

Appendix B. Disposition of Scoping Comments

On May 19, 2008, a scoping package providing information and seeking public comment on the proposed action was mailed to approximately 107 individuals and groups. This included federal and state agencies, Native American Tribal governments, local government officials, municipal offices, businesses, interest groups, adjacent landowners, and other individuals. A total of eight responses to this mailing were received, with four parties that provided substantive comments and one state agency that provided procedural recommendations. Comment forms were also received from three individuals that expressed support for the project or had questions on the implementation of the project. One comment form was received from an individual requesting a copy of this EA.

Some parties commented on the preliminary project design of the project during the pre-NEPA collaboration process. Correspondence received from those that had requested that their earlier comments be considered in the project scoping exercise is included in the correspondence listing that follows.

The comments and questions addressed in this appendix come from correspondence sources listed in Table 1. Each correspondence comment source was assigned a comment source number that is referenced in the comment disposition summary in Table 2.

Table 1. Summary of Comment Source Correspondence

Comment Source #	Comment Source
<i>Scoping Correspondence</i>	
1	Rick and Barney McClendon; May 29, 2008 Letter
2	Klamath Siskiyou Wildlands Center (KSW), George Sexton; May 30, 2008 Letter
3	American Forest Resource Council (AFRC), Richard Svilich; June 3, 2008 Letter
4	Environmental Protection Information Center (EPIC), Kimberly Baker; June 5, 2008 Letter; Co-signatory: Greg King of the Northcoast Environmental Center (NEC)
5	California Regional Water Quality Control Board (CRWQCB), Kaete King; June 4, 2008 Letter
6	William Wernett; Comment Form received on June 2, 2008
7	Robert Steven; Comment Form received on June 3, 2008
<i>Pre-scoping Correspondence</i>	
8	American Forest Resource Council, Richard Svilich; February 26, 2008 Letter
9	KSW, George Sexton; March 4, 2008 Letter; Co-signatories: Scott Greacen (EPIC), Kimberly Baker (KFA)

Comment Source #	Comment Source
10	Environmental Protection Information Center, Scott Greacen; March 5, 2008 Letter; Co-signatories: Kimberly Baker (KFA), George Sexton (KSW), Greg King (NEC)
11	American Forest Resource Council, Richard Svilich; February 26, 2008 Letter

Table 2 displays how each comment was handled in this environmental analysis. The comments received were organized by resource category, which is displayed in the first column. The second column displays the comments made. Several comments were paraphrased and similar comments combined. The third column indicates the source(s) of the comment by primary party name referenced in Table 1. The fourth column shows the disposition and agency response to each comment. Comments received consisted of issues, general comments, concerns, procedural recommendations, suggested alternatives, questions, or statements of support/opposition.

Issues are points of discussion, dispute, or debate about the proposed action. Issues were categorized as significant or non-significant for this proposal. Significant issues are based on the extent, duration, and intensity of the issue. Significant issues would form the basis for the development of alternatives to the Proposed Action, which in the case of this project, none were identified. Non-significant issues on the other hand were deemed such by virtue of the extent, duration, and intensity of the effect being limited or mitigated to thresholds of acceptability as defined in the LRMP Standards and Guidelines for resource protection. These issues are discussed only briefly in the EA and provide resource context to other mandatory disclosures in Chapter 3.

Table 2. Disposition of Comments Received During Public Scoping

Resource Category	Comment	Primary Party Source	FS Response and Disposition
Biomass Utilization	We ask that you research the feasibility of biomass removal during the NEPA assessment. The value of the commercial timber will also be an important consideration for determining just how much subsidy is required to remove biomass material.	AFRC	Biomass utilization is addressed in the EA more as an opportunity than an expressed outcome of activity fuel treatments in some of the proposed commercial harvest timber stand improvement units, and fuel treatment units. The ability to capture this opportunity is dictated by changes in local demand. Because of the variability in demand and utilization standards for the material made available, it was determined unfeasible to ascertain subsidy for its removal in this EA.
Commercial Timber Sales	How are companies selected for commercial timber harvest?	William Wernett	Prospective bidders are not selected. A commercial timber sale is advertised to the general public to solicit bids for the sale. The agency then awards the timber sale contract to the highest bidder.
Commercial Timber Sales	Who receives the proceeds from commercial timber harvest?	William Wernett	On traditional commercial timber contracts, all receipts go to the National Treasury. A portion of these receipts is then issued to the county in which the timber sale is located. Stewardship contracts are handled differently. Any excess “credits” are held on the Forest for future projects.

