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Date: April 6, 2016

Dear Stakeholder:

The 2012 Planning Rule (36 CFR 219) requires the Rogue River-Siskiyou National Forest to establish a land management plan monitoring program by May 9, 2016, or as soon as practicable, that is consistent with the new Planning Rule's monitoring requirements. We have reviewed our existing Rogue River and Siskiyou Land and Resource Management Plans (Forest Plans) monitoring program to determine what modifications are needed to conform to the new monitoring requirements. We want to take this opportunity to share our new monitoring program with you and request your input.

2012 Planning Rule

As defined by the Planning Rule, monitoring is continuous and provides feedback for the planning cycle by testing relevant assumptions, tracking relevant conditions over time, and measuring management effectiveness (36 CFR 219.12). The Planning Rule includes eight monitoring requirements.

- i. The status of select watershed conditions.
- ii. The status of select ecological conditions, including key characteristics of terrestrial and aquatic ecosystems.
- iii. The status of focal species to assess the ecological conditions required under §219.9.
- iv. The status of a select set of the ecological conditions required under §219.9 to contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain a viable population of each species of conservation concern.
- v. The status of visitor use, visitor satisfaction, and progress toward meeting recreation objectives.
- vi. Measureable changes on the plan area related to climate change and other stressors that may be affecting the plan area.
- vii. Progress toward meeting the desired conditions and objectives in the plan, including for providing multiple use opportunities.
- viii. The effects of each management system to determine that they do not substantially and permanently impair the productivity of the land (16 U.S.C. 1604(g)(3)(C)).

The Rogue River-Siskiyou's new Forest Plan monitoring program must contain one or more monitoring questions and associated indicators addressing each of the monitoring requirements. The monitoring questions are tied to specific Forest Plan components, which include desired future conditions, plan objectives, and standards and guidelines. They must focus on providing the information necessary to evaluate whether Forest Plan components



are effective and appropriate, and whether management is being effective in maintaining or achieving progress toward the desired conditions and objectives for the Forest.

The monitoring plan in the Forest Plan was used as a starting point for developing the new Forest Plan monitoring program. Indicators are quantitative or qualitative variables that can be measured or described and, when observed periodically, show trends in conditions that are relevant to the associated monitoring questions.

Focal Species

Every Forest Plan monitoring program must identify focal species along with monitoring questions and associated indicators to track the status of the identified focal species, in order to comply with monitoring requirement. Focal species are “a small subset of species whose status permits inference to the integrity of the larger ecological system to which it belongs and provides meaningful information regarding the effectiveness of the plan in maintaining or restoring the ecological conditions to maintain the diversity of plant and animal communities in the plan area. Focal species would be commonly selected on the basis of their functional role in ecosystems.” (36 CFR 219.19)

Management indicator species (MIS) in the Forest Plans were used as a starting point for identifying focal species. Currently, the Forest has eleven wildlife and plant species/guilds listed as management indicator species. These species are listed in following table.

Table 1. Proposed Changes from Management Indicator Species to Interim Focal Species and Rationale

Rogue River Forest Plan	Siskiyou Forest Plan	Interim Focal Species	Rationale
Northern Spotted Owl	Northern Spotted Owl	Drop-track under (iv) recovery of T&E species	T&E species that is key component of Northwest Forest Plan
Pileated Woodpecker	Pileated Woodpecker	Drop	Covered by the Primary Cavity Nester guild below.
Pacific Marten	Pacific Marten	Pacific Marten	Species of mature and late successional forests; indicator of down wood habitat.
Bald Eagle	Bald Eagle	Drop	Recovered; habitat condition will be tracked with fish focal species and riparian/stream ecological condition monitoring; protect at the project level by evaluation as sensitive species and Biological Evaluations.
Woodpeckers	Primary Cavity Nesters	Primary Cavity Nesters	Broad indicator of the health of snag habitat.
	Osprey	Drop	This species niche is covered by other riparian and aquatic dependent species.
Peregrine falcon		Drop	Too narrow of an ecological niche to be used as a focal species.

