SUMMARY

Clarks Fork of the Yellowstone
Wild and Scenic River Study

and

Final Environmental Statement
02-14-79 - 04

Legislative Action

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Abstract: This Environmental Impact Statement describes and evaluates five alternatives regarding possible inclusion of the Clarks Fork River in Wyoming in the National Wild and Scenic Rivers System. The free-flowing nature and scenic, recreational, and historic characteristics are described. The environmental, social, and economic effects of implementing each of the alternatives are described. The Forest Service preferred alternative, number 3, recommends Wild River designation for 21.5 miles. The rationale for this recommendation is shown.
SUMMARY

I. BRIEF DESCRIPTION OF THE PROPOSED ACTION: The study has concluded that the lower 22.5 miles of the 23-mile long study area on the Clarks Fork of the Yellowstone River is eligible for inclusion in the Wild and Scenic Rivers System under the Wild River classification. The recommendation is to include 21.5 miles of the study area in the Wild and Scenic Rivers System, excluding 0.5 miles of private land on the upstream end of the study area and one mile on the downstream end. Opportunities for construction of recreation facilities will be provided. The entire 21.5 miles would be classified as a Wild River.

This recommendation provides Congressionally designated protection of a highly scenic river, in keeping with the spirit and intent of the Wild and Scenic Rivers Act. At the same time, this recommendation provides opportunities for increasing the diversity of dispersed recreation along the river.

Major issues and concerns identified for the river area and the study process are as follows:

A. Further restrictions on public land in an area where much of the National Forest lands are now classified as wilderness.

B. Imposing constraints on a parcel of private land (scenic easements) in an area where there is very little private land, and in a state where only 17% of the total land area is in private ownership.

C. Foregoing further consideration of dams within the study area and reducing development potential for Wyoming's allocation of Clarks Fork River water.

D. Foregoing further consideration of extending Wyoming Highway #292 westward through the Clarks Fork River canyon.

No other Federal actions are discussed in this Environmental Statement.

II. ALTERNATIVES CONSIDERED:

A. Alternative 1. Continue the management in effect prior to the Wild and Scenic River Study and include construction of an overlook and one trail to the river. There would be no Wild and Scenic River recommendation under this alternative, thus allowing development along the river and placing minimal constraints on existing or potential uses. The primitive road in the mouth of the canyon would remain open without improvements.

B. Alternative 2. Recommend Wild and Scenic River designation for the lower 22.5 miles of the study area as a Wild River. Emphasis would be given to protection of the scenic and recreational values of the river, and to day-use recreation activities. A river overlook and two trails to the river would be constructed. Zoning ordinances or scenic easements would restrict development on a parcel of private land within the study area. The primitive road in the mouth of the canyon would remain open without improvements.

C. Alternative 3. Recommend Wild and Scenic River designation for 21.5 miles of the study area, excluding the private land at the lower end of the study area. The recommended status would be as a Wild River. Zoning ordinances on scenic easements would restrict development on the one remaining parcel of private land within this recommendation. Two overlooks and two trails to the river would be constructed. The primitive road in the mouth of the canyon would remain open without improvements. Day use recreation would be emphasized. This alternative is preferred by the Forest Service.

D. Alternative 4. Recommend Wild and Scenic River designation for the 21.5 miles of the study area, excluding the private land at the lower end of the study area. The western three-fourths of the area would be classified as a Wild River and the eastern one-fourth would be classified as a Scenic River. Zoning ordinances or scenic easements would restrict growth on the parcel of private land included in this recommendation. The road in the mouth of the canyon (the segment classified as Scenic) would be improved to a single lane, low speed gravel road with pullouts and a terminal parking facility. An eight unit picnic area would be constructed near the canyon mouth. Two canyon overlooks and two trails to the river would be constructed. Day use recreation activities would be emphasized.
E. Alternative 5. Recommend Wild designation for 21.5 miles of the study area excluding the private land at the lower end. Zoning ordinances or scenic easements would restrict development on a parcel of private land within the study area. The road in the mouth of the canyon would be improved to a single lane, low speed gravel road with pullouts and a terminal parking facility. Two canyon overlooks and two trails to the river would be constructed. Day use recreation activities would be emphasized.

No economic development alternatives are considered due to the lack of documented needs or opportunities within the study area, and in light of feasibility, cost effectiveness, and public input.

III. SUMMARY OF ENVIRONMENTAL EFFECTS: Construction of trails and overlooks will impose minor modification on the natural environment. Increased use of these recreation facilities will cause minor soil compaction and vegetative alterations on small areas. Recreation use will also increase as a result of the classification as a Wild and Scenic River.

Increased recreation use will provide opportunities for development on private lands not included within the area recommended for classification. Zoning ordinances or a scenic easement will reduce development potential on a parcel of private land within the classified area.

IV. CONSULTATION WITH OTHERS: Public input meetings were held on July 10 and September 11, 1978 at Powell, Wyoming, with a total of 31 people attending. Several newspaper articles during all phases of the study were run in local and state newspapers. In addition, several magazine articles concerning the study were published and considerable local radio coverage was given to the study. Slide talks and presentations were made before twelve groups and organizations with a total attendance of about 400 people. All landowners and several individuals knowledgeable about the study area were consulted. All of these contacts provided input to the planning process.

Specific information has been provided by the Bureau of Land Management, Water and Power Resources Service, Department of Energy, Department of Army, Wyoming State Archeologist, Wyoming Highway Department, Wyoming Game and Fish Department, and Wyoming State Engineer.

One hundred and ninety copies of the Draft Environmental Statement were distributed and comments were received from the following:

Federal Agencies
U.S. Dept. of the Interior, Regional Environmental Officer
Advisory Council on Historic Preservation
Soil Conservation Service
Federal Energy Regulatory Commission
Department of Army
Department of Commerce
Department of Housing and Urban Development

Wyoming State Agencies
Game and Fish Department
State Planning Coordinator
Wyoming Governor, Ed Herschler

Park County Wyoming
Chairman, Board of Park County Commissioners
Park County Planning Coordinator
Water Commissioner

Organizations
Shoshone and Heart Mountain Irrigation Districts
Sierra Club, Northern Great Plains Office
Sierra Club, Wyoming Chapter
Powell Area League of Women Voters
Friends of the Earth, Northern Great Plains Representative
Wildlife Management Institute
Federal Timber Purchasers Association
Trout Unlimited, Colorado Council
Trout Unlimited
Public Lands Institute
Shoshone River Water Users Association
Russell Faus
Dr. Gary Sturmer
Lynne Bama
Patti Bugas Harris
James E. Nielsen
Howard E. Sparhawk
Steve J. Sparhawk
Dr. Frank J. Sparhawk
John S. Bugas
Garnett L. Cary
Florence J. Higgins
Nancy Lissawai
Craig Willcox
Ruth Palmer
Lois S. Jones
Mark Pearson
Wesley G. Oliver
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Jon M. McMillan, M.D.
Dolores Fraker
Don Fraker
Richard W. Heessler, Jr.
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Leonard E. Anderson
Dee Oudin
Stanley Biesemeier
Nancy E. Stearns
Bern Hinckley
R. A. Stearns
Ginger Bowen
Marjorie A. Ford
Vera S. Ford
Beverly DeVore
William Powell
Ella Powell
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Walter Teichert
Buzzy Hassrich
Fred G. McGee
Charles S. Mueller
Elaine B. Mueller
Audrey M. Wilde
Ray E. Wilde
Robert J. Pike
Dale Pike
Lee Stearns
Cara Stearns
Suzanne F. Capstick
James R. Stebren
Lin Copeland Burke
Polly P. Copeland
Anne Model
John R. Strong
Mrs. John R. Strong
Norman P. Dodd
Meredith Taylor
Brad Donovan
Melvin C. McGee
Don Miller
Jo Miller
Margaret Boree
William H. Dunn
Anna Jane Dunn
Dewitt Dominick, M.D.
Elizabeth P. Dominick
Donald J. Gibbs
Joseph C. Schott
William C. Rhoads
Martie Crane
Irene B. Smith
Dr. William G. Pierce
May Bell Pierce
Jack Richard
David A. Larson
Cindy A. Albright
Paul J. Seronko
O. S. Farmer
Kerry Powers
Robert L. Lebruska
Thomas A. Gustafson
Claire M. Smith
Arthur J. Eck
Darrell L. Anderson
Blanche Keller
Sally Stimp
Charles R. Neal
W. E. Crane, Jr.
Kate P. Neal
Kermit W. Olson
Becky S. Robinson
Doug Brandt
Beth Becker
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I. INTRODUCTION

A. The Study

The Clarks Fork of the Yellowstone Wild and Scenic River Study was being conducted in direct response to a 1975 Amendment to the Wild and Scenic Rivers Act (P.L. 93-621 and P.L. 90-542, respectively). The 1975 Amendment lists the Clarks Fork of the Yellowstone River, plus an additional 28 rivers or sections of rivers, to be studied for possible inclusion into the National Wild and Scenic Rivers System. Completion date for the study was October 2, 1979, at which time the study and recommendations should have been submitted to the Congress.

B. Study Objectives

Section 4.(a) of the Wild and Scenic Rivers Act directs the Secretary of Agriculture or the Secretary of Interior to report on the suitability or nonsuitability of selected rivers for addition to the National Wild and Scenic Rivers System. Furthermore Section 4.(a) directs the Secretaries to evaluate the existing and potential uses of the rivers and to recommend future management of the rivers. In accordance with directives from Section 4.(a), two objectives have been formulated for the Clarks Fork Wild and Scenic River Study:

1. Evaluate suitability of the Clarks Fork of the Yellowstone River for inclusion in the Wild and Scenic River System.

2. Recommend whether eligible segments of the river should be included as components of the National Wild and Scenic Rivers System.

C. Study Area Location

The Clarks Fork River originates in the Beartooth Mountains north of Cooke City, Montana, and is a major tributary of the Yellowstone River. The Clarks Fork of the Yellowstone River is named after William Clark of the Lewis and Clark Expedition. The river flows into Wyoming, carving a deep, narrow canyon which is the section included in the study area. The river then flows back into Montana to join the Yellowstone River near Laurel, Montana. Figure I shows the river in relation to major features. The entire study area is within Park County, Wyoming, and is approximately ninety minutes from Billings, Montana by automobile.

The study area as specified in Public Law 93-621 includes a 23-mile segment along the main stem of the Clarks Fork River from Crandall Bridge (locally referred to as the Clarks Fork Bridge), Section 4, T56N, R106W, downstream to the mouth of the Clarks Fork Canyon, one mile east of the Forest boundary (the line between Sections 7 and 8, T56N, R103W). Width of the study area is about one-half mile wide, approximating the canyon rim in the Upper and Middle canyons. Width of the study area in the Lower canyon is the width of the visible rim as viewed from the River, about one to two miles. Refer to Figure 2.

The boundaries of the study area were established by the study team on the basis of a statement in the National Park and Recreation Subcommittee, U.S. House of Representatives, Hearing Record, October 29 and 30, 1973, on H.R. 8501 which says, "The segment proposed for consideration, from Crandall Creek Bridge, downstream through the Clarks Fork Canyon, passes through rugged mountain country."
Figure 2. Clarks Fork of the Yellowstone River Study Area.
II. AFFECTED ENVIRONMENT

For brevity, the Clarks Fork of the Yellowstone River will be referred to as the Clarks Fork River throughout the remainder of this Final Environmental Statement.

A. River Segments

The area specified in P.L. 93-621 is considered as one unit throughout the study, but for descriptive purposes it is divided into three segments. These divisions are based on the physical characteristics of the canyon.

1. Upper Canyon. This segment runs from the Crandall Bridge downstream to Canyon Creek and is approximately eight miles long. It is characterized by slopes of 40 to 90 percent covered by stands of Douglas-fir, with some Engelmann spruce and lodgepole pine. Most of this segment has a well developed flood plain which supports stands of Englemann spruce.

   In the central portion of the Upper Canyon, the river is contained within a shallow, narrow canyon. The river gradient here is very steep for a short distance, resulting in several waterfalls, cascades, and rapids, most of which are impassable by boat or raft. However, most of the Upper Canyon has a gentle gradient. In places 500-foot granite cliffs contain the river and its immediate environment.

   Vehicular access is limited to the extreme upstream portion of this segment. There are two unimproved roads for high clearance vehicles which provide access to the confluence of Crandall Creek and the Clarks Fork River. The Lewis and Clark Trail (Forest Development Trail #628) parallels the river for the eastern two-thirds of this segment after dropping into the study area on the north side of the river. Although named for the Lewis and Clark Expedition, no part of the study area was crossed by the expedition. Several unconstructed trails and scrambling routes also provide access.

2. Middle Canyon. This segment runs downstream from the confluence of the Clarks Fork River and Canyon Creek for approximately eight miles. This segment is deeply incised into granite, with walls towering up to 1,200 feet vertically from the water's edge. The river drops very fast throughout this entire segment, forming several rapids, plunge pools, and waterfalls which preclude raft or boat use.

   Douglas-fir with limited shrub understory is confined to benches or narrow floodplains where some soil development has occurred.

   The Middle Canyon is accessible only by primitive nonconstructed trails or scrambling.

3. Lower Canyon. In the eastern segment of about seven miles the river character changes dramatically. The canyon opens to a half-mile wide "U" shaped glacial valley with canyon walls towering up 4,000 feet above the river. A combination of granite and overlying sedimentary rock form a very interesting and scenic geological display. There are a few rapids, but generally the river gradient is nearly flat in this segment.

   Vegetation on the canyon walls is limited to widely scattered Douglas-fir and grasses and forbs. Vegetation in the canyon bottom is typical of extremely dry sites which is unusual for mountain valleys in the Absaroka-Beartooth Area. Yucca and common junipers are the most noticeable species. Prolonged periods of high wind have prohibited the junipers from growing as trees, resulting in dense mats and mounds known as krummholz.

   Access through the Lower Canyon is provided by a primitive road which can be travelled with high clearance vehicles. This road enters the mouth of the canyon from the east, becoming a four-wheel drive route up the north side of the canyon and leaving the study area.

B. General Setting

The Clarks Fork River area is within the Shoshone National Forest which was established in 1908. The area was previously set aside from the Public Domain in 1891 as the Yellowstone Timber Land Reserve. Management questions have been addressed on a case-by-case basis within the framework of Multiple Use Guides for the Clarks Fork District prior to the Wild and Scenic River Study. General management direction has been toward maintenance of natural conditions in the study area.
The gradient of the Clarks Fork River within the Canyon is very steep, dropping over 100 feet per mile.
Because of the extremely rugged terrain and the lack of products sought by early Forest users, there has been very little development or use within the study area. There has been and is now some grazing of cattle in the Upper and Lower Canyons. Fires have occurred very infrequently, although some evidence in the form of vegetation patterns suggests past wildfires.

Scattered artifacts indicate that Indians travelled through but did not settle in the study area. The canyon or benches adjacent to it were traversed by early white explorers and used by Indians as travel routes. The most famous historical event in the area was a chase of the Nez Perce Indians, led by Chief Joseph, by the U.S. Cavalry. The Nez Perce eluded the Cavalry by slipping through a narrow gorge into the Clarks Fork Canyon. The exact escape route is not known.

Four homesteads were patented within the study area. Segment one contains three of the old homesteads, two are near the Crandall Bridge and are now subdivided and one is in the middle of the segment. The fourth homestead is in segment three at the mouth of the canyon. See Figure 2, page 3. No mineral development has occurred within the study area. Historically, the most frequent recreational use of the Clarks Fork River has been viewing scenery and fishing, with small amounts of hunting and camping.

There are no dams, diversions, or structures of any kind which alter the natural stream flow through the study area.

C. Legal Setting

The Clarks Fork River area is managed by the Forest Service as part of the Shoshone National Forest except for the small amount of private land included within and at either terminus of the study area, and a 40 acre tract of public land administered by the Bureau of Land Management. The BLM land is included with the Forest Service lands for simplicity throughout this environmental statement. Since the study area is primarily within the Shoshone National Forest, the Forest Service is the lead agency in conducting the study. The Water and Power Resources Service, Bureau of Land Management, Department of Energy, Missouri River Basin Commission, Wyoming Game and Fish Department, Wyoming Highway Department, and the Wyoming State Engineers Department-Planning Division were consulted during the study.

D. Socio-economic Setting

Scattered ranches and homesites occur near the periphery of the study area including Sunlight Basin, Crandall, and Clark. Most of the residential developments in the area are second homes, with a few guest ranches. The local economy is based on ranching and outfitting, with some logging and tourism. The larger surrounding communities of Cooke City and Red Lodge, Montana, and Powell and Cody, Wyoming, have primarily petroleum industry, ranching, farming and tourist related economies, with some industry. Yellowstone National Park, and the high mountain country of the Shoshone, Gallatin and Custer National Forests, are the primary tourist attractions.

The local economy is growing at a moderate rate. Exploration for minerals, particularly oil, gas, and coal, is active in the area and if mineral developments result there will be rapid social and economic change.

The local public interest in National Forest lands is quite high because the Forest provides a substantial part of local outdoor recreation needs.

Generally local interests favor a full range of uses with a minimum of constraints, rather than land classification which may preclude some existing or potential land uses.

E. Vegetation

Several distinct vegetative types occur within the study area, resulting from glacial and water formed topography.
Four riparian zones occur including (1) a broad, flat alluvial zone dominated by lodgepole pine, sagebrush and aspen; (2) an incised shallow gorge zone with only herbaceous vegetation; (3) a Middle Canyon Zone with isolated, narrow benches of Douglas fir, grass and shrubs; (4) a dry valley bottom zone with juniper, yucca, grass, and shrubs. Other associations include vegetation along small benches, cracks, and pockets in steep granitic walls, and shrub and grass on talus slopes and alluvial fans, all of which occupy very small areas and therefore have not been mapped or classified.

Lodgepole pine, aspen and sagebrush vegetation occur in glacial scoured granitic benches above the Middle Canyon.

