Inyo, Sequoia, and Sierra National Forests Need to Change Analysis - Supplement

WHAT WAS THE PROCESS FOR DEVELOPING RECOMMENDATIONS FOR THE NEED TO CHANGE?

At the end of 2013, the planning team began work on the Need to Change (NTC). The NTC was based on the three forest assessments, the Bio-Regional Assessment, and the Forest Service Pacific Southwest Research Station's science synthesis. The planning team identified six preliminary NTC emphasis areas by considering a set of criteria together with the assessments and the science synthesis. This preliminary NTC and set of criteria can be found at http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5444578.pdf.

These criteria were used to identify the most pressing areas needing change during this plan revision effort by considering threats to benefits to people, trends, issues with current management direction, and ability of forest plans to influence conditions. The six emphasis areas identified were: 1) vegetation, resilience, wildlife and fire (focused on the west side of the Sierra Nevada); 2) vegetation, resilience, wildlife, invasive plants, and fire (focused on the east side of the Sierra Nevada); 3) the wildland urban interface; 4) meadows; 5) aquatic and riparian areas; and 6) sustainable recreation. We received feedback from the public and tribes on these six emphasis areas between December 30, 2013 and January 31, 2014.

We received several comments that the process was unclear, not transparent enough, did not clearly link to the fifteen topic areas from the assessments, did not highlight uniqueness among the three forests, and did not adequately address the relationship to current management direction. The planning team subsequently worked out a more systematic and transparent process to identify areas recommended for change. In doing so, rather than the original set of criteria, we used a more straightforward process of identifying where resource conditions are concerning, where changed plan components could improve those conditions, and how that would contribute to sustainability. Several of the original criteria, however, are encompassed within these steps. The NTC table displays the results of this process, which support our updated need to change recommendations. In addition to the comments received on the NTC process, we also received input specific to NTC content. Using endnotes we highlight some of the substantial comments received and how they were addressed. These numbered endnotes are found throughout the document. The numbers refer to information at the end of the document.

In the table below, each of the assessment topic areas is broken into subtopics. For each subtopic, we describe overall resource condition and trend. These are simplified descriptions based on quantitative and qualitative information in the assessments, including professional judgment. For each subtopic, we also describe the relationship between current plan direction and resource conditions, identifying the extent to which plan direction influences conditions and how current plan direction may be lacking, or whether other factors are at play.

Taking all that information together, we make recommendations to change current plan direction and provide further rationale, including how changes would help guide management of National Forest System lands so they are ecologically sustainable and contribute to social and economic sustainability. Opportunities to contribute to social and economic sustainability and to support benefits to people are integrated within the rationale for each resource subtopic where change is recommended. Therefore, we do not cover these topics in separate rows in the table.

Based on available resources and consideration of public and tribal feedback, the responsible official for each forest will ultimately decide what will get addressed in the plan revision process.

WHAT ARE THE FINDINGS BY ASSESSMENT TOPIC AREAS?

Topics and Subtopics	Resource Condition	Trend of Condition	Relationship Between Current Plan Direction and Resource Conditions	Change Recommended	Rationale for Recommendation
Terrestrial Ecosystems					
Fire as an ecological process	Poor in most areas	Declining, due to uniformly dense vegetation, lack of low/moderate intensity fire, and climate change	Current plan direction has a focus on vegetation management and fuel conditions at the stand or patch scale. There is no direction on restoration of fire as an ecological process. There is a lack of direction at the landscape scale. In part because of plan direction, there is limited fire and vegetation restoration that would reduce or moderate unplanned fire intensity. Riparian areas are and continue to be impacted by the lack of low and moderate intensity fire. Plan direction is highly restrictive on restoration of fire or vegetation conditions in riparian areas. This has led to an increase in large-scale high intensity and severity fires. These areas are especially vulnerable to these types of fires because of the tendency to occur in canyons or drainages that "funnel" fire spread and intensity.	Yes	Ecological fire resilience and restoration of fire as an ecosystem process is critical to ecological sustainability and the continue provision of benefits on the forests. Vegetation density remains high and uniform, perpetuating uncharacteristic fire. Biodiversity (e.g., birds, mammals) associated with patchy vegetation (heterogeneity) has declined and continuous to decline. Understory plants dependent on or enhanced by recurrent low and moderate intensity fire continue to decline. Old forest structure continues to decline with large-scale high intensity fire. With climate change already increasing uncharacteristic fire and with decreased water expected that will directly impact riparian areas, they are at great risk. Substantial impacts are already occurring and are expected to continue. Some of the changes take centuries or more to recover if they do. There is evidence that repeated fires occurring in some landscapes recovering from fire are resulting in type conversion from forest or woodland to shrublands. Management direction could be substantially improved by focusing on outcomes rather than limitations. For example, desired conditions related to vegetation condition, structure,

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					function, and fire effects. Improved conditions would reduce the likelihood of fire impacts on communities, infrastructure (power lines, recreation sites, communication towers), and other values at risk that provide benefits to people. Many tribal values and interests are impacted by uncharacteristic fire, fire deficits, increased forest density and homogeneity, increased fuel loading of ecosystems and habitats used by tribes, decreased shrub and non-forest habitat that affect tribal access and utilization of valued habitats and resources.
Eastside, general	Condition and trend vary by ecosystem, as described below	Stable to declining	Current plan direction is limited for eastside ecosystems, does not include ecological requirements for the Bi-State DPS of greater-sage grouse, and does not include new science on resilience to cheatgrass invasion. There is limited integration of social and ecological sustainability, particularly related to pinyon pine gathering sites and other areas of tribal importance.	Yes	New and updated plan components are needed to ensure ecologically sustainable management and to further support tribal uses of culturally important areas. Improved conditions would contribute to economic and social benefits associated with recreation, grazing, other forest uses, biodiversity, and wildlife, as well as reduce the threats of fire to communities and these benefits.
Sagebrush	Moderate to poor	Declining	There is no direction for sagebrush in the 2004 Sierra Nevada Forest Plan Amendment (SNFPA). There is some direction in the Inyo Land and Resource Management Plan (LRMP) related to seral stage and structure. There is no direction on sagebrush in the Sequoia LRMP. Differences between sagebrush types (e.g., different species, ecological	Yes	Invasive plant species, grazing, and changes in fire regime (too frequent or too infrequent) have influenced condition and trend. Conifer encroachment has affected greater-sage grouse habitat. Many potential management strategies could be developed to address these issues, such as desired conditions for ecosystem