Resource Category	Comment	Primary Party Source	FS Response and Disposition
Commercial Thinning Prescription	<p>We ask that you take all references to average spacing out of the proposed action and NEPA document. It would be preferable to only include desired basal area (BA) and/or canopy closure.</p> <p>As we all have seen in the field, the average spacing stated in the proposed action would leave too many trees, not meet an economic sale package, and most importantly would not meet your long term objectives for the development of late-successional habitat. Utilizing BA as the descriptive component for sale preparation personnel would be the best as canopy closure is very difficult to measure accurately in the field.</p>	AFRC	The Forest Service acknowledges the suggestion and describes the target stand characteristics in proposed commercial thinning units in terms of desired basal area per acre and canopy closure down to a minimum of 40% in the EA. An average leave tree spacing guideline of 12-14 feet is still used for proposed timber stand improvement (TSI) units where trees <8" DBH would be removed.
Commercial Thinning Prescription	The proposed action desires variable basal area retention. During our field trip we discussed a designation by description clause that is being used on other Forests to achieve the desired variable spacing. This clause also saves tremendously on sale preparation costs. We aren't requesting its use but would like some consideration when putting the final package together.	AFRC	The proposed action promotes the use of variable density thinning in the commercial thinning prescription to achieve the project's purpose and need. To that end, the Forest Service considered different designation strategies for successfully implementing the prescription, including use of the designation by description clause. Due to contract agreements made between the Forest and Enterprise TEAMS in performing sale preparation work on this project, the final Line Officer decision was made to designate cut trees by marking.
Commercial Thinning Prescription	One of the other objectives within the project area is to promote and maintain hardwoods. It is essential the prescription developed to achieve this allows for enough conifer removal to maintain hardwoods within these stands for an extended time period.	AFRC	Promoting hardwoods is not an expressed objective of this project, rather it is an objective to maintain the existing native species diversity, including hardwoods (see Chapter 2, Commercial Harvest description). The primary hardwood component in these stands is tanoak, with less abundant California bay, chinquapin, and big-leaf maple. The cover of tanoak in these stands is moderate to high. Tanoak and the other hardwood species

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			<p>are shade tolerant, can persist in the understory for decades, and have an enormous capacity to re-sprout if damaged.</p> <p>Variable density thinning proposed for the commercial harvest units would create canopy gaps, thus space into which understory tanoaks can grow and become a component of the overstory. Spacing in the timber stand improvement units with probable subsequent re-entry would also accommodate the growth and development of tanoak.</p>
Commercial Thinning Prescription -- Diameter Cut Limits	AFRC will not support alternatives that set diameter limits within the Prescribed Timber Management land allocation. Diameter limits are arbitrary designations that do not have any silvicultural merit. They are counterproductive to meeting your identified purpose and need.	AFRC	<p>The Grande and Jones subdivisions occur within a Late-Successional Reserve (LSR). LRMP Standards and Guidelines for LSRs limit the cutting of trees over 20" DBH. The South subdivision is not within the LSR and therefore not subject to this diameter cut limit. With the exception of predominant trees, there is no diameter limit set for this subdivision. Regardless of the subdivision, no predominant trees would be removed, which is consistent with the purpose and need for this project.</p>

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Commercial Thinning Prescription -- South Subdivision	<p>The Scoping Notice mentions that trees over 20" may be extracted in the South Subdivision because it is within Matrix. We are concerned that the project area is deficient in mature stands and that removal of large trees would be contrary to the purpose and need of the project and to the spirit of HFRA. Please consider an alternative that does not extract large trees (>20"). The Scoping notice states that the units proposed for thinning activities are plantations and young even aged stands, is this true also for the stands within the South Subdivision. We ask that the agency is specific as possible when describing current stand conditions in the EA.</p>	EPIC	<p>One unit (CH-60) in the South Subdivision has trees greater than 20" dbh that may be removed. The stand is a young, early seral stage stand, with average tree size of 15" dbh. Maximum tree size that may be removed is approximately 24", provided the largest or healthiest trees are retained. The 20" dbh cut limit required in the LSR to meet the S&G of the NWFP is not based on silvicultural criteria and does not apply in this unit.</p> <p>The purpose and need for the proposed action is to accelerate the development of late-successional habitat. To that end, commercial thinning prescriptions were designed to maintain the largest and healthiest trees in the stand. Under the prescription, the limited number of trees 20 inches dbh or greater in that one unit (natural young early-seral stand) would only be taken when removing them would improve growing conditions for the neighboring larger, dominant trees.</p> <p>The alternative was considered yet not further evaluated because it would not fully achieve the purpose and need for the project. Moreover, it would have limited effectiveness in addressing the concern for the late-successional stand deficiency inherent to the project area.</p>
Commercial Thinning Prescription	<p>How is the selection of commercial timber harvest determined?</p>	William Wernett	<p>A certified silviculturalist used existing stand information and aerial photography to determine those areas that were commercially viable. Then a field review was conducted to verify stand conditions to finalize silvicultural prescriptions to fulfill stand-level objectives based on the purpose and need of the project. The final prescriptions utilize selection criteria for both leave trees and cut trees. Designation of commercial harvest cut trees is done at that time.</p>