F. Transportation

Access into the general area of the Clarks Fork River is good, although immediate access to the river is limited. Wyoming Highway #296 parallels the western two-thirds of the study area at a distance of one to two miles from the river. Wyoming Highway #292 provides access to the east end of the Lower Canyon, terminating approximately three-fourths of a mile inside the study area boundary. Forest Development Road #119 is a primitive road requiring the use of high clearance vehicles. There are two unimproved roads to the Upper Canyon along either side of Crandall Creek on Forest Service land which provide access to the confluence of Crandall Creek and the Clarks Fork River. Both of these roads also require the use of high clearance vehicles.

There is also a road from Wyoming #296 near Reef Creek Campground to private land known locally as the Wright Place in the canyon bottom. This is Forest Development Road #174 and is 0.77 miles long. The road is under a special use permit, with travel restricted to the current owner of the Wright Place.

The Lewis and Clark Trail #682 parallels the river for six miles in the Upper Section. Several other unconstructed trails and primitive scrambling routes provide access to various parts of the canyon.

All of these transportation routes are shown in Figure 2, page 3.

There are three general categories of vehicle users within and adjacent to the study area. The first group is comprised of those people living and working in the Clark, Cooke City, Crandall, and Sunlight Basin communities. The second group of travelers originate in the communities of Powell, Cody, Red Lodge, and Billings. These people travel into the area primarily for recreation activities. The third group includes people traveling through the general area on their way to or from the Beartooth Mountains or Yellowstone National Park. The Northeast Entrance to Yellowstone National Park is three miles west of Cooke City, Montana.

G. Recreation

Although the Clarks Fork Canyon is large and contains ample water flow to support a diversity of recreational activities, the rugged nature of the canyon and relatively poor immediate river access are currently limiting use. Traditional river-influenced recreational use such as floating, fishing, hunting, and camping are thus limited. The eastern six miles of the Clarks Fork Canyon, which is accessible by road, receives a majority of the dispersed motorized use and fishing use. The lightly used Upper Canyon and Middle Canyon can be reached by primitive roads, constructed and unconstructed trails, or scrambling. These primitive routes afford access to excellent fishing, outstanding scenery, and a number of unique and unusual environments such as waterfalls, cascades, extremely wet micro-environments, and narrow vertical canyon walls.

H. Range

Parts of four grazing allotments occur within the study area. One hundred ten animal use months (AUMs) \(^1\) of cattle grazing are produced within the study area, most of which occurs in the Upper Canyon. Overall, grazing use is minimal throughout the entire study area. Some over-utilization of forage occurs in small riparian zones, all of which can be corrected through improved management. No changes in amounts of types of grazing are expected to occur within the study area in the foreseeable future.

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\(^1\) The equivalent of one cow and calf grazing for 30 days.
Wyoming Highway #292 provides access to the Lower Section, terminating approximately 0.75 miles inside the study area boundary.
I. Timber

Most of the forested lands within the study area are rocky, steep, and of low productivity, and therefore are unsuitable for production of commercially valuable wood products. The Shoshone National Forest Timber Management Plan, approved May 20, 1976, classified all of the forested lands in the immediate environs of the Clarks Fork River study area as unregulated, which means that wood fiber produced by these lands is not scheduled for harvest and utilization. The only suitable forested lands on the basis of productivity and operability are located on the alluvial bottoms of the Upper Canyon. These lands are classified as unregulated because they are inaccessible and no plan exists to develop access to the area.

A very small timber sale was made in the early 1920's in the canyon bottom, downstream from the Wright Place. A portable sawmill was used to cut rough lumber for buildings, corrals, and fences on the homestead.

J. Water

The Clarks Fork River is a large stream, with an average annual yield of approximately 650,000 acre-feet of water 2/ at the mouth of the canyon. Average annual flow at the upper part of the study area is about 600 cubic feet per second (c.f.s.) and 900 c.f.s. at the canyon mouth. The highest recorded flow is 12,000 c.f.s. at the canyon mouth during the 1975 snowmelt runoff. The lowest recorded flow in very dry years is about 100 c.f.s. No straightening, riprapping, impoundment, or other flow modification occurs within the study area.

There is a total lack of extensive, dense vegetation within or adjacent to the study area. This fact, combined with relatively low precipitation, precludes any opportunity to manage the area for increased water yield.

Due to the rugged nature of the canyon and limited size of potential storage reservoirs, no economically feasible sites for water storage occur within the study area. The study area is included within Bureau of Reclamation and Department of Energy power sites withdrawals. The Clark's Fork Division of the Beartooth Project, which would develop hydroelectric power within the study area (four reservoirs, two power plants, several water conduits) was evaluated by the Bureau of Reclamation in the late 1950's (Bureau of Reclamation, 1959). A 1975 economic update of the project calculated a benefit:cost ratio of 0.47 to 1 (Appendix A).

The Clarks Fork River is unique in that only a small amount of the usable water is appropriated for use in Wyoming. The Yellowstone River Compact, which provides a basis for dividing Clarks Fork water between Wyoming and Montana, allows Wyoming to use 60 percent of the unused and unappropriated waters of the Clarks Fork River, at the time the compact was signed in 1950. For an average year, Wyoming's share is 429,000 acre-feet of which only 11,000 acre-feet or five percent is consumptively used (Missouri River Basin Commission, 1978). Storage will be necessary to effectively use Wyoming's allocation of the Clarks Fork water.

Two sites exist downstream of the study area which could be used to store water. The potential Lake Creek off-stream storage project (SCS, 1964) would provide 5,000 acre/feet of storage and serve the potential Cyclone Bar and Badger Basin watershed irrigation projects.

The Lake Creek project would divert 100 c.f.s. of water in Section 7, Township 56 North, Range 103 West, about one-half mile below the Forest Boundary and transmit the water through a canal and siphon to the Lake Creek Reservoir. The Lake Creek Project is summarized in Appendix C.

The Wyoming Water Planning Program (State Engineer's Office) studied a much larger Clarks Fork Reservoir (750,000 acre/feet) which could be constructed downstream of the study area (Wyoming State Engineer's Office, 1972, Missouri River Basin Commission, 1978). The objective of the project would be to provide storage in order for the State of Wyoming to develop its Clarks Fork compact water. The project would divert water to the Shoshone River for a wide range of municipal, industrial and agricultural uses. This would include irrigation water for Chapman and Kimball Benches, Polecat Bench, and Sage Creek Valley.

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2/ The equivalent of an acre of water one foot deep, or approximately 350,000 gallons.
Polecat Bench could also be irrigated from Buffalo Bill Reservoir on the Shoshone River. A more dependable supply of water for Polecat Bench could be guaranteed if Buffalo Bill Reservoir is enlarged (Missouri River Basin Commission, 1978).

The Clarks Fork Reservoir would back water about one and one-half miles into the study area. Three alternative plans for development of Clarks Fork Reservoir are described in detail in Appendix D.

The Yellowstone Level B study team (MRBC, 1978) concluded that the Clarks Fork Reservoir would not be necessary to provide storage water in Wyoming before the year 2000. The reservoir, however, does provide an opportunity to develop Wyoming's allocation of Clarks Fork water.

Water quality in the Clarks Fork River is excellent. The cold, clear water of the Clarks Fork, with a high oxygen concentration, low nutrients, low conductivity, and low fecal bacteria concentrations, has been designated as a Class 1 Stream by the State of Wyoming Department of Environmental Quality (Wyoming DEQ, 1978). The Class 1 designation does not allow measurable degradation of water quality below its existing quality by any point source discharges other than from dams.

Clarks Fork River water yield and water quality reports are included in the Clarks Fork Wild and Scenic River Eligibility Report, available at the Forest Supervisor's office.

K. Land Ownership and Use

The total land area within Park County, Wyoming, is distributed as shown in the following table.

<table>
<thead>
<tr>
<th>TABLE 1</th>
</tr>
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<tbody>
<tr>
<td>PERCENTAGE DISTRIBUTION OF LAND IN PARK COUNTY, WYOMING</td>
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<table>
<thead>
<tr>
<th>Ownership Type</th>
<th>Percent</th>
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<tbody>
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<td>Private ownership</td>
<td>17.8</td>
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<tr>
<td>Public ownership</td>
<td>3.6</td>
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<tr>
<td>State</td>
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<tr>
<td>Nonwilderness</td>
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<td>Yellowstone National Park</td>
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<td>Bureau of Land Management</td>
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</tr>
<tr>
<td>Water &amp; Power Resources Service</td>
<td>5.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

Of the total land area within 0.25 miles on each side of the Clarks Fork River within the study area, 94% is National Forest land. The tracts of private land and Bureau of Land Management land are shown in Figure 2.

Three parcels of private land occur within the study area. The upper 0.5 mile of the study area (106 acres) has been subdivided, with thirteen present owners. Several houses, cabins, and trailers have been constructed. A fifteen unit mobile camper park is planned for construction on the north side of the river, approximately 500 feet downstream from the Crandall Bridge.

A 136-acre ranch is located on the river below Reef Creek, about four miles downstream from the western end of the study area. This homestead, known locally as the Wright Place, is occupied by one owner. The land is occupied by a house, several barns and sheds, and is being used for the irrigated production of hay.

A 200-acre tract of private land at the eastern end of the study area is occupied by one owner. This land is in a natural undeveloped state except for a small dwelling near an access road by the river.
The western 0.5 miles of the study area adjacent to the Crandall Bridge is private land with homes, cabins, and trailers.
III. **Eligibility Determination and Classification Determination**

**A. Eligibility Criteria and Analysis**

The first objective of the Clarks Fork Wild and Scenic River Study is to determine if the river is eligible for inclusion in the National Wild and Scenic Rivers System. In order to make this determination, it is necessary to interpret Section 1.(b) of the Wild and Scenic Rivers Act (Public Law 90-542) which states that:

"It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations."

In order to evaluate the river, it was first necessary to determine whether or not the river is "outstandingly remarkable." Eligibility criteria were written to reflect the intent of the Wild and Scenic Rivers Act as it applies to streams of the Absaroka-Beartooth Mountains, an area which includes the Clarks Fork River. These criteria are definitions of the terms "outstandingly remarkable" scenic, recreational, geologic, fish and wildlife, historic, and cultural values.

Because this evaluation can be highly subjective, the evaluation criteria were reviewed and modified at a public workshop. The accepted criteria are as follow:

1. **Scenic value:** The area contains a high variety of landforms, vegetative patterns, and waterforms which possess unusual or distinctive characteristics not common to the general area.

2. **Recreational value:** The area provides either a high potential capacity for at least one water-influenced recreation opportunity or a diversity of exceptionally high quality water-influenced recreation opportunities.

3. **Geologic value:** The area displays individual or a combination of unique or unusual geologic features, or provides evidence of geologic processes which are unique or unusual in character.

4. **Fish and wildlife values:** The area provides exceptionally high quality habitat which contributes significantly to the requirements of large or diverse populations and/or contributes significantly to the habitat of high interest species of fish and wildlife.

5. **Historic value:** Historical events of regional or national interest have occurred within the area and/or the area contains physical remains of historical events of regional or national significance.

6. **Cultural value:** The area contains scientific, paleontological, archeological, or cultural resources of regional or national interest.

In addition to the six criteria written in response to the Wild and Scenic Rivers Act, there are four criteria contained in the "Guidelines for Evaluating Wild, Scenic, and Recreational River Areas..." written by the U.S. Department of Agriculture and the Interior in 1970. They are:

7. **Free-flowing River:** The river must be in a free-flowing, natural condition.

8. **Meaningful Experience Opportunity:** The river must be long enough to provide a meaningful experience.

9. **Water Volume:** The river should contain sufficient water volume to permit, during the recreation season, full enjoyment of water-related outdoor recreation activities generally associated with comparable rivers.

10. **Water Quality:** Water quality should meet the criteria for fish, other aquatic life, and wildlife as defined in the chapter on Aesthetics - General Criteria of Water Quality Criteria, Federal Water Pollution Control Administration, April 1, 1968.
The application of these criteria to the Clarks Fork River during the eligibility phase of the study (May-July, 1978), led the study team to a determination that the entire study segment was eligible for inclusion in the National Wild and Scenic Rivers System. To quote from the Draft Environmental Statement:

"The application of these criteria to the Clarks Fork River has led the study team to a determination that the entire segment is eligible for inclusion in the National Wild and Scenic Rivers System. The Clarks Fork River meets three of the eligibility criteria for "outstandingly remarkable" values and also meets the four additional criteria. Table 2 is an analysis of the criteria as they apply to the Clarks Fork Study Segment.

TABLE 2

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Criteria Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenic Value</td>
<td>Yes</td>
</tr>
<tr>
<td>Recreational Value</td>
<td>Yes</td>
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<td>No</td>
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</tr>
<tr>
<td>Free-flowing River</td>
<td>Yes</td>
</tr>
<tr>
<td>Meaningful Experience Opportunity</td>
<td>Yes</td>
</tr>
<tr>
<td>Water Volume</td>
<td>Yes</td>
</tr>
<tr>
<td>Water Quality</td>
<td>Yes</td>
</tr>
</tbody>
</table>

The study team re-evaluated the eligibility of the upper 0.5 mile of the study area (just downstream from the Crandall Bridge) in response to public input to the Draft Environmental Statement. Several response letters questioned the eligibility of this section. As a result of the re-evaluation, the study team concluded that this section does not have any "outstandingly remarkable" values and thus does not meet the eligibility criteria.

1. **Scenic value:** The lower 22.5 miles of the study area possesses "outstandingly remarkable" scenic value. Evaluation of scenic qualities using the Forest Service Visual Management System concluded that the lower 22.5 miles of the Clarks Fork River and visual surroundings classified as Variety Class A. This means scenic qualities of the landforms and waterforms within the Upper, Middle, and Lower Canyons, is of a tumultuous whitewater nature, broken occasionally by deep, slick water pools. The river and surrounding canyon area typify the rugged beauty of western landscapes.

The upper 0.5 mile of the study area, which is just upstream of the Upper Canyon, does not meet the scenic value criteria. This section does not contain landform, vegetative, or waterform characteristics which are unusual or distinctive and not common to the general area.

The upper 0.5 mile has a fairly gentle river gradient as the Clarks Fork River flows through sagebrush grassland with a few riparian conifer trees (page 11). This section, which is entirely in private ownership, has been subdivided with considerable development within sight of and adjacent to the River. Average lot size is 0.2 acres. The development consists of nine houses, and 17 trailers, with associated outbuildings, power lines, TV antennas, fences, gravel road system, and private vehicles. A six-acre gravel pit occurs just north of the river. In addition, this section is entirely within view of the Crandall Bridge along Highway 296 and 14 houses west of Highway 296. These developments and associated activities have significantly changed the visual character of this segment, particularly where compared with the rest of the study area. Although the upper 0.5 mile is visually pleasant, the scenic value is of a different nature, judged not to be of an "outstandingly remarkable" nature as is the rest of the study area.

2. **Recreational value:** The "outstandingly remarkable" recreational value criteria is met by the lower 22.5 miles of the Clarks Fork River. Although traditional forms of water-based recreation (floating, fishing, swimming) are somewhat limited by rugged access, the canyon provides high potential capacity for two water influenced recreation opportunities: (1) viewing scenery and (2) enjoying unique and unusual environments such as waterforms (waterfalls, rapids, cascades), wet micro-environments, narrow canyon walls, boulder flood plains, and wind-blown juniper krummholz.
Vertical canyon walls, up to 1200 feet high, contribute significantly to the distinctive scenery in the Inner Gorge.
Sunlight Falls, located where Sunlight Creek cascades into the Clarks Fork River, dominates human presence with its sheer power and force. Spray from the falls creates a moist environment of saturated soils and water loving plants.
The upper 0.5 mile of the study area does not have a high potential capacity for any water-influenced recreation opportunity. This section does not have the “outstandingly remarkable” scenery or unique and unusual environments of the Upper, Middle, and Lower Canyons. The upper 0.5 mile does not offer a diversity of recreational opportunities. Public access is currently prohibited by private ownership of this section. Barbed wire fencing runs to the waters’ edge in several places and serves as an impediment to shoreline travel. Even if public access rights were acquired along the river, existing developments on the private lands (houses, trailers, bridge, power lines) would dominate the experience of a person engaged in water-influenced recreation opportunities. Based on the above, the upper 0.5 mile does not possess “outstandingly remarkable” recreation value.

The upper 0.5 mile is not used, nor is it necessary for public access to the Clarks Fork River. Two unimproved roads, entirely on National Forest, provide access to the confluence of Crandall Creek and the Clarks Fork River. In addition, a Forest Trail provides foot and horse access to the north bank of the Upper Canyon (see Figure 2, page 3).

3. Geologic value: Although the Clarks Fork Canyon affords an interesting geologic display, the geological values are not considered “outstanding remarkable.” The Clarks Fork Canyon, particularly the Lower Section, has a spectacular display of rock formations (Precambrian granite and Paleozoic sedimentary forms) and geologic processes (high angle uplifting and glaciation). These geologic characteristics, however, are quite common to the area and do not display unique or unusual geologic features or provide evidence of geologic processes which are unique or unusual in character. In this regard, a distinction was made between geology and scenery. Although geologically common, these characteristics contribute significantly to the outstanding scenery.

4. Fish and wildlife values: Wildlife values of the Clarks Fork River do not meet the “outstandingly remarkable” criteria. The Clarks Fork Canyon is intermittently occupied by a large variety of high interest species of fish and wildlife such as grizzly bears, Rocky Mountain goats, elk, many species of raptors, and Yellowstone cutthroat trout. However, the study area does not provide exceptionally high quality habitat which contributes significantly to the requirements of these animals. Habitat for the grizzly bear (a threatened species), as identified by the Shoshone National Forest, includes the western six miles of the study area on the north side of the Clarks Fork River. Grizzly bear habitat in the greater Yellowstone area, including the Upper Section of the Clarks Fork River, is being considered by the U.S. Fish and Wildlife Service for designation as Critical Habitat under the authority of the Rare and Endangered Species Act. Downstream of the Upper Section, the canyon becomes too dry and rugged for grizzly bears. This is the only known threatened or endangered species within or adjacent to the study area.

