# IMPLEMENTATION DIRECTION

## General Direction

The Boise National Forest Land and Resource Management 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 Plan will be implemented, how implementation activities will be monitored and evaluated, and how the Plan can be kept current in light of changing conditions or other findings.

Implementation of the Plan is guided by existing and future laws, regulations, policies, and guidelines. The Plan is designed to supplement, not replace, direction from these sources, except in specific instances. This Plan replaces all previous management plans except for the Frank Church–River of No Return 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 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 Plan. Therefore, the funding distribution between program components, and the intensity or level of activities in those programs, is a reflection of the 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 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 Plan.

Implementation of the 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 Plan. When specific proposals are found to be inconsistent with Plan direction, or site-specific analysis shows an error in the Plan, the Plan or the proposal must be adjusted according to the analysis. Most adjustments to the Plan can be accomplished through a non-significant amendment signed by the Forest Supervisor and documented in a CE/Decision Memo, EA/Decision Notice, or EIS/Record of Decision. Significant amendments require documentation through an EIS/Record of Decision and must be signed by the Regional Forester.

## 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 this 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 re-evaluation 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 a IRA would likely have more significant effects on its wilderness attributes than a small project on the periphery.

- Interconnected actions. The 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

Evaluation and monitoring provide knowledge and information to keep the Land and Resource Management Plan viable. Appropriate selection of indicators, and monitoring and evaluation of key results helps us determine if we are meeting the desired conditions identified in the Plan. Evaluation and monitoring also help us determine if we should change goals and objectives, or monitoring methods.

Adaptive management is the foundation for planning and management. Forest planning regulation requires that plans be revised every 10-15 years after plan approval [36 CFR 219.10(g)]. One of the lessons learned from experience implementing current Forest Plans is that plans need to be dynamic to account for changed resource conditions such as large scale wildfire or listing of additional species under the Endangered Species Act, new information and science such as taking a systems approach, and changed regulation and policies such as the roads analysis policy.

Evaluation and monitoring are critical to adaptive management. Other component parts include inventory, assessment, planning, and implementation. No single component can be isolated from the whole of adaptive management.

Consider the learning-loop schematic illustrated in Figure 1: No matter where we jump into the loop, all phases are needed to learn. This learning-loop is applicable for site-specific problems, forest plans, or on processes, policy, or any other aspect of an organization. In most of our Forest Plan evaluation and monitoring, however, we will focus our learning on how effective we are at implementing the plan and realizing desired futures from the plan, as well as how to improve plans in the future.

## Monitoring and Evaluation and Strategy

Our evaluation and monitoring strategy is straightforward. We will tightly focus implementation, evaluation and monitoring on decisions made in the Record of Decision (ROD). Elements in our monitoring will include requirements from NFMA regulation, as well as other pertinent law and regulation.

We begin monitoring and evaluation processes by thinking about what questions we need to answer about Forest Plan implementation. By understanding the questions, we can begin to identify information needs, data collection designs, and tools needed to turn data into information and knowledge. We used a variety of existing monitoring strategies to help determine which questions to ask, including The Monitoring and Evaluation Strategy - Southwest Idaho Ecogroup Version 1.2 (USDA Forest Service 1997) and others such as Criteria and Indicators from the Local Unit Criteria and Indicator Development (LUCID) process and monitoring strategies from National Marine Fisheries Service and USDI Fish and Wildlife Service Matrices and Pathways.

We must also have a clear understanding of baseline conditions (current resource condition at the time of signing the ROD) versus desired conditions and the evaluation strategies that will help us to determine if movement towards desired conditions is occurring. As previously stated, appropriate selection of resource indicators that help us measure where we want to be versus where we are, and monitoring and evaluation of key results are critical to determining if we are meeting the desired conditions identified in our Plan.

## Forest Land and Resource Plan Evaluation and Reports

Evaluation is more than reporting facts and figures. Forest plan evaluation tells how forest plan decisions have been implemented, how effective the implementation has proved to be in accomplishing desired outcomes, what we learned along the way, and how valid our assumptions are that led us to decide what we did in the plan.

