

## **IMPLEMENTATION DIRECTION**

### **General Direction**

The Boise National Forest (Forest) Land and Resource Management Plan (Forest Plan) provides direction for managing the Forest over the next 10 to 15 years (USDA Forest Service 2010a). 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.

Forest Plan implementation is guided by existing and future laws, regulations, policies, and guidelines. Except in specific instances, the Forest Plan is designed to supplement, not replace, direction from these sources. This Forest Plan (USDA Forest Service 2010a) replaces all previous management plans except for the Boise Wilderness Management Plan, allotment management plans, and approved fire management plans. Additionally, the terms and conditions or reasonable and prudent measures resulting from consultation under Section (a) of the Endangered Species Act remain part of the monitoring process.

All permits, contracts, and instruments for Forest use or occupancy 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 (USDA Forest Service 2010c) for the revised Forest Plan provides the Responsible Official's direction concerning transitioning permits, contracts, and other uses to reflect direction of the revised Plan.

### **Budget Proposals**

National Forest System (NFS) appropriation provides the funds for stewardship and management of 192 million acres of federal lands and the natural ecosystems existing 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. Monitoring 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 of 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 Forest Plan implementation.

## **National Forest Management Act and National Environmental Policy Act 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 (USDA Forest Service 2010b).

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.

Forest Plan implementation occurs at the project level, using site-specific analysis guided by the National Forest Management Act (NFMA), National Environmental Policy Act (NEPA), and other laws and regulations which may be involved in a specific proposal. Project-level compliance with NFMA is primarily concerned with Forest Plan consistency 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 Forest Plan direction. 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 Forest Plan amendment that, if approved, would accommodate the project. If the Forest Plan amendment applies only to a single project, the amendment would be subject to the project review process. If the Forest 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 meet criteria for potential wilderness designation under the Wilderness Act of 1964. Recent court cases and appeal decisions on such areas require actions which 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.

Appendix C of the Final Environmental Impact Statement for the Forest Plan (USDA Forest Service 2003) contains the location and description of each IRA on the Forest. When an activity is proposed within the boundary of an IRA, it is evaluated to determine if the activity irretrievably alters the natural condition or forecloses on a future wilderness option for the entire area.

Forest Plan management prescriptions allow for development in some IRAs (USDA Forest Service 2003, Appendix C; Chapter III, management area descriptions). 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 using a site-specific level of analysis.

Site-specific analysis of environmental effects for projects in IRAs includes an evaluation of the effects on wilderness attributes. Appendix C of the Forest Plan FEIS (USDA Forest Service 2003) contains a description of wilderness attributes for each IRA. The project-level environmental analysis will include a discussion of 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 would be the appropriate NEPA process. The following are some indicators to determine significance:

- 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 a more significant effect on the 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 Forest Plan components or other Forest 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 Forest Service Handbook (FSH) 1909.12, Chapter 30. The monitoring plan presented was developed with the approach that it will evolve over the next planning cycle as the Forest completes a revision to meet the 2012 Planning Rule.

The plan monitoring program must contain one or more monitoring questions and associated indicator, 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 identified by the 2012 Planning Rule, have not been identified for the Forest 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 which may be affecting the plan area
- Progress toward meeting the desired conditions and objectives in the Forest Plan, including for providing multiple use opportunities
- The effects of each management system to determine it does not substantially and permanently impair the productivity of the land

The 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 condition and objective. However, not every Forest Plan component has a corresponding monitoring question.

The monitoring program sets out the monitoring questions and associated indicators. Protocols are not part of the monitoring program in the Forest Plan but are instead 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 Forest boundaries to improve the effectiveness of the monitoring program. In addition, project and activity monitoring may be used to gather information for the monitoring program if it will provide relevant information to inform adaptive management.

Tables IV-1 through IV-4 are organized to display the Forest Plan components driving the monitoring question(s) and the indicator(s). 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 list of potential monitoring indicators listed in this chapter will be evaluated as needed to address the questions. 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 the 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 providing new information regarding management effectiveness and progress towards meeting desired conditions or objectives, changing conditions, or validation (or invalidation) of assumptions.

The monitoring evaluation report will indicate whether or not a change to the Forest Plan, management activities, or monitoring program, or if a new assessment may be warranted based on the new information. The monitoring evaluation report is used to inform adaptive management of the Forest Plan area.

## **Physical and Biological Ecosystems**

At a Forest-wide scale, potential vegetation group (PVG) is a useful organizing concept to delineate habitat that may be related to wildlife occurrence or influenced by elevation, microclimates, or productivity. The Forest has identified desired conditions for PVGs and watershed condition indicators (WCIs) (refer to USDA Forest Service 2010a, 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 2010a, Appendices A and E). Specific vegetation indicators that could be monitored for key ecosystem characteristics on the Forest 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 based on 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 Forest.