Although the river provides good habitat for Yellowstone cutthroat trout, it is not considered exceptionally high quality fish habitat. It is limited by a poor pool-riffle ratio due to the steep gradient, and the high sediment discharge from tributary streams which flow through erosive Absaroka volcanic soils. This Yellowstone cutthroat fishery, however, is one of the few remaining pure Yellowstone cutthroat trout habitats.

5. Historic value: The middle and Lower Canyons have “outstandingly remarkable” historical value because of an event of nationwide interest. In 1877, Chief Joseph and the Nez Perce Indians eluded the U.S. Cavalry in a 1,200 mile chase from Oregon to Montana. By slipping through a narrow chasm (tentatively identified as Dead Indian Gulch) and out of the mouth of the Clarks Fork Canyon, the Nez Perce escaped by a route believed to be impassable, thus avoiding a Cavalry detachment waiting for them on the plains to the east. The exact route taken by the Nez Perce is unknown. The upper 0.5 mile does not have “outstandingly remarkable” historical value as no known historical events of regional or national interest, including the 1877 Chief Joseph event, occurred along this segment.

6. Cultural value: The study area does not meet the criteria for “outstandingly remarkable” cultural value. The study area does not contain known cultural resources of greater than local interest.

7. Free-flowing river: There are no impoundments, structures, or diversions within the study area. Therefore, the river is free-flowing throughout.
8. Meaningful experience opportunity: The portion of the Clarks Fork River under study provides a variety of meaningful experiences, as identified in the discussions of scenery, recreation, and history.

9. Water volume: The average river flow is approximately 900 cubic feet per second (c.f.s.) varying between 7,000 c.f.s. and 200 c.f.s. during a normal year. This is a sufficient volume of water to permit full enjoyment of water-related outdoor recreation activities.

10. Water quality: Water quality of the Clarks Fork River is very high, meeting or exceeding all requirements in "Aesthetics-General Criteria" in Water Quality Criteria, Federal Water Pollution Control Administration, April 1, 1968.

In summary, the lower 22.5 miles of the study area is eligible for inclusion into the National Wild and Scenic Rivers System. It possesses "outstandingly remarkable" scenic, recreational, and historic values and meets other eligibility criteria (USDA, USDI, 1970). The upper 0.5 mile is not eligible for inclusion in the system as it does not have any "outstandingly remarkable" values.

B. Classification

In addition to determining eligibility, the study team concluded that except for the western 0.5 mile, the entire study area is suitable for wild river classification. This determination is based primarily on the degree of development along the shoreline of the river.

The Wild and Scenic Rivers Act provides three classes of rivers in the National System and defines them as follows:

1. Wild river areas--Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

2. Scenic river areas--Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

3. Recreational river areas--Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

These are the criteria by which the Clarks Fork was judged. The following analysis indicates how a wild classification for the river was determined.

The one-half mile of private land immediately east of the Crandall Bridge has six houses and nine trailers near the river on the south shore, and three houses and eight trailers on the north side, with the associated outbuildings, TV antennas, power lines, gravel road system, and vehicles. This section is not suitable for designation. A few other developments occur within the study area which, in the judgment of the study team, are of insufficient magnitude to compromise the potential "wild" status of the river.

Private land along the Clarks Fork River near the confluence with Reef Creek (the Wright Place) has cultivated hay fields, buildings, and a private four-wheel drive access road. These developments are well screened from the river. Two cables spanning the river are used to support small platforms on wheels which provide access across the river when it is too deep to ford. A powerline and a telephone serve the ranch. All of these cables and lines are minor features within the surrounding landscape.

The eastern end of the study area is accessible via Wyoming #292 (a paved highway). The eastern six miles of the Lower Section are accessible via Forest Development Road #119, a road suitable only for high clearance vehicles. For most of the distance, FDR #119 cannot be seen from the river. The road climbs out of the canyon as a very narrow four-wheel drive trail which provides access to the Switchback Ranch, above and out of the study area. The switchbacks are not visible from the river directly below, although they can be seen from the river downstream. The road and switchbacks have low visual impact and do little to detract from the "wild" status of the Lower Section.
IV. CRITERIA FOR EVALUATING ALTERNATIVES

These criteria are in the form of standards or tests which are used to select a preferred alternative for future management of the Clarks Fork River. They must be specific enough to determine the degree to which they can be met by the alternatives, yet they must contain enough flexibility for minor changes in policy or needs. The evaluation criteria are derived from laws, regulations, and policies that apply to the Forest Service management of public lands. The evaluation criteria also reflect the capability of the study area to produce outputs demanded from it by the public.

Evaluation criteria for selecting a preferred alternative for the Clarks Fork River are as follows: The criteria are grouped by priority, with the most important criteria in the first group and the least important criteria in the last group.

1. Protect or enhance scenic, recreational, and historic values.
2. Give high priority to maintaining the free-flowing conditions of the Clarks Fork River.
3. Generate outputs consistent with issues and concerns identified through public involvement.
4. Provide additional opportunities for dispersed primitive recreation in the Upper and Middle Canyon and more opportunity for dispersed motorized recreation in the Lower Canyon.
5. Maintain or enhance opportunities for development of recreation facilities by private land owners.
6. Maintain or improve diversity of the local economic structure.
7. Construct environmentally sound, cost-effective developed recreation facilities which do not conflict with non-Forest Service developments.
8. Provide on-Forest water storage only when increases in water use effectiveness are commensurate with benefits foregone.
9. Maintain opportunities for mineral discovery and extraction.
Primitive trails and rock scrambling routes provide the only access to the middle canyon's tumultuous whitewater.
V. ALTERNATIVES

A. Alternative Formulation

Eligibility re-evaluation of the upper 0.5 mile, in response to public input which was received on the Draft Environmental Statement, concluded that this section was not eligible for inclusion in the Wild and Scenic River System. The alternatives presented below are modified from those presented in the DES released in June, 1979 to reflect this change.

Several basic considerations were used by the study team during the formulation of alternatives. These define the opportunities and constraints appropriate for this planning situation. This process eliminates alternatives which have no potential for serious consideration, and at the same time promotes the development of sound alternatives which can provide long-term solutions to problems.

The considerations are:

1. Feasibility. The alternatives must be within Forest Service authority, and must be achievable and manageable.
2. Cost effectiveness. For the foreseeable future, benefits must outweigh costs, or expenditures must be commensurate with qualitative benefits, such as recreation opportunities provided.
3. Uniqueness. Each alternative must offer a distinctive choice; alternatives should not be variations of one theme.
4. Land capability. Alternatives must be within the land's inherent capability to produce the expected outputs.
5. Implementation of alternatives must be within the capability of the various levels of government and nongovernment interests involved in the decision.
6. One or more of the alternatives should reflect the position of the State of Wyoming.
7. All alternatives should provide opportunities to manage grizzly bear habitat consistent with grizzly management guidelines used on the Shoshone National Forest.

Because decisions made in this study affect water development and uses and other related land uses, the Water Resources Council's Principles and Standards for Planning Water and Related Land Resources were used to formulate and evaluate alternatives.

In brief, the Principles and Standards require formulation of plans serving co-equal national objectives called National Economic Development (NED) and Environmental Quality (EQ). Once established, the alternatives are analyzed and their effects are displayed in an accounting matrix that considers regional economics and social well-being as well as environmental quality and national economics.

A so-called no action alternative is also formulated to provide a baseline for comparison of effects of all alternatives. No action does not mean that planned management is absent; to the contrary, it is the deliberate continuation of the current management and existing plans into the future. Under no action, the river would not be designated as a wild and scenic river component since that would be a departure from the current management. Similarly, no major investments for economic benefit would be made unless they are currently planned.

Two conditions underlie the formulation of an NED Alternative. First, there must be a need for economically measurable goods and services of a resource and, second, the planning agencies must be able to implement actions that satisfy the needs.

Chapter II described the social and economic character of the region that includes the Clarks Fork River. Tourism and ranching are the mainstays of the economy. The national economy, as characterized by an NED Alternative, could be enhanced by increased or more efficient production of several commodities. Minerals, timber, livestock, grazing, water for irrigation or hydroelectric power, and recreation at developed sites could all be considered as logical components of an NED Alternative. However, the second requirement of action to achieve increased production of these components is lacking. Timber production in the canyon is infeasible because of low productivity and inaccessibility.

Livestock grazing is currently at greatest desirable levels and no increases can be made. Mineral exploration, though active in the Region, has not disclosed deposits of economic value in the study area. Developed recreation needs are increasing, but the topography and lack of suitable sites precludes large scale developments in excess of that now planned.

Although several potential water development projects have been considered by various entities, none have economic characteristics favorable enough for firm project proposal at this time. It appears that most water benefits can currently be obtained from other sources at lower cost.
Figure 3. Alternatives for the Clarks Fork Wild and Scenic River Study
From this analysis, the study team concluded that no viable NED Alternative exists. The no
action alternative serves the NED objective best by keeping development options open and
continuing the present level and trend of recreation development.

Several Environmental Quality alternatives are possible. They vary chiefly in the proposed
treatment of privately owned lands. The EQ alternatives are based on the need for protection
of the free-flowing nature of the Clarks Fork River and protection or enhancement of out-
standingly remarkable scenic, recreational, and historic values. These needs can be met in
varying degrees, by designation of all or part of the Clarks Fork River segments under
study.

The alternatives are:

Alternative 1. Alternative 1 is a continuation of management in effect prior to the 1975
Wild and Scenic Rivers Act amendment which required this study. The river, its immediate
environs, and current land uses would remain essentially unchanged. This alternate includes
construction of a river overlook and one trail to the river. Future options to provide
additional facilities would remain open.

Under this alternative, decisions for management would rest with the Forest Supervisor and
District Ranger, in accordance with current delegated authority. This alternative would
allow development along the river and would place minimal constraints on existing uses and
activities in the short-term. The temporary mineral entry withdrawal imposed by P.L. 93-621
would be lifted. This alternative would not preclude construction of the Clarks Fork Division
of the Beartooth Project as outlined in Appendices A and B.

Opportunities for dispersed, primitive recreation would be enhanced with construction of one
trail to the river and a river overlook (accessible by a short trail).

Future management would be directed and controlled under the Forest Land and Resource
Management Plan, to be written in 1981, and environmental assessments of individual proposals.

Alternative 2. Under this alternative, the lower 22.5 miles of the study area containing
about 7100 acres, would be recommended for classification as a Wild River from the Forest
boundary one-half mile below the Crandall Bridge downstream to a point one mile east of the
Forest boundary (the entire study area).

Management of the river under this alternative would give primary emphasis to protection of
the scenic and recreational values of the river. This alternative would preclude the
construction of the Clarks Fork Division of the Beartooth Project reservoirs or any other
reservoirs on the designated river segment. Water developments above or below the designated
component river which would directly and adversely affect the free-flowing river values
could also be precluded or modified. (Wild and Scenic Rivers Act, P.L. 90-542, Section
7(a)). A mineral withdrawal one-fourth mile wide on each side of the river would be
continued (Wild and Scenic Rivers Act, P.L. 90-542, Section 9(a) iii). Opportunities for
dispersed, primitive recreation would be enhanced with construction of two trails to the
river, and river overlook (accessible by a short trail). An overlook along Wyoming #296
would be constructed to allow travelers to view the Clarks Fork Canyon (Figure 3). Vehicular
travel over the existing primitive road in the Lower Canyon would be permitted to continue
although the road would not be improved. There would be no recreation developments in the
Lower Canyon.

Alternative 2 includes some constraints on the development of the 136-acre parcel of private
land below Reef Creek, about four miles downstream from the Crandall Bridge, and the 200-acre
tract of private land at the eastern end of the study area. The intent is not to change
present private land use, but to prevent commercial encroachments, structures such as bill-
boards, large, multi-family residences right on the river, and other changes in historical
use patterns.

These constraints could be the form of State, county, or local zoning ordinances, or in the
form of scenic easements 1/ acquired by the Federal Government on the 336 acres of private
land.

1/ "Scenic easement" is a purchase of development rights from private landowners in order to retain
the scenic qualities of an area. Scenic easement means the right to control the use of land (including
the air space above such land) within the authorized boundaries of a component of the Wild and Scenic
Rivers System, for the purpose of protecting the natural qualities of a designated wild, scenic, or
recreational river area, but such control shall not affect without the owner's consent, any regular
use exercised prior to the acquisition of the easement (Sec. 15, Wild and Scenic Rivers Act). Some of
the most successful scenic easement programs have preserved pastoral areas along highways, thereby
maintaining the historical land use and associated scenic values, while compensating the landowners
for the loss of potential development income. In the case of the Clarks Fork the terms of the scenic
easements would be negotiated with each landowner so that allowances for proposed compatible developments
by the landowners would be built into the easements.
If the local government then adopts and maintains zoning ordinances that meet the spirit of the Federal standards and if the zoning ordinances are approved by the Department of Agriculture, the Federal Government will not require scenic easements on the private property. If so desired by the private landowner, the Federal Government could acquire the scenic easements on a willing buyer-willing seller basis.

In the absence of local zoning ordinances the Federal Government would acquire the scenic easements, through condemnation, if necessary.

Alternative 3. Under this alternative, a 21.5-mile river segment, containing about 6,800 acres would be recommended for classification as a Wild River. However, the private land at the lower end of the study area would be excluded from the recommendation. This would leave the 136-acre ranch below Reef Creek (the Wright Place) as the only private land within the Wild and Scenic River recommendation. Constraints on this private land would be the same as described for Alternative 2 in regard to easements, but would affect only 136 acres of private land. None of the land administered by the Bureau of Land Management in the Lower Canyon would be affected in this alternative.

Alternative 4. This alternative excludes the private land at the lower end of the study area. About 16 miles would be recommended for classification as a Wild River, and about 5 miles would be recommended for classification as a Scenic River.

The Federal Government would acquire a scenic easement on 136 acres at the Wright Place only on a willing buyer-willing seller basis.

Under this alternative, the same opportunities and constraints would apply as for Alternative 2 except that more options for developments would be retained in the Lower Canyon. Forest Development Road #119 would be upgraded to a single lane gravel road, so that automobiles could be driven through most of the Lower Canyon (Figure 3). A few fishermen access pullouts and a terminal parking facility would be constructed to facilitate fishing and other nonmotorized dispersed recreation. A day use concept would be emphasized with construction of an eight unit picnic area near the canyon mouth. The road improvements and picnic area would be carefully designed to harmonize as much as possible with the natural elements of the canyon, reducing visual impact of increased recreation use in the Lower Canyon. Overnight use will be discouraged due to the unpredictable high winds which endanger camping vehicles and tents.

Alternative 5. This alternative combines features of Alternatives 2, 3, and 4. Under this alternative, a 21.5-mile river segment, containing about 6,800 acres, would be recommended for classification as a Wild River. The designated river boundaries would be the same as Alternatives 3 and 4.

In segment three, Forest Development Road #119 would be upgraded with fisherman access pullouts and a terminal parking lot. The eight unit picnic area near the canyon mouth would not be built at this time. The road would be inconspicuous to the river uses and the area could still be classified as Wild.

B. Alternatives Eliminated From Further Consideration

No large scale economic development alternatives were considered because of the lack of documented opportunities or documented need for such developments in the canyon. The highway and the Beartooth Project reservoirs, discussed in detail below, do not meet criteria for alternative formulation.

1. A proposed highway from the mouth of the canyon west to a junction with Wyoming #296 was rejected by the Wyoming Highway Department in the Final Environmental Statement for the Clarks Fork Canyon Road (Wyoming Highway Department, 1973). This proposed highway would have been a westward extension to Wyoming #292. Wyoming Highway #296 will be constructed over Dead Indian Hill. This route will meet transportation needs identified in the Clarks Fork Canyon Road proposal. Letters stating the Wyoming Highway Department position and the Department of Transportation position are included in Appendix E.

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2. The Clarks Fork Division of the Beartooth Project (4 reservoirs, 3 power plants, several water conduits and electrical transmission lines as outlined in Appendix A), most of which is within the study area, was not considered because:

   a. There is no industry, municipality, or government agency proposing the development of this project.

   b. The Clarks Fork Division of the Beartooth Project is not economically viable with a benefit cost ratio of only 0.47 to 1.00 (Bureau of Reclamation, 1975).

   c. The Missouri River Basin Yellowstone Level B Study, which evaluated water and energy needs of the Wind-Bighorn-Clarks Fork Basin for the foreseeable future, rejected the Beartooth Project on the basis of need, economics, and environmental costs (Missouri River Basin Commission, 1978; Appendix B).

3. No known oil, gas, or hard rock mineral deposits of economic or subeconomic value occur within the Clarks Fork Wild and Scenic River study area.

C. Summary of Effects

1. Alternative 1. The No Action Alternative would not curtail private land uses or water development. Recreation values would be enhanced slightly by trail and lookout construction. Private land development will continue at the upper end of the study area and in time may occur at the lower end of the Lower Canyon. The trend toward commercial establishments, large residential subdivisions, and permanent parking of trailers and mobile homes on the river could accelerate. The private land in the Upper Canyon (Wright Place) will continue to be used for ranching and hay production in harmony with the other values of the river. This alternative foregoes permanent protection of the free-flowing nature and outstanding scenic and recreation values of the river. Dams and other developments for irrigation and hydropower could be built if beneficiaries are willing to pay the higher costs of identified potential projects.

2. Alternative 2. This alternative would curtail some uses and development of private land and would preclude construction of dams and other water developments on the designated segments of the Clarks Fork River. Alternative 2 may cause the potential Clarks Fork Reservoir downstream of the designated segment to be substantially modified. Recreation values would be enhanced by protection of the river and construction of trails, overlooks, and parking facilities. Private land uses such as commercial development, erection of signs or billboards, large subdivisions, and permanent trailers or mobile homes directly on the river bank would be curtailed or precluded. If local zoning ordinances do not adequately protect the river's resources, the private land uses would be controlled by purchase of scenic easements. Private landowners would be fully compensated for loss of development rights. Present uses would not be affected. Ranching, hay production, and unobtrusive commercial recreation on private lands would be enhanced. Private owners would retain title to their lands and no restrictions on selling or giving their land away would be imposed. Public access is not a feature of the scenic easement; recreationists or other visitors would not be allowed on private land without landowner permission.

