Table 2. Number of study sites, study types, dates established, time read, and trend by allotment for monitoring in the Jarbidge Resource Area.

Allot. Name	Allot. No.	No. of Sites	Study Type*	Estab. Date	Times Read	Trend
Turner Butte	1000	-	-	-	-	-
Cedar Butte E.	1001	-	-	-	-	-
Cedar Butte DC	1002	1	NF	6/84	1	N/A
Cedar Butte #9	1004	1	NF	7/89	1	N/A
Cedar Butte #10	1007	12	NF	7/89	1	N/A
Brackett Bench	1008	12	NF/PP	6/88	1	N/A
Roseworth FFR	1009	-	-	-	-	-
Cedar Cyn Field	1013	-	-	-	-	-
Roseworth Point	1014	1	PP	8/86	1	N/A
Devil Crk. #1	1016	4	NF/PP	7/86&87	1	N/A
Devil Crk Patrk	1017	3	NF	6/87	2	Static
South Deadwood	1018	1	NF	7/87	1	N/A
E/W Deadwood	1020	1	NF	7/87	2	Static
Diamond A	1021	9	NF/PP	7/87&89	2	Static
Cedar Crossing	1022	-	-	-	-	-
Cedar Cr. Cyn.	1023	-	-	-	-	-
Deadwood	1024	2	NF	6/87	1	N/A
China Creek	1025	3	NF	7/87	2	Static
Bear Creek	1026	1	NF	7/87	1	N/A
Player Canyon	1027	-	-	-	-	-
Grassy Hills	1029	2	NF	7/87	1	N/A
Juniper Ranch	1031	14	NF	6/88	1	N/A
Hammett Unit	1032	-	-	-	-	-
House Creek	1042	-	-	-	-	-
Kinyon	1046	-	-	-	-	-
Player Butte	1047	-	-	-	-	-
Poison Creek	1050	33	NF/PP	5/88&89	1	N/A
Poison Crk-Bert	1051	38	NF/PP	5/88&89	1	N/A
Bruneau Arm	1052	-	-	-	-	-
Browns Gulch	1053	-	-	-	-	-
Lower Saylor Crk	1055	1	NF/PP	7/86&90	1	N/A
Bruneau Hill	1057	4	PP	5/75	3	Upward
Echo	1058	-	-	-	-	-
Flat Top	1059	-	-	-	-	-
Flat Iron	1060	-	-	-	-	-
E. Roseworth Pt.	1061	-	-	-	-	-
Sheep Trail	1063	-	-	-	-	-
Winter Camp	1064	-	-	-	-	-
Three Crk-Clover	1065	-	-	-	-	-
Three Crk #8-Pvt	1066	-	-	-	-	-
Three Crk #2	1067	4	NF	6/87	2	Static
Three Crk #8	1070	-	-	-	-	-
Three Crk Blos	1071	-	-	-	-	-
Three Crk #8	1075	-	-	-	-	-
Three Crk #9	1076	-	-	-	-	-
Taylor Pocket	1077	9	NF	7/87&89	1	N/A
Wilkins Island	1084	3	NF	6/87	1	N/A
North Fork Fd.	1088	2	NF	7/87	2	Static
Signal Butte	1092	16	NF/PP	9/87&88	1	N/A
Little House Cr	1093	-	-	-	-	-
Guerry Patrick	1094	5	NF	7/89	1	N/A
Camas Slough	1095	1	NF	7/87	2	Static
Antelope Sprs.	1096	22	NF/PP	8/88&90	1	N/A
71 Desert	1099	-	-	-	-	-
Bruneau Canyon	1100	-	-	-	-	-
Crawfish	1118	1	PP	9/82	1	N/A

Table 2, continued;

Allot. Name	Allot. No.	No. of Sites	Study Type*	Estab. Date	Times Read	Trend
Juniper Butte	1119	1	PP	5/75	3	Upward
Horse Butte	1120	10	NF/PP	5/89	1	N/A
Grassy Hills AMP	1121	13	NF	5/89	1	N/A
Buck Flat	1122	1	PP	9/82	1	N/A
Coonskin	1123	-	-	-	-	-
Pigtail	1125	13	NF	7/87&89	1	N/A
Conover	1126	6	NF	7/87	2	Static
Cedar Creek	1131	5	NF	7/87	1	N/A
E. Juniper Draw	1132	1	NF	5/85	1	N/A
Devil/Bal. Rock	1133	-	-	-	-	-
Guerry Ind.	1134	-	-	-	-	-
S. Crows Nest	1135	-	-	-	-	-
East Clover	1136	-	-	-	-	-
W. Saylor Crk.	1137	8	PP	5/74&76	2	Upward
Juniper Draw	1138	9	NF	6/88	1	N/A
N. Balance Rock	1139	-	-	-	-	-
Noh Field	1140	-	-	-	-	-
Lower Salmon Falls	1141	-	-	-	-	-
Thousand Sprs.	1142	-	-	-	-	-
Yahoo	1143	-	-	-	-	-
Notch Butte	1144	1	PP	8/86	1	N/A
Twin Butte	1145	5	NF/PP	6/77&84	3	Upward
Dove Springs	1146	-	-	-	-	-
Kubic	1147	1	PP	8/86	1	N/A
Southside Grp.	1148	2	PP	5/74&89	2	Upward
Echo Group	1149	1	PP	10/86	1	N/A
Hagerman Group	1150	-	-	-	-	-
McPherson Sec 15	1197	-	-	-	-	-
Totals: 85 Allotments		283 study sites.				