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			requirements) need to be addressed. Conservation and restoration of greater-sage grouse habitat needs to be incorporated based upon current conservation strategies and science. Direction must be highly adaptive, because information is very new and variable across the landscape.		structure. Improved conditions would contribute to economic and social benefits associated with recreation, grazing, other forest uses, biodiversity, and wildlife, as well as reduce the threats of fire to communities and these benefits.
Pinyon-Juniper	Moderate	Declining	This is a widespread type on the Inyo National Forest, but is often inaccessible, so agency ability to influence conditions on a very large scale is limited. Although the type is more limited on the Sequoia National Forest, it also tends to be inaccessible. Direction is absent for this type in the SNFPA Record of Decision (ROD). In the Inyo LRMP, existing standards and guidelines for forested types need to be revised for dwarf forests and woodlands, where desired conditions and management strategies differ. Incorporation of the new federal fire policy into the revised plan would improve the condition and trend of this type.	Yes	Forests are becoming denser, due mainly to climate and background geographic expansion. Invasive plants are becoming more common. In some areas, disease or large fires are affecting pinyon pine health. Improved conditions would contribute to economic and social benefits associated with recreation, grazing, other forest uses, biodiversity, and wildlife, as well as reduce the threats of fire to communities and these benefits.
Jeffrey pine and dry mixed conifer (eastside and Kern Plateau)	Moderate	Declining	Because of drier conditions, changes since fire suppression have been slower and less severe than in westside pine. There have been moderate increases in tree density, homogeneity, and surface fuels. Fuels treatments have improved	Yes	Departure from natural range of variability in fire regime, spread of invasive species, concentrated recreation, and significant historic/tribal areas make revised direction for these areas important.

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			conditions in many areas, as have some areas of less severe natural fires. There is an absence of direction on Jeffrey pine structure/composition/function in the SNFPA, and limited direction in individual forest plans.		Improved conditions would contribute to economic and social benefits associated with recreation, grazing, other forest uses, biodiversity, and wildlife, as well as reduce the threats of fire to communities and these benefits.
Desert (xeric) shrub/ blackbrush	Moderate	Declining	No direction exists in the SNFPA. Seral stage and structure direction exists in the Inyo LRMP. Direction for all shrubland ecosystems is needed.	Yes	Fire frequency is increasing, partly due to invasive annual grasses. Climate change is causing shifts in distribution. Improved conditions would contribute to economic and social benefits associated with recreation, biodiversity, and wildlife, as well as reduce the threats of fire to communities and these benefits.
Mountain mahogany	Moderate	Stable to declining	No direction exists in the SNFPA. Direction for all shrubland ecosystems is needed (see above types).	Yes	Fire interval is departed from historic conditions and cheatgrass is widespread.
Special habitats (alkali flats, pumice flats, and dry forb habitats	Moderate	Stable to declining	Current plan direction is lacking to protect and enhance these habitats.	Yes	Shrub and tree encroachment, related to climate change, fire suppression, and grazing all affect these habitats. Integrated direction could improve trend.
Subalpine and alpine	Mostly good. Some concentrated use areas in poor condition.	Declining, due to climate change and, in limited areas, increased recreation use pressure	Plan direction specific to subalpine and alpine ecosystems is currently very limited or absent. Adding desired conditions related to ecological integrity of ecosystems along with some strategies to minimize future impacts, would help ensure ecological sustainability.	Yes	New and updated plan components are needed to ensure ecologically sustainable management, including adaptation to climate change and ecological resilience to concentrated recreation use. Changes recommend include adding desired conditions related to ecological integrity of ecosystems, along with some strategies to minimize future impacts. Updated plan components would contribute to benefits to people by helping to protect primitive recreation opportunities and solitude, biodiversity, scenic integrity, and areas of

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					tribal importance.
Foothill	Moderate	Declining, due to climate change, urbanization, uncharacteristic fire, and invasive plant species	There is very little plan direction specific to foothill ecosystems, including blue oak, chaparral and other non-forest types. Adding desired conditions related to ecological integrity of ecosystems along with some strategies to minimize future impacts would ensure ecological sustainability. This zone is one of the most vulnerable to climate change.	Yes	New and updated plan components are needed to ensure ecologically sustainable management, including adaptation to climate change and ecological resilience to concentrated recreation use. National fire policy has changed since the current plans were developed. It emphasizes management of fire for resource benefit and protection, recognizing that it is one of the most efficient means to reduce fire hazard while at the same time using a risk management approach to minimize loss of human life and values.
Montane (pine, oak, mixed conifer)	Poor in many places. Moderate in others.	Declining, due to fire suppression and past management that has resulted in substantial changes (e.g. increased density), air pollution, climate change, and lack of active management.	Some plan direction limits pace and scale of vegetation restoration, by both mechanical means and fire. The intensity and pattern of restoration is limited and focused at the stand scale. Current plan direction does not focus on restoring within-stand and landscape heterogeneity, impacting the ecological sustainability of wildlife habitat. Benefits to people have also been impacted, including recreation, biodiversity, cultural heritage and connection to the land, water quality and supply, carbon sequestration, timber, and scenery.	Yes	New and updated plan components are needed to ensure ecologically sustainable management, including adaptation to climate change and ecological resilience to concentrated recreation use. National fire policy has changed since the plans and emphasizes management of fire for resource benefit and protection, recognizing that it is one of the most efficient means to reduce fire hazard while at the same time using a risk management approach to minimize loss of human life and values. Updated plan components that support widespread restoration have the potential to offer local employment opportunities and reduce threats of uncharacteristic fire to communities and

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					infrastructure.
Upper montane	Moderate	Declining, due to climate change, change in fire regime. Red fir and lodgepole pine forests are particularly vulnerable to climate change because they are associated with snowpack.	Some plan direction limits pace and scale of vegetation restoration, by both mechanical means and fire. The intensity and pattern of restoration is limited and focused at the stand scale. Current plan direction does not focus on restoring within-stand and landscape heterogeneity, impacting the ecological sustainability of wildlife habitat. Benefits to people have also been impacted, including recreation, biodiversity, cultural heritage and connection to the land, water quality and supply, carbon sequestration, timber, and scenery.	Yes	New and updated plan components are needed to ensure ecologically sustainable management, including adaptation to climate change and ecological resilience to concentrated recreation use. National fire policy has changed since the plans and emphasizes management of fire for resource benefit and protection, recognizing that it is one of the most efficient means to reduce fire hazard while at the same time using a risk management approach to minimize loss of human life and values. Updated plan components would help improve conditions that support a variety of benefits to people, including recreation, biodiversity, cultural heritage, connections to the land, water quality and supply, carbon stability, timber, grazing, energy production, and scenery. Updated plan components that support widespread restoration have the potential to offer local employment opportunities and reduce threats of uncharacteristic fire to communities and infrastructure.
Old forest and complex early seral habitats	Poor	Declining, due to change in fire regime and vegetation density and	Plan direction for old forest emphasizes closed canopied conditions that contribute to reduced fire resilience and are inconsistent with new science on forest heterogeneity. Large-scale fires	Yes	New and updated plan components that emphasize desired conditions at within-patch and landscape scales would contribute to ecological fire resilience and improved ecological integrity.[1] Sustainability of these

