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2012 Annual Monitoring Report

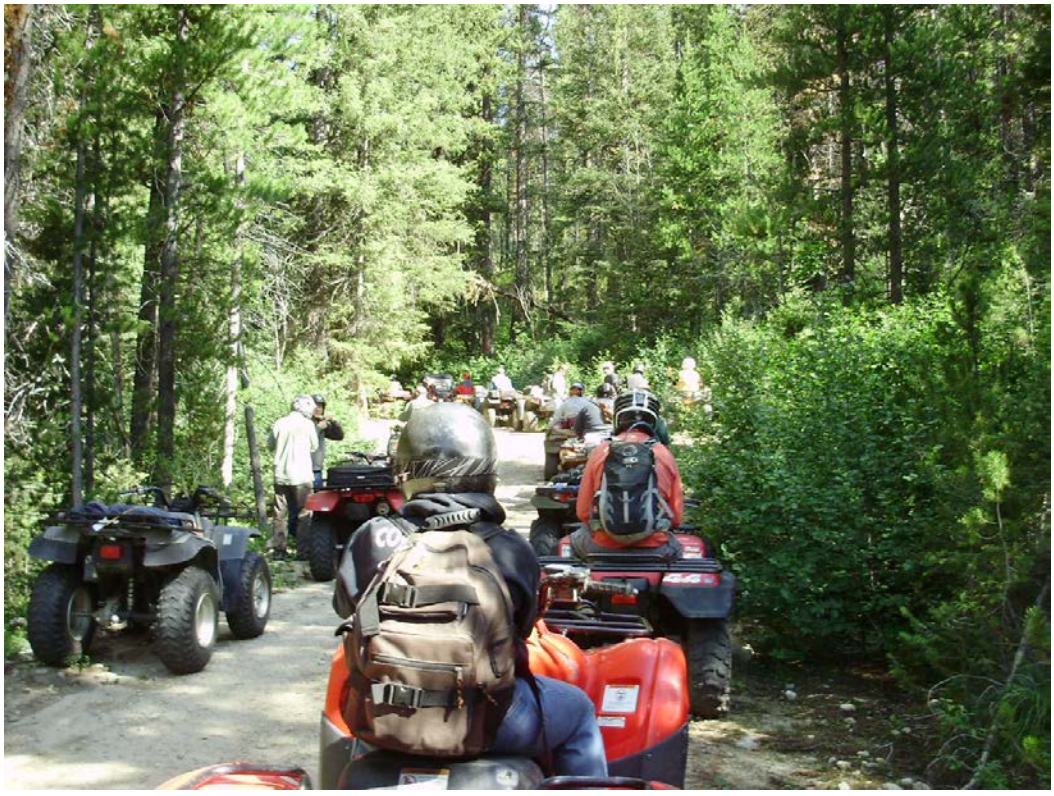
Payette National Forest

Land and Resource Management Plan

Forest

Service

September
2013



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PAYETTE NATIONAL FOREST

LAND AND RESOURCE MANAGEMENT PLAN

SEPTEMBER 2013

1. Introduction

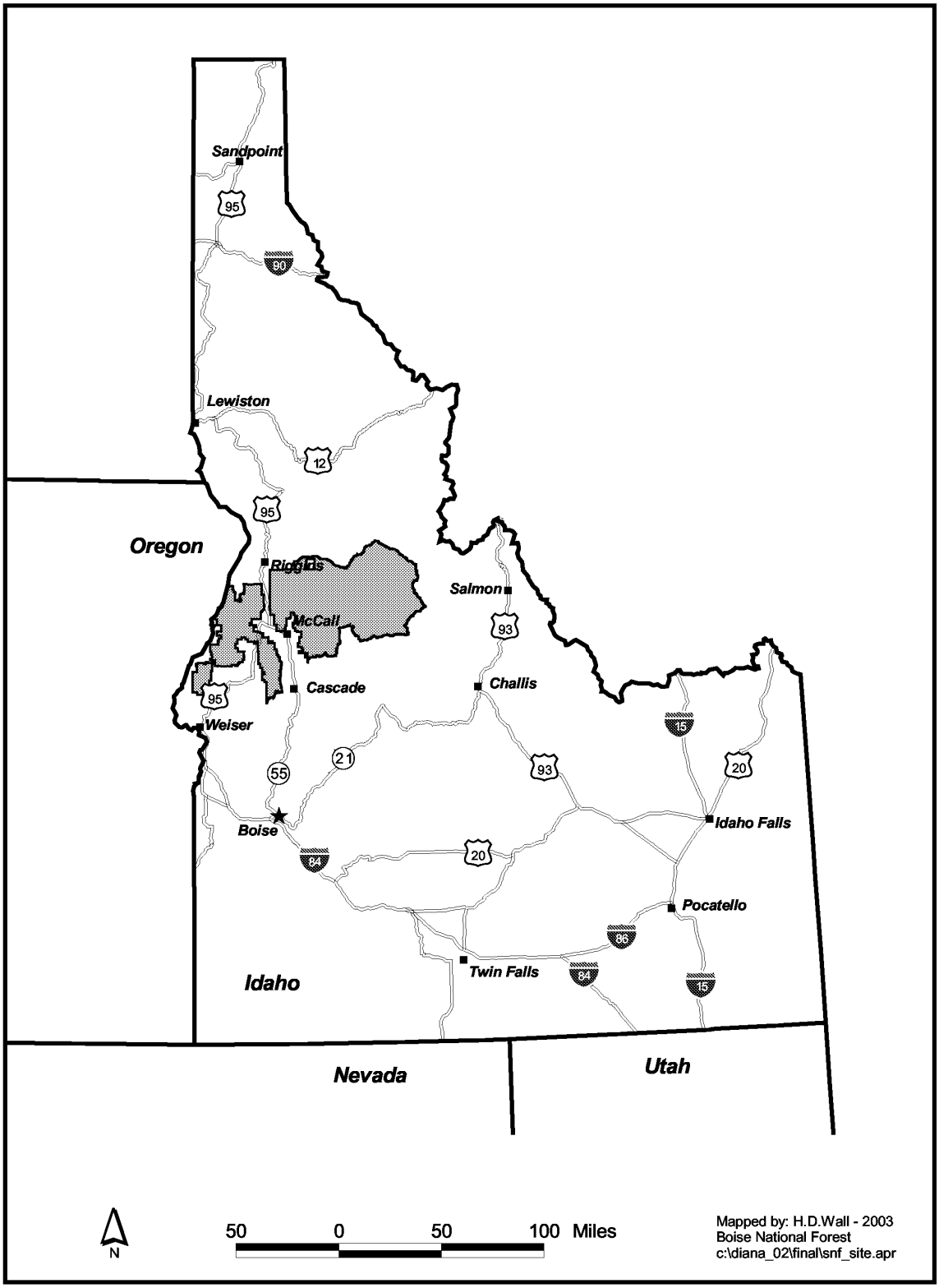
1.1 The Forest and The Forest Plan

The Payette National Forest (NF) is located in west central Idaho in Adams, Idaho, Valley, and Washington Counties (see Figure 1). The Forest is bordered on the south by the Boise National Forest, on the east by the Salmon-Challis National Forest, on the north by the Nez Perce National Forest, and on the west by the Wallowa-Whitman National Forest in Oregon. The Forest Supervisor's Office is located in McCall, Idaho, approximately 100 miles north of Boise. The Forest is comprised of five ranger districts—Council, Weiser, New Meadows, McCall, and Krassel. The Forest is an administrative unit of the Intermountain Region (Region 4) of the Forest Service, U.S. Department of Agriculture. The Regional Forester's office is in Ogden, Utah.

In 2003, the Payette NF completed revision of its 1988 Land and Resource Management Plan (hereafter, called the 1988 Forest Plan). The Regional Forester signed the Record of Decision for the revised Forest Plan on July 25, 2003. The revised Plan (hereafter also called the Forest Plan) went into effect September 7, 2003. The Forest Plan defines a strategy for the next 10-15 years and describes desired conditions for Forest ecosystems. It sets goals, objectives, standards, and guidelines that emphasize maintaining and restoring watershed conditions, species viability, terrestrial and aquatic habitats, and healthy, functioning ecosystems. The 2003 