area. These percentages assume that the total acres of the hazard tree removal projects were a clear-cut. Since hazard tree projects would remove less than two trees per acre within the Watdog Project Area, the effects to a management area or sub-watershed area would be substantially less than listed above.</p> <p>Additionally from the Watdog Hazard Tree Cumulative Effects Supplement, the potential number of large trees greater than 30 inches dbh that would be affected within the Watdog Project area due to hazard tree removal would be less than 2.0 percent (Table 3). Overall, less than 3.4 percent of the large trees greater than 30 inches dbh within the Watdog Project area would be affected (Table 3). Therefore, the cumulative effects from hazard tree removal projects to large trees and future potential as snags and down woody material would be minimal. Additional discussion will be added to the Watdog Project FSEIS and associated BA/BE. Standards and guidelines for snag retention are stated within Table 2 of the SNFPA FEIS. Table 2 states to retain 4 of the largest snags per acre (hardwood or conifer) using snags larger than 15 inches dbh to meet the guideline. The thinning areas were inventoried using the current Forest Inventory and Analysis User's Guide for the Pacific Southwest Region. The Region's Forest Inventory Analysis (FIA) system is used to collect data from a series of random points located within each of a number of stands exhibiting a possible need for treatment. The field data is loaded into the FIA program and is used as a database to generate various reports. The FIA data was also loaded into the Forest Vegetation Simulator (FVS) which is a forest growth model that predicts forest stand development. This model was used to predict stand development after alternative treatments. The FIA plots and FVS runs show that approximately 29 snags per acre exist within the Watdog project area, including the plantations and underburning stands. Of the 29 snags, approximately 4.1 snags per acre are greater than 15"dbh. Not including plantations and underburning stands: within CWHR4 stands the retention of snags will be 6.8 snags per acre and within CWHR5 stand snag retention will be 4.6 snags per acre. Snag retention of a minimum of 4 trees per acre, greater than 15 inch dbh, is part of the project design stated in the Watdog Project DSEIS. Snag retention requirements will be added to the mitigations listed in Appendix E of the Watdog Project FSEIS.</p>

FOR	106	1-43	<p>The Forest Services has not adequately disclosed effects on oak removal on hardwood ecosystem management objectives outlined in the 2004 SNFPA, nor on wildlife.</p> <p>The 2004 SNFPA ROD outlines management objectives for lower Westside hardwood ecosystems including maintaining a diversity of structural and seral conditions that are sustainable on a watershed scale, providing sufficient regeneration and recruitment of young hardwoods, and providing for habitat elements such as cavities and acorns that are important for wildlife and native plant species (USDA Forest Service 2004, p. 35).</p>	<p>The proposed group selection harvest would result in a short-term reduction in the number of large diameter oak trees. However, the proposed group selection harvests would create early seral stages of hardwoods, which would meet 2004 SNFPA objectives of maintaining a diversity of structural and seral stage conditions and providing recruitment of young hardwoods (DEIS 3-164).</p> <p>In addition, the Watdog Project proposes to restore 40 acres of black oak stands by removing encroaching conifers and create openings around existing black oaks. (DEIS pages 1-10, 2-12, 3-163).</p> <p>The Watdog Project follows the HFQLG FEIS for direction regarding oak management. Table 2.5, page 2-10, states that the “Current Forest Plan Direction” is: Where oak is present, retain an average 25 to 35 square feet basal area per acre of oaks over 15 inches dbh. Site specific planning will determine feasibility and specific needs. Retain smaller oaks, if determined to be necessary for future recruitment.</p> <p>Oaks greater than 15 inches will be retained within DFPZ to meet the 25-35 square feet basal area per acre direction. However, Table 2 (standards and guidelines) of the 2004 SNFPA ROD under “Group Selection” states that projects only have to be designed to save all trees greater than 30” dbh. “All” trees is considered to include oaks.</p> <p>In other words, oaks under 30”dbh do not have to be retained for group selection treatments. Regarding oaks, snags and large conifers; additional discussion and updates will be provided within the Watdog Project FSEIS and associated BA/BE based on additional field data.</p> <p>The Watdog Project EIS does provide alternatives that would reduce the effects to oaks. Alternative C, and to a greater degree Alternative D, would have fewer group selection treatments and therefore less impacts on oaks.</p>
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Subject Code	Category Code	Comment ID	Comment	Forest Service Response
FOR	102	1-44	<p>The HFQLG plan requirements are to retain a minimum of 25-35 sq. ft/acre basal area per oaks over 15” dbh (BE, p.55).</p> <p>The Watdog Project does not demonstrate compliance with these standards and goals. To the contrary, the project would remove 400 trees over 12” dbh.</p> <p>It is not known how many acres of pure oak or mixed habitat was avoided in group selection placement and how much would be impacted.</p> <p>Despite this lack of information, the BE concludes that the indirect effects to habitat will be insignificant (p. 99). There is no data or analysis provided to support this claim.</p>	<p>An estimated 393 out of a total number of 4,284 black oak trees in the project area greater than 12 inches may be removed from the 231 acres of group selection units. These 393 black oak trees that may be removed account for 9.2 percent of large black oaks within the project area. Supplemental criteria that was used in group selection layout, included avoiding placing groups in black oak concentration areas where possible (DEIS 3-145).</p> <p>Where California black oak is present within the defensible fuel profile zone (DFPZ), an average basal area of 25 to 35 square feet per acre would be retained for oaks over 15 inches dbh (DEIS 3-163). According to the most recent data, black oaks greater than 12 inches dbh will be retained. Therefore, for the 4,021 acres of DFPZ, excluding group selection areas, oak retention standards and guidelines would be met where it currently exists.</p> <p>Approximately 90.8 percent of the large black oak trees within the project would remain (DEIS 3-163 to 3-164).</p> <p>Refer to response to Comment 1-43 above.</p>
FOR	106	1-45	<p>Oak tree age and ability to produce acorns, cavities, and other habitat for wildlife is not described, thus the environmental impact of oak removal cannot be evaluated in a revised DSEIS.</p>	<p>Refer to response to Comment 1-43 and 1-44 above.</p>

FOR	104	1-46	<p>Elsewhere in the Sierra, oaks over 12” dbh are retained in vegetation management projects designed to reduce fire risk and their removal is not necessary to achieve fuel objectives.</p> <p>The proposed group selection practices conflicts with the stated propose and need and undermine the enhancement of oak in the treatment area. An alternative should be developed to more fully address the need to enhance oak habitat in the project area.</p>	<p>Black oak trees would not be removed for fuel reduction purposes, but for pine regeneration purposes. While oak shade favors natural regeneration of conifers, it can retard their later growth and development. Ponderosa pine is relatively intolerant of the lower light levels under residual hardwoods and conifers. Therefore, for group selection harvests, all trees up to 30 inches dbh, including hardwoods, would be removed to minimize the amount of shade from residual trees (DEIS 3-163).</p> <p>We are already leaving on average 7 to 8 conifers per acre with 12 to 15 percent canopy cover of greater than 30 inch dbh trees in the group selection areas (DEIS 3-157, Tables 3-39 and 3-40).</p> <p>Refer to response to Comment 1-43, 1-44 and 1-45 above.</p>
FOR	104	1-65	<p>The DSEIS fails adequately to consider the cumulative impacts of the Watdog project together with other past, present, and reasonably foreseeable projects in the area. In particular, the DSEIS still fails to consider the cumulative impacts of several hazards tree projects that the Forest Service has approved and is considering within and adjacent to the Watdog project area, including Tamarack Flat, Mule, American House, Lost Creek, Fowler Peak, and Devil’s Gap.</p>	<p>The Watdog Project Silviculture Report contains a hazard tree cumulative effects analysis supplement. The hazard tree cumulative effects analysis discusses the hazard tree removal effects on vegetation attributes such as species composition, forest health, canopy cover, seral stage diversity, and so forth. Table 5 also quantitatively displays the proportional impact of each hazard tree project by management areas and subwatersheds.</p> <p>Each resource section in chapter 3 of the DSEIS and FEIS includes a discussion of cumulative effects focused on evaluating the effects of the proposed action and alternatives in context with relevant effects from past, present, and reasonably foreseeable future actions. Past, present, and foreseeable future actions considered in the cumulative effects analyses will vary for each resource. Relevant actions are those expected to generate effects on a specific resource which will occur at the same time and in the same place as effects from the proposed action. In addition, the specialist’s reports (available by request) contain more detailed information on cumulative effects analysis by resource area.</p>

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FOR	104	1-67	<p>The DSEIS now includes an assessment of the number of trees by size that will be removed for each hazard tree project, but provides little data quantifying the existing or baseline condition for large snags or large down wood.</p> <p>The assessment simply estimates the total of large trees in the assessment area and only makes comparisons to this value.</p>	<p>The Hazard Tree Cumulative Effects Supplement quantifies how many hazard trees would be removed and the effect on large trees (i.e., greater than 30 inch dbh). Less than 4 percent of the large trees would be affected in the Watdog Project area. The remaining 96 percent of the large trees that are 200 feet away from the roadway would serve as future potential snag and down woody material recruitment.</p> <p>The Watdog BE/BA has been updated to include snags per acre tables by unit for the various treatment types (i.e., thin, masticate, underburn, etc.). Refer to the response for Comment 1-36 above. The Watdog BE/BA has been updated to include snags per acre tables by unit for the various treatment types (i.e., thin, masticate, underburn, etc.). Down woody material and down logs are discussed throughout the Watdog Soils Report. Section 6.3.3 of the Watdog Soils Report, Table 5 displays the number of down logs by decomposition classes for each unit. The majority of units that are deficit of down woody material are plantations (Summary Table S-1 of the Watdog Soils Report). A mitigation measure for down logs is contained in the Watdog EIS, Appendix E, Table E-1, page E-5.</p>
FOR	104	1-69	<p>The failure to compare the projected future loss due to salvage logging is especially important to the development of mitigation measures. For instance, the low levels of large down wood can be mitigated by felling and leaving in place salvage or green trees. Similarly, salvage or green trees can be moved to areas where down wood is in low abundance. Thus, failing to analyze cumulative impacts limits the ability to identify mitigation measures that can improve degraded environmental conditions.</p>	<p>Since hazard tree projects would remove less than two trees per acre within the Watdog Project Area and would affect less than four percent of a management area or a sub-watershed area, the cumulative effects from hazard tree removal projects to large trees and future potential as snags and down woody material would be minimal.</p> <p>Hazard tree removal projects generally remove tree hazards that are within 150 to 200 feet of a roadway, recreation area, or facility. Reducing risks to public health and safety and damage to property is of prime importance in hazard tree abatement. There are no requirements to move down logs to areas where there is a deficit of down woody material. There would be opportunities to leave additional snags and cull trees as down logs within the treatment unit that is beyond 200 feet from the roadway.</p> <p>A mitigation measure for down logs is contained in the (Watdog EIS, Appendix E, Table E-1, p. E-5) for the retention of “cull” logs where the requirement of 10-15 tons per acre of 10 foot/20 inch diameter logs are not existing. Typically, retention of large woody material is NOT a fuels issue. It is the smaller or finer fuels, especially ladder fuels, which is of concern for risk of stand replacing fires. The Watdog Project FSEIS and associated BA/BE will provide additional discussion.</p>