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		uniformity.	are contributing to large areas of high severity effects, fragmenting old forest and creating large patches of complex early seral habitats. There is a lack of widespread within-patch and landscape heterogeneity to provide landscape connectivity of these habitat types.		habitats is important for numerous habitat specialists. Updated plan components would support the benefits that these unique ecosystems provide, such as special aesthetic and recreational values. Updated plan components that support widespread restoration have the potential to offer local employment opportunities and reduce threats of fire to communities and infrastructure.
Aspen habitats	Poor	Declining, due to fire suppression and past management.	There is little to no plan direction specific to aspen. Plan direction on riparian areas, where a good portion of aspen occurs, limits active management (especially fire) that aspen needs to sustain. Conifer encroachment and fire as a process are particular issues for sustainability. Aspen is vulnerable to climate change.	Yes	New and updated plan components are needed to ensure ecologically sustainable management. Aspen supports a high level of biodiversity and is important for overall landscape ecological integrity. These areas are highly vulnerable to climate change. Without accelerated, active restoration, they are at risk of loss in many areas. Aspen groves contribute to social and economic sustainability by supporting recreation experiences and attracting visitors.
Connectivity[2]	Moderate to poor	Declining for many habitats. Improving condition for some habitats, such as early seral and fire-related habitats.	There is little direction specific to connectivity. Large-scale fires and other factors are resulting in fragmentation of habitat for wide-ranging species. This is a result of changes in vegetation specific to each ecological zone. See ecosystems sections above.	Yes	Recommended changes are primarily those described for ecosystems and fire. Updated plan components would contribute to ecological sustainability because connectivity affects the ability of species to move in response to climate change, and to migrate to different seasonal habitats. Connectivity also helps ensure genetic diversity. Improving conditions contributes to social and economic sustainability through employment opportunities and benefits associated with recreation and wildlife. Connectivity is important to tribal culture and uses.
Aquatic Ecosystems					
Riparian areas	Moderate	Mostly stable. Declining in	Existing management direction in current plans and other watershed	Yes	Roads and trails, uncharacteristic fire, air pollution, climate change, compaction of soils,

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		some areas that have been fragmented or degraded from past actions.	programs or policies do not address impacts to riparian habitats at the landscape level from uncharacteristic fire, air pollution, invasive species, and climate change. For examples, current direction allows for some fire and thinning in riparian areas. However, riparian areas continue to be impacted by fire exclusion because management direction for riparian areas and upland areas is not always aligned.[3]		and recreation use influence riparian areas. There is a need to align plan direction to better manage riparian areas to improve resilience to climate change, fire, ozone, and nitrogen deposition. Improved direction would contribute to benefits to people by supporting water supply, biodiversity, recreational opportunities, and grazing. Riparian areas are important to tribal culture and uses.
Streams and rivers	Moderate to some poor	Declining	Current management direction does not prioritize restoration needed to address the multitude of interacting factors that impact aquatic habitats and threaten native species and diversity.	Yes	Hydrologic changes, warming temperatures, invasive species, and lack of habitat connectivity have already been observed. Strategies to prioritize restoration of aquatic ecosystems would promote resilience and sustainability of aquatic diversity. Improved direction would contribute to benefits to people by supporting water supply, biodiversity, power generation, recreational opportunities, and grazing. Streams and rivers are important to tribal culture and uses.
Lakes and ponds	Moderate to some poor	Declining, due to stressors	Current management direction does not take into account impacts from invasive species and climate change in prioritizing restoration.	Yes	High elevation lakes and ponds are vulnerable to warming temperatures, changing hydrology, climate change, and invasive species. Restoration of lake and pond ecosystems could improve resilience to climate changes, pollution, and reduce invasive species. Strategies and other plan components are recommended to address restoration and sustainability of priority lake ecosystems,

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					including habitats and diversity. Improved direction would contribute to benefits to people by supporting water supply, biodiversity, and recreational opportunities. Lakes and ponds are important to tribal culture and uses.
Meadows and fens	Moderate to good	Stable. Declining in some areas where past actions have influenced condition.	Current standards and guidelines have provided some protection and allowed for many restoration projects. However, additional strategies are lacking that would improve resilience to climate change and fire. Current direction is focused on individual resource areas, such as hydrology, soils, wildlife, and vegetation, making integrated meadow management and restoration difficult.	Yes	Strengthening strategies to prioritize restoration of meadows would improve sustainability of diversity and resilience to changing climate. Strategies and other plan components are recommended to address restoration and sustainability of priority meadows or fens. A multi-resource, integrated approach would better achieve ecological sustainability. Improved direction would contribute to benefits to people by supporting water supply, biodiversity, recreational opportunities, and grazing. Ecological sustainability of meadows is important for many tribal uses, including meadows along cross-Sierra traditional travel routes.
Springs and seeps	Moderate	Declining, due to stressors	Springs and seeps are groundwater-dependent ecosystems. They may be impacted by factors such as grazing, recreation, water use, flood and drought, and climate change. Current plan direction does not address groundwater-based ecosystems.	Yes	Springs and seeps are affected by climate change that may trigger the need for adaptive management to protect these groundwater dependent ecosystems, at-risk species, and aesthetic values. Current plan direction does not reflect new policy for management of groundwater and other new policies. Improved direction would contribute to benefits to people by supporting water supply, biodiversity, and recreational opportunities.

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					Ecological sustainability of springs is important for many tribal uses, including providing a source of water along cross-Sierra traditional travel routes.
Connectivity	Poor	Stable to declining, primarily due to climate change.	Dams and diversions contribute to aquatic habitat alteration by blocking fish movement or migration, and contribute to aquatic species isolation. The Forest Service does not have the authority to remove barriers such as large dams. However, the Forest Service can influence other issues related to connectivity. Current direction in the SNFPA ROD addresses connectivity through multiple standards and guidelines.	No	Current plan direction on connectivity of aquatic ecosystems exists. The Forest Service will continue to work with FERC, public utilities, and other partners to restore connectivity where possible. Adding strategies to prioritize restoration of aquatic and riparian ecosystems, as described in the other rows of this section, will also include consideration of habitat connectivity.
Watersheds					
Watersheds	Moderate	Stable	Many watersheds are in need of improvement. Current management direction does not address how restoration should be prioritized. The Watershed Condition Framework (WCF) protocol for identifying priority watersheds was developed after the development of current plans.	No	Identifying priority watersheds is a requirement of the 2012 Planning Rule and will be included in this revision effort.
Air					
Ozone and nitrogen	Poor	Declining, ozone and nitrogen are increasing due to increasing population and emissions in the	While the Forest Service has authority to influence the resilience of vegetation to emissions by reducing and managing vegetation density, there is limited ability to address the main source of emissions, which is vehicle use in the	Yes	Impacts to vegetation and other ecosystem components have been detected, as has an increased susceptibility to stressors. Changes in management direction described in the terrestrial ecological integrity and fire sections could improve resilience of vegetation to stress