Record of Decision was appealed in 2003 and, in March 2005, the Regional Forester was reversed on the decision to implement the direction found in the revised Plan regarding bighorn sheep management. The Payette revised Forest Plan direction in response to the appeal decision instructions for bighorn sheep and issued a Record of Decision amending the Forest Plan in July 2010. The decision was implemented in spring of 2011 after the appeal resolution process was completed. The amendment includes additional monitoring requirements which were implemented in 2011. Additionally, the 2003 Plan was amended to include direction for the Frank Church Wilderness in September of 2003. The Forest also revised the summer Travel Management Plan. This did not necessitate a Forest Plan amendment. The new travel management designations are found on the Motor Vehicle Use Map (MVUM) issued by the Forest annually.

After implementation of the 1988 Forest Plan, it was evident that forest plans need to be dynamic to account for changes in resource conditions such as large scale wildfire or listing of additional species

Figure 1 Location of Payette National Forest



under the Endangered Species Act (ESA), new information, and changed regulation and policies such as the roads analysis policy. To accomplish this, the 2003 Forest Plan has embraced the principles of adaptive management.

After the large wildfires on the Forest in FY2006 and FY2007, the Forest experienced few natural disturbance events during 2008 through 2012, with only 11,700 acres consumed by wildfire in 2008, 610 acres in 2009, 1,274 acres in 2010, 1,345 acres in 2011, and 22,476 acres in 2012 (PNF 2012 Annual Fire Report, USDA Forest Service 2013). The 16,000 acre Wesley Fire, which started with a lightning strike on September 9, was the largest event in 2012.

