

CHAPTER 5. RESPONSE TO COMMENTS

5.1 Forest Service Response to Comments

This chapter provides the Forest Service response to comments received during the Draft Environmental Impact statement (EIS) comment period and gives reference to additional clarification in the Final EIS (where appropriate).

Copies of the Draft EIS or letters were mailed to approximately 20 interested parties. This included local, state, and Federal agencies. On July 20, 2007 a Notice of Availability for the Draft Environmental Impact Statement for the Big Creek Vegetation Treatment Project was published in the *Federal Register*.

During the comment period, five responses were received which contain approximately 40 separate comments. Each comment was categorized into a resource content area. The comments were then summarized in Table 5.1.1. The Forest Service Interdisciplinary Team member for each resource reviewed the original letters and the comment summary and responded to that comment. The response is also shown in Table 5.1.1. All summarized comments and responses are included in this chapter for public review. Individual letters are on file in the project record.

Changes in the Final EIS were based on comments received on the Draft EIS and further analysis by the Forest Service. The changes in response to comments included further clarification on air quality and the use of herbicides and the effects. Other responses included clarification of subject matter and where appropriate referred to changes in the FEIS.

Table 5.1.1. Summary of comments received on the Draft EIS and Forest Service responses.

Letter #	Comment #	Name	Comment	USFS Response to Comment
1	1	B. Sachau	Ban all hunting and trapping	Thank you for your comment. Hunting and trapping regulations are beyond the scope of the project. The State of Utah regulates hunting and trapping.
1	2	B. Sachau	Ban prescribed fire which pollutes the air with fine particular matter.	Air quality was not discussed in the DEIS. A discussion on air quality has been added to the Final EIS, Section 3.3.
1	3	B. Sachau	No logging.	Under Alternative 2 – No Action, no vegetation treatment activities (including logging) would be implemented to accomplish project goals. After reviewing the environmental consequences, it is possible that the Decision Maker could select Alternative 2; however, it does not meet the purpose and need for the project.
1	4	B. Sachau	No toxic chemicals to be used at all ever. They are far more dangerous than believed in 1950.	A discussion on the use of herbicides and effects has been added to the Final EIS, Section 3.3.
2	1	Utah Division of Wildlife Resources	UDWR biologists reviewed the DEIS and visited the project site on the ground. The UDWR is supportive of Alternative 1 to help	Thank you for your comment.

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		(UDWR)	accomplish the vegetation restoration and habitat improvement that is needed in this area.	
2	2	UDWR	The Big Creek project area has been identified by UDWR as Crucial Summer habitat for mule deer and elk. The UDWR believes the project would improve vegetation and structure and pattern for the cover types described. The DEIS adequately identified and covered issues related to sensitive and other wildlife species.	Thank you for your comment.
2	3	UDWR	The UDWR supports Alternative 1. The No Action Alternative will not provide needed improved wildlife habitat conditions. The "reduced action" wildlife alternative can be made better by completing all the acres and projects identified in Alternative 1.	Thank you for your comment. Alternative 3 reduces the effects of management activities to several sensitive species such as the northern goshawk, in addition to improving habitat conditions for big game species.
3	1	UEC	Both the Big Creek Watershed Assessment and the DEIS rely heavily on regional, and sub-regional, USFS R-4 "PFC" assessments. The FS PFC is critically flawed because it did not consider an actual area (or areas). Without real life references the PFC is nothing more than a guess that is not based on current scientific literature or on the ground reality. It is a mistake to rely on its created vision of proper conditions for this project.	<p>It is widely accepted that diversity within an ecosystem is both the desired and "natural" condition within a watershed. PFC is one approximation of the diverse range of conditions that might have existed historically. It is based on the need to have a range of age classes sufficient for recruitment into and replacement of the older classes. Reynolds et al. (1992) developed a sustainable range of structural stages for several major forested vegetation type based on seedling establishment requirements, growth rates, pathological rotation ages, as well as site and climatic factors. Reynolds et al. (1992) has withstood a "best science" review.</p> <p>The National Forest Management Act (NFMA) of 1976 states that forest plans must provide for diversity of plant and animal communities. Section (3)(B) of NFMA states: "provide for diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple-use objectives, and within the multiple-use objectives of a land management plan adopted pursuant to this section, provide, where appropriate, to the degree practicable, for steps to be taken to preserve the diversity of tree species similar to that existing in the region controlled by the plan. In addition, "the most</p>