<b>WILDLIFE – GENERAL</b>			
WILD	200	1-3	<p>As demonstrated in our appeal of the 2004 ROD and FSEIS (Sierra Nevada Forest Protection Campaign et al. 2004), both the 2004 plan and the FSEIS fail to comply with the National Forest Management Act, the National Environmental Policy Act, and other environmental laws.</p> <p>A lawsuit challenging the 2004 Framework is currently pending in federal court.</p> <p>Therefore, for programmatic reasons set forth in our appeal of the 2004 ROD and FSEIS, the Watdog project is also contrary to law.</p>
			<p>The Watdog Project analysis was designed to comply with the 2004 Sierra Nevada Forest Plan Amendment (SNFPA) FSEIS and ROD, and the 1988 Plumas National Forest Land and Resource Management Plan (Forest Plan) as amended by the Herger-Feinstein Quincy Library Group (HFQLG) FEIS and ROD (1999). The January 2004 Record of Decision for the SNFPA allowed for full implementation of the HFQLG Pilot Project. However, there are a few exceptions: 1) Section E, “Management Direction for the HFQLG Pilot Project Area” which has additional direction for the Northern goshawk territories, fisher and marten management areas and Scientific Analysis Team (SAT) Guidelines; and 2) Table 2, “Standards and Guidelines applicable to the HFQLG Pilot Project Area for the life of the pilot project”. Also, “The HFQLG establishes certain vegetation management activities to be implemented in order to test their effectiveness in: reducing the potential size of wildfires; reducing risk to firefighters; supplying timber for the economic stability of rural communities, and promoting ecological health of a forest through uneven-aged timber management benefiting wildlife.” The HFQLG FEIS, page 1-3, states “The purpose and need for a pilot project is to test and demonstrate the effectiveness of certain resource management activities designed to meet ecologic, economic, and fuel reduction objectives...” and “To accomplish resource management objectives that include fuelbreak construction consisting of a strategic system of defensible fuel profile zones (DFPZs), group selection (GS) and individual tree selection (ITS) harvest, and a program of riparian management and riparian restoration projects are required.” Both EIS decisions met the legal requirements of the HFQLG Forest Recovery Act Pilot Project (1998). Both EIS documents had determinations of “May effect individuals but not likely lead to a trend toward listing” for the American marten, Pacific fisher, California spotted owl and Northern goshawk. There were three alternatives considered for the Watdog Project DEIS. The major difference between alternatives is the acres/number of group selection treatments which does affect the canopy cover. An alternative was “considered but eliminated from detailed study” which would propose implementation of the 2001 SNFPA. This alternative primarily would maintain 50 percent canopy cover and not remove trees greater than 20” dbh. The Watdog Project DEIS, page 2-14, states “The 2001 SNFPA ROD Alternative would not fully meet the purpose or resolve the need for the project” and was therefore not considered further.</p>
WILD	202	1-4	<p>The DSEIS fails to recognize the imperiled status of the American marten in the northern Sierra Nevada and the significance of the project area in ensuring a viable and well distributed population of</p>
			<p>Refer to the response under the “FOREST RESOURCE”, section 100 above. Refer to the response under the “WILDLIFE-General”, section 200 above.</p> <p>Refer to the response under the “WILDLIFE-Monitoring”, section 206 below. Please refer to Watdog Project BE/BA (pages 43 through 69 and 94 through 101) and MIS Report regarding the status of the marten. The Marten is addressed as a sensitive species and MIS, but does not have the status of “imperiled” on the Plumas NF. Marten prefer large blocks of dense (50-100%</p>

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			marten.	<p>canopy cover), multi-storied, multi-species, late-seral stage coniferous forest with a high number of large (&gt;24 inch dbh) snags and downed logs (Freel 1991). These areas are generally in close proximity to both dense riparian corridors (used as travelways), and an interspersion of small (&lt;1 acre) openings with good ground cover (used for foraging) (Ruggerio et al. 1994). The proposed treatment units for the Watdog Project include a total of 4,381 acres which is 3% of the anticipated Pilot Project area, 18% of the wildlife analysis/survey area, and 9% of the watershed/aquatic area. Of these 4,381 acres, there are 4,049.5 acres of treatment. Proposed treatment units are over 90% along ridge-tops which is not preferred denning/resting habitat for the marten or fisher. Also, the proposed project does not include activities within riparian zones which could potentially be utilized as riparian corridors or saddles between major drainages. The Watdog Project BA/BE and MIS report disclose effects of the project on the Marten and its habitat. In addition, the Plumas NF MIS report documents the Marten's distribution across the Plumas. Please refer to the MIS discussion under "Wildlife-Monitoring" section below. The Marten is known to be locally distributed within the Lakes Basin and Little Grass Valley area of the Forest and has not been found to date within the Watdog project area. Proposed treatments in the Watdog Project are not located within the draft forest carnivore network. The Watdog Project is not expected to affect the Marten's current distribution on the Forest. The Watdog Project BA/BE made a determination of "may affect but not lead to a trend toward listing" for the American marten based on 1) no treatments within the draft forest carnivore network; 2) treating less than 10% of existing potentially suitable habitat; and 3) maintaining treated habitat at minimal or greater levels of suitability for foraging and travel. The amount of habitat being retained within the analysis area and the fact that no part of the draft forest carnivore network will be affected by the Watdog project will maintain habitat suitability for the American marten.</p>
WILD	202	1-5	<p>Forest experts that have reviewed the 2004 Framework have uniformly concluded that the plan threatens the marten's viability by allowing logging of medium and large trees, reduction in canopy cover, and reduction in large snags and down logs, particularly within the QLG pilot project where the Watdog is located.</p>	<p>Refer to the response under the "FOREST RESOURCE", section 100 above.  Refer to the response under the "WILDLIFE-General", section 200 above.  <i>Continue on next page.</i>  <i>Continued from previous page.</i></p> <p>Refer to the response under the "WILDLIFE-Monitoring", section 206 below.  Refer to response to Comment 1-4 above.  Refer to response to Comment 1-10 below.</p>

WILD	202	1-7	Forest experts that have reviewed the 2004 Framework have uniformly concluded that the plan threatens the marten’s viability by allowing logging of medium and large trees, reduction in canopy cover, and reduction in large snags and down logs, particularly within the QLG pilot project where the Watdog is located.	Refer to the response under the “FOREST RESOURCE”, section 100 above. Refer to the response under the “WILDLIFE-General”, section 200 above. Refer to the response under the “WILDLIFE-Monitoring”, section 206 below. Refer to response to Comment 1-10 below.
WILD	202	1-8	The Watdog DSEIS interprets the marten’s localized distribution within the Lakes Basin and Little Grass Valley area to simply mean that the Watdog project will not effect the marten’s current distribution on the Forest. (DSEIS, P.1-27). Unfortunately, project impacts to future distribution and future colonization of the project are not addressed in the DSEIS.	Refer to the response under the “FOREST RESOURCE”, section 100 above. Refer to the response under the “WILDLIFE-General”, section 200 above. Refer to the response under the “WILDLIFE-Monitoring”, section 206 below. Refer to response to Comment 1-4 above.
WILD	202	1-9	The Forest Service has not assessed marten persistence over the next 30 years, given their isolation in the Lakes Basin and Little Grass Valley areas, without connectivity north to the off base areas on the Feather River or to the northern population in the Lassen National Forest.	Refer to the response under the “FOREST RESOURCE”, section 100 above. Refer to the response under the “WILDLIFE-General”, section 200 above. Refer to the response under the “WILDLIFE-Monitoring”, section 206 below. Refer to response to Comment 1-4 above.  5. In addressing the first part of the comment, the Watdog Project does not propose to reduce 1,230 acres of CWHR 5 habitat to unsuitable. Please refer to the Watdog Project FSEIS pages 3-219 to 3-223 and the Watdog Project BA/BE (pages 43 through 69 and 94 through 101). Out of 2,020 acres proposed for thinning (including GS), 1,230 acres are presently “highly suitable habitat” (60% or greater canopy cover). Alternative B would result in 900 acres being reduced to “moderately suitable habitat” (40% to 59% canopy cover) and 330 acres being reduced to “low suitable habitat” (below 40% canopy cover). Alternative C and D would result in all of the 1,230 acres being reduced to a “moderately suitable habitat”.

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				<p>The second part of the comment is beyond the scope of the Watdog Project. The Draft Forest Carnivore Network within the Watdog project area will maintain habitat connectivity for the marten, since the Watdog Project will not affect the draft network. The PNF has mapped a draft forest carnivore network across the Forest that consists of scattered known sightings, large habitat management areas, and wide dispersal or connecting corridors. The network provides a continuously connected system of habitats focused on the needs of marten and fisher. This corridor is designed to provide a habitat connectivity corridor linking the Tahoe NF with the Lassen NF. The Plumas network is comprised of four components: 1) the riparian zone, 2) old-forest habitat, 3) connectors, and 4) known sightings. Much of the forest carnivore network is in areas reserved from harvest for other reasons (e.g., California spotted owl PACs and northern goshawk PACs, or designated wilderness). To date old forest habitat across the HFQLG pilot project has only affected 1.8% of old-forest habitat (see HFQLG Monitoring Report). Marten connectivity between the Lassen and Tahoe is not due to inadequacy of the draft carnivore corridor, but lack of marten presence.</p>
WILD	202	1-10	<p>The DSEIS does acknowledge research by Zielinski, but dismisses concerns raised in the research because the Forest Service claims they will retain important habitat components in the project area such as large trees and large oaks (DSEIS, p. 3-223). The 2004 SNFPA defines a large oak as “a dbh of 12” or greater.” The Watdog project is actually proposing to remove 393 “large oaks” (DSEIS, p. 3-164). The DSEIS does not quantify or discuss in detail the impacts of large snag removal to old forest species habitat quality.</p>	<p>Refer to the response under the “FOREST RESOURCE”, section 100 above.</p> <p>Refer to the response under the “WILDLIFE-General”, section 200 above.</p> <p>Refer to the response under the “WILDLIFE-Monitoring”, section 206 below.</p> <p>Refer to response to Comment 1-9 above.</p> <p>Refer to a more detailed discussion on habitat components such as large oaks and snags in the Watdog Project BA/BE (pages 43 through 69 and 94 through 101).</p> <p>Retaining large oaks and snags are just two of many standards and guidelines or design features which contribute to habitat suitability for forest carnivores such as the marten.</p>

WILD	202	1-11	<p>The claim that the Watdog project addresses Marten habitat concerns by retaining important structures for marten such as large oaks and large snags is incorrect and misleading.</p>	<p>Refer to the response under the “FOREST RESOURCE”, section 100 above.  Refer to the response under the “WILDLIFE-General”, section 200 above.  Refer to the response under the “WILDLIFE-Monitoring”, section 206 below.  Refer to response to Comment 1-10 above.  Refer to a more detailed discussion on habitat components such as large oaks and snags in the Watdog Project BA/BE (pages 43 through 69 and 94 through 101).</p> <p>Retaining large oaks and snags are just two of many standards and guidelines or design features which contribute to habitat suitability for forest carnivores such as the marten.</p>
WILD	202	1-12	<p>The BE does not acknowledge or discuss findings from experts or published research.</p> <p>This omission is critical because the BE presents an analysis that assumes martens utilize a stand with 40% canopy cover to the same extent as habitat with higher canopy cover and larger trees. The conclusions of the studies cited contradict this assumption.</p> <p>As a result, the BE underestimates the effects to marten nesting and denning habitat.</p>	<p>Refer to the response under the “FOREST RESOURCE”, section 100 above.  Refer to the response under the “WILDLIFE-General”, section 200 above.  Refer to the response under the “WILDLIFE-Monitoring”, section 206 below.  Refer to response to Comment 1-9 above.</p> <p>6. Refer to Watdog Project BA/BE (pages 43 through 69 and 94 through 101). The analysis in the BA/E does not assume that martens utilize a stand with 40% CC to the same extent as habitat with higher canopy cover. The analysis evaluates marten habitat based on the action alternatives and changes to High Suitable habitat (60% or greater CC), Moderately Suitable habitat (40–59% CC) and low suitable habitat (CC below 40%).</p>
WILD	202	1-14	<p>In the entire Watdog Project, road density averages 6.6 miles per square mile (BE, p. 39).</p> <p>The impact of high road densities on marten was not addressed in the current DSEIS.</p>	<p>Refer to the response under the “FOREST RESOURCE”, section 100 above.  Refer to the response under the “WILDLIFE-General”, section 200 above.  Refer to the response under the “WILDLIFE-Monitoring”, section 206 below.  Refer to the Watdog Project DSEIS pages 3-222 to 3-223.</p> <p>“Under Alternatives B and C, approximately 1.2 miles of new system (permanent) road construction is proposed. Alternative D proposes no new road construction. Alternatives B, C and D propose 5.7 miles of temporary road reconstruction.</p>

Subject Code	Category Code	Comment ID	Comment	Forest Service Response
				<p>Approximately 397.5 trees 30”dbh and greater would be removed for each action alternative as a result of the construction of permanent and temporary roads, reconstruction of temporary roads, and landings due to “operability”. Large trees are an important habitat component. The removal of the 20 to 30” and greater trees would have the greatest long-term affects on species and their habitat.</p> <p>In addition, the loss of this large tree component affects numbers of large trees for future snag recruitment. For all action alternatives there will be approximately 13 miles of, and ½ mile of new temporary road construction that would increase human disturbance. However, 5.3 miles of road closures and 17.1 miles of decommissioning of some permanent and old temporary roads is also proposed. The average road density within the project area is 6.6 miles per square mile, which is exceptionally high density. Under all three action alternatives, decommissioning of roads would lower the average road density to 5.3 miles per square mile.</p> <p>These activities could result in some site-specific short-term disturbance but could also create additional nesting/denning, and foraging/resting habitat in the long-term. However, disturbance in the long-term would be only slightly reduced as a result of the proposed road reduction.”</p>
WILD	201	1-15	<p>The Watdog DSEIS effects determination for marten is based on the assumption that there are no known marten den sites in the project area, and if they are discovered they’ll be protected (Ibid., pp. 95-96). This issue hasn’t been resolved and suggests that there may be direct effects from roads, logging and habitat disturbance to undetected den sites.</p>	<p>Refer to the response under the “FOREST RESOURCE”, section 100 above.  Refer to the response under the “WILDLIFE-General”, section 200 above.  Refer to the response under the “WILDLIFE-Monitoring”, section 206 below.  Refer to response to Comment 1-9 above.  Refer to response to Comment 1-10 above.  Refer to response to Comment 1-14 above.  The fact that undetected den sites may be impacted is factored into the effects analysis and determination made for the Marten.</p>