This Monitoring and Evaluation Report reflects the ninth full year of implementing the revised Forest Plan. It reports Forest monitoring activities and accomplishments for fiscal year 2012, which was from October 2011 through September 2012. In addition to this annual report of monitoring results which has been completed for each full year of plan implementation, the Forest has completed a Five-Year Evaluation Report summarizing the results of the first five years of monitoring on the 2003 Forest Plan. All of the monitoring reports are available on the Payette National Forest web site at: www.fs.usda.gov/payette

1.2 Forest Plan Monitoring and Evaluation

The goal of Forest Plan monitoring is to determine what is working well and what is not, and to help identify what changes are needed in management direction or monitoring methods. Monitoring and evaluation are key parts of adaptive management. They track how projects are meeting the Forest Plan's desired condition. They provide the information to keep the Forest Plan viable. Monitoring and evaluation track how Forest Plan decisions have been implemented, how effective the implementation has proven to be in accomplishing desired outcomes, and evaluates the validity of the underlying management strategy expressed in the Forest Plan.

Chapter IV of the Forest Plan, "Implementation", describes the Payette's monitoring and evaluation strategy. It lists the activities, practices, and effects to monitor and the indicators, or measures, to track in Tables IV-1 and IV-2. Most of the elements require annual data gathering and they are designed to evaluate the effects of management over several years. Therefore, results of monitoring for most elements will be reported after evaluation of data gathered over multiple years. The monitoring elements in Table IV-2 have been updated over the years to more accurately reflect the information needed. Also, the 2010 LRMP amendment added additional items to Table IV-2. These updates are reflected in the Tables below.

As this is the ninth year of monitoring under the revised Forest Plan, this report focuses on the elements from Tables IV-1 and IV-2 that are to be reported annually and at 3 year intervals.

Table IV-1. Forest Plan Evaluation Expectations (Chapter IV, LRMP)

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)] [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: [i] Lands are adequately restocked as specified in the forest plan;	No	Yes
[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

Table IV-2. Forest Plan Monitoring Elements (Chapter IV, LRMP)

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
	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

Activity, Practice, Or Effect To Be Measured	Monitoring Question	Indicator	Data Reliability	Measuring Frequency and Recommended Method	Report Period
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
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

Activity, Practice, Or Effect To Be Measured	Monitoring Question	Indicator	Data Reliability	Measuring Frequency and Recommended Method	Report Period
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
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

Activity, Practice, Or Effect To Be Measured	Monitoring Question	Indicator	Data Reliability	Measuring Frequency and Recommended Method	Report Period
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
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 Reproduction and age class distribution of live plants being collected	Low 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

Activity, Practice, Or Effect To Be Measured	Monitoring Question	Indicator	Data Reliability	Measuring Frequency and Recommended Method	Report Period
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
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

Activity, Practice, Or Effect To Be Measured	Monitoring Question	Indicator	Data Reliability	Measuring Frequency and Recommended Method	Report Period
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, US 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 analysis; remote sensing, and GIS queries	3 years

Activity, Practice, Or Effect To Be Measured	Monitoring Question	Indicator	Data Reliability	Measuring Frequency and Recommended Method	Report Period
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 analysis	5 years
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 mid-, fine-, and site-scale analysis; 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

Activity, Practice, Or Effect To Be Measured	Monitoring Question	Indicator	Data Reliability	Measuring Frequency and Recommended Method	Report Period
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
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

Activity, Practice, Or Effect To Be Measured	Monitoring Question	Indicator	Data Reliability	Measuring Frequency and Recommended Method	Report Period
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
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

Table IV-2. 2010 LRMP Amendment – Additional Monitoring Elements

Activity, Practice, Or Effect To Be Measured	Monitoring Question	Indicator	Data Reliability	Measuring Frequency and Recommended Method	Report Period
Terrestrial sensitive species —bighorn sheep	Are bighorn sheep present in areas of risk?	Sighting or telemetry location in a risk area	Low to moderate	Annually, via survey of selected areas	Annually
Terrestrial sensitive species —bighorn sheep	Are bighorn sheep present in or near active domestic sheep and goat allotments?	Presence of bighorn sheep and presence of domestic sheep or goat bands	Low	Annually, via survey of selected areas and active domestic sheep and goat allotments	Annually
Terrestrial sensitive species —bighorn sheep	Is separation between bighorn sheep and domestic sheep and goats maintained?	Presence of bighorn sheep and presence of domestic sheep or goat bands	Low to moderate	Annually, via survey of all active domestic sheep and goat allotments	Annually
Rangeland Resources—stray domestic sheep	Are domestic sheep straying from permitted grazing allotments	Are domestic sheep grazing on areas identified as not suited for domestic sheep grazing	Low to High	Annually track the location of domestic sheep by following radio telemetry collared ewes or by keeping close contact with the permittees and the bands.	Annually

1.3 Applying Forest Plan Monitoring and Evaluation

There are three types of monitoring described for Forest management:

- **Implementation monitoring.** This includes periodic monitoring of project activities to determine if they have been designed and carried out in compliance with Forest Plan direction and management requirements.
- **Effectiveness monitoring.** This level of monitoring is used to determine if management activities are effective in achieving the Desired Future Condition described for each of the various management areas.
- **Validation monitoring.** This level of monitoring is used to determine whether initial data, assumptions, and coefficients used in the development of the Forest Plan are correct, or if there is a better way to meet Goals and Objectives and Desired Future Conditions.