3. Alternatives 3, 4, and 5. These alternatives do not affect the private land at the canyon mouth in the Lower Canyon. The "Wright Place" would continue to be used for ranching and production of irrigated hay. A scenic easement, if obtained, would not affect the present use nor reasonable expansion of uses associated with ranching on this private land parcel. The attractive rural landscape would be protected from future development and subdivision or commercial uses. Title to the private land would remain with present owner and no restrictions on selling or giving the land away would be imposed. Public access would not be included in the scenic easement; recreationists and other visitors would not be allowed on the land without the landowner's permission. Recreation and scenic values would be enhanced as in Alternative 2. Alternative 3 would have somewhat less recreation opportunity because Road #119 would not be upgraded as in Alternatives 4 and 5. Alternative 4 includes a small picnic facility in segment 3. The free-flowing character of the river would be protected. Dams and other water developments on the designated segment would be precluded. These alternatives would not affect the potential Clarks Fork Reservoir downstream as much as Alternative 2.
VI. EFFECTS OF IMPLEMENTATION

A. Display techniques

Including a river in the National Wild and Scenic Rivers System may have significant environmental, social, and economic effects. Chapter V described use of guidelines known as the Principles and Standards for Planning Water and Related Land Resources (Federal Register 38;174;111, Section 10, 1973). As outlined in the Principles and Standards ... the study will include alternative plans for future management of the study area. Generally, this planning should serve two equal objectives of national economic development (NED) and environmental quality (EQ). The effects of achieving these objectives are displayed in tables called a system of accounts, and include a national economic development account, environmental quality account, regional development account, and social well-being account. As discussed previously no NED alternatives were considered because there is no opportunity for economic development on the Clarks Fork River. All alternatives for the Clarks Fork River can be considered EQ alternatives, although each alternative, particularly Alternatives 4 and 5, have some economic benefits. Because the primary objective of Alternatives 4 and 5, as in Alternatives 2 and 3, is environmental protection, and the magnitude of the economic benefits is small, these four alternatives are considered primarily EQ alternatives.

Because there is no true NED alternative, and the magnitude of economic outputs and effects for all alternatives are small, the traditional system of accounts is not used. Instead, alternatives are displayed in terms of their effects on the production of goods and services (with emphasis on recreation), costs, employment, and the local economy.

B. Alternative Effects

The tables in this section display specific comparisons of uses and consequences of each alternative, including costs and social and economic implications. These values for 1978 are also shown to form a basis for comparison.
TABLE 3
COMPARISON OF USES OR OUTPUTS FROM THE ALTERNATIVES IN 1990

<table>
<thead>
<tr>
<th>Activity</th>
<th>1978</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
<th>Alternative 3</th>
<th>Alternative 4</th>
<th>Alternative 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Yield (acre feet per year)</td>
<td>650,000</td>
<td>650,000</td>
<td>650,000</td>
<td>650,000</td>
<td>650,000</td>
<td>650,000</td>
</tr>
<tr>
<td>Water Quality</td>
<td>0</td>
<td>0</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Reservoir Construction on designated segments</td>
<td>NA</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Hardwoods and Softwoods (Sawtimber &amp; Products MMBF)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Range (animal use months)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cattle</td>
<td>110</td>
<td>170</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>110</td>
</tr>
<tr>
<td>Sheep</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Minerals (oil, gas, hard rock minerals)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tons extracted</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Exploration</td>
<td>0</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Development</td>
<td>0</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Wildlife Habitat</td>
<td>NA</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fisheries Habitat</td>
<td>NA</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

LEGEND
NA Not applicable
+ Enhance opportunities, quantity, quality
0 No effect, no change
- Negative effect on opportunities, quantity, quality
### TABLE 4
CHANGES IN RECREATION USE IN 1990

<table>
<thead>
<tr>
<th></th>
<th>1978</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
<th>Alternative 3</th>
<th>Alternative 4</th>
<th>Alternative 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Visitors</td>
<td>RVD's</td>
<td>Visitors</td>
<td>RVD's</td>
<td>Visitors</td>
<td>RVD's</td>
</tr>
<tr>
<td>Dispersed motorized</td>
<td>10,000</td>
<td>1,440</td>
<td>13,790</td>
<td>1,990</td>
<td>16,000</td>
<td>2,310</td>
</tr>
<tr>
<td>recreation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dispersed nonmotorized</td>
<td>3,540</td>
<td>840</td>
<td>5,030</td>
<td>1,190</td>
<td>5,830</td>
<td>1,590</td>
</tr>
<tr>
<td>recreation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water-based</td>
<td>30</td>
<td>10</td>
<td>40</td>
<td>20</td>
<td>50</td>
<td>20</td>
</tr>
<tr>
<td>recreation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hunting</td>
<td>1,970</td>
<td>330</td>
<td>2,230</td>
<td>370</td>
<td>2,230</td>
<td>370</td>
</tr>
<tr>
<td>Wildlife nonhunting</td>
<td>280</td>
<td>20</td>
<td>400</td>
<td>30</td>
<td>460</td>
<td>40</td>
</tr>
<tr>
<td>Fishing</td>
<td>5,040</td>
<td>1,520</td>
<td>6,810</td>
<td>2,060</td>
<td>7,900</td>
<td>2,380</td>
</tr>
<tr>
<td>Camping 5/</td>
<td>0</td>
<td>0</td>
<td>5,050</td>
<td>7,030</td>
<td>5,050</td>
<td>7,030</td>
</tr>
<tr>
<td>Picnicking 6/</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(overlook)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>20,860</td>
<td>9,160</td>
<td>35,660</td>
<td>13,170</td>
<td>53,680</td>
<td>14,420</td>
</tr>
</tbody>
</table>

1/ Recreation use for 1978 was estimated using available data collected by the Forest Service since 1962 and observations of the study team, Clarks Fork District personnel, and Wyoming Game and Fish personnel.

2/ Alternative 1 recreation use increases by 1990 are based on percentage increases projected in the Yellowstone Level B study, Missouri River Basin Commission, April, 1978.

3/ Alternatives 2, 3, 4, and 5 are based on recreation outputs for Alternative 1, plus an increase of 1.5% annually as a result of classification, plus use from additional facilities.

4/ Recreation visitor day, which is 12 hours of recreation activity. One RVD can be 1 person engaging in an activity for 12 hours, 12 people engaging in an activity for 1 hour, or any other combination adding up to 12 hours.

5/ Camping is defined as camping in constructed camping facilities. The only campground planned is on private land at the upstream end of the study area, shown here to display potential economic impacts on the river and economic potential for private landowners.

6/ Picnicking is defined as picnicking in constructed picnic facilities. The only picnic area proposed is in the Lower Section in Alternative 4.
Water yield would not be changed under any of the alternatives as there is no opportunity to increase water yield within the study area. The Forest Service, however, would not claim the entire 650,000 acre feet of water as needed to fulfill Wild and Scenic River purposes. Although a determination would be necessary to specifically quantify the amount of water necessary to fulfill instream flow needs for Wild and Scenic River purposes (scenery, recreation, and fish and wildlife), a reasonable approximation has been documented in the Yellowstone Level B Study. The Ad Hoc Committee on Instream Flow Needs for the Yellowstone Level B Study (Missouri River Basin Commission, 1978) estimated minimum stream flows below which decreases would significantly affect the River's "ecological, scenic, or other values," would be:

| Western end of study area | 250 cfs | 180,000 |
| Eastern end of study area | 392 cfs | 280,000 |

Minimum flows would not be evenly distributed throughout the year, with lowest flows during January through March of 150 c.f.s. at the western end and 250 c.f.s. at the eastern end. The highest flow would occur during June and July, with 400 c.f.s. at the western end and 525 c.f.s. at the eastern end. Higher flows in the summer are necessary for fisheries, sediment flushing, and stream channel maintenance.

Existing water quality should be maintained in all alternatives. The State of Wyoming has designated the Clarks Fork River from the Forest Boundary upstream through the study area to the Wyoming-Montana border as a Class I stream. Under this designation, the water quality will not be degraded below existing quality by any point source discharges other than from dams. The State, however, could change or rescind the Class 1 designation. Opportunities to maintain or enhance water quality would improve with Alternatives 2, 3, 4, and 5 as additional emphasis is given to protection of water quality as specified in Section 10 of the Wild and Scenic Rivers Act.

Reservoir construction opportunities would remain unchanged under Alternative 1 and would be foregone or changed within the study area in Alternatives 2, 3, 4, and 5. If a firm proposal for the 750,000 acre-foot Clarks Fork Reservoir occurs, the conflict between the upstream part of the reservoir and the potential Wild and Scenic River would be greatest in Alternative 2 (with 1.5 mile overlap), less in Alternatives 3, 4, and 5 (0.5 mile overlap), and nonexistent in Alternative 1. At least three methods exist to resolve potential conflicts between a Clarks Fork Reservoir proposal and a Wild and Scenic River:

1) A smaller Clarks Fork Reservoir could be constructed which would not back water into the designated area. Such a proposal could be the 450,000 acre-foot reservoir outlined in the second plan (page D-2).

2) The Secretary of Agriculture, under the authority in Section 7a of the Wild and Scenic Rivers Act, could determine that the conflicting part of the Clarks Fork Reservoir would or would not "invade the area or unreasonably diminish the scenic, recreational, and fish and wildlife values present in the area." This determination could result in allowing the Clarks Fork Reservoir to back water for some distance into the designated Wild and Scenic River segment.

3) Congress could de-classify the conflicting segment of the Clarks Fork River from the Wild and Scenic River system if the Congress determined such action was in the best interest of the country.

No timber harvesting will occur under any alternative. Grazing production will also remain unchanged. Although no known economic minerals occur, potential to utilize minerals within the study area will be reduced under Alternatives 2, 3, 4, and 5. Wildlife habitat remains essentially unchanged in all alternatives.

No activities to improve fisheries habitat, or activities which would degrade fisheries habitat, are proposed in any of the alternatives. Increased recreation use in the Lower Canyon due to recreation developments and road improvements are not expected to adversely affect wildlife values. Most of the recreation use increases in the Lower Canyon would occur in the summer months, at which time wildlife use is very limited. Rocky Mountain goats occasionally descend to the river in the Lower Canyon during severe winter storms. Recreational use in the Lower Canyon at this time is expected to be extremely light. Recreation use will increase under all alternatives, with the greatest increases in Alternative 4, and next greatest in Alternative 5, due to construction of recreation facilities in the Lower Canyon.
# TABLE 5

**COMPARISON OF COSTS (1978 Dollars)**

<table>
<thead>
<tr>
<th></th>
<th>1978</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
<th>Alternative 3</th>
<th>Alternative 4</th>
<th>Alternative 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Recreation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Overlook Construction 2/</td>
<td>0</td>
<td>29,600</td>
<td>44,900</td>
<td>44,900</td>
<td>44,900</td>
<td>44,900</td>
</tr>
<tr>
<td>b. Picnic Area Construction 2/</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>36,000</td>
</tr>
<tr>
<td>c. Maintenance 3/</td>
<td>0</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>5,900</td>
<td>1,000</td>
</tr>
<tr>
<td><strong>2. Roads</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Construction and Improvement 4/</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>350,000</td>
</tr>
<tr>
<td>b. Maintenance 3/</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td><strong>3. Trails</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Construction 2/</td>
<td>0</td>
<td>42,800</td>
<td>85,500</td>
<td>85,500</td>
<td>85,500</td>
<td>85,500</td>
</tr>
<tr>
<td>b. Maintenance 3/</td>
<td>800</td>
<td>1,000</td>
<td>1,500</td>
<td>1,500</td>
<td>1,500</td>
<td>1,500</td>
</tr>
<tr>
<td><strong>4. FS Administration</strong></td>
<td>5/</td>
<td>900</td>
<td>900</td>
<td>1,100</td>
<td>1,050</td>
<td>1,450</td>
</tr>
<tr>
<td><strong>5. Scenic Easement Acquisition 5/</strong></td>
<td>0</td>
<td>0</td>
<td>672,000</td>
<td>271,400</td>
<td>271,400</td>
<td>271,400</td>
</tr>
</tbody>
</table>

---

**Total Construction and Improvement Costs (1a, 1b, 2a, 3a)**

|                      |      | 72,400         | 130,400        | 130,400        | 516,400       | 480,400       |

**Total Yearly Cost Maintenance and Administration (1c, 2b, 3b, 4)**

|                      | 1,700 | 2,900         | 3,600         | 3,550         | 9,890         | 4,700         |

---

1/ Costs are estimates based on normal requirements and average conditions in 1978.
2/ Total dollars spent by 1990 to construct facilities.
3/ Average annual expenditures for maintenance of existing and proposed developments.
4/ Improvements of Road #119 will be only those necessary to allow passage by automobile traffic generated by scenic river designation.
5/ Average annual expenditures by Forest Service to administer the river area.
6/ Estimated costs to purchase development rights from private landowners within the study area on 336 acres for Alternative 2 and 136 acres for Alternatives 3, 4, and 5.
7/ Easement acquisition only on a willing buyer - willing seller basis for Alternative 4.
Costs were computed in 1978 dollars since predictions of monetary fluctuations through 1990 would be purely speculative.

Alternative 1 construction and maintenance costs are higher than in 1978 because of one river trail and a river overlook (constructed as part of the Beartooth VIS project in the Beartooth Plateau Management Plan) which will be constructed under all alternatives. Construction costs in Alternatives 4 and 5 are considerably higher than other alternatives because of developments in the Lower Section (road and picnic area in Alternative 4 and road only in Alternative 5). Maintenance and administration costs reflect the number and use of constructed facilities.

Table 6 shows the relative comparisons of economic and employment effects of the alternatives.
TABLE 6
ESTIMATED EMPLOYMENT AND CONTRIBUTIONS TO LOCAL INDUSTRY BASED ON ALTERNATIVE OUTPUTS

<table>
<thead>
<tr>
<th>Contributions to Local Economy Because of Alternative Outputs</th>
<th>1978</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
<th>Alternative 3</th>
<th>Alternative 4</th>
<th>Alternative 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Employment Man-years</td>
<td>0</td>
<td>0.8</td>
<td>2.4</td>
<td>2.4</td>
<td>15.2</td>
<td>8.4</td>
</tr>
<tr>
<td>Maintenance, Administration, and Local Sales Employment Man-Years</td>
<td>0.6</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
<td>2.0</td>
<td>1.6</td>
</tr>
</tbody>
</table>

1/ Sales include livestock, repair services, gasoline, dining, retail trade, lodging and other services to local merchants on average annual basis.

2/ Number of man-years of employment generated by construction of facilities in Alternatives 1 through 5.

3/ Government and other local man-years of employment generated on an average annual basis.
An economic analysis model (developed during the RARE II process for Park and Teton Counties, Wyoming) was used to evaluate the effects of expenditures and outputs on the local economy. Although alternative outputs have a very small effect on the local economy, some changes can be observed. Contributions to the local economy increase for Alternatives 4 and 5 because of recreational developments and improved access in the Lower Canyon. Alternative 5 contributions to the local economy are lower than Alternative 4 because of the assumption that the picnic area would not be constructed. Construction employment is temporary employment only. Maintenance and administration employment are highest in Alternative 4 because of increased recreation use in the Lower Canyon.
VII. EVALUATION OF ALTERNATIVES

A. Relationships Between Short-Term Uses and Long-Term Productivity

1. Alternative 1. No loss in long-term productivity of the environment will result from short-term uses for the foreseeable future under this alternative.

Potential economic developments which could occur in this alternative could reduce long-term productivity of the river in providing water based recreation derived from the free-flowing condition of the river. However, these same developments could enhance productivity of hydroelectric power, irrigation water, and recreation activities oriented around use of lakes.

2. Alternative 2. The short-term uses planned under this alternative will not affect long-term productivity. However, the potential for use of the river within the study area for water, storage or power production would be legislatively removed for the foreseeable future, but would remain a potential long-term option. Section 7(a) of the Wild and Scenic Rivers Act directs that upstream and downstream water development projects are permitted if they will not invade the protected river area or deprive it of the water needed to maintain its remarkable values. Future construction of impoundments that would have a direct and adverse effect on the outstandingly remarkable values would not be permitted. Opportunities for the construction of the Clarks Fork Reservoir (Beartooth Project) reservoirs would be legislatively removed for the foreseeable future.

Outputs from this project that would be foregone are substantial. The firm energy potential of the Clarks Fork Division is estimated at 873 million kilowatt-hours per year. Generation of this amount of hydroelectric energy could save the United States at least 410,000 tons of coal, 1,500,000 barrels of oil, or nine billion cubic feet of natural gas each year. Designation of the entire study area would not necessarily preclude the potential Lake Creek diversion and storage project (the diversion canal for this project would be taken from the River one-half mile into the study area), but modifications may be required to minimize the visual impact of the diversion and canal on scenic and recreational values in the Lower Canyon. The potential 750,000 acre-foot Clarks Fork Reservoir, which would be constructed below the study area (Appendix D), may need to be modified if the project would invade or unreasonably diminish the scenic, recreational, and historic values present in the area. Such modification could consist of the 450,000 acre-foot capacity Clarks Fork Reservoir which is the second plan discussed in Appendix D. The Secretary of Agriculture would determine if the project would "unreasonably diminish" the values of the Wild and Scenic River by backing water into the classified area. (Wild and Scenic Rivers Act, Section 7a).

The Lower Clarks Fork Reservoir, if proposed, would require a complete review and evaluation through the NEPA (National Environmental Policy Act) process. A recommendation in favor of construction of the Clarks Fork Reservoir, without modification, would have to be based upon a clear showing that the public values to be gained (Appendix D) exceed the values that would be lost, and that the need cannot be met outside the designated river corridor. Such a recommendation may be to modify the Clarks Fork Reservoir to lessen conflict with the designated river segment or to exclude that section of the river from the designated area. Such modification could involve a reduction in reservoir capacity or a relocation of the dam further downstream. This could result in increased costs or reduce the water use opportunities outlined in Appendix D.