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Economic Viability	Limit the use of hand pile and burn. These costs become very expensive and will quickly take away from any of the value that may be gained from commercial products.	AFRC	Mechanical treatments are limited to a few units or those portions of units close to the road where slopes are less <35%. It is recognized that hand removal methods may result in higher costs compared to mechanical treatments and particularly understory burn treatments. However, factors such as topography, LRMP Standards and Guidelines, project design features, and existing fuel loading, make hand piling the most effective means of initially addressing fuels.
Economic Viability	We ask that you carefully assess and review proposed restrictions and mitigation items. It must be clearly documented they are needed. Additional mitigation items will require contractors to incur additional costs for a project that may have marginal economics.	AFRC	The FS acknowledges the concern over prescribing mitigation measures that incur additional costs to the project. Project design features and mitigations are often founded in LRMP standards and guidelines or to reduce the risk of negative effects to a particular resource. The rationale for a particular design feature is captured either in the EA or in the specialist report that supports the information in the EA.
Economic Viability -- Appraisal and Contract Package	When preparing the sale package and appraisal please use the most current timber values, harvest system costs, and do not add any fluff to the package. Unneeded trust fund collections (KV/BD) will significantly detract from the sale offering.	AFRC	The FS acknowledges this desire to use the latest costs and benefit values during the appraisal for project. In an effort to develop attractive bid offerings during a down market, needs for trust fund collections are scrutinized closely and would not be accounted for in the appraisal unless the need for resource protection is warranted.
Fuels - Canopy Closure	In northwest California, partially thinned stands burned more intensely and suffered higher levels of tree mortality than unlogged areas (Weatherspoon and Skinner 1995). In eastern Washington, thinning that was intended to reduce fire hazard had the opposite effect, as logged areas showed increased rates of fire spread and greater flame lengths (Huff et al. 1995). To the extent that "uneven-age management" strives to create "open-grown" forest	EPIC	<p>Fuel treatments for activity generated fuels are conducted simultaneously or immediately following the thinning treatments. Many stands that are being commercially thinned would require whole tree yarding or yarding of tops, which would further reduce fuels hazard in the units. The treated stands would still fair better in the event of a wildfire after thinning treatments than if no thinning had occurred.</p> <p>Several of the units Weatherspoon and Skinner studied had no fuels treated prior to the wildfire occurrence. Those units that did have follow up fuels treatment were either treated with a lop and scatter prescription, and/or fire</p>

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	<p>conditions, changes to fire climate and intensified fire behavior are likely to occur. The forthcoming NEPA should discuss the potential for reduced canopy closure to increased solar radiation, ground level wind speed, surface fuel moisture and flammability to result from proposed density management.</p>		<p>was allowed to creep into the units from roadside pile burning operations or from broadcast burning in other units, mimicking a sparse understory burn that likely did not consume an adequate amount of the activity fuel to be fully effective in reducing loading. Additionally, the harvest prescriptions in the study favored removal of overstory trees, leaving a higher percentage of smaller and more susceptible trees.</p> <p>FFE/FVS simulations show that the treatments proposed in the Big Flat project would reduce fire behavior in these previously managed plantations compared to simulations modeled in untreated stands. The creation of “open grown” stands is not the project’s desired condition or proposed outcome; however, it is recognized that a reduction of crown bulk density and canopy closure may allow for minor increases in solar radiation, mid-flame winds, and subsequent reduction in fuel moisture. However, these effects would be negligible and likely negated within a short time frame as stands respond with good growth and successive increases in canopy closure. Williamson (1982) documented good growth response after thinning in up to 110-year old Douglas-fir stands.</p>
<p>Fuels - Mastication</p>	<p>We greatly prefer hand work to mechanical mastication. Hand work provides greater employment opportunities while avoiding many of the detrimental impacts of Slashbuster mastication.</p>	<p>KSW</p>	<p>Mastication acres are reduced from the level identified in the Scoping Letter; its application is now limited to certain roadsides in two TSI units (approximately 30 acres). Low-pressure mechanical equipment similar to a mowing machine rather than a Slashbuster would be used to cut live vegetation. Project design features pertaining to soil productivity and wildlife would also apply to areas subject to mastication (e.g. soil porosity and log retention standards).</p> <p>Hand work primarily is incorporated into the majority of activity fuel treatments in the commercial and timber stand improvement units in the form of hand piling and burning or lop and scatter treatments. Hand work is also incorporated into a majority of the fuels reduction treatment units (approximately 85%) in the form of hand cutting, hand piling and burning, and hand line construction. So while fuels treatment by mechanical means</p>