<b>WILDLIFE – CALIFORNIA SPOTTED OWL</b>				
WILD	202	1-16	Because the Watdog project implements the 2004 ROD, it contributes to the California spotted owl viability.	Refer to the response under the “WILDLIFE-General”, Section 200 above. The Watdog FEIS and DSEIS disclose the determination made in the BA/E that the CSO may be affected, but is not likely to lead to a trend toward federal listing. This determination was based on: 1) No entry into PACS and SOHA; 2) Limited modification of habitat; 3) Treatments are 90% on ridge-tops; and 4) Implementation of protection measures such as LOPs.
WILD	202	1-16	The 2004 ROD will result in substantial loss and degradation of habitat by allowing harvest of medium and large trees, reduction in canopy cover, and removal of large snags and down logs.	Analysis of MIS trends is not required at the project level (i.e., Watdog area), as indicated by the commenter. Population trends are to be discussed and disclosed at the Forest Level. The Plumas NF MIS report has complied with the requirement and provides disclosure of MIS trends for the CSO on the Forest. The USFWS has concluded that most owl populations in the Sierra Nevada are stable or increasing and is denying a petition to list the California spotted owl under the Endangered Species Act (ESA). In responding to a second petition to list the species in three years, the USFWS conducted a comprehensive study of California spotted owl populations. It assessed the best scientific and commercial information available; reviewed comments and information received during two public-comment periods; and consulted with recognized spotted-owl experts and federal and State resource agencies, including an interagency Science Team. The USFWS concluded that the California spotted owl should not be listed as a threatened or endangered species under the ESA. Among the USFWS’s conclusions: <ul style="list-style-type: none"> <li>▪ The best available data indicate most California spotted owl populations in the Sierra Nevada are stable or increasing and adult survival rates show an increasing trend.</li> <li>▪ Forest fuels reduction activities, notably those provided for in the Sierra Nevada Forest Plan Amendment of 2004, may have a short-term impact on owl populations. But fuels reduction will have a long-term benefit to California spotted owls by reducing the risk of catastrophic wildfires that pose a major threat to California spotted owl habitat.</li> </ul> Refer to the response under the “FOREST RESOURCE”, section 100 above. Refer to the response under the “WILDLIFE-General”, section 200 above.

Subject Code	Category Code	Comment ID	Comment	Forest Service Response
WILD	202	1-17	<p>While supporting a greater proportion of suitable owl habitat than the larger area included in the landscape assessment, the Watdog wildlife assessment area still has a smaller proportion of suitable habitat for spotted owl when compared to the Sierra Nevada bioregion (i.e., 45% compared to 55%).</p>	<p>Refer to the response under the “WILDLIFE-Monitoring”, section 206 below.</p> <p>Considering that over 90% of the Watdog Project area is along ridge-tops, and that the southern and eastern borders are surrounded by heavily managed private lands, and that the northern and western borders are the steep Middle Fork Feather River the number of PACs is probably close to capacity. There is potential habitat along the northern border of the Watdog Project that could be occupied. Presently, under HFQLG the majority of this land is off-base and deferred lands which are not available for treatment.</p> <p>Within the 22,659 acre (Forest Service System Land) analysis area there are 2,812 acres of Protected Activity Centers (PACs) and 763 acres of Spotted Owl Habitat Areas (SOHAs). No treatment units fall within California spotted owl PACs or SOHAs; therefore no direct effects to California spotted owls are anticipated within these protected areas.</p> <p>In addition, over 90 percent of the Watdog Project area is located on ridge-tops, which are utilized for foraging but not preferred for nesting by the owls. Therefore, minimizing any effects to potentially occupied nesting habitat outside of PACs and SOHAs.</p> <p>No new road construction will occur in CSO PACs or SOHAs. For any road reconstruction in PACs a LOP would be applied to all CSO activity centers. A LOP will be applied to haul routes within ¼ mile of an active nest. Noise from vehicles and equipment and increased human activity and presence could affect this species. Disturbance would be limited to individual treatment units and last a few days to 2 weeks in any location. Implementation of the LOPs for known nests, as listed in the HFQLGFRA FEIS ROD, would reduce impacts on California spotted owls. Impacts from disturbance would be limited and not substantially affect habitat use or reproductive capacity of this species. No treatment of aspen stands will occur in California spotted owl PACs or SOHAs or within ¼ mile of know active nests.</p> <p>Outside of the PACs and SOHAs there are 2,031 acres of habitat typed as suitable for nesting and 4,613 acres of habitat typed as suitable for foraging. This analysis is based on CWHR forest strata types identified as nesting and foraging habitat in the HFQLG Act FEIS (p. 3-103. The effects to potentially suitable nesting habitat outside of established PACs and SOHAs was considered under indirect effects based on the assumption that surveys, following regional protocol, would have detected any activity centers.</p> <p style="text-align: center;"><i>Continue on next page.</i></p>

WILD	202	1-17	<p><i>Continued from previous page.</i></p>	<p style="text-align: center;"><i>Continued from previous page.</i></p> <p>Between the no-action alternative and the action alternatives, little change in canopy closure and size class is expected in mastication or underburn treatments because these treatments primarily remove understory vegetation rather than overstory vegetation.</p> <p>Refer to the Watdog Project FSEIS pages 2-16 to 2-19. Alternatives C and D reduce the total acres of proposed Group Selection treatments, which is the largest effect on CWHR 5s and CWHR4s. Alternative B proposes to treat 231 acres, Alternative C proposes to treat 151 acres, and Alternative D proposes to treat 105 acres. Alternative D proposes to treat less than half of the group selections proposed for treatment under Alternative B.</p> <p>In addition, Alternative D does not propose any new system road construction. Figure 2-1 on page 2-19 visually displays what a treated stand would look like under the no action and three action alternatives. Implementation of Alternative B would result in a less dense canopy cover and a single canopy layer which is more open versus Alternative D which is multi-layered with a denser canopy. Which means that there was an Alternative provided which would retain not only a higher percent canopy cover but provide for canopy layering and therefore an understory component.</p> <p>The Watdog BA/BE does discuss that habitat with higher canopy covers and multi-layering provide much more suitable habitat than habitat with lower canopy cover and single-story (single-layer). A determination was made (DSEIS, page 3-233) that the proposed Watdog treatments “May affect” California spotted owl individuals. Refer to the response under the “FOREST RESOURCE”, section 100 above.</p> <p>Refer to the response under the “WILDLIFE-General”, section 200 above. Refer to the response under the “WILDLIFE-Monitoring”, section 206 below.</p> <p>Refer to response to Comment 1-10 above.</p> <p>Refer to Marten Section of BA/BE.</p>
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Subject Code	Category Code	Comment ID	Comment	Forest Service Response
WILD	202	1-18	<p>The DSEIS makes contradictory claims regarding effects to spotted owl habitat.</p> <p>First, forest stands with 40% canopy cover may not provide even minimal quality of foraging habitat for mature, old forest dependent species if adequate understory is not provided (DSEIS, P. 196).</p> <p>Later the FS characterizes post-project conditions that maintain a minimum of 40% canopy cover as suitable spotted owl foraging (DSEIS, p. 3-124).</p>	<p>Refer to the response under the “FOREST RESOURCE”, section 100 above.</p> <p>Refer to the response under the “WILDLIFE-General”, section 200 above.</p> <p>Refer to the response under the “WILDLIFE-Monitoring”, section 206 below.</p> <p>Refer to response to Comment 1-17 above.</p> <p>Even though an average 40% canopy cover is retained it is expected that in areas where the group selections are concentrated that the loss of the understory would have more of an effect.</p> <p>There are approximately 58 acres of GS treatments within California spotted owl home range core areas (HRCA) (foraging habitat). For clarification, stands with 40% cc that lack an adequate understory are not considered suitable habitat, however a stand with 40% cc that does contain an adequate understory is considered suitable owl foraging habitat.</p>
WILD	202	1-19	<p>Focusing on a 40% canopy cover threshold below which habitat becomes unsuitable is not supported by owl scientists.</p> <p>Verner et al. (1992, p. 92) recommended canopy closure in the range of 70-95% for roosting habitat.</p>	<p>Refer to the response under the “FOREST RESOURCE”, section 100 above.</p> <p>Refer to the response under the “WILDLIFE-General”, section 200 above.</p> <p>Refer to the response under the “WILDLIFE-Monitoring”, section 206 below.</p> <p>Refer to response to Comment 1-17 above.</p> <p>The 40% canopy cover is a minimum used for suitable foraging habitat. A canopy closure of 60% is considered the minimum for nesting within the HFQLG FEIS pages 3-101 to 3-3-105 and the associated BA/BE, pages 64-88.</p>

WILD	202	1-20	<p>The agency does not evaluate the effects of the project at the home range scale even though a mechanism to do so exists (i.e. apply the principals in Bart (1995) and a similar analysis was completed for the HFQLG pilot project(USDA Forest Service 1999).</p> <p>The Forest Service should develop an alternative that retains fully canopy in CWHR 5 to protect breeding habitat.</p>	<p>Refer to the response under the “FOREST RESOURCE”, section 100 above.</p> <p>Refer to the response under the “WILDLIFE-General”, section 200 above.</p> <p>Refer to the response under the “WILDLIFE-Monitoring”, section 206 below.</p> <p>Refer to response to Comment 1-17 above.</p> <p>The Home Range Core Area (HRCA) is evaluated in the Watdog Project DSEIS, pages 3-211 to 3-217 and associated BA/BE, pages 80 to 95.</p>
WILD	202	1-21	<p>The Watdog project proposes to diminish 14.7% of all available foraging habitat to low or no habitat, and to eliminate 6.3% of nesting habitat (BE, p.81: DSEIS, p.3-213).</p> <p>The DSEIS should revisit the magnitude of this impact.</p>	<p>Refer to the response under the “FOREST RESOURCE”, section 100 above.</p> <p>Refer to the response under the “WILDLIFE-General”, section 200 above.</p> <p>Refer to the response under the “WILDLIFE-Monitoring”, section 206 below.</p> <p>Refer to response to Comment 1-17 above.</p> <p>Alternative B proposes the maximum treatment for the proposed Watdog Project. Alternative B would reduce suitability of 127 acres (2.3%) of suitable nesting habitat and 680 acres (14.7%) of suitable foraging habitat within the analysis area, outside of PACs and SOHAs. None of the three action alternative propose “eliminating” habitat.</p>

Subject Code	Category Code	Comment ID	Comment	Forest Service Response
<b>WILDLIFE – NORTHERN GOSHAWK</b>				
WILD	201	1-22	<p>Despite the proposed reduction in 5M and 5D, considered high quality habitat for goshawks, the BE concludes that none of the action alternatives are considered detrimental to the Northern goshawk (BE, P. 93).</p> <p>The goshawk habitat preferences used in the DSEIS likely overestimate the availability of suitable goshawk habitat preferences used in the DSEIS likely underestimate the availability of suitable habitat in the project area and thus underestimate the true impact to goshawks.</p>	<p>Refer to the response under the “FOREST RESOURCE”, section 100 above.</p> <p>Refer to the response under the “WILDLIFE-General”, section 200 above.</p> <p>Refer to the response under the “WILDLIFE-Monitoring”, section 206 below.</p> <p>Refer to response under the “California Spotted Owl Section”, 202, Comment 1-17 above.</p> <p>Refer to response to comment under the California Spotted Owl Section 201, 1-18 above.</p> <p>The Watdog effects analysis relies on a unique definition of goshawk foraging habitat that includes CWHR 3M, 3D, 4P and 5P stands (BE, Table 14, p90). According to the SNFPA FEIS, goshawk habitat is CWHR SMC size class 4M, 4D, 5S, 5P, 5M, 5D and 6.</p> <p>A determination of “Will Effect” or “May affect, likely lead to trend toward listing” would be considered “detrimental”. A determination of “may affect, not likely lead to a trend toward listing was made for the Northern goshawk for the Watdog Project, therefore it was expected that individual goshawks could be affected.</p>
WILD	201	1-32	<p>Goshawk is addressed in the forest-wide MIS report that states that there are currently 144 protected activity centers (PACs) established on the forest. The LRMP requires the survey for occupancy in 25% of established nest groves annually. Thus, the LRMP monitoring requirement is to survey 25% of the 144 nest stands or 36 nest stands.</p> <p><i>Continue on next page.</i> <i>Continued from previous page.</i></p> <p>The MIS report indicates that</p>	<p>Refer to the response under the “WILDLIFE-Monitoring”, Section 206 below.</p> <p>The LRMP requirement was replaced by monitoring requirements found in Appendix E of the 2004 SNFPA ROD. Appendix E requires distribution and demographic monitoring (see table 2 Forest MIS report).</p> <p>The Plumas MIS Report addresses both distribution of Goshawks on the Plumas and the demography monitoring being conducted by PSW as part of their Goshawk/OHV study.</p>

