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2011 Annual Monitoring Report

Payette National Forest

Land and Resource Management Plan

Forest

Service

September
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2011 MONITORING REPORT

PAYETTE NATIONAL FOREST

LAND AND RESOURCE MANAGEMENT PLAN

SEPTEMBER 2012

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 2010 Forest Plan amendment is attached (Attachment 3). 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 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 2011, with only 11,700 acres consumed by wildfire in 2008, 610 acres in 2009, 1,274 acres in 2010, and 1,345 acres in 2011 (USDA Forest Service 2012).

This Monitoring and Evaluation Report reflects the eighth full year of implementing the revised Forest Plan. It reports Forest monitoring activities and accomplishments for fiscal year 2011, which was from October 2010 through September 2011. 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

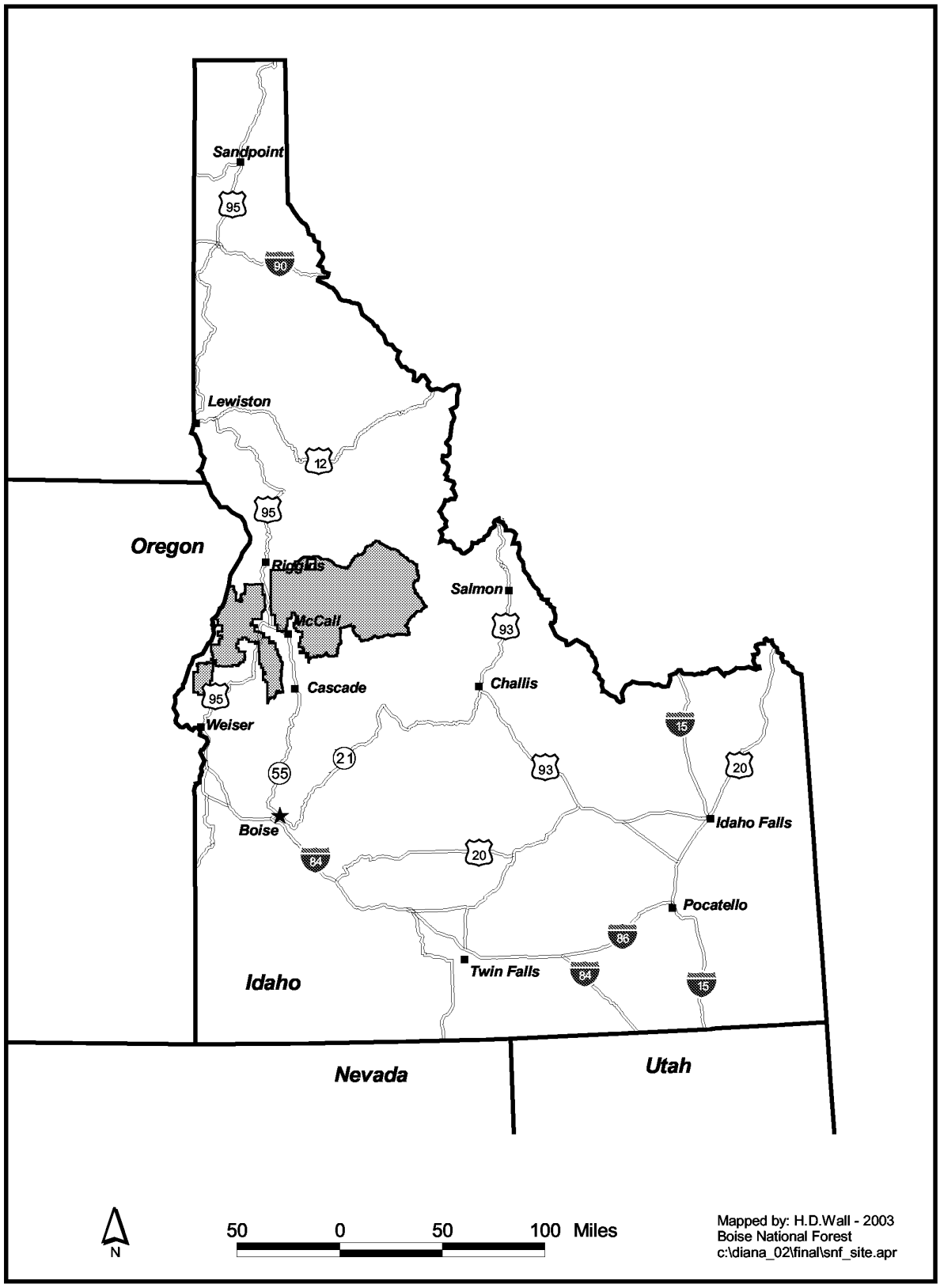
1.2 Forest Plan Monitoring and Evaluation

