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First name: George
Last name: Sexton
Organization: KS Wild
Title: Conservation Director
Comments: "Salvage logging of large snags and down boles does not contribute to recovery of late-successionalforest habitat; in fact, the only activity more antithetical to the recovery process would be removal ofsurviving green trees from burned sites. Large snags and logs of decay resistant species, such asDouglas-fir and cedars, are critical as early and late successional wildlife habitat as well as forsustaining key ecological processes associated with nutrient, hydrologic, and energy cycles."-Dr. Jerry Franklin, 1/20/04."When wildfires do occur on federal lands they create an opportunity for development of high-qualityearly successional ecosystems. Intensive salvage operations and associated site preparation and treeplanting are not appropriate if a management goal is to utilize such events to provide for earlysuccessional ecosystems. Salvage and related activities can greatly reduce the potential for fulldevelopment of early successional ecosystems by removing important legacies, eliminating importantconstituent species, and abridging the duration of early successional development."-Dr. Jerry Franklin and Dr. Norm Johnson, 2/15/12.Dear Forest Service Planners,On behalf of the Klamath Siskiyou Wildlands Center (KS Wild), the Environmental ProtectionInformation Center (EPIC), the Klamath Forest Alliance (KFA), and the Mt. Shasta BioregionalEducation Center (MSBEC) thank you for the opportunity to provide comments regarding theAntelope and Tennant Salvage Logging Project Environmental Assessment (EA).Snag Retention within Logging UnitsBased on the content of the Antelope Tennant Forest Service salvage logging scoping proposalthat was released last year, our organizations were under the impression that the agency intendedto retain an average of 10-14 snags per acre to provide for forest structure, wildlife habitat andnutrient cycling within the conifer plantations that will develop after the proposed salvagelogging. While we appreciate the agency's discussion with us regarding this issue after the EAwas released for commenting, we are not able to locate anything in the EA or supportingdocuments addressing the rationale for the dramatic decrease in snag retention that occurredbetween the scoping notice and the release of the EA. The primary reference that we are able tolocate in the Administrative Record regarding the significant reduction in snag retention islocated at page 35 of the Scoping Outcome Summary in which the Timber Products Companycomplains about the initial snag retention proposal and suggests reducing the retention standardto 5 snags per acre- the very minimum level to barely, potentially, meet the standards andguidelines contained in the Klamath National Forest Management Plan.It is likely within the Forest Service's authority to retain the very bare minimum snag retentionnumbers allowed by the Forest Plan even though that plan recommends a range of retention thatis better reflected in the agency's scoping proposal. However, it is arbitrary and capricious of theKNF to propose a moderate level of snag retention in the project scoping notice and thensignificantly reduce that retention level at the behest of the timber industry in the EA withoutaddressing and analyzing the reason for the change and the environmental tradeoffs involved.The EA is simply silent as to the reason for the dramatic reduction in snag retention. The singleaction alternative developed by the Forest Service provides the decision maker and the publicwith a "take it or leave it" approach in which the tradeoffs of implementing the greater (but stillmoderate) snag retention levels that were proposed by the agency in its scoping document areneither disclosed nor analyzed.Restoration and Public InvolvementDue to the abbreviated nature of the EA, it is difficult for the public to fully assess the direct andcumulative impacts of the proposed logging, road construction and plantation establishmentactivities. The project map on the Forest Service web site currently provides few detailsregarding site-specific timber sale activities. For instance, we are unable to determine thelocation (and hence the impacts) of proposed new logging roads and log landing sites.Please note real restoration is more than just logging. Activities such as log landingestablishment, timber yarding and timber haul and machine piling do little to restore thewatershed, soil and wildlife values of post-fire forests. While we support restoration activitiessuch as meadow enhancement and the utilization of prescribed fire, the Antelope Tennant projectappears to focus primarily on post-fire salvage logging and green tree mistletoe logging onapproximately 20,000-acres. Much of the logging will be ground-based and facilitated by newlogging road construction. We respectfully urge the KNF to more fully engage in the statedrestoration objective for the project rather than focusing primarily upon logging activities.Beschta and the Range of Action AlternativesThe Antelope and

