

The Deschutes National Forest (Forest) transition monitoring plan was developed following guidance in the 2012 Planning Rule as codified in the 36 CFR 219 regulations with further direction provided in Forest Service Manual 1920 and Forest Service Handbook 1909.12, Chapter 30. An interdisciplinary team of resource specialists met over the course of several meetings, initiating in May of 2015, to identify important monitoring elements, questions, and indicators to be responsive to the 2012 planning rule requirements. The Forest leadership team then reviewed the draft transition monitoring plans at two meetings (October 21, 2015 and November 18, 2015) and approved the draft transition plans for the Deschutes and Ochoco National Forests and the Crooked River National Grassland for release for public comment.

As part of the public comment process, letters were sent on January 27, 2016 to the Tribal Chairs and Natural Resource staff of the Confederated Tribes of Warm Springs, Klamath Tribes and Burns Paiute Tribe with notification of the opportunity to comment on the draft transition monitoring plan. On February 11, 2016, letters and emails were sent to over 140 individuals, federal and state agencies, and organizations requesting comments on the draft transition monitoring plan. The forest received comments from four individuals or organizations. The Forest’s interdisciplinary team reviewed the comments received, and responses are captured in the following table. None of the comments resulted in any substantial changes because the focus of the transitional monitoring plan, as indicated by the 2012 Planning Rule, is on forest plan components, while most comments were related to research questions, population monitoring, or on monitoring project specific effects.

The following are responses to the public comments received, including identifying those people that commented.

Commenter	Comment	Forest Response
Rod Adams, member, Oregon Hunters Assoc.	I think that these are vital items to inventory and have on file to be on top of questions and/or lawsuits before they are asked for or filed. As caretaker of the Public Lands we all use and enjoy, the F.S. should strive to be prepared and ready to give the results of up to date studies and inventories to interested parties instead of reacting defensively and having to start gathering information to support the position taken by upper management. Go forth and do a good job for all of us.	Thank you for your comment.
Tom Partin, American Forest Resource Council	The Deschutes National Forest is in the process of establishing a land management transition monitoring plan that is consistent with the 2012 Planning Rule (36 CFR 219). However for the reasons below, we feel the Forest is premature in establishing these transition monitoring plans before a new Deschutes Forest Plan is implemented.	Monitoring forms the basis for continuous improvement of the plan and provides information for adaptive management (see FSH 1909.12, Zero Code, Section 05) of the plan area. The purpose of monitoring in an adaptive management framework is to facilitate learning

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	<p>The Forest Service is moving prematurely to adapt monitoring plans to the 2012 planning rule. Multiple Forests have made statements to the effect that the 2012 requires that all land management plan monitoring programs meet the requirements of the new rule for transition of the plan monitoring programs by May 9, 2016. This treatment of May 9, 2016 as a hard deadline is erroneous and, where undertaken outside the plan revision process, a waste of scarce resources.</p> <p>The 2012 planning rule provides, in general, “The responsible official shall develop the plan monitoring program as part of the planning process for a new plan development or plan revision.” 36 C.F.R. § 219.12(c)(1). The rule requires that monitoring plans are to be included in forest plans, 36 C.F.R. § 219.12(a)(1), and track toward plan desired conditions, 36 C.F.R. § 219.12(a)(2). Similarly, the planning rule requires development of broader-scale monitoring strategies. 36 C.F.R. § 219.12(b). Thus the rule has a strong preference and direction that monitoring revisions be tied to plan and management revisions.</p> <p>For Forests which developed their current plans under a prior rule and which are not undergoing plan revision, the rule states “the responsible issue shall modify the plan monitoring program within 4 years of the effective date of this part, or as soon as practicable, to meet the requirements of this section.” 36 C.F.R. § 219.12(c)(1) (emphasis added). “As soon as practicable” is a flexible standard. In <i>Milk Train, Inc. v. Veneman</i>, 310 F.3d 747, 751 (D.C. Cir. 2002), the court ruled that a statute using “as soon as practicable” left some discretion to the agency. Similarly, <i>Biodiversity Legal Found. v. Badgley</i>, 309 F.3d 1166, 1176 (9th Cir. 2002), found that a 90-day deadline “to the maximum extent practicable” was “flexible”</p>	<p>and to support determinations on whether changes need to be made to plan components and/or projects and activities. Monitoring also provides feedback to prioritize and improve the plan monitoring program and broader-scale monitoring strategy.</p> <p>The Chief of the Forest Service has directed national forests to prepare a transition monitoring plan following regulations at 36 CFR 219 and direction in FSM 1920 and FSH 1909.12. The Forest does not have the discretion to ignore Forest Service direction.</p> <p>It is true that during forest plan revision, a new monitoring program will be developed to assess the new plan’s components such as desired conditions, goals and objectives, and standards and guidelines.</p>