		<p>between 38, 28, and 21 active nest sites were monitored in 2004, 2005, and 2006, respectively. In all but the first year of this monitoring, less than 25% of the nest stands across the forest had been surveyed.</p> <p>Based on the data provided, it appears that the annual monitoring requirements of the forest plan as adopted in 1988 have only been met for one year out of 18 years.</p>	
	1-33	<p>The Watdog effects analysis relies on a unique definition of goshawk foraging habitat that includes CWHR 3M, 3D, 4P, and 5P stands (BE, Table 14, p90).</p> <p>According to the SNFPA FEIS, goshawk habitat is CWHR SMC size class 4M,4D,5S,5P,5M,5D and 6.</p>	<p>There is no where in BA/BE effects section for the Northern goshawk that “relies on a unique definition of goshawk foraging habitat that includes CWHR 3M, 3D, 4P and 5P stands (BE, Table 14, p90).” The Indirect Effects section for the Northern goshawk states “Within the analysis area, 22,659 acres, there are 5,518 acres of potentially suitable goshawk nesting habitat and are 8,114 acres of potentially suitable goshawk foraging habitat, not including the California spotted owl PACs and SOHAs plus northern goshawk PACs. This analysis is based on CWHR forest strata types identified as nesting and foraging habitat in the HFQLGFRA FEIS (p.3-106) which is 4M, 4D, 5M, 5D and 3M, 3D, 4P, 5P, 6.</p> <p>You also reference Table 14. Table 14 is a table under the effects discussion for the Ca. spotted owl. If Table 15 was meant as the reference, this table looks at the number of potential foraging acres within existing goshawk PACs that would be treated by the action alternatives and is not a table showing CWHR types.</p>
<b>WILDLIFE – AMERICAN FISHER</b>			
	1-23	<p>The Watdog project area may play an important role in fisher conservation in the Sierra Nevada.</p> <p>The DSEIS fails to adequately</p>	<p>Refer to the responses under the “WILDLIFE-American Marten”, Section 201 above.</p> <p>Refer to the response under the “FOREST RESOURCE”, section 100 above.</p> <p>Refer to the response under the “WILDLIFE-General”, section 200 above.</p>

Subject Code	Category Code	Comment ID	Comment	Forest Service Response
			acknowledge this issue or to assess the project’s likely adverse impacts on the fisher and its habitat.	Refer to the response under the “WILDLIFE-Monitoring”, section 206 below.
		1-24	To facilitate fisher re-colonization, the Forest Service must provide sufficient habitat for fisher denning, resting, and foraging, and that habitat must be located in a manner that will promote the fisher’s occupation of, and movement throughout, the region	Refer to response to Comment 1-23 above. Refer to the responses under the “WILDLIFE-American Marten”, Section 201 above. Refer to the response under the “FOREST RESOURCE”, section 100 above. Refer to the response under the “WILDLIFE-General”, section 200 above. Refer to the response under the “WILDLIFE-Monitoring”, section 206 below. Fisher decolonization is an issue outside the scope of the Watdog Project. However, the Watdog Project will maintain habitat for the fisher should future re-colonization efforts come to fruition.
		1-25	The Forest Service should disclose the impacts of proposed logging on fisher habitat connectivity and on the fragmentation of existing habitat, particularly within checkerboard lands in the central and northern Sierra.	Refer to response to Comment 1-23 above. Refer to the responses under the “WILDLIFE-American Marten”, Section 201 above. Refer to the response under the “FOREST RESOURCE”, section 100 above. Refer to the response under the “WILDLIFE-General”, section 200 above. Refer to the response under the “WILDLIFE-Monitoring”, section 206 below. Please refer to the Watdog Project BA/BE (pages 43 through 69 and 94 through 101) for a discussion of effects on fisher and its habitat.
		1-26	Black oak is an important species for fisher rest sites. Zielinski et al. (2004) found that hardwoods provide 45% of fisher rest sites in the Sierra, and these sites were predominately black oak.  The DSEIS proposes to remove approximately 400 black oak	Refer to the response under the “FOREST RESOURCE”, section 100 above. Please refer to the Watdog Project BA/BE (pages 43 through 69 and 94 through 101) for a discussion of effects on fisher and its habitat.  The Zielinski et al. 2005 paper “Selecting Candidate Areas for Fisher Conservation that Minimize Potential Effects on Martens” was considered in the effects analysis for the Pacific fisher. Even though treatment areas overlap with areas determined by Zielinski to be suitable for Pacific fisher conservation and re-introduction. The habitat of best quality and the habitat that would provide denning/resting, and corridors for foraging and of connectivity would not be adversely affected

		<p>over 12” dbh during mechanical operations (DSEIS, p. 3-164).</p> <p>The impacts to fisher by the proposed hardwood removal are not adequately addressed.</p>	<p>by the Watdog project.</p> <p>The opportunity for Pacific fisher conservation and re-introduction would still be available should the Pacific fisher be found on the Plumas or a decision made to re-introduce Pacific fisher to the Plumas. The Zielinski et al. (2005) unpublished paper was written as an evaluation tool. The paper was regarding “potential for negative competitive interactions between the congeneric (an organism belonging to the same taxonomic genus as another organism) fisher and American marten, usually with martens suffering from the interaction”.</p> <p>Zielinski’s paper states in it’s discussion section: 1) “.....candidate fisher conservation areas should be subjected to additional evaluation as to their on-the-ground suitability, and the implications of ownership to potential conservation activities”; 2) “The current exercise was designed to identify general areas for consideration, not to identify specific areas for management action; and 3) “Additional evaluations should include further examination of habitat modeling tools.”</p> <p>The model presented in the paper was intended to be used as an evaluation tool and not for individual project management. Even if the model shows suitable habitat, any proposed activity does not automatically reduce suitability (personal communication William Zielinski 9/5/2007). Nevada, the identification of these areas are just as important for planning for the restoration of habitat connectivity for fishers in the Sierra Nevada.</p> <p>However, Zielinski also states “Although the areas identified in this exercise may be considered candidate locations for future reintroduction of fishers into the northern Sierra. This benefit can be achieved even in the absence of planning for reintroduction.”</p> <p style="text-align: center;"><i>Continue next page.</i> <i>Continued from previous page</i></p> <p>The Truex/Zielinski 2005 paper “Short-term Effects of Fire and Fire Surrogate Treatments on Fisher Habitat in the Sierra Nevada” was reviewed. Measures to mitigate short-term effects, as suggested in the paper, were considered and applied where feasible and applicable. SNFPA ROD 2004 and HFQLG FEIS 1999 “Standards and Guidelines” were applied to retain large trees, snags, large woody material and large oaks, thereby reducing effects of implementing fuels-reduction (“Fire and Fire Surrogate”) treatments such as mechanical harvest, mechanical harvest followed by burn and fire (underburn) only treatments. The paper also states “the short-term effects of treatments may be mitigated by the beneficial effects of the treatments on subsequent stand development.</p>
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Subject Code	Category Code	Comment ID	Comment	Forest Service Response
<b>WILDLIFE - SURVEYS</b>				
WILD	205	1-27A	<p>Surveys for the federally threatened California red-legged frog are required by the USFWS. Because suitable habitat was located within one mile of the project area, surveys were conducted for Watdog (BE, p. 27). These surveys were conducted in 2003, and suitable aquatic and upland habitats within treatment units have not been surveyed for five years.</p> <p>It is entirely possible that the suitable habitat may have been colonized by frogs since surveys were conducted.</p>	<p>As part of the 2002 survey effort several sites were identified as potentially suitable for the California red-legged frog (CRLF), Watdog Project DEIS page 3-203.</p> <p>The CRLF is a federally listed species. Surveys for the sites that were identified as potentially suitable habitat will be surveyed prior to project implementation.</p> <p>This mitigation will be added to the Watdog Project FEIS and associated BA/BE.</p>
WILD	205	1-27B	<p>The Watdog project area was surveyed for great gray owls in 2002 with no detections (BE, p43). <i>Continue next page.</i> <i>Continued from previous page.</i></p> <p>Two years later, a great gray owl was detected two miles from the project area in 2004 (Ibid).</p> <p>This new sighting suggests that the previous surveys are now out of date and the project area should be resurveyed. Once occupancy is known, effects analysis should be revised to reflect any new information.</p>	<p>Watdog Project BA/BE, page 46 Surveys: Great gray owl surveys were completed in the analysis area in 2002.</p> <p><i>Continue next page.</i> <i>Continued from previous page.</i></p> <p>No great gray owls were located. Surveys follow the “Survey Protocol For The Great Gray Owl In The Sierra Nevada Of California”; Beck and Winter; May 2000.</p> <p>** The “Protocol” for the great gray owl does not require surveys to be within any certain timeframe of project activities. Analysis Area Occurrence Potential: There have been no observations of this species reported within the Watdog analysis area. The contract surveyor reported that some of the meadows surveyed within the Watdog analysis area provide potential habitat.</p> <p>The closest recent observation (2004) of a great gray owl occurred approximately 2 miles east of the analysis area boundary. Watdog Project BA/BE, page 110: There are no great gray owl</p>

				<p>(GGO) territories within the Watdog analysis area. Potentially suitable habitat for the GGO was surveyed and no new nests or individuals were detected.</p> <p>However, there is suitable habitat and the lack of detections as a result of surveys does not mean species absence. Potential direct effects on the great gray owl may result from the modification or loss of habitat by group selection openings or habitat components through thinning (due to reduction of canopy cover and availability of future nest trees). Meadows that provide potential habitat are not within the treatment units. Any wet meadows within a treatment polygon will have an RHCA buffer applied. A mostly dry meadow located adjacent to DFPZ unit 101 has been marked for retention of a tree buffer as required by the LRMP.</p> <p>The wildlife analysis area boundary is large compared to the Watdog project area boundary. The 2004 sighting is not located near any proposed Watdog treatments and is located in a different watershed, outside the wildlife analysis area.</p>
WILD	201	1-28		<p>Watdog Project BA/BE, page 46 Surveys: Great gray owl surveys were completed in the analysis area in 2002. No great gray owls were located. Surveys follow the “Survey Protocol For The Great Gray Owl In The Sierra Nevada Of California”; Beck and Winter; May 2000. ** The “Protocol” for the great gray owl does not require surveys to be within any certain timeframe of project activities. Analysis Area Occurrence Potential: <i>Continue next page.</i></p> <p style="text-align: center;"><i>Continued from previous page.</i></p> <p>There have been no observations of this species reported within the Watdog analysis area. The contract surveyor reported that some of the meadows surveyed within the Watdog analysis area provide potential habitat. The closest recent observation (2004) of a great gray owl occurred approximately 2 miles east of the analysis area boundary.</p> <p>Watdog Project BA/BE, page 110: There are no great gray owl (GGO) territories within the Watdog analysis area. Potentially suitable habitat for the GGO was surveyed and no new nests or individuals were detected.</p> <p>However, there is suitable habitat and the lack of detections as a result of surveys does not mean species absence. Potential direct effects on the great gray owl may result from the modification or loss of habitat by group selection openings or habitat components through thinning (due to reduction of canopy cover and availability of future nest trees). Meadows that provide potential habitat are not within the treatment units. Any wet meadows within a treatment polygon will have an RHCA buffer applied. A mostly dry meadow located adjacent to DFPZ unit 101 has been</p>