Tennant Salvage Logging EA does not provide the public or the ForestService decision maker with a reasonable range of action alternatives that illuminate thetradeoffs associated with controversial post-fire logging activities such as road construction,logging, yarding, snag removal and log landing establishment. Rather than develop and considera range of action logging alternatives designed to achieve the project's "restoration" purpose andneed the EA contains a single proposed action to the exclusion of alternative Forest Service postfiremanagement strategies that have been successfully implemented elsewhere in the region.The KNF's "Scoping Outcome Summary" makes reference (at page 4) to the allegedconsideration of an action alternative based upon the peer-reviewed studies by Beschta et al 2004that were submitted by our organizations along with our scoping comments of June 16, 2022.Over the past 18 years the Beschta recommendations have served as the basis for successfulpost-fire management proposals on dozens of Forest Service and Bureau of Land Managementlandscapes and have provided a useful comparison point for analysis for many public landmanagers. Yet page 4 of the Scoping Outcome Summary indicates that the KNF refuses toanalyze or develop any action alternative intended to meet the project's restoration purpose andneed "in detail" other than the inevitable proposed action. This subverts the very purpose ofNEPA. The public commenting and agency analysis process codified by NEPA is not intended tojustify land management decisions that have already been made- rather the NEPA process isintended to inform the public and the decision maker of environmental impacts and tradeoffsthrough consideration of a reasonable range of alternatives in order to foster informed decisionmaking and transparent management of public lands. Please note that while in the ScopingSummary the KNF clearly stated its refusal to develop and analyze an action alternative based onthe Beschta publications, the EA itself fails to even include the publications in its bibliography.Hence the agency has not considered the best available science in violation of NEPA andNFMA.Please note that as reflected in the peer reviewed Beschta publication that was submitted by ourorganizations to the Forest Service during the scoping period (but that does not appear the EAbibliography) the best available science indicates that the purpose and need of post-firerestoration is best met by implementing project activities that avoid ground-based salvagelogging, road construction and cattle grazing.EIS and SignificanceIn our review of a multitude of post-fire logging proposals over the past 20 years this is the firstdraft Finding of No Significant Impact (FONSI) that we have read that does not attempt toaddress the "significance factors" that determine when an agency action involves actions -suchas thousands of acres of logging and miles of new road construction- that necessitate completionof an Environmental Impact Statement (EIS) as opposed to an EA. The draft FONSI contained inthe Antelope Tennant salvage logging EA consists of conclusory statements unsupported byanalysis or data. Simply declaring that approximately 20,000 acres of logging and 8 miles ofroad construction will not result in significant impacts to the environment does not satisfyNEPA's "hard look" requirements or address the EIS significance factors identified by theCouncil on Environmental Quality (CEQ).20,000 acres of proposed logging and 8 miles of logging road construction will directly andcumulatively result in significant impacts to the environment. Please note that "even age"logging is proposed to remove mistletoe habitat in the remaining unburned green forest stands,that hazard tree logging is proposed within the Callahan Flow Inventoried Roadless Area, thatground based machine piling is proposed on recovering post-fire soils and that dozer and tractorsoil ripping may occur on an undisclosed number of acres at undisclosed locations. Finally,please note that the project area is "highly susceptible" to invasive plant species infestations andthat the proposed action involves significant and widespread ground disturbance. Thesesignificant impacts and actions necessitate completion of an EIS prior to the logging and roadconstruction occurring.Address Logging SlashThe intent of snag/tree retention is to provide the habitat, hydrological and soils benefits of largediametercoarse woody debris. Please ensure that the project does not result in the creation andretention of large amounts of logging slash throughout treated areas. We are concerned about theagency's ability to conduct needed follow-up pile and prescribed fire treatments.Mistletoe Logging"The benefits of dwarf mistletoe as wildlife habitat and a food source are well known. Not only does thepresence of mistletoe contribute to stand diversity through the creation of gaps, structural irregularityand contribute to the accumulation of snags and down wood, it also serves as habitat for a variety ofmammals, birds and arthropods. In particular, in the Siskiyou Mountains, large Witch's brooms serveas nest platforms for spotted owls and raptors."-Sterling Sweeper EA page 3-9. Medford District BLMPlease note that mistletoe provides many of the stand benefits (diversity, gaps, irregularity, snagsand down wood) that silvicultural prescriptions are often designed to achieve. Hence the projectrestoration purpose and need might be better met by retaining, rather than removing, mistletoeinfected