The Forest Supervisor will maintain monitoring information for public reviews, including internet-based reports, and will evaluate such on a periodic basis to determine, among other things, need for amendment or revision of the Forest Plan. Formal evaluation and reporting will occur every 5 years, unless the Forest Supervisor deems it necessary that a shorter timeframe is warranted for some evaluations. The 5-year review will provide a comprehensive evaluation of information in response to monitoring questions and regulatory review requirements as depicted in Table IV-1.

**Figure 1. An Adaptive Management Learning Loop**

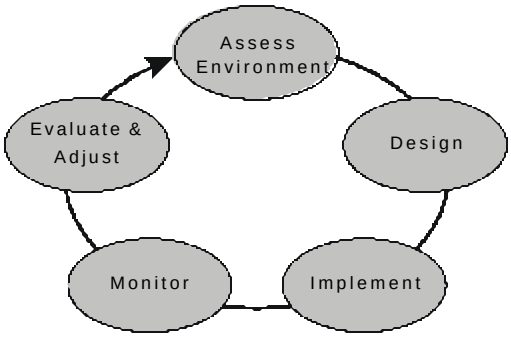



**Table IV-1. Forest Plan Evaluation Expectations**

| Focus of Evaluation | Annual Posting of Results? | Five-Year Evaluation Report? |
|---|---|---|
| A program of monitoring and evaluation shall be conducted that includes consideration of the effects of National Forest Management on land, resources, and communities adjacent to or near the National Forest being planned and the effects upon National Forest management from activities on nearby lands managed by other Federal or other government agencies or under the jurisdiction of local governments. [36 CFR 219.7(f)] | No | Yes |
| The Forest Supervisor shall review the conditions on the land covered by the plan at least every 5 years to determine whether conditions or demands of the public have changed significantly. [36 CFR 219.10(g)] | No | Yes |
| At intervals established in the plan, implementation shall be evaluated on a sample basis to determine how well objectives have been met and how closely management standards and guidelines have been applied. Based upon this evaluation, the interdisciplinary team shall recommend to the Forest Supervisor such changes in management direction, revision, or amendments to the forest plan as are deemed necessary. [36 CFR 219.12(k)] | No | Yes |
| Monitoring requirements identified in the forest plan shall provide for—[36 CFR 219.12(k)]<br>[1] A quantitative estimate of performance comparing outputs and services with those projected by the forest plan; | Yes | No |
| [2] Documentation of the measured prescriptions and effects, including significant changes in productivity of the land; and | No | Yes |
| [3] Documentation of costs associated with carrying out the planned management prescriptions as compared with costs estimated in the forest plan. | Yes | No |
| [5] A determination of compliance with the following standards:<br>[i] Lands are adequately restocked as specified in the forest plan; | No | Yes |

| Focus of Evaluation | Annual Posting of Results? | Five-Year Evaluation Report? |
|---|---|---|
| [ii] Lands identified as not suited for timber production are examined at least every 10 years to determine if the have become suited; and that, if determined suited, such lands are returned to timber production; {Note: See also 219.14(d): …Designation in the plan of lands not suited for timber production shall be reviewed at least every 10 years.} | No | Yes |
| [iii] Maximum size limits for harvest areas are evaluated to determine whether such size limits should be continued; and | No | Yes |
| [iv] Destructive insects and disease organisms do not increase to potentially damaging levels following management activities. | No | Yes |
| (a)(6) Population trends of the management indicator species will be monitored and relationships to habitat changes determined. This monitoring will be done in cooperation with state fish and wildlife agencies, to the extent practicable (36 CFR 219.19 Fish and wildlife resource). | Yes | Yes |
| Accomplishment of ACS priority subwatershed restoration objectives. | Yes | Yes |
| Terms and conditions or reasonable and prudent measures that result from consultation under Section (a) of the Endangered Species Act | Yes | Yes |
| Effectiveness of mitigation measures and monitoring of risk factors described in the Record of Decision for the Forest Land and Resource Management Plan | No | Yes |

## Monitoring Elements

Table IV-2 contains monitoring elements organized around monitoring questions. The table addresses requirements from 36 CFR 219.12(k)[4], and includes a description of:

[i] The actions, effects, or resources to be measured, and the frequency of measurements;
[ii] Expected precision and reliability of the monitoring process; and
[iii] The time when evaluation will be reported.