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				<p>efficient way to maintain biological diversity in a forested landscape is to have a diverse array of stands, and thus a diverse array of ecosystems and their constituent species” (Hunter 1990).</p> <p>Projects based on forest plan objectives (i.e., Big Creek) must be targeted at creating and maintaining diversity in vegetation both in terms of species composition and structural stages. In terms of aspen, PFC is not the only issue we are concerned with in this project. Much of the aspen in the western U.S. has been lost as a result of conversion to conifer cover types. O'Brien and Pope (1997) summarize field data (FIA 1995) that shows as much as 66% of the historic aspen on the Wasatch-Cache National Forest is now classified as conifer types. Bartos and Campbell (2000) suggest a hierarchy of priorities for aspen treatment in which stands with a significant conifer component are the highest priority for treatment. Many of the aspen stands in this proposal fall into that class because they have a significant conifer component. In addition, UDWR biologists recognize a benefit of age class diversification including an increase in early successional habitat types.</p> <p>The desired structure and pattern for vegetative cover patterns that indicates properly functioning condition (PFC) is a guideline from the Revised Forest Plan, and therefore constitutes management direction (USDA Forest Service 2003). As such, the project's purpose and need are supported as implementation of our Revised Forest Plan. The Revised Forest Plan relied on a “Sub-regional Assessment of Properly Functioning Condition for Areas encompassing the National Forests of Northern Utah”. (USFS 1998a). Ecosystem units described are the Uinta Mountains, Wasatch Mountains and Bonneville Basin. Conditions described reflect actual areas on the Forest.</p> <p>Numerous references consider a mix of seral stages across a landscape as appropriate desired conditions. For example, the reference conditions used in the Fire Regime Condition Class (FRCC) assessment for this project describe the percentage of a landscape in early,</p>

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				<p>mid, or late seral stands, in very similar terms to the balanced range given in the PFC description. The FRCC seral stage percentages were developed by experts or teams of experts for each vegetation type, using the VDDT (vegetation dynamics development tool), a state and transition model incorporating natural disturbance agents according to the best available science. VDDT modeling is a well accepted, standard scientific method of determining seral stage desired conditions for a landscape. Although the particular seral stage numbers differ slightly between FRCC reference conditions and PFC balanced range, they both indicate that current conditions weighted toward a preponderance of older stands do not match desired conditions of a more even mix between younger and older stands.</p> <p>In addition, there are two other non PFC components to the purpose and need for this project: Reduction in fuel levels and a return to a more historic fire regime, and to provide timber product to the local community.</p>
3	2	UEC	The PFC assessment is directly conflicted by and refuted by the best available science on aspen, cottonwood and willow restoration.	No it is not. The research referred to by UEC on restoration of these ecosystem components, particularly in the Greater Yellowstone area focuses on establishment of seedlings and young age classes in the hardwood species as the missing component in the landscape. These younger age classes are needed in order to replace the older classes as they die out. Nowhere in the literature is it suggested that diversity in both species and structure is not desirable. In fact the best science on ecosystem health suggests that diversity is of the utmost importance in order to sustain diverse and resilient ecosystems. "Our guiding premise for sustaining ecosystems and protecting biodiversity now and into the future is to manage ecosystems such that structure, composition, and function of all elements, including their frequency, distribution and natural extinction are conserved" (Kaufmann 1994).
3	3	UEC	See the file folder provided by UEC on the CD with the literature review which contains a sampling of the best science available on subjects central to this project, such as aspen decline and recovery in the American West.	Thank you for the information. A thorough review of the provided literature does not suggest there is only one cause of all aspen decline. Much of the literature regarding aspen decline suggests several factors which may interact with each other (i.e., fire, ungulate abundance, climatic change, etc). As