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				<p>marked for retention of a tree buffer as required by the LRMP.</p> <p>The wildlife analysis area boundary is large compared to the Watdog project area boundary. The 2004 sighting is not located near any proposed Watdog treatments and is located in a different watershed, outside the wildlife analysis area</p>
WILD	205	1-29A	<p>Spotted owl surveys were last conducted for the Watdog project in 2003. The 1991 USFWS protocol for spotted owls has a two-year expiration on survey results if conducted in two consecutive years. Therefore, Watdog spotted owl surveys no longer meet protocol and estimation of project effects are not accurate.</p> <p><i>Continued from previous page.</i> Activity centers have undoubtedly moved and new territories may have been established.</p>	<p>Spotted owl surveys were last conducted for the Watdog project in 2003. The 1991 USFWS protocol for spotted owls has a two-year expiration on survey results if conducted in two consecutive years. Therefore, Watdog spotted owl surveys no longer meet protocol and estimation of project effects are not accurate. Activity centers have undoubtedly moved and new territories may have been established.</p>
WILD	201	1-29B	<p>Goshawk surveys were last conducted in 2002-2003 (BE, p. 37).</p> <p>The activity center locations from these surveys are outdated because goshawks tend to relocate their nests annually and there is potential that new territories would be established after surveys were complete and therefore not protected.</p>	<p>Surveys for the Northern goshawk follow the “Survey Methodology For Northern Goshawks in The Pacific Southwest Region, U.S. Forest Service”; Region 5; May 14, 2002. The Northern goshawk “Protocol” does not require additional surveys once the “Protocol” level of survey effort is completed. The Watdog DSEIS, Appendix E-Mitigations includes mitigation for “Protection of Habitat of Threatened, endangered and Sensitive Species”.</p> <p>Design features that were included in the Watdog DSEIS, for wildlife, will be added to Appendix E. Refer to response under the “WILDLIFE – California spotted owl”, Section 203 above.</p> <p>A two-year protocol level survey for the California spotted owl was completed in 2002 and 2003 for the Watdog analysis area.</p> <p>Due to planning delays the survey was extended to include year 2004 (Watdog Project BA/BE,</p>

				<p>page 38). The Watdog Project DSEIS, Appendix E-Mitigations includes mitigation for “Protection of Habitat of Threatened, endangered and Sensitive Species. Design features that were included in the Watdog DSEIS, for wildlife, will be added to Appendix E.</p> <p>The District Wildlife Biologist provided a “risk assessment” regarding the Watdog Project and the status of California spotted owl surveys to the District Ranger on February 23, 2007. The risk assessment considered factors such as: three year level of survey effort, that PACs and SOHAs will be avoided, and the ridge-top location of 90% of the treatments. Based on the biologists risk assessment, input from the District Ranger and other considerations the Plumas NF made a decision that additional surveys were not necessary for the Watdog Project.</p> <p>Based on the level of survey effort and the ridge-top location of 90% of the treatments and that PACs and SOHAs will be avoided, the Forest Supervisor made a decision that additional surveys were not necessary.</p>
<b>WILDLIFE - NORTHERN GOSHAWK</b>				
WILD	201	1-22	<p>Despite the proposed reduction in 5M and 5D, considered high quality habitat for goshawks, the BE concludes that none of the action alternatives are considered detrimental to the Northern goshawk (BE, P. 93).</p> <p>The goshawk habitat preferences used in the DSEIS likely overestimate the availability of suitable goshawk habitat preferences used in the DSEIS likely underestimate the availability of suitable habitat in the project area and thus underestimate the true impact to goshawks.</p>	<p>Refer to the response under the “FOREST RESOURCE”, section 100 above.</p> <p>Refer to the response under the “WILDLIFE-General”, section 200 above.</p> <p>Refer to the response under the “WILDLIFE-Monitoring”, section 206 below.</p> <p>Refer to response under the “California Spotted Owl Section”, 202, Comment 1-17 above.</p> <p>Refer to response to comment under the California Spotted Owl Section 201, 1-18 above. A determination of “May affect, likely lead to trend toward listing” would be considered “detrimental”. A determination of “may affect, not likely lead to a trend toward listing was made for the Northern goshawk for the Watdog Project, therefore it was expected that individual goshawks could be affected.</p> <p>The Watdog effects analysis relies on a unique definition of goshawk foraging habitat that includes CWHR 3M,3D, 4P and 5P stands (BE, Table 14, p90). According to the SNFPA FEIS, goshawk habitat is CWHR SMC size class 4M, 4D, 5S, 5P, 5M, 5D and 6.</p> <p>It is unclear what the response “relies on a unique definition of goshawk foraging habitat that includes CWHR 3M, 3D, 4P and 5P stands (BE, Table 14, p90)” references. It is not in the effects discussion text for the Northern goshawk.</p>

Subject Code	Category Code	Comment ID	Comment	Forest Service Response
				<p>The Indirect Effects text section for the Northern goshawk states: “Within the analysis area, 22,659 acres, there are 5,518 acres of potentially suitable goshawk nesting habitat and are 8,114 acres of potentially suitable goshawk foraging habitat, not including the California spotted owl PACs and SOHAs plus northern goshawk PACs.</p> <p>This analysis is based on CWHR forest strata types identified as nesting and foraging habitat in the HFQLGFRA FEIS (p.3-106)(which is 4M,4D,5M,5D and 3M,3D,4P,5P,6. You also reference Table 14. Table 14 shows suitable acres pre- and post-project based on the same CWHR as described above.</p>
WILD	201	1-29	Goshawk surveys were last conducted in 2002-2003 (BE, p. 37). The activity center locations from these surveys are outdated because goshawks tend to relocate their nests annually and there is potential that new territories would be established after surveys were complete and therefore not protected.	<p>Surveys for the Northern goshawk follow the “Survey Methodology For Northern Goshawks in The Pacific Southwest Region, U.S. Forest Service”; Region 5; May 14, 2002. The Northern goshawk “Protocol” does not require additional surveys once the “Protocol” level of survey effort is completed.</p> <p>The Watdog DSEIS, Appendix E-Mitigations includes mitigation for “Protection of Habitat of Threatened, endangered and Sensitive Species.” Design features that were included in the Watdog DSEIS, for wildlife, will be added to Appendix E.</p>
<b>WILDLIFE - MONITORING</b>				
WILD	206	1-28	The DEIS does not address the monitoring required by the Plumas Land and Resource Management Plan as originally adopted or amended. In several cases, the annual population monitoring required by the original forest plan has not been completed.	<p>Refer to the “Plumas Management Indicator Species Report, November 2006” and the “Management Indicator Species Report for the Watdog Project, March 2007.”</p> <p>Project level MIS Selection and project-level effects analysis for the Watdog Project are based on the Pacific Southwest Region (R5) “Draft – MIS Analysis and Documentation in Project-Level NEPA, R5 Environmental Coordination,” May 23, 2006. Selected project-level MIS reflect the May 30, 2006 letter “Clarification on Plumas National Forest MIS List” and the MIS identified in the Plumas Forest Plan, Appendix G (1988). A Forest scale examination of habitat, population attributes, and trend for each selected project-level MIS, documented in the November, 2006 Plumas National Forest (PNF) MIS Report, has been incorporated into the Watdog Project analysis.</p>

WILD	206	1-28	<p>In addition, population monitoring required for MIS and species at risk is not addressed. The failure to address these monitoring issues violates the forest plan and the National Forest Management Act.</p>	<p>The Plumas NF is in compliance with MIS direction and guidance regarding monitoring of MIS. The Plumas NF MIS report and Watdog MIS report assess status and impacts to MIS habitat and population trends. The December 2007, “Sierra Nevada Forests Management Indicator Species – Amendment FEIS” amends the Plumas MIS list. However, the FEIS “Exempts Projects Subject to Alternative Standard” such as the Watdog Project where previous” obligations relating to MIS had been met.....using the MIS list in effect at the time the MIS analysis was conducted.”</p> <p>Appendix E of the 2004 SNFPA ROD replaced monitoring requirements in the Plumas LRMP for those MIS which are found in Appendix E and also in the Plumas LRMP (see Table 2, Forest MIS Report). There is no requirement to monitor SAR (species at risk). SAR are only addressed if they are also listed TE&amp;S or are a MIS.</p> <p>In addition, Table 1 in the Watdog Project MIS Report identifies the status of the MIS (2nd column), the reason each MIS was identified in the LRMP (3rd column) and discloses whether or not the MIS is potentially affected by the Watdog Project (4th column).</p> <p>Hence, where the Plumas NF LRMP requires population monitoring or population surveys for an MIS, the project-level effects analysis for that MIS may be informed by population monitoring data, which are gathered at the forest or bioregional scale.</p> <p>The Plumas NF LRMP does not require population monitoring or surveys for these MIS, unless they have federal or sensitive species status. Project-level MIS effects analysis can be informed by forest-scale habitat monitoring and analysis alone. The Plumas NF LRMP requirements for MIS analyzed for the Watdog Project are summarized in Section 3 of the Watdog MIS Report. For several MIS, such as California spotted owl and American marten, Appendix E of the 2001 SNFPA FEIS and Chapter 2 of the 2004 SNFPA SEIS identify other population monitoring requirements. For these species, population data are collected and compiled at the bioregional (Sierra Nevada) scale, not the forest scale (SNFPA 2001).</p>
WILD	206	1-29	<p>The LRMP requires the national forest to report on territory occupancy and reproductive success at selected sites annually for golden eagle and prairie falcon.</p>	<p>Refer to response to Comment 1-28 above.</p> <p>There are no known active Golden eagle territories within the Watdog project area.</p> <p>Refer to Table 2, Plumas NF-MIS Report.</p> <p>Table 2 Displays the monitoring objective that applies for the Plumas MIS.</p> <p>For the Golden Eagle and Prairie Falcon, the LRMP monitoring approach has been replaced by distribution population monitoring under Appendix E.</p> <p>The Golden Eagle’s known distribution on the Plumas occurs at nine locations, none of which occur in the Watdog project area.</p>

Subject Code	Category Code	Comment ID	Comment	Forest Service Response
			For golden eagle, the number of birds counted on five consecutive years (1988 to 1992) is displayed in Fig. 11 of the forest-wide MIS report. Results are not reported for territory occupancy or reproductive success as required by the LRMP for the five years of monitoring displayed.	
WILD	1-206	1-30	The LRMP requires that golden eagle sites be monitored annually and there is no data reported in the MIS report for the period 1993 to 2006. The situation is similar for prairie falcon. Annual counts of birds from 1988 to 1992 are presented in Fig. 12 of the MIS report. Results are not reported for territory occupancy or reproductive success as required by the LRMP, for the four years of monitoring displayed. The LRMP also requires that prairie falcon sites be monitored annually and there is no data reported on the MIS report for the period 1993-2006.	<p>Refer to response to Comment 1-28 above.</p> <p>There are no known active Golden eagle territories within the Watdog project area. There is no habitat for and no sightings of Prairie falcon on the Feather River Ranger District.</p> <p>Refer to Table 2, Plumas NF-MIS Report. Table 2 Displays the monitoring objective that applies for the Plumas MIS.</p> <p>For the Golden Eagle and Prairie Falcon, the LRMP monitoring approach has been replaced by distribution population monitoring under Appendix E.</p> <p>The Prairie Falcon’s known distribution on the Plumas occurs at six locations, none of which occur in the Watdog project area.</p>
<b>WILDLIFE - BATS</b>				
WILD		1-41	Despite having no information about population trends on pallid bats in the project area and no baseline data on habitat quality (including snag levels in the project area), the BE concludes	<p>Refer to response to Comment 1-28 above.</p> <p>Refer to the response under the “FOREST RESOURCE”, Section 100, specifically regarding oaks, snags and large woody material.</p> <p>Refer to the response under the “WILDLIFE-General”, Section 200.</p>