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 tell 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.

As this is the eighth 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 biennially.

Figure 1 Location of Payette National Forest



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 has 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.

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 eighth year of monitoring.

Section 2.3 describes the project level monitoring completed in 2011. This monitoring collects some of the information needed to address monitoring elements in **Table IV-2**.

2 2011 Monitoring and Evaluation

Section 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, p. IV-5.

Botanical Resources

Objective BTOB04: ***Maintain annually a list of Forest Watch plants that identify species of concern (see Table 2 for a list of species).***

Updated rare species status lists from the Regional Forester and Natural Heritage Programs were used to make changes in global and state status of rare plants found on the Payette.

Table 1 Federal, State, and Forest Service status of rare plant species with potential or known habitat on the Payette National Forest (2011, Hanson). Based on the results of the twenty-fifth Idaho rare plant conference sponsored by the Idaho Native Plant Society, October, 2012, Boise, Idaho

Species Name	Common Name	Global[1]	State[2]	Forest Service Status[3]		Global Distrib.[4]
				Regional Sensitive	PNF Plan	
Allium madidum	swamp onion	G3	S3	S	S	re
Allium tolmiei var. *persimile*	Tolmie's onion	G4/T3	S3	S	S	le
Allium validum	Tall swamp onion	G4	S3	N	W	w
Allotropa virgata	candystick	G4	S3	S	S	d
Astragalus paysonii	Payson's milkvetch	G3	S3	S	S	re
Astragalus vexilliflexus var. *vexilliflexus*	bent flowered milkvetch	G4/T4	S1	S	S	d
Botrychium lanceolatum var. lanceolatum	Lance-leaved moonwort	G5T4	S3	N	W	cb
Botrychium lineare	Linear-leaved moonwort	G2	SH	S	S	sd
Botrychium simplex	Least moonwort	G5	S2	S	W	cb
Buxbaumia viridis	green bug moss	G3G4	S3	N	W	w
Calamagrostis tweedyi	Cascade reedgrass	G3	S2	S	S	re
Camassia cusickii	Cusick's camas	G4	S2	S	S	re
Carex aboriginum	Indian Valley sedge	G1	S1	N	W	le
Ceanothus prostratus ssp. prostratus	Mahala-mat ceanothus	G5/?	S1	N	W	d
Crepis bakeri ssp. *idahoensis*.	Idaho hawksbeard	G4/T2	S2	N	W	le
Douglasia idahoensis	Idaho dwarf-primrose	G3	S2	S	S	le

Species Name	Common Name	Global[1]	State[2]	Forest Service Status[3]		Global Distrib.[4]
				Regional Sensitive	PNF Plan	
Draba incerta	Yellowstone draba	G5	S2	N	W	re
Eatonella nivea	White eatonella	G4G5	S3	N	W	d
Epilobium palustre	Swamp Willow Weed	G5	S3	N	W	w
Epipactis gigantea	Giant helleborine orchid	G3G4	S3	N	W	sd
Ericameria nauseosa ssp.nanus	Dwarf grey rabbitbrush	G5/T4	S3	N	W	re
Hackelia davisii	Davis' stickseed	G3	S3	N	W	le
Halimolobos perplexa var. perplexa	Puzzling halimolobos	G4/T3	S3	S	S	le
Helodium blandowii	Blandow's helodium	G5	S2	N	W	cb
Hierochloe odorata	Sweetgrass	G5	S1	N	W	w
Howellia aquatilus	Water howellia	T-G2	S1	N	W	sd
Leptodactylon pungens ssp. *hazeliae*	Hazel's prickly phlox	G5/T2	S2	S	S	le
Lewisia sacajaweana	Sacajawea's bitteroot	G2	S2	S	S	re
Lobaria scrobiculata	Pored lungwort	G4	S1	N	W	cb
Mimulus clivicola	Bank Monkeyflower	G4	S3	S	S	re
Mirabilis macfarlanei	MacFarlane's four-o-clock	T-G2	S2	N	W	le
Peraphyllum ramosissimum	Wild crab apple	G4	S2	N	W	sd
Pilophorus acicularis	Nail lichen	G4	S2	N	W	sd
Pinus albicaulis	Whitebark pine	C-G3G4	S3	S	-	-
Polystichum kruckebergii	Kruckeberg's Sword-fern	G4	S2	N	W	re
Pyrrocoma radiata (Haplopappus)	Snake River golden weed	G3	S3	S	S	re