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			is still identified for a portion of the units or as a treatment component, its application is relatively minor compared to treatments using hand methods.
Fuels -Canopy Closure	We are very concerned with taking the canopy down to 40% because of increased fuels risk and wildlife habitat need. Assessment needs to be done on the effects of canopy on fire behavior and incorporate peer reviewed literature. For example Agee (1997) concluded that reducing ground fuels was the most effective treatment to prevent crown fires, while thinning canopies results in hotter, drier, windier conditions on the ground surface. This is supported by a USDA and USDC document which describes the closed canopy forest as providing a variety of benefits that decrease the risk of forest fires, and concludes that logging and logging roads change fire prevention characteristics of the closed canopy and increase the chance of wildfire.	EPIC	<p>The 40% minimal canopy closure level applies to commercial harvest units < 80 years of age or timber stand improvement units that are primarily even-aged plantations or natural stands in the early seral stage of development. This is the lowest canopy closure that can be reduced in any area, not a universal prescription. For the majority of the fuelbreaks, no overstory canopy would be reduced. Relative to fuel treatment units in habitat considered suitable to wildlife, no overstory trees or overstory canopy would be removed and overall canopy closure of no less than 60% should be maintained (see EA Project Design Features).</p> <p>In reference to Agee (1997), it is true that opening up canopies could result in an increase in wind (a drying agent) and an increase in solar radiation below the canopy which in turn alters micro-climatic conditions near the forest floor (van Wagtenornk 1996), but there are settings, thresholds and variables to consider.</p> <p>Opening canopies or reducing crown density could reduce the incident of crown fire spread and potential stand-replacing fires under certain wind conditions (i.e. wind speed). Units where crown cover may be reduced to 40% are even-aged stands that are primarily plantations with considerable crown-to-crown contact. Application of a variable density thinning in the commercial harvest units would result in creating gaps to promote horizontal diversity and clumps of trees to promote snag development. Timber stand improvement units are likewise densely stocked, thus vulnerable to stand-replacing crown fires. The prescription calls for opening the canopy to reduce crown-to-crown contact by removing subordinate trees less than 8" DBH. For either the commercial harvest or timber stand improvement units, the forest floor would not be uniformly exposed to the drying agents of wind or solar radiation.</p> <p>The structure of the fuels on the forest floor is a variable that would</p>

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			<p>influence burn intensity. If fuels are packed tightly or are less porous and close to the forest floor, they may burn at lower intensities than fuels that are arranged in a more open fashion (thus subject to drying on more surfaces of the particular fuel) (Agee et. al. 2000). Another variable that influences the conditions on the ground surface is the herbaceous response to canopy opening. Canopy gaps can stimulate germination of forest floor plant species. Depending on the species, the foliar moisture content of these species could have a dampening effect on subsequent fire behavior (Agee et.al, 2000).</p> <p>So, it is recognized that opening a canopy could result in forest floor drying and thus the potential for greater surface fire intensities, but the prescriptions described above would not lead to the uniformity of drying conditions suggested. Rather, the prescriptions reduce the incidence of crown fires (by reducing crown density in even aged stands) and shift the structure from densely stocked, even aged stands to stands with increased horizontal and structural diversity.</p> <p>Agee (1999) concluded that “a well-designed fuelbreak will alter the behavior of wildland fire entering the fuel-altered zone. Both surface and crown fire behavior may be reduced. Shaded fuelbreaks must be created in the context of the landscape within which they are placed. Landscape-level treatments such as prescribed fire can use shaded fuelbreaks as anchor points, and extend the zone of altered fire behavior to larger proportions of the landscape... Therefore, reducing surface fuels, increasing the height to the live crown base, and opening canopies should result in (a) lower fire intensity, (b) less probability of torching, and (c) lower probability of independent crown fire.”</p>