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	<p>and allowed up to a year. In sum, “the requirement [a] determination is to be made ‘as soon as practicable’ leaves much room for discretion” and “will obviously vary from case to case.” City of Inglewood v. Unnamed Citizens, Residents & Owners of Prop. Within City of Inglewood, 508 F.2d 1283, 1284 (9th Cir. 1974). The 2012 planning rule also gives the responsible official substantial discretion to vary the monitoring program according to “financial and technical capabilities. . . .” 36 C.F.R. § 219.12(a)(4)(ii).</p> <p>Because the 2012 planning rule gives discretion on when to revise monitoring plans, the Forest Service’s insistence that 2016 is a hard deadline is confusing. The Forest Service will have to redo the monitoring plans when it conducts plan revisions. As you know, Forest Service planning and project resources are at a premium and stretched thin across the country. It is counterproductive to deploy scarce resources on a premature effort that will have to be redone before long.</p>	
<p>Tom Partin, American Forest Resource Council</p>	<p>Rather than comment on the eight monitoring requirements individually AFRC will comment on significant issues that are currently impacting the Deschutes National Forest and we feel should be monitored and acted upon until a new Forest Plan can be completed.</p> <p>Wildfire has made the biggest impact on the Forest in the past two decades. Fires such as the B&B complex, Cache Mountain, Davis Mountain, Pole Creek and many others have made significant impacts to the eight indicators the monitoring plan addresses including soil, water, wildlife, recreation and standing timber (often not regenerated). AFRC recommends that the Deschutes National Forest make their number one priority going forward the fireproofing of the Forest by using tools such as mechanical</p>	<p>The transition monitoring plan contains an element that will disclose the progress the forest is making towards achieving desired forest fuels conditions and also describing barriers to maintaining or improving those conditions.</p> <p>There is a second monitoring element that focuses on late and old structured stands and how those stands are functioning in the forested system. The monitoring questions focus on progress towards maintaining and restoring resiliency and how far stands and landscapes are departed from the historical range of variation.</p>