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		San Joaquin valley.	San Joaquin Valley.		by ozone and nitrogen. Restoration contributes to social and economic sustainability through employment opportunities.
Particulate matter	Poor	Declining, particulate matter is increasing due to uncharacteristic fire. Land use in the San Joaquin valley is another contributor.	There is an absence of management direction on tradeoffs between short-term and long-term smoke emission levels. The Forest Service has the ability to influence long-term particulate matter levels through restoration that reduces the frequency and size of high emission uncharacteristic wildfire events. State and federal air quality standards and national policy encompass much of what is relevant to management direction.	Yes	The condition of vegetation across large spatial scales influences the concentration of smoke emissions when wildland fires occur. Across much of the landscape, current vegetation conditions of high fuel loadings result in high emissions. Planning strategies that increase the pace and scale of restoration may compromise short term local air quality but will improve long term air quality over a broader area. Good air quality is an important benefit for communities and forest users. Improved air quality can help protect the recreation experience and associated economic benefits.
Soil					
Soil	Moderate	Stable to improving	Management of soils is adequately addressed in existing plans and agency policy to ensure indicators of soil quality are in an upward trend. A few areas exist with excessive soil degradation. The majority of areas with soil degradation are a result of legacy impacts and management practices on sensitive soils, e.g., meadow incision, compaction, and displacement.	No	Current management direction and best management practices are expected to continue to improve soil quality.
Water					

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Water Quantity	Moderate	Declining, due to climate change	Current management does not address prioritization, restoration, and protection of floodplains, meadows, streams and rivers, and riparian areas that could increase water storage.	Yes	Modifications to plan components to recognize trends in water shortages and drought would assist the forests with future water use issues. Updated plan components contribute to benefits to people, including water supply for municipal, industrial, agricultural, and recreational uses. These forests contribute a major portion of California's overall water supply.
Water Quality	Moderate	Stable	Fire suppression, climate change, human sanitation concerns from a growing population, and illegal use of toxic chemicals all pose an elevated risk to water quality since the last forest plans were written.[4] Overall, Forest Service best management practices have been effective at protecting water quality, and we can generally address needed changes outside the planning process through these best management practices.	Yes, where water quality objectives are not being met	While water quality on National Forest System lands is generally good, some water bodies are impaired (Clean Water Act, Section 303d listed) and/or exceed state regulated water quality objectives. Updated plan components and a geographic restoration focus where water bodies are impaired could help meet water quality objectives. Updated plan components would contribute to social and economic sustainability by supporting tribal uses, protecting recreational opportunities on the forests, and providing clean water to communities.
Groundwater	Groundwater quality is assumed to be good. Localized issues with groundwater quality likely exist.	Declining. A net deficit in precipitation since the 1930s and series of droughts indicate that groundwater recharge has decreased and the trend is likely to continue.	Both surface waters and groundwater are linked as water moves through the watershed. Strategies to improve water retention in meadows and deep organic soils will promote storage of groundwater. The new Forest Service Groundwater Directives provide direction for changes in monitoring and planning of groundwater resources. These changes need to be considered in the new management direction.	Yes	Forest plans should be aligned with the new Forest Service Groundwater Directives. Modifications to plan components to consider water uses would improve compliance with requirements for permitted uses, provide guidance in water conservation, and assist the forests with future water use issues. Updated plan components contribute to benefits to people, including groundwater supply for municipal, industrial, agricultural, and recreational uses.
Drivers and Stressors					
Invasive Species	Moderate to poor	Declining, due to uncharacteristic	The Forest Service manages invasive plants and can influence existing	Yes	Updated plan components that align with existing agency policy and emphasize

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		fire, climate change, and varied land uses.	populations and new infestations on National Forest System lands. However, management of invasive plants at the landscape scale depends on coordinated efforts with adjacent landowners and land managers. National direction exists for invasive plants, but current direction may not be harmonized with this direction. Proactive strategies to prevent the spread of aquatic invasive species are often the only alternative and are lacking from current forest plans. Once established, invasive species are costly to remove.		coordination with partners could improve conditions. Limited resources are often the greatest barrier to more aggressive action. Strategies based on best available science to prevent the spread of aquatic invasive plants and animals have not yet been incorporated into forest plans. Updated plan components would contribute to benefits to people and sustainability by better protecting human communities, biodiversity, recreation opportunities, and ecosystem resilience. For some invasive species, including the barred owl, white pine blister rust, and chytrid disease, not enough is known that would warrant a change in plan direction at this time.
Fire	Poor	Declining, due to continued accumulation of fuels, increased human ignitions, and climate change.	Fire is a key ecological process, or "driver" in most of the area. See section above on fire as an ecological process. It is a "stressor" when it impacts communities and infrastructure, such as recreation facilities, power lines, communication towers, major roads, trails, dams, and energy production facilities. The interplay of extreme fire behavior, increased human population, infrastructure, and past fire policy have resulted in greater impacts and threats to communities. This interplay continues to raise suppression costs and increases the risk to firefighters and the	Yes	Federal Wildland Fire Policy and the National Cohesive Fire Management Strategy compel us to restore and maintain fire-resilient landscapes and create fire-adapted communities using risk management as a foundation of actions taken.[5] One aspect of this is the application of scientifically based risk management approaches to aid in determining the broader area where fires could originate and impact communities and other values. Current policy also allows more flexibility in managing fire for multiple objectives. Changes to LRMP's are needed to better align with current policy. As described above in the section on fire as an ecological process, desired conditions that include fire type, severity, frequency and extent, specific to each ecosystem type, in

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			public. Existing LRMPs mainly focus on providing limited areas of strategically placed fuels treatments to protect assets and/or limit fire extent. They do not address the large areas that cannot be actively managed and focus more on fuels reduction than on fire as an ecological process. Current management direction greatly limits the ability to plan and implement ecological restoration and maintenance and fuel reduction by restricting prescribed fires, wildfires managed for multiple objectives, or mechanical treatments to modify vegetation.		combination with current federal fire policy, would result in a substantial increase in the pace and scale of restoration. Updated plan components would contribute to employment opportunities through fuels reduction activities and reduce the threat of fire impacts to natural resources, communities, and infrastructure.
Carbon					
Carbon Stability	Poor	Declining, due to the increase in uncharacteristic fire and increased tree mortality due to a "stress complex" of air pollution, drought, insects,	Current plan direction and other factors have resulted in limited restoration that would improve resilience to fire and thus have greater carbon storage and sequestration stability. There is a complex interplay between denser forests having more trees to sequester and store carbon but at the same time being more vulnerable to carbon loss	Yes	It is estimated that if current trends continue, forests in the region will become net emitters of carbon rather than sinks. Improved plan direction could contribute to stable carbon storage and sequestration, reducing carbon emissions. See sections on montane and eastside terrestrial

