The above assessments of eligibility and classification are provided as preliminary information. A congressionally authorized study is needed and required to determine these factors and provide the U.S. Congress with a recommendation on whether the South Fork is suitable for inclusion in the National Rivers System. A study of the river should involve all responsible land and resource managing agencies, private landowners and the public to arrive at a coordinated recommendation. BLM will communicate through the Director that the South Fork is considered an eligible candidate for addition to the National Rivers System and should have a study authorized by Congress.

CULTURAL RESOURCES

Bureau and Idaho State University archaeologists have inventoried 71,240 acres or 18.3% of Medicine Lodge Resource Area's public lands. About 9% was intensively inventoried (Class III standards). Inventories discovered and recorded 165 prehistoric sites. Site types include surface lithic scatters, quarries or other lithic materials sources, rock shelters, rock alignments (rock walls, rock circles and talus pit hunting blinds), rock art (pictographs and petroglyphs) and kill/butchering sites.

Prehistoric human groups have used the planning area for about 12,000 years. Archaeologists have recovered Paleo-Indian cultural materials from the Wasden Site. Archaic (5000 B.C. - 1200 A.D.) and late Archaic Period (1200-1850 A.D.) sites have been documented in every management area. Shoshone-Bannock, Blackfeet, Gros Ventre and Nez Perce used some cultural resource sites into the late 1800's.

One site has been listed on the National Register of Historic Places. The Wasden Site is a group of three lava-tube rockshelters. Ten thousand year old extinct elephant and camel remains were removed from one cave. An 8,000 year old bison herd kill was excavated in a higher level. Later Archaic period material was also found here. The site is located on private land but it is surrounded by public land and should merit planning consideration. Other planning area sites may be eligible for nomination, but require more evaluation. There are 15 sites with high archaeological data potential. Forty-five sites have medium potential and 95 have low potential. Medicine Lodge occupies a key position in the Eastern Snake River Plain. Opportunities are present for considerable cultural-ecological research, and overall archaeological research potential is high.

There are 25 historic sites on public lands in the planning area. No sites have been listed on the National Register of Historic Places. One site has been nominated and other sites appear eligible. Additional site evaluation is required. Historic sites are related to exploration, fur trade, transportation, ranching, logging, and homesteading. Site types include historic trails and wagon roads, cabins, sawmill sites, CCC fences, homesteads, sheep camps, stage stations, railroad service facilities, townsites, cemetaries, graves, and battlefields.

FIRE MANAGEMENT

Since 1971, there have been 198 wildfires controlled by the BLM in the Resource Area (see Table 3-4). These have burned a total of 37,881 acres. For the planning area, there are about 15 fires per year with an average size

of 100 acres. More complex fires called project fires require special measures and several days to control. A project fire occurs in the planning area about every four or five years. In 1981 there were three large project wildfires, the Meyers fire, 10,240 acres; Indian Creek fire, 10,460 acres; and the Morgan fire, which burned 37,700 acres, and an additional 13,800 acres from a breakout. About 18% of the wildfires are caused by lightning and the balance are man-caused by actions such as debris burning, railroads, equipment use, and intentional burning or arson.

TABLE 3-4
Fire Occurances in Medicine Lodge Resource Area
1971-1984

County	Number of Fires	Acres 1/ Burned	Lightning Caused
Bonneville	19	1,018	4
Clark	54	11,515	19
Fremont	69	9,275	8
Jefferson	47	15,169	4
Madison	6	733	1
Teton	3	171	0
Totals	198	37,881	36

1/ Excludes the Indian Creek, Morgan and Meyers fires.

At the present time, the planning area is identified for full fire suppression activities. Restrictions include no heavy equipment use in the active sand dune areas (Sand Mountain vicinity), Menan Butte and South Fork of the Snake River. Prescribed fire has been used as a management tool in the resource area.

Aerial retardant use is restricted in the South Fork of the Snake River and Teton River. Due to rough terrain and numerous lava tubes, there are no night fire suppression activities in the area north of the Junipers and south of Pine Butte.

ECONOMIC CONDITIONS

This description of the local economy is divided into a general description of the overall income and employment levels and more complete descriptions of those industries which will be impacted by the alternatives.

A. General Description

This RMP covers all or parts of six counties (Bonneville, Clark, Fremont, Jefferson, Madison, Teton). Due to its large economic activity (relative to the other counties) Bonneville County has been excluded from description of the local economy. The economic activity generated by public land in Bonneville County has been included.