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Chris Richard, Operations Forester, Interfor, Gilchrist, OR	<p>thinning to remove excess fuels and fiber from the forest. Subsequently monitoring the effectiveness of these fireproofing efforts should be the highest priority for the new monitoring plan.</p> <p>Interfor supports the Forest in the Transitional Monitoring Plan. In addition, Interfor feels that unnaturally large and hot wildfires, as well as insects and disease are having the biggest impacts on the Forest at this time. We all need to do what we can to increase the pace and scale of fuels reduction and treatment, increase forest resiliency to insects and disease, and bring the forest back to Historic Range of Variation.</p>	<p>Fire proofing stands is not a reasonable nor desired goal for all National Forest System lands and will not be monitored. As an example, fire proofing in wilderness or in Inventoried Roadless Areas is not allowed under current direction.</p> <p>The transition monitoring plan will track trends for insect and disease incidences and outbreaks on the forest on an annual basis and will be reported in the monitoring report biennially.</p>
Tom Partin, American Forest Resource Council	<p>Climate change factors are also greatly impacted by wildfire, forest health, insects and disease, tree stocking and vigor. In addition to reducing catastrophic wildfires as discussed above by increasing the pace and scale of fire proofing the Forest, AFRC encourages the forest to use the mechanical treating tool to reduce stocking in stands to reduce competition for water, to remove excess and unhealthy vegetation that is contributing to CO₂ into the atmosphere by decomposition, and to match tree species in elevation with new climatic conditions. Monitoring these elements, AFRC believes will be helpful as a check on climate change factors.</p>	<p>The transition monitoring plan has monitoring elements associated with insect and disease trends, resiliency and departure from historic conditions in select plant association groups for late and old structured stands, and fuels management. These elements will also inform the climate change monitoring element. However, the climate change element will not track contributions of CO₂ into the atmosphere as it is not a component of our existing Forest Plan. The monitoring questions associated with climate change reflect elements that may be affected by climate change.</p>
Tom Partin, American Forest Resource Council	<p>AFRC suggests that close monitoring be done to look at species such as mule deer and Rocky Mountain elk that require early seral species for their survival. Under this discussion item, the plan only discussed cover and totally left out the forage issue. As shown in the Starkey Experimental Forest studies on Rocky Mountain elk survival, early seral forest forage is more important for providing food in the late spring and early summer for calf survival than is</p>	<p>The request to monitor the status of forage habitat and hunter success on the Deschutes National Forest will not be implemented in this monitoring effort. The current Deschutes Land and Resource Management Plan focuses standards and guidelines on managing cover. This is because of the transitory nature of forage</p>

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	<p>cover. AFRC suggests the new monitoring regime include early seral as a key big game wildlife factor. Additionally, hunting is a big recreational activity on the Deschutes National Forest. This activity isn't mentioned in the recreation section; however, due to lack of early seral plant stages and forage for deer and elk, dismal hunting success has been reported in recent years due to lack of game. Monitoring should be done to look at hunting success and how that success could be improved by conducting forest management projects and creating early seral habitat for both deer and elk.</p>	<p>habitat and the amount of survey work needed to accurately assess the state of forage on the entire forest. In addition, hunter success is under the jurisdiction of Oregon Department of Fish and Wildlife and is not formally reported by the Deschutes National Forest.</p> <p>The Deschutes Forest Plan includes standards and guidelines for the protection of habitat for game and non-game species. Project-level planning generally includes design criteria intended to insure that standards and guidelines are met, including those for foraging areas and project-level monitoring often addresses these standards and guidelines.</p>
<p>Chris Richard, Operations Forester, Interfor, Gilchrist, OR</p>	<p>In regards to ecological conditions of aquatic and terrestrial ecosystems and wildlife: Thinning watersheds to prevent catastrophic wildfires, helps prevent erosion, provides cooler water temperatures, and provides more steady and predictable flow rates. Thinning also helps reduce the competition for scarce resources, and reduces mortality from insects and disease. In terms of terrestrial habitat, Interior noticed there was no mention of the lack of/need for early seral forest forage in this monitoring plan. With another season of dismal hunting behind us, let's look for ways to improve habitat and forage opportunities for mule deer and Rocky Mountain elk, as well other non-game species. Hunters are often multi-generation, life-long sportsman, who like their mothers and fathers before them; enjoy spending time in the outdoors. By ensuring hunter access and suitable game habitat, we ensure future generations of outdoorsman and women. By monitoring hunter success, along with bird, reptile, non-game wildlife counts, and inventory critical habitat areas, we can keep a closer watch on wildlife populations.</p>	
<p>Tom Partin, American Forest Resource Council</p>	<p>Many of the watersheds in the Deschutes National Forest have been impacted or impaired by wildfire. Not only will thinning the forest reduce the wildfire threat, but post-thinning operations will yield more and cooler water in streams and rivers. Stream</p>	<p>The stream temperature and the stream habitat monitoring elements will look at select streams on the forest to build on previous local monitoring efforts. This long-term monitoring</p>

