

## UPDATE TO CHAPTER IV

**Please note:**

On August 5, 2022, the Forest made public notification that the Forest Supervisor was approving administrative changes to several monitoring questions and indicators in tables IV-1 and IV-2 in Chapter IV of the Forest Plan. The administrative changes were needed to add clarifying language and/or remove unnecessary or irrelevant language, to correct inconsistencies between questions and indicators, and to add questions and indicators that reflect current monitoring efforts. These changes were conducted under the administrative change procedures of 36 CFR 219.13(c). These changes to the monitoring program were made outside of the process for plan revision or amendment, therefore, the Forest provided the public 30 days to comment on the administrative changes. No comments were received. On September 20, 2022, Chapter IV was updated to incorporate the administrative changes.

## **IMPLEMENTATION DIRECTION**

### **General Direction**

The Sawtooth National Forest Land and Resource Management Plan (Forest Plan) provides direction for managing the Forest over the next 10 to 15 years. This chapter explains how management direction from Chapter III of the Forest Plan will be implemented, how implementation activities will be monitored and evaluated, and how the Forest Plan can be kept current in light of changing conditions or other findings.

Implementation of the Forest Plan is guided by existing and future laws, regulations, policies, and guidelines. The Forest Plan is designed to supplement, not replace, direction from these sources, except in specific instances. This Forest Plan replaces all previous management plans except for the Sawtooth Wilderness Management Plan, Allotment Management Plans, and approved Fire Management Plans.

All permits, contracts, and instruments for use or occupancy of the Forest must conform to the revised Forest Plan's direction. However, because some existing permits and leases are already committed, they will remain in effect until they can be adjusted to accommodate direction in the revised Forest Plan. The Record of Decision for the revised Forest Plan provides the Responsible Official's direction concerning transition of the permits, contracts, and other uses to reflect direction of the revised Plan.

### **Budget Proposals**

The National Forest System appropriation provides the funds for stewardship and management of 192 million acres of federal lands and the natural ecosystems that exist on those lands. These appropriated funds are key for translating the goals, objectives, and management requirements stated in the Forest Plan to on-the-ground results.

Upon receipt of the final budget every year, the Forest prepares an annual implementation budget. This budget is a result of program development, annual work planning, and monitoring processes. These processes supplement the Forest Plan and make the annual adjustments and changes needed to reflect current priorities within the overall management direction contained in the Forest Plan. Therefore, the funding distribution between program components, and the intensity or level of activities in those programs, is a reflection of the Forest Plan as well as the will of Congress. The final determining factor in carrying out the intent of the Forest Plan is the adequacy of funding, which dictates the rate of implementation of the Forest Plan.

### **NFMA and NEPA Compliance**

Forest Planning is a two-tiered process. The initial planning process established Forest-wide and management area goals, objectives, standards, and guidelines. This level of planning was programmatic in nature, and evaluated possible management activities across the entire

Forest. The initial analysis tested the feasibility of activities in arriving at a Forest Plan, but did not evaluate the site-specific effects of individual projects.

The second phase of the planning process is implementing site-specific activities designed to aid in achieving the goals, objectives, management direction, and desired future conditions established in the Forest Plan.

Implementation of the Forest Plan occurs at the project level, using site-specific analysis guided by the National Forest Management Act (NFMA) and the National Environmental Policy Act (NEPA), and other laws and regulations that may be involved in a specific proposal. Project-level compliance with NFMA is primarily concerned with consistency with the Forest Plan and NFMA regulations. NEPA compliance involves an environmental analysis of a specific proposal, and proper documentation and public disclosure of effects in an Environmental Assessment (EA), Environmental Impact Statement (EIS), or a Categorical Exclusion (CE).

Most proposed activities will be consistent with direction in the Forest Plan. When specific proposals are found to be inconsistent with Forest Plan direction, or site-specific analysis shows an error in the Forest Plan, the Responsible Official has the option to start a plan amendment that, if approved, would accommodate the project. If the plan amendment applies only to a single project, the amendment would be subject to the project review process. If the plan amendment would apply to future projects as well, the objections process of the 2012 Planning Rule (36 CFR 219, Subpart B) would apply.