Three terrestrial wildlife species (pileated woodpecker, black-backed woodpecker, and white-headed woodpecker) and one fish species (bull trout) were considered Management Indicator Species (MIS) in the past Forest monitoring plan (USDA Forest Service 2010a). These species have been selected as focal species in the new Forest monitoring plan. A focal species is an indicator of ecological conditions for diversity of plant and animals communities. The four focal species were chosen 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, these focal species 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 plan monitoring questions and potential indicators for the Boise National Forest (Forest)**

Selected Plan Components	Monitoring Questions	Potential Indicators
<b>Terrestrial Ecosystems</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 debris CWD), and soil organic matter.</p> <p>Upland and riparian vegetation provide habitat to support terrestrial species diversity, with an emphasis on maintaining or restoring Threatened, Endangered, Petitioned, Candidate and Sensitive (TEPCS) terrestrial species and Watch plant species.</p> <p>Habitats for TE 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.</p> <p>Management activities from Forest programs are at levels that do not threaten the persistence of TEPC terrestrial species populations.</p> <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>	Are live vegetation, snags, and CWD at, or moving towards, desired conditions as described in Appendices A and E of the Forest Plan (USDA Forest Service 2010a)?	<p>Mix of size classes, canopy cover class, and species composition and their spatial patterns by forested Potential Vegetation Group (PVG) and non-forested cover types</p> <p>Project acres meeting or contributing to the desired condition for snags and CWD</p>
	Are restoration and conservation actions being implemented within Sage Grouse Priority Habitat Management Area (PHMA), Important Habitat Management Area (IHMA), and General Habitat Management Area (GMHA) to meet desired outcomes?	Number of acres restored in PHMA, IHMA, and GHMA habitat
	Are Forest management actions maintaining and/or restoring the distribution, abundance, and habitat quality of TEPCS terrestrial species, or the occupied habitat of TEPCS and Watch plant species?	<p>Acres of TEPCS habitat maintained or restored</p> <p>Acres of disturbance of occupied habitat of TEPCS plant species and Watch plant species</p>
	Are Forest management actions affecting the distribution, abundance, and habitat quality of focal species and Species of Conservation Concern?	<p>Population trend data for focal species in potential habitat</p> <p>Acres treated within focal species habitat</p> <p>The proportion of vegetation management projects that include restoration for Species of Conservation Concern in their Purpose and Need</p>
	Have habitat restoration and conservation actions been prioritized in watersheds identified in the Forest Plan Wildlife Conservation Strategy (WCS) as priority watersheds?	<p>Proportion of acres restored or enhanced annually in WCS priority watersheds compared to total acres in other 5th field watersheds</p> <p>Total acres restored or enhanced of terrestrial habitat</p>
	Are special forest product gathering activities resulting in resource depletion (e.g., overharvest of fungi, bear grass, berries)?	Number of collection permits and amount of product by species
	Has winter recreation affected source environments in priority watersheds identified in the Forest Plan Source Environment Restoration Strategy?	Level of winter recreation use in priority watersheds identified in the Source Environment Restoration Strategy

Selected Plan Components	Monitoring Questions	Potential Indicators
<b>Fire</b>		
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 priority 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 priority watersheds contributing to desired conditions
High fire risk within the wildland urban interface (WUI) is reduced to conditions that will provide for protection of life, investment, and valuable resources.	Are high wildfire risk areas being identified within the WUI, and are those acres being subsequently treated to reduce that risk?	Acres of high wildfire risk within the WUI treated in a manner that reduces risk
<b>Aquatic Ecosystems</b>		
<p>Maintain or improve watershed conditions to support healthy riparian and aquatic habitats.</p> <p>Habitats for TE 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>Management activities from Forest programs are at levels that do not threaten the persistence of TEPC aquatic species populations.</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>	Do implemented activities maintain or restore water quality to fully support beneficial uses?	<p>Watershed Condition Framework (WCF)—change in watershed condition class or key WCF attributes</p> <p>Applicable best management practices monitoring</p> <p>Applicable Forest Plan Pathways and WCIs</p> <p>Certified Accomplishments via Watershed Improvement Tracking (WIT) (core and integrated targets)</p> <p>Idaho Division of Environmental Quality Beneficial Use Reconnaissance Project (BURP) data</p>
	Are management activities in riparian conservation areas (RCAs) designed to maintain or restore riparian functions and ecological processes?	Acres of projects in RCAs with Purpose and Need to restore riparian functions and ecological processes
	Have habitat restoration and conservation been prioritized in watersheds identified in the Forest Plan Aquatic Conservation Strategy (ACS) priority watersheds?	<p>Within ACS priority watersheds:</p> <p>–Applicable Forest Plan Pathways and WCIs</p> <p>–Certified accomplishments (core and integrated targets)</p>
	Are Forest management actions affecting the distribution, abundance, and quality of habitat for TEPC aquatic species or focal species?	<p>WCIs tracked for selected aquatic focal species:</p> <p>–Presence/absence data</p> <p>–Acres/miles of occupied habitat</p> <p>–Number of strongholds</p> <p>–Number of isolated populations</p>
	Is water quality in priority watersheds being maintained or restored to fully support beneficial uses and native and desired non-native fish species and their habitats?	<p>Miles of stream habitat improved</p> <p>NOTE: State data, including BURP data, PIBO data collection</p>