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				<p>suggested in the literature related to Yellowstone National Park, concentrated use by ungulates and overabundance may play a stronger role in that area. However, this is not the case in the Big Creek Project area because this is not winter range where ungulates concentrate as they do in the studied area of Yellowstone (Ripple 2001).</p>
3	4		<p>The statement on page 1-2 regarding aspen decline being related to fire suppression is not correct. Aspen is actually a fire break. Additionally, the best available science indicates that it is the trophic cascade that has occurred as a result of management-caused extirpation of the top trophic level, i.e. wolves.</p>	<p>See response to comment 3-3. The proposed burning and harvest activities are to stimulate ramet (individual stems from the same clone) production. The statement on page 1-2 of the DEIS is correct. Pure aspen can act as a fire break under the right conditions and its regeneration is not entirely dependant on fire. It does burn though and the stand is top killed and sprouting follows, thus creating an even aged young stand. Aspen trees are thin barked and extremely sensitive to fire, thus even a light surface fire can regenerate the clone (Jones and Debyle 1985). However, aspen with a significant fir component is highly flammable. Historically in these sites the fir develops and provides fuel to carry a stand replacing fire (Margolis 2007) after which the aspen clone re-sprouts profusely, later to be again invaded by sub alpine fir.</p> <p>In response to your comment that trophic cascade is causing aspen decline, please see response to Comment 3-3. Unlike Yellowstone NP, elk populations within the project area are regulated by the State of Utah through hunter-harvest. Elk numbers within the project area are not likely to significantly effect regeneration as such has occurred within Yellowstone NP. As is stated by Larsen and Ripple (2005), "Within the park, a lack of predation on elk (sport hunting and/or wolves) may have contributed to high elk browsing pressure and the poor regeneration success for aspen (Ripple and Larsen 2000; Ripple and Beschta 2004)".</p>
3	5	UEC	<p>Based on the studies in Yellowstone and at Zion NP's the best science shows that aspen do regenerate successfully in the middle rocky mountains without clearcutting and stand replacing fires. Best science indicates that the successful regeneration of aspen is not related to human reduction of ungulate populations. Rather it is related to changes in</p>	<p>That is not entirely correct. As stated by Ripple and Beschta (2005), "At the landscape scale, willow growing in valley bottoms may be browsed less since elk may be avoiding certain riparian areas and selecting for higher ground to lower their risk of predation by wolves.....Conversely, this same process of elk avoiding riparian areas could be causing high browsing pressure on upland aspen stands". Also, see response to comment 3-4. True, aspen can and does regenerate without</p>