			<p>that the effects to pallid and other bats is expected to be low.</p> <p>In the absence of information about population trend and existing habitat quality, the conclusion that effects will be low cannot be supported.</p> <p>The soils report (pp. 38-40, Table 5) indicates that the level of large down wood is presently below the standard of five logs per acres on 23 units.</p>	<p>Refer to the response under the “WILDLIFE-Monitoring”, Section 206.</p> <p>Population trend information is not required for the Pallid Bat in the project area. The Watdog Project Area is within the Westside of the forest where a Pallid Bat habitat assessment has been ongoing for the last two years. The third year of this assessment will occur in 2008. This assessment is providing roost site information to assist land managers in retaining habitat features important to Pallid Bats (See BA/BE, pages 43-69 and pages 101-105 for a complete discussion and rationale used for making a determination on sensitive bats. The reports for the first two years of the Pallid Bat Assessment are located in the project files.</p> <p>As a result of the 2006-2008 survey effort; Mooreville Ridge, Lumpkin Ridge and Hartman Bar Ridge are all considered Pallid bat habitat. Mooreville Ridge and Lumpkin Ridge are not within the Watdog Project area however Hartman Bar Ridge is located in the project area. A limited operating period has been added for two potential roost areas by the Pallid bats along Hartman Bar Ridge in the Watdog project area. This will be noted in the Watdog Project FSEIS (including Appendix E-Mitigations) and the Watdog Project BA/BE.</p>
<b>SOILS</b>				
SOIL	400	1-62	<p>The report also identifies that previous monitoring indicates that there were substantial decreases in the number of logs per acre in group selection and thinning units.</p> <p>The report fails to estimate the likely decrease in large wood for all units following treatment. An approach similar to that used for soil cover should be applied to large wood analysis.</p> <p>The 2005 monitoring results suggest large woody material decreases from an average of 10 logs per acre to 2 logs per acre.</p>	<p>Legal standards and guidelines for the maintenance and improvement of soil resources are specified in the Plumas National Forest LRMP and the Record of Decision for the 2004 Sierra Nevada Forest Plan Amendment (see Comment 1-60). Down wood standards and guides for HFQLG projects are listed in Table 2 in the Record of Decision for the 2004 Sierra Nevada Forest Plan Amendment. The standard and guide states “Determine retention levels of down woody material on an individual basis. Within Westside vegetation types, generally retain an average over the treatment unit of 10-15 tons of large down wood per acre...Consider the effects of follow-up prescribed fire in achieving desired retention levels of down wood.” The R5 Soil Management Handbook recommends large woody material be present at a rate of at least 5 well distributed logs per acre. It further recommends that large woody material presence may be reduced to meet fuel management objectives in strategic fuel treatment areas, such as fuel breaks. The 2005 HFQLG soil monitoring report documented large woody material decreases in thinning and group selection treatments units, usually due to follow-up prescribed fire treatments. The utilization of both mechanical and fire treatment methods is documented as the most effective treatment to modify potential fire behavior and severity (see Section 3.5.6.2 of DEIS). Contract Provision CT6.7, presented as a mitigation for wildlife concerns in Appendix E of the DEIS, requires that “logs not meeting utilization standards shall be used to meet the LRMP as amended requirements. Logs should be evenly distributed within the units (stands) to the extent possible.”</p>

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SOIL	400	1-63	Despite the importance of large wood to soil quality, the report (Ibid., p. 57) declares that “Large woody material has no importance on soil nutrients (personal communication - Robert Powers),” and thus dismisses its importance to the analysis of soil effects. This position is inconsistent with the Regional Soil Quality standards and requires additional discussion.	The 1995 R5 Soil Management Handbook recommends that organic matter be “maintained in amounts sufficient to prevent short- or long-term nutrient cycle deficits, and to avoid detrimental physical and biological soil conditions.” This organic matter consists of soil and surface organic matter. Surface organic matter consists of both fine organic matter and large woody material. Recent research demonstrates that organic carbon and nitrogen concentrations are much higher in decaying wood material than mineral soil and concludes that large woody material is not considered important for nutrient storage or cycling with respect to soils (see Section 3.10.5.16 of DEIS).
SOIL	400	1-60	The Region 5 Soil Quality Standards (FSH 2509.18, 2[1]), the service-wide soil management handbook (FHS 2905.18-91-1), and the forest plan provide the regulatory framework that governs soil management in this project. This framework establishes soil properties, conditions, and associated threshold values that are used to avoid detrimental soil disturbance.	<p>The Forest Service Region 5 (R5) Soil Management Handbook establishes guidelines for soil quality analyses. It also provides threshold values for soil properties and conditions that indicate potentially significant change or impairment of the soil productivity potential, hydrologic function, or buffering capacity of the soil.</p> <p>Legal standards and guidelines for the maintenance and improvement of soil resources are specified in the Plumas National Forest LRMP (see Section 3.10.3 and 3.10.4 of the DEIS and Section 2 and 3 of the Watdog Soils Report). The Record of Decision for the 2004 Sierra Nevada Forest Plan Amendment also specifies a legal standard and guideline for large down woody material.</p>
SOIL	400	1-61	As was the case in previous EISs, the soils analysis for the DSEIS fails to discuss the effects that the extremely low levels of large woody debris have on soil quality in the project area. This failure is a violation of NEPA.	The soils analysis disclosed the effects of proposed activities to large woody material. (See section 3.10.5.16 of the DEIS and Section 7.2.1.3 of the Watdog Soils Report.)

<b>PLANNING</b>				
PLAN	602	1-6	The failure to acknowledge and analysis the meaning of the marten population gap in this area renders the NEPA analysis of impacts to marten inadequate. Since the NEPA process is uninformed, the impacts to marten are not properly assessed, yet the Forest Service still proposes significant reductions in marten habitat in the project area.	Refer to the response under “WILDLIFE-American Marten”, Section 201.
PLAN	602	1-37	The failure to gather and report information on snag densities is a violation of the Forest Plan.  The failure to consider this information in the environmental analysis is also a violation of NEPA since in its absence, the quality of available habitat cannot be known nor can mitigation measures that might improve poor conditions be identified.	Refer to the response under “FOREST RESOURCES”, Section 100.
PLAN	601	1-38	Ten species were identified in Appendix E as being of particular concern and were addressed individually in the narrative in Appendix E.  Appendix E also states that “Population and/or habitat monitoring will be conducted for all MIS species at risk” (USDA Forest Service 2001a, Vol. 4, Appendix E, pp.62, 75, 96).	Refer to the response under “WILDLIFE-Monitoring”, Section 206.

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			<p>There are several species at risk that were addresses in the project level environmental documents for which monitoring requirements have not been met.</p>	
PLAN	602	1-39	<p>The potential impacts of the Watdog project on these at risk species have not been evaluated in the environmental analysis.</p> <p>Such as evaluation is warranted since elsewhere the Forest Service has determined that, for a majority of these species, a full viability analysis was required to satisfy NEPA and NFMA. (USDA Forest Service 2001a, Vol. 4, Appendix E, p. 16.)</p>	<p>Refer to the response under “WILDLIFE-Monitoring”, Section 206.</p>
PLAN	601	1-40	<p>As identified in the Regional direction on the analysis of MIS species and documentation in project level NEPA (USDA Forest Service 2006), “when governing LRMP requires population monitoring or population surveys, the MIS effects analysis for the project must be informed by population monitoring data.”</p> <p>Since the population monitoring</p>	<p>Refer to the response under “WILDLIFE-Monitoring”, Section 206.</p>

			data are absent or inadequate for many of the MIS the effects analysis for these species is also inadequate.	
PLAN	602	1-63	<p>To comply with NEPA, an EIS must discuss the environmental impacts of past, present, and the proposed logging; a mere listing of projects and acreage, in the absence of specific analysis of the environmental impacts of the projects, is inadequate.</p> <p>Under NEPA, in assessing cumulative effects, the EIS must give a sufficiently detailed catalogue of past, present, and future projects, and provide adequate analysis about how these projects, and differences between the projects, are thought to have impacted the environment.</p>	See comment FOREST RESOURCE 1-65.
PLAN	603	3-1	Hopefully you are aware that congress failed to re-authorize the Secure Rural Schools and Community Self Determination Act which provided Forest Reserve Revenues to rural counties that contain national forest lands. These annual FRRs amount to \$9.2 million for just Plumas and Butte Counties and they are equally shared between the county schools	The Economic section of the Watdog Project FSEIS will be updated to reflect the latest information about the Secure Rural Schools and Community Self Determination Act.

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			<p>and county roads.  <i>Continue next page.</i>  <i>Continued from previous page.</i></p> <p>Although the Watdog project is just one of the proposed projects in the QLG Program of Work that contribute to these funds, all efforts must be undertaken to reduce project implementation costs while maximizing revenues to the Treasury and the FRRs.</p>	
PLAN	603	2-1	<p>EPA reviewed the Draft and Final EIS and provided comments to the USFS on October 16, 2006 and May 9, 2007 respectively. We rated the DSEIS as Environmental Concerns – EC-2 because of concerns regarding cumulative watershed effects. We recommended Alternative D, or a less intensive timber harvest alternative, as a way to reduce impacts to riparian resources, water quality, soils, and native plants (from noxious weeds). Our concerns remained upon reviewing the FSEIS. We appreciate the additional clarifications in the 2<sup>nd</sup> DSEIS and have rated this document as Environmental Concerns – Adequate – EC-1.  <i>Continue next page.</i>  <i>Continued from previous page.</i></p>	<p>Thank you for your EC-1 rating. Refer to comment FOR 102 1-2 regarding retaining quality old-forest habitats. Additional discussions will be included in the FSEIS regarding provisions made for old-forest dependent species as well as watershed cumulative effects.</p> <p>Refer to Wildlife Section 202 1-4 and 1-9</p> <p>Refer to Wildlife Section 201 1-17 and 1-18</p>

			We continue to have concerns regarding cumulative effects to watersheds and short-term impacts to old-forest species and recommend Alternative D or a less harvest alternative selection, which will meet the project purpose and need with reduced impacts.	
PLAN	603	3-2	Although 50% of the QLG Pilot Project Program of Work acres have been accomplished through 2007, only 10% of the merchantable sawlog volume has been generated and this is the primary reason we are losing the forest industry infrastructure that is needed to address the hazardous fuel problem on the national forest lands.	<p>The Forest Service recognizes the importance of forest industry infrastructure.</p> <p>The Watdog Project treatments address hazardous fuel reduction while promoting community and economic stability as identified in the Herger Feinstein Quincy Library Group Forest Recovery Act.</p> <p>Projects are required to meet state and federal requirements under project specific environmental analysis.</p> <p>A project specific analysis will have more site specific details regarding environmental conditions and management allocations than the original broad scale analysis in the 1999 HFQLG FEIS.</p> <p>This may result in a change from the original FEIS estimate for merchantable sawlog volume.</p>
<b>FUELS</b>				
FUEL	700	1-47	<p>The results of fire behavior modeling in the FEIS demonstrates there is no difference between Alternative B, C and D in the type of fire or the flame length expected post-treatment for ten representative stands (DSEIS, p. 3-55).</p> <p>Under all action alternatives, the fires encountered in each stand</p>	<p>There are four fire behavior indicators used in the Fire and Fuels section of the Watdog Report to show differences between alternatives (see section 2.4 of FSEIS). The fire behavior indicators are used to help decision makers compare alternatives. Although fire type and flame length are the same between alternatives B, C and D, the fire and fuels analysis does show a difference in predicted crown base height and tree mortality.</p> <p>The Watdog fire predictions are site specific to the DFPZ zones. Crown fires have occurred on the Plumas National Forest, fires such as 1999 Pigeon, Lookout and Bucks, 2000 Storie and the 2007 Wheeler and Moonlight fires have proven that passive and active crowning is not just a rare occurrence. In recent years the occurrence of crown fires has been trending towards being a common occurrence for large fires on the Plumas The reduction of canopy needs to occur to make</p>

Subject Code	Category Code	Comment ID	Comment	Forest Service Response
			<p>would be surface fires. (Ibid).</p> <p>Despite the lack of differences among the alternatives, DSEIS claims that it is necessary to reduce canopy cover to as little as 25% in order to meet fuel objectives. We feel these claims are not supported by evidence or have overlooked existing information that was contrary to the claim.</p>	<p>an effective DFPZ. A fire coming out of the Middle Fork of the Feather River Canyon could easily become a crown fire due to slope and preheating of the trees. The comment refers to fire type and flame length being the same for all post treatment alternatives. Although this is true in the stands in the DFPZ, this is not the fire we are worried about, it is the fire coming from outside the DFPZ that we are trying to slow or stop.</p> <p>In its entirety the fire and fuels analysis shows that decreased surface fuel loading, increased crown base height, and reduction of canopy cover result in decreased intensity of fire behavior. These treatments incorporate the three principles of fire resistance described by Agee et al. 2000 to reduce surface fuels, increase height to live crown, decrease crown density, while retaining the largest trees in the stand.</p>
FUEL	700	1-48	<p>The DEIS claims that the increased number of trees in Alternatives C and D would make crown fires coming into the DFPZ less easy to moderate due to the increases in canopy density.</p> <p>Rice (2008) found that “the type of expected fire spreading into the DFPZ is not a sustained crown fire but a fire that frequently torches. The Fire and Fuels Report supports this conclusion and acknowledges that torching, not crown fire spread, is the main fire behavior characteristic of concern... The problem of crown fire initiation is not solved by reduction of canopy cover, but through increasing the crown base</p>	<p>In creating a DFPZ for the purpose of slowing or stopping a fire coming out of the middle fork of the Feather river canyon it would be necessary to reduce some of the canopy. The DFPZ is approximately 1,320 feet across. To not separate the canopy would make the DFPZ less effective. The Moonlight fire of 2007 showed us that canopy separation is a key component to limiting the amount of crowning and is an important part of an effective DFPZ. The comment also states that canopy density has nothing to do with passive and active crowning if this is the case fire behavior prediction models like Fuels Management Analysis (FMA) and Nexus would not need canopy bulk density to do the algorithm.</p> <p>Active (dependant) and passive (torching) crown fires are known to occur in the Watdog area (Mooreville and Devils Gap fires). Both of these types of crown fires are partially driven by a combination surface fire intensity released from combustion of surface fuels, wind, fuel moisture, and stand structure, including, but not limited to, tree height to crown base, horizontal crown spacing, canopy bulk density (Scott and Reinhardt, 2001).</p> <p>Prevention of crown fire is not the only goal of fuel treatments. Additional goals of fuel treatments are reduction of fire intensity within treated areas, creation of locations that improve fire suppression efficiencies, and enhancement fire fighter safety-.</p>