* NF = Nested Frequency
PP = Photo Plot

N/A - Initial reading only. Unable to establish trend at this time.

system was developed and implemented in COBOL on the Idaho State Office Honeywell DPS-6 database system.

This system maintains and organizes rangeland monitoring records, and determines range condition trend. Currently, all of the Jarbidge Resource Area study files are being maintained and stored in RESMON for future retrieval, update, and evaluation. The entire Resource Area is included in a Resource Objective and Monitoring Plan (ROMP). This plan is based on the ecological site inventory and objectives that are identified in the RMP.

In addition to photo plots and the nested plot frequency monitoring method to determine trend, shrub density plots have also been established at several bitterbrush sites to help detect any additional vegetal changes that may occur over a period of time, in response to current management practices. In riparian and upland game areas, monitoring methods used to measure trend consist of photo points, videos and cover, density, and line intercept transects. Most of these studies have only baseline data, and have not been resampled or rephotographed since the initial establishment. If resampling has occurred, the data has not been analyzed or evaluated to date, and the trend is estimated to be static (Table 2).

As of March 1993, the Resource Area has initiated a comprehensive Monitoring and Evaluation Plan (MEP). This procedural guidebook is to provide proper direction on the procedures, processes, and actions of the monitoring and evaluation program in the Resource Area.

Since 1987, riparian monitoring efforts have centered on the projects listed in Table 3.

There have been no water quality monitoring studies initiated in the Resource Area since 1987. In 1992, however, four water temperature monitoring stations were established on the East Fork of the Bruneau River. Additional monitoring attributes to be measured in the future on perennial streams include: Temperature, sediment, bacteria, pH, dissolved oxygen, herbicides/insecticides, peak/low flows, and channel shape and pattern.

Range

Since the completion of the RMP, some significant changes in allotment boundaries have been made. In general, through consolidations and divisions affecting 14 of the original 79 allotments in the Resource Area, there are now 113 allotments being recognized. It is anticipated that future adjustments to other allotment boundaries will also occur. These changes are being made in response to changing livestock operations, to simplify administrative procedures, or attempts to intensify livestock management practices. Thirty allotments were transferred to the Bruneau Resource Area with the Bennett Mountain Planning Unit.

As monitoring data becomes available, allotment evaluations (AIEs) are being prepared to determine if resource objectives are being met. To date, AIEs have been finalized on 13 allotments.

Informal grazing systems using rotational or deferred grazing patterns have been implemented on 31 allotments. Emphasis has been placed on reducing or rotating the amount of spring grazing use which has historically occurred.

Completed range improvement projects include:

(A) Approximately 213 miles of new pipeline construction and 25.5 miles of existing pipeline reconstructed;
(B) One new well drilled and equipped and two existing wells equipped;
(C) 15 cattle guards installed;
(D) 149 miles of fence constructed;
(E) 9 new reservoirs built and 2 others reconstructed;
(F) 3 new springs developed and 2 existing springs redeveloped;
(G) 3,300 acres of prescribed burn.

Table 3. Monitoring on riparian areas in the Jarbidge Resource Area.

Project	Type of Monitoring	Unit
1. East Fork of the Bruneau River Gap Fences (1988)	- Photo Plots and Video	6 mi.
2. Antelope Spring (1992)	- Photo Points	3 ac.
3. Whiteside Spring (1992)	- Photo Points	5 ac.
4. Cedar Creek (1992)	- Water Temp, Photo Points, Greenline Transects	6 mi.
5. Heil Reservoir (1989)	- Photo Points	10 ac.
6. 71 Draw Reservoir (1987)	- Photo Points	15 ac.
7. Camas Slough Resv. (1991)	- Photo Points	5 ac.

Table 4 lists the types and quantity of projects completed within each MUA.

Recreation

In conjunction with the Cultural Resource Program, the Oregon Trail and associated stage/freight roads have been identified and marked with fiberglass posts throughout the Resource Area. The marking program not only identifies the historic trails, it also denotes public/private property lines and use restrictions (e.g., no motorized vehicles on undisturbed segments). Planning and interagency coordination was initiated for Idaho's Centennial Trail, which will provide a multiple use corridor for backcountry travel from the Canadian border to the Nevada border. Most of the BLM portion of this trail will lie within the Jarbidge Resource Area.

In 1990, the Bruneau Canyon Overlook site was completed with the installation of a kiosk and interpretive signs describing the natural and recreational features of the canyon. In 1991, the Jarbidge River Recreation Site was completed. This facility serves as a launch site for boaters and a primitive campground. It contains a kiosk with boating regulations and river information, permanent fire-rings, a toilet, and a parking area.