### **Project Implementation in Inventoried Roadless Areas**

Inventoried Roadless Areas (IRAs) contain natural landscapes where human activities have not had a significant impact, and the areas meet criteria for potential wilderness designation under the Wilderness Act of 1964. Recent court cases and appeal decisions on such areas require that actions that would irretrievably foreclose the wilderness option, or have a significant adverse environmental impact on the undeveloped character of an IRA, be evaluated through an EIS.

The Forest Plan EIS, Appendix C, contains the location and description of each IRA on the Forest. When an activity is proposed within the boundary of an IRA, it will be evaluated to determine the significance of the activity on irretrievably altering the natural condition and foreclosing on a future wilderness option for the entire area.

Forest Plan management prescriptions allow for development in some IRAs (refer to the Forest Plan EIS, Appendix C or the Management Area descriptions in Chapter III of the Forest Plan). For these areas, the option to develop is discretionary, not a mandate for development, because the site-specific effects of implementation have not been evaluated through the appropriate NEPA procedure. Development has been determined to be tentatively feasible in the forest planning process, but must be further evaluated on a site-specific level of analysis.

Site-specific analysis of environmental effects for projects in IRAs will include an evaluation of the effects on the wilderness attributes. Appendix C of the Forest Plan EIS contains a description of wilderness attributes for each IRA. The project-level environmental analysis will include a discussion on how the wilderness attributes would be affected by each alternative along with the cumulative and irretrievable effects. The site-specific analysis will not include a reevaluation for a wilderness recommendation unless the analysis reveals a significant wilderness attribute not previously identified. The significance of any change in individual wilderness attributes should be disclosed in the evaluation.

Determining significance of the project's effect on an IRA forms the basis for whether a CE, EA, or EIS is the appropriate NEPA process. Some indicators to determine significance are:

- Location and size of proposed projects within the IRA boundary during the planning period. A large development project in the core of an IRA would likely have more significant effects on its wilderness attributes than a small project on the periphery.
- Interconnected actions. The Forest Plan may allow for a series of timber sales during the planning period. Individually, a given sale may not have a significant effect on the IRA. The aggregate or cumulative effects of all sales, however, could be significant.

## **MONITORING AND EVALUATION DIRECTION**

### **Overview**

Monitoring provides feedback for the forest planning cycle by testing assumptions, tracking relevant conditions over time, measuring management effectiveness, and evaluating effects of management practices. Monitoring information should enable the Forest to determine if a change in plan components or other plan management guidance may be needed, forming a basis for continual improvement and adaptive management. Direction for the monitoring and evaluation of forest plans is found under the 2012 Planning Rule at 36 CFR 219.12 and in the directives in the Forest Service Handbook 1909.12 Chapter 30. The monitoring plan presented was developed with the approach that it will help inform the need for change in the next revision effort.

The Forest Plan monitoring program must contain one or more monitoring questions and associated indicators addressing each of the following:

- The status of select watershed conditions
- The status of select ecological conditions, including key characteristics of terrestrial and aquatic ecosystems
- The status of focal species to assess the ecological conditions required under § 219.9

- 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, conservation of proposed and candidate species, and maintenance of a viable population of each species of conservation concern (Species of conservation concern, as defined by the 2012 Planning Rule, have not been identified for the Sawtooth NF at this time.)
- The status of visitor use, visitor satisfaction, and progress toward meeting recreation objectives
- Measurable changes on the plan area related to climate change and other stressors that may be affecting the plan area
- Progress toward meeting the desired conditions and objectives in the plan, including for providing multiple use opportunities
- The effects of each management system to determine that it does not substantially and permanently impair the productivity of the land

The Forest Plan monitoring program addresses the most critical components for informed management of the Forest's resources within the financial and technical capability of the agency. Every monitoring question links to one or more desired conditions and objectives. However, not every Forest Plan component has a corresponding monitoring question.