			<p>height.”</p> <p>A passive crown fire is expected outside of the DFPZ. (DSEIS, p. 3-355, Table 3-16). Rice found that changing surface fire behavior is critical to controlling passive fire and that “canopy density has nothing to do with torching potential.” (Sierra Forest Legacy, Rice 2007, p. 3).</p>	
FUEL	700	1-49	<p>The DSEIS claims that the increased canopy closure in Alternative C and D makes fire retardant drops less effective in fire suppression, when compared to Alternative B.</p> <p>This distinction between effectiveness in retardant drops in three canopy covers ranging from 30% in Alternative B to 50% in Alternative D (based on Table 3-17), however the only information provided in the DSEIS is an observation made for the treated and untreated stands encountered in the Peterson Fire.</p> <p>This observation is a comparison between a treatment vs. no treatment, not a comparison between resulting in 30% to 50% canopy cover that, supported by modeling results, have the same</p>	<p>In the FSEIS, more examples, Peterson, Bell (Moghaddas and Craggs 2007) and Moonlight fires, have been provided to illustrate the principle that less canopy cover makes retardant drops more effective by allowing more retardant to reach surface fuels. While two of the examples compare treatment verses no treatment, the Moonlight example is able to contrast two levels of canopy cover.</p> <p>The description of the Moonlight fire in the FSEIS, illustrates effectiveness of retardant drops in two canopy cover types, 60% and less than 40%. The weather and surface fuel conditions were similar in this instance and witnesses observed a marked difference in the effectiveness. According to the observers, the 60% treatment was unable to moderate fire behavior to a level where suppression resources were able to engage. The successful less than 40% treatment is most similar to Alternative B.</p> <p>When suppressing active or passive crown fires, and surface fires, retardant is applied ahead of the flaming front directly to surface fuels. The goal is to moisten surface fuels to the point where they have a limited ability to ignite. This in turn stops surface spread of fire which stops or slows the propagation of active or passive crown fires. Under these conditions, suppression actions can be implemented more safely and effectively. As stated by the commenter and in the Anderson (1974) paper, a higher canopy cover will limit the amount of retardant reaching the surface fuels where it can effectively limit passive and active crown fires.</p> <p>Rice cites a proposal by Robertson et al. (1997) to systematically study retardant effectiveness by using similar weather and flight conditions. Currently there are no published studies that quantify retardant effectiveness. However, the similar conditions suggested are present in the Moonlight example, only the amounts of canopy cover were different. The resultant fire behavior exhibited</p>

Subject Code	Category Code	Comment ID	Comment	Forest Service Response
			<p>fire intensity. This observation is not relevant to the comparison of treated stands nor is it a valid reason for selecting Alternative B.</p>	<p>in the respective stands does illustrate which treatment level will meet the needs of a DFPZ, for retardant purposes.</p>
FUEL	700	1-50	<p>Based on a reported lower tree mortality resulting from wildfire, the DSEIS concludes that Alternative B out performs “Alternative C and D. (DSEIS, pp. 3-61 to 3-62).</p> <p>This comparison however fails to take into account the actual number of live trees remaining in the modeled stands following wildfire.</p> <p>As identified by Rice (SFL 2008) in the FSEIS (which is unchanged in the SDEIS).</p>	<p>The comment refers to mortality tables in the Fire and Fuels section of the Draft Supplement Environmental Impact Statement (DSEIS) and states that the tables fail to account for mortality due to timber harvest.</p> <p>Tables 3-14, 3-15, and 3-16 were made to show post-treatment mortality from wildfire. Mortality from timber harvesting based on the number of trees removed by project treatments is reported in the Vegetation Section (3-12) p. 3-126 of the FSEIS.</p> <p>Table 1 on page 20 of the commenter letter was reviewed and although Alternative D may yield the most amount of trees post treatment, minimizing or maximizing the amount of trees is not the intent of the DFPZ.</p> <p>A DFPZ is a strategically located strip of land on which fuels, both living and dead, have been modified in order to reduce the potential for sustained crown fire and to allow fire suppression personnel a safer location from which to take action against a wildfire.</p> <p>It is the size of the remaining trees in Alternative D that concern Forest Service fire managers when trying to establish an effective DFPZ.</p> <p>Appendix A, Tables A-16, 17, 18 and 19 of the Silviculture Report were used to generate the following table of California Wildlife Habitat Relationships (CWHR) 4 Stand Structure of average Trees per Acre by alternative to illustrate stand structure and ladder fuel potential.</p>

FUEL	700	1-50		<table border="1"> <thead> <tr> <th>Alternatives</th> <th>0-6” dbh</th> <th>6-11” dbh</th> <th>11-20” dbh</th> <th>20-30” dbh</th> <th>&gt;30” dbh</th> <th>Total Trees”</th> </tr> </thead> <tbody> <tr> <td>Alternative A</td> <td>605.3</td> <td>68.5</td> <td>78.9</td> <td>26.5</td> <td>7.2</td> <td>786.4</td> </tr> <tr> <td>Alternative B</td> <td>0.6</td> <td>0.9</td> <td>35.8</td> <td>25.6</td> <td>7.2</td> <td>70.0</td> </tr> <tr> <td>Alternative C</td> <td>1.8</td> <td>5.1</td> <td>49.2</td> <td>25.8</td> <td>7.2</td> <td>89.1</td> </tr> <tr> <td>Alternative D</td> <td>0.0</td> <td>29.0</td> <td>63.2</td> <td>26.5</td> <td>7.2</td> <td>125.8</td> </tr> </tbody> </table>	Alternatives	0-6” dbh	6-11” dbh	11-20” dbh	20-30” dbh	>30” dbh	Total Trees”	Alternative A	605.3	68.5	78.9	26.5	7.2	786.4	Alternative B	0.6	0.9	35.8	25.6	7.2	70.0	Alternative C	1.8	5.1	49.2	25.8	7.2	89.1	Alternative D	0.0	29.0	63.2	26.5	7.2	125.8
				Alternatives	0-6” dbh	6-11” dbh	11-20” dbh	20-30” dbh	>30” dbh	Total Trees”																													
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<p><b>Table 1.</b> CWHR 4 stand structure by averaged trees per acre by size classes</p> <p>Alternative D leaves the most ladder fuels (0-11 inch diameter at breast height (dbh)) that could potentially torch and effect the crowns of large trees, slow ground suppression resources, and reduce effectiveness of aerial suppression resources during a wildfire.</p> <p>Additionally Alternative D would leave the most snags post wildfire that would pose an even greater hazard to fire fighters in subsequent fires. The table above also shows that Alternative B has the greatest reduction in fuel ladder vegetation including trees between 0-6 inch dbh and 6-11 inch dbh size classes.</p> <p>The Watdog fuel treatments will retain approximately 90 percent of the trees greater than 20 inches dbh (Watdog Vegetation Report, pp. 3-125 to 3-126, Table 3-38). Furthermore, the limit of 30 inches is the maximum diameter of tree which can be removed as specified on page 68, Table 2 Standards and guidelines applicable to the HFQLG Pilot Project Area for the life of the pilot project, of the 2004 SNFPA ROD. The upper diameter limit is not a prescription and all trees up to 30 inches dbh will not be removed.</p> <p>Determining the amount of desired canopy cover for meeting fuels objectives in the Watdog Project is four fold and takes into consideration:</p> <ol style="list-style-type: none"> <li>1) Designing a safe and effective place for fire fighters to make a stand against an approaching wildfire;</li> <li>2) Empirical evidence, as stated in the DSEIS on p. 58, that aerial retardant penetration was more effective in stands that had previous timber harvest;</li> <li>3) To maintain growth and vigor of the co-dominate and dominate conifers;</li> </ol>																																							

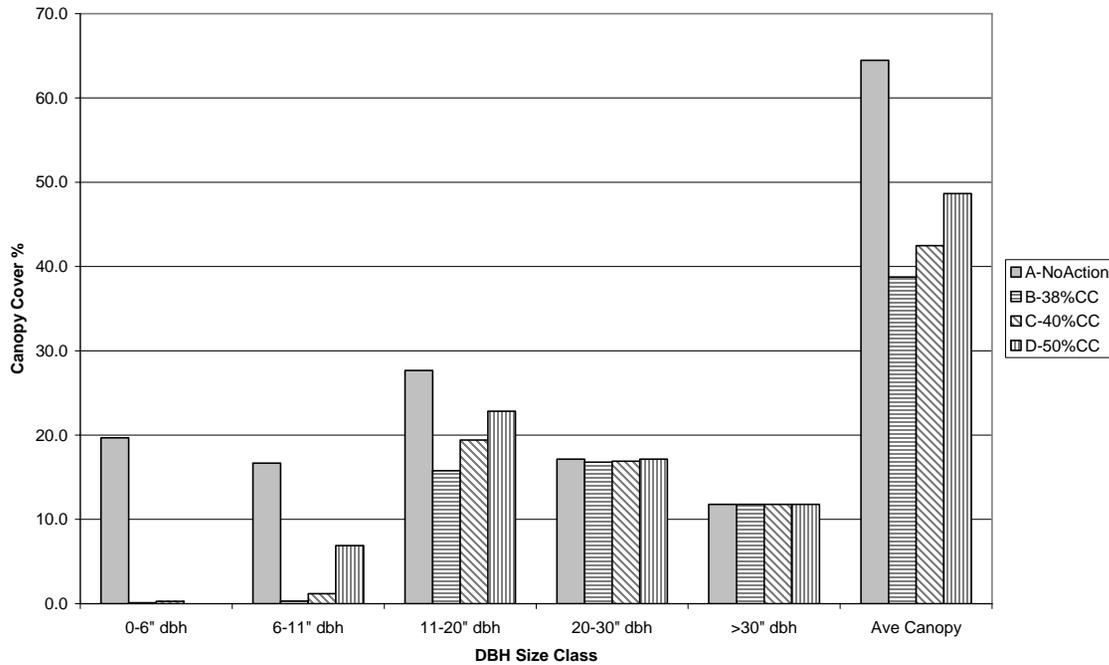
Subject Code	Category Code	Comment ID	Comment	Forest Service Response
				4) Guidance from Herger-Feinstein Quincy Library Group Final EIS Fire and Fuels Appendix J in addition to dbh limits specified in Table 2 of the 2004 Sierra Nevada Forest Plan Amendment Record of Decision.
FUEL	700	1-51	<p>The FSEIS (p. 3-64) incorrectly claims the irretrievable effects of Alternative B and C will be less than Alternative D.</p> <p><i>Continued from previous page</i>  Irretrievable effects in the FSEIS are based on an evaluation of post-treatment tree mortality and fail to consider the mortality of the stand resulting from tree harvest. A correct analysis of irretrievable effects would include an evaluation of mortality that includes trees lost to harvest. (See FSEIS Tables 3-17, 3-18, and 3-19, “Trees lost per acre” and “Trees per acre post-treatment and post-wildfire” were calculated from this data.)</p>	See response of 1-50.
FUEL	700	1-52	<p>Ultimately, following a wildfire, stands harvested following Alternative B would contain fewer than half the number of trees per acre remaining following harvest under Alternative D. These stands would also have considerably fewer than the target for Alternative B of 70 trees per</p>	See response of 1-50.