## Productivity of the Land

Productivity is defined as the capacity of NFS 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 could be monitored for key ecosystem characteristics on the Forest are identified and described in Table IV-2.

**Table IV-2. Productivity of the land: plan monitoring questions and potential indicators on the Boise National Forest (Forest)**

Selected Plan Components	Monitoring Questions	Potential Indicators
<p>Soil protective cover and soil organic matter are at levels that maintain or restore soil productivity and soil-hydrologic functions.</p> <p>Soils' physical, biological, and chemical properties are representative of the inherent capabilities of the setting and support desired vegetation growth.</p>	Is the Forest maintaining or restoring soil quality?	<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.</p> <p>New outbreaks of existing weed species may occur as small non-expanding populations in areas of high susceptibility.</p> <p>Noxious weed populations in low susceptibility areas are isolated to disturbed areas with scattered plants with low densities.</p> <p>New invader species to the forest are not becoming established.</p> <p>Native plants are dominant on disturbed or recently restored sites.</p>	Are Forest invasive species management activities effectively controlling or eradicating targeted populations of noxious weeds and preventing new invader species from becoming established?	<p>Acres treated of current infestations</p> <p>Acres treated of new infestations</p> <p>Acres treated of new invader species to the Forest</p>

## Human Uses and Designations of the Forest

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

**Table IV-3. Human uses and designations of the forest plan monitoring questions and potential indicators on the Boise National Forest (Forest)**

Selected Plan Components	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 recreational opportunities and safe and efficient public and agency access, and are they environmentally compatible?	Miles of roads maintained by maintenance level Miles of road decommissioned Miles of trail maintained National Visitor Use Monitoring (NVUM) results every 5 years: Percent Satisfaction Index for facilities, road conditions, trail conditions, and services provided
	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 Recreation Opportunity Spectrum (ROS) NVUM results by activity.

## Economic, Cultural, and Social Environment

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

- Inform managers and the public of changes in social, cultural, and economic conditions which are influenced by the Forest Plan
- Monitor contributions of the management of the Forest Plan area toward meeting social, cultural, and economic attributes of desired conditions
- Provide feedback for adaptive management toward expected and potential contributions to social and economic sustainability

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

**Table IV-4. Economic, cultural, and social environment plan monitoring questions and potential indicators on the Boise National Forest (Forest)**

Selected Plan Component(s)	Monitoring Question	Indicator
<b>Social and Economic</b>		
<p>As an outcome of restoration, sustainable ecosystems provide a variety of products and services for current and future generations.</p> <p>Timber, range, and recreation offer opportunities for economic development and contribute to local community needs, while maintaining ecological integrity.</p>	Is the Forest meeting the expected outcomes as by-products of restoration?	<p>The amount of commercial and non-commercial wood products provided Allowable Sale Quantity (ASQ) and Total Sale Program Quantity (TSPQ)</p> <p>Number of stewardship contracts awarded</p> <p>Acres treated that contribute to achievement of desired restoration conditions</p>
	Are current allotment management strategies effective in meeting or moving toward desired vegetation, ground cover, and soil stability conditions for non-forested vegetation types?	<p>Number of grazing authorizations provided annually and over a 10-year period</p> <p>Percentage of upland and riparian sites monitored, that have a long-term trend at meeting or moving toward meeting Desired Future Conditions.</p>
	What is the visitor satisfaction on National Forest System (NFS) lands?	National Visitor Use Monitoring (NVUM) visitor satisfaction
<b>Tribal Interests and Rights</b>		
Ecosystems on the Forest 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?	<p>Challenges to addressing tribal interests and rights identified are reviewed with tribal representatives through the agreed upon consultation forum to determine opportunities to improve consultation processes to better achieve desired outcomes</p> <p>Results of consultation are reported annually</p>
<b>Cultural Resources</b>		
Stewardship of cultural and historic properties	Are cultural and historic properties being managed to standard?	<p>Presence of a Heritage Management Plan</p> <p>Inventory of NFS lands</p> <p>Evaluation for eligibility for listing on the National Register of Historic Places</p> <p>Condition assessments on Priority Heritage Assets</p> <p>Cultural resource stewardship</p> <p>Opportunities for study and /or public use</p> <p>Volunteer hours</p>