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		and pathogens.	from varied factors, including high severity fire and other stress related mortality.		ecosystems for recommended changes to plan direction and other benefits to people.
At-Risk Species[6]					
Fish, Amphibians, Reptiles	Moderate to poor	Slightly declining, due to limited populations and habitat fragmentation	Current plan direction is adequate to manage direct effects from activities for most species. Current plan direction for riparian habitats generally limits treatments due to short term potential for effects to riparian vegetation and changes in riparian condition. There are additional forest plan standards and guidelines that restrict activities when there is the potential for effects to the species. The current pace and scale of fuels treatments is not sufficient to reduce long-term and cumulative effects from large wildfires on riparian habitats. Current plan direction related to Sierra Nevada yellow-legged frog, mountain yellow-legged frog, and Yosemite toad were developed when they were Forest Service sensitive species.	Yes	The U.S. Fish and Wildlife Service listed the three amphibian species under the Endangered Species Act in April. Plan direction should be updated to incorporate new information and conservation practices to contribute to species recovery and to streamline later project planning. Updated plan components would contribute to sustainability by further protecting aquatic and riparian ecosystems, people's connection to the land, culture, and economic benefits from biodiversity.
Birds (Late-Seral/Old Forest Associated and Complex Early-Seral Associated)	Moderate	Declining	The current plan direction was developed specifically to try to reduce the rate of loss of old forests and California spotted owl habitat from wildfire while protecting key habitat areas and key habitat elements. However, for a variety of reasons, the pace and scale of fuels reducing activities has not been sufficient to reduce the wildfire threats to habitat. The current plan direction provides general direction for providing for post-	Yes	Managing wildfires for resource benefits would increase the restoration of fire to landscapes and improve resilience of old forest habitat to wildfire. A conservation assessment is currently being prepared for the California Spotted Owl that may be available in time to inform the development of plan direction. Strategies such as those described in PSW-GTR-220 and 237 and the Science Synthesis could be developed to address landscape patterns of late seral forests to reduce fragmentation and to identify areas where restoration and management toward late seral

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			fire complex early-seral habitat.		forest conditions are needed. Plan components that incorporate both old forest/late-seral and early-seral considerations as part of ecological sustainability would improve conditions for both old forest and early-seral at-risk species. Updated plan components would contribute to benefits to people and sustainability by better protecting biodiversity of late seral and old forests.
Birds (Meadow and Riparian Associated)	Moderate	Stable to slightly declining	Current plan direction exists for some species (willow flycatcher and great gray owl). For others, management of meadows and riparian habitat is provided by the aquatic management strategy of the SNFPA.	No	Existing plan direction is generally adequate, and there are opportunities to make local adjustments within existing direction
Birds (Sagebrush Associated – e.g. greater-sage grouse on the Inyo National Forest)	Poor	Declining	The current Inyo LRMP does not include ecological requirements for the Bi-State DPS of greater-sage grouse. It provides some direction related to seral stage and structure of sagebrush, but does not recognize differences between sagebrush types.	Yes	The Inyo National Forest has a need to include plan direction that would allow for the restoration and maintenance of sage-grouse habitat. The recent forest plan amendment of the Humboldt-Toiyabe NF should be used as a model with the goal of having consistent direction where practical. Updated plan components would contribute to benefits to people and sustainability by better protecting biodiversity of sagebrush habitats.
Birds (Other e.g., condor, bald eagle, peregrine falcon)	Moderate	Stable or slightly improving	Current plan direction allows for management of early seral habitat for deer, a source of prey, though funding limits habitat improvement work. National Forest System lands provide cliff sites for peregrine falcons, which can be impacted by recreational uses.	No	Managing recreation and disturbance for existing plan peregrine falcons can and does occur under existing plan direction.
Mammals	Moderate to poor	Declining	Current plan direction addresses fuel reductions to lessen threats from large	Yes	A conservation strategy is currently being developed for the southern Sierra Nevada

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(Late-Seral/Old Forest Associated)			high severity wildfires; however, the pace and scale of treatment has not been sufficient to reduce the threat. Specific plan direction exists for fisher but some elements have proven difficult to implement.		population of fisher that may be available to inform plan development. Updated plan components aligned to the in-progress conservation strategy could improve the ability to accomplish more on-the-ground restoration activities to reduce threats to late seral forest conditions while conserving and restoring habitat and protecting key ecological conditions important to fisher. Updated plan components would contribute to benefits to people and sustainability by better protecting biodiversity of later seral and old forests.
Mammals (Other)	Moderate to good	Stable to slightly declining	Current plan direction and existing policy provide adequate management direction.	No	Current management direction is adequate.
Invertebrates	Moderate	Stable to declining	Existing plans do not have specific direction for at-risk invertebrates.	No	Because of their site-specific nature and variability, these species may best be managed at the project level but will also benefit by plan direction that considers the ecological integrity of their key ecological conditions.
Plants	Moderate to poor	Stable to slightly declining	There is little direction in the current plans specific to at-risk plant species; however, current practices require consideration of species needs at the project planning level.	Yes	Using the ecological integrity approach will allow better consideration of at risk plant species in unique habitats. Since many at-risk plants are thought to be sensitive to climate change, updating plan direction to consider climate change adaptation strategies will increase opportunities for conservation.
Multiple Uses					
Fish, Plants, Wildlife	Moderate	Stable to slightly declining	There is little direction in the current plans specific to providing for these multiple-uses. Where needed, agency policy provides for the evaluation of proposals and issuance of special-use or collection permits.	No	Existing agency policy and current plan direction are adequate to continue to provide these uses. Issuance of special use permits is limited by Forest Service staffing and capacity to evaluate proposals
Range[7] (Permitted Livestock	Moderate	Stable to slightly declining	Current plan direction provides some flexibility to apply adaptive management to address local issues	Yes	Plan components should be updated to try to reduce overlapping direction related to wildlife in existing plans to maintain or improve

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Use)			related to wildlife, but implementation has been difficult.[8] Overlapping direction for a variety of resources (e.g., wildlife, riparian areas, and water quality) can make sustaining economically viable operations challenging. Current plan direction provides for landscape restoration activities (e.g., mechanical thinning treatments; returning fire to the ecosystem; removing conifer encroachment in meadows), but the pace and scale of implementation has not been sufficient to achieve the added benefit of increasing of livestock forage availability and improved livestock distribution by maintaining more open forested areas available for understory grazing.		economic sustainability of permitted livestock use. Improving economic sustainability of permitted livestock use also support social sustainability. Permitted livestock use on National Forest System lands is culturally important to many Sierra Nevada communities.
Timber	Moderate to poor	Stable to declining	Current plan direction limits the pace and scale of restoration. Current levels of forest product and biomass production marginally support an economically viable forest products industry. This then leads to further reductions in pace and scale of restoration because there are fewer mills and biomass facilities to process materials. The current plans contain outdated	Yes	Clear management objectives that encourage economically-viable vegetation management, with supporting standards and guidelines, could improve conditions. Incorporating plan components that encourage local hiring would further support restoration by building a skilled labor force that is able to implement restoration projects and process timber and biomass. This would support socioeconomic sustainability of local communities, as well as ecological sustainability.