Rogue River Forest Plan	Siskiyou Forest Plan	Interim Focal Species	Rationale
Black tail Deer	Black tail Deer	Black tail Deer	Needed to track the amount and function of early seral habitat where elk are not present on the Forest.
Roosevelt Elk	Roosevelt Elk	Roosevelt Elk	Providing elk habitat and hunting opportunities is an important public issue; also indicator of amount of early seral habitat and elk is sensitive to road management.
Sensitive Plants		Drop Sensitive plants; substitute Serpentine Endemic Plants	All sensitive plants is too wide a spread of habitats to be a meaningful focal species guild. Serpentine endemics is narrower and focuses on habitats of regional significance.
	Port Orford Cedar	Drop	Other species were added that are better indicators of broad scale ecological integrity, primarily oaks.
		Oaks	Important family of plants for wildlife and transition habitats. Affected by fire suppression and susceptible to sudden oak death.
		KMP and OC Steelhead	Indicators of high quality stream and riparian habitat and aquatic ecosystem health; the range of KMP steelhead coincides with SONCC Coho critical habitat.
		Beaver	Contribute to watershed function and natural storage and release of water, especially given expected climate change.
		Invertebrate Pollinators	Critical declines have occurred; foundational guild for ecosystem health and function; associated with biological diversity on the landscape.
		Caves and Bats	The presence of white nose syndrome now in the Pacific Northwest elevates the importance of integrity of habitats and populations.

Based on how well the species serve as indicators of ecological integrity and existing Forest Plan components, along with the anticipated time until the completion of Forest Plan revision, the following is proposed for the transition period.

- Continue to monitor primary cavity nesters, Pacific marten, and elk as interim focal species.
 1. Primary cavity nesters are indicators of dead and down wood habitat;

2. Pacific marten are indicators of mature and late successional habitat above 4,000 feet; and
 3. Elk are indicators of early seral habitat.
- Remove spotted owl, osprey, peregrine falcon, bald eagle, Port Orford cedar, and pileated woodpecker given they are monitored under Endangered Species Act (ESA), are covered by other focal species, or are no longer at risk. The spotted owl is monitored as part of the Northwest Forest Plan and Northern Spotted Owl Recovery Plan.
 - Add oaks and serpentine endemic plants for their importance as ecological indicators of biodiversity and for serpentine fen and upland habitats.
 - Add Klamath Mountain Province (KMP) and Oregon Coast (OC) steelhead as indicators of high quality stream and riparian habitat and aquatic ecosystem health. The range of KMP steelhead defines SONCC coho critical habitat, except where natural barriers preclude coho access.
 - Add beaver as indicators of biodiversity, watershed health, and the capacity of natural systems for sustainable storage and release of water. This capacity is critical in the face of climate change.
 - Add insect pollinators as indicators of biological diversity in habitats, sensitivity to contaminants and ecosystem health.
 - Add caves and bats, due to the presence of white nose syndrome now in the Pacific Northwest and the heightened concern for habitat integrity and bat populations.

The interim focal species for the Forest will be re-evaluated during the Forest Plan revision process and will likely change through that process, based on the corresponding changes to Forest Plan components (e.g., standards and guidelines).

Administrative Changes

In order to implement the new Forest Plan monitoring program, the Forest will be making the following change. First, the new Forest Plan monitoring program would replace the existing monitoring program described in the current Forest Plans.

The changes will be made using an administrative change under the 2012 Planning Rule (36 CFR 219). An administrative change (36 CFR 219.13(c)) is any change to a plan that is not a plan amendment or plan revision. Administrative changes include corrections of clerical errors to any part of the plan, conformance of the plan to new statutory or regulatory requirements, or changes to other content in the plan, including the monitoring program (§ 219.7(f)(iii)).

Forest Plan Monitoring Program

The Forest will prepare its first monitoring report under this new program in fiscal year 2018. The biennial monitoring evaluation report will use the indicators to answer the monitoring questions and evaluate the trends. The report will document whether a change to the Forest Plan or change to the monitoring program is warranted based on new information or whether there is no need for change at that time as required by the Planning Rule (36 CFR 219.5).

Public Input

As required by the 2012 Planning Rule, a substantive change to the monitoring program made outside of the process for plan revision or amendment may be made only after notice to the public of the intended change and consideration of public comment (§ 219.16(c)(6)). We invite your comments on these proposed administrative changes and the specific monitoring questions and indicators. These documents are available electronically at: <http://www.fs.usda.gov/main/rogue-siskiyou/landmanagement/planning> or by contacting us, as specified below.

We would like your comments by May 8, 2016. Comments may be submitted by email to comments-pacificnorthwest-rogue-rogue-siskiyou@fs.fed.us. Please put "**FP Monitoring Transition**" into the subject line.

Please send your written comments to:

Shannon Downey, Environmental Coordinator
Rogue River-Siskiyou National Forest
3040 Biddle Road
Medford, OR 97504
Or FAX: (541) 618-2146

You may obtain a copy of the draft monitoring plan or hand-deliver your comments to the above address during normal business hours which are 8:00 a.m. to 4:30 p.m. Monday through Friday, excluding federal holidays. All those who comment will remain on our mailing list and receive future updates on this proposal.