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			grazing behavior that is driven by the presence of predators.	disturbance under a canopy on stable aspen stands (those without conifer encroachment), and this is occurring in several stands within the Big Creek Watershed since ungulate browsing pressure is low. In these stands there has been some mortality in the overstory within the last decade that has opened the stand up to sunlight and initiated the regeneration event. However, presence of coniferous understories characteristic of most of the aspen stands proposed in the Big Creek project area for treatment this is not the case. In these cases the sunlight and moisture required for aspen suckering is blocked and used by the fir understory and aspen does not regenerate. Aspen has been recognized for many years as being very intolerant of shade (Jones and Debyle 1985). Thus either fire or mechanical treatment is needed to return these stands to an aspen dominated condition.
3	6	UEC	This DEIS is inadequate under NEPA, NFMA, and the APA because it relies on flawed PFC and outdated best science. This DEIS errs when it states that the aspen stands must be subjected to clear cutting and/or prescribed fire in order to be saved. The natural energy flows and influences between normal trophic levels just need to be restored.	Thank you for your comment. See responses to comments 3-3, 3-4, and 3-5.
3	7	UEC	Because the analysis is based on a flawed PFC and relies on outdated best science the cumulative effects analysis is just as inadequate and off-base as is the range of action alternatives and the flawed purpose and need statement. The consensus that has emerged in the newest and best available science on this subject is clear and undeniable.	<p>Thank you for your comment. See responses to comments 3-3, 3-4, 3-5, and 3-9.</p> <p>A list of Past, Present, and Reasonably Foreseeable Future activities was presented on pages 3-1 to 3-3 of the DEIS and is displayed again in Tables 3.1.1 and 3.1.2 of the FEIS. Cumulative effects were analyzed in Chapter 3 of the DEIS and FEIS by resource area.</p> <p>The purpose and need and action alternatives are consistent with the Revised Forest Plan.</p>
3	8	UEC	The proposed action and the impacts analysis in Chapter 3 is inadequate as a result of their failure to incorporate, use or consider the best available science on the value of dead post fire jackstrawed aspen on subsequent successful aspen regeneration. (See "rolloffire.pdf"). The proposed action and its environmental	Retention of coarse woody debris has many values including seedling protection, nutrient cycling, wildlife habitat, and others, as was recognized and incorporated into the Forest Plan revision process. Guideline G-16 shows the amounts of coarse woody debris that will be left on these sites - at a minimum. Table 1.7.2 of the DEIS on pages 1-5 to 1-6 and is displayed again in Table 1.7.2 of the FEIS shows that Guideline G-16 will be applied to this

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			analysis in Chapter 3 needs to be reworked to disclose and analyze the failure of this alternative to provide the beneficial coarse woody debris in <u>successful</u> aspen regeneration that will unavoidably be missing in the aspen clear cut units.	project. The value of jack straw material in the protection of aspen saplings was not overlooked; it is not applicable in this situation. Ripple's research is applicable as he states in his hypothesis, to an area "where ungulate browsing is excessive and concentrated during winter months". The Big Creek area is summer range for managed (i.e., hunted) and much lower elk populations. Grasses and forbs are abundant and combined with the natural tendency of elk to disperse in the summer. This results in overall low browsing pressure by elk on aspen regeneration. This is evidenced on site by several small stands of aspen where regeneration is both successful and abundant, as well as aspen sites in the 1994 Dry Canyon 2 (near Randolph) wildfire area which are regenerating quite well despite light ungulate use.
3	9	UEC	Page 1-5 of the DEIS says the references listed suffices for NFMA compliance. Appendix B, which is the "references listed" does NOT constitute, use or consider the best available science as NFMA mandates.	<p>The techniques and methodologies used in this analysis consider the best available science. The analysis includes a summary of the credible scientific evidence which is relevant to evaluating reasonably foreseeable impacts. The analysis also identifies methods used and references scientific sources relied on. When appropriate, the conclusions are based on the scientific analysis that shows a thorough review of relevant scientific information, a consideration of responsible opposing views, and the acknowledgment of incomplete or unavailable information.</p> <p>In addition, the literature cited in this analysis represents the best available science in relation to the proposed action. It is a result of searches conducted through and relevant research provided by: professional contacts, internet search engines, Rocky Mountain Research Station (RMRS) publications site: (http://www.fs.fed.us/rm/publications/titles.shtml), which lists all RMRS publications from 1963 to current, the National FS Library at (http://fsweb.wo.fs.fed.us/library), attendance at and proceedings publications from professional silviculture seminars, and current research symposia on aspen science including the recent "Sustaining Aspen in Western Landscapes" Symposium.</p>
3	10	UEC	Recommend amending the outdated 2003 Forest Plan to incorporate the implications of the attached best science.	Thank you for your comment. See response to comment 3-9.