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			direction related to regulated timber harvest activities.		The SNFPA ROD indicates that, while multiple standards and guidelines have affected timber harvest options for the individual forest plans, no effort was made to adjust the schedule of timber harvests. This will be conducted as part of plan revision considering the pace and scale of ecological restoration.
Recreation					
Settings	Mostly moderate. Poor in some heavily used areas.	Declining where increased recreation use has impacted ecological and social conditions.	Current direction for management of recreation settings is outdated. Outdated Recreation Opportunity Spectrum (ROS) classifications currently exist as a result of changes in management and land status since the last plans were written. Current ROS does not adequately capture valued recreation settings and opportunities.[9] Decreasing budgets affect management of recreation settings across the ROS.	Yes	New and updated plan components would improve and sustain the diversity and quality of recreation settings by addressing visitor use conflicts, aligning visitor use with settings, and focus limited resources. New and updated plan components would reduce ecological and social impacts.[10] Updated plan components would contribute to sustainability by helping to manage ecological and social impacts in popular recreation areas, bringing social and cultural considerations into management, encouraging partnerships, and further supporting the economic benefits associated with quality and diverse recreation settings.[11]
Opportunities	Moderate to poor	Stable or declining due to increased public demand for recreation opportunities and lack of resources required to	Current direction for recreation is limited and does not address the wide range of recreation uses or public demand for additional recreation opportunities and access. Plan direction does not incorporate guidance to achieve desired conditions under the sustainable recreation framework,	Yes	New and updated plan components would help sustain the quality and diversity of year-round developed and dispersed recreation opportunities. Updated plan components would improve focus on key recreation opportunities and recreation distinctive roles and contributions. New and updated plan direction would address conflicts between competing

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		maintain developed recreation sites, road and trail systems, and manage dispersed recreation	which would improve the balance between social and environmental conditions and more integrated management. Current plans do not harmonize recreation opportunities with the recreation distinctive roles and contributions of each forest.		uses, and improve environmental conditions and the quality and diversity of recreation opportunities. Updated plan components would contribute to sustainability by helping to focus resources on key recreation settings, encouraging partnerships and education, protecting areas where environmental damage has occurred, and further supporting the economic benefits associated with quality and diverse recreation opportunities.[12]
Access	Moderate to poor	Stable or declining where roads and trail systems are degraded, causing resource impacts, while demand for motorized and non-motorized recreation access continues to increase. Demographic shifts are challenging the way forests have traditionally communicated and outreached to communities.	Current plan direction does not provide guidance to address the increasing demand for non-motorized and motorized recreation access and the associated conflicting uses. In addition, plan direction is lacking or outdated in regards to public outreach and communication efforts that serve to connect people with nature.	Yes	New and updated plan components would improve the sustainability of year-round recreation access and minimize visitor use conflict. New plan components would contribute to improved communication technology to enlist public involvement in forest stewardship, public outreach, and improve the connection between people and nature, with emphasis on serving underrepresented populations.
Scenic Character	Moderate to poor	Declining due to dense forest conditions (increasing the	Current plan direction utilizes the outdated Visual Management System (VMS). Converting to the Scenery Management System (SMS) advances	Yes	Updated plan direction for scenic character would contribute to “sense of place” and integrate scenic character improvement with ecological restoration efforts. The protection

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		threat of uncharacteristically severe wildfire) and urbanization (higher demand for energy and communication infrastructure).	the contemporary paradigm that both natural and cultural (built element) features are part of scenic character and contribute to "sense of place". Under SMS, the concept of scenic stability ties scenery management to ecological restoration and reduces long-term risks to scenic character. In addition, incorporating sustainable recreation concepts into plan direction for ecological restoration can improve and protect scenic character.		and improvement of high quality scenic character contributes to people's recreation experience and increases the potential for connecting people with nature.
Energy and Minerals					
Transmission Corridors	Good	Stable. Existing lines are in compliance with permits. There are no new proposals.	Current direction provides for sufficient management of transmission corridors.	No	Current condition and trend does not warrant changes to management direction for transmission corridors.
Wind Energy	N/A	N/A	Wind energy development is already supported by existing law, regulation and policy and does not require additional plan components.	No	Wind energy facilities do not currently exist on any of the three forests. On the Inyo and Sequoia National Forests, there is potential for wind energy development. Wind energy production is unlikely on the Sierra National Forest.
Geothermal Energy	Good	Stable	Geothermal energy development is already supported by existing law, regulation, and policy and does not require additional plan components.	No	Existing geothermal leases on the Inyo National Forest are in compliance with permits and operations are expanding. The Sequoia and Sierra National Forests do not expect geothermal development.
Solar Power Facilities	N/A	N/A	Solar energy development is already supported by existing law, regulation and policy and does not require additional plan components.	No	There are no permitted solar power facilities on any of the forests, though the potential for solar energy development exists.
Hydropower Facilities	Moderate	Declining for hydropower capacity, due to	Management direction in forest plans does not influence condition of hydropower facilities. The Federal	No	Updated plan components would not impact the condition of hydropower facilities. However, the Forest Service does participate in