Some opportunities for intensive or incompatible development on the two parcels of private land designated in this alternative will be foregone by zoning ordinances or acquired by Federal acquisition of scenic easements. However, the potential productivity of the private land will remain unaltered.

3. Alternative 3. The relationships between short-term uses and long-term productivity are similar under this alternative as under Alternative 2. Because the lower end of the classified area would be at the Forest Boundary in this alternative, the potential Lake Creek diversion project would be located below the classified area, and not necessarily encumbered with additional mitigation costs. In addition, fewer adjustments or constraints would be incurred in construction of the potential Clarks Fork Reservoir, as only one-half mile of the reservoir would back into the classified area. Under alternative 3, if the Clarks Fork Reservoir is proposed, and the NEPA process concludes that the public values to be gained by constructing the reservoir exceed the values that would be lost, a much smaller section of the river could be excluded from the designated river corridor. Only one private land holding would be involved in this alternative, and therefore fewer development options would be foregone.
4. **Alternative 4.** A very small acreage will be committed to the improved road, picnic area, and parking facility, thus removing some land from vegetative production. Constraints on potential water development projects and private landholders would be the same as in Alternative 3.

5. **Alternative 5.** The relationships between short-term uses and long-term productivity for potential water development projects and the private land would be the same as in Alternative 3. A small acreage will be committed to the improved road and parking facility, thus removing some land from vegetative production. This acreage would be slightly less than in Alternative 4 because no picnic area is included in Alternative 5.

B. **Summary of Probable Adverse Environmental Effects Which Cannot Be Avoided**

1. **Alternative 1.** Short-term probable adverse environmental effects under Alternative 1 are very limited. Some modifications of the natural environment will occur in areas of the trail and overlook construction, with additional littering, trampling of vegetation, and loss of solitude. These impacts are expected to be minimal, and will probably be less than under the other alternatives. Additional subdivision of the private lands within the study area could occur under Alternative 1. Unless carefully planned, subdivision development can have adverse effects on visual qualities, wildlife habitat, and recreation experiences in the immediate river area.

Long-term probable adverse environmental effects are not expected, but could result from implementation of economic development options (reservoirs, highways) which could occur under Alternative 1.

2. **Alternative 2.** Short-term probable adverse environmental effects under Alternative 2 are also quite limited. Modification of the natural environment will occur with construction of two trails into the Upper Canyon and Middle Canyon and two overlooks at the canyon rim. The adverse environmental effects are expected to be minimal. Development options on the two parcels of private land within the study area would be constrained by zoning ordinances or Federal purchase of development rights.

Recreation use in Alternative 2 is expected to increase at a rate of 1.5% annually for most activities, over and above the rates of increases taken from the Yellowstone Level B Study (Missouri River Basin Commission, 1978). This is due to increased recognition of the Clarks Fork River as a desirable recreation area once it becomes a National Wild and Scenic River. This projected rate of additional use increase is not nearly as large as other more accessible rivers which have been added to the system. The generally inaccessible nature of the Clarks Fork Canyon and lack of potential to generate a large amount of recreational use is expected to continue to limit use regardless of classification.

3. **Alternative 3.** Short-term probable adverse environmental effects are the same as in Alternative 2 except that development of private land in the Lower Canyon area will not be controlled by the Wild and Scenic River classification. Some control may still be exercised through the Park County Land Use Plan currently being developed. Intensive use of private lands for permanent or vacation homes, trailer sites, commercial campgrounds and picnic areas, and recreation-oriented support services could adversely affect scenic, fish and wildlife, and recreational values of the study area.

4. **Alternative 4.** Short-term probable adverse environmental effects are the same as in Alternative 3 except for recreational developments which would occur in the Lower Canyon. Modification of the natural environment of the Lower Canyon will occur from construction of the picnic area and upgrading of Forest Development Road #119. Dust, smoke, and noise will temporarily occur during construction activities. Sedimentation from road construction will be very minor and temporary. The pristine appearance and solitude of the Lower Canyon will be somewhat degraded with the developments and additional people and vehicles.

5. **Alternative 5.** Short-term probable adverse environmental effects are the same as in Alternative 4, except that less modification of the natural environment in the Lower Canyon would occur because the picnic ground would not be constructed at this time. Fewer additional people and vehicles would be expected in the Lower Canyon when compared to Alternative 4. Development constraints on private lands would be the same as in Alternative 2, except that the private land in the Lower Canyon would be excluded.

C. **Irreversible or Irretrievable Commitment of Resources**

1. **Alternative 1.** None of the activities proposed under this alternative will result in an irreversible or irretrievable commitment of resources in the short-term.
Economic developments which could occur under this alternative in the future (water storage, hydroelectric development, highway construction) could result in irreversible or irretrievable commitment of resources but would be addressed, after specific proposals have been made, through the environmental analysis process.

2. Alternatives 2, 3, 4, and 5. Designation as a Wild and Scenic River does not constitute an irreversible and irretrievable commitment for the future, as Congress has the authority to change or rescind Wild and Scenic designation if the need occurs. Zoning ordinances could be changed or eliminated and scenic easements purchased as a result of designation could be returned to landowners.

The picnic area in the Lower Section under Alternative 4 is not an irreversible resource commitment as the facilities could be removed and the area rehabilitated. However, the improved road in Alternatives 4 and 5 is a long-term facility and is considered an irreversible commitment of the land upon which it would be constructed.

D. Goal Satisfaction

In Table 7 the alternatives are evaluated using the criteria outlined in Section V. The ratings used to measure the degree to which the alternatives meet the criteria are for relative comparison purposes only, and should not be interpreted to mean absolute criteria attainment. Table 7 is used for a horizontal comparison of the alternatives for each evaluation criteria. The ratings must not be added vertically because the evaluation criteria are not equally important.

The criteria are ranked in order of importance to the task of selecting a preferred alternative. The first group of criteria (#1, #2, and #3) are assigned highest priority because protection of the unique values of the Clarks Fork River is considered to be of greater importance and feasibility in the foreseeable future than large scale economic development. Criteria #1 and #2 basically reflect the spirit and intent of the Wild and Scenic Rivers Act. Criteria #3 is ranked with the first group because of the importance of recognizing public input on the Shoshone National Forest.

The second group of criteria, although important, are not considered to be as important as the first group in evaluating alternatives. The second group (dispersed recreation, recreation development by private landowners, and local economic diversity) deals primarily with local economic issues and local preference which were not considered as important as the protection criteria in the first group.

The third group of criteria (recreation development, water developments, mining) are the least important in the selection of the preferred alternative because of the limited potential for economic developments of any type within the study area.
TABLE 7

EVALUATION OF ALTERNATIVES

<table>
<thead>
<tr>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protect or enhance scenic, recreational and historical values.</td>
</tr>
<tr>
<td>Give high priority to maintaining the free-flowing condition of the Clarks Fork River</td>
</tr>
<tr>
<td>Generate outputs consistent with issues and concerns identified through public involvement.</td>
</tr>
<tr>
<td>Provide additional opportunities for dispersed primitive recreation in the Upper and Middle Canyon and more opportunity for dispersed motorized recreation in the Lower Canyon</td>
</tr>
<tr>
<td>Maintain or enhance opportunities for development of recreation facilities by private landowners.</td>
</tr>
<tr>
<td>Maintain or improve diversity of the local economic structure.</td>
</tr>
<tr>
<td>Construct cost-effective developed recreation facilities which do not conflict with private developments.</td>
</tr>
<tr>
<td>Provide on-Forest water storage only when increases in water use effectiveness are commensurate with benefits foregone.</td>
</tr>
<tr>
<td>Maintain opportunities for mineral extraction.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative 1</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>0</td>
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<tr>
<td>++</td>
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<tr>
<td>0</td>
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<tr>
<td>0</td>
</tr>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

++ Alternative meets the criteria to a high degree.
+ Alternative meets the criteria to a moderate degree.
0 Alternative meets the criteria to a minimal degree.
- Alternative does not meet the criteria.
Following is a detailed discussion of the summarized information in Table 7.

1. **Criterion #1.** Protection or enhancement of the "outstandingly remarkable" Clarks Fork River values can be achieved without Wild and Scenic classification in Alternative 1. Such protection can be prescribed within the Forest Land and Resource Management Plan and could protect the river values for the short-term, although long-term protection is not assured. With less recreation developments, Alternative 1 provides more protection of these values in the short run than other alternatives. Alternatives 2, 3, 4, and 5 provide explicit protection of the "outstandingly remarkable" river values under the Wild and Scenic Rivers Act, particularly in the long run.

2. **Criterion #2.** In the short run, the free flowing condition of the Clarks Fork River can be protected in all alternatives. In Alternative 1, however, no long-term protection is assured. Alternatives 2, 3, 4, and 5 provide protection of the free flowing conditions as spelled out in Section 7 of the Wild and Scenic Rivers Act.

3. **Criterion #3.** Alternative 3 generates the best mix of outputs consistent with issues and concerns identified through public involvement. Response to the Draft Environmental Statement was over 2:1 in favor of some form of Wild and Scenic River classification. Response was strongly adverse to the classification of the upper 0.5 mile of river and acquisition of scenic easements on those lands. In addition, the improvements of Road 119 in the Lower Canyon were opposed by nearly all people commenting on that issue. Although Alternative 3 was not frequently indicated as a preferred Alternative by respondents, it best meets the overall mix of outputs requested by the public. Alternatives 2 and 5 were unfavorable to many because of acquisition of scenic easements on private lands. Alternatives 4 and 5 were unfavorable to some because of the development of Road 119. Alternative 2 was particularly unfavorable to many because of the conflict with the potential Lake Creek off stream water storage project or the potential Clarks Fork Reservoir below the Canyon. Alternative 1, although generating support of nearly one-third of all respondents, was not favored by most because of the lack of long-term protection of the Canyon. Alternative 1, however, historically would best match the consensus of public opinion in Park County which has generally been adverse to additional Federal preservation classifications of public land.

4. **Criterion #4.** Alternatives 4 and 5 provide more opportunity for dispersed motorized recreation in the Lower Canyon than the other alternatives because of the improvements to Road 119. The picnic area in Alternative 4 will tend to concentrate people and draw more people to the area, thus detracting from the opportunities for dispersed primitive recreation in the Lower Canyon. Alternatives 2, 3, 4, and 5 provide equally to additional opportunities for dispersed primitive recreation in the Upper and Middle Canyon since no public access would be provided to the upper 0.5 mile of private land which would be classified in Alternatives 2 and 5. Alternative 1 meets this criteria less than the other Alternatives because of less recreational developments although in the long run, Alternative #1 could equal or exceed the other Alternatives in recreational developments.

5. **Criterion #5.** Maintenance or enhancement of opportunities for development of recreation facilities by private landowners within or near the study area is achieved best under Alternative 1, with no controls on private land development. Maximum constraints of private land development 5 occur through controlling ordinances and acquisition of scenic easements on all private lands within the study area. Alternative 3 does not control development on the private land at the Lower Canyon, but does include purchase of a scenic easement on the private land at Reef Creek (the Wright Place). Alternative 4 meets the criteria for private landowner development by not only excluding private land at the Lower Canyon, but also purchasing development rights on the private land at Reef Creek only on a willing buyer - willing seller basis. Alternative 4 is preferable because of the lack of long-term protection as the river receives publicity as a Wild and Scenic River, thus enhancing commercial recreation development opportunities.

6. **Criterion #6.** Diversity of the local economic structure will be maintained under all alternatives, but for different reasons. Under Alternative 1, there are no constraints on private lands, thus allowing for developments. Under Alternatives 2, 3, 4, and 5, there are varying degrees of constraints on landowners, but these are offset by slightly increased recreation use generated by designation. These recreationists will spend money locally, thus contributing somewhat to the local economy.

7. **Criterion #7.** All alternatives include some construction of developed overlooks. In the National Forests of Colorado and Wyoming (USFS Region 2), campgrounds and picnic areas of less than 15 units in size have generally not been cost effective. This is based on a comparison of the value of recreational use with the cost of constructing, maintaining, and servicing the facility. The eight unit picnic ground, which would be constructed in Alternative 4, is too small and remote to be cost-effective; the overlooks are assumed to be cost-effective.
8. **Criterion #8.** Reservoirs for water storage could be constructed in Alternative 1, providing that the increase in water use effectiveness is commensurate with benefits foregone. This would be determined through environmental assessments of water storage proposals. Reservoir construction or large scale water diversions on designated river segments are explicitly foregone in Alternatives 2, 3, 4, and 5 in accordance with Section 7 of the Wild and Scenic Rivers Act. Conflicts with the upstream portion of the potential Clarks Fork Reservoir, which could be constructed below the canyon, would be greatest with Alternative 2, and much reduced in Alternatives 3, 4, and 5.

9. **Criterion #9.** Although no known economic minerals occur within the study area, opportunities for mineral and energy resources discovery and extraction are maintained only under Alternative 1. The mineral withdrawals recommended in Alternative 2, 3, 4, and 5 are subject to valid existing rights but would preclude many future mineral developments within the immediate river area, and therefore do not meet the criteria.
VIII. IDENTIFICATION OF THE PREFERRED ALTERNATIVE

A. Selected Alternative

Alternative 3 is the preferred alternative. This would classify about 21.5 miles of the Clarks Fork River as a Wild River. The area designated as a Wild and Scenic River System component would encompass about 6,800 acres, of which 136 are private and 6,664 are National Forest System lands. The estimated cost, over a ten year period of the action is $437,300. The Forest Service would administer the designated river component and bear all costs of the recommended action. State and local agencies will be asked to support the administration of the designated river but will not share in the costs of the action. The map that follows shows the proposal of the Wild River for the preferred alternative.

The reasons for the selection of Alternative 3, which is a change from the preferred Alternative in the Draft Environmental Statement (Alternative 5) are as follows:

1. The concensus of public input at all levels, including local (Cody-Powell area), Wyoming, other states, officials, agencies, and organizations and groups was for some form of Wild and Scenic River designation of the Clarks Fork River.

2. Although considerable support was provided for the most restrictive alternatives in the Draft Environmental Statement (Alternatives 2 and 5), much opposition was expressed concerning some of the features of those alternatives. More specifically:
   a. Some respondents questioned the scenic and recreational quality and hence, the eligibility of the upper 0.5 miles of the study area. A majority of the public commenting on that part of the study area strongly opposed classification and acquisition of scenic easements on the private land in this section. The need or desirability to include the upper 0.5 mile, which is more developed, less scenic, and of a different character that the rest of the study area, was questioned. The upper 0.5 mile was found to be ineligible for designation in a subsequent eligibility re-evaluation.
   b. The proposed improvement of Road 119 in the Lower Canyon received virtually no public input support but generated strong opposition. Reasons cited for this opposition was appreciation of the primitive nature of the Lower Canyon, a desire to see this character unaltered, and questioning the cost effectiveness ($350,000) of this proposal. In order to reflect this input, evaluation criterion #3 in the Draft Statement was reworded (the wording of this criterion in the Draft Statement was criticized for being vague) and moved to the second group of evaluation criteria (#4). The ratings for this criterion were slightly changed.
   c. Many of the respondents were concerned about potential conflicts between Wild and Scenic River classification and development of unappropriated water of the Clarks Fork River in Wyoming. The maximum conflict between a Clarks Fork Wild and Scenic River and the Lake Creek off-stream water storage project and the Clarks Fork Reservoir would occur in Alternative 2 where the lower mile of the Wild and Scenic River could directly conflict with both projects.

3. Alternative 3 provides a good mix of outputs consistent with issues and concerns identified through public involvement, particularly with regard to concerns voiced in response to the Draft Environmental Statement. Although only seven respondents indicated preference for Alternative 3, several respondents indicated second choice preference for this alternative. Alternative 3 provides outputs which are the most responsive to the substantive changes requested by the public from Alternative 5. In this regard, the substance of the public involvement was considered more important than simple "vote counting". To reflect this change in the goal satisfaction, criterion #4 in the Draft Statement was moved to the first group of evaluation criteria (now #3 in this document) and the ratings adjusted to show that Alternative 3 is the only alternative which meets the public involvement criteria to greater than a minimal degree.

4. Alternative 3 is the only alternative which meets all three of the first group of evaluation criteria to greater than a minimal degree. Alternative 5 only meets the first two criteria to greater than a minimal degree. As explained on page 18, varying degrees of significance are assigned to the evaluation criteria, depending on the relative importance of each criteria to the decision. Evaluation criteria #1, 2, and 3 are considered to be the most significant.
PREFERRED ALTERNATIVE
PROPOSED CLARKS FORK WILD RIVER

LEGEND

Jeep Trail
Rocks
Trails
Private Land
Designated Area
Rivers & Creeks
Proposed Development

SCALE: 1 inch = 1 mile

Canyon Overlook

Crandall Ranger Station

Deep Lake

Little Rock Creek

Yellowstone River

Canyon Creek

Rivers & Creeks

Proposed Development

WINDY MOUNTAIN
The second group of three criteria are next in priority. Alternative 3 meets criterion #4 to a greater than minimal degree, because of the recreational developments in the Upper and Middle Canyons, but only meets criterion 5 and 6 to minimal degrees. Constraints on private landowners for developments of recreation facilities on their lands is applied only to the Wright Place in Alternative 3. The designation of the Clarks Fork as a Wild and Scenic River may provide some "drawing card" to the area, thus meeting Criterion #6 to some degree.

The third group of criteria are the least important tests used to make a selection among the alternatives. This group of criteria would become significant only if there was no outstanding alternative after applying the first six criteria. The weak performance of Alternative 3 when tested, with the last three criteria is outweighed by the high performance in the first group of criteria.