Since data precision and reliability are tied to specific procedures and methods that change as we learn, we expect to update the Forest Monitoring Section to allow for such changes.

**Table IV-2. Monitoring Elements**

| Activity, Practice, Or Effect To Be Measured | Monitoring Question | Indicator | Data Reliability | Measuring Frequency and Recommended Method | Report Period |
|---|---|---|---|---|---|
| Perception of management activities on the Forest | Are interested citizens raising concerns about management activities? | Comment cards, personal contacts, level of National Environmental Policy Act (NEPA)/National Forest Management Act (NFMA) involvement, appeals, litigation | Low | Annually, via leadership team review of substantive comments and NEPA decision appeals | 5 years |

| Activity, Practice, Or Effect To Be Measured | Monitoring Question | Indicator | Data Reliability | Measuring Frequency and Recommended Method | Report Period |
|---|---|---|---|---|---|
| | Are consulting agencies part of the process, and are concerns being raised about implementation of the Forest Plan? | Level 1 meeting notes, level of NEPA or NFMA involvement | Moderate | Annually, via Level 1, State 303(d) and permitting reviews and NEPA decisions | 5 years |
| Management actions | Are proposed actions and associated effects being adequately disclosed in NEPA documents? | Review of actions on the Quarterly Schedule of Proposed Actions | Moderate | Annual review of selected projects | 3 years |
| Tribal participation with the Forest | Are current processes meeting the needs for consultation? | Program reviews and personal contacts | Moderate | Annually, using personal contacts, and formal feedback | 3 years |
| Coordination with Tribes | Are traditional cultural resources and special interest areas being considered and maintained? | Projects within known special interest areas or potentially affecting traditional cultural resources | Moderate | Annually review up to 10 percent of projects within known special interest areas or potentially affecting traditional cultural resources | 3 years |
| State and local government participation with the Forest | Are current processes such as commission appearances, field reviews, etc., meeting coordination needs? | Program reviews and personal contacts | Moderate | Annually, using personal contacts, and formal feedback (surveys) | 3 years |
| Accessibility improvement efforts in developed recreation and administrative use facilities | Is disabled access improving in relation to the American Disability Act and other related agency policy and direction? | Condition survey of Forest administrative and developed recreation facilities | Moderate | Annually, conduct condition surveys of up to 20 percent of the Forest's administrative and developed recreation facilities | 5 years |
| Safety of administrative facilities | Are administrative sites safe and accessible for visitors and employees including drinking water sources? | On-site inspection of facilities and drinking water testing | High | As needed, but at least annually using inspection form that keys to INFRA database, drinking water testing program | Annually |

| Activity, Practice, Or Effect To Be Measured | Monitoring Question | Indicator | Data Reliability | Measuring Frequency and Recommended Method | Report Period |
|---|---|---|---|---|---|
| Safety of developed recreation sites | Are developed recreation sites free of high-risk conditions? Do water systems meet Federal, State, and local requirements? | On-site inspection of facilities and drinking water testing | High | As directed by State and/or agency requirements | Annually for water systems; 5 years for other |
| Condition, level of use, and maintenance of roads | Are road conditions improving related to safety or user comfort? | Miles maintained by maintenance class, and condition surveys | Moderate | Annually track miles of roads maintained via INFRA, Conduct condition surveys in accordance with National Condition Survey policy and protocol | 5 years |
| Recreation demand | Are the amount and types of recreation opportunities provided meeting customer needs and expectations? | National recreation use monitoring survey results, Comment forms and user correspondence | Low | Every 4 years for the National Rec. Use Survey; Annually during Forest recreation meetings for other sources | 5 years |
| Recreation use trends, distribution and levels | Are recreation activity levels changing, and are shifts occurring between types of activities, and locations of recreation use? | Field observations by recreation staff, comments, letters, and National Recreation Use Survey results | Low | Every 4 years for the National Rec. Use Survey; Annually during Forest recreation meetings | 5 years |
| Recreation use conflicts | Are conflicts rising between recreational uses? | Comments or complaints from users; number of citations related to closure orders | Moderate | Annually | 3 years |
| Total Recreation Visitor Days (RVDs) | Are recreation activities levels changing, or are shifts occurring between types of activities? | Tracking RVDs by various types of recreation activities | Moderate | INFRA, Meaningful Measures, or other sampling techniques | 5 years |
| Dispersed recreation use and distribution | What level of use is occurring in dispersed sites and what impacts are occurring to other resource values | Site inventory and use survey | Moderate | Annually, survey up to 10 percent of dispersed sites | 3 years |