Species Name	Common Name	Global[1]	State[2]	Forest Service Status[3]		Global Distrib.[4]
				Regional Sensitive	PNF Plan	
Ribes sanguineum	Red flowered currant	G5	S2	N	W	-
Ribes wolfii	Wolf's current	G4	S2	N	W	d
Rubus bartonianus	Bartonberry	G2	S2	S	S	le
Salix glauca	gray willow	G5	S2	N	W	D
Sanicula graveolens	Sierra sanicle	G4	S1	N	W	W
Saxifraga bryophora var. *tobiasiae*	Tobias' saxifrage	G2T2	S2	S	S	le
Schistostega pennata	Luminous moss	G4	S1	N	W	cb
Sedum borschii	Borch's stonecrop	G4 ?	S2	N	W	sd
Sedum valens	Salmon River sedum	G1G2	S1S2	N	W	le
Silene spaldingii	Spalding's silene	T-G2	S1	N	W	re
Spiranthes diluvialis	Ute Ladies'-tresses	T-G2	S1	N	W	re
Triantha occidentalis ssp. *brevistyla*	Short-style tofieldia	G5/T4	S1	S	S	d
Trifolium douglasii	Douglas' clover	G2	S2	N	W	re
Trifolium plumosum ssp. amplifolium	Plumed clover	G4T2	S2	N	W	-
Tripterocladium leucocladulum	Naked Rhizomnium moss	G3	S3	N	W	le

[1]**Global** - Global ranking as assigned by Natural Heritage Program and Idaho Native Plant Society. **T** = Threatened, **C** = Candidate. [2]**State** - Idaho State ranking, **SH =** State Historical Occurrence, **S1 =** State critically imperiled, **S2** = State Imperiled. [3]**Forest Service Status** - **S** = Region 4 Sensitive, **W** = Forest Watch plants, **N** = No current status.[4]**Global Distribution** - **d** =disjunct, **le** = local endemic (< 100 square miles), **re** = regional endemic (distribution 100-10,000), **sd** = sparsely distributed (isolated populations), **p** = peripheral, **w** = widespread, **cb** = circumboreal, circumpolar.

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 2011 with 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 2 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 2011.

Table 2. Predicted Versus Actual Forest Budget Levels, Fiscal Years 2004 through 2010. (Note. Carryover dollars are not included in the current year allotment.)

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	Percent of Forest Plan predicted level for FY11
BDBD	Brush Disposal	$79,510	$109,262	$66,404	$115,000	$115,000	$183,500	$325,000	$200,000	$39,000	49%
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	21%
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	69%
CMTL	Trail Construction and Maintenance	$301,219	$273,269	$250,895	$208,443	$286,736	$306,986	$361,045	$306,177	$451,738	150%
CWKV	Coop Work, KV	$1,091,546	$811,518	$712,647	$800,000	$240,000	$406,700	$269,254	$360,800	$20,000	2%
NFIM	Inventory and Monitoring	$442,160	$460,183	$586,839	$369,035	$514,765	$663,701	$527,624	$542,750	$545,535	123%
NFLM	Land and Ownership Management	$308,546	$267,594	$216,859	$192,937	$172,323	$200,661	$182,880	$212,883	$190,532	62%
NFMG	Minerals and Geology	$307,785	$297,727	$512,284	$386,692	$648,571	$1,374,152	$577,806	$551,436	$390,370	127%
NFPN	Land Management Planning	$502,769	$185,179	$67,773	$172,567	$155,468	$109,242	$234,629	$53,697	$65,248	13%
NFRG	Grazing Management	$304,207	$434,646	$525,926	$337,163	$426,888	$489,345	$448,104	$492,876	$461,172	152%
NFRW	Recreation/Wilderness	$733,522	$741,141	$851,800	$931,288	$805,844	$808,807	$841,988	$788,785	$788,788	108%