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		climate change and reduced runoff.	Energy Regulatory Commission (FERC) issues hydroelectric permits and regulates projects. The Forest Service can affect change through participating in FERC relicensing.		the FERC process, which governs conditions.
Mining Resources	Good	Stable	Current management direction is sufficient to appropriately manage active mining claims. Abandoned mine lands are being reclaimed as resources allow.	No	Current condition and trend does not warrant changes to management direction for mining resources.
Infrastructure					
Facilities and Transportation System	Poor	Declining, due to stable or decreasing budgets	Plans currently have direction to maintain facilities to standard. The current declining condition of the forest transportation system and facilities is primarily due to funding constraints, not management direction.	No	New or changed plan components would not likely affect the condition of transportation and facilities infrastructure. Current management direction carried forward in revised plans can provide the guidance needed to manage road and trail systems for resource protection.
Public Utilities	Good	Stable	Condition of public utilities is good. Existing plan direction appears to be sufficient to support public utilities.	No	Current condition and trend does not warrant changes to public utilities on the forests.
Private Uses	Good	Stable	Condition of private uses is good. Existing plan direction appears to be sufficient to support private uses.	No	Current condition and trend does not warrant changes to private uses on the forests.
Areas of Tribal Importance					
Areas of Tribal Importance	Moderate	Stable	Current management direction provides guidance on protecting and providing access to cultural sites. However, implementation is an issue due to resource limitations. Numerous federal authorities exist that provide opportunities for tribes to be involved at all levels of project planning and implementation. Forest leadership is key in providing direction to staff to work on the development of meaningful	Yes	New management direction could lay the groundwork to establish partnerships with tribes to develop programs and implement projects as funding becomes available. Establishing local protocols would ensure meaningful tribal participation in forest planning and project implementation.[13] Updated plan components would contribute to social and economic sustainability by helping tribes maintain their culture and connection to

Topics and Subtopics	Resource Condition	Trend of Condition	Relationship Between Current Plan Direction and Resource Conditions	Change Recommended	Rationale for Recommendation
			collaboration with tribes in the process of planning projects.		the land, as well as support economic opportunities through forest projects. Updated plan components would also contribute to sustainability by supporting traditional tribal management and encouraging partnerships to restore ecosystems. There are numerous opportunities to align tribal values and interests with ecological sustainability. Ecological sustainability benefits tribal interests by fostering access to and supporting uses of habitats and resources for traditional cultural purposes. Threats and declines in the ecological sustainability of terrestrial, aquatic, riparian, and meadow ecosystems negatively impact tribal interests and uses. See sections on terrestrial, aquatic, and riparian ecosystems for more detail on ecological sustainability.
Cultural and Historic Resources and Uses					
Cultural and Historic Resource and Uses	Poor	Declining, due to impacts related to population growth; agency management practices that inadvertently create new threats such as fuels build up in or next to sites; road, bridge, and	In addition to current laws, regulation and policies, current plans provide some direction on protecting and interpreting cultural and historic resources. Current Plan direction is primarily focused on National Historic Preservation Act Section 106 compliance processes that occur in response to undertakings proposed by other resource areas. These processes often emphasize flag-and-avoid methods. Constraints such as budget and staffing limit the agency's	Yes	Updated plan components that emphasize, as appropriate, the importance of protecting, interpreting and using cultural and historical resources could help improve the conditions of these resources. The guiding goals, principles and focus areas of the National Framework for Sustainable Recreation may provide for proactive management by aligning with goals that call for the protection of cultural resources, principles that emphasize connecting people with their cultural heritage, and focus areas that highlight investing in special places. Updated

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		building maintenance; illegal vandalism and looting; marijuana cultivation; wildfire; and climate change.	ability to influence current conditions and trends.		plan components would contribute to social and economic sustainability by helping to maintain connections to history and culture, supporting educational opportunities, drawing visitors to local communities,
Land					
Ownership	Good	Stable	Forest land is relatively consolidated and stable.	No	Current management is already supported by existing law, regulation and policy.
Status and Use	Moderate	Declining, due to increasing population, increasing demand for recreation opportunities, communication technology, and energy development.	Current management direction is sufficient to manage land status and uses. The one exception is the lands acquired by the Inyo National Forest through the Nevada Enhancement Act, which continue to be managed under the Tonopah Bureau of Land Management (BLM) plan. When the forest acquired the BLM lands, the forest was supposed to revise or amend its plan to bring in those lands. During plan revision, management direction will apply to these enhancement lands as they would elsewhere on the forest.	No, except for the Nevada Enhancement Act lands on the Inyo National Forest	Current management direction is sufficient to manage land status and uses. There is a need to update the Inyo LRMP to include management direction for the acquired BLM lands.
Existing Designated Areas					
Wilderness	Moderate in general, but varies by specific wilderness	Trend varies by specific wilderness area from stable to declining or	While most of the current direction is adequate, new uses and issues have emerged since the last revision and individual wilderness plans were completed. Additionally there are new	Yes	Conditions can improve if we update direction to address new uses, issues, and updated performance standards. If we have in place what we need to develop a wilderness character baseline and can begin to monitor it

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	area.	unknown.	performance standards that have been implemented since the last revision that include requirements for adequate standards and for protocols for monitoring that are sufficient. A wilderness character baseline and monitoring program has not yet been developed for any of these wilderness areas.		over time, we will be better able to identify trends that threaten wilderness character and meet national requirements. New wilderness areas and wilderness additions have occurred since the last plan revision.[14] Updated plan components would contribute to benefits to people by protecting opportunities for solitude and primitive recreation, as well as other benefits such as clean air and water, climate regulation, and maintenance of biodiversity.
Wild and Scenic Rivers	Poor to moderate. The condition is variable for each specific river.	Trend varies by river, but ranges from stable to declining or unknown. Where baselines have not yet been established, trend cannot yet be evaluated or where insufficient monitoring has occurred conditions are unknown.	On the Inyo National Forest, a Comprehensive River Management Plan (CRMP), including a final boundary, has not been completed for two recently designated Wild and Scenic Rivers and is past the three year Congressional deadline to complete after designation. Additionally, final boundaries still need to be completed for these two rivers. On the Sierra National Forest and Sequoia National Forest, for the Kern and Kings and Merced Wild and Scenic Rivers, existing direction in CRMPs may be stale because it has been 20-24 years since those plans were updated to incorporate new information, new threats, changed conditions, or updated guidance on components of an adequate CRMP including capacity analysis and protection measures. Some lack adequate descriptions of outstandingly remarkable values, or conditions at designation like upland and channel	Yes	When management direction has not yet been developed or updated for long periods of time, wild and scenic values may not be adequately protected. Until baselines for river values and conditions are documented in a CRMP, and standards, guidelines, management practices, and monitoring are in place, the wild and scenic values are at risk. WSRs play an important role in the Forest Service's overall commitment to healthy watersheds and clean water, and protect water quality, free flow and river-related outstandingly remarkable values including scenery, recreation, fish, wildlife, botany, heritage, geological and other values that benefit people.