The monitoring program sets out the plan monitoring questions and associated indicators. Protocols will not be part of the monitoring program in the Forest Plan but will instead be established in implementation guidance. Consideration and coordination with other broad-scale monitoring strategies, multi-party monitoring collaboration, and cooperation with State agencies where practicable will increase efficiencies and help track changing conditions beyond the Forest boundaries to improve the effectiveness of the plan monitoring program. In addition, project and activity monitoring may be used to gather information for the plan monitoring program if it will provide relevant information to inform adaptive management.

Tables IV-1 through IV-4 are organized to display the plan components that drive the monitoring question(s) and the indicator(s) for answering the monitoring question. Monitoring questions are used to evaluate whether management is maintaining or moving toward or away from desired conditions or objectives.

Indicators are the specific resource measures used in answering the monitoring questions. In general, the forest plan component listed is the primary direction being addressed by the monitoring question.

The monitoring indicators listed in this chapter will be evaluated. The associated evaluation process will then determine if the observed changes are consistent with the Forest Plan as well as the effectiveness of implementation.

Evaluation reports will be produced biennially (per the 2012 Planning Rule at 36 CFR 219.12(d)). An interdisciplinary team will develop the biennial monitoring evaluation report which will summarize the results of completed monitoring, evaluate the data, consider relevant information from broad-scale or other monitoring efforts, and make recommendations to the responsible official. Some monitoring indicators will require longer time frames for thorough evaluation of results, but a biennial review of what information has been collected will ensure timely evaluation to inform planning. The biennial monitoring evaluation does not need to evaluate all questions or indicators on a biennial basis but must focus on new data and results that provide new information regarding management effectiveness and progress towards meeting desired conditions or objectives, changing conditions, or validation (or invalidation) of assumptions. The monitoring and evaluation report will indicate whether or not a change to direction in the Sawtooth Forest Plan, Forest management activities, or the plan monitoring program is needed, or if an assessment may be warranted based on the new information. The monitoring and evaluation report is used to inform adaptive management of the plan area.

### **Physical and Biological Ecosystems**

At a national forest scale, potential vegetation group (PVG) is a useful organizing concept to delineate habitat which may be related to wildlife occurrence, influenced by elevation, microclimates, or productivity. The Sawtooth National Forest (NF) has identified desired conditions for potential vegetation groups and watershed condition indicators (refer to USDA Forest Service 2012, Appendices A and B, respectively). The key ecosystem characteristics listed in Appendices A and B are intended to be used for Forest Plan monitoring at a forest-wide or biophysical setting scale. Many existing vegetation characteristics are associated with wildlife habitats and meeting desired conditions in Appendix A, including patch size by PVG, is used as a mid-scale indicator for wildlife source habitat quality (refer to USDA Forest Service 2012, Appendix E). Specific indicators that would be monitored for key ecosystem characteristics on the Sawtooth NF are identified and described in Table IV-1.

Key ecosystem characteristics can also be combined in different ways to assess habitat for specific species of interest using habitat models that are based upon the best available scientific information. Species-specific habitat models are used at the project scale to assess potential effects of Forest Plan implementation.

Key ecosystem characteristic related to climate change and wildlife are measured at very large scales, not the forest scale, but are important to some wildlife species on the Sawtooth NF. For example, one key ecosystem characteristic is “persistent spring snow,” which is useful for monitoring habitat for species such as wolverine. Changes in the distribution of persistent spring snow on the Sawtooth NF would be monitored if and when existing data are updated. Another key ecosystem characteristic is related to drought, measured by drought severity indices and trends, which would be monitored over time as data are updated.