			acre. Clearly, the total mortality (harvest plus wildfire) is higher under Alternative B. The FSEIS fails to acknowledge this in the analysis.	
FUEL	700	1-53	<p>Group selections are not compatible with fuel breaks because of the long time in which they are vulnerable to damage from fire and because they produce dramatic fire behavior, and exhibit unsafe conditions for fighting fire during that time. Fuel breaks are intended to be continuous, not broken with group selection areas that result in plantations that are notorious for burning rapidly and with great intensity.</p> <p>Of the three alternatives, Alternative B has the greatest proportion of group selections and would be the alternative most dangerous for the firefighters and more vulnerable to the effects of wildfire..</p>	<p>According to the HFQLG, Appendix J (Fire and Fuels), “Small group selections could be consistent with achieving the desired condition of the DFPZ, if they are placed on the fringe, away from primary control point of the DPFZ, and at density that was consistent with achieving the criteria of maintaining 90 percent of the area in a condition that is not susceptible to torching Weatherspoon (1996) reported that DFPZs will require periodic regeneration of portions of the zone, and long-rotation, low-density versions of group selection might be the best silvicultural method for this purpose” (HFQLG, Appendix J, page 5).</p> <p>For the Watdog Project, Alternative B proposes to place 202 acres of group selection harvests within 4,021 acres of DPFZ, which results in a rate of approximately 5 percent. This density of groups is within the desired conditions for DFPZs (HFQLG, Appendix J).</p> <p>In addition, uneven-aged management, and group selection in particular, results in vertical and horizontal structure more closely associated with pre-settlement forest conditions by breaking up canopy continuity and reducing ladder fuels. This would help change the structure of the forests from even-aged or uneven-aged with a high risk fire ladder potential to the desired condition of uneven-aged, multistory, and fire-resilient.</p> <p>Long-term fire resilience of forested landscapes can be maintained by small group selections conducive to regeneration of fire resistant and shade intolerant ponderosa pine. Group selections permit the maintenance of single canopy layers in any given location, thereby discouraging crown fires (Weatherspoon 1996; Weatherspoon and Skinner 1996) (DEIS, page 3-169).</p>
FUEL	700	1-54	<p>Creating A Fire Resilient Stand Does Not Require Reduction of Canopy Cover to Less Than 50%. Stephens and Moghaddas (2005b) examined a number of stands on which commonly used silvicultural systems had been applied and compared to the</p>	<p>In both of Stephens and Moghaddas papers, stand structure (i.e., saplings, poles, small trees, medium/large trees) by diameter classes is not described. So it is very difficult to determine how removal of canopy cover by stand structure classes would affect residual stand canopy. In one of the papers, they do infer that stands were crown thinned (i.e., removing dominant and co-dominant trees) so that residual trees were well spaced with little overlap of live crowns in dominant and co-dominant trees; followed by thinning from below to maximize crown spacing with approximately 90% of understory conifers and hardwoods between 1 and 10 inches in diameter at breast height (DBH) being masticated in place; and some stands receiving a</p>

Subject Code	Category Code	Comment ID	Comment	Forest Service Response
			<p>predicted fire behavior of these stands to young and old growth reserves.</p> <p>They concluded that “overall, thinning from below and old-growth and young-growth reserves were more effective at reducing predicted tree mortality.”</p> <p>In these stands with the most fire resilient fuel profiles, average canopy cover ranged between 57% and 75%. (Ibid., p. 374).</p> <p>Thus, canopy cover in excess of 50% was consistent with reduced tree mortality in reserved and treated stands.</p>	<p>prescribed burn treatment.</p> <p>Post-treatment residual canopy cover for these treatments ranged from 51 to 58 percent.</p> <p>However, the vegetation type and stand structure from the Watdog Project area is different than the vegetation type and stand structure located at Blodgett Forest Research Station.</p> <p>Specific to the vegetation in the Watdog Project area, it would be incorrect to assume that thinning all stands to a 50 percent or higher canopy would eliminate all of the ladder fuels. Stand canopy cover is highly dependent u species (true firs have narrow crowns when compared to ponderosa or Jeffrey pines), tree size, and tree spacing or density (open grown trees have wider crowns than closely spaced trees).</p> <p>Therefore, it is very important to provide a stand structure table by diameter classes to display the fuel ladder potential of a specific stand.</p> <p>The Watdog Project Silviculture Report, Appendix A, tables A-15, A-16, A-17, A-18, and A-19 displays the stand structure and fuel ladder potential by dbh size classes for each stand.</p> <p>In addition, Appendix G of the Watdog Project Silviculture Report, contain a series of photographs and associated tables in attachments A, B, C and D that illustrate that the saplings and pole size trees make up the fuel ladder. Figure 1 below graphically displays the average stand structure and fuel ladder potential for the CWHR 4 stands.</p>

*Continued from previous page.*

**Watdog: Stand Structure and Fuel Ladder Potential for CWHR Size Class 4 Stands**



*Continued from previous page.*

Consequently, in the Watdog Project area, defensible fuel profile zones (DFPZs) would not be effective at 50 percent or higher canopy cover because small trees that could draw ground fires up into the crowns of large trees would have to be left.

Maintaining a 50 percent or higher canopy cover would result in the retention of sapling (i.e., 0-6" dbh) and pole size ladder fuels (i.e., 6-11" dbh).

Most of the canopy cover reduction would occur in the sapling (i.e., 0-6" dbh), pole (i.e., 6-11" dbh), and small tree size classes (i.e., 11-20 inches dbh).

Preliminary cruise data estimates that the number of medium trees (i.e., 20 to 30 inches dbh) that would be removed due to poor crowns, defects, disease, insect damage, or because their crowns are beneath those of larger sized trees (greater than 30 inches dbh) would range from 2.5 to 4.1 trees per acre for CWHR Size Class 5 and 4 stands, respectively.

The 4 trees per acre of medium size trees that would be harvested would contribute very little to the overall stand canopy cover.

Subject Code	Category Code	Comment ID	Comment	Forest Service Response
FUEL	700	1-57	The Fire and Fuel Report does not identify the need to reduce large levels of large wood to meet fuel objectives. In fact, the report states that “where down logs exist, 10 to 15 tons per acres of the largest down logs with diameters greater than 12 inches would be retained. The claim in the soils report that the fuel treatments require reduced levels of large woody debris is not supported in the specific report or by the measures included in the preferred alternative.	Section 3.10.5.16 of the SDEIS states: “There are proposed treatments units under the existing condition that are below the R5 recommended threshold for large woody material, and several proposed treatment units could be below the recommended threshold post treatment. The R5 guidelines allow for the adjustment of this threshold when fuel management treatments are needed. It has been determined that the Watdog Project is needed for fuels management “See Fire and Fuels Report for further information” The statement in the DSEIS about the R5 guidelines and the Fire and Fuels Report is taken out of context. It does not state that levels of large wood have been adjusted in the Fire and Fuels Report. The statement was to explain that it is not necessary in on all cases to achieve the guidance set forth by the R5 handbook, especially for projects with fuel management objectives. The Fire and Fuels Report does explain the need for fuel treatments. Further clarification to this statement has been included in the FSEIS.
Fuel	700	1-58	Alternative B will result in more Brush. Alternative B result in a more open canopy that will allow more bursh to grow, the greater amount of brush cover prevents this alternative from being effective in three ways. The fire in southern California demonstrated that with enough heat, the greater volume of brush is likely to be available fuel, regardless of live fuel moistures alternative B would have higher volume of chaparral. One might question whether fuel model 8 or 9 would best describe the surface fuels when chaparral is expected in the understory.	The comment states that a more open canopy will result in more brush. This statement is true but the mitigation measures of prescribed fire as a secondary treatment to the thinning will keep brush re-growth down. Along with follow up underburning at an appropriate interval for maintenance will keep brush re-growth in check. In addition, as the trees in the DFPZ grow this will also close the canopy, while keeping the crown base height above the threshold level and help reduce the brush re-growth in the future. The fuel model outputs for montane chaparral are based on fire weather conditions described in the Final Watdog Fire and Fuels Report (and its interaction with fuel model 5 as computed by Behave fire modeling software). The Fire and Fuels Report notes the difference in montane chaparral in northern Sierra Nevada from chaparral typical at lower elevations, coastal, and southern regions and the difference in burn severity/intensity citing recent work by Nagal and Taylor (in press). The report also notes that high severity/intensity fires have rarely been encountered by fire management staff working on the Feather River District over the past 35 years. The fact that montane chaparral can burn with low severity, even lower severity than surface fuels of coniferous forests is documented within their 80+ combined years of fire experience in these ecosystems and verified by published works of Nagel and Taylor (in press) and validated with actual fire experience on the ground.

Fuel	700	1-59	<p>The importance of crown fire spread is over-emphasized. The DSEIS still claims that additional trees present in alternatives C and D would make crown fires coming into the DFPZ less effective in moderating fire behavior due to increase in canopy density.</p> <p>However, Table 3-16 states that all areas are currently expected to have passive crown fires under 90th percentile conditions. The use of this for criterion of selecting Alternative B is not appropriate because it is not condition for which the treatment is designed.</p>	<p>The importance of crown fire is not over emphasized. The DFPZ is designed to slow or stop crown fire and provide an advantageous location for fire suppression resources to attack a fire that comes out of the Middle fork of the Feather River Canyon.</p> <p>The DFPZ would be most effective with higher crown base heights and lower canopy density. Less canopy density would allow for more efficient aerial fire suppression and safer anchor points for ground suppression crews to attack a fire. Fewer trees in the DFPZ would lower the possibility of crown fires coming from the slopes below crossing through the crowns in the DFPZ.</p>
Fuel	700	1-60	<p>The Difference in crown Base height between alternative B and C is insignificant.</p> <p>Table 3-17 now indicates the average crown base height for the three alternatives is 7, and 32, 28, and 20 feet for post activities alternative B, C, and D, respectively but the difference in crown base height of 28 and 32 feet, resulting from alternative B and C is insignificant.</p>	<p>It is true that the difference of 28 and 32 feet is not a large difference; however we are required to report our analysis results. Besides increasing the crown base height an additional 4 feet, increase crown base heights would prolong maintenance of fuels treatments.</p> <p>The commenter must remember that we need to make the treatment effective for as long as possible. As time goes on the smaller trees that come up in the DFPZ will begin to grow and become ladder fuels. The need for maintenance will soon become apparent. The higher the base height will give future management a little more time to do the maintenance of the DFPZ. Given future uncertainties in project plans, budgets and legislative direction, it is prudent to plan in this manner.</p>

Subject Code	Category Code	Comment ID	Comment	Forest Service Response
Fuel	700	1-61	<p>The benefit of alternative B on changing condition class is not valid.</p> <p>The DSEIS still erroneously claims on page 3-66 that The combined effect of the action alternative along with the present actions will begin to move the analysis area from condition class 3 towards the desired conditions of 2 or 1.</p> <p>Alternative B would produce the greatest change, followed by C and finally D. However as I stated in my comments dated May 2007, all alternatives would result in a condition Class 1.</p> <p>There would be no difference between alternatives in the ranking of the condition class.</p>	<p>The comment says that all alternatives would result in a condition class one, this is incorrect. Condition class is the departure from an area's historical range of fire frequency and potential risk of losing key ecosystem components.</p> <p>The Watdog area and the Plumas NF in general are in either condition class two or three there are some areas of the Plumas that are in condition class one but this is certainly a small area.</p> <p>The Moonlight fire of 2007 showed that there has been a high departure from historical range of variability; the fire completely devastated the area. There has been thinning in the past inside the Moonlight area yet the fire burned through with extremely high mortality rates in all size classes.</p> <p>As all strata of the fuel layer are treated, surface, ladder, and canopy, the remaining trees would eventually grow and get to the size class 5 or 6, this would bring the area back towards its historical range of condition Class 1. This would allow for the stands to survive a fire in the future.</p>

Fuel	700	1-62	<p>The consequences of a microclimate are understated.</p> <p>The consequences of a microclimate are still understated in the DSEIS the tradeoff between a drier climate due to more open stands and the reduction in surface, ladder fuels, and flame length along with fire suppression production rates is faulty.</p> <p>This likely true when comparing treated vs. untreated conditions, but not always for a comparison between alternatives. This is especially true because the flame length and surface fuels are the same in all comparisons.</p> <p>Fire scientists have clearly addressed the negative effects on fire behavior that can result from the reduction of canopy cover. Please refer to my may 2007 comments to the FSEIS for appropriate citations and quotes from numerous studies on the subject</p>	<p>In Chapter 3, the fire and fuels report addresses the slight wind increase and a small decrease in fuel moisture in group selection and DFPZ but this effect is mitigated by the reduction of surface fuel loadings post treatment.</p> <p>The second part of this question is answered by the 90th percentile weather that is used in the fire behavior modeling, this weather is taken from Pike County remote automated weather station this weather station is located in a totally open stand that has no restriction to the wind or shading it is the worst case weather conditions. The small microclimate effect that the commenter talks about has been analyzed in an even worse case condition than the microclimate would produce.</p>
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