trees.The KNF analysis of mistletoe fails to convey needed quantitative and qualitative information.How many mistletoe trees will be logged? Where are they located? What is the environmentalbaseline? How many wildlife species will be impacted by mistletoe removal? The requiredanalysis is largely absent from the EA.Mistletoe does not inhibit forest health. Mistletoe does reduce the growth rate of the host trees,but that is only a forest health problem if one believes that fiber production is the sole measure offorest health. Mistletoe creates complex habitat structures such as brooms and snags and is anatural and vital part of the ecosystem.According to the Big Butte Springs EIS (a project on the High Cascades District of the RogueRiver-Siskiyou National Forest), "dwarf mistletoe provides a source of vertical and horizontaldiversity through gap creation, and production of snags, brooms and down woody material.Many species of mammals, birds, and anthropods can take advantage of the favorable structuremistletoe infection provides, while other species use dwarf mistletoe plants or host tissuesassociated with infection for food." DEIS II-46. These habitat benefits provided by mistletoeinfectedtrees, increase, rather than decrease, the value of residual mature trees in forest stands.Please see:http://www.fs.fed.us/r6/rogue-siskiyou/projects/planning/big-butte-spring.shtmlAdditionally, logging practices often contribute to the spread of dwarf mistletoe. When soils aredisturbed and ground cover is removed during logging operations, stand densities increasebecause pine seedlings readily germinate and grow on bare mineral soil. Such disturbances areparticularly prevalent when heavy machinery is used to remove trees.Logging may increase mistletoe in the remnant stand, rather than decrease it. Many mistletoeseeds that infect host trees do not readily produce aerial shoots; these are known as "latentinfections" (Knutson and Tinnin 1980). After thinning, 90 percent of all latent infections willappear within five years (Shea 1964).To suppress mistletoe, further logging would likely be necessary after this entry, which is aforeseeable cumulative impact that must be disclosed in the forthcoming NEPA analysis.Mistletoe seed production will increase after the proposed entry with improved nutrition of theinfected leave trees that do not now display symptoms of infection. More open stands willpromote regeneration, and the new trees can become infected by the mistletoe seeds droppedfrom infected leave trees. Moreover, increased mortality can occur in the remaining overstorytrees; some heavily infected trees are not able to adjust to release from competition (Knutson andTinnin 1980).Our organizations request that the agency please read and respond to the following mistletoescience:Conklin, David A., Dwarf Mistletoe Management and Forest Health in the SouthwestUSDA Forest Service, Southwest Region.http://www.forestpests.org/diseases/pdfs/dwarfmistletoe.pdfPennings, Steven C., and Ragan M. Callaway. 2002. Parasitic plants: parallels and contrasts withherbivores. Oecologia.http://biology.umt.edu/Callaway/Lab/Full/text/papers/and/abstracts/oecologia2002/parasitic/plants.htm Geils, Brian W.; Cibri[aacute]n Tovar, Jose; Moody, Benjamin, tech. coords. 2002. Mistletoes of NorthAmerican Conifers. Gen. Tech. Rep. RMRS[circ]GTR[circ]98. Ogden, UT: U.S. Department of Agriculture,Forest Service, Rocky Mountain Research Station. 123 p.http://extension.usu.edu/forestry/Reading/Assets/PDFDocs/RMRS_GTR_098.pdfBennetts, Robert E., Gary C. White, Frank G. Hawksworth, and Scott E. Severs. 1996. DwarfMistletoes: Biology, Pathology, and Systematics The Influence of Dwarf Mistletoe on BirdCommunities in Colorado Ponderosa Pine Forests. Agriculture Handbook 709. USDA Forest Service,Washington, DC. Mar 1996.Maloney, P.E.; Rizzo, D.M. 2002. Dwarf mistletoe-host interactions in mixed-conifer forest in theSierra Nevada. Phytopathology. 