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3	11	UEC	<p>The action alternative development in Chapter 2 of the DEIS is fundamentally inadequate. It fails to address or resolve the basic causes or solution of what is presently called "outside PFC". Both action alternatives are overly risky, destructive and are short-lived quick fixes. Following a basic re-write of the purpose and need, Chapter 2 (and alternative development) needs to be re-worked.</p>	<p>The current lack of structural diversity in the Big Creek Watershed is caused primarily by the extensive fire suppression efforts over the last 100+ years. Since few young stands have been created by fire, there is now an overabundance of older classes. This proposal would create some younger stands. The use of prescribed fire and timber harvest periodically (every 20 to 30 years) for the foreseeable future would result in long-term diversity and both the establishment of and maintenance of a diverse array of structural and species composition given that wildfire will continue to be suppressed.</p>
3	12	UEC	<p>The "needs" for logging to satisfy logging industries must be broken out into a different project than this one, which would be more properly aligned with ecosystem restoration. Once the real underlying cause (i.e. the broken cascades of effects and energy between the three basic trophic levels) is repaired then go ahead and entertain logging projects. Mixing the interests of private logging interests and biological restoration is disingenuous.</p>	<p>This project will result in the accomplishment of several needs/purposes. The first is to improve vegetation structure and pattern for cover types within the project area to move toward properly functioning condition at the landscape scale. A second purpose of this project is to enhance ecosystem resiliency and to maintain desired fuel levels with fire operating within historical fire regimes as described in the Revised Forest Plan (USDA Forest Service 2003, p. 4-10, 4-19). A third purpose of this project is to provide commercial timber that contributes to a sustainable level of goods and services. The Revised Forest Plan (USDA Forest Service 2003, p. 4-23) directs the use of timber harvest where allowed, to contribute to the economy while achieving properly functioning conditions of vegetation and watersheds.</p> <p>Timber harvest is a tool approved for use by the Revised Forest Plan to achieve vegetation management objectives, and its use is appropriate in these management prescriptions. The Revised Forest Plan identifies a complex of interrelated socio economic as well as ecological needs in relation to the lands managed by the Wasatch-Cache National Forest. Therefore separating one from another in project development is neither realistic nor appropriate. In the short term, creating openings for species to regenerate and create young age patches will be accomplished. Aspen is only one of the species considered for treatment in this proposal and timber harvest is primarily proposed in the conifer stands, or aspen stands with a heavy conifer component. Aspen restoration is primarily achieved through prescribed fire.</p>

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				In addition, commercial logging can be used to remove large woody fuels and alter the remaining fuel profile in aspen stands that might otherwise burn too hot and kill aspen clone roots under current fuel conditions. Logging can also be used to create early seral patches in areas where burning is not feasible, such as adjacent to private lands.
3	13	UEC	To be a success, this project and the impacts analysis supporting it need to address the effects from the currently broken relationships between upper and middle trophic levels on forest and range conditions, as well as TES and MIS plants, animals domestic and exotic ungulates.	Please see the Response to Comment 3-3. The DEIS and the Revised Forest Plan discusses moving forest vegetation condition toward properly functioning condition. The DEIS displays how the proposed alternatives affect vegetation condition (e.g., age class / structural condition) and how these influence numerous species. The DEIS also discusses the cumulative effects of activities such as livestock grazing. Though some species of large carnivores have been extirpated from Utah, we don't believe the relationship between upper and middle trophic levels play as large a role in the Big Creek project area as they do in the studied area of Yellowstone.
3	14	UEC	The roadless area inventory discussion on pages 3-46 and elsewhere are very out of date. The Welsh memo and the FSM that is cited are in conflict with the roadless rule that is in effect at 36 CFR part 294.	You are correct; they are out of date. We have corrected this error in the FEIS in Section 3.6. The Roadless Area Conservation Rule published in the Federal Register Volume 66, No 9, on January 12, 2001 is currently in effect.
3	15	UEC	Prescribed fire is an appropriate activity in an IRA. However, mitigation measures should be added and committed to that prohibit fire line construction inside the IRA.	The 2001 Rule established prohibitions (with some exceptions) on road construction and road reconstruction and timber cutting, sale, or removal in inventoried roadless areas (36 CFR 294.12 and 294.13). Firelines are not included in the prohibitions. Unit 60 is the only unit proposed for prescribed fire or treatment in an IRA. By Revised Forest Plan definition (USDA Forest Service 2003, p. 4-60) prescribed fire may include clearing vegetation to secure perimeters and clearing fire holding lines using either hand tools or heavy equipment. It is expected that minimal fireline will be needed since units were designed using terrain features for holding purposes.
3	16	UEC	Chapters 2 and 3 would be more valuable if they more closely adhered to FSM, Forest Plan, and USDA Departmental Regulation 9500-4 direction to restore and maintain viable populations of all native plants and animals across their natural distributions. The	The DEIS and the Revised Forest Plan discusses moving forest vegetation condition toward properly functioning condition. The DEIS displays how the proposed alternatives affect vegetation condition (e.g. age class/structural condition) and how these influence numerous species. This project has both beneficial and negative effects depending on the individual