Comments received in response to this solicitation, including names and addresses of those who comment, will be considered part of the public record for this project, available for public inspection, and released if requested under the Freedom of Information Act.

If you have any questions concerning this proposal, please contact Shannon Downey at shannondowney@fs.fed.us or 541-618-2074.

Sincerely,



ROBERT G. MACWHORTER
Forest Supervisor

Rogue River-Siskiyou National Forest Transition Monitoring Plan - 2016

Element Table – May 6, 2016

Selected Plan Component	Monitoring Question	Monitoring Indicator	Potential Data Source and Responsible Position
(i) The status of select watershed conditions			
1. Functioning Watershed Condition	What is the status of the watersheds? Are watershed conditions functioning properly? Which watershed conditions are functioning properly and why? Which are functioning improperly and why? What are the trends in watershed conditions and function?	Trends in functioning condition for the watersheds	Watershed Condition Framework analysis and Database Forest Hydrologist
2. BMPs to Protect Water Quality Forest standard	What BMPs been implemented and are they effective at managing water quality consistent with the Clean Water Act? If needed, what corrective actions and adaptive management measures were implemented? Were they effective?	Results from BMP Annual monitoring protocols	BMP database Forest Hydrologist
(ii) The status of select ecological conditions including key characteristics of terrestrial and aquatic ecosystems.			
3. Stream Temperature Maintain or enhance stream temperatures on the forest.	Are watersheds functioning properly with the focus on stream temperature to support desired fish habitat, including downstream habitat? Describe conditions and trends in watersheds. Which watersheds are not functioning properly and why?	Stream temperature on select streams on the forest	Observed and/or modeled stream temperatures obtained from NorWeST Stream Temperature Database (Oregon Coast unit) Forest Hydrologist

<p>4. Aquatic Habitat</p> <p>Maintain or enhance stream habitat conditions to provide for desired aquatic habitat for both focal and T&E species.</p> <p>PACFISH and Northwest Forest Plan Riparian Reserve and ACS standards</p>	<p>Are streams functioning properly with the focus on stream habitat to support desired aquatic habitat, including downstream habitat?</p> <p>Which streams are not functioning properly and why?</p> <p>Have any trends been identified in habitat conditions in monitored streams and what are the trends?</p> <p>What S&Gs have been followed to protect riparian habitat?</p>	<p>Habitat parameters such as riffle to pool ratios, width to depth ratios, pebble counts, bank condition, large woody debris and other parameters collected during stream surveys.</p>	<p>Stream survey data on select Forest Streams, data stored in NRIS</p> <p>Watershed Condition Framework reporting</p> <p>NEPA project review to determine consistency with S&Gs (RR, RHCA, ACS, etc.)</p> <p>Forest Fisheries Biologist</p>
<p>5. Fuels Management</p> <p>Improvement in watersheds ecological condition for fuels characteristics and management.</p>	<p>Are forest fuels conditions functioning properly as determined by departure from desired forest fuels conditions?</p> <p>How many acres of the different plant association groups are at desired fuel levels and where are they located?</p> <p>What are the barriers to maintaining or improving conditions?</p>	<p>Identification of desired forest fuels conditions.</p> <p>Identification of desired fuels conditions.</p> <p>Acres treated by treatment type.</p> <p>Acres treated by treatment type by Wildland Urban Interface and Non-Wildland Urban Interface.</p> <p>Changes in fuel arrangements within treatment units and within watersheds.</p>	<p>FACTS database - Treatment acreages by treatment type, within WUI and Non-WUI, etc.</p> <p>Vegetation monitoring and potential use of LIDAR</p> <p>Qualitative narrative to evaluate risk on the existing landscape condition and movement towards a desired condition.</p> <p>Forest Fuels Program Manager</p>

