

**SHOSHONE NATIONAL FOREST
LAND AND RESOURCE MANAGEMENT PLAN
FY 1999 Monitoring Plan**

AIR RESOURCE

MONITORING REQUIREMENT: Air Quality

RESPONSIBILITY: Liz Oswald

DUE DATE: March 1, 2000

DATA SOURCE: Deposition samples collected at a National Atmospheric Deposition site.

FUNDING/PERSONNEL: Program cost: \$13,500.

MONITORING REQUIREMENT: Air Quality

RESPONSIBILITY: Liz Oswald

DUE DATE: March 1, 2000

DATA SOURCE: Air Quality Related Values (AQRV) Wilderness Lake Sampling. Parameters sampled are water quality, macroinvertebrates, and zooplankton. Also sampling vegetation and soils in one watershed for MAGIC computer model. Synoptic Survey of low alkalinity lakes. Samples to be collected by the National Outdoor Leadership School (NOLS), under the direction of the Forest Service.

FUNDING/PERSONNEL: Program Cost \$16,000 (\$1,000 for the Synoptic Survey portion).

PLAN BUDGET

MONITORING REQUIREMENT: Actual Costs of Applying Management Direction from Forest Plan

RESPONSIBILITY: Forest Analyst and Budget & Finance Person

DUE DATE: March 1, 2000

DATA SOURCE: Program Accounting and Management Attainment Reporting System

FUNDING/PERSONNEL: 5 person-days, GS-7 and 2 person-days, GS-11

CULTURAL

MONITORING REQUIREMENT: National Register of Historic Places - Listed Sites

RESPONSIBILITY: Archeologist

DUE DATE: Sept. 30, 2000

DATA SOURCE: Visual assessment of site conditions at 10 sites

FUNDING/PERSONNEL: Program cost: \$2,500.

MONITORING REQUIREMENT: National Register of Historic Places - Eligible Sites

RESPONSIBILITY: Archeologist

DUE DATE: Sept. 30, 2000

DATA SOURCE: Visual examination of 20-25 sites which have been determined eligible to the National Register. Also update of site forms and reevaluation in case of some early designated sites.

FUNDING/PERSONNEL: Program Cost \$3,500.

MONITORING REQUIREMENT: Range Permit Issue MOU

RESPONSIBILITY: Archeologist

DUE DATE: March 1, 2000

DATA SOURCE: Visual examination of areas identified as having high potential for heritage resources and high probability of impacts associated with livestock grazing. (MOU between Forest Service,

Advisory Council for Historic Preservation, National Council of State Historic Preservation Officers, Wyoming State Historic Preservation Office).
FUNDING/PERSONNEL: Cost to Forest Service: \$20,000
Note: Monitoring and survey of range allotments for 1998 and beyond is doubtful based on funding reductions.

FACILITIES

MONITORING REQUIREMENT: **Road Construction**

RESPONSIBILITY: North & South Zone Engineering
DUE DATE: March 2, 2000
DATA SOURCE: Annual MAR and FRP Accomplishment Reports, RoADS Report
FUNDING/PERSONNEL: 1 person-day for Civil Engr Techs (2), 1 person-day for Engineer, GM13.

MONITORING REQUIREMENT: **Road Reconstruction**

RESPONSIBILITY: North and South Zone Engineering
DUE DATE: Nov. 1, 1999
DATA SOURCE: Annual MAR and FRP Accomplishment Reports, RoADS Report
FUNDING/PERSONNEL: 1 person-day for Civil Engr Techs (2), 1 person-day for Engineer, GM13.

MONITORING REQUIREMENT: **Roads Closed** (system road miles closed by project activities)

RESPONSIBILITY: North and South Zone Engineering, Rangers
DUE DATE: Nov. 1, 1999
DATA SOURCE: RoADS Report, Project Work Plans, Annual MAR report.
FUNDING/PERSONNEL: 1 person-day for Civil Engr Techs (2), 1 person-day for Engineer, GM13, .5 person days for rangers.

MONITORING REQUIREMENT: **Roads Obliterated** (system road miles obliterated by project activities).

RESPONSIBILITY: North and South Zone Engineering, ID teams.
DUE DATE: Nov. 1, 1999
DATA SOURCE: Annual FRP and MAR reports, Project Work Plans, EA/DN's.
FUNDING/PERSONNEL: 1 person-day for Civil Engr Techs (2), 1 person day for Engineer, GM13, .5 person-days for each Deciding Officer.

MONITORING REQUIREMENT: **Level 1 Road Maintenance** (Miles of Level 1 maintenance performed)

RESPONSIBILITY: North and South Zone Engineering, WOC temp crew, 2 person days
Hydrologist/Fish Biologist.
DUE DATE: Nov. 1, 1999
DATA SOURCE: Annual MAR reports, completed project work plans, WOC crew field records.
FUNDING/PERSONNEL: 58 days GS9 Engr. Tech, 20 days GS7 Engr. Tech, 27 days GS9 Engineer, 3 days GM13 Engineer, 11 days GS9 Forestry Tech., 10 Days Hydrologist, 60 days GS-5 hydro Techs.