92(6):597-602.Hawksworth, F. G. 1985. Insect-Dwarf Mistletoe Associations. P. 49-50, In, Proceedings Of The 36thAnnual Western Forest Insect Work Conference, Boulder, Colorado. March 4-7, 1985. NorthernForestry Centre, Canadian For. Service, Edmonton, 54p.The sources referenced above indicate that:1. While dwarf mistletoe has traditionally been viewed as a forest pest because of reducing in timbervolume, these sources suggest that in areas where management goals are not strictly focused on timberproduction, control of dwarf mistletoe may not be justified, practical, or even desirable. The datasuggests that dwarf mistletoes may have positive influences on wildlife habitat. Consequently, theysuggest that eradication efforts be reconsidered given that dwarf mistletoes have been a part of theseforest ecosystems for thousands of years.2. Forest insects and pathogens are increasingly being recognized as important agents in shaping thestructure and composition of forests. Mistletoes affect the forest canopy, landscape pattern, and treespecies mix.3. These plants are integral part of forested ecosystems and have existed as part of the coniferousforests of North America since the Miocene.4. Dwarf mistletoe is important to the ecology of these systems. The fruit, foliage and pollen of dwarfmistletoe are a food source for numerous bird, mammalian and insect species. Dwarf mistletoe altersthe growth patterns of infected

trees, creating structural complexity within forests in the form of witchesbrooms and snags, both which are used by numerous wildlife species for nesting, roosting and cover.5. The witches[sbquo] brooms and higher snag densities in infected areas enhance habitat values for birds andother wildlife. In considering the beneficial aspects of dwarf mistletoe infection, it seems reasonable toassume that it is the large infected trees, particularly those with large witches' brooms, which have thegreatest ecological value.6. Land use activities (grazing, logging, and fire suppression) have encouraged the spread of dwarfmistletoes. Many of the silvicultural challenges created by these parasites are exacerbated byecologically insensitive land management policies such as fire suppression, livestock grazing, andinappropriate silvicultural techniques.7. In general, dwarf mistletoe only becomes a problem when land managers attempt to create highlyproductive forests or tree farms to grow timber far in excess of historical production rates.8. Probably the most significant forest health problem in the Northwest is that there are too many fiberplantations, primarily small and medium-sized trees, over vast areas. Thus, efforts to improve forestconditions should focus on areas that can benefit the most from thinning.9. The damaging effects of mistletoe can best be minimized, and their ecological benefits maximized, byrecreating forest stands with age, size and density distributions similar to the original, presettlementforests.10. There is an urgent need for the Forest Service to reevaluate its current strategy for managing dwarfmistletoe, and to adopt an integrated ecosystem perspective that manages for forest ecosystem integrity,rather than waging a war against dwarf mistletoe.11. An integrated management strategy that restores some of the fundamental components andprocesses that historically existed in these systems would largely eliminate the mistletoe problem. Allcomponents need to be incorporated into an overall management plan for any one of them to workcorrectly. Such an integrated strategy would include the following fundamental components: 1. Nocutting of large diameter trees and snags. 2. Thin understory trees to create stand structure anddensities that approximate presettlement conditions. 3. Reestablish regular ground fires in order tominimize seedling survival and to prevent the accumulation of fuel. 4. Reduce livestock densities to alevel that will allow a relatively continuous ground cover of herbs and grasses to develop where light,soil and moisture conditions would normally support such vegetation. Once forests are thinned andopened up, they will simply return to their pre-thinning densities if livestock remain to prevent thereestablishment of ground cover.12. In none of the aggressively treated research plots was dwarf mistletoe eliminated. After treatmentshad reduced the parasite to undetectable levels, populations inevitably began to rise in theseexperimental areas.13. Foresters are often surprised to see considerable infection in treated areas thought to be rid ofdwarf mistletoe.14. When stands are opened up by selective harvest or thinning, dwarf mistletoes are stimulated. Latentinfections are more apt to develop shoots; existing shoots grow more rapidly and produce more seed.This is probably a result of both improved tree vigor, which provides more water and nutrients to theparasite, and increased light. Unlike many forest insects and pathogens that are often associated withweak or slow-growing trees, dwarf mistletoes actually do better on vigorous trees.15. Dwarf mistletoes are well-adapted for survival and are remarkably persistent. They infect all agesand sizes of trees; moreover, a very significant proportion of infected trees have no visible shoots.Although these parasites spread slowly, trees grow slowly. Dwarf