<p>6. Desired Terrestrial Conditions are Properly Functioning</p> <p>Status of habitat and forest seral stage distribution in the landscape, including late successional and old growth forests.</p>	<p>What progress has been made toward maintaining and restoring resiliency?</p> <p>How are landscapes departed from historical range of variation?</p> <p>Are late seral habitats being maintained?</p> <p>Are early seral habitats adequately distributed across the landscape?</p> <p>Are fire-dependent communities being maintained?</p>	<p>Changes in seral stage distribution</p> <p>Assessment of desired seral stage distribution in landscape restoration projects</p> <p>Mid-closed stands treated to accelerate the development of late seral conditions or returned to early seral where needed</p> <p>Late-closed stands moved to late-open, as needed</p> <p>Meadow restoration treatments</p> <p>Re-introduction of fire on the landscape</p>	<p>FACTS database</p> <p>Legacy tree mortality</p> <p>PNW and I&D data by HUC5</p> <p>GIS vegetation data; prescribed fire treatments and wildfire data; treatment information in FACTS, etc.</p> <p>Planned and/or implemented treatment acres by treatment type</p> <p>Forest Silviculturist with Forest Fire Planner and Forest Ecologist</p>
<p>7. Riparian Habitats</p> <p>Status of Riparian Areas / Wetlands, Streamside Management Units, and Flood Plains (Northwest Forest Plan Riparian Reserve, ACS and PACFISH standards)</p>	<p>Are habitats being protected in accordance with LRMP S&Gs at selected sites (PACFISH, NWFP and ACS)?</p> <p>What is the trend in riparian habitat conditions?</p> <p>Are restoration activities effective in maintaining / protecting riparian habitats?</p>	<p>Adherence in planning and implementation to riparian management standards for vegetation, grazing, and recreation management.</p> <p>Changes in riparian vegetation cover and species compositions.</p>	<p>Project implementation monitoring of RR/RHCA mitigations.</p> <p>NEPA project review</p> <p>Long-term effectiveness monitoring of select restoration projects.</p> <p>Forest Fisheries Biologist with Forest Hydrologist and Forest Wildlife Biologist</p>

<p>(iii) The status of focal species to assess the ecological conditions required under § 219.9.</p>			
<p>8. Marten, fisher, and Sierra red fox</p>	<p>What are the amounts of suitable habitat for these species and how have they changed?</p>	<p>Amount and distribution of habitat and changes over time</p> <p>Presence sampling in potential habitat throughout forest</p>	<p>GNN, stand exams, and other project level habitat measurements</p> <p>Camera stations and track surveys along pre-determined routes using approved protocols</p> <p>AFR telemetry work</p> <p>Coordination with PNW/PSW and Regional Carnivore Team</p> <p>Forest Wildlife Biologist</p>

<p>9. Oak Woodlands</p> <p>Biodiversity at the landscape scale; threatened by development, fire exclusion and invasive plants (particularly non-native annual grasses)</p>	<p>Are oak woodlands being affected by uncharacteristic fire intensities, encroachment from fire exclusion, invasive species (plants/pathogens), and OHV use?</p> <p>What levels of biodiversity, resiliency and overall ecological integrity is present in these systems?</p>	<p>Plant community richness indicators.</p> <p>Acres of oak woodland habitat treated for invasive plants and to address fire exclusion.</p> <p>Acres burned from natural and prescribed fires in relation to oak woodland stands.</p> <p>Fire effects measures</p>	<p>FACTS database</p> <p>GIS Analysis Using GNN Data</p> <p>Floristic and Habitat Inventories</p> <p>Invasive Plant Surveys</p> <p>BAER reports</p> <p>Forest Botanist, Forest Fire Planner, Forest Wildlife Biologist</p>
<p>10. Serpentine endemic plants and Darlingtonia wetlands</p> <p>Unique habitats of regional significance; biodiversity</p>	<p>Are known and mapped populations still extant?</p> <p>Have any species been extirpated from the forest?</p> <p>What are the population demographics and trends for these species?</p> <p>What is the distribution and health of Darlingtonia wetlands on the forest?</p> <p>What are the primary threats to these populations and how can threats be reduced?</p>	<p>Survey and monitoring of historical populations</p> <p>Census of plants in individual populations</p> <p>Inventories and mapping of fen habitats</p> <p>Species composition and richness changes in relation to climate change and succession</p> <p>Assessment of function in relation to range, timber, recreation (including OHV), mining, and other activities</p>	<p>NRM: TESP-IS database</p> <p>Historic survey and site reports</p> <p>Oregon Biological Inventory Center (ORBIC) database information</p> <p>Habitat models</p> <p>Trends in function of habitat: Conservation Strategy for Darlingtonia Fens</p> <p>Rapid Assessment protocol for fens</p> <p>Forest Botanist</p>
<p>11. Primary Cavity Nesters (woodpeckers)</p> <p>Snags in key habitat (e.g., late successional conifer and pine-oak)</p>	<p>What are the current snag densities and sizes on the forest?</p> <p>Are they represented well in all important plant groups?</p> <p>Are MIS S&Gs being followed?</p> <p>How are the amount of burned acres affecting or contributing to foraging and nesting habitat?</p>	<p>Snags – 5th field watershed by habitat type (DecAid) for key plant groups.</p> <p>Burned habitat – acres and locations</p> <p>Insect and disease tree mortality</p> <p>Presence sampling along established breeding bird survey routes</p>	<p>DecAid analysis for the forest has been completed.</p> <p>Tie to population / habitat analysis, baseline, updating annually.</p> <p>Annual breeding bird surveys across the forest.</p> <p>Forest Ecologist and Wildlife Biologist</p>