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	<p>sedimentation and erosion also increases following catastrophic fire events. Monitoring work can be done both to test impacts of thinnings to water yield and temperature and to test sedimentation, temperature and volume of streams following wildfire.</p>	<p>will provide information on watershed interactions, especially with the possibility of potentially identifying changes resulting from management actions and wildfire effects.</p>
<p>Chris Richard, Operations Forester, Interfor, Gilchrist, OR</p>	<p>In regards to watersheds: Thinning in watersheds not only increases the volume of water released, but compared to watershed that has been devastated by wildfire, it has a cooler temperature and a slower pace by which that water is released. Wildfires on important watersheds degrade stream habitat from increased sedimentation, higher temperatures, and higher flow rates. By making our forest more fire resilient, we help everyone downstream including fish and wildlife. Closely monitoring streams and watersheds following wildfire will help illustrate this point.</p>	<p>However, the intent of the stream monitoring on select streams is not to specifically monitor the effects of wildfire. If a wildfire occurs within a watershed where stream monitoring is on-going, information collected could reflect impacts attributed to the wildfire.</p>
<p>Tom Partin, American Forest Resource Council</p>	<p>The level of forest products harvest is directly tied to socio-economic impacts of local communities. Oregon Forest Resource Institute recently reported that approximately 12 jobs (both direct and indirect) are created for every million board feet of timber harvested. Currently the one sawmill adjacent to the Deschutes National Forest (Interfor) is only working at half capacity (one shift). Harvesting more sawlogs will create more jobs and improve the socio-economic conditions in surround rural communities. Monitoring should be done to look at the harvest potential of the Deschutes National Forest and if increased how that could impact the local industry and communities.</p>	<p>One element of the monitoring plan will focus on the contribution of the timber program to social and economic stability in the local area. This includes reporting on the annual timber targets and accomplishments and special forest products and their trends over time.</p>
<p>Chris Richard, Operations Forester, Interfor, Gilchrist, OR</p>	<p>In regards to the socio-economic impact of the forest on local communities: The forest has a large impact on local, rural communities. Sawmill and logging jobs are some of the best paying, stable, and respected professions in rural Oregon. The forest is directly tied to the economic health of these communities. By harvesting timber at a sustainable level, thinning and fuels reduction we ensure the health of such communities as</p>	

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	<p>well as the forest itself. Interior's mill in Gilchrist recently cut our production from two shifts to one in response to the tack of affordable sawlogs. It has been hard on the local communities, and we fear what may happen if this trend continues. Monitoring available affordable sawlog volume and rural economic stability would hopefully reinforce to the Forest what small rural communities already know.</p>	
<p>Paula Hood, Blue Mountains Biodiversity Project</p>	<p>The monitoring plans for the Ochoco and the Deschutes National Forests, while distinct in some ways, are also very similar and so these comments address both of these monitoring plans. We did not receive a letter on the Deschutes monitoring plan, and did not initially realize that the Deschutes also had a monitoring plan proposal as it is also not on the SOPA or the project page for the Deschutes.</p>	<p>The Deschutes NF utilized the Districts' NEPA mailing lists and sent letters to both Paula Hood's email address and Karen Coulter's hard copy mail address. No "return to sender" notices were received from either mailing. It is unknown why BMBP did not receive the mailing, either hard copy or by email. The Forest has still addressed the comments presented by BMBP.</p>
<p>Paula Hood, Blue Mountains Biodiversity Project</p>	<p>The Monitoring Plan's stated questions and elements/indicators will not adequately allow for adaptive management with regard to logging, roading, or (in the Ochoco National Forest) grazing activities. For both the Deschutes and Ochoco Forests, the Forest Service has not shown that the outlined BMP monitoring will be adequate to detect whether or not BMPs in logging projects sufficiently protect water quality. Currently, BMP monitoring criteria only require a handful of sites to be monitored annually. Of these sites, only a small subset of this handful is required to be related to timber sales.</p>	<p>The Best Management Practices (BMPs) monitoring element reflects the monitoring program as described by the national initiative. This is in compliance with the direction as stated in 36 CFR 219.12 (c) (3) where to the extent practicable that the monitoring program take into account existing national and monitoring programs.</p> <p>FSH 1909.12, Chapter 30, section 30.5 discusses the relationship of project monitoring to the Monitoring program. Project monitoring is a valuable means of understanding the effects of projects and activities. Project monitoring can provide useful information to adapt future project plans to improve resource protection and restoration. Project and activity monitoring</p>