| Activity, Practice, Or Effect To Be Measured | Monitoring Question | Indicator | Data Reliability | Measuring Frequency and Recommended Method | Report Period |
|---|---|---|---|---|---|
| Recreation Opportunity Spectrum (ROS) Inventory | Are management activities changing the ROS settings? | Review of project implementation and updating the ROS inventory to reflect any changes in settings | Moderate | Annually via review of selected projects | 5 years |
| Track actual daily and seasonal use versus use capacity | What level of use is occurring in special use areas, including recreation sites (e.g., downhill ski areas)? | Ski area attendance reports, annual reports from special uses | High | Annually | 3 years |
| Developed site use and distribution, and resource impacts to sites | What level of use is occurring in developed sites and what impacts are occurring to other resource values? | Use INFRA-Database to track site specific use data | Moderate | Annually via INFRA, survey, public comment cards | 3 years |
| Level of trail maintenance relative to trail use | Are trails being maintained for anticipated levels of use? | Trail counters and MARS for trail construction/ reconstruction or maintenance | Moderate | Annually, up to 10 percent of trail system | 3 years |
| Potential impacts to visual resources | Are Forest management actions being designed and implemented to meet Visual Quality Objectives (VQOs)? | Monitoring project areas from sensitive viewpoints | Moderate | Annually review up to 10 percent of projects on-the-ground from identified viewpoints | 3 years |
| Modification of established VQOs | Are the VQOs appropriate given resource management needs? | Number of Forest Plan amendments that modify established VQOs | High | Annually review management areas where amendments for VQOs were completed | 5 years |
| Protection of historic properties during project implementation | Are historic properties being affected by project activities? | Assess the effects of project implementation on selected projects for at least 5 percent of the projects for which Cultural Resource Management approval had been recommended during the previous year | Low | Annually using field inspection | Annually |

| Activity, Practice, Or Effect To Be Measured | Monitoring Question | Indicator | Data Reliability | Measuring Frequency and Recommended Method | Report Period |
|---|---|---|---|---|---|
| Stewardship of historic properties | Are historic properties being managed to standard? | Condition of historic properties | Low | Annually survey up to 5 percent of the historic properties based on heritage assets using condition assessments | 3 years |
| Gathering activities on the Forest | Are Forest gathering activities resulting in resource depletion (i.e., mushrooms, bear grass, huckleberries)? | Estimated amount of miscellaneous products collected<br><br>Reproduction and age class distribution of live plants being collected | Low<br><br>Moderate | Annually, via review of miscellaneous product permits issued for any given area | 3 years |
| Vegetation treatments | Are planned treatments being implemented? | Acres treated annually | High | Annually via NEPA document decisions | 5 years |
| Effectiveness of vegetation treatments | Is live vegetation at, or moving towards, desired conditions as described in Appendix A of the Forest Plan? | Mix of size classes, canopy closures, species composition and their spatial patterns by forested PVG and non-forested cover types within 5th field hydrologic units | Moderate | 5 years or sooner using LANDSAT, FIA inventories, and other local Forest-wide and project-level field inventories | 5 years |
| Riparian condition | Are Forest management activities adequately designed (including delineation of RCAs) to maintain or improve riparian functions and ecological processes important to furthering Forest Plan goals and objectives? | Effects on the riparian functions and ecological processes as identified in Appendix B: Guidance for Delineation and Management of RCAs. | High | 3 years via review of selected projects and surveys (e.g., Proper Functioning Condition; IIT Effectiveness Monitoring; remote sensing within 5th field hydrologic units | 5 years |
| Maintenance and restoration of forested conditions | Has establishment of off-site native tree species affected the maintenance or restoration of desired forested conditions? | Number of regeneration acres dominated by off-site native tree species | Moderate | Survey of regeneration acres | 5 years |