<p>12. Elk and Black-tail Deer</p> <p>Hiding cover and road densities are important, particularly in Habitat Management Areas.</p> <p>Amount and distribution of early seral foraging habitat is equally important.</p>	<p>What are the current vegetation cover percentages in Key Elk Areas and Big Game Management Areas and summer range; are they meeting S&Gs?</p> <p>If there are deficiencies, what is the cause?</p> <p>What are road densities?</p> <p>What factors contribute to big game disturbance and diminished habitat effectiveness?</p>	<p>Key Elk areas – hiding cover, road density, recreation impacts (trail mileages, use levels and capacity, user created trails, etc.)</p> <p>Road density by 6th field watershed and for Key Elk areas and summer range</p> <p>Early seral habitat by 5th code watershed and for summer and winter ranges, within limits of available vegetation data accuracy</p>	<p>Modeled habitat, including changes in timber stand conditions from treatment and wildfire</p> <p>Select group of Key Elk areas monitored for user created trails and use over and above the modeled analysis</p> <p>Road densities from transportation monitoring</p> <p>Tie to population/habitat analysis, baseline, updating annually</p> <p>Vegetation seral classes based on GNN or LANDFIRE data</p> <p>Forest Wildlife Biologist, Forest Ecologist</p>
<p>13. Beaver</p> <p>Climate change adaptation</p>	<p>What is the availability of beaver habitat?</p>	<p>Beaver habitat – willow and other forage species – in riparian areas and occupancy</p> <p>Status and trends riparian vegetation cover and species compositions.</p>	<p>Stream and riparian habitat surveys</p> <p>Forest Wildlife Biologist, Fisheries Biologist</p>
<p>14. Insect Pollinators</p> <p>Terrestrial ecosystem function and diversity; distribution and condition of meadow and early seral habitat</p>	<p>What are the amounts of suitable habitat available and how is it changing over time?</p>	<p>Amount and distribution of habitat and changes over time.</p> <p>Presence/absence surveys</p> <p>Acres of habitat enhancement</p>	<p>Surveys/sampling per protocol for various sensitive species at known and suspected sites on Forest</p> <p>Forest Wildlife Biologist, Forest Botanist</p>
<p>15. Abandoned Mines, Caves and Bats</p> <p>Townsend's big-eared bat (caves and mine adits)</p> <p>Pallid bat (snags)</p> <p>Fringed Myotis, General bats (snags)</p>	<p>Is cave and abandoned mine habitat being protected?</p> <p>Are mitigations effective to prevent White nose syndrome?</p> <p>What are human impacts to cave habitat where access is granted and allowable?</p> <p>Are snag guidelines being met?</p>	<p>Implementation of mitigation measures for white nose syndrome and surveys for presence of infections</p> <p>Condition of important habitat components</p> <p>Habitat for bats, including:</p> <ul style="list-style-type: none"> • Summer maternity • Winter hibernacula • Protection of habitat <p>DecAID analysis for snags at 5th field watershed for key plant groups</p>	<p>Number of mine entrance gates installed that protect habitat</p> <p>Effectiveness monitoring for habitat protection by preventing access, preserving surrounding habitat, and assessing damage if access allowed</p> <p>Number of bat boxes installed</p> <p>Biannual Townsends big-eared bat monitoring data and annual bat grid sampling (with BLM)</p> <p>Might be doing acoustic monitoring</p> <p>Forest Wildlife Biologist with Abandoned Mines Specialist, Forest Ecologist</p>