Three terrestrial wildlife species (Northern goshawk, greater sage grouse and pileated woodpecker) and two fish species (Yellowstone cutthroat trout and bull trout) were considered

Management Indicator Species in the past Sawtooth NF monitoring plan (USDA 2012). These species have been selected as *focal species* in this proposed monitoring plan for the Sawtooth NF. A focal species is an indicator of ecological conditions for diversity of plant and animal communities. The five focal species were chosen at this time because they are considered sensitive to changing ecological conditions and occur in habitats where the Forest anticipates implementing the greatest proportion of projects during this planning period. Therefore they represent habitats where potential risks to fish and wildlife habitat sustainability and species persistence are likely to be highest.

**Table IV-1. Physical and biological ecosystem**

Selected Plan Component(s)	Monitoring Question(s)	Potential Indicator(s)
<b>Terrestrial Ecosystems and Vegetation (TE&amp;V)</b>		
<p>Forest, grassland, shrubland, and riparian plant communities are within a desired range of variability for composition, structure, patterns, and processes.</p> <p>Vegetation forms a diverse network of habitats and connective corridors for wildlife and provides desired levels of snags, coarse woody material, and soil organic matter.</p> <p>Upland and riparian vegetation provide habitat to support species diversity, with an emphasis on maintaining or restoring threatened, endangered, petitioned, candidate and sensitive terrestrial species (TEPCS) and watch plant species.</p>	<p>Is live vegetation and snags and CWD at, or moving towards, desired conditions as described in Appendices A and E of the Forest Plan (USDA Forest Service 2012)?</p>	<p>Mix of size classes, canopy closures, and species composition and their spatial patterns by forested PVG and non-forested cover types as measured across all three districts on the north-end of the Forest and as measured across each individual division on the south end of the Forest.</p> <p>Project acres meeting or contributing to the DC for snags and CWD.</p>
	<p>Are planned treatments being implemented within WCS high priority (active restoration) watersheds to meet desired outcomes?</p>	<p>Proportion of acres treated in WCS high priority (active restoration) watersheds compared to total acres treated on the Forest annually.</p>
	<p>Are Forest management actions affecting occupied habitat of threatened, endangered, and sensitive terrestrial species and threatened, endangered, sensitive and watch plant species at the project level?</p>	<p>Acres of known occupied habitat of threatened, endangered, and sensitive terrestrial species and threatened, endangered, sensitive and watch plant species maintained or restored.</p>
<b>Wildlife Species of Conservation Concern</b>		
<p>The amount, distribution, and characteristics of source habitat are present at levels necessary to support persistence of native and desired non-native terrestrial wildlife species within their respective ranges across the planning unit.</p>	<p>Have habitat restoration and conservation been prioritized in watersheds identified in the Forest Plan WCS and priority SG habitat watersheds</p>	<p>Acres of restoration treatments in high priority WCS versus other 5<sup>th</sup> field watersheds.</p>

Selected Plan Component(s)	Monitoring Question(s)	Potential Indicator(s)
	Are restoration and conservation actions being implemented within Sage Grouse Priority Habitat Management Area, Important HMA, and General HMA to meet desired outcomes?	Acres of restoration and conservation actions in sage-grouse PHMA, IHMA, and GHMA habitat.
	Are the distribution, abundance, and habitat quality of terrestrial focal species being maintained?	Population trend data for select terrestrial focal species in potential habitat.  Acres of focal species habitat treated.
Habitats for threatened and endangered terrestrial species are managed consistent with established and approved recovery plans. Management actions either contribute to or do not prevent recovery or delisting of these species.	Are the distribution, abundance, and habitat quality of TEPC terrestrial species being maintained and/or restored?	Population trend data for select terrestrial TEPC species in potential habitat.
Human activities do not affect source environments in a manner that prevents wildlife populations from attaining desired distribution and abundance during critical life stages.	Has winter recreation affected source environments in priority watersheds identified in the Forest Plan Source Environment Restoration Strategy (Forest Plan Appendix E, Map 1)?	Level of winter recreation use in priority watersheds identified in the Source Environment Restoration Strategy (Forest Plan Appendix E, Map 1).
<b>Fire</b>		
Wildland fire functions in its natural ecological role to improve the health of the land by creating fire resilient landscapes and restoring fire-adapted ecosystems.	In WCS high priority (active and passive restoration) watersheds is wildland fire and or management ignited fire moving landscapes towards desired conditions for resiliency and fire condition class.	Wildland fire and or management ignited fire acres burned in WCS high priority (active and passive restoration) watersheds contributing to desired conditions.
High fire risk within the wildland urban interface is reduced to conditions that will provide for protection of life, investment and valuable resources.	Are high wildfire risk areas being identified within the wildland urban interface and are those acres being subsequently treated to reduce that risk?	Acres of high wildfire risk within the wildland urban interface treated in a manner that reduces risk.