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	Percent of Forest Plan predicted level for FY11
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	76%
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	79%
NFWF	Wildlife and Fisheries Management	$555,627	$455,816	$447,120	$802,941	$488,762	$442,223	$528,510	$611,206	$525,547	95%
RBRB	Range Betterment	$33,812	$31,430	$45,690	$42,448	$64,106	$30,339	$61,186	$30,955	$30,385	90%
RTRT	Reforestation Trust Fund	$293,666	$321,067	$394,144	$1,159,809	$75,310	$42,500	$501,300	$73,897	$310,000	106%
SSSS	Salvage Sale	$2,743,302	$1,749,194	$921,896	$200,000	$200,000	$150,000	$239,073	$200,000	$250,000	9%
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	97%
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	106%
	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**	**77%**

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, on p. IV-6).

Table 3 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 3 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.

This section will be updated at a later date with monitoring information from 2010 and 2011.

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: This section will be updated at a later date.

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 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 2008 please review the Biological Evaluations, Assessments, and Opinions found on the Payette National Forest website.

Fisheries Consultation Requirements

In the Table 13, 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 2010. These requirements are measures to protect fisheries from some actions that the Forest Plan allows.

Documents related to consultation which occurred during 2011 are available upon request from the Payette NF Supervisor's Office.

Table 4 Compliance with Terms and Conditions for Reasonable and Prudent Measures Required by NOAA Fisheries

Terms and Conditions	Compliance in 2010
# 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.
B. Landslide Prone – Stratify by hazard class	Completed as for RCAs
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.
D. Fire Management – Develop operational resource guidelines prior to 2004 season	In fiscal year 2010, 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 2010, 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, but the Forest presented a draft "Framework" document to the NMFS and USFWS in 2008 and in FY2011 (Documents Attached).
# 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 watersheds with ESA-listed anadromous fishes.	In fiscal year 2010, no ECA increases were planned over 15%. See 2010 Bas for discussion of ECA by project. See Project BAs on the Monitoring website.
B. In the South Fork Salmon River (SFSR): *1. Revise the default WCIs to values*	Completed. See FY 2006 report. Completed. See FY 2006 report.

appropriate for the Subbasin	
2. Continue sampling, analysis, and annual reporting of sediment levels.	Sampling occurred in FY 2011 and a report of core sampling through 2009 was produced (Nelson 2010)
3. Projects must meet criteria if even a negligible likelihood to adversely effect	Actions at Meadow Creek are being monitored to assure that mitigation measures are effective.

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.

Section 2.2. Table IV-2. Monitoring Elements

Because this is the eighth year of monitoring of the forest plan, those monitoring elements from Table IV-2 of the forest plan which have annual and biennial reporting requirements are discussed (ten 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. These questions are key to determining if implementation is moving toward the desired conditions in the Forest Plan.

2.2.1 Safety of Administrative Facilities

Monitoring Question: ***Are administrative sites safe and accessible for visitors and employees including drinking water sources?***

Indicator: On-site inspection of facilities and drinking water testing.

Work Completed and Findings: During 2011, the requirement for inspecting 20% of facilities was met.

2.2.2 Safety of Developed Recreation Sites

Monitoring Question: ***Do water systems meet Federal, State, and local requirements?***

Indicator: On-site inspection of facilities and drinking water testing.

Work Completed and Findings: Developed Campground water systems were tested per requirements during the operating season. All water systems in developed sites had required sanitary surveys and inspections. All test results were entered into INFRA Water Sampling data base.