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Landings	Include the analysis of larger landings if whole tree/top removal will be required.	AFRC	The proposed action was developed to maximize the use of existing landings to the greatest extent possible. Aside from requiring larger landings, use of other local existing landings outside of units prescribed whole tree yarding and yarding of tops is also a viable option.
Late-Successional Reserve (LSR)	<p>Average spacing stated in the proposed action would leave too many trees, not meet an economic sale package, and most importantly would not meet your long term objectives for the development of late-successional habitat. Utilizing BA as the descriptive component of the sale preparation personnel would be the best as canopy closure is very difficult to measure accurately in the field.</p> <p>We have stated several times that re-entries into LSRs for habitat development should be minimized and completed before the trees reach a size where entries would be more difficult to achieve.</p>	AFRC	<p>The scoping document did mention an average spacing for the commercial harvest units, but the EA did not carry this forward. Instead, the desired residual stand description for prescribed treatments in the commercial harvest units rely on general canopy closure guidelines down to a minimum of 40% and basal area unit of measure (i.e. 80-120 square feet per acre), as suggested..</p> <p>A single rather than multiple re-entries is probable for the commercial harvest units that are currently 35-45 years of age. This would occur before the stands reach 80 years of age. The proposed variable density thinning in stands currently <80 years old is expected to create the desired horizontal and vertical diversity without the need for re-entry for at least another 20-30 years.</p>
Logging Systems	During the NEPA analysis do not be explicit on the types of logging systems to be used during implementation. There are many alternatives available to accomplish the desired result. Allow purchasers the flexibility to utilize equipment that will most effectively and efficiently accomplish the work. We discussed the use of Yoders, feller-bunchers, tractors, end lining, etc.	AFRC	The EA prescribes tractor skidding or mechanized harvester on slopes <35% and cable yarding and tractor with 100-foot endlining on slopes >35%. Type of equipment is not specified, thus allowing the purchaser the flexibility suggested in the comment.

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Monitoring	<p>We also suggest as per the LRMP and ROD that this project incorporates some level of monitoring, more than what is suggested in the Scoping Notice, for instance: developing photo points, documenting effects to RR's, sensitive and S&M species and document evaluations made in the field a compile into one report/document. Because this is an HFRA project we highly recommend using Firemon for effectiveness monitoring.</p>	EPIC	<p>Monitoring is addressed in Chapter 2 of the EA. Effectiveness monitoring associated with Best Management Practices (BMP's) will be conducted according to established protocols. These practices include effectiveness monitoring of riparian reserve designations. While not required, the monitoring section also identifies post-harvest field reviews by specialists to evaluate the effectiveness of project design features. Firemon is applicable to monitoring and evaluating post-wildfire conditions, not prescribed fuels treatments; however, photo point monitoring is being considered to monitor the effects of the fuels and thinning treatments in relation to meeting project objectives.</p>
NSO Critical Habitat	<p>We are concerned about canopy removal in suitable and Critical Habitat for the NSO. The EA should map location and amount of existing habitat. We do not support 40% canopy within suitable and Critical Habitat nor degrading or downgrading suitable or Critical Habitat. The EA should be very clear about what is being proposed in these areas. Are there any other special habitat management zones within the project area?</p>	EPIC	<p>The entire project area occurs within a NSO Critical Habitat Unit (CHU). Primary constituent elements (PCE) of CHU include forested stands that qualify as nesting/roosting ("suitable habitat", mid-mature through old growth seral stages), foraging (early-mature stands 71-110 years old, with trees an average 18" dbh), or dispersal habitat (trees > 11 inches dbh with > 40% canopy closure). Most of the plantations that will be commercially thinned meet the definition of dispersal habitat; however, these are considered low quality because they are densely stocked and even-aged. Thinning may degrade 503 acres of dispersal habitat; however, the project would maintain 40% or greater canopy closure in all units. Dispersal habitat would remain functional post project. No PCE of CHU would be removed. The project would treat younger stands to accelerate the development of late-successional habitat, which will decrease fragmentation and increase patch-size of existing late-successional habitat. The project would improve and accelerate habitat conditions for the NSO in the CHU. FWS concurred with this determination.</p>