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		<p>may be used to gather information for the plan monitoring program, and plan monitoring information may inform the development of specific projects and activities. However, the Responsible Official has the discretion to strategically select which projects to monitor and the monitoring questions related to those projects that will best inform the monitoring program, test assumptions, track changing conditions, or evaluate management effectiveness.</p> <p>The monitoring plan does include a monitoring question associated with whether corrective actions were needed on projects and what adaptive management measures were necessary. This will identify which BMPs are working and potentially identify adaptive measures needed to improve conditions in the future in similar situations.</p>
<p>Paula Hood, Blue Mountains Biodiversity Project</p>	<p>In addition, there is a lack of guidance concerning BMP monitoring. The FS does not have an appropriate or standardized approach to monitoring that includes the necessary statistical robustness (or even close to it), nor are there monitoring design criteria, that would be capable of detecting potential changes in stream temperature or sediment in relation to timber sales.</p>	<p>On April 30, 2012, the National Best Management Practices Program was released by the Forest Service. The National BMP Program will improve agency performance, accountability, consistency, and efficiency in protecting water quality, and is a significant component of the Agency’s water strategy. The National BMP Program will enable the Agency to readily document compliance with the management of nonpoint source pollution at local, regional, and national scales and address</p>

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		<p>the new planning rule requirement for national BMPs (36 CFR 219.8(a)(4)).</p> <p>The National Core BMP Technical Guide was also released at this time. This standardization of inspection and recordation will allow efficient cross-unit and cross-regional application, evaluation and reporting.</p>
Paula Hood, Blue Mountains Biodiversity Project	<p>The Oregon Department of Forestry has developed a relatively simple riparian and water quality monitoring design (the RipStream monitoring design) that includes, for example, before and after as well as an upstream and downstream stream temperature monitoring design that are much more effective at determining compliance with water quality standards such as stream temperature. This design could easily be adopted into monitoring plans on the Ochoco and Deschutes National Forests.</p>	<p>The monitoring element that will monitor stream temperatures will be done on specific streams important to fish populations or contributing to downstream habitat and may not necessarily track project specific impacts. The Deschutes’ stream monitoring program was developed to establish long-term monitoring on important streams. FSH 1909.12, Chapter 30 states that the scope and intent of the monitoring program under the 2012 planning rule is to test assumptions, track changes and measure management effectiveness and progress towards achieving or maintaining the plan’s desired conditions or objectives.</p>
Paula Hood, Blue Mountains Biodiversity Project	<p>The Plan also lacks the ability to detect how most MIS and T & E species are responding to management activities such as logging. The USFS’s underlying assumptions that fuels reduction is good and that bark beetles are bad is reflected in the plan. The plan proposes to monitor, for example, how well management has achieved fuels reduction goals— goals which are defined by the USFS but that lack sufficient analysis of the full range of scientific opinion about natural fuel loading levels. There is a large body of science that shows that these assumptions are controversial. The plan does not, unfortunately, include monitoring of species that</p>	<p>The transition monitoring plan does have monitoring elements for focal species representing important ecological conditions associated with current MIS and sensitive species. Water quality as represented by stream temperature and aquatic habitat are two monitoring elements within the transition monitoring plan. Snag habitat is also a part of</p>