LANDS

MONITORING REQUIREMENT: Land Exchange Offers

RESPONSIBILITY: Lands Specialist (Jennifer Watson)

DUE DATE: March 1, 2000

DATA SOURCE: Annual accomplishment reports, files.

FUNDING/PERSONNEL: 5 days GS11 Lands Specialist.

MONITORING REQUIREMENT: Right of Way Acquisition

RESPONSIBILITY: Lands Specialist (Jennifer Watson)

DUE DATE: March 1, 2000

DATA SOURCE: Annual accomplishment reports, files.

FUNDING/PERSONNEL: 5 days GS11 Lands Specialist.

MONITORING REQUIREMENT: Landline Location (Property Boundary Location) and Occupancy Trespass

RESPONSIBILITY: Lands Specialist (Jennifer Watson)

DUE DATE: March 1, 2000

DATA SOURCE: Annual accomplishment reports, files.

FUNDING/PERSONNEL: 5 days GS11 Lands Specialist.

MONITORING REQUIREMENT: Compliance with Land Use Authorizations (Special Uses)

RESPONSIBILITY: Lands Specialist (Jennifer Watson)

DUE DATE: March 1, 2000

DATA SOURCE: Inspections, permittee use reports and income statements.

FUNDING/PERSONNEL: 5 days GS11 Lands Specialist, 25 days GS5.

MINERALS

MONITORING REQUIREMENT: Notice of Intentions, Plan of Operations, Application of Permits, and Other Mineral Special Use Permits

RESPONSIBILITY: Forest Minerals Staff Officer

DUE DATE: January 15, 2000

DATA SOURCE: filed Notices of Intentions, Plan of Operations, Applications for Permits to Drill, and Mineral Materials Special Use Permits.

FUNDING/PERSONNEL: .5 person per year for forest, GS-11

RECREATION

MONITORING REQUIREMENT: Off-road Vehicle Use of Designated Travelways

RESPONSIBILITY: Monte Barker, Skip Shoutis

DUE DATE: March 1, 2000

DATA SOURCE: Citations, warning notices, ranger observations/notes/photos; inventoried orv use areas and access points are the focus for monitoring, regularly used off-road areas will be prioritized

FUNDING/PERSONNEL: This item is monitored continuously by District personnel. Approximately .5 person year for Forest, GS-4-11s; and 2 person-days, GS-11

MONITORING REQUIREMENT: Trail Condition

RESPONSIBILITY: Monte Barker, Skip Shoutis

DUE DATE: March 1, 2000

DATA SOURCE: Project Trail Inspections, trail segment monitoring forms

FUNDING/PERSONNEL: 2 person-years for Forest, GS-4-7s; and 2 person-days, GS-11

MONITORING REQUIREMENT: Dispersed Campsite Condition and Trend

RESPONSIBILITY: Monte Barker, Skip Shoutis

DUE DATE: March 1, 2000

DATA SOURCE: Modified Cole method. Includes visual observations and use of photo points. Inventoried orv use areas and access points would be the focus for monitoring, regularly used off-road areas and road termini would be prioritized.

FUNDING/PERSONNEL: Dispersed areas along roads - 80 days. Remote dispersed areas .25 person-year for Forest, GS-4-7s; and 2 person-days, GS-11

MONITORING REQUIREMENT: Developed Site Use

RESPONSIBILITY: Monte Barker, Skip Shoutis

DUE DATE: Nov. 1, 1999

DATA SOURCE: MAR Reports, Infrastructure DB

FUNDING/PERSONNEL: 10 person-days, GS-4-7s, 4 person-days GS-9

MONITORING REQUIREMENT: Developed Site Condition

RESPONSIBILITY: Monte Barker, Skip Shoutis

DUE DATE: March 1, 2000

DATA SOURCE: Inspection, site inspection reports, MAR report.

FUNDING/PERSONNEL: 10 person-days, GS-4-7s, 4 person-days, GS-9.

MONITORING REQUIREMENT: Downhill Skiing Use

RESPONSIBILITY: Jennifer Watson

DUE DATE: Nov. 1, 1999

DATA SOURCE: Permittee supplied use statistics, resort inspections

FUNDING/PERSONNEL: 15 days for a GS-9, 5 days for a GS-11

MONITORING REQUIREMENT: Trail Construction/Reconstruction

RESPONSIBILITY: Monte Barker, Skip Shoutis.