| Activity, Practice, Or Effect To Be Measured | Monitoring Question | Indicator | Data Reliability | Measuring Frequency and Recommended Method | Report Period |
|---|---|---|---|---|---|
| Habitat for terrestrial Management Indicator Species (MIS); Threatened, Endangered, Proposed or Candidate (TEPC) species, both plant and animal | Are management actions providing for, or moving toward the extent of vegetation components necessary to meet the needs of MIS and TEPC species? | Changes in habitat acres | Moderate | Annual field review of up to 25 percent of projects within known habitats | 2 years for TEPC and 5 years for MIS |
| Terrestrial Management Indicator Species | Are management actions maintaining or restoring distribution and abundance of management indicator species? | Population trends, demographic population data | Moderate | Annual coordination of population surveys with other agencies such as Idaho Dept. of Fish and Game, Idaho Dept. of Water Resources, U.S. Fish and Wildlife Service, Idaho Partners In Flight, and Idaho Conservation Data Center | 5 years |
| Botanical species of concern, Watch species or Sensitive species | Are Forest management actions affecting known Sensitive species or Watch species habitats at the project level? | Acres of disturbance of known occupied habitat | Moderate | Annually, via review of 5 percent of projects within known occupied habitat | 3 years |
| Soil productivity | Are management actions and forest plan direction effectively maintaining or restoring long-term soil productivity? | Amount of area in non-detrimentally disturbed condition and Total Soil Resource Commitment (TSRC) | Moderate to High | Annually; review of selected activity areas | 3 years |
| Snags and coarse wood for wildlife habitat and soil productivity | Are snags and coarse woody debris at, or moving toward, desired conditions as described in Appendix A of the Forest Plan? | Number of snags or tons of coarse woody debris by size class for each PVG within activity areas | Moderate to High | Annually review of selected assessments, inventories or projects. Aggregate results of annual reviews for reporting | 5 years |

| Activity, Practice, Or Effect To Be Measured | Monitoring Question | Indicator | Data Reliability | Measuring Frequency and Recommended Method | Report Period |
|---|---|---|---|---|---|
| Distribution of aquatic ecosystems | Are management actions maintaining or restoring the distribution, abundance, and habitat quality of management indicator and TEPC species? | Identification of Watershed Condition Indicators, tracking presence absence data, acres/mile of occupied habitat, number of strongholds, number of isolated populations as identified in the WARS database | Moderate | 3 years via review of selected mid- and fine-scale assessments and restoration actions, surveys (e.g., IIT Effectiveness monitoring; Forest Service, Tribal and State Populations and Spawning Surveys) | 3 years |
| Watershed restoration and conservation activities | Have restoration and conservation activities been focused in priority watersheds identified by the WARS process? | Program reviews, total dollars spent and amount of restoration activity in high priority vs. other 6th field watersheds | High | Annually review selected projects and programs. Review results of monitoring with NOAA Fisheries and USFWS annually. | Annually |
| Project implementation | Have prescriptions, projects, and activities been implemented as designed and in compliance with the Forest Plan? | Project reviews and yearly summaries for Pacfish/Infish IIT team | High | Annual review of IIT Implementation Monitoring, State (DEQ/ DSL) and Forest reviews of selected 6th field hydrologic units | 5 years |
| Landslide prevention | Are management actions and forest plan direction effectively preventing management-induced landslides? | Changes in frequency/size of landslides stratified by hazard risk classes (low, moderate, and high) | Low | As needed via mid-, fine-, and site-scale analyses; remote sensing, and GIS queries | 3 years |
| Aquatic ecosystems stream flows | Are forest management actions maintaining or restoring the processes and functions that regulate stream flows and ground water character? | Tracking acres in ECA; road density; # federal water rights obtained; stream discharge in selected 6th field hydrologic units | Moderate | Annually via IIT Effectiveness monitoring; USGS water resources data; R1/R4 Habitat Inventory; mid-, fine-, and site-scale analyses | 5 years |