mistletoe populations can doubleseveral times during the length of a rotation.16. Dwarf mistletoes tend to do better on vigorous trees. Since a primary goal of silviculture is topromote vigorous trees, it can indirectly promote the parasite.17. Because of the typical patchy, concentrated distribution of the parasite, the removal of all visiblyinfected trees usually results in stands having understocked areas that contain mostly small trees.Except in very lightly infected stands, this type of treatment can greatly alter stand structure and havesignificant visual impact. Moreover, even when attempts are made to remove all infected trees,considerable infection remains in most treated areas, due to latent infection. Follow-up treatments(before the next scheduled entry) are often difficult to justify economically, except in very young stands.While cutting all visibly infected trees can provide better disease control than a less vigorous approach,the practice can fall short when other factors, especially aesthetic and ecological ones, are considered.18. The most vigorous dominant and codominant trees should be retained. Selection of "leave trees"should be based on overall tree qualities rather than just mistletoe. A lightly infected dominant orcodominant tree is usually a better choice for retention than an intermediate or suppressed tree withoutvisible infection.19. Entering a stand to remove only the more heavily infected trees is usually not an effective way tomanage dwarf mistletoe or to improve forest conditions. In most cases, stand infection levels wouldrebound to even higher levels before the next entry and become progressively more severe over time.Infection should generally be reduced as much as possible without

sacrificing the best trees in thestand.20. Group selection has also been perceived and used recently as a tool for treating dwarf mistletoe.However, its efficacy for control of mistletoe is largely untested, and opinions and perspectives vary.21. The creation of small openings can be very favorable to dwarf mistletoes over the long run, leadingto heavy losses. In many cases, the regeneration that develops within the openings will be exposed toinfected trees on the edges, and, in some cases, from infected trees within the openings. The parasitecan penetrate small (1- to 4-acre) openings relatively quickly.22. Underburning may well be a good ecological approach for managing dwarf mistletoes on manyponderosa pine and mixed conifer sites. Often a combination of mechanical thinning and burning canbe used to reduce infection levels and improve overall stand conditions. Fire can be used to helpmaintain infection at or below a desired level, perhaps allowing longer intervals between mechanicaltreatments. Significant amounts of crown scorch are probably needed to provide a controlling effect.23. Prescribed fire will be more effective in reducing infection levels when crews can "shape" the fire(increase intensity) within infected areas. Fires covering relatively small areas (certainly no more thana few hundred acres at a time) should provide better results than larger fires, since crews generallyhave more control over coverage and intensity.24. Mistletoe presence, incidence, and severity may not be good indicators themselves of wildlifehabitat value. Wildlife species are probably responding in a complex way to special features such asbrooms and snags, to vertical crown structure, to canopy gap pattern, and other factors affected bymistletoes.25. Mistletoes possess aesthetic, scientific, and intrinsic values.26. Forests are not only managed for the resources they produce but also to sustain and protect foresthealth and ecosystem values. Dwarf mistletoes are important disturbance agents with distinctecological functions. They contribute to natural diversity structurally and biologically.27. An important consideration in the design of a silvicultural entry is whether dwarf mistletoetreatment is necessary. In many cases the presence of dwarf mistletoe poses no threat to standobjectives.28. Because the spread and intensification of dwarf mistletoe in uneven-aged, multistory strands can bequite rapid, management of these stands is a serious challenge.39. Larger trees often tolerate more dwarf mistletoe infection without deleterious effects.30. One of the major challenges for management of infested uneven-aged stands is the dispersal ofdwarf mistletoe seed from infected overstory trees to the understory. Although the predominant opinionhas been that dwarf mistletoe intensifies rapidly after a partial cutting or disturbance such aswindthrow.31. In view of the uncertainties and potential adverse effects from selection and partial cutting ininfected stands, use of the appropriate criteria for selecting and retaining trees is especially important.32. Where wildlife habitat is an important consideration, it may be desirable to maintain or encouragefeatures resulting from mistletoe infections, such as snags and