<p>16. Klamath Mountain Province (KMP) and Oregon Coast (OC) Steelhead</p>	<p>Is anadromous fish habitat being maintained or improved?</p>	<p>Changes in steelhead distribution and abundance across the forest Stream and riparian habitat conditions</p>	<p>Distribution surveys (redd surveys, adult surveys, electrofishing, snorkeling, etc.) Level II Stream Inventory Data Regional fish distribution maps (new data or changes in distribution). Regional fish barrier database (showing habitat accessible due to barrier removal) Forest Fisheries Biologist</p>
<p>17. Fire-dependent plant species of conservation concern</p>	<p>What are the effects of fire exclusion on plant species of conservation concern that rely on fire for various reasons? Are viable populations being maintained? What is the demographic trend?</p>	<p>Demographic analysis of known populations Acres burned or treated in relation to current distribution (new potential habitat) of species</p>	<p>Habitat modeling Vegetation monitoring FACTS and Wildfire Reports Forest Botanist</p>
<p>(iv) The status of a select set of the ecological conditions required under § 219.9 to contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain a viable population of each species of conservation concern.</p>			
<p>18. Northern spotted owls and marbled murrelet – NWFP key species</p> <p>Contributing to spotted owl and marbled murrelet recovery is a prime goal for the Rogue River-Siskiyou NF.</p>	<p>What is the amount of Nesting, Roosting, and Foraging (NRF) and dispersal habitat and how has it changed? What is the amount of marbled murrelet suitable habitat? Are barred owls invading spotted owl habitat and what are the trends?</p>	<p>Amount and distribution of NRF and dispersal habitat and changes over time Barred owl known sites Amount and distribution of murrelet habitat over time Nesting surveys and nesting success rates</p>	<p>Surveys associated with NEPA projects Spotted owl demographic study areas in Cascade and Klamath Mountains NRF and dispersal habitat tracked through FWS for Programmatic Biological Assessment at the forest level Barred owl known sites Review of NEPA project BAs and BOs for treatment impacts Forest Wildlife Biologist</p>
<p>19. Gray wolves</p>	<p>Status of wolf den sites and rendezvous sites on the forest</p>	<p>Number of known reproductive wolf packs on the forest</p>	<p>Review of NEPA project BAs and BOs for treatment impacts Regional carnivore monitoring and wolf-specific monitoring coordination with the USFWS Forest Wildlife Biologist</p>

<p>20. SONCC Coho</p>	<p>Is critical habitat for SONCC coho being maintained and improved?</p>	<p>Changes in coho distribution and abundance across the Forest</p> <p>Stream and riparian habitat conditions</p>	<p>Distribution surveys (redd surveys, adult surveys, electrofishing, snorkeling, etc.)</p> <p>Level II Stream Inventory Data</p> <p>Regional fish distribution maps (new data or changes in distribution). Regional fish barrier database (showing habitat accessible due to barrier removal)</p> <p>Forest Fisheries Biologist</p>
<p>21. Endangered plants</p> <p>McDonald's rockcress (<i>Arabis macdonaldiana</i>) and Gentner's fritillaria (<i>Fritillaria gentneri</i>)</p>	<p>What is the current distribution and population demographics for these species on the RRSNF?</p> <p>What is the status and ecological function of habitat for these species across the forest?</p> <p>What, if anything, is threatening the persistence of these species on the landscape?</p>	<p>Census of known populations</p> <p>Plant community trends from known populations</p> <p>Ecological integrity assessment in relation to populations (are invasive plants, succession, fire exclusion, OHV use, mineral and/or timber extraction affecting populations?)</p>	<p>NRM: TESP-IS database</p> <p>Long term monitoring reports</p> <p>Habitat modeling</p> <p>Inventories and surveys of habitat</p> <p>Taxonomic treatments and revisions</p> <p>Forest Botanist</p>
<p>(v) The status of visitor use, visitor satisfaction, and progress toward meeting recreation objectives.</p>			
<p>22. Recreation</p> <p>Settings and opportunities provide high visitor satisfaction, meeting current and future public demands in sustainable ways. Assets include trails, trailheads, developed sites, and dispersed sites for motorized and non-motorized summer and winter use.</p>	<p>Are the current recreation settings and opportunities moving toward desired recreation settings and opportunities?</p> <p>How have the recreation settings and opportunities trended?</p> <p>What is the trend in visitor use and satisfaction?</p> <p>Are water and soil resources being protected from recreational uses?</p>	<p>Recreation opportunity spectrum: acres, location, and distribution (mapped)</p> <p>Satisfaction levels from USDA Forest Service national visitor use monitoring survey results by single administrative unit; every 5 years new data is collected</p> <p>Satisfaction levels gathered through site data collection and visitor comments</p> <p>Increase in number of dispersed sites; concentrated use area; user created roads and trails</p>	<p>GIS review: site type/opportunities by recreation setting class</p> <p>NVUM reporting, every 5 years, release base year info</p> <p>Field observation data collected including portal use and other field gathering efforts (such as winter ranger, field ranger, recreation staff reporting)</p> <p>BMP recreational site monitoring on select sites</p> <p>Forest Recreation Program Manager</p>
<p>23. Special Use Authorizations</p> <p>Recreation opportunities not provided by the Forest Service are provided to a diversity of users through special use authorizations.</p>	<p>Are people satisfied when using the forest through permitted service providers, including recreation events, resorts, outfitter guides services, and campground operations?</p> <p>Are permit holders providing a quality experience to a diversity of users?</p>	<p>Satisfaction levels gathered through permit data collection and visitor comments</p> <p>Percent compliance with terms of permit</p> <p>Diversity of customers served</p>	<p>Reporting results on special use permit inspections, performance and compliance, and civil rights compliance. File review based on SUDS query results (e.g. complaints, diversity of customers served - from Title VI reviews, etc)</p> <p>Information stored in the Special Use Database System (SUDS)</p> <p>Forest Recreation Program Manager</p>

