APPENDIX I
RESOURCE MONITORING AND EVALUATION PLAN

TABLE I-1

Element	Item	Location	Technique	Unit of Measure	Frequency	Information Warranting A Decision Change	Annual Cost
FOREST MANAGEMENT	Reforestation stocking survey	All past and present timber sale areas, plantations, and wildfires in timber types	Regeneration stocking survey method as outlined in April 24, 1985 District Instruction Memorandum	Trees/acre	Plantations: 1, 3, and 5 years following planting or until stocked and established; natural Regeneration: 5-year intervals until stocked and established	Identification of non-stocked timber stands	$1,500
	Timber sale contract compliance	All active timber sales	Timber sale inspections	Site inspection; monitoring compliance with timber sale contract	Minimum of twice per week during periods of logging activity	Noncompliance with contract specifications; exceeding environmental parameters of Idaho Forest Practices Act	$2,000
	Forest insect and disease reconnaissance	All timber stands	Aerial and field surveys	Number of infected acres & extent of infection	One USFS flight per year and random field reconnaissance	Data revealing above average occurrence of forest insects or disease	$ 500
VEGETATION	Utilization	All allotments	Key forage plant method (Draft Manual 4423)	Percent of forage plant removed	Annually (within 10 days after close of each grazing period)	Generally utilization greater than 50% on native range; special cases, riparian zones, meadows, vegetation treatment areas, seeding, fall use areas, etc., will require variation in allowable utilization levels.	$5,000
	Actual use	All allotments	Actual grazing use reports submitted by livestock operators; livestock compliance checks	Animal unit months (AUMs)	Annually	Consider with precipitation in determining why utilization is at monitored level.	$3,125

TABLE I-1 (Continued)

Element	Item	Location	Technique	Unit of Measure	Frequency	Information Warranting A Decision Change	Annual Cost
VEGETATION (cont'd)							
	Precipitation	All allotments	Special site-specific precipitation gauges	Inches of precipitation	Quarterly year-long	Consider with actual use in determining why utilization is at monitored level.	$3,750
	Trend	a) All "I" category allotments with AMPs and selected "M" category allotments b) Allotments not under an AMP where adjustments in active preference are proposed	Nested frequency plot method, photos	Percent frequency of key species; percent ground cover	a) Annually for one complete grazing cycle, then after each grazing cycle b) First, third, and fifth year, then on a 5-year basis	(a and b) Downward index summary from base of 10 points	$27,500
	Condition	All allotments	Range Condition Guide as outlined in SCS National Range Handbook, Section 305	Percent pounds production compared to climax allowance	At the end of each grazing cycle for AMP areas; at 5-year intervals on other allotments	Condition reduced by 1 class or 10% from original reading (if latest reading is less than good or indications are that next reading will be less than good)	$3,750
WILDLIFE	Bald eagle	Salmon & Lemhi rivers	Aerial, winter	Number and age	Annually	20% or greater decrease in number for two consecutive years	$2,000
	Gray wolf	Approx. Sandy Creek to Eighteenmile Creek	Aerial winter, big game winter range condition, human activity levels	Extensive forage utilization transects and cover mapping; zones and estimated level of human activity	Annually and triannually	Downward trend in big game winter range condition; more than incidental or casual human activity	$3,600
	Idaho sensitive species	Throughout resource area	Observation of representative sites during key periods	Occupied sites and population levels	Annually	10% loss of occupied sites and numbers/site	$1,400

TABLE I-1 (Continued)