witches[sbquo] brooms. The same factors thatcan be manipulated to reduce mistletoe spread, intensification, and effects can also be used to enhancethese processes and produce a continuing supply of dead and diseased trees.33. From certain perspectives and in some situations, dwarf mistletoe infestations have beneficialimpacts for associated species and communities. In old-growth forests, dwarf mistletoes may exert adifferent set of effects on infected trees and display different dynamics. Special management strategiesand silvicultural treatments for infested stands are required where the objectives are to maintain andenhance wildlife habitat, old-growth character, and other ecosystem values.34. Greater bird diversity is associated with increased mistletoe infestation (24 of 28 species positivelyassociated); the key limiting resource for the birds in this situation may be snags. Parker (2001) reportsa similar study in a northern Arizona ponderosa pine forest. He finds, however, a more complexsituation with four species positively associated with mistletoe (cavity-nesting birds), five species with anegative association (avoiding infested areas), and seven with no relation (indifferent). Fairweather(1995) and Parks and others (1999b) describe mistletoe control treatments in which infected trees werekilled but left standing for woodpeckers and other cavity-nesting animals. Although these snags areused, they remained standing for only a few years. Studies of broom use by wildlife include work byParks and others (1999a), Hedwall (2000), and Garnett (2002). These studies identify which birds andmammals use witches[sbquo] brooms, how they use it (for nesting and roosting), and what kinds of brooms arepreferred. This information is useful to determine if retaining certain brooms is a potential benefit for afavored species. Information still lacking is knowledge of how the number and distribution of snags andbrooms relates to levels of mistletoe infestation and to wildlife populations and the dynamics (rates ofgeneration and loss) of these features.Machine Piling, Dozer Firelines and Tractor Soil RippingThe EA and the project design features that it contains appear to allow heavy equipment onrecovering post-fire soils (and within mistletoe green tree logging units) throughout the 20,000-acre logging area with very

few restrictions or sideboards. Additionally, the location, impactsand alternatives to widespread ground-based heavy equipment use throughout the project area isnot quantified, documented or analyzed.Please note that Forest Service project planners in the Six Rivers National concluded that:"Machine piling/burn piles would increase ground disturbance and soil displacement when themachine turns."-Little Doe and Low Gulch Timber Sale DEIS p 110.In response to a request from the timber industry (American Forest Resources Council) to allowmachine piling in logging units, federal timber sale planners on the Medford District BLMresponded as follows:[Timber Industry] Comment 4: We asked that BLM provide some flexibility in how fuels wouldbe treated by focusing on the desired goals. The BLM has restricted fuels treatments tohandpiling and burning. Contractors could use light weight equipment to treat fuels withoutdetrimentally compacting soils.[BLM] Response: The commenter has not provided details on methodology or supportingscience that would support the claim that machine piling could be done without detrimentallycompacting soils in excess of RMP standards for percent area compacted by current activities.Resource management plans call for limiting compaction in harvested areas in order tominimize soil productivity losses. Therefore, no additional use of mechanical equipment forfuels reduction was proposed, as ground-based logging would compact up to 12 percent of theharvest units. This is particularly important in the Cottonwood planning area as the majorityof soils contain high rock content. It was identified that ripping the soils in this area wouldbring rocks and cobbles to the surface. The priority was given to minimizing the soil areacompacted instead of trying to mitigate the effects. Additionally, the harvest prescriptionresulting in relatively few trees per acre being cut minimizes the slash, and consequently, alsoreduces the need for mechanical fuel treatment.Medford BLM Cottonwood Project EA Appendix A, Response to Comments. Page 3-2Manual piling is a reasonable alternative to the avoidable impacts associated with machine pilingwhile mechanical piling is often recognized as an outdated practice that has disproportionatelyharmful impacts on watershed and soil resources.Please see:Evelyn Bull et al. Trees and Logs Important to Wildlife in the Interior Columbia River BasinPNW-GTR-391 (1977).BLM, USGS, Biological Soil Crusts: Ecology and Management (Technical Reference 1730-2(2001) (Available from BLM Publication Management Distribution Service, Bldg 41, E-16(BC-650B) Denver, CO 80255We further encourage the