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			conditions. Only two of the five designated rivers are meeting the wild and scenic river performance standard of "rivers meeting statutory requirements" in part because planning elements have not been completed.		
Pacific Crest National Scenic Trail	Good in designated wilderness. Moderate to poor outside designated wilderness.	Stable in designated wilderness. Declining outside designated wilderness, due to increased visitor use, increased motorized trespass, and increased development and energy infrastructure.	Current direction to protect the recreation experience and scenery resources of the Pacific Crest National Scenic Trail (PCT) is limited or absent. The trail corridor has not been defined.	Yes	New plan direction would provide for consistent trail-wide management direction. Without a corridor definition and adequate plan components in place, the trail has been negatively impacted by infrastructure development adjacent to the trail and increasing recreation events on the trail. The cumulative impacts are significant. Updated direction would contribute to sustainability by better protecting scenic integrity, opportunities to connect with nature, and the recreation user experience. Updated direction would help protect the distinct role and contribution the PCT has in the landscape as the only national scenic trail crossing the Sierra and Cascade mountain ranges and providing long distance travel opportunities for hikers and equestrians from Mexico to Canada.
National Recreation Trails	Moderate to poor	Stable. Declining where trail conditions are degraded.	National Recreation Trails were designated after the current forest plans were published. No direction currently exists to protect the attributes for which	Yes	New plan direction would help protect the attributes or which these trails were designated. It would contribute to benefits to people and sustainability by better protecting the user

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			these trails were designated.		experience, quality of the trails, and opportunities to connect with nature.
Other Designated Areas	Moderate to good	Stable to declining, due to fire and recreation	Management direction for other designated areas is adequate.	No	Current condition and trend does not warrant changes to management direction for other designated areas. The declining trend due to fire and recreation is addressed in sections above.

[1] Public comments included a desire to limit post-fire salvage to hazard tree reduction and zero or minimal salvage of burned trees. This is stated to benefit species that depend on early seral habitats, to benefit natural recovery of landscapes, and to recognize that post-fire management alters natural ecological processes. Internally, there is concern with the impacts of large fires on long term carbon sequestration and storage, changes in fire regimes, and long term fragmentation in old forest habitats for species that depend on large trees and mature forests. In addition, there is concern about future fire management in areas not salvaged or where many large trees are cut and left. There is evidence that places with large amounts of down logs experience soil damage when re-burned. There is concern for land stability and erosion when large areas burn. We also are concerned with the loss of benefits to people from not harvesting burned trees and for not establishing future forests for future wood product use. There are impacts to visual quality and recreation in areas not managed post-disturbance. There were a few public comments echoing the need to manage and reforest burned areas. Current plan direction from the 2004 Sierra Nevada Forest Plan Amendment (SNFPA) provides specific direction for managing large disturbance events, such as fires, insect mortality, and windstorms. It provides few hard limitations and considerable local flexibility. However, we could achieve benefits by clarifying plan component areas of overlap and potential conflict and by setting a desired condition and objectives for reforestation. It is unknown from recent fires whether major needs to change the plans were recognized through those experiences. It is known that at the project level there are delays because some direction is not clear in the plan, particularly related to how much should be left for early seral species. There are some economic elements that support the case for updated plan components to recognize benefits to people from managing burned areas, especially the relationship of timely action and costs and benefits. Strengthening this direction in the plan should help streamline project level NEPA.

[2] Connectivity was a major concern brought up through public input, particularly in relation to climate change and the need for animals and plants to respond and adapt to changes by moving across the landscape. While connectivity is an aspect of ecological integrity for each ecosystem type, the broader topic of connectivity was separately addressed to better respond to comments received from the public.

[3] The connection between upland and aquatic ecosystems was also emphasized in public comments received.

[4] Herbicides were brought up as a concern by the public. However, herbicide use is currently well regulated, and a need to change current plan direction was not identified.

[5] We received public input also emphasizing the connection between increasing fire resilience of ecosystems and increased human safety. Many members of the public support the notion of more holistic fire management. The public also expressed interest in the wildland urban interface, offering various recommendations for change.

[6] We received public input expressing a desire to see species-specific plan direction for wildlife conservation addressed in forest planning. However, the 2012 Planning Rule directs the agency to use an ecological approach first. The Forest Service will address specific species when an ecological approach is not sufficient.

[7] Some concerns were received from the public regarding the impacts of livestock management on wild horses on the Inyo National Forest. However, the forest's grazing utilization standards take into account other species that forage in these allotments. Wild horses are considered "wildlife" and effects determinations at the project-scale take into account leaving forage for wild horses. Other suggestions included promoting predators to control herd sizes. However, the Forest Service does not have the ability or jurisdiction to promote predators. States manage wildlife populations, including predators. There is also no evidence that more predators would keep the wild horse herd at sustainable levels. Some commenters felt that the Inyo National Forest needed to reduce or eliminate permanent fences and reduce restricted access to water. However, fences are in place to protect other resources and manage livestock on allotments, and the Forest Service will not be removing fences, unless they are no longer needed. Fences around water sources are there to protect those sources from over use, including over use by horses. Finally, comments were received that wild horses are not impacting sage-grouse and, rather, livestock grazing is creating those impacts. While impacts to the overall population of sage-grouse are not occurring, site-specific impacts are. Updating wild horse management plans is part of the sage-grouse action plan and something the agency will be required to address.

[8] Some people provided comments that grazing should be reduced or eliminated in meadows and riparian areas due to concerns for wildlife species. However, current plans include direction to manage grazing to consider needs and effects to wildlife species and to allow for local adaptive approaches, though implementation has been challenging.

[9] We received comments from the public that ROS classes do not adequately capture the valued recreation experience and treasured places. As part of our need to change, we recommend incorporating strategies for working with partners to adequately protect and managed these valued visitor experiences.

[10] Based on comments received, there is a wide spectrum of desires among the public for increasing and decreasing various recreation settings.

[11] Members of the public have also emphasized the importance of visitor spending to local economies, as well as the role that recreation plays in attracting people to live and work near high-value recreation areas.

[12] We received several comments highlighting the importance of dispersed recreation opportunities. The public has also expressed concerns over the effects of dispersed recreation on environmental conditions. The lack of adequate information about dispersed users and the effects was also identified. Many user groups, non-profit organizations, and agencies concerned about these conditions and trends have expressed the desire to partner with the Forest Service on these issues. The public has also emphasized the role that education and youth programs play in connecting people to the land and social sustainability.

[13] In comments received from the tribal community, they raised concerns about the continued protection of and access to culturally important resources and areas of tribal importance. Tribes would like more opportunities to assist in project-level planning and in the implementation of projects to include traditional place-

based knowledge and stimulate tribal economic development. Tribes have emphasized that many tribal values and interests are impacted by uncharacteristic fire, fire deficits, increased forest density and homogeneity, increased fuel loading of ecosystems used by tribes, decreased shrub and non-forest habitat that affect tribal access, and utilization of valued habitats and resources.

[14] The public provided feedback that having good direction and monitoring in place are only part of the equation. They felt that management of most of these wilderness areas is suffering from extreme staffing shortages. Partners and volunteers are helping to fill this gap to some degree, but not completely.