Element	Item	Location	Technique	Unit of Measure	Frequency	Information Warranting A Decision Change	Annual Cost
WILDLIFE (cont'd)							
	Big game winter range condition	Selected ranges	Extensive browse transects	Age/fawn class utilization	3-year cycle	Over 70% utilization for 2 consecutive cycles	$5,000
			Pellet transects	Big game days/ac.	Annually	25% decrease in numbers	
			Utilization of grasses in key elk winter range	percent	2-year cycle	Over 30% utilization prior to winter	
	Distribution on winter range	Selected ranges	Aerial and ground surveys	Estimate numbers, location level of human activity	Annually	Any noticeable change in use areas for two comparable winters and/or apparent trend in numbers that seem unusual	$3,000
	Antelope habitat condition	Selected ranges	Canopy cover of sagebrush	Canopy cover of sagebrush, forb production index	Tri-annually (more frequently in areas subject to modification)	Any reduction of shrub canopy parameters as shown in Standard Operating Procedures	$5,000
			Guzzler observations	Number of animals and frequency of use	annually	No improvement in distribution and breeding territories	$1,000
	Sage grouse	Selected summer ranges	Guzzler observations	Number of birds & frequency of use	Annually	No improvement in distribution	
		Selected leks	Observation of leks during breeding season	Number of males	Annually	Population levels below 1981 levels	$2,000
		Selected wintering habitat	Photo, toe-point	% cover of shrubs and forbs	3-year cycle	20% decrease in key forbs and browse species (see Standard Operating Procedures)	$ 500
		Selected brood Rearing	Photo, toe-point	% cover of forbs and visual view of foliage height	Annually	Any decrease in forb composition until areas are back into satisfactory condition	$ 500
		Selected nesting	Photo, toe-point	% cover of sagebrush and amount of nesting material available	3-year cycle	10% variation from sage grouse guidelines (see Standard Operating Procedures)	$1,500

TABLE I-1 (Continued)

Element	Item	Location	Technique	Unit of Measure	Frequency	Information Warranting A Decision Change	Annual Cost
WATERSHED	Water quality, Water temp., pH, dissolved O_2, water discharge, turbidity	McDevitt Creek, Hawley Creek, Pattee Creek, Henry Creek, Sevenmile Creek	Marsh-McBurney Meter, HACH water chemical analysis kit	Variable	Once every 2 years	Water quality parameters exceeding recommended state of Idaho standards	$ 225/ stream/ year
	Wetland/riparian areas	McDevitt Creek, Hawley Creek, Pattee Creek, Cow Creek, Sevenmile Creek, Henry Creek, Beercan Flats, Muddy Creek, Eighteenmile Creek	Photo transects	Variable	Once every 2 years	Streambank instability, heavy utilizations, woody riparian vegetation response	$ 75/ stream/ year
FISHERIES	Fisheries habitat	McDevitt Creek, Eighteenmile Creek, Sevenmile Creek	Photo transects	Variable	Once every 2 years	Streambank instability, heavy utilizations, woody riparian vegetation response	$ 75/ stream/ year
SOILS	Erosion	Bentonite badlands	Patrol, photo recordation, point step transect as needed	% ground cover, acres affected	3 to 5 years	Downward trend, limited response of desirable species	$ 1,500
	Compaction	Areas surrounding new troughs and guzzlers	Photo recordation and bulk density samples	Pounds per cubic foot	Before installation and biannually thereafter	Information gathered will determine future sites to reduce existing compaction and identify highly compactable potential soils.	$ 2,000
RECREATION	General recreation use	All of resource area outside of special recreation management areas	Ocular reconnaisance, aerial photography	Visitor counts, area inspections to look for vandalism, road proliferation	Two days/month, one flight/year, photos every 2nd year	Collected data revealing user conflicts, resource degradation, or safety hazards	$ 5,000/ year + $2,000 every other year.
	Developed site use	Developed Sites (7)	Ocular reconnaisance	Visitor counts, site damage, overuse of vegetation	Once every other week at each site	Vandalism, excessive wear and tear, or nonuse	$10,000

TABLE I-1 (Concluded)

Element	Item	Location	Technique	Unit of Measure	Frequency	Information Warranting A Decision Change	Annual Cost
WILDERNESS	Interim management	Eighteenmile wilderness study area	Ocular and photo reconnaisance	Road proliferation, mining sites	Monthly	Any change to existing landscape	$ 5,000
CULTURAL RESOURCES	Condition of cultural resources	Cultural resource management plan areas, plus the remainder of the planning area	Patrol and observation	Number of impacts on sites	3 to 5 trips annually	Any adverse impact to site	$ 3,000
			Patrol and observation	Number of impacts on sites	3 to 5 trips per year	Any adverse impact to site	$2,000
NATURAL HISTORY OR PALEONTOLOGY	Condition of caves, natural history, or paleontological resources	Areas of geological interest	Photo inventory, patrol and observation	Number of impacts	Once every 2 years	Any new incidence of collecting or vandalism at any area	$1,000