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	<p>depend on: higher forest density, post-fire habitat created by mixed and high-severity fires, snags, mixed-conifer habitats, and bark beetles—or how are these species are responding to the widespread and ubiquitous logging projects that reduce fuels, further fire suppression, open forest canopy, and alter fire and vegetation regimes further from historic norms. At the very least, the Forest Service needs to recognize that there is a large body of legitimate scientific controversy regarding these issues, and that their monitoring plans need to address and include how management activities are affecting MIS, T&E species, water quality, snags and downed wood, and soil condition with regard to these issues and their potential impacts and risks. It is not clear that the monitoring plan, as outlined, will accomplish this, or that monitoring will be sufficient to indicate whether changes in management strategies are needed in order to protect these resources. It is clear that many of these relevant questions regarding ecological functions and species viability in response to management activities have been left out of the monitoring plan.</p>	<p>the Transition Monitoring plan. The impacts of management actions on the soil productivity is also being monitored.</p> <p>All T&E species for the Deschutes are included in the transition monitoring plan and habitat will be assessed at the forest level for these species.</p> <p>Research regarding the effects of management activities on particular species is outside the scope of the transition monitoring plan.</p>
<p>Paula Hood, Blue Mountains Biodiversity Project</p>	<p>Stream temperature violations are the most widespread water quality issue on National Forests in Eastern Oregon. The Forest Service does not have an adequate understanding of how their logging projects and other land management activities affect stream temperature. Stream temperature probes (dataloggers/hobo probes) are comparatively cheap, easy, and not labor intensive to deploy. They give large amounts of high quality data, including diurnal stream temperature fluctuations (which are also very important to look at and have been shown to have significant effects on salmonids). Stream temperature is directly tied to stream health, listed fish, and stream ecosystem resilience. Stream temperature is an important water quality component that is crucial to species and ecosystem health, and is potentially affected by logging (and grazing in the Ochoco) and is therefore</p>	<p>The monitoring element that will evaluate stream temperatures will be done on specific streams important to fish populations or contributing to downstream habitat. Monitoring of project specific impacts to stream temperature is not a specific component of the Transition Monitoring Plan. FSH 1909.12, Chapter 30 describes the scope and intent of the Monitoring program under the 2012 planning rule is to test assumptions, track changes and measure management effectiveness and progress towards achieving or maintaining the plan’s desired conditions or objectives. Devices</p>

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	<p>very important for the USFS to directly monitor in a more widespread and thorough manner that allows for adaptive management.</p>	<p>to monitor stream temperature include those listed by the commenter.</p>
<p>Paula Hood, Blue Mountains Biodiversity Project</p>	<p>Habitat quality as a surrogate for species viability is insufficient to ensure viability of native species, or recovery of sensitive and T&E species. Monitoring habitat as a surrogate for monitoring species trends and viability is a risky strategy, and may yield unintended/unexpected results. For example, in the Draft Blue Mountains Forest Plan Revision (2014) the tables showing habitat quality and fish populations reflect that many streams and watersheds that the USFS categorizes as having “good” and “fair” habitat quality contain fish populations that are declining and/or at imminent risk of extinction. Such issues with inaccuracy and mismatched trends make it clear that the USFS does not have sufficient understanding of habitat parameters or modeling criteria to accurately predict how landscape conditions and management activities will affect habitat quality and, in turn, species viability. Monitoring protocols need to include much more robust direct monitoring of specific species and their population trends.</p>	<p>The identification of focal species is not meant to be a surrogate for species viability. Focal species are selected because they are believed to be indicative of key characteristics of ecological integrity and are responsive to ecological conditions in a way that can inform plan decisions. A focal species could be a keystone species, an ecological engineer, an umbrella species, a link species, or a species of conservation concern, but it need not be any of these species categories. Monitoring questions should relate the species to the ecological condition and reason for its selection, and indicators may include affected attributes of the species, such as presence or occupancy, habitat use, reproductive rate, and population trends. (FSH 1909.12, Chapter 30, Section 32.13c).</p>
<p>Paula Hood, Blue Mountains Biodiversity Project</p>	<p>Species monitoring should include full population studies over a period of years (and should include status, repro success, and viability thresholds). Species that need high forest density, mixed and high-severity post-fire areas, and mixed-conifer forests should be specifically monitored. This includes American marten, Pacific fisher, Northern goshawk, Pileated woodpeckers, and Black-backed woodpeckers. On the Deschutes, it is important to look at Northern spotted owl response to ongoing fragmentation and forest density reductions due to logging projects.</p>	<p>See previous response regarding focal species monitoring. In some cases of focal and or threatened or endangered species monitoring, actual reproductive success (bald eagle) and population monitoring (sensitive plants) are critical components of the monitoring and will be reported.</p> <p>Late and old structured habitat is a monitoring element that will be tracked for each plant association group, including the mixed-conifer forests.</p>