B. Reason for Nonselection

1. Alternative 1. This alternative meets seven of the nine criteria only to a minimal degree. None of the three most important criteria are met above this minimal level. The alternative can provide only short-term protection to the "outstandingly remarkable" values and free-flowing characteristics of the river. In addition, this alternative does not respond well to public input, being preferred by less than a third of the respondents.

2. Alternative 2. This alternative prescribes unpopular constraints at the lower end of the study area: classification and scenic easement acquisition of the 200 acres of private land at the lower end of the study area and maximum conflict with potential water developments below the Lower Canyon. This alternative, therefore, does not meet the first group of evaluation criteria as well as Alternative 3. Of the remaining six criteria, three are not met at all by this alternative.

3. Alternative 4. Alternative 4 was not selected because of a poor performance in generating outputs responsive to public output (criterion #3). This was due primarily to recreation developments in the Lower Canyon (upgrading of Road 119, construction of a picnic ground) which were not specifically favored by any respondents and opposed by many. This alternative meets the second group of criteria as well as any alternative, being particularly responsive to criterion #4, with the recreation developments, and criterion #5, by placing the minimum development constraints on landowners of any of the alternatives. Alternative #4 does not meet any of the last three criteria, notably #7 because the picnic area is not cost-effective, being too small and expensive to build and maintain for its size. A larger picnic area cannot be constructed because of adverse effects on other scenic and recreational values.

4. Alternative 5. Alternative 5, which was the preferred alternative in the Draft Environmental Statement, was not selected as the preferred alternative in this Final Environmental Statement because of strong public opposition to upgrading of Road 119 in the Lower Canyon. For these reasons, Alternative 5 only meets criterion 3 to a moderate degree, and does not meet the first three important groups of evaluation criteria as well as Alternative 3.
IX. CONSULTATION WITH OTHERS

A. Summary of Public Involvement

As a first step in the study, a public involvement plan was developed to guide the study team throughout the Clarks Fork Wild and Scenic River Study. In May of 1978, 80 letters were sent out to individuals, groups, and agencies notifying them that the study was being initiated. Newspaper articles announcing the study were published in Cody and Powell, Wyoming, and Billings, Montana. During June and July, 1978, a slide program describing the study was shown to 170 people at six clubs and organizations in the Cody-Powell area. Nearly all of the landowners along the river were contacted in person to explain the objectives and progress of the Clarks Fork Wild and Scenic River Study. The few remaining landowners were contacted by personal letter.

Radio talk shows were conducted in Cody and Powell on several occasions, and a three-part series of newspaper articles were published in Cody, Powell, Casper, and Billings, prior to an eligibility workshop. At the public workshop on July 10, 1978, the study team received public input on the eligibility of the Clarks Fork as a Wild and Scenic River. Only 15 people attended this workshop. Newspaper articles in Cody, Powell, Lander, Casper, Wyoming and Billings, Montana, plus radio coverage in Cody and Powell announced a second public workshop on September 11, 1978. Sixteen people attended this alternative analysis workshop in Powell and provided input on the selection of the preferred alternative. Newspaper articles and radio talk shows in Cody and Powell discussed several aspects of the study after the alternative analysis workshop.

A presentation highlighting the progress of the study was given to approximately 150 people at a water management seminar, January 9, 1979, in Powell, and to about 75 people at five organizations in the Cody-Powell area from January to May, 1979. In addition, a presentation on the study was given to about 150 people at a Rivers and Trails Symposium at the University of Wyoming, November, 1979.

A three-part series of magazine articles discussing the Clarks Fork Canyon and Wild and Scenic River Study, by Lynne Bama, was published in Wyoming News from November 1978 to January 1979. High Country News published a condensed article of the Lynne Bama series during July 1979. In June, 1979, Wyoming Wildlife printed an article summarizing the study to date. In June, radio stations and newspapers in the Cody, Powell, and Billings areas announced the release of the Draft Environmental Statement which was sent to 140 agencies, officials, Congressional delegates, media, organizations, and individuals (listed in the Summary at the front of this document). In addition, about 50 copies were distributed at request in offices of the Shoshone National Forest.

During the 90-day public review period of the Draft Environmental Statement, the Clarks Fork study received considerable newspaper and radio publicity in the Cody and Powell area.

B. Summary of Comments Received

Over two-thirds of the responses from the public in the eligibility analysis phase of the study expressed opinions that the Clarks Fork River has "outstandingly remarkable" values with most responses directed to scenic and recreational values.

A total of 94 written responses were received on the Draft Environmental Statement. Substantive input by some respondents resulted in changes in the Draft Environmental Statement, including selection of a new preferred alternative.

The following is a summary of the respondents:

<table>
<thead>
<tr>
<th>Respondent Represented</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Agency</td>
<td>7</td>
</tr>
<tr>
<td>State or Local Agency or Official</td>
<td>4</td>
</tr>
<tr>
<td>Organization/Group</td>
<td>14</td>
</tr>
<tr>
<td>Individual</td>
<td>69</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Residence of Respondent</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wyoming</td>
<td>70</td>
</tr>
<tr>
<td>Montana</td>
<td>4</td>
</tr>
<tr>
<td>Colorado</td>
<td>5</td>
</tr>
<tr>
<td>California</td>
<td>6</td>
</tr>
<tr>
<td>Washington, D.C.</td>
<td>6</td>
</tr>
<tr>
<td>Michigan</td>
<td>2</td>
</tr>
<tr>
<td>Texas</td>
<td>1</td>
</tr>
</tbody>
</table>

Responses to the Draft Environmental Statement favored some form of Wild and Scenic River classification by greater than a 2 to 1 margin (61 to 29). Table 8 contains a summary of extraction of comments and number of each type received.
<table>
<thead>
<tr>
<th>TABLE 8</th>
<th>SUMMARY OF RESPONSES TO DRAFT ENVIRONMENTAL STATEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>For Wild and Scenic River designation</td>
<td>61</td>
</tr>
<tr>
<td>Prefer Alternative 2</td>
<td>15</td>
</tr>
<tr>
<td>Prefer Alternative 3</td>
<td>7</td>
</tr>
<tr>
<td>Prefer Alternative 4</td>
<td>1</td>
</tr>
<tr>
<td>Prefer Alternative 5</td>
<td>14</td>
</tr>
<tr>
<td>For classification, no alternative preference indicated</td>
<td>22</td>
</tr>
<tr>
<td>Opposed to Wild and Scenic River designation</td>
<td>29</td>
</tr>
<tr>
<td>Support acquisition of scenic easements</td>
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</tr>
<tr>
<td>Opposed to acquisition of scenic easements</td>
<td>13</td>
</tr>
<tr>
<td>Support recreation developments</td>
<td>1</td>
</tr>
<tr>
<td>Oppose recreation developments</td>
<td>4</td>
</tr>
<tr>
<td>Support upgrading Road 119 in Lower Canyon</td>
<td>0</td>
</tr>
<tr>
<td>Oppose upgrading Road 119 in Lower Canyon</td>
<td>13</td>
</tr>
<tr>
<td>Opposed to water development in Canyon</td>
<td>5</td>
</tr>
<tr>
<td>Support water development in Canyon</td>
<td>5</td>
</tr>
<tr>
<td>Oppose curtailment of hydroelectric option in Canyon</td>
<td>7</td>
</tr>
<tr>
<td>Support curtailment of hydroelectric option in Canyon</td>
<td>5</td>
</tr>
<tr>
<td>Desires continuation of present management</td>
<td>5</td>
</tr>
<tr>
<td>For multiple use</td>
<td>4</td>
</tr>
</tbody>
</table>
Table 8 was not and should not be analyzed as a vote count, but considered a reflection of concerns and a rough indication of public sentiment toward management of the Clarks Fork Canyon. The following conclusions were drawn concerning public response to the Draft Environmental Statement.

1. The proposal for designation of the Clarks Fork River as a National Wild and Scenic River received support by over two-thirds of the respondents. Environmental protection for the scenic and recreational values and free-flowing river condition of the Canyon were the most frequent reasons cited for support of Wild and Scenic River designation. In addition, many respondents expressed appreciation of the "unique undeveloped" nature of the Canyon and a desire to see the area given additional protective status. Many letters were received which simply stated preference for Wild and Scenic designation or preference for one of the classification alternatives (most frequently Alternatives 2 or 5) but did not indicate the reasons for that preference.

2. The eligibility of the upper 0.5 mile of the study area was questioned by several respondents. The proposal for acquisition of scenic easements from private landowners and classification of the upper 0.5 mile of the study area in the preferred alternative in the Draft Statement received very strong opposition from a large majority of respondents to that issue. Although a large number of responses favored Alternatives which included designation of the upper 0.5 mile, only two of those respondents expressed specific support for acquisition of scenic easements or classification of the upper 0.5 mile of the study area. Many of the landowners along the upper 0.5 mile of the study area indicated no personal plans for future development of their private lands, but preferred formal development constraints to be in the form of county zoning or other local controls rather than Federal purchase of development rights. Several landowners along the upper 0.5 mile of the study area and others questioned the need to include this relatively developed, gentle river segment with the rest of the essentially pristine, rugged canyon, particularly since no public access is provided to the upper 0.5 mile of river but exists closely downstream. In addition, some respondents questioned inclusion of private land in the Wild and Scenic River at the upper end of the study area, but excluding the private land at the lower end of the study area.

3. Although most respondents did not comment on the proposed recreation developments within the study area (overlooks, trails) those that did encouraged the Forest Service to be cautious about encouraging more recreation use in the canyon. Concerns about reduction of the pristine nature of the canyon and loss of solitude were the two reasons cited for that concern. Three respondents encouraged the Forest Service to consider an alternative which does not have recreation developments within the Canyon.

4. Considerable opposition was expressed to the provision of upgrading Road 119 in the Lower Canyon in the preferred alternative. The Lower Canyon receives most of the recreation use within the study area and several respondents indicated preference for leaving the Lower Canyon "as is". All responses specifically mentioning the upgrading of Road 119 as a factor in their preference of an Alternative expressed opposition to the proposal for upgrading Road 119.

5. Several respondents objected to Wild and Scenic River designation because of the curtailment of hydroelectric options in the Canyon. These respondents cited the "energy shortage" and "need to develop hydroelectric energy" as the basis for their objection. On the other hand, some responses cited curtailment of hydroelectric options in the Canyon as a reason for favoring Wild and Scenic classification.

6. A number of respondents, including local water user groups, expressed opposition to Wild and Scenic River designation because of potential conflicts with development of unappropriated water of the Clarks Fork River in Wyoming.

7. Considerable support was expressed for a continuation of present management alternative, with preference for leaving the Canyon "as is", favoring of multiple use management, and satisfaction with current Forest Service management.

C. Summary of Agency Involvement

Letters announcing the initiation of the Clarks Fork Wild and Scenic River Study were sent to the following agencies:
Federal Agencies

Beartooth Ranger District, Custer National Forest
Bureau of Land Management, Cody, Wyoming
Yellowstone National Park
Environmental Protection Agency
President's Advisory Council for History Preservation
Heritage Conservation and Recreation Service
Federal Energy Administration (FERC)
Bureau of Reclamation
Office of Environmental Projects Review
Soil Conservation Service
Rocky Mountain Forest and Range Experiment Station
Inter-Agency Grizzly Bear Study Team
Advisory Council on Historic Preservation

Wyoming State Agencies

State Planning Coordinator
State Forester
Game and Fish Department
Recreation Commission
Highway Department
State Engineer

Substantive comments were received from the Bureau of Reclamation and Federal Energy Regulatory Commission which confirmed the lack of foreseeable economic potential for the Clarks Fork Reservoirs. Comments by and responses to the Department of Interior and Advisory Council on Historic Preservation are included in Appendix E.

Comments by the Wyoming Highway Department reconfirming the lack of any plans to build a highway through the Clarks Fork Canyon have already been discussed in other parts of this report.

Public and agency comments on the Draft Environmental Statement, and Forest Service responses to those comments are in Appendix E of this document.
APPENDICES

A. Summary of the Clarks Fork Division of the Beartooth Project, Clarks Fork River .................................................. A1

B. Evaluation of the Clarks Fork Division of the Beartooth Project, Yellowstone Level B Study .......................... B1

C. Summary of the Lake Creek Diversion and Storage Area .................................................................................. C1

D. Summary of the Wyoming Water Planning Program Reports on the Clarks Fork Reservoir ..................... D1

E. Public Comment on the Draft Environmental Statement and Forest Service Response ............................. E1

F. Literature Cited ....................................................................................................................................................... F1

G. Index ...................................................................................................................................................................... G1
APPENDIX A

SUMMARY OF THE CLARKS FORK DIVISION OF THE BEARTOOTH PROJECT, CLARKS FORK RIVER

In 1959 the Bureau of Reclamation, Region 6, (now the Water and Power Resources Service) Billings, Montana, published the Report on Clarks Fork Division, Wyoming and Montana, Missouri River Basin Project. The hydroelectric works described in the report, the Clarks Fork Division, are included in the Missouri River Basin Project, authorized by the Flood Control Act of 1944. The Clarks Fork River project is usually referred to as the Beartooth Unit.

The Beartooth Unit would include three dams and reservoirs on the main stem of the Clarks Fork River, one dam and reservoir on Sunlight Creek, a tributary, and three powerplants to utilize the regulation and hydrostatic heads provided by the dams. Power installations in the Unit would have the following characteristics:

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</thead>
<tbody>
<tr>
<td>Hunter Mountain</td>
<td>130,000</td>
<td>609</td>
<td>14,400</td>
<td>100.22</td>
<td>1900</td>
</tr>
<tr>
<td>Thief Creek</td>
<td>200,000</td>
<td>1404</td>
<td>125,200</td>
<td>504.52</td>
<td>1170</td>
</tr>
<tr>
<td>Sunlight</td>
<td>50,000</td>
<td>2003</td>
<td>14,900</td>
<td>111.76</td>
<td>1550</td>
</tr>
<tr>
<td>Bald Ridge</td>
<td>14,600</td>
<td>390</td>
<td>23,000</td>
<td>156.51</td>
<td>225</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>177,500</td>
<td>873.01</td>
<td></td>
</tr>
</tbody>
</table>

Hunter Mountain Dam would be located farthest upstream on the Clarks Fork, about seven miles upstream of the Wild and Scenic River study area. A conduit 34,800 feet long would convey water from Hunter Mountain Reservoir to Hunter Mountain Powerplant (located in the study area) which would contain a single generating unit.

Thief Creek Dam would be located about 12 miles downstream from Hunter Mountain Dam. A conduit 30,000 feet long would convey water from Thief Creek Reservoir to Sunlight Powerplant. This plant would be located on the Clarks Fork directly below its confluence with Sunlight Creek and would contain two generating units to utilize releases from Thief Creek Reservoir and one generating unit to utilize releases from Sunlight Reservoir.

Sunlight Dam would be located on Sunlight Creek about six and one-half miles upstream from its confluence with the Clarks Fork and out of the Wild and Scenic River study area. A conduit 34,900 feet long would convey water from Sunlight Reservoir to the powerplant.

Bald Ridge Dam would be located about seven miles downstream from Thief Creek Dam. A conduit 25,600 feet long would convey water from Bald Ridge Reservoir to Bald Ridge Powerplant both within the lower canyon which would contain a single generating unit.

Hunter Mountain Powerplant and Bald Ridge Powerplant would be operated by remote control from Sunlight Powerplant. The plants would be interconnected with facilities of the Missouri River Basin Transmission Division.
### DAM PROPERTIES

<table>
<thead>
<tr>
<th>Dam</th>
<th>Ht. Above Outlet (ft)</th>
<th>Streambed Length (ft)</th>
<th>Volume (cu. yds.)</th>
<th>Discharge* (cfs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hunter Mountain</td>
<td>215</td>
<td>1430</td>
<td>3,420,000</td>
<td>515</td>
</tr>
<tr>
<td>Thief Creek</td>
<td>343</td>
<td>750</td>
<td>577,000**</td>
<td>700</td>
</tr>
<tr>
<td>Sunlight</td>
<td>146</td>
<td>850</td>
<td>444,000</td>
<td>500</td>
</tr>
<tr>
<td>Bald Ridge</td>
<td>140</td>
<td>1000</td>
<td>1,236,000</td>
<td>600</td>
</tr>
</tbody>
</table>

* At maximum water surface elevation.

** Thief Creek Dam would be a concrete arch structure. The other dams would be earthfill structures.

### CONDUIT PROPERTIES

<table>
<thead>
<tr>
<th>Conduit</th>
<th>Tunnel Length (ft)</th>
<th>Tunnel Diameter (ft)</th>
<th>Penstock Length (ft)</th>
<th>Penstock Diameter (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hunter Mountain</td>
<td>31,000</td>
<td>9-1/2</td>
<td>3,800</td>
<td>7</td>
</tr>
<tr>
<td>Thief Creek</td>
<td>32,000</td>
<td>13-1/2</td>
<td>7,000</td>
<td>10</td>
</tr>
<tr>
<td>Sunlight</td>
<td>*</td>
<td>*</td>
<td>12,500</td>
<td>3-3/4</td>
</tr>
<tr>
<td>Bald Ridge</td>
<td>24,500</td>
<td>12-1/2</td>
<td>1,100</td>
<td>10</td>
</tr>
</tbody>
</table>

* Conduit would include 3200 feet of tunnel with a diameter of seven feet and 19,200 feet of concrete pipe in cut-and-cover with a diameter of 5-1/2 feet.

At present time there are about 42,750 acres of land irrigated from the Clarks Fork River. Except for extremely dry months, such as occurred in August 1940, an adequate supply is available for those lands from the unregulated flows of Clarks Fork. The infrequent demand for supplemental water precludes construction of storage facilities to furnish such supplemental water. However, the stream flow regulation provided by normal operation of the Beartooth Unit for power production would provide, if required, enough water to irrigate 10,000 to 15,000 acres of new lands in addition to those presently irrigated. This streamflow regulation would provide incidental benefits by reducing operation and maintenance costs resulting from diversion difficulties now experienced under conditions of extreme flow fluctuations and would reduce the tendency to over-irrigate during flood periods.