| Activity, Practice, Or Effect To Be Measured | Monitoring Question | Indicator | Data Reliability | Measuring Frequency and Recommended Method | Report Period |
|---|---|---|---|---|---|
| Water quality and beneficial use status | Are management actions maintaining or restoring water quality to fully support beneficial uses, and native and desired non-native fish species and their habitats over multiple spatial scales? | Number of 303(d) streams listed versus de-listed; macro-invertebrate tolerance measures; water quality indicators (e.g., temperature, pH, turbidity) | Moderate to High | Annual review of TMDLs, USGS and DEQ databases, Forest water quality stations and selected NEPA projects | 2 years |
| Aquatic ecosystems | Are management actions and forest plan direction effectively maintaining WCIs when currently in the range of desired conditions, and restoring WCIs when outside the range of desired conditions over multiple spatial scales? | Changes in watershed, channel and habitat condition and water quality indicators | Moderate | Annually via review of selected project mid-, fine-, and site-scale analyses; review of IIT effectiveness, R1/R4 Habitat Inventory and DEQ Burp data | 2 years |
| Noxious weed prevention | Are Forest Plan standards and guides effective in preventing establishment of new noxious weed infestations? | Acres of new noxious weed infestations | Moderate | Annual field inspection of projects for 2 years during and after project implementation for selected high-risk projects. | 3 years |
| Noxious weed containment | Are Forest management strategies effective in preventing further expansion of established noxious weed populations? | Acres of known infestation | High | Annually; via inventories and surveys of selected known infestation areas in management areas where strategy is containment | 3 to 5 years |
| Noxious weed control and eradication | Are Forest management strategies effective in controlling or eradicating targeted populations of noxious weeds? | Acres of known infestation in management areas identified for eradication or control | High | Annual field inspection of treatment sites that have been identified for eradication or control for 3 years to determine changes in density or total eradication | 3 years |

| Activity, Practice, Or Effect To Be Measured | Monitoring Question | Indicator | Data Reliability | Measuring Frequency and Recommended Method | Report Period |
|---|---|---|---|---|---|
| Changes in the type of vegetation conditions, volume, growth, or mortality | How have conditions changed and what are the levels of volume, growth, or mortality at the Forest level. | Re-measurements of existing fixed points and new measurements to determine conditions | High | 10 year interval or as needed | 10 years |
| Total Sale Program Quantity, which includes Allowable Sale Quantity | Are prescriptions implemented to achieve management objectives meeting the expected outcomes for timber production? | Tracking acres treated (e.g., thinned, harvested, planted) and associated volumes. | High | Annually, via MARS reports, Sale Tracking And Reporting System (STARS), Timber Information Manager (TIM) and Timber Sale Accounts (TSA). | 5 years |
| Head Months Under Permit | Are Forest Plan goals, objectives, standards, and guidelines affecting the number of head months associated with term grazing permits? | Billing and annual operating plans; allotment grazing module from IIT process | High | Annually, via Management Attainment Reporting System (MARS) reports and INFRA | 5 years |
| Range Improvements | Are range improvements being adequately maintained and serving their intended design? | Field inspection and documentation of improvements | High | Annually, on selected high and medium priority allotments via INFRA | 5 years |
| Forage Utilization Levels | Are established utilization levels providing for desired ground cover, soil stability, plant vigor and composition? | Field observation/ utilization studies | High | Annually, review up to 10 percent of active allotments | 3 years |
| Effectiveness of the Allotment Management System | Are current allotment management strategies effective in meeting or moving toward desired vegetation conditions for non-forested vegetation types? | Grazing Response Index: Frequency (duration of grazing); intensity (use levels); and opportunities (growing periods) | Moderate | Annually, review up to 10 percent of allotments | 5 years |

| Activity, Practice, Or Effect To Be Measured | Monitoring Question | Indicator | Data Reliability | Measuring Frequency and Recommended Method | Report Period |
|---|---|---|---|---|---|
| Research Natural Areas | Have management plans been developed for Research Natural Areas that currently lack them? | Number of management plans completed | High | Annually | 5 years |
| Research Natural Areas | Have additional RNAs been recommended for establishment? | Number of RNAs recommended for establishment | High | 5 years | 5 years |

## FOREST PLAN AMENDMENT AND REVISION

The Forest has adopted a Continuous Assessment and Planning (CAP) approach to its Forest Plan revision. Forest plans are normally revised on a 10-year cycle; with anticipated completion of the revision occurring 10-15 years after plan approval. As previously discussed, one of the lessons learned from implementation of the current Forest Plan is that plans need to be dynamic to account for changed resource conditions and changed regulations and policies. To keep plans current with changing conditions and issues, they often require amendment.