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Port-Orford-Cedar	We are interested in learning what site-specific measures will be taken to ensure that project activities will not spread POC root diseases. Do not rely solely on generic mitigation measures. Provide a site-specific analysis of where POC is present and how the spread of the disease will be avoided.	KSW	The mitigation measures used to protect POC are applied to the project area as a whole, which is critical to successfully protecting POC. Requiring any vehicles or equipment be washed prior to entering the project area, limiting operations to the dry season, and requiring operation occur in uninfected areas before infected areas have all proven to be effective in preventing the spread of POC into new areas. In addition to these general mitigation measures, POC stands in units were primarily found within RR and were included in RR equipment exclusion buffers. Other units were dropped during the field review and planning stage due to POC concerns. The risk of spreading POC root disease through project implementation is low.
Port-Orford-Cedar	The forthcoming EA should map out all know POC stands, infected and uninfected. The TSO should be made aware of where these stands are in order to protect uninfected stands. This should also be included in a monitoring plan.	EPIC	<p>A map of all infected and uninfected POC stands in the project area has been provided as requested in Appendix D of this EA.</p> <p>POC protection measures are standard procedures for all projects on the NRA, and are written into the contract.</p> <p>The Sale Administration staff would have full knowledge of the environmental assessment and the contract to apply the prescribed provisions regarding POC.</p>
Project Size	<p>We feel this project needs to treat as many acres as possible in order to fully meet your designated purpose and need. We encourage you not to reduce the project any further.</p> <p>As project size and volumes shrink during the NEPA analysis it may not individually seem to have any impact on industries ability to implement. But cumulatively, as all projects shrink, it has a major impact on the ability to maintain adequate infrastructure to accomplish your land management activities.</p> <p>We ask you to develop prescriptions that truly meet the particular needs and desired condition of the</p>	AFRC	The FS invests a lot of resources up front in designing an economically viable project that would achieve the identified purpose and need while being in full compliance with the LRMP before the NEPA process is launched with the initiation of public scoping. In the case of this project under the HFRA authorities, the proposed action also incorporated design features that were suggested from various stakeholder groups. Once public scoping is initiated, the proposed action remains static during the environmental analysis under NEPA unless new information comes to light that would compel minor changes.

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	stands and land base. We have recently seen too many instances where prescriptions are developed to address public concerns from entities that have personal agendas and biases and have no background or knowledge of the forest environment and ecosystem. Prescriptions developed in these instances do not meet the needs of the stands, land allocation standards and guides, project purpose and need, and long term forest protection and health.		
Riparian Reserves (RR)	We are very concerned about potential yarding activities in and through RRs. Tractor yarding is wholly inappropriate unless pre-existing skid trails exist that can be ripped post project. Skyline yarding often results in 10-14 clearcut swaths in the yarding corridors. These swaths often directly inhibit attainment of the Aquatic Conversation Strategy Objectives	KSW	All Riparian Reserves have a no-treatment buffer established of a minimum of 50 feet (or break in slope, whichever is greater), with equipment exclusion requirements in the remaining RR (approximately 160 feet total RR width). Mention of tractor yarding in RRs in the scoping document (under RR BMPs) was in error. As correctly stated in this EA, no heavy equipment, including tractors, would operate within RRs. Any yarding within the RRs would be accomplished by cabling trees out of RRs. Any trees damaged by yarding in the RR and not marked for removal would remain onsite. Yarding corridors would not result in clear cut swaths because the majority of the material to be harvested from RRs is less than 20" dbh and variable density marking guidelines would create small gaps in canopy closure and therefore would not inhibit the attainment of ACS objectives.
Riparian Reserves (RR)	Please give a detailed map of RR's in the EA and delineate whether they are intermittent, ephemeral or unstable areas. Please also give a site-specific description of each RR that is proposed for entry. The Scoping Notice states that RR designation width is 160 ft. and then states that core no-management zones can be as close as 25 ft. Given that the project is within Key 1 Watersheds we ask	EPIC	A map of all RRs in the project area has been provided as requested. All RRs have a no-treatment buffer established of a minimum of 50 feet (or break in slope, whichever is greater), with equipment exclusion requirements in the remaining RR (approximately 160 feet total RR width). The 25-foot buffer mentioned in the scoping document was in error. In addition, there are more restrictive buffer widths on the larger creeks and the river in the project area (660 feet on lower Hurdygurdy Creek, 300 ft on Blackhawk, Jones, and Muzzleloader creeks and 0.25 mile on the South