2.2.3 Protection of Historic Properties During Project Implementation

Monitoring Question: ***Are historic properties being affected by project activities?***

Indicator: Assess the effects of project implementation on selected projects for at least 5% of the projects for which cultural resource management approval had been recommended during the previous year(s).

Work Completed: In 2011, the Heritage Program reviewed 93 federal actions for their potential to affect historic properties. The majority of these 93 Federal actions were consulted upon with the Idaho State Historic Preservation Office (SHPO) and with the three Tribes of southern Idaho whom the Payette NF does consultation with. Some Federal actions including the reviews for the installation of seismograph instruments at eight locations across the Forest required on-going consultation with Idaho SHPO. This was because of the winter months and great distances between each of the eight locations. The Idaho SHPO sometimes have requests for additional information or had stipulations for monitoring requirements to be completed and reported on during following year(s). Variable in completing some federal actions depended upon annual funding or changing priorities.

Summary of the Findings: FY2011 projects implemented on the Payette NF with and without historic properties received formal reviews and consultation with the Idaho SHPO. Federal actions containing American Indian archaeological sites also required consultation with the three Tribes of southern Idaho. Nearly all projects with cultural resources were monitored during or after implementation. Project

implementation in 2011 where there was technical and formal consultation caused no effects to historic properties.

In honoring the intent of the Programmatic Agreement (PA) for the management of historic properties in the Frank Church – River of No Return Wilderness (FC-RONR) and between four National Forests, the Advisory council on Historic Preservation and with the Idaho State Historic Preservation Office, the PA was extended for several more years. Remote historic properties in the FC-RONR are now requiring about two days to reach two days to return. More time is needed to accomplish monitoring and evaluations of historic properties in the wilderness. As of 2011, no looting or intended human damage was found at previously identified historic properties.

In summary, in 2011, no historic properties were found to have suffered human-caused changes on the Payette NF.

2.2.4 Watershed Restoration and Conservation Activities

Monitoring Question: ***Have restoration and conservation activities been focused in priority watersheds identified by the WARS process?***

Indicator: Program reviews, total dollars spent and amount of restoration activity in high priority vs. other 6th field watersheds.

Work Completed and Findings: In FY 2011, two culvert upgrades occurred – one in Dewey Creek (EF Weiser River), and one in Yellow Jacket Creek (Boulder Creek, Little Salmon River), both ACS Priority, WARS Active/Moderate and Active/High priority respectively.

2.2.5 Water quality and beneficial use status

Monitoring question: 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?

Indicator: Number of 303(d) streams listed versus de-listed; macro-invertebrate tolerance measures; water quality indicators (e.g. temperature, pH, turbidity)

Work completed and findings: Information to be updated at a later date.

2.2.6 Aquatic ecosystems

Monitoring question: 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?

Indicator: Changes in watershed, channel and habitat condition and water quality indicators.

Work completed and findings: Information to be updated at a later date.

2.2.7 Terrestrial sensitive species – bighorn sheep

Monitoring question: Are bighorn sheep present in areas of risk?

Indicator: Sighting or telemetry location in a risk area.

Work completed and findings: The monitoring report for bighorn sheep in 2011 is found in Attachment 4.

2.2.8 Terrestrial sensitive species – bighorn sheep

Monitoring question: Are bighorn sheep present in or near active domestic sheep and goat allotments?

Indicator: Presence of bighorn sheep and presence of domestic sheep or goat bands.

Work completed and findings: The monitoring report for bighorn sheep in 2011 is found in Attachment 4.

2.2.9 Terrestrial sensitive species – bighorn sheep

Monitoring question: Is separation between bighorn sheep and domestic sheep and goats maintained?

Indicator: Presence of bighorn sheep and presence of domestic sheep or goat bands.

Work completed and findings: The monitoring report for bighorn sheep in 2011 is found in Attachment 4.

2.2.10 Rangeland Resources – stray domestic sheep

Monitoring question: Are domestic sheep straying from permitted grazing allotments?