This report focuses on implementation and effectiveness monitoring. Monitoring elements also include requirements from the National Forest Management Act (NFMA) and NFMA Regulations as well as other pertinent laws and regulations. The 2003 Forest Plan was prepared under the 1982 planning regulations (36 CFR 219), which continue to govern the plan and its implementation. The Forest Service issued new planning regulations in 2012. These regulations will be implemented in May 2012 and include revisions to Forest Plan monitoring requirements. The Forest will revise their monitoring plan within four years of the new regulations taking effect to be consistent with the new direction. After the monitoring plan is revised reporting will occur biennially rather than annually. Region 4 plans to transition to the new monitoring strategy in 2015-2016.

Monitoring also tracks compliance with the requirements in the Biological Opinions (BO) on the revised Forest Plan by the regulatory agencies (USDI Fish and Wildlife Service (USFWS) and NOAA Fisheries).

Monitoring and evaluation of key results over time will help determine if projects are making satisfactory progress toward the desired conditions in the Plan, or if a "need for change" in the existing strategy has arisen in light of the conditions at that time. As long as the information gained from year to year indicates that Plan implementation strategy is making acceptable progress toward Plan desired conditions, then there is no need for change in that strategy. However, if evaluation concludes that the Forest Plan strategy is not effective, then the Forest Supervisor will determine if a "need for change" exists, and whether Plan errata, amendment, or revision would be needed to make the change. If evaluation of monitoring results indicates any monitoring requirements or their methodology are ineffective or outdated, then that conclusion would provide an empirical basis for initiating change.

1.4 Report Organization

Section 2.1 below discusses the five evaluation elements listed in **Table IV-1** of the Forest Plan, "Forest Plan Evaluation Expectations" which are reported annually. Forest Plan Table IV-1 lists elements related to NFMA and other laws and regulations to be reported and the frequency of reporting. Elements not

reported each year require the collection of information over multiple years before meaningful evaluation is possible. Forest monitoring efforts are focused on meeting these reporting requirements, however, the amount of monitoring actually done for each element is a function of available funding.

Section 2.2 discusses the monitoring questions relevant for the ninth year of monitoring.

Section 2.3 describes the project level monitoring completed in 2012. This monitoring collects some of the information needed to address monitoring elements in **Table IV-2**.

2 2012 Monitoring and Evaluation

2.1 Table IV-1 Forest Plan Evaluation Expectations

2.1.1 Monitoring requirements identified in the forest plan shall provide for a quantitative estimate of performance comparing outputs and services with those projected by the forest plan

This section provides a "quantitative estimate of performance comparing outputs and services with those predicted by the forest plan," as required by Forest Plan Table IV-1. Outputs are tracked in national electronic databases. Information available upon request.

2.1.2 Documentation of costs associated with carrying out the planned management prescriptions as compared with costs estimated in the forest plan

This section evaluates the documentation of costs of carrying out the planned management prescriptions as compared with the costs estimated in the Forest Plan, as required by Forest Plan Table IV-1, p. IV-5.

As described in Chapter IV of the Forest Plan, carrying out the intent of the Forest Plan depends on the funding allocated by Congress. During the implementation period of the former Forest Plan (1988-2003), funding was consistently lower than projections for most program areas. Therefore, the 1988 Forest Plan was implemented more slowly than projected. Table 2 compares the actual allocation for fiscal year 2012with a level predicted based on the 2003 Forest Plan, by program area (fund type).

To predict a more realistic rate of implementation, the budget level used to develop the 2003 Forest Plan for all programs, except forest products and hazardous fuels, was based on average actual budget allocations from 2001 to 2003. Forest products and hazardous fuels reduction were based on a 10 percent increase over average service level constraints from the Forest Service Budget Formulation and Execution System (BFES). Actual allotment by fund code and program emphasis will vary on an annual basis based on Forest and Regional priorities for a given year, as well as on the will of Congress. Table 1 compares the predicted Forest Plan budget level by program area based on average allotment and Budget Formulation and Execution System (BFES), with the actual allotment for fiscal year 2012.

Table 1. Predicted Versus Actual Forest Budget Levels, Fiscal Years 2004 through 2010.