The transfer of the Bennett Hills Planning Unit removes 22.5 miles of the Oregon Trail, and the proposed Bennett Hills Winter Special Recreation Management Area from Jarbidge Resource Area control.

Maintenance will continue on the Bruneau Canyon Overlook, Jarbidge River Recreation Site, and historic trail systems. Final route selection and marking of the Idaho Centennial Trail within the Resource Area will be accomplished with the cooperation of the Idaho Department of Parks and Recreation and the Idaho Trails Council.

In 1993 and 1994, the planning and initial marking of the Three Island Crossing National Back Country Byway should be completed. These efforts will be made in conjunction with the cultural resources program.

In 1993, the development of a site plan for improvements at Cedar Creek Reservoir will be completed. Currently, Cedar Creek Reservoir has two boat docks and two toilets. BLM plans to improve the facilities by adding new handicap accessible toilets, ramadas, picnic tables and parking areas.

Riparian

The Jarbidge RMP targeted riparian habitat improvement projects on 53.3 miles of rivers and creeks. To date, there have been approximately 33 miles of riparian areas protected by gap fences. Portions of rivers and creeks protected presently include Dive Creek, East Fork of the Bruneau River, Salmon Falls Creek, and Little Canyon Creek (Table 5). Generally, the projects have been started in areas rated the highest priority for aquatic habitat. A willow and dogwood planting on the East Fork of the Bruneau River was conducted. By 1990 however, only one dogwood was alive. Crane Falls Lake adjacent to C. J. Strike Reservoir has been gap fenced to restrict livestock grazing and to protect wetlands, as well as to enhance waterfowl and shorebird nesting habitat, aquatic habitat, and to improve recreation. Dive Creek and Little Canyon Creek are located in the Bennett Mountain Planning Unit, transferred to the Bruneau Resource Area.

Portions of Deer and Cedar Creek, the Jarbidge River, and the Snake River will have improvement projects scheduled from fiscal years 1992 to 1995 (Table 5). Bear and Shack Creek were both given high priority for riparian improvement in the Jarbidge RMP. However, since 1987, resource conflicts identified by the public have caused these two creeks to have their priority lowered. These riparian areas are still under consideration for enhancement in the future. Riparian areas along portions of Cougar and Columbet Creek, as well as Dorsey

Table 4. Livestock management projects completed in each MUA since 1987.

Water Related Projects

MUA#	Pipeline New (mi.)	Pipeline Reconstr (mi.)	Well each	Reservoir New each	Reservoir Reconstr each	Springs Develop each	Springs Redevel each
1	0	0	0	0	0	0	0
2	0	0	0	3	0	0	0
3	2.5	0	0	0	0	1	0
4	0	0	0	0	0	0	0
5	2.5	0	1	0	0	0	0
6	21.5	0	0	0	0	0	0
7	83.5	0	2	0	0	0	0
8	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0
11	41.0	0	0	1	0	0	1
12	26.5	18.0	0	1	2	0	0
13	17.5	3.0	0	1	0	0	0
14	0	0	0	0	0	0	0
15	17.0	0	0	3	0	0	1
16	1.0	4.5	0	0	0	2	0
Total	213	25.5	3	9	2	3	2

Other Livestock Management Projects

MUA#	Cattle Guard each	Prescribed Burn (Acres)	Prescribed Burn & Seed (Acres)	Fire Rehab (Acres)	Green Strip (mi.)	Fence (mi.)
1	0	0	0	0	0	0
2	1	0	0	0	0	3.7
3	0	0	0	320	13	12.0
4	0	0	0	0	0	0
5	0	0	0	0	0	1.0
6	0	0	0	0	0	0
7	8	0	0	10883	7	80.3
8	0	0	0	0	0	4.5
9	0	0	0	0	0	0
10	0	0	0	0	0	0
11	1	0	0	6611	0	13.0
12	3	0	0	471	74	15.7
13	1	1890	0	836	10	11.5
14	0	0	0	0	0	0
15	1	0	0	638	0	8.3
16	0	1410	1410	0	0	0
Total	15	3300	1410	19759	104	150.0

Table 5. Segments of rivers and creeks with riparian improvement projects in the Jarbidge Resource Area.

River/Creek	Miles Protected	Miles Remaining	RMP Target (Miles)
East Fork of the Bruneau	9.2	22.2	31.4
Dive Creek	1.5	0.0	1.4
Little Canyon Creek	1.8	1.4	3.2
Salmon Falls Creek	22.0	0.0	4.0
Snake River	2.0	53.0	0.0
Total	33.8	79.1	

Table 6. Rivers and creeks where riparian area improvement projects are being proposed.

River/Creek	Riparian Goal Miles
Cedar Creek	7.0
Deer Creek	1.8
Shack Creek	1.1
Bear Creek	0.4
Spring Creek	3.2
Cherry Creek	2.4
East Fork of the Bruneau	6.5
North Fork Salmon Falls Creek	1.2
Big Flat Creek	1.6
Deadwood Creek	4.0
Three Creek	1.2
Columbet Creek	Not Specified
Cougar Creek	Not Specified
Dorsey Creek	Not Specified
Jarbidge River	Not Specified