Indicator: Are domestic sheep grazing on areas identified as not suited for domestic sheep grazing.

Work completed and findings: The monitoring report for domestic sheep in 2011 is found in Attachment 4.

2.2 Project Level Monitoring

During fiscal year 2011 the following projects and activities were assessed (records available on website):

- Attachment 2 - Payette National Forest 2011 Annual Fire Report
- Attachment 5 - Meadows Slope Implementation Monitoring

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
- Forest Plan Standards and Guidelines have been updated to incorporate the amendment for domestic and bighorn sheep management, and monitoring requirements related to this decision have been added.

In addition to the above, 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 2012.

4 Monitoring and Evaluation Report Timing

The 2011 Monitoring and Evaluation report documents and discloses the activities from fiscal years 2004 through 2011 (October 2004 – September 2011. Each Forest Plan Monitoring and Evaluation report is intended to be a "living" document, meaning information displayed in the 2011 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.

4 List of Preparers

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5 Acronyms and References

Acronyms

ACS - Aquatic Conservation Strategy

AMS - Airshed Management System

ARAR - Annual Roads Accomplishment Report

ASQ - Allowable Sale Quantity

ATV - All Terrain Vehicle

BA – Biological Assessment

BAER – Burned Area Emergency Rehabilitation

BFES - Budget Formulation and Execution System

BLM - Bureau of Land Management

BO – Biological Opinion

COGS – Columbian ground squirrel

CWMA - Coordinated Weed Management Area

DN - Decision Notice

EA - Environmental Assessment

EIS – Environmental Impact Statement

Forest Plan – Payette National Forest Land and Resource Management Plan

EPA - Environmental Protection Agency

ESA - Endangered Species Act

FCRONR - Frank Church River of No Return

FMP - Facility Master Plan

FONS I - Finding of No Significant Impact

FRTA - Forest Roads and Trails Act

FSM/FSH – Forest Service Manual/Handbook

FY – Fiscal Year

GSA – General Services Administration

GIS – Geographic Information System

ICBEMP - Interior Columbia Basin Ecosystem Management Project

ICDC - Conservation Data Center

ID - Interdisciplinary

IDEQ - State of Idaho, Department of Environment Quality

IDFG - Idaho Department of Fish and Game

IDL - Idaho Department of Lands

IDPR - Idaho Department of Parks and Recreation

IDWR - Idaho Department of Water Resources

IIT - Interagency Implementation Team

MIS - Management Indicator Species

MMBF - Million board feet

MOA - Memorandum of Agreement

MOU - Memorandum of Understanding

NAAQS - National Ambient Air Quality Standards

NEPA - National Environmental Policy Act

NIDGS - northern Idaho ground squirrel

NF – National Forest

NFMA – National Forest Management Act

NFS - National Forest System

NHPA - National Historic Preservation Act

NMFS - National Marine Fisheries Service

NOAA – National Oceanic and Atmospheric Administration

NOI - Notice of Intent

NRHP - National Register of Historic Places

NRIS - Natural Resource Information System

ORV - Outstandingly Remarkable Values

PNW - Pacific Northwest

SHPO - State Historic Preservation Office

SWRA - Soil, Water, Riparian, Aquatic

RAC - Resource Advisory Committee

RAP - Road Analysis Process

RCA - Riparian Conservation Area

RNA – Research Natural Area

ROD - Record of Decision

TEPC – Threatened, Endangered, Proposed, or Candidate Species under ESA

TMDL - Total Maximum Daily Loads

TSPQ - Total Sale Program Quantity

TSRC - Total Soil Resource Commitment

USDA – United Stated Department of Agriculture

USDA-APHIS - USDA Animal and Plant Health Inspection Service

USFS - US Forest Service

USFWS - US Fish and Wildlife Service

WAG - Watershed Advisory Groups

WARS - Watershed and Aquatic Recovery Strategy

WCI - Watershed Condition Indicator

WCS - Wildlife Conservation Strategy

WFU - Wildland Fire Use

WS - Wildlife Services

WUI - Wildland Urban Interface

WWW – World Wide Web

YCC - Youth Conservation Crews

General References Used to Guide Forest Monitoring

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