Fund Code	Fund Description	Predicted Forest Plan Budget Level	FY04 Actual Allotment	FY05 Actual Allotment	FY06 Actual Allotment	FY07 Actual Allotment	FY08 Actual Allotment	FY09 Actual Allotment	FY10 Actual Allotment	FY11 Actual Allotment	FY12 Actual Allotment	Percent of Forest Plan predicted level for FY12
BDBD	Brush Disposal	$79,510	$109,262	$66,404	$115,000	$115,000	$183,500	$325,000	$200,000	$39,000	$10,000	12.5%
CMFC/CMII	Facility Construction and Deferred Maintenance	$632,873	$612,771	$366,845	$662,447	$447,327	$308,779	$108,563	$179,754	$132,768	$122,243	19.3%
CMRD	Road Construction and Maintenance	$1,370,254	$1,270,929	$1,286,049	$1,430,598	$1,264,826	$1,176,964	$1,159,575	$1,122,884	$948,004	$963,251	70.3%
CMTL	Trail Construction and Maintenance	$301,219	$273,269	$250,895	$208,443	$286,736	$306,986	$361,045	$306,177	$451,738	$333,415	110.7%
CWKV	Coop Work, KV	$1,091,546	$811,518	$712,647	$800,000	$240,000	$406,700	$269,254	$360,800	$20,000	$13,000	1.2%
NFIM	Inventory and Monitoring	$442,160	$460,183	$586,839	$369,035	$514,765	$663,701	$527,624	$542,750	$545,535	$472,761	106.9%
NFLM	Land and Ownership Management	$308,546	$267,594	$216,859	$192,937	$172,323	$200,661	$182,880	$212,883	$190,532	$158,825	51.5%
NFMG	Minerals and Geology	$307,785	$297,727	$512,284	$386,692	$648,571	$1,374,152	$577,806	$551,436	$390,370	$400,411	130.1%
NFPN	Land Management Planning	$502,769	$185,179	$67,773	$172,567	$155,468	$109,242	$234,629	$53,697	$65,248	$40,274	8.0%
NFRG	Grazing Management	$304,207	$434,646	$525,926	$337,163	$426,888	$489,345	$448,104	$492,876	$461,172	$457,188	150.3%
NFRW	Recreation/Wilderness	$733,522	$741,141	$851,800	$931,288	$805,844	$808,807	$841,988	$788,785	$788,788	$806,525	110.0%
NFTM	Forest Products	$2,522,000	$1,858,269	$2,033,266	$1,963,927	$2,673,375	$2,721,475	$1,880,624	$1,892,452	$1,914,501	$3,477,667	88.0%
NFVW	Vegetation and Water	$873,338	$905,771	$1,063,720	$1,846,161	$1,216,413	$790,002	$530,329	$756,518	$686,767	See NFTM for total NFRR	See NFTM for total NFRR
NFWF	Wildlife and Fisheries Management	$555,627	$455,816	$447,120	$802,941	$488,762	$442,223	$528,510	$611,206	$525,547	See NFTM for total NFRR	See NFTM for total NFRR
RBRB	Range Betterment	$33,812	$31,430	$45,690	$42,448	$64,106	$30,339	$61,186	$30,955	$30,385	$0	0%

Fund Code	Fund Description	Predicted Forest Plan Budget Level	FY04 Actual Allotment	FY05 Actual Allotment	FY06 Actual Allotment	FY07 Actual Allotment	FY08 Actual Allotment	FY09 Actual Allotment	FY10 Actual Allotment	FY11 Actual Allotment	FY12 Actual Allotment	Percent of Forest Plan predicted level for FY12
RTRT	Reforestation Trust Fund	$293,666	$321,067	$394,144	$1,159,809	$75,310	$42,500	$501,300	$73,897	$310,000	$120,000	40.9%
SSSS	Salvage Sale	$2,743,302	$1,749,194	$921,896	$200,000	$200,000	$150,000	$239,073	$200,000	$250,000	$400,000	14.6%
WFHF	Hazardous Fuels	$1,427,000	$1,249,727	$883,167	$1,641,933	$1,223,006	$826,244	$877,000	$1,093,257	$1,388,578	$833,715	58.4%
WFPR	Fire Preparedness	$7,322,256	$6,279,224	$6,166,000	$5,311,785	$7,213,518	$7,315,527	$7,915,435	$7,374,976	$7,727,287	$7,042,445	96.2%
	Total	**$21,845,392**	**$18,314,717**	**$17,399,324**	**$18,575,174**	**$18,232,238**	**$18,347,147**	**$17,569,925**	**$16,845,303**	**$16,866,220**	**$15,651,720**	**71.6%**

(Note. Carryover dollars are not included in the current year allotment.)

2.1.3 Population trends of the management indicator species will be monitored and relationships to habitat changes determined

This section evaluates the population trends and relationships to habitat changes of the management indicator species (MIS) which are monitored, as required by Forest Plan Table IV-1.

Table 2 shows the MIS selected for the 2003 Forest Plan. The primary reason MIS are selected is because the species population is believed to indicate the effects of management activities. Other factors also contribute to the choice (36 CFR 219.19(a)(1)).