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	that the EA as specific as possible when describing current condition and proposed entry into RR.		Fork Smith River). All RRs proposed for commercial and precommercial thinning are young, even-aged stands. These stands were clear cut up to 40 years ago (see the RR baseline discussions and tables in the EA and the Hydrology and Fisheries Assessment for description of current stand conditions). Past management practices did not buffer riparian areas; therefore they require thinning to improve stand conditions and to meet ACS objectives, including the future recruitment of large woody debris. Implementation of the project would maintain and improve riparian habitat conditions.
Riparian Reserves (RR)	Riparian Reserves were set up not only for protection from sediment but also as corridors for wildlife. We are concerned that activity within recommended guidelines of the NFP may disrupt wildlife travel corridors. This issue should be discussed in the EA	EPIC	The majority of RRs within the project area are small intermittent and ephemeral streams that have very limited “true riparian vegetation”, and only within 10-40 feet of the stream channel. The remaining vegetation types within the rest of the 160-foot RRs are composed of drier upland vegetation types. All RRs have a no-treatment buffer established of a minimum of 50ft, and at least 60% canopy closure must be maintained in the remaining RR (approximately 160' total RR width). Treatments are designed to benefit RRs and accelerate tree growth and the development of late-successional habitat. Implementation of the project would maintain and improve riparian habitat conditions for wildlife.
Roads	Please examine opportunities to decommission un-needed roads in the project area. The proposed use of non-system roads and currently closed roads concerns us, but we are willing to live with since they will subsequently be decommissioned. However we would like to see the FS reciprocate by decommissioning additional un-needed roads in the project area.	KSW	Decommissioning roads not used for the project is outside the scope of this project; however, the District is currently evaluating the entire NRA road system under the Smith River NRA Road Management and Route Designation Project EA and will making additional decisions on roads (including decommissioning) in the near future.

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Shaded Fuelbreaks	Please be specific in the EA as to where shaded fuel breaks are located. The Scoping Notice states that they are along the road system and on ridge tops. Are they considered to be a majority of the project area? How do they differ from the rest of the project area? Also please specify the proposed maintenance schedule and how maintenance will be funded?	EPIC	<p>Shaded fuel breaks are located on County Road 405, and Forest roads 16N02, 16N03, 15N38, and 15N39 (Figure 1 of the EA). Roadside shaded fuelbreaks comprise approximately 14% of the project area. All other “stand alone” fuel treatment units not paralleling roads comprise approximately 21% of the project area. Although 14% of the project area is prescribed for roadside shaded fuelbreaks, the remainder of the fuel treatment units located away from roads and connected to roadside shaded fuelbreaks would have similar prescriptions to the roadside shaded fuelbreaks, effectively receiving a “shaded fuelbreak” type of treatment. These additional fuel treatment areas were designed to enhance the roadside shaded fuelbreak in strategic areas (i.e. up to ridgetops, adjacent to private land etc).</p> <p>The roadside shaded fuelbreaks associated with the Big Flat Project would be effectively augmented by the other activities occurring in the project area which will create a more area-wide effect, including the “stand alone” fuels treatment units, and activity fuels treatments in the commercial and precommercial thinning units. Although the prescriptions for the thinning units will meet different objectives, crown bulk density will be reduced and crown bulk height will be increased, also enhancing the effectiveness of the shaded fuelbreaks.</p> <p>The need for maintenance activities on the fuelbreaks would be monitored; however the expected interval for maintenance activities is between 5 and 10 years. Fuelbreak maintenance would be accomplished using appropriated funding.</p>
Shaded Fuelbreaks	Linear fuelbreaks have been shown to be somewhat ineffective at stopping fires under extreme weather conditions because of spotting, whereas area-wide treatments provide multiple options for fire containment. The canopy and habitat removal associated with fuelbreak construction will not contribute to the stated purpose and need for this project involving the development of late-	EPIC	Fuelbreaks are not designed to stop a fire, but to slow its spread and allow fire suppression resources a higher probability of successfully attacking an unwanted fire. The primary reason for fuelbreaks, as well as any other type of fuel treatment, is to change the behavior of a fire entering the fuel-altered zone. Fuelbreaks may also be used as points of anchor for indirect attack on wildland fires, as well as for prescribed fires (Agee et al, 2000).