I. Income

The total personal income in the 5-county area was $341.6 million in 1981 (BEA 1983). This is based on earnings of $217.4 million and adjustments for contributions for social insurance, place of residence, dividends, rents, and transfer payments of $124.3 million. Agriculture was the number one industry with 27 percent of total earnings. Services was second at 16 percent of total earnings.

II. Employment

Total employment in the 5-county area was 17,933 in 1981 (BEA 1983). Agriculture is the top employer with 25 percent of total employment, with state and local government second with 13 percent and services third with 10 percent of the total employment.

III. Multipliers

When changes occur in one sector of a local economy changes also occur in other sectors. This is due to the interrelated nature of the economy. These changes are measured through the use of multipliers. The multiplier is a single number that summarizes the total direct and indirect spending effects of a given change in the local economy. Multipliers tell an analyst how large an impact on the entire local economy will occur as a result of a change in one sector. The U.S. Water Resources Council published Gross Output Multipliers for Bureau of Economic Analysis Economic Areas in January of 1977. The economic area that includes the study area is Area 152. This includes almost all of southeast Idaho and parts of western Wyoming. These multipliers (see Appendix H) indicate that the sectors in the local economy that would lead to the greatest changes in other sectors would be the meat animals and meat products sectors. In addition to multipliers, output must be converted to earnings in order to estimate economic impact. This is done through the use of earnings/gross output ratios. These ratios will be used in Chapter 4 to estimate the impacts on the various local industries. These ratios are shown in the Appendix.

B. Specific Descriptions

This section provides more in-depth descriptions of the livestock and recreation industries.

I. Livestock

The number of cattle and calves in the 5-county area is approximately 155,000. Of this amount, it is estimated that 25,000 are dairy cattle and 130,000 are beef cattle. There are approximately 73,000 sheep and lambs (USDA 1980). Ranch budgets prepared for other planning efforts in the state (for sheep) and eastern Idaho (for cattle) indicate that an AUM generates $20.27 in sales for cattle operations and $27.63 in sales for sheep operations (USDI, BLM. 1977, 1980, 1981, 1982, 1983). Utilizing the gross output multipliers and earnings/gross output

ratios, these sales figures were converted to direct and indirect income of $12.63/AUM for cattle and $17.22/AUM for sheep. Approximately 1,560,000 cattle AUMs and 175,200 sheep AUMs would be required to maintain the 5-county area's inventory of cattle and sheep. Total direct income due to the livestock (beef cattle and sheep) industry would be $8.9 million. This would represent 15% of total farm income. Total income (direct and indirect) due to the livestock industry would be $22.7 million or 10% fo the total 5 county income.

Permittees who use public lands in the Medicine Lodge RMP area own about 55,000 cattle and 81,000 sheep. This represents 42% of the 5-county cattle inventory and over 100% of the sheep inventory.[1] This would translate into direct income of $4.6 million, which is 52% of the 5-county direct livestock income and 8% of the 5-county farm income. BLM grazing provides 61,000 cattle AUMs and 27,000 sheep AUMs. This represents 9% and 14% respectively of the permittees' total needs. The BLM AUMs represent direct income of $487,300, which represents 11% of the permittees' total income, and 6% of the 5-county direct livestock income. The permittees in the Medicine Lodge RMP were split into six size groups to determine whether one group is more, or less, dependent on BLM grazing. The data indicates that dependency is fairly uniform and does not vary much from group to group. The largest sheep group is the most dependent at 15% of total needs and the largest cattle group is least dependent at 10%. All other groups fall between these two. Based on employment/earnings ratio it is estimated that in the farm sector of the 5-county economy there are 82 jobs per million dollars in earnings. This would mean that the 5 county livestock industry generates 730 direct jobs and 1,860 total jobs. Permittees generate 377 direct jobs and BLM AUMs generate 40 direct jobs.

As early as 1925 it was recognized that the annual value of the federal grazing privilege was being capitalized into rancher property. "It is argued that long use of the range in connection with the early settlement of agricultural lands has resulted in capitalizing the values of public pasturage as part of the value of the ranch..." (USDA 1925).