Table 2 Management Indicator Species for the Payette National Forest

Type	Common Name	Habitat[1]	Management Concerns
Bird Species	Pileated Woodpecker	Large tree size class in moderate and high canopy cover class in in PVGs 2, 3, 5, 6	Sufficient large trees, snags, and down logs
	White-headed Woodpecker*	Large tree size class in low canopy cover class in PVGs 1, 2, 3, 5, 6	Sufficient snags, and large trees with low crown density
Fish Species	Bull Trout	Perennial streams	Sediment in spawning and rearing areas, water temperature, habitat connectivity, and hybridization with brook trout

Population Trend Monitoring for Pileated and White-headed Woodpeckers

The monitoring strategy used by the Forest from 2004 through 2007 was based on standardized bird monitoring methods (i.e., Hamel et. al. 1996 and Ralph et. al. 1993). In 2008, the Forest determined that a revised study design was needed to better monitor MIS species. Vicki Saab, FS Rocky Mountain Research Station (RMRS) biologist, worked with us in 2008 and 2009 to revise our monitoring techniques. Revised techniques and results through 2009 are summarized here. The entire study report is available upon request.

Goals of the study were to continue analysis and evaluation of monitoring methods implemented during 2008 and 2009 and to suggest refinements for increased effectiveness and efficiency in a long-term monitoring effort. Specific objectives were to 1) evaluate the effectiveness of playback calls versus point counts for detecting pileated and white-headed woodpeckers, 2) estimate the probability of occupancy (proportion of area occupied) for each species in areas classified as potential white-headed or pileated woodpecker habitat, and 3) assess the effect of habitat covariates on detection and/or occupancy.

Seventy of the 71 transects surveyed for pileated and white-headed woodpeckers during 2008 continued to be sampled in 2009. An additional 2 transects were established in burned forest areas to

improve likelihood of detecting white-headed woodpeckers. A subset of the 72 total transects received repeat visits (~ 5 visits each) to estimate detection probability, which is used to adjust occupancy estimates. Both [silent] point count and playback detection methods were used and distance to detected individuals was recorded as ≤50 or >50m.

Thirty-three white-headed woodpeckers and 219 pileated woodpeckers were detected between 13 April and 25 June 2009. Naïve estimates of occupancy (percent of transects occupied) using both detection methods and distance classes was 0.14 for white-headed woodpeckers and 0.65 for pileated woodpeckers. Occupancy estimates, adjusted for constant detection probability across all sites using both detection methods and distance intervals, was 0.42 (SE = 0.18) for white-headed woodpeckers and 0.95 (SE = 0.14) for pileated woodpeckers.

Analysis of occupancy by method and distance class was hindered by sparse data and qualities of the double sampling study design. However, the emerging pattern suggested that the playback detection method is more effective than point counts, particularly for white-headed woodpeckers. Additionally, detections in the ≤50m distance interval were more reliable and resulted in less model uncertainty in model selection analyses. Consequently, the playback detection method and ≤50m distance interval is recommended for future sampling.

With improved sampling design (more transects with repeat visits), estimation of occupancy and/or detectability is expected to improve. However, overall occupancy estimates (combined detection methods and distance intervals) for pileated woodpecker from 2008 (0.66) and 2009 (0.67) are similar and rather high, suggesting widespread pileated woodpecker occurrence. Thus, if effort must be limited during monitoring, reduction in sampling intensity of pileated transects may be considered.

Recommendations

- The current level of sampling effort (72 transects) across the forest is likely adequate and additional transects are not indicated at this time.
- Use "Playback method" only. The playback method was very effective for pileated woodpeckers and can provide sufficient detections of white-headed woodpeckers for occupancy analysis.
- Sample the 0-50m distance category only. This reduces sampling outside target habitat and reduces chances of false-positive detections.
- To reduce costs and time, consider sampling every other survey station on pileated woodpecker transects.
- Repeat sampling of all transects is important. Use 3 repeat surveys on each transect in white-headed woodpecker habitat to improve ability to detect changes in occupancy over time. Some transects in designated pileated habitat (up to 5%) may be surveyed once without substantial influence on the occupancy analysis.
- Survey begin and end dates (mid-April to end of June) appear to be appropriate.

MIS monitoring for pileated and white-headed woodpeckers was completed in 2012. Copies are available upon request.

Population Trend Monitoring for Bull Trout

Population monitoring information for bull trout can be found in the following reports (available upon request):

- *A Forest-wide Bull Trout habitat Suitability Model (2011)*
- *A Watershed-Scale Monitoring Protocol for Bull Trout (2009)*
- *Fisheries Monitoring Results: 2006-2009*
- *A Summary of Biological Surveys on the West Zone of the Payette National Forest (2009)*

2.1.4 Accomplishment of ACS priority subwatershed restoration objectives

This section evaluates the accomplishment of restoration objectives in the ACS (Aquatic Conservation Strategy) Priority Subwatersheds.

The ACS is a long-term strategy to restore and maintain the ecological health of watersheds and aquatic ecosystems contained within National Forest System lands. It is a refinement and furtherance of approaches outlined in the ICBEMP (Interior Columbia River Basin Ecosystem Management Plan) Implementation Strategy and the USFWS and NMFS 1998 Biological Opinions. It provides direction to maintain and restore characteristics of healthy, functioning watersheds, riparian areas, and associated fish habitats. The ACS incorporates the monitoring goals identified in the ICBEMP Implementation Strategy and associated Memorandum of Understanding (MOU).

There are eight ACS components. Any of these components has the potential to influence any of the factors of decline or the recovery/restoration strategy.