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			impacts analysis would be more useful if it went further and disclosed and analyzed the extent to which alternatives work to restore populations and geographic extent of native plants, forbs, and animal species.	species; the project may change the abundance of species and improve habitat conditions within a small localized area, but should not be viewed as changing the geographic extent of species or restoration of species now extirpated from the area.
3	17	UEC	The three-toed woodpecker environmental effects is insufficient as it is essentially absent	The effects of the alternatives on the three-toed woodpecker are discussed on page 3-148 of the DEIS. As specified the effects to three-toed woodpeckers are similar to those of the boreal owl. Modifications have been made to this section between draft and final.
3	18	UEC	Attention paid to goshawk MIS impacts needs to be further developed. For example, Reynolds (1992) says that all short term impacts to the goshawk and its habitats are to be avoided, period.	Reynolds et al (1992) provides numerous management recommendations for the northern goshawk to reduce the effects of management activities. These include activities which would have both short-term and/or long-term effects. Pages 3-114 thru 3-130 display the effects of the alternatives on the goshawk and its habitat. Also, referenced in the DEIS is the report: Goshawk Area Analysis For The Big Creek Area. Implementation of Wasatch-Cache NF standards and guidelines are addressed within the effects analysis which deals with both short-term and long-term effects.
3	19	UEC	We believe that the disclosure and impacts analysis relating to a number of species raised in our scoping were not completely resolved or addressed. In particular to analysis and unnecessary impacts to TES and MIS species and migratory birds.	The DEIS displayed the effects to MIS, TES, and migratory birds within Sections 3.2 Aquatic; 3.10 Vegetation; and 3.12 Wildlife Resources. Modifications and minor changes have been made between draft and final to these sections.
3	20	UEC	In the case of this DEIS it is very clear that there are a number of foundational flaws that need to be reworked, starting with the outdated direction forced by the scope and purpose and need statements. The scope and Purpose and Need Statement should be redefined such that restoring the proper natural interactions between trophic levels is included in the project.	See response to comment 3-4. Introduction of wolves and its resultant changes in trophic level interactions is both outside the scope of the project and outside of the legal jurisdiction of the Forest Service authority. The scope and purpose/need of the project are in alignment with and support of the Revised Forest Plan goals and objectives for biodiversity.
3	21	UEC	The proposed action should be rewritten such that it 1) uses prescribed fire only and no road construction or reconstruction of any kind is used to alleviate short term trends from broken trophic level relationships and 2) works to	See Chapter 2, Section 2.3, Alternatives Considered, but Eliminated From Detailed Study. Also see response to comment 3-3 and 3-4. 1) Prescribed fire only would not meet the purpose and need. Logging achieves one