Minimum flows that would be maintained continuously throughout the year for protection and propagation of fish are as follows:

<table>
<thead>
<tr>
<th>Reach of Stream</th>
<th>Min. flow (cfs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunlight Dam to mouth of Sunlight Creek</td>
<td>15</td>
</tr>
<tr>
<td>Hunter Mountain Dam to mouth of Crandall Creek</td>
<td>20</td>
</tr>
<tr>
<td>Thief Creek Dam to Sunlight Powerplant</td>
<td>40</td>
</tr>
<tr>
<td>Bald Ridge Dam to Bald Ridge Powerplant</td>
<td>70</td>
</tr>
</tbody>
</table>

These flows would be increased by occasional spills and accretions below the dams.
If the Beartooth Unit is not constructed, the electrical power probably would be developed in eastern Montana or Wyoming with a coal-fired thermal power generating plant. Costs probably would be less, but the environmental impact might be higher.

National Economic Development account projections are determined in accordance with Water Resource Council "Principles and Standards".

### NED ACCOUNT

**BENEFICIAL EFFECTS**

<table>
<thead>
<tr>
<th>Description</th>
<th>ANNUAL EQUIVALENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipal and industrial water</td>
<td>--</td>
</tr>
<tr>
<td>Flood control</td>
<td>$7,000.</td>
</tr>
<tr>
<td>Irrigation</td>
<td>420,000.</td>
</tr>
<tr>
<td>Recreation</td>
<td>48,000.</td>
</tr>
<tr>
<td>Fish and Wildlife</td>
<td>--</td>
</tr>
<tr>
<td>Power (Hydro)</td>
<td>$9,599,000.</td>
</tr>
<tr>
<td>Total beneficial effects</td>
<td>$10,180,000.</td>
</tr>
</tbody>
</table>

**ADVERSE EFFECTS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installation cost</td>
<td>$18,120,000.</td>
</tr>
<tr>
<td>Interest during construction</td>
<td>$1,642,000.</td>
</tr>
<tr>
<td>Annual investment cost (IDC)</td>
<td>$19,762,000.</td>
</tr>
<tr>
<td>Annual OM&amp;R</td>
<td>($255,000.)</td>
</tr>
<tr>
<td>Total annual cost</td>
<td>$21,007,000.</td>
</tr>
<tr>
<td>External Diseconomics</td>
<td>$43,000.</td>
</tr>
<tr>
<td>Total adverse effects</td>
<td>$21,611,000.</td>
</tr>
</tbody>
</table>

**BENEFICIAL EFFECTS**

$11,431,000.  

$($50/kW-1.8 MILLS)-RATIO .47

The costs and benefits present in the National Economic Development (NED) and Regional Development account are indexed to 1975. An interest rate of 6-1/2 percent was used to compute interest during construction (IDC) and annual equivalent costs and benefits.

Power benefits are based on $50 per installed kW plus 1.8 mills times the energy produced.

As can be seen, the benefit:cost ratio of the project is 0.47:1 which precludes economic development of the Beartooth Project at this time.

Indexing of costs and benefits to 1978, however, would show still another relationship. Power benefits are based on a coal-fired electric generation plant costs. These costs are increasing at a more rapid rate than costs to build hydro plants. Therefore, these 1975 indexed costs and benefits should be used with caution and be it further understood that they are at the reconnaissance level.
## REGIONAL DEVELOPMENT ACCOUNT (ANNUAL EQUIVALENTS)

<table>
<thead>
<tr>
<th>BENEFICIAL EFFECTS: (ANNUAL)</th>
<th>REGION</th>
<th>ADJACENT REGION</th>
<th>REST-OF-NATION</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>USER BENEFITS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irrigation</td>
<td>$ 162,000</td>
<td>$ --</td>
<td>$ 258,000</td>
<td>$ 420,000</td>
</tr>
<tr>
<td>Municipal and Indus. Water</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Flood</td>
<td>37,000</td>
<td>--</td>
<td>33,000</td>
<td>70,000</td>
</tr>
<tr>
<td>Fish and Wildlife</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Recreation</td>
<td>12,000</td>
<td>12,000</td>
<td>24,000</td>
<td>48,000</td>
</tr>
<tr>
<td>Power (Hydro 1) */</td>
<td>2,399,750</td>
<td>2,399,750</td>
<td>4,799,500</td>
<td>9,599,000</td>
</tr>
<tr>
<td><strong>REGIONAL BENEFITS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment Impact</td>
<td>1,050,600</td>
<td>4,202,400</td>
<td>5,253,000</td>
<td>10,506,000</td>
</tr>
<tr>
<td>Induced and Stemming from</td>
<td>807,750</td>
<td>2,423,250</td>
<td>3,231,000</td>
<td>6,462,000</td>
</tr>
<tr>
<td>Externalities</td>
<td>17,000</td>
<td>1,000</td>
<td>25,000</td>
<td>43,000</td>
</tr>
<tr>
<td><strong>TOTAL BENEFICIAL EFFECTS</strong></td>
<td>4,486,000</td>
<td>$9,038,000</td>
<td>$13,624,000</td>
<td>$27,148,000</td>
</tr>
</tbody>
</table>

*/ @ $50 kW/ 1.8 MILL COEFFICIENTS
The Yellowstone Level B Study of the Missouri River Basin Commission (MRBC) is a reconnaissance level evaluation of water and related land resources with potential recommendation for implementation subject to the satisfactory completion of a Level C study. Major objectives of the study are to:

1. Display beneficial and adverse effects of alternative water resource plans.
2. Develop information for establishing State--MRBC priorities.
3. Define future study and research needs.
4. Provide information to resolve critical water use conflicts.
5. Identify crucial state and federal legislative needs.

Chapter 5 of the final report (Missouri River Basin Commission, Report on the Yellowstone Basin and Adjacent Coal Area Level B Study, Volume 7, Wind-Bighorn-Clarks Fork, April, 1978, 432 p.) entitled "Water and Related Land Resource Problems and Opportunities" describes several potential water development projects. Description of the Beartooth Project is listed in the section "Rejected Reservoir Sites" and is included here in its entirety.

In 1956 the Bureau of Reclamation proposed development of the Beartooth hydroelectric unit in the upper reaches of the Clarks Fork study area. The Unit would include three reservoirs on the main stem of the Clarks Fork, one reservoir on Sunlight Creek, and three powerplants and related facilities. A firm energy supply of 873 million kilowatt-hours per year could be supplied by the unit. The Project costs were estimated in 1956 to be $131,000,000 and annual benefits were estimated to exceed annual costs by 1.09 to 1. At 1975 price levels, the Beartooth Unit would have a benefit-cost ratio of 0.47 to 1.0 if it were developed by the Bureau of Reclamation as a part of the Missouri River Basin Project. If power from the project was sold at going private-sector rates for capacity and energy, the benefit-cost ratio would be 1.03 to 1.00. If pumped storage facilities were added to the system, the benefit-cost ratio would probably be somewhat better. In view of the fact that the project facilities would be located primarily on public land in an area where there are exceptional scenic and recreational values, and the project would be either infeasible or marginal under any foreseeable institutional arrangement, it is the judgment of the Study Team that the project should be eliminated from any further consideration. Table V-26 lists some of the design properties of the Unit.

Table V-26 Design Properties
Of The Clarks Fork Division Of The Beartooth Unit

<table>
<thead>
<tr>
<th>Facility Name</th>
<th>Reservoir Data</th>
<th>Powerplant Data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dam Height (feet)</td>
<td>Total Crest Length (feet)</td>
</tr>
<tr>
<td>Hunter Mountain</td>
<td>215</td>
<td>1,430</td>
</tr>
<tr>
<td>Thief Creek</td>
<td>343</td>
<td>750</td>
</tr>
<tr>
<td>Sunlight</td>
<td>146</td>
<td>850</td>
</tr>
<tr>
<td>Bald Ridge</td>
<td>140</td>
<td>1,000</td>
</tr>
<tr>
<td>Total</td>
<td>394,600</td>
<td></td>
</tr>
</tbody>
</table>

a/ Located at the Sunlight Powerplant.

As proposed, the Beartooth Unit would provide base load power only. Increased fossil fuel costs are causing a peaking power shortage. A pump-back peaking installation would probably improve the Beartooth Unit benefit-cost ratio. This should be explored if the unit is ever reconsidered.
In 1964 the Soil Conservation Service completed the report Preliminary Investigation Report, Cyclone Bar Watershed (February, 1964). The Lake Creek diversion and storage project would develop water for irrigation of the Cyclone Bar Watershed which is downstream of the Wild and Scenic River study area. The report was updated by the SCS in the Cyclone Bar, Watershed Investigation Report, March, 1976. The three problems identified on Cyclone Bar by the SCS included: (1) irrigation shortages on Littlerock, Bennett, and Line Creeks; (2) flood damages to irrigation structures and ditches on Littlerock, Bennett, and Line Creeks; and (3) freezing and icing on the lower reaches of Bennett Creek.

Each winter Bennett Creek freezes from the bottom up and develops a sheet of ice 2 to 3 feet thick, one-fourth to three-fourths-mile wide, and up to 2.5 miles long. While the problem was not studied in detail by the SCS, there may be ways of preventing this massive ice build-up.

The SCS study determined there is little potential for using reservoir storage to provide supplemental irrigation water supplies or for flood control storage. This is because of a lack of good storage sites and suitable construction materials. The best means identified for reducing flood damages are through channel stabilization and installation of permanent diversion structures. Supplemental irrigation water could be diverted from the Clarks Fork and regulated on Lake Creek with a reservoir to serve lands on Little Rock and Bennett Creeks.

A diversion structure on Clarks Fork (Sec. 12, T. 56 N., R. 103 W.) would divert 100 c.f.s. of water through a 3.3-mile-long supply canal into a potential 5,100 acre-foot reservoir on Lake Creek (Sec. 4, T. 56 N., R. 102 W.). A 45-foot-high earth-fill dam would store 4,900 acre-feet of irrigation water and provide 150 acre-feet of sediment storage and 50 acre-feet of flood-detention storage. The irrigation storage would give 2,076 acres a supplemental supply and provide 3,190 acres of nonirrigated grasslands a full supply in an 80-percent-chance year.

The cost of this project was estimated to be $840,000 with an annual cost of $54,400. The average annual benefits were estimated to be $134,320, and the resulting benefit-cost ratio is 2.5 to 1.0.
Cyclone Bar Watershed

Wind - Bighorn - Clarks Fork River Basin
APPENDIX D

SUMMARY OF THE WYOMING WATER PLANNING PROGRAM REPORT ON THE CLARKS FORK RESERVOIR

The Water Planning Program (State Engineer's Office, Report No. 11, Water and Related Land Resources of the Bighorn River Basin, Wyoming, Oct. 1972, investigated 3 alternative plans for the Clarks Fork River. The most comprehensive plan would involve the following:

a) construction of a dam on the Clarks Fork River;
b) irrigation of 19,800 new acres in the Clarks Fork Basin;
c) a diversion into the Shoshone River Basin to supply Polecat Bench, and 25,000 acres on the Shoshone Project for exchange of Shoshone River, and to deliver municipal and industrial (M&I) water to the Shoshone River; and
d) raising Buffalo Bill Dam to provide a larger minimum pool for recreation, irrigation of existing lands and Shoshone Extension South, M & I water, and sustained streamflow below the dam for fishery and water quality improvement for the entire Shoshone River.

A potential 265-foot-high earth dam on the Clarks Fork in Sec. 14, T. 56 N., R. 103 W. and a 168-foot dike on Lake Creek in Sec. 35 T. 57 N., R. 103 W. would provide 750,000 acre-feet of storage capacity, 185,000 acre-feet for a recreation pool and a head for diverting to the Cyclone Bar area, 50,100 acre-feet of storage to provide a firm sustained streamflow release into Clarks Fork, 140,500 acre-feet for irrigation, 317,700 acre M & I water supply, and 56,700 acre-feet for spillway surcharge. The 50,100 acre-feet of storage for sustained flows would provide 188 c.f.s. (10,000 acre-feet per month) below Clarks Fork Reservoir. The 140,500 acre-foot irrigation pool would provide a full irrigation supply for the 4,600 acres presently irrigated below the reservoir, 19,200 acres of new land on Polecat Bench, the 25,000 acres on the Shoshone Project for exchange, 11,000 new acres on Chapman and Kimball Benches, 8,800 new acres on the Cyclone Bar, and provide supplemental water as needed to the 5,300 acres presently irrigated on Pat O'Hara Creek and on Cyclone Bar. The 317,700 acre-foot M & I pool would develop an M & I water supply of 127,100 acre-feet per year that would be diverted to the Shoshone River.

Irrigation water would be released through the outlet works in the Lake Creek Dike to irrigate 8,800 acres of new land on Cyclone Bar and provide the presently irrigated lands on Cyclone Bar a supplemental water supply directly or by providing exchange water. The outlet works in the Clarks Fork Dam would release water into the Clarks Fork River to provide the sustained flow on Clarks Fork, M & I, and irrigation and supplemental water supply for 56,200 acres in the Clarks Fork, Shoshone, and Greybull River Basins. The M & I and irrigation water would be pumped directly out of the Clarks Fork below Paint Creek (Sec. 12, T. 57 N., R. 103 W). A network of pipelines would provide a supplemental water supply to 5,300 acres presently irrigated from Pat O'Hara Creek, provide a full water supply to 11,000 acres on Kimball and Chapman Benches, 25,000 acres on the Shoshone Project, and 19,200 acres on Polecat Bench, and deliver a firm annual M & I water supply of 127,100 acre-feet to the Shoshone River. The M & I water supply and the irrigation water supply for the Shoshone Project and Polecat Bench Unit would be pumped into Heart Mountain Canal in Sec. 4, T. 56 N., R. 101 W.

Exchange water developed at Clarks Fork Reservoir would be pumped to the Heart Mountain Canal to provide a full-season water supply for 25,000 acres on the Shoshone Project. The present canal and lateral system would be used wherever possible; however, in some instances additional supply canals may be desired to more beneficially utilize the imported water.

The 127,100 acre-feet of M & I water developed at the Clarks Fork Reservoir would be delivered to the Heart Mountain Canal in conjunction with delivering irrigation water to more fully utilize the pipeline and pumping plant capacities. The basic M & I water delivery period would be March through October, except no M & I water would be delivered in July and August because of the high irrigation demand in those months. The M & I water pumped into the Heart Mountain Canal would be conveyed down Alkali Creek and then released into the Shoshone River near Ralston. Releases from Buffalo Bill Dam would be scheduled to provide a steady, year-round M & I water supply that could be diverted below Ralston irrigate M & I water from Bighorn Lake rather than from the Shoshone River. If the water quality of the entire Shoshone River would be enhanced. The combination of irrigation releases and M & I water releases from Buffalo Bill Dam would provide a sustained flow below the dam of 325 c.f.s. in October and 415 c.f.s. or more the rest of the year. Sustained flows in the Shoshone River below Ralston would always be 415 c.f.s. or more.
The Clarks Fork water exchanged for Shoshone River water would enable an enlarged Buffalo Bill Reservoir to serve the existing Shoshone Project (except the 25,000 acres served by exchange) and the Shoshone Extension South, to provide increased recreation with an enlarged minimum pool and develop 209,900 acre-feet of M & I water per year. The plan would include enlarging Buffalo Bill Dam by 25 feet and the reservoir capacity to 710,200 acre-feet. The reservoir allocation could include 200,000 acre-feet minimum pool, 442,200 acre-feet conservation pool, and 68,000 acre-feet spillway surcharge capacity.

A complete analysis of the costs and benefits of the Clarks Fork-Shoshone River project has not been done. The modification of Buffalo Bill Dam and the associated irrigation, M & I water supply, recreation, and hydropower facilities is under feasibility investigation by the USBR and up-to-date figures are not available. The latest cost estimate for the Polecat Bench Project is $30.3 million, and the ratio of total benefits to costs is 1.2 to 1.0.

A reconnaissance estimate of the Buffalo Bill Dam enlargement was $4.2 million in 1968. Recreation and hydropower-plant costs were an additional $5.2 million. The estimated cost of the Shoshone Extension South was reported to be $24.3 million in 1968.

Clarks Fork Dam and conveyance works from Clarks Fork to the Shoshone River were estimated to cost over $101 million. Additional costs not estimated would include conveyance structures to deliver irrigation water on Cyclone Bar, Pat O'Hara Creek, Chapman Bench, and Kimball Bench. The estimated average cost of water developed for all purposes is $17 per acre-foot per year. The feasibility of the project would depend upon how the costs were allocated among the various project purposes.

A second plan considered full utilization of Wyoming's compact allocation of Clarks Fork water. In this plan, 19,800 acres of new land would be developed and a 181,600-acre-foot per year M & I water supply could be provided. The Clarks Fork Reservoir would have about 450,000 acre-feet capacity. Sustained winter streamflows below the Clarks Fork Dam could not be provided if the M & I water were diverted into the Shoshone River.

A third plan considered new irrigation only. Approximately 19,800 acres of new land would be developed in the Clarks Fork River Basin. In this plan as in the other two plans it was contemplated that water would be diverted into the Shoshone River for use on Polecat Bench and the Shoshone Project to provide an exchange of water so that Shoshone River M & I water supply, irrigation, and recreation at Buffalo Bill Dam could be provided. Depletion of Clarks Fork would be about 238,000 acre-feet per year under this plan.

The obvious alternative to diverting Clarks Fork water into Shoshone River for use in the Bighorn Basin would be to divert Wyoming's share of the Clarks Fork, along with other water at Miles City, Montana, into the Miles City-Gillette aqueduct proposed by the USBR.
Figure 5. Location Map of Potential Clarks Fork Reservoir, Wyoming Water Planning Program, State Engineer's Office.
APPENDIX E

PUBLIC COMMENT ON THE DRAFT ENVIRONMENTAL STATEMENT AND
FOREST SERVICE RESPONSE
Written comments on the Draft Environmental Statement were separated into five categories:

1. Letters favoring Wild and Scenic River designation which do not need a response.
2. Letters favoring Wild and Scenic River designation which need a response.
3. Letters expressing opposition to Wild and Scenic River designation which do not need a response.
4. Letters expressing opposition to Wild and Scenic River designation which need a response.
5. Letters not favoring or opposing Wild and Scenic River designation but providing substantive information.