CAP recognizes the need to keep plans current and puts into place both procedures and an organization to conduct assessments to aid in determining the need for forest plan amendment and revisions prior to the scheduled 15-year update. Within an adaptive management framework, the need to amend or revise the Forest Plan may result from:

The need to amend the plan may result from:

- Recommendations of an interdisciplinary team based on monitoring and evaluation results.
- Determinations by the Forest Supervisor that existing or proposed projects, permits, contracts, cooperative agreements, or other instruments authorizing occupancy and use are appropriate, but not consistent with elements of the Plan's management direction.
- Administrative appeal decisions.
- Planning errors found during forest plan implementation.
- Changes in physical, biological, social, or economic conditions.

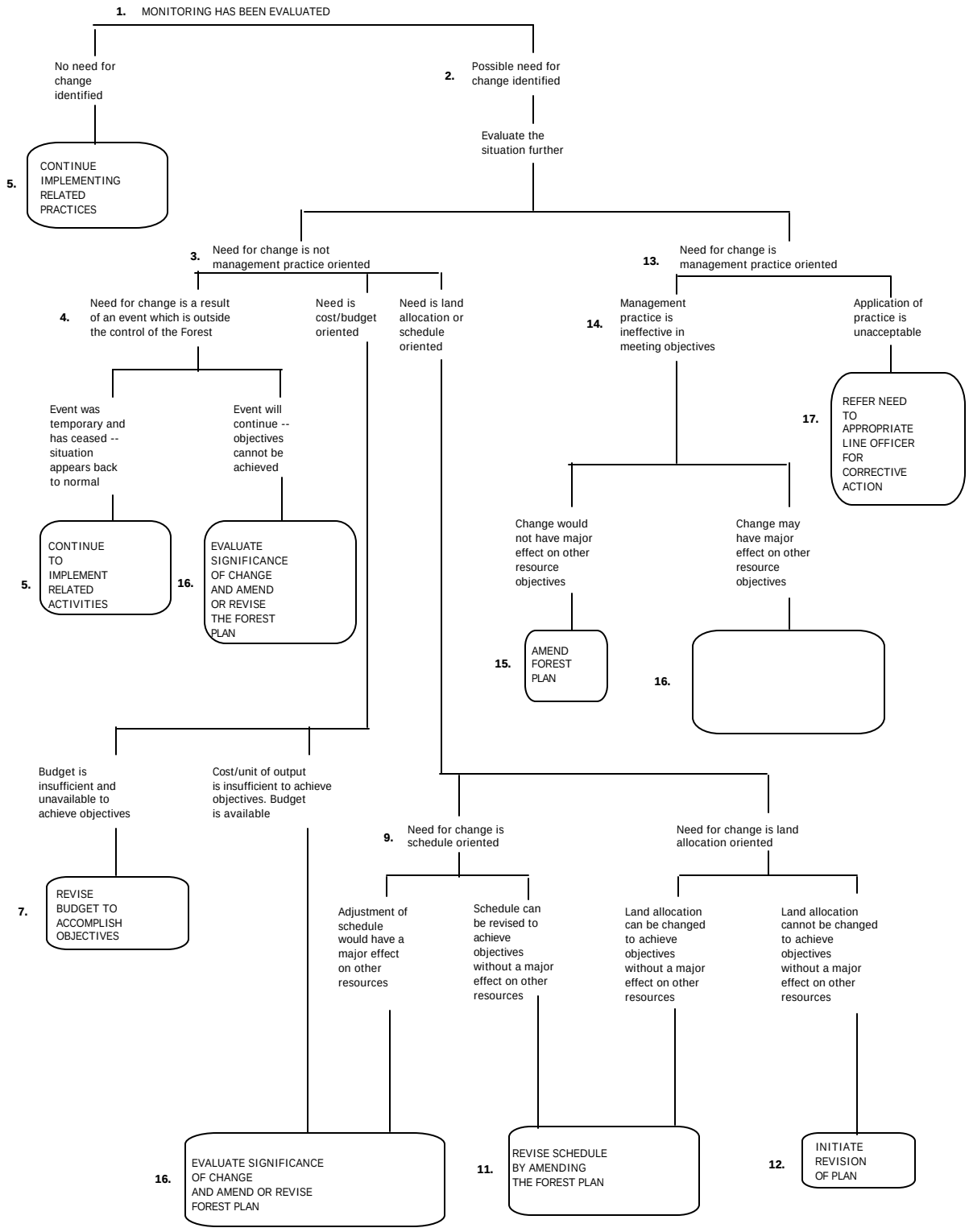
The Forest Supervisor will determine whether the proposed changes in the Forest Plan are significant or non-significant. Significance here is defined by the NFMA regulations, and is different than significance as used under NEPA.