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			<p>actively restore the top trophic level so that exotic and native ungulate grazing patterns are natural and good for aspen health and not artificial and detrimental to aspen health as it is now.</p>	<p>important aspect of the stated purpose and need: to provide commercial timber that contributes to a sustainable level of goods and services.</p> <p>Further, in some vegetation types, in order to achieve specific components of the purpose and need, timber harvesting (whether commercial or not) in conjunction with prescribed fire is necessary. For example:</p> <ul style="list-style-type: none"> • Some aspen/conifer areas may be logged before burning, to reduce the heavy fuel component and reduce the chance of killing the aspen clone roots with too hot of a fire. • Some aspen/conifer areas have fewer conifers and falling at least some conifers before burning may create surface fuels to help carry the fire. Many of these stands (heavy to the aspen component) will be difficult to get to burn, it is expected that fire activity will occur primarily around the edges adjacent to mountain big sagebrush stands (which are generally more flammable), and in conifer pockets within the aspen/conifer. • Some Aspen/conifer units have too little conifer for commercial timber harvest, and not heavy enough fuel loading to need fuels treatment before burning, but would have enough conifers to carry at least a patchy burn through the stands. • Some conifer/aspen stands may be commercially harvested followed by mosaic burn. These areas have enough timber to make commercial harvest economically viable, and enough heavy conifer fuels (both dead and standing live) that it may burn so hot as to kill the aspen roots without removing some conifers first. But removing the commercial timber and scattering logging slash will provide enough smaller fuels to help carry a fire, while not creating excessive heavy fuels that would result in an undesirable high severity burn, and the fire would kill many of the non-commercial conifers in the stand. • Conifer stands in the Big Creek area vary from lodgepole pine, spruce/fir (Engelmann spruce and subalpine fir), mixed conifer (mostly of those three conifers), to Douglas-fir (mostly on drier limestone outcrops; sometimes with white fir). Logging, rather than fire, is the preferred tool for creating seral stage diversity for this project. <p>2) Wolf reintroduction is beyond the scope of the project and the authority of the USFS.</p>

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4	1	DOI – Office of Environ. Policy/ Compliance	Section 3.12, Wildlife, pages 3-106 to 3-154. It would benefit the public if the EIS included available supporting references. Where a reference cannot be cited information should be provided such as who conducted the survey, when it was done, where results can be found, etc.	The DEIS included a list of references in Appendix B. In addition, the analysis provided in Chapter 3 includes a summary of the credible scientific evidence which is relevant to evaluating reasonably foreseeable impacts. The analysis also identifies methods used and references scientific sources relied on. Modifications have been made to improve the citation of referenced material in the Final EIS.
4	2	DOI -- Environ. Policy/ Compliance	It would benefit the public if the FEIS listed the criteria that were used to select the MIS listed on page 3-113.	The effects of the project are displayed for all the Revised Forest Plan wildlife MIS species. The criteria for MIS selection are located within the Revised Forest Plan, Final EIS, Appendix J (USDA Forest Service 2003).
4	3	DOI -- Environ. Policy/ Compliance	The FEIS should include available supporting references regarding statements of fact about the species in the project area. Examples include but are not limited to goshawk (3-114), lynx (3-139), great grey owl (3-144-145), greater sage grouse (3-148), DWR sage brush surveys (3-148) and pygmy rabbit surveys (3-149).	See response to comment 4-1. References were added to the Wildlife (Terrestrial) Section where appropriate and also to the Wildlife Specialist's Report (Blatt 2008).
4	4	DOI -- Environ. Policy/ Compliance	Pages 3-146-147 contain a mixed discussion of habitat requirements for the Townsends Big-eared bat and the Western Big-eared bat. It is unclear which species the discussion is referring to. We recommend the FEIS identify and provide references for the food requirements of this specific species.	Corynorhinus townsendii (sometimes referred to as Plecotus townsendii) is commonly referred to as the Townsend's Big-eared bat, but other vernacular names used for the species are western big-eared bat, western lump-nosed bat, western long-nosed bat, and Townsend's western big-eared bat.
4	5	DOI -- Environ. Policy/ Compliance	The document does not explicitly discuss the potential impacts resulting from herbicide treatments nor discuss the potential need for mitigation measures for terrestrial species. Only one mitigation reference was found (3-150).	Modifications have been made to the Final EIS regarding the use and effects of herbicide on wildlife species and their habitats, see Sections 3.3 and 3.12.
4	5	DOI -- Environ. Policy/ Compliance	It would benefit the public if the FEIS included a holistic analysis of species specific potential impacts from herbicide treatments including an analysis of trophic level interactions as well as proposed appropriate mitigation measures based on available scientific studies with supporting references.	See response to comment 4-5 above.
5	1	EPA-R8	EPA finds that the DEIS is commendably thorough and	Thank you for your comment. The rationale for the selected alternative will be provided in the