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		<p>For the Deschutes, monitoring questions associated with spotted owls reflect the importance of maintaining and tracking nesting, roosting and foraging habitat along with stressors such as invading barred owls.</p>
<p>Paula Hood, Blue Mountains Biodiversity Project</p>	<p>The Forest Service needs to examine actual species’ response to mixed and high-intensity fires in post-fire habitats. There are accumulating scientific studies and evidence showing that mixed and high-intensity fires are not unnatural or catastrophic, and that species (including Northern spotted owls and Pacific fisher) are more successful in these habitats than the USFS has assumed. Monitoring of post-fire areas that have not been degraded by salvage logging or replanting needs to be conducted.</p>	<p>Research regarding the effects of wildfire on particular species is outside the scope of the transition monitoring plan.</p> <p>Spotted owl monitoring is part of the transition monitoring plan but is not directly related to post-fire evaluation but availability of habitat.</p>
<p>Paula Hood, Blue Mountains Biodiversity Project</p>	<p>Deer and elk populations should be monitored in response to forest density reductions, including reductions to hiding and thermal cover as a result of logging projects and other fuels reduction activities. Particularly in the Deschutes National Forest, where large areas of cover have been lost due to logging, many monitoring opportunities are available to examine the response of deer and elk populations in these areas.</p>	<p>The transition monitoring plan contains elements associated with deer and elk habitat including hiding and thermal cover percentages.</p> <p>The monitoring plan is not intended to be research and evaluate the response of species’ populations to management activities.</p> <p>Deer and elk population monitoring is the responsibility of Oregon Department of Fish and Wildlife and their data is utilized in project analysis and evaluation.</p>
<p>Paula Hood, Blue Mountains Biodiversity Project</p>	<p>Road monitoring should include looking at road density calculations that include “temporary” and closed roads, as well as the miles of “temporary” road constructed vs. actually obliterated. The USFS needs a more honest accounting of road impacts on the ground, and monitoring of how the real road densities affect watershed hydrology, water quality, and species sensitive to road-</p>	<p>Closed roads are a part of the transition monitoring plan element for transportation. Closed roads, also known as maintenance level 1 roads, however, are defined as those roads needed for future use but can be closed to</p>