Selected Plan Component(s)	Monitoring Question(s)	Potential Indicator(s)
<b>Aquatic Ecosystems</b>		
<p>Wetlands and floodplains are maintained where they are properly functioning and restored where degraded.</p> <p>Improving watershed conditions contribute to the delisting of water quality limited water bodies to meet Clean Water Act requirements. Public waters are restored where water quality does not support beneficial uses and otherwise are maintained or improved.</p>	<p>Are planned treatments being implemented within ACS priority sub-watersheds to meet desired outcomes-desired conditions?</p>	<p>Proportion of stream miles treated within ACS priority sub-watersheds compared to total stream miles treated on the forest annually.</p> <p>Acres treated annually in wetlands, floodplain and RCAs within ACS priority watersheds.</p>
	<p>Are watershed conditions improving which contribute to delisting of water quality limiting bodies?</p>	<p>Proportion of stream miles fully supporting beneficial uses on the forest.</p>
<p>Distribution of native and desired non-native fish and other aquatic species is maintained or is expanding into previously occupied habitat, with interconnectivity between and within metapopulations.</p>	<p>Are the distribution and abundance of aquatic focal species being maintained?</p>	<p>WCIs tracked for selected aquatic focal species:</p> <ul style="list-style-type: none"> <li>• Distribution (map)</li> <li>• Miles of occupied habitat.</li> <li>• Number of fish passage improvements and miles of habitat expanded.</li> </ul>
<p>Habitats for threatened and endangered aquatic species are managed consistent with established and approved recovery plans. Management actions either contribute to or do not prevent recovery or delisting of these species.</p>	<p>Are forest management actions supporting approved recovery plans for TEPC aquatic species?</p>	<p>Number of projects designed to support TEPC aquatic species recovery plan objectives.</p>

## Productivity of the Land

Productivity is defined as the capacity of National Forest System lands and their ecosystems to provide various renewable resources in certain amounts in perpetuity (36 CFR 219.19). In this context, productivity is an ecological term, not an economic term. Specific productivity indicators that would be monitored for key ecosystem characteristics on the Sawtooth NF are identified and described in Table IV-2.

**Table IV-2. Productivity of the land**

Selected Plan Component(s)	Monitoring Question(s)	Potential Indicator(s)
<p>Soil protective cover, soil organic matter, and coarse woody material are at levels that maintain or restore soil productivity and soil-hydrologic functions where conditions are at risk or degraded. Soils also have adequate physical, biological, and chemical properties to support desired vegetation growth.</p>	<p>Is the Forest maintaining or restoring long-term soil productivity?</p>	<p>Amount of activity area in non-detrimentally disturbed condition (annual review of selected projects)</p> <p>Amount of activity area Total Soil Resource Commitment (TSRC) (annual review of selected projects)</p>
<p>Existing noxious weed populations are not expanding in size. New noxious weed outbreaks may occur temporarily or continue to exist as small, nonexpanding populations in areas of high susceptibility. Noxious weed populations in low susceptibility areas are small and scattered with low-to-moderate densities. New invader species to the forest are not becoming established. Native plants are dominant on disturbed or recently restored sites.</p>	<p>Are Forest management strategies effectively controlling or eradicating targeted populations of noxious and invasive weeds and preventing new invader species from becoming established?</p>	<p>Acres of known noxious and invasive weed infestation in management areas identified for eradication or control</p> <p>Acres treated of new invader species to the forest</p> <p>Acres treated of new noxious and invasive weed infestations.</p>