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			complete in its analysis of the impacts of the proposed action, alternative action, and current management alternatives. The document comprehensively addresses a number of foreseeable impacts. In general EPA's concerns with the DEIS are minor and center on the rationale behind the decision to pursue the preferred alternative rather than the modified action alternative and several instances in which language is unclear or insufficiently informative.	Record of Decision.
5	2	EPA-R8	EPA suggests the FEIS provide additional clarification on the agency's commitment to the design element (Section 2.2 DEIS, subsection "wildlife") to minimize effects on migratory birds.	The USFS is committed to minimizing effects of management activities on migratory songbird species as is described in the FEIS in Sections 2.2 and 3.12 and to numerous other species (e.g., timing restrictions on activities that may effect the northern goshawk). Due to the restricted window for implementation of timber harvest and road construction activities due to the high elevation of the project area, "road construction and timber harvest activities should be planned when possible to occur within the late summer, fall, or winter to minimize effects to neotropical birds." (DEIS page 2-7)
5	3	EPA-R8	EPA suggests the agency provide rationale for its selection of the preferred alternative. The FEIS include clarification as to why Alternative 1 is preferable to Alternative 3 and what benefits the adoption of Alternative 1 will provide that justify its possible higher impacts on goshawk populations.	Thank you for your comment. The rationale for the selected alternative will be provided in the Record of Decision.
5	4	EPA-R8	The DEIS specifies that minimal amounts of fence may be required to isolate livestock from grazing in treated areas. It is not clear that the resources have been committed to this eventuality.	As stated in the DEIS (p. 3-36), fencing may be used (specifically electric fence), but as a last resort after pasture resting or deferring, where monitoring indicates that livestock are (or are likely to be) impacting vegetative recovery. If fencing is required, it is likely that the Forest would be re-using materials from past projects, if available. Otherwise, a combination of project implementation funding (such as fuels and/or vegetation) and range management funding will be used to purchase and install necessary fencing.
5	5	EPA-R8	In Section 3.3, "Fire" subsection "Sagebrush" the EPA suggests that more information on the	A discussion on the use of herbicides and effects and regeneration time has been added to the Final EIS, Section 3.3. Mountain big

Letter #	Comment #	Name	Comment	USFS Response to Comment
			regeneration time of big sagebrush stands be supplied in the FEIS.	sagebrush dominance is expected to return within 20 years (Goodrich 2005), and sagebrush will remain an important component of the stands in the interim.
5	6	EPA-R8	In Section 3.6, "Recreation", EPA suggests the inclusion of planning to enforce the exclusion of unauthorized ATV users from the project area.	The Ogden Ranger District will be managed for motorized travel on designated routes based on the September 2007 <u>Ogden District Travel Plan revision</u> . This document includes management and mitigation for motorized uses on National Forest System lands. The Big Creek DEIS considers motorized recreation use as an activity in or near the project area that could contribute to cumulative effects