1. Goals to Maintain and Restore SWRA (Soil, Water, Riparian, Aquatic) Resources
2. Watershed Condition Indicators for SWRA Resources
3. Delineation of Riparian Conservation Areas (RCAs)
4. Objectives, Standards, and Guidelines for Management of SWRA Resources, including RCAs
5. Determination of Priority Subwatersheds within Subbasins
6. Multi-Scale Analyses of Subbasins and Subwatersheds
7. Determination of the Appropriate Type of Subwatershed Restoration and Prioritization
8. Monitoring and Adaptive Management Provisions

Work Completed and Findings: On April 6, 2012 the Forest Supervisor signed the Record of Decision for the Mill Creek Council Mountain Restoration Project. The decision includes restoration activities in the East Fork of the Weiser River, an ACS priority subwatershed. In 2012 the Forest began analysis of the Lost Creek Boulder Creek project. This project area encompasses Boulder Creek, an ACS priority subwatershed. Restoration activities will be proposed to improve watershed conditions in this

subwatershed. If the project is approved, accomplishments will be reported after implementation monitoring.

There were no projects implemented in ACS priority subwatersheds in 2012.

2.1.4 Terms and conditions or reasonable and prudent measures that result from consultation under Section (a) of the Endangered Species Act

This section evaluates compliance of projects with terms and conditions or reasonable and prudent measures that resulted from consultation with the USFWS and NOAA Fisheries as provided in Section 7(a) of the Endangered Species Act.

The Biological Opinion (BO) on the Forest Plan from NOAA dated June 9, 2003, contains a number of terms and conditions. Project implementation needs to be in compliance with those terms and conditions. For project specific discussions of compliance with the BO in 2003 copies of the Biological Evaluations, Assessments, and Opinions are available upon request.

Five Letters of Concurrence (LOC) and four Biological Opinions were received by the Forest in 2012:

Letters of Concurrence:

- Golden Meadows Exploration (2 LOCs for two separate exploration projects)
- Rocky Bear and Brundage Bear Basin Vegetation Management Projects
- Phoebe Creek Site Restoration
- Valley County Road Easement

Biological Opinions:

- East Fork Weiser River Road Repair
- Programmatic Culvert Replacement
- Amended Noxious Weed Programmatic (Aminopyralid)
- Mill Creek Council Mountain Landscape Restoration Project

Documents related to consultation which occurred during 2012 are available upon request from the Payette NF Supervisor's Office.

Fisheries Consultation Requirements

In the Table 3, the left hand column briefly summarizes the specific term and condition from the BO, and the right-hand column summarizes how the Forest met or made progress toward that term and condition in 2012. These requirements are measures to protect fisheries from some actions that the Forest Plan allows.

Table 3 Compliance with Terms and Conditions for Reasonable and Prudent Measures Required by NOAA Fisheries

Terms and Conditions	Compliance in 2012
# 1 – To implement Reasonable and Prudent Measure #1, clarification of local sideboards. the Forest Service shall:	
A. RCAs – Assess effectiveness of floodprone widths	RCA delineation typically uses the default widths of 300' and 150' or one or two site tree heights rather than delineation as a result of studying the floodprone-width or riparian vegetation, etc. Project development identifies local landslide hazards. In 2012, RCA delineation was made using either the default widths or one or two site tree heights, not through identification of floodprone width or riparian vegetation.
B. Landslide Prone – Stratify by hazard class	Completed as for RCAs In 2012, landslide prone areas as delineated in the Forest GIS coverage were verified on-the-ground and project implementation adjusted accordingly.
C. Definitions – Identify change to WCIs and potential effects to WCIs over 3 temporal scales	Changes to WCIs and effects over temporary, short-term, and long-term timescales are evaluated as part of project development. Preliminary development of tentative temperature WCIs for redband trout were proposed in 2007. WCIs were evaluated for all projects occurring in ESA fish species habitat.
D. Fire Management – Develop operational resource guidelines prior to 2004 season	In fiscal year 2012, no variances from guidelines were identified. No consultations occurred in which limitations on the Forest Service authority needed clarification.
# 2 – To Implement Reasonable and Prudent Measure #2, maintain link between LRMP and Broadscale restoration/recovery strategies, the Forest Service shall:	
A. IIT – Provide oversight and accountability body linking to IIT	In fiscal year 2012, coordination with the Interagency Implementation Team (IIT) field crews occurred multiple times.
B. In Upper Salmon, SFSR, and Little Salmon - Framework must be in place to implement "likely to adversely affect" actions	Framework has not been completed for any projects to date, but the Forest presented a draft "Framework" document outline to the NMFS and USFWS in 2008 and again in FY2011.
# 3 – To Implement Reasonable and Prudent Measure #3, Upper Salmon and South Fork Salmon direction, the Forest Service shall:	
A. Do not increase ECA above 15% in	In fiscal year 2012, the Brundage Wildland Urban Interface Bear Basin

watersheds with ESA-listed anadromous fishes.	Restoration Project decision approves ECA increases over 15%, however, the effects of the increase were still within the level of effects to allow a *Not Likely to Adversely Affect* determination for listed fish species.
B. In the South Fork Salmon River (SFSR):	Completed. See FY 2006 report.
1. Revise the default WCIs to values appropriate for the Subbasin	Completed. See FY 2006 report.
2. Continue sampling, analysis, and annual reporting of sediment levels.	Sampling occurred in FY 2012 and a report of core sampling through 2009 was produced (Bonaminio 2012, available upon request)
3. Projects must meet criteria if even a negligible likelihood to adversely effect	There were no *Likely to Adversely Affect* determinations in the SFSR in 2012.