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	<p>related issues. The Forest Service also needs a more accurate and honest monitoring of real road density trends. Timber sales often claim to use only old road beds which are already disturbed but also fail to show up on the road network or in any road density calculation. At the same time, the USFS says that road-related impacts and new roads will not exceed the duration of a given project, at least not for more than a few years. The Forest Service can't have it both ways—either road-related impacts are more widespread than previously disclosed or understood by the public, or new projects are actually creating more widespread impacts than the USFS admits. Monitoring needs to include “temporary” and closed roads in a thorough and accurate accounting.</p>	<p>motorized traffic until that future use is needed. Closed roads are not temporary roads.</p> <p>The request to monitor road density for temporary roads and to track temporary roads actually obliterated is reflected in the implementation of timber sale contracts and sale administration documentation but will not be part of the transition monitoring plan.</p>
<p>Paula Hood, Blue Mountains Biodiversity Project</p>	<p>Invasive plants should not only be monitored in “treated” sites but also in high-risk areas for invasive plant introduction and spread including logging projects (especially slash piles), roads, and livestock areas (for the Ochoco).</p>	<p>The monitoring of high-risk areas for potential invasive plant introduction and spread, in particular for logging and roading projects, is conducted during project specific analysis. It is normal practice to include an evaluation of the risk of invasive plant introduction as part of the NEPA analysis for a ground disturbing project. Additionally, consistent with Forest Plan direction, it is required to include prevention mitigation measures in the project’s design.</p> <p>An important monitoring element for invasive plant treatment is reporting on the results and the effectiveness of treatment, especially treatment with chemicals and that the objective is to reduce the amount of chemicals in treated sites.</p> <p>Project monitoring is tracking the use of prevention practices and surveying high-risk</p>

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		<p>areas after management actions. This project specific monitoring may inform the transition monitoring biennial report.</p>
<p>Paula Hood, Blue Mountains Biodiversity Project</p>	<p>Climate change monitoring should include potential cumulative and synergistic effects in combination with land management activities such as logging and (for the Ochoco) grazing in relation to environmental impacts such as water quality, sensitive/at-risk species population trends. Stream flows and temperature, as well as effects on at-risk aquatic species should be monitored for possible synergistic effects from logging projects and climate change. Monitoring should include how climate change is affecting baseflows and stream connectivity. Climate change monitoring should also include carbon storage accounting. Carbon storage and emissions should be tracked and disclosed in managed vs. unmanaged forests.</p>	<p>The transition monitoring plan contains specific elements to monitor stream temperatures and flows on select streams. Separate elements also assess the fish habitat for specific aquatic species as focal species or listed species. Monitoring will assess flow changes.</p> <p>Monitoring will not track carbon storage or emissions for the transition monitoring plan. Climate change was not an element in the 1990 Deschutes Land and Resource Management Plan and, therefore, is not an item that would be considered in the transition monitoring plan.</p>
<p>Paula Hood, Blue Mountains Biodiversity Project</p>	<p>Dead wood (snags, downed wood) density and trends should be monitored in relation to logging projects including thinning, prescribed burning, and other fuels reduction/fire suppression, and “restoration” activities. The effects of logging and fuels reduction activities should monitor effects on forest structure and complexity. Microclimate should also be included in monitoring of logging projects, as it is not clear whether fuels reduction efforts are simply drying out forests and potentially increasing fire risk.</p>	<p>Snag monitoring for several plant association groups is an element in the transition monitoring plan and will be evaluated at the forest level. This monitoring will reflect the changes in snag density and composition across the forest and will incorporate changes as a result of prescribed burning, vegetation management and wildfire impacts.</p> <p>Microclimate monitoring as suggested by the commenter is more related to research as opposed to monitoring forest plan components and, therefore, will not be a part of the transition monitoring plan.</p>

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Paula Hood, Blue Mountains Biodiversity Project	The potential effects from logging projects on bats are not sufficiently understood or accounted for in the monitoring plan. For example, how is the continued loss of snags from logging affecting Pallid bats or Townsend’s big-eared bats? Bat species populations and the effects of logging on population trends should be monitored.	<p>The transition monitoring plan will evaluate cave habitat because of the potential spread of white nose syndrome and the subsequent devastating impact on bat populations.</p> <p>The monitoring plan also has an element to monitor snags overall as well.</p> <p>The request to monitor specific populations of bats and their trends as a result of logging is more appropriate to be addressed as part of research and is not associated with a current forest plan component.</p>