DUE DATE: March 1, 2000

DATA SOURCE: MAR Reports

FUNDING/PERSONNEL:

THREATENED, ENDANGERED AND SENSITIVE SPECIES

MONITORING REQUIREMENT: Grizzly Bear Mortalities

RESPONSIBILITY: Forest Supervisor, Wildlife Biologist

DUE DATE: March 1, 2000

DATA SOURCE: Interagency Grizzly Bear Study Team and Montana Fish, Wildlife and Parks annual reports.

FUNDING/PERSONNEL: 2 days GS-12 (Approximately \$500)

MONITORING REQUIREMENT: Compliance with Interagency Grizzly Bear Guidelines

RESPONSIBILITY: Forest Supervisor, District Rangers, team leaders, project biologists, Wildlife Biologist.

DUE DATE: March 1, 2000

DATA SOURCE: Project Biological Assessments and consultation with U.S. Fish and Wildlife Service, grizzly bear compliance patrol reports, law enforcement reports, IGBC grizzly bear conflict annual report.

FUNDING/PERSONNEL: Above noted personnel and district compliance personnel (approximately \$20,000).

MONITORING REQUIREMENT: Grizzly Bear Habitat Effectiveness

RESPONSIBILITY: Forest Supervisor, Wildlife Biologist

DUE DATE: March 1, 2000

DATA SOURCE: Grizzly Bear Cumulative Effects Model (CEM) and the IGBC access analysis process. (NOTE: Completion of this monitoring item is dependant on the following. CEM was run on the Forest in 1996 and model validation and testing is in process. CEM will be run again on the Forest as soon as model testing is completed for the Ecosystem. Databases used in the CEM analysis will be updated for any changes in 1997. Development of the access analysis process is underway and a baseline report will be generated once the process for completing the analysis is finalized.)

FUNDING/PERSONNEL: District biologists, district recreation staff, GIS Coordinator, engineering staff, timber staff, Grizzly Bear/Wolf Center of Excellence (Approximately \$15,000).

MONITORING REQUIREMENT: Wolf Population Status

RESPONSIBILITY: Wildlife Biologist

DUE DATE: March 1, 2000

DATA SOURCE: Weekly Gray Wolf Recovery Progress Report from U.S. Fish and Wildlife Service, reports received from Forest Service Employees and the general public.

FUNDING/PERSONNEL: 10 days GS-12 (approximately \$3,000)

MONITORING REQUIREMENT: Nesting Bald Eagle Surveys

Note: Monitoring was originally focused on wintering bald eagle surveys. It is now focused on nesting pairs because reproductive behavior is more important on the Shoshone National Forest than wintering. The nesting population in the Greater Yellowstone Area is expanding.

RESPONSIBILITY: Forest Wildlife Biologist

DUE DATE: March 1, 2000

DATA SOURCE: Report from WGFD as a part of CCS agreement # 11214109410

FUNDING/PERSONNEL: \$2500 - Forest share. \$2500 WGFD share.

MONITORING REQUIREMENT: Inventory of Nesting Peregrine Falcons (to include number of sites used, number nesting pairs, nesting success, and production)

RESPONSIBILITY: Forest Wildlife Biologist

DUE DATE: March 1, 2000

DATA SOURCE: Report from WGFD as a part of CCS agreement # 11214109410

FUNDING/PERSONNEL: 60 person-days plus helicopter time - \$7,000 total project cost - Forest share = \$3,500 as a part of project mgmt code 2611.

TIMBER

MONITORING REQUIREMENT: Allowable Sale Quantity

RESPONSIBILITY: Rangers and Forest Timber Staff

DUE DATE: March 1, 2000

DATA SOURCE: MAR Report

FUNDING/PERSONNEL: Timber Zone Personnel, Forest Timber Staff, TCE personnel in Laramie. Personnel estimate is 50 days at a cost of \$8,000.

MONITORING REQUIREMENT: Restocking of Clearcuts

RESPONSIBILITY: District Rangers, Forest Silviculturists, Timber Staff

DUE DATE: March 1, 2000

DATA SOURCE: Regeneration Surveys and Stand Exams

FUNDING/PERSONNEL: 20 person-days, \$4,000.00

MONITORING REQUIREMENT: Timber Stand Improvement

RESPONSIBILITY: Zone Timber Personnel, Contracting Officers and Inspectors

DUE DATE: March 1, 2000

DATA SOURCE: MAR Report, Field inspection reports, daily diaries, RMRIS

FUNDING/PERSONNEL: 40 person-days, \$6,000.00

MONITORING REQUIREMENT: Growth Response

RESPONSIBILITY: Zone Timber Personnel, Forest Timber Staff

DUE DATE: March 1, 2000

DATA SOURCE: Stage II data, regeneration survival surveys, MAR reports, RIS data base.

FUNDING/PERSONNEL: 50 person-days, \$8,000.