(vi) Measurable changes on the plan area related to climate change and other stressors that may be affecting the plan area.			
<p>24. Climate Change</p> <p>Trends and threats to the forest from changing climate</p>	<p>What are the plan area vulnerabilities?</p> <p>What stressors are affecting the plan area?</p> <p>Are there trends in stressors, and, if so, how are they affecting the plan area?</p>	<p>Changes in extent, duration and severity of disturbance, such as insect and disease, wildfire, etc.</p> <p>Changes in timing and amounts of stream flows and stream temperatures.</p> <p>Changes in vegetation location, composition and structures.</p>	<p>Climate change vulnerability assessment</p> <p>Watershed and terrestrial condition monitoring including stream temperature modeling</p> <p>Changes in precipitation, snowpack, etc.</p> <p>Gauge stations for flow regimes on selected streams</p> <p>Length and severity of fire season on the forest</p> <p>RAWS data station – precipitation, snowpack (NRCS), fuel moistures</p> <p>Forest Health Protection Program Managers Invasive Species Program Manager Forest Ecologist, Forest Fire Planner, Forest Hydrologist</p>
<p>25. Insects and Disease</p> <p>Insects and diseases are an integral disturbance agent in the forest ecosystem; however, the goal is to prevent epidemics outside the normal range of disturbance.</p>	<p>What are the extent of outbreaks and infestations?</p> <p>What are the trends?</p> <p>Are trends related to causal events or conditions and what are those?</p> <p>Are areas identified in the Risk mapping showing evidence of outbreaks and infestations and what are they?</p> <p>What are the responses to insects and disease related to fire impacts?</p>	<p>Acres of stands affected by the various disturbance agents (insects and disease)</p> <p>Impact of Sudden Oak Death (acres affected, acres treated, acres at risk, acres under quarantine)</p>	<p>Regional Office Forest Health Protection aerial surveys – review for status and trends, forest level –broad-scale</p> <p>District level surveillance for localized outbreaks and infestations</p> <p>Individual studies on select projects</p> <p>Risk Mapping of insect and disease areas for Farm Bill</p> <p>Forest Health Protection Program Managers</p>

(vii) Progress toward meeting the desired conditions and objectives in the plan, including for providing multiple use opportunities.
Note - This is supposed to be related to questions and associated indicators addressing the plan contributions to communities, social and economic sustainability of communities, multiple use management in the plan area, progress toward meeting desired conditions and objectives related to social and economic sustainability. Ecosystem services are mentioned in this description in the handbook.

Maintenance and Enhancement of Social, Economic and Cultural Benefits (from 1909.12, Chapter 30 FS handbook)

<p>26. Social and Economic status</p> <p>Contribution of timber, forest products and the recreation program to social and economic stability.</p>	<p>What are the annual timber targets? What are the trends?</p> <p>What are the special forest products and what are the trends in their use?</p> <p>What are the effects of the recreation and lands special uses programs?</p>	<p>Levels of production of multiple uses including timber, special forest products and recreational visits and their connected economic benefits</p> <p>Qualitative economic effects on the surrounding communities from lands and recreational special uses</p>	<p>Annual accomplishment reports, periodic census data for social and economic reporting</p> <p>SUDS reporting</p> <p>Forest Timber Program Manager Forest Recreation Program Manager</p>
<p>27. Transportation System (Roads)</p> <p>Goal – to plan, operate and maintain a safe and economical transportation system providing efficient access for the movement of people and materials involved in the use and protection of NFS lands.</p>	<p>Are road densities meeting forest-wide and allocation specific guidelines?</p> <p>How many miles of roads have been constructed?</p> <p>How many road miles have been closed?</p> <p>How many road miles have been decommissioned?</p> <p>What are the trends and what is affecting those trends?</p>	<p>Miles of open roads by 6th field watershed (aka 12^{digit})</p> <p>Miles of roads closed per year</p> <p>Miles of roads decommissioned per year</p> <p>Miles of roads constructed per year</p> <p>Miles of roads maintained per year</p>	<p>INFRA and GIS database for roads info</p> <p>Annual Accomplishment report using INFRA for miles of closed and miles of decommissioned, report is generated from INFRA by district, forest etc.</p> <p>Data from Travel Analysis (subpart A) carried into landscape NEPA projects for decisions</p> <p>Forest Roads Manager</p>