agency to examine the soil compaction monitoring reports from 1985through 1997 on the Payette National Forest. While the Payette contains different ecotypes andsoil types than does the Antelope and Tennant project area, the monitoring reports clearly showlong-lasting and significant soil damage from tractor piling activities. Similar monitoring in theIdaho Panhandle (Jerry Niehoff) and the Kootenai National Forest (Lou Kuennen) demonstratesignificant impacts to soils.We also encourage the agency to review the findings of Geppert, R.R., Lorenz, C.W., andLarson, A.G., 1984. Cumulative Effects of Forest Practices on the Environment: A State of theKnowledge. Wash. For. Practices Board Proj. No. 0130, Dept. of Natural Resources, Olympia,Wash.Our organizations remain convinced that manual piling is far preferable to tractor piling. Manualpiling has none of the negative impacts to soils associated with tractor piling, provides anincreased opportunity for local employment and significantly reduces long-term damage to soilhealth and productivity. Hence manual piling would better achieve the stated forest restorationpurpose and need for the project.Please further note that the proposed machine piling violates NFMA requirements that a givenlogging system cannot be chosen because of dollar value alone. There is no other justificationfor implementing the proposed tractor piling provided in the administrative record other thaneconomic considerations and many reasons why the use such systems is not appropriate.The EA does not analyze or disclose the impacts to soil resources from utilizing bulldozers toestablish fire lines when implementing prescribed fire prescriptions, nor does the EA disclosewhere this activity will occur. Similarly, the EA is silent as to the impacts of ground-basedscarification and soil ripping conducted by heavy equipment in post-fire forest ecosystems.New Logging Road ConstructionOur June 16, 2022 scoping comments contained numerous references to scientific peer-reviewedstudies and articles that argue against the construction of new "temporary" logging roads as aform of post-fire forest recovery. The EA largely failed to acknowledge or respond to thosescoping comments and literature references.Beschta et al. (1995) warned that even temporary road construction should be prohibited onburned landscapes. Existing roads in the watershed are experiencing significant slumping andfailure that contributes directly to sediment loading. Commercial landings, log decks, andhauling have similar direct impacts on soil and hydrological values.The Flounce Around EA (a 500 acres matrix salvage timber sale in the Medford District ButteFalls Resource Area) acknowledges that:"Many of these roads were previously closed or had little traffic but were opened up during thesuppression effort of the Timbered Rock wildfire in the adjacent Elk Creek

watershed in the summer of2002. As a result, many of these high gradient access roads have not been re-blocked and winter traffichas destroyed many of the designated road drainage (i.e. water bars, water dips and culverts). This hascaused damage to the road surfaces creating road related erosion (rill, gullies) and subsequentsedimentation of the nearby stream channel."-Flounce Around EAThe Antelope-Tennant salvage logging EA does not disclose if similar impacts occurred duringfire suppression activities at the Antelope and Tennant fires. The EA also did not disclose thecumulative and synergistic impact of tractor fire line construction.Emergency Situation DeterminationWe are hopeful that everyone involved in this planning process wants similar outcomes- namelyhealthy fire-resilient forest stands that provide wildlife habitat, watershed values, recreationalopportunities and carbon sequestration. For that reason, conservation organization havesupported projects like Six Shooter and Harlan that seek to bring this planning area back towardsa more natural and resilient condition. We are concerned that the KNF is proposing to fast-trackup to 20,000-acres of logging and 8 miles of road construction in the Antelope-Tennant projectarea through utilization of an Emergency Situation Determination (ESD). In our pre-scopingcomments of April 2022 we requested that the agency engage in a targeted and careful approachto post-fire logging. We repeat that request now. Please avoid the significant deleterious impactsassociated with extensive utilization of ground-based post-fire logging on thousands of acres andthe construction of 8 miles of new logging roads.ConclusionPlease note that there is almost universal agreement that salvage logging does not leavewatersheds and forests in a healthier, more resilient state, and that the timber volume gained viasalvage is neither predictable nor sustainable.We believe that post-fire ecosystems have more to offer than simply another opportunity forsalvage logging and plantation forestry.Thank you for considering our concerns and input in this planning process.