The dichotomous key and flow chart below provide a general idea as to how items monitored will be evaluated in the context of the Forest Plan, and a general gauge as to how to determine the relative significance resulting from monitoring.

Additional analysis in support of Plan implementation activities conducted at various scales above the project (site) level is also a form of CAP. Completing these analyses can improve our understanding of ecosystems and associated social and economic dimensions, and provide context information for project planning. Ecosystem analysis at the mid and fine scale, for example, is designed to help set the stage for project planning and NEPA analysis, focus ID team discussion on key management issues at multiple scales, and provide a basis for integrating project designs. This type of analysis is not a decision-making process in the context of NEPA.

For more information on CAP, see the final section of Chapter II in this document.

## Table IV-3. Key to Sorting Results of Monitoring and Evaluation

| PROCEED TO. | NUMBER |
|---|---|
| 1. Monitoring has been evaluated, and | |
| a. No Need for Change Identified | 5 |
| b. Possible Need for Change Identified | 2 |
| 2. Evaluate the situation further: | |
| a. Need for Change is **not** management practice oriented | 3 |
| b. Need for Change **is** management practice oriented | 13 |
| 3. Need for change is not management practice oriented | |
| a. Need is result of an event, which is outside the control of Forest | 4 |
| b. Need is cost-budget oriented | 6 |
| c. Need is land allocation or schedule oriented | 8 |
| 4. Event is outside the control of Forest | |
| a. Event was temporary and has ceased - situation appears back to normal | 5 |
| b. Event will continue - objectives cannot be achieved | 16 |
| 5. Continue to implement related activities | |
| 6. Need for change is cost-budget oriented | |
| a. Cost per unit of output is insufficient to achieve objectives; Budget is available | 7 |
| b. Budget is insufficient and unavailable to achieve objectives | 16 |
| 7. Revise budget to accomplish objectives | |
| 8. Need for change is land allocation or schedule oriented | |
| a. Need for change is schedule oriented | 9 |
| b. Need for change is land allocation oriented | 10 |
| 9. Need for change is schedule oriented | |
| a. Adjustment of schedule would have a major effect on other resources | 16 |
| b. Schedule can be revised to achieve objectives without a major effect on other resources | 11 |
| 10. Need for change is land allocation oriented | |
| a. Land allocation can be changed to achieve objectives without a major effect on other resources | 11 |
| b. Land allocation **cannot** be changed without a major effect on other resources | 12 |
| 11. Revise schedule or land allocation by amending the Forest Plan | |
| 12. Initiate revision of the Forest Plan | |
| 13. Need for change is management practice oriented | |
| a. Management practices ineffective in meeting goals and objectives | 14 |
| b. Application of practice is unacceptable | 17 |
| 14. Management practice is ineffective | |
| a. Change would not have major effect on other resource objectives | 15 |
| b. Correction may have major effect on other resource objectives | 16 |
| 15. Amend the Forest Plan | |
| 16. Evaluate significance of change and amend or revise the forest plan | |
| 17. Refer need for change to appropriate line office for corrective action | |

## Figure IV-2. Monitoring and Evaluation Flow Chart