MONITORING REQUIREMENT: Size of Clearcuts

RESPONSIBILITY: Zone Timber Personnel, District Rangers, Timber Staff Officer

DUE DATE: March 1, 2000

DATA SOURCE: Silvicultural Prescription, Timber Sale Packages, RIS Data Base

FUNDING/PERSONNEL: 10 person-days, \$2,000.

MONITORING REQUIREMENT: Openings Created by Management Activities

RESPONSIBILITY: Timber Staff, ID Teams, Permit or Contract Administrators

DUE DATE: March 1, 2000

DATA SOURCE: NEPA documents, contracts

FUNDING/PERSONNEL: 20 person-days, \$4,000.

MONITORING REQUIREMENT: Lands Not Suited for Timber Production

RESPONSIBILITY: Zone Timber Personnel, Forest Timber Staff, District Rangers

DUE DATE: March 1, 2000

DATA SOURCE: NEPA Documents, Contracts, RIS data base

FUNDING/PERSONNEL: 30 person-days, \$6,000.

WATER RESOURCES

MONITORING REQUIREMENT: Water Quality Trend

RESPONSIBILITY: North and South Zone Hydrologists

DUE DATE: March 1, 2000

DATA SOURCE: Quantitative and qualitative field data collected and analyzed by professional and seasonal staff. Data collected is dependent upon the project type, monitoring objectives and statistical reliability required. Sampling and site selection is designed to facilitate extrapolation of data to other projects and areas.

FUNDING/PERSONNEL: Funding is spread across many projects. Monitoring not specifically funded by a project is funded through normal watershed management dollars. Monitoring is conducted by 1 GS-12 and 1 GS-9 hydrologist.

MONITORING REQUIREMENT: Water Uses

RESPONSIBILITY: North and South Zone Hydrologists

DUE DATE: March 1, 2000

DATA SOURCE: Bighorn Decree and on-site information. Handled on a case-by-case basis.

FUNDING/PERSONNEL: Funding is either through special use dollars or normal watershed management dollars on an as needed basis. Monitoring is conducted by 1 GS-12 and 1 GS-9 hydrologist.

WILDLIFE AND FISH

MONITORING REQUIREMENT: Sensitive Species Survey Work (including lynx, boreal owl, and dwarf shrew)

RESPONSIBILITY: Forest Wildlife Biologist

DUE DATE: March 1, 2000

DATA SOURCES: Report from WGFD as a part of CCS agreement # 11214109410

FUNDING/PERSONNEL: Total project cost estimate = \$78,000 - Forest share = \$39,000 as a part of project management code 2611.

MONITORING REQUIREMENT: Wildlife Habitat Improvements - Forest Plan item

RESPONSIBILITY: Forest Wildlife Biologist

DUE DATE: March 1, 2000

DATA SOURCES: Information assembled for annual MAR Report

FUNDING/PERSONNEL: 1 person-day GS-12

MONITORING REQUIREMENT: Winter Range Carrying Capacity - Forest Plan item

RESPONSIBILITY: Forest Wildlife Biologist

DUE DATE: March 1, 2000

DATA SOURCE: Data sheets from seasonal Range and Wildlife Crew

FUNDING/PERSONNEL: 2 GS-5 seasonals - total project cost estimate = \$10,000.

MONITORING REQUIREMENT: Riparian Condition

RESPONSIBILITY: Forestwide Riparian Coordinator

DUE DATE: March 1, 2000

DATA SOURCE: Riparian, watershed, aquatic habitat, range, and wildlife field data collected on key monitoring areas/sites including functioning riparian, stream morphology, key aquatic habitat parameters, browse utilization, production-utilization transects, stubble height transects, photo points and other approved methods found in the Region 2 Analysis Handbook.

FUNDING/PERSONNEL: 60 days GS-7,9,11,12 (20 days range staff + 20 days GS-11 Aquatic Biologist + 10 days GS-12 Hydrologist + 5 days GS-9 Hydrologist + 5 days GS-12 Wildlife Biologist). Other miscellaneous riparian monitoring = 20 days (10 days GS-12 Hydrologist and 10 days Aquatic Biologist).

WILDERNESS

MONITORING REQUIREMENT: **Wilderness Campsite Condition**

RESPONSIBILITY: Monte Barker, Skip Shoutis

DUE DATE: March 1, 2000

DATA SOURCE: Modified Cole Campsite/Used site condition inventory.

FUNDING/PERSONNEL: .5 person per year for Forest, GS-4-7s; and 2 person-days, GS-11

VISUALS

MONITORING REQUIREMENT: **Adopted Visual Quality Objective**

RESPONSIBILITY: Landscape Architect/Districts

DUE DATE: March 1, 2000

DATA SOURCE: Management Reviews

FUNDING/PERSONNEL: 25 person-days for Buffalo Bill Highway/GS9, 5 days for the rest of the Forest.