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	<p>successional forest habitat conditions in this LSR.</p>		<p>Shaded fuelbreaks have proven to be effective. An evaluation of the fuel treatments on the Six Rivers National Forest Megram fire in 1999 (Agee and Skinner 2005) showed that stand replacement fires outside of the fuelbreaks quickly transitioned to surface fires in the fuelbreaks and that fire severity was significantly reduced.</p> <p>The fuelbreak construction called for in this project would be shaded fuelbreaks that would retain upper canopy closure. The shaded fuelbreaks would vary in width based on such factors as topography, vegetation type, and proximity to private lands.</p> <p>A fire moving through forested areas may move as a surface fire, an independent crown fire, or as a combination of types. Crown fires are initiated due to low moisture content of the surface fuels (which influences fire intensity and rate of spread) and the height of the forest canopy above the ground. Modifying one or both of these factors can reduce the potential to initiate a crown fire.</p> <p>Fuel treatment prescriptions do not include canopy removal. The prescription focuses upon reducing surface fuels and increasing the height to the live crown base (pruning lower branches) and opening canopies would result in lower fire intensity, less probability of torching, and lower probability of independent crown fire.</p> <p>Maintaining overstory canopy closure while removing surface and ladder fuels (brush and small diameter trees up to 8" dbh) would create an effective fuelbreak and would help reduce the potential for the more frequent passive or active crown fires. This fuelbreak design has been proven to be effective in slowing fire spread in other areas on the Forest (Jimerson 2001 and Agee and Skinner 2005).</p>

Resource Category	Comment	Primary Party Source	FS Response and Disposition
Soil Productivity – Jackpot Burning	<p>The NEPA document must analyze the extent of damage to soils caused from jackpot burning.</p> <p>We ask that the forthcoming NEPA document analyze the extent of damage to soils caused from jackpot burning.</p>	EPIC	<p>Jackpot burning is not a prescribed fuel treatment, but a potential consequence of underburning operations when the burn passes through concentrations of existing fuels. Incidences of jackpot burning would lead to sites of higher intensity burn, than that in the surrounding area. The soils and geology project report analyzes the effects of fuel treatments on the soil resource and states:</p> <p>Underburning in general would not cause additional soil disturbance within harvest units or in areas outside the harvest units. Heat penetration into the surface soil during burning would be minimal to none. Generally, soil pH, phosphorous, and exchangeable cations (potassium, calcium, and magnesium) would increase in the soil immediately after burning.</p> <p>Hand piling and burning would consume from 1 to 25% of the piled area. Nutrient loss of the burned pile area will not have a significant effect on soil productivity (loss of nitrogen). Other nutrients, such as cations, would increase in the soil due to leaching.</p>
Special Status Species	<p>Have all S&M, Sensitive species and MIS species been considered? The EA should analyze and disclose effects of proposed activities on these species.</p>	EPIC	<p>Direct, indirect and cumulative effects to threatened, endangered, and Sensitive species (TES), Management Indicator Species (MIS) and Survey and Manage Species (S&M) for the Big Flat Vegetation and Fuels Management Project were analyzed and the findings disclosed in Chapter 3 of the EA.</p>
Stewardship Contracting / Collaboration	<p>Since the project area is within the Community Wildfire Protection Plan we highly recommend using Stewardship authorities whenever possible. We recommend that the Forest Service make a strong attempt to engage local fire-safe/watershed councils and encourage community involvement</p>	EPIC, KSW	<p>Stewardship contracting is not a currently viable implementation option due to market conditions. The Del Norte Fire Safe Council and local community were involved in the development of this project. Moreover, outreach to prospective stakeholders and convening public forums to solicit project design ideas was part of the collaboration process used to involve the local community.</p>

Resource Category	Comment	Primary Party Source	FS Response and Disposition
Water Quality	All forest projects must comply with all substantive and procedural requirements of the Porter-Cologne Act and the Basin Plan. Additionally, the BFP must comply with the Regional Water Board's Categorical Waiver for Discharges Related to Timber harvest Activities on Federal Lands managed by the USDA Forest Service in the North Coast Region, Order No. R1-2004-0015.	CRWQCB	The proposed action is in full compliance with all the requirements of the Porter-Cologne Act and the Basin Plan, as well as with the Board's Categorical Waiver under Order No. R1-2004-0015). A waiver application will be filed upon signature of the Decision Notice for this project EA.