## Human Uses and Designations of the Forest

The Forest Plan monitoring program must contain one or more monitoring questions and associated indicators addressing the status of visitor use, visitor satisfaction, and progress toward meeting recreation objectives. Specific human use indicators that would be monitored for key ecosystem characteristics on the Sawtooth NF are identified and described in Table IV-3.

**Table IV-3. Human uses and designations**

Selected Plan Component(s)	Monitoring Question	Indicator
<b>Facilities</b>		
Facilities—such as roads, trails, campgrounds, and administrative sites—are constructed, reconstructed, or eliminated as needed to provide a balance of safe, effective, and environmentally responsible management activities.	Is the transportation system providing recreation opportunities, safe and efficient public and agency access, and are environmentally compatible?	Miles of roads maintained by maintenance level.  National Visitor Use Monitoring Results Percent Satisfaction Index for facilities, road conditions, trail conditions, and services provided)  Miles of trail maintained.
	Do potable water systems meet federal, state, and local requirements?	Water quality monitoring results and condition surveys
<b>Recreation Setting</b>		
Recreational settings range from primitive to developed, offering a wide spectrum of opportunities and uses. Visitors enjoy a variety of special attractions, including National Recreation Areas, Wilderness Areas, Wild and Scenic Rivers, Scenic Byways, historic landmarks, and winter recreation areas.	Are recreation activity levels changing, and are shifts occurring between types of activities and locations of recreational use?	Project specific changes to the ROS.
Conflicts between recreationists are reduced or addressed while a broad array of recreation opportunities are available.	Are conflicts arising between recreational uses? Are conflicts being resolved?	Number of plans or other mechanisms developed to resolve conflicts.

## Economic, Cultural, and Social Environment

Monitoring social, cultural, and economic indicators (FSH 1909.12) accomplishes the following:

- Informs managers and the public of changes in social, cultural, and economic conditions that are influenced by the Forest Plan
- Monitors contributions of the management of the plan area toward meeting social, cultural, and economic attributes of desired conditions
- Provides feedback for adaptive management toward expected and potential contributions to social and economic sustainability

Specific cultural indicators that would be monitored for key ecosystem characteristics on the Sawtooth NF are identified and described in Table IV-4.

**Table IV-4. Economic, cultural, and social environment**

Selected Plan Component(s)	Monitoring Question	Indicator
<b>Social and Economic</b>		
Sustainable ecosystems provide a variety of sustainable products and services for current and future generations. Timber, range, and recreation offer opportunities for economic development and contribute to local community needs, while maintaining ecological integrity	Is the Forest meeting the expected outcomes as by-products of restoration?	Levels of commercial and non-commercial timber products provided (ASQ and TSPQ)
	Are current forest management strategies providing for livestock grazing opportunities while maintaining ecological integrity?	Number of Grazing authorizations provided annually and over a 10 year period.  Number of permit modifications issued to address resource concerns
	Is the Forest providing recreation opportunities as planned?	Change in ROS class
<b>Tribal Interests and Rights</b>		
Ecosystems on the Sawtooth NF are managed to promote meaningful relationships with American Indian tribes to understand and incorporate tribal cultural resources, needs, interests, and expectations.	Are Tribal interest and rights identified through consultation being addressed?	Challenges identified in annual Tribal Summary Report submitted to WO Tribal Relations
<b>Historic Resources</b>		
Stewardship of historic properties	Are historic properties being managed to standard?	Presence of a Heritage Management Plan  Evaluation for eligibility for listing on the National Register of Historic Places  Condition assessments on Priority Heritage Assets  Cultural resource stewardship  Opportunities for study and /or public use