<p>28. Cultural Resource</p> <p>Goal – To provide for the protection and preservation of prehistoric and historic sites, buildings, objects, and antiquities of local, Regional or National significance.</p>	<p>Are significant historic and prehistoric sites and properties being maintained, stabilized, and repaired according to preservation standards?</p>	<p>Status of select historic and prehistoric sites and properties</p>	<p>Monitoring data and site condition assessments where applicable</p> <p>Forest Heritage Program Manager</p>
<p>29. Invasive Plant Species</p> <p>Goal - Invasive species are being managed to reduce or eliminate the impacts to native plant and vegetative communities.</p>	<p>Are invasive plant species being treated and are invasive plant populations being reduced in treated areas?</p>	<p>Population trends in treated sites</p>	<p>Field survey and treatment records NRM:TESP-IS database FACTS database GIS Analysis</p> <p>Forest Botanist</p>
<p>Wilderness (Management Area 6)</p>			
<p>30. Preserve wilderness character</p> <p>Allow for natural processes and provide opportunities for solitude, challenge, and inspiration and within these constraints to provide for recreational, scenic, scientific, educational, conservation and historical uses.</p>	<p>Is the wilderness character being preserved and protected?</p> <p>Are the physical / biological, managerial and social settings of each Wilderness Resource Spectrum (WRS) maintained consistent with the standards for wilderness management?</p>	<p>Resources and/or experience quality degraded through inappropriate uses and/or behaviors of visitors</p> <p>Trends in wilderness character</p>	<p>Wilderness Performance Program Score Card – 10 elements achieved or sustained</p> <p>Status of each wilderness as described in the Wilderness Performance Program Score Card</p> <p>Wilderness monitoring data</p> <p>Forest Recreation Program Manager</p>
<p>Conservation of Eligible Wild and Scenic River Status</p>			
<p>31. Eligible Streams and Rivers</p> <p>Maintain character of rivers and streams <u>eligible</u> for Wild and Scenic Rivers designation as described in the LRMP.</p>	<p>Are we protecting the future eligibility/ suitability and potential classification of our eligible rivers? How is that protection being maintained?</p>	<p>Change to the characteristics affecting eligibility which include free flow, water quality, and outstanding remarkable values</p>	<p>Reviews of project planning documents and ongoing actions (e.g., road maintenance)</p> <p>Field monitoring for implementation and effectiveness of mitigation to protect eligible rivers</p> <p>Forest Recreation Program Manager with Forest Hydrologist and Forest Fisheries Biologist</p>

Conservation of Designated Wild and Scenic Rivers (WSR)			
<p>32. Designated River and Streams</p> <p>Maintain the Wild, Scenic, or Recreation River character of streams <u>designated</u> by Congress as Wild and Scenic Rivers.</p>	<p>Are we protecting the outstandingly remarkable values of the Congressionally designated rivers?</p> <p>Has Section 7(a) reviews been conducted when instream work is planned?</p> <p>Have River Management Plans been completed?</p>	<p>Change to the characteristics affecting Wild and Scenic Rivers which are free flowing, water quality, and outstanding remarkable values</p> <p>Change in ORVs or status of ORVs based on planning analysis</p> <p>Status of River Management Plans</p>	<p>Reviews of project planning documents and ongoing actions within WSR corridors</p> <p>Field monitoring for implementation of mitigation to protect designated rivers and effectiveness of those measures</p> <p>Inspection and compliance results for conservation easements</p> <p>Forest Recreation Program Manager with Forest Hydrologist and Forest Fisheries Biologist</p>
<p>(viii) The effects of each management system to determine that they do not substantially and permanently impair the productivity of the land.</p>			
<p>32. Soils</p> <p>Maintain or enhance long-term soil productivity.</p>	<p>Are management activities being implemented so that they do not substantially and permanently impair the productive capacity of the land?</p>	<p>Extent of detrimental soil disturbance within activity areas</p>	<p>Management activity soil monitoring</p> <p>Forest Soil Program Manager</p>