A report published by the Utah State University Experiment Station stated "There was nothing illegal or unethical in the fact that grazing permits took on value; ranchers just reacted to an economic situation that was created by government policy. Permit values rose because ranchers who have grazing permits were capturing economic rents in the form of low cost grazing; i.e., the grazing fee and recognized non-fee costs did not equal the value of the grazing to ranches. Thus, the authorization to use the federal lands and the associated economic rents were capitalized into rancher-owned assets. This value could show up either as a permit value or as an increased value of the commensurate property." (Nielson and Workman 1972)

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1. Permittees in the RMP area own more sheep than are in the 5-county area for basically two reasons: (1) The inclusion of Bonneville County in the permittee totals and its exclusion in the 5-county totals, and (2) Many sheep operations are somewhat nomadic, operating in one county but being based (and thus counted) in another.

The Bureau of Land Management's position on permit values is based on very explicit language in Section 3 of the Taylor Grazing Act of 1934, which states "So far as consistent with the purposes and provisions of this Act, grazing privileges recognized and acknowledged shall be adequately safeguarded, but the creation of a grazing district or the issuance of a permit purusant to the provisions of this Act shall not create any right, title, interest or state on or to the lands." Thus, any capitalized value associated with grazing permits has no legal basis, and as a result a rancher has no compensation for loss of this value.

Magazine articles and research results have often been in conflict on the subject of permit values. Nevada rancher Dean Rhoads, in an article in the New West Magazine, stated that "the forage right for a single cow on the public range now sells for anywhere from $1500 to $3000 in the Elko area." (Boly, 1980.) A survey done in New Mexico of ranch appraisers and credit officers placed the value of Forest Service permits at between $944 and $1163 per animal unit, depending on area, in New Mexico. Bureau of Land Management values varied from $677 to $888. (Fowler and Gray, 1980). On the other hand, a study in eastern Oregon found "the inclusion of public grazing privileges were found to have no significant impact on the level of private grazing land sale prices." (Winter and Whittaker, 1979.)

II. Recreation

Expenditures in the recreational activities of the region primarily impact the retail trade and services sectors of the local economy. The 1980 Survey of Hunting and Fishing (USFW 1980) data indicates that in destination type expenditures (meals, lodging, transportation, ammunition, land use fees, etc.) the retail trade sector is affected the most. Table 3-5 shows the direct impact of a dollar of recreation expenditure by type of activity.

Table 3-5
Distribution of Recreation Expenditures

Sector	Fishing	Big Game	Small Game	Migratory Birds	Other Hunting
Transportation	$ .01	$ .02	$ .00	$ .00	$ .00
Retail Trade	.95	.97	.99	.99	.99
Services	.04	.01	.01	.01	.01

A wide variety of recreational activities takes place on public lands in the RMP area. It is not possible to identify the amount of recreation activity that takes place within the Medicine Lodge RMP area. Also,expenditure data on activities other than hunting and fishing are not available. For these reasons, the remainder of this section will be limited to a discussion of the economic impacts of hunting and fishing in the 5-county region. The total 1980 fishing demand for the 5-county region was estimated at 750,000 activity occasions. The 1980 hunting demand was estimated at 392,000 activity occasions (Idaho Parks and

Recreation 1982). Data in the 1980 National Survey of Hunting and Fishing for Idaho identifies expenditures for hunting and fishing by type of expenditure. Destination type expenditures were $9.43/day for freshwater fishing and $12.24/day for all hunting. The definitions of an "activity occasion" and a "day" in the reports by the Idaho Department of Parks and Recreation and the U.S. Fish and Wildlife Service appear to be roughly the same (see Glossary). Thus, the values for expenditures per day have been directly applied to the number of activity occasions. Total fishing expenditures would amount to $7.1 million and hunting expenditures would amount to $4.8 million. The total (fishing and hunting) expenditures of $11.9 million would convert to income of $10.4 million, using the gross output multipliers and earning/gross output ratios for the retail trade industry. In order to compare this data (based on 1980 expenditures and use) to the 1981 income data, the income was inflated to 1981 values using the consumer price index. This made the 1981 hunting and fishing income equal to $11.4 million, or roughly 5% of the 5 county income.

III. Forestry

The Idaho Department of Employment estimated the 1981 RMP area timber employment at 354. Bureau of Economic Analysis data indicate that jobs in the manufacturing sector of the RMP area earn $13,700 each. This would make the total timber wages approximately $4,849,800. This level of earnings would be roughly 20% of the RMP area manufacturing income in 1981. Based on data in Rudeman (1982) and Schuster, et.al. (1976) it is estimated that this level of employment would be generated from the harvest of 40.3 MMBF. The Medicine Lodge RMP area provides roughly 0.5 MMBF per year (5 MMBF per decade) or 1 percent of the area's timber harvest.