Summary of White Paper on WCIs in the South Fork Salmon River

The National Marine Fisheries Service (NMFS) BO (Term and Condition 3.B.1.) for the 2003 Forest Plans required the Payette and Boise NF to revise the default sediment watershed condition indicator (WCI) values to something more appropriate for the South Fork of the Salmon River.

On July 13, 2005, the Payette and Boise NF Supervisors transmitted the final version of this white paper to NMFS and documented interagency agreement on the white paper and use of its revised values for analysis of effects for future projects within the South fork of the Salmon River basin. The sediment WCI paper is entitled, *Developing Appropriate Sediment-Related Watershed Condition Indicators for National Environmental Policy Act Analyses and Biological Assessments in the South Fork Salmon River Basin* (Burns and Nelson 2005).

The analysis supporting the paper estimated what watershed condition indicators researchers could expect in streams functioning at the three categories defined in the Forest Plan (Functioning at Acceptable Fisk, Functioning at Risk, and Functioning at Unacceptable Risk). The paper proposed four major categorical changes: (1) modifications to the indicator names; (2) combining indicators for salmonids where appropriate and rearranging species associations; (3) using free matrix counts in preference to cobble embeddedness measurements for interstitial conditions; and (4) eliminating or relegating surface fines to a support role.

These proposed WCIs incorporate inherent variability so that risks to the aquatic system can be minimized when Forest projects are planned and implemented in the granitic portions of the South Fork

Salmon River. The Payette and Boise NF will now proceed with the use of the revised sediment WCI values for analysis in future biological assessments.

The Forest has expanded the analysis with WCIs for the EFSFSR and Big Creek (using data from the 2005 WCI report) as a result of analysis completed for the Big Creek Yellow Pine Travel Plan (Snow-free Season) and Big Creek Ford decision. These decisions and the supporting analysis modified the EFSFSR WCIs for sediment as well, which had not been done in the 2005 report. Copies of the decision and analysis are available upon request from the Payette NF Supervisor's Office.

Wildlife Consultation Requirements

For wildlife the components are conservation measures, not terms and conditions, and thus do not have a mandatory reporting requirement.

2.2. Table IV-2. Monitoring Elements

Because this is the ninth year of monitoring of the forest plan, those monitoring elements from Table IV-2 of the forest plan which have annual and three year reporting requirements are discussed (twenty-eight elements). As described in Chapter IV of the Forest Plan, monitoring elements were designed around monitoring questions that need to be answered about Forest Plan implementation. The results of data collected to answer these questions are key to determining if implementation is moving toward the desired conditions in the Forest Plan. Due to funding constraints results from the data collected to answer these questions will be evaluated in the upcoming 10-year evaluation report which will be prepared in 2014.

2.3 Project Level Monitoring

During fiscal year 2012 the Big Creek Yellow Pine Travel Management proposal was evaluated for compliance with the LRMP. The Forest Monitoring Team provided their review comments to the Krassel district for consideration in project planning. A local collaborative group, which includes representation from the Payette NF is currently working on a proposed action for travel designations and watershed restoration activities in a portion of the Big Creek Yellow Pine analysis area. Copies of the monitoring review are available upon request.

Forest-wide and district level project monitoring has also been conducted for watershed, wildlife, and fire.

3 Need for Change

The Forest Supervisor has determined that the following items need to be updated to respond to changing conditions:

- Definitions may need to be updated for range, fuels, and road management; and
- The Forest is also proposing to modify, delete, and add to current Forest Plan direction in response to new information and / or changed conditions concerning wildlife habitat. This effort is called the "Wildlife Conservation Strategy" or WCS. The Payette issued a draft EIS with

draft revised Forest Plan direction in January 2011. A final EIS and decision are expected towards the end of 2014.

4 Monitoring and Evaluation Report Timing

The 2012 Monitoring and Evaluation report documents and discloses the activities from fiscal years 2004 through 2012 (October 2004 – September 2012. Each Forest Plan Monitoring and Evaluation report is intended to be a "living" document, meaning information displayed in the 2012 report will be considered part of the next report. Much of what is learned from monitoring and evaluation is based on how things evolve from year to year, rather than what is learned at a single point in time. For example, trends and answers to several of the questions in Forest Plan Table IV-1 and Table IV-2 become clearer with the accumulation of annual data.

5 List of Contributors

These are the members of the Payette National Forest interdisciplinary team who manage data collection and reporting for Payette NF monitoring.

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