The following persons or groups each sent letters favoring Wild and Scenic River designation. Sample letters are on pages E-3 to E-6.

Department of Commerce
Washington, D.C.

Public Lands Institute, Inc.
Denver, Colorado

Sierra Club, Wyoming Chapter
Phillip M. Hocker, Chairman
Jackson, Wyoming

Powell Area League of Women Voters
Ann Hinckley, President
Powell, Wyoming

Friends of the Earth
Edward M. Dobson, President
Northern Great Plains Rep.
Billings, Montana

Wildlife Management Institute
Daniel A. Poole, President
Washington, D.C.

Trout Unlimited, Colorado Council
Jim Belsey, Executive Director
Denver, Colorado

Jon M. McMillan, M.D.
Cody, Wyoming

Richard W. Heasler, Jr.
Laramie, Wyoming

Bart Koehler
Laramie, Wyoming

Henry P. Heasler
Laramie, Wyoming

Dee Oudin
Cody, Wyoming

Nancy E. Stearns
Powell, Wyoming

Bern Hinckley
Powell, Wyoming

R. A. Stearns
Powell, Wyoming

Ginger Bowen
Laramie, Wyoming

Beverly Devore
Powell, Wyoming

William & Ella Powell
Powell, Wyoming

Cliff Kaufman
Powell, Wyoming

Bev and Craig Leeper
Powell, Wyoming

Richard D. Anderson, M.D.
Cody, Wyoming

Deborah S. & Robert W. Koelling
Powell, Wyoming

Benjamin L. Chapman
Lake Placid, New York

Luisi W. Stratford
Cody, Wyoming

H. A. Neuenschwander
Powell, Wyoming

Buzzy Hassrich
Cody, Wyoming

Fred G. McGee
Cody, Wyoming

Dale and Roberta Pike
Cody, Wyoming

Lee Stearns
Powell, Wyoming

Cara Stearns
Powell, Wyoming

Suzanne F. Capstick
Cody, Wyoming

Elmer Ratcliff
Powell, Wyoming

Lin Copeland Burke
Sierra Madre, California

Polly P. Copeland
Altadena, California

Anne Model
Cody, Wyoming

Mr. and Mrs. John R. Strong
Worland, Wyoming

Meredith Taylor
Meeteetse, Wyoming

Brad Donovan
Powell, Wyoming

Mrs. Melvin McGee
Cody, Wyoming

Margaret Bowes
Powell, Wyoming

Elizabeth P. Dominick
Cody, Wyoming

Dewitt Dominick
Cody, Wyoming

Donald J. Gibbs
Cody, Wyoming

Joseph C. Schott
GAFB, Texas

Martie Crane
Casper, Wyoming

Ruth Palmer & Lois S. Jones
Cody, Wyoming

Irene B. Smith
Cody, Wyoming

Dr. William G. Pierce
Los Altos, California

May Bell Pierce
Los Altos, California

Jack Richard
Cody, Wyoming
The following people signed a petition letter supporting Wild and Scenic designation of the Clarks Fork Canyon and opposing construction of dams in the study area:

David A. Larson
Powell, Wyoming

Sally Shimp
Powell, Wyoming

Cindy A. Albright
Powell, Wyoming

Charles R. Neal
Worland, Wyoming

Paul J. Seronko
Powell, Wyoming

Kate P. Neal
Worland, Wyoming

Kerry Powers
Powell, Wyoming

W. E. Crane, Jr.
Cheyenne, Wyoming

Robert L. Lebruska
Powell, Wyoming

Kermit W. Olson
Cody, Wyoming

Thomas A. Gustafson
Powell, Wyoming

Becky S. Robinson
Cody, Wyoming

Claire M. Smith
Powell, Wyoming

Doug Brandt
Cody, Wyoming

Arthur J. Eck
Powell, Wyoming

Beth Becker
Cody, Wyoming

Darrell L. Anderson
Powell, Wyoming

David Northrup
Powell, Wyoming

Blanche Keller
Powell, Wyoming

Public Lands Institute
Incorporated
1740 High Street, Denver, Colorado 80218
Telephone 303-388-4171

September 13, 1979

Dear Sir:

The Public Lands Institute, a national conservation research and education organization, wishes to support inclusion of the Clark's Fork of the Yellowstone River in the National Wild and Scenic River System (NWSRS).

We are in favor of "wild" river designation as proposed in the preferred alternative, Alternative 5. The idea of upgrading Road 119 in the lower canyon is acceptable, the end result being more diversified opportunity for recreation. However, the upgrading must be consistent with "wild" status. Therefore, the picnic area proposed in Alternative 4 is unacceptable (as is that alternative's "scenic" designation for the lower canyon.)

The draft statement does not make a good case for including the private land at the western boundary of the study segment in the designation. The local opposition to and expense of acquiring scenic easements on this 0.5 mile stretch of river may not justify its inclusion in the NWSRS.

The Public Lands Institute therefore supports a combination of Alternatives 4 (no picnic ground) and 5 (private land at Crandall Bridge excluded). We feel this designation would adequately protect the river's outstanding scenery, landforms, variety of waterflows, and historical values. It would also improve dispersed recreation opportunities while maintaining the primitive character of the Clark's Fork.

Please make this letter a part of the public record.

Sincerely,

Todd M. Bacon
Project Director
September 14, 1974

Dear Mr. Hall,

I'm writing you a note concerning the Clarks Fork of the Yellowstone River Wild & Scenic River Study. I feel that the Alternative D plan would be best for both the State of Wyoming and the people concerned.

Thank you for your time.

Sincerely,

Nancy D. Stimson
P.O. Box 1184
Council, WY 82435

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Dear Mr. Hall,

As a Bachelor Forest vacation cabin owner, I would like to add my voice in support of Alternative #5 proposed by the Forest Service in the Clarks Fork River study. Best wishes for success in the protection of this magnificent area.

Sincerely,

Ben Chapman
The question is then, how can the area be best protected. Because I have lived in the area and hope to again make it my home, I would like the area to be protected by Wild River designation along its entire studied length (alternative 2) so as to help shield it from local and regional oscillations in political policies. The area needs and deserves to have the utmost protection.

Thank you for your time and consideration.

Sincerely,

Henry P. Heasler
TO: FOREST SUPERVISOR, SHOSHONE NATIONAL FOREST
FROM: POWELL AREA LEAGUE OF WOMEN VOTERS
RE: CLARKS FORK OF THE YELLOWSTONE WILD AND SCENIC RIVER STUDY

The Powell Area League of Women Voters supports the concept of a "wild" designation for a segment of the Clark's Fork River.

We favor Alternative 2 because it excludes more of the private land, and because it eliminates improvement of road 139. This would limit further development on that side of the river, which, because of its inaccessibility, could make maintenance and/or administration of a developed area difficult.

We believe consideration should be given to a boundary change which would accommodate water storage in the proposed Clark's Fork Reservoir, if the height of that dam could not be lowered to prevent intrusion of the water into the proposed segment, or if another dam-site downstream is not feasible. We believe the option for water storage on the main stem of the Clark Fork outside the proposed segment should be retained.

Ann Hinckley, President
Powell Area LWV
September 14, 1976

The following persons or groups each sent letters favoring Wild and Scenic River designation which have Forest Service responses.
Mr. Randall R. Hall  
September 24, 1979  
Page Two

1. Such a designation must provide complete protection of the rights and interests of any private citizen who may be impacted by the action.

2. The states water resource development opportunities on the Clarks Fork in Wyoming must be preserved under such a designation.

Alternative 4, as currently framed, provides adequate protection for the private landowners at the upper and lower ends of the study segments because their lands are excluded. However, I am concerned about the inclusion of the private lands in the middle segment, the "Wright Place". Can Alternative 4 be modified such that the "Wright Place" will not be included in the designation? If not, then I would require assurances that a scenic easement be obtained only if the landowner consents and then only if the easement would not affect the present use nor reasonable expansion of uses associated with this parcel. This is a sensitive issue, and I request that something be worked out which is amicable to the landowner involved before a final recommendation is sent to Congress.

With regards to the state's water resource development opportunities, I believe that a slight modification to the eastern boundary of the study segments would adequately preserve these opportunities. The eastern boundary should be moved back somewhere within the existing National Forest boundary. The attached figure shows the suggested boundary adjustment. This boundary adjustment would permit the development of the Lake Creek Diversion and Storage Project and the Clarks Fork Reservoir without compromising the potential "wild and scenic" status of the river. As such, this slight modification would alleviate one of my major concerns with a designation of the Clarks Fork.

As I view it, the advantages of this modified version of Alternative 4 are several fold. Foremost, it would protect the rights and interests of the private citizens involved and also preserve the state's water resource development opportunities. As far as recreation is concerned, the scenic overlooks, picnic area and day use concept under this alternative will provide more diversified recreation opportunities in a region dominated by wilderness type areas. It also appears that the outputs associated with this alternative would generate more socio-economic benefits to the area than the other designation alternatives. Finally, if this modified version of Alternative 4 were to become the recommended alternative, it would indeed reflect and uphold the concerns of the state.
Mr. Randall R. Hall  
September 24, 1979  
Page Three

I hope that you find these comments useful in formulating your final recommendation. I am sure that we are both interested in devising an alternative which can be supported by all involved. Please keep me informed of any further progress in this effort.

Yours sincerely,

[Signature]

Attachment

1. Alternative 4 would purchase a scenic easement at the "Wright Place" only on a willing buyer-willing seller basis which means that condemnation would not be used to purchase a scenic easement in this alternative. In the Forest Service preferred alternative in this statement, Alternative 3, a scenic easement would be acquired on the "Wright Place" by condemnation if necessary. We realize this is a sensitive issue and have discussed it at length with the landowner involved. The "Wright Place" occupies one of the most scenic parts of the study area and one of the most frequently viewed. Growth constraints on this parcel of land are important to maintenance of scenic values for the potential Clarks Fork Wild and Scenic River. A scenic easement would not affect any of the present uses or reasonable expansion of uses associated with this parcel. The Wild and Scenic Rivers Act (Section 6b) does not allow the Federal government to acquire fee title to lands by condemnation where the Federal government owns fifty percent or more of the land, as in the Clarks Fork study area.

Considerable response was received to the Draft Environmental Statement acknowledging the undeveloped scenic value of the inner canyon and requesting maintenance of that characteristic. In order to meet this response, and also to meet evaluation criteria #1 (page 18 and 37) we feel that growth constraints on the "Wright Place" are necessary. We will work with the landowner and the Park County Planning and Zoning Board to formulate a solution which hopefully, will be amiable to the landowner.

2. The Forest Service recognizes the need in future years to develop water resources as demands increase and that the Clarks Fork River has much unappropriated water that could be utilized in Wyoming. Ideally, Wild and Scenic River designation of the Clarks Fork River should avoid conflict with proposed or potential development of the Clarks Fork River in Wyoming. A major reason for deleting the lower mile of the study area from the segment of river recommended for Wild and Scenic River designation is to minimize conflict with the potential Clarks Fork Reservoir.

We have not further modified the eastern boundary of the study segment to eliminate the one-half mile overlap between the Wild River recommendation and the potential reservoir for several reasons:

1) At the present time, no proposal exists to construct the Clarks Fork Reservoir. If and when the Reservoir is proposed, the size and exact location of the proposal may differ from the 750,000 acre-feet reservoir discussed in Appendix D, such as a proposal to construct the second plan (page D-2) which is only a 450,000 reservoir.
The one-half mile overlap between the potential Wild and Scenic River and potential Clarks Fork Reservoir is relatively small and can be resolved by several methods:

a. A smaller Clarks Fork Reservoir could be constructed which would not back water past the Forest boundary.

b. The Secretary of Agriculture, under the authority in Section 7a of the Wild and Scenic Rivers Act, could determine that the upper one-half mile of the 750,000 acre-feet Clarks Fork Reservoir, would or would not "invade the area or unreasonably diminish the scenic, recreational, and fish and wildlife values present in the area". This determination could result in allowing the Clarks Fork Reservoir to back water for some distance into the designated Wild and Scenic River segment.

c. Congress could de-classify the conflicting segment of the Clarks Fork River from the Wild and Scenic River system if the Congress determined such action was in the interest of the country.

Alternative 4 was the least preferred alternative in the comments to the Draft Environmental Statement. The upgrading of Road 119 was particularly opposed and no support was received for the picnic ground in the Lower Canyon. For this reason we feel that Alternative 3 better matches the substance of the public involvement. Note that adoption of Alternative 3 does not preclude the road and picnic ground in the Lower Canyon as these facilities could be developed in the future as the need and demand for these improvements occur.

3) The draft environmental statement for the Wild and Scenic River Study of The Clarks Fork of the Yellowstone River has been reviewed by our state agencies. Copies of the comments provided by these agencies are enclosed for your consideration and use. If any additional comments or questions are generated, we will forward them immediately to your office as an addendum to the enclosed.

You are well aware that any proposed action which has the potential to affect the utilization of water resources in Wyoming is going to generate a lot of controversy. We in state government must be sensitive to all viewpoints and issues involved in such controversy. It is our desire that an alternative be developed which reflects to the fullest degree the position of both the local entities and the State of Wyoming. Due to the Governor's absence from Cheyenne, the official state position on the study alternatives for the Clarks Fork will be forthcoming early next week.

At this time, I would like to present an editorial change which is necessary because of a recent change in the Wyoming Water Quality Standards, Chapter I. With regards to degradation of Class I waters, the new standards (see attached copy) state that waters which are designated as Class I shall not be degraded below their existing quality by any point source discharges other than from dams. (emphasis added) This change should be reflected in statements made on pages 10 and 29 of the draft and in any future discussions of Class I waters.
Thank you for the opportunity to review this study draft. I hope you find the enclosed comments and the Governor's forthcoming comments useful in making your decision on which alternative is in the best interest of all involved.

Yours sincerely,

Dick Hartman,
State Planning Coordinator

1. Page 10 and 29 have been changed to reflect changes in the Wyoming Water Quality Standards, Chapter I.
August 29, 1979

Dear Mr. Hall:

We have reviewed the Draft Environmental Statement (DES 02-14-79 - 04) and the Wild and Scenic Rivers Study of the Clarks Fork of the Yellowstone, in the interest of the wildlife resource, and offer the following comments:

1) Fish and wildlife values should receive greater emphasis in this assessment due to the fact that the stream is a good Yellowstone cutthroat habitat. Emphasis should be added to the discussion included in the second paragraph, item 4, under Summary of Criteria of Satisfaction, on page 13 to point out the need for protection of one of the few remaining pure Yellowstone cutthroat trout population habitats.

Selection of alternative number 5, which would be to recommend designation of the entire study area, excluding the private land at the lower end, would result in the most beneficial management for wildlife. We would, however, suggest that this alternative also include recommendation of those BLM lands located between the Forest boundary and private lands.

If we may be of further help on this project, do not hesitate to contact us.

Sincerely,

W. DONALD DEXTER, ASSISTANT
WYOMING GAME AND FISH DEPARTMENT

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2. The BLM lands located between the Forest Boundary and private lands are included in the Wild and Scenic designation in Alternative 2. Inclusion of the 0.25 mile BLM section below the Forest Boundary would increase the conflict between the Wild and Scenic designation and the potential 750,000 acre-foot Clarks Fork Reservoir below the Forest Boundary.

The Cody BLM Area Office is in the process of inventorying recreation problems, opportunities, and management alternatives along the Clarks Fork River below the Forest Boundary. Recreation Impact problems in the 0.25 mile of BLM land below the Forest Boundary (see Sparkhaws' letter, page E-43) will be examined. BLM recreation management in this 0.25 mile segment, however, is not dependent upon Wild and Scenic River designation of that segment.
August 29, 1979

Mr. Randall R. Hall
Forest Supervisor
Shoshone National Forest
Cody, Wyoming 82414

Dear Mr. Hall:

This is in response to the request for the Department of the Interior's review and comments on the draft environmental statement for the Clarke Fork of the Yellowstone Wild and Scenic River Study, Shoshone National Forest, Park County, Wyoming.

1. **Cultural Resources** - This statement makes no mention of cultural resources. Pursuant to Section 106 of the National Historic Preservation Act and Executive Order 11593, the Forest Service must survey the area for potential National Register properties before any further action is taken which would result in ground disturbance. This should be done in consultation with the State Historic Preservation Officer (SHPO) and the final environmental statement should show concurrence from the SHPO on this project.

2. **Mineral Resources** - This Department is concerned with the effect that mineral-related sector of the economy. A literature search reveals that the Forest should survey the area for potential mineral resources. However, the statement acknowledges that the exploration for minerals is occurring in the area, but mentions only coal, gas, and oil. Because mineral commodities are essential to the national economy, we believe that mineral resources should be considered in depth in the final statement.

3. **Water Resources** - Sediment, which can affect both water quality and aquatic ecosystems, could be expected to increase both over the short term from proposed construction of access routes and parking lots, and later from the projected increase in user traffic (p. 35). There was no supporting data to determine that sedimentation would be "minor or temporary."

4. The term, "minimal stream flow," "instream flow," and "free flowing" should be defined with respect to each other. Sufficient quantities of water are necessary to provide adequate protection and preservation for the river (if designated) and its aquatic ecosystems (p. 29). The problem of monitoring stream flow and administrative or agency responsibility to preserve "instream flow" were not adequately addressed. The entire issue of monitoring probable impacts was not mentioned.

5. Based on a 1943 Forest Service study which found that hydroelectric projects in this area were economically and structurally feasible, the Geological Survey prepared Power Site Classification 353, which includes about 30,000 acres of Federal land that would be required for development of these projects. The classification was approved June 7, 1944. The firm energy potential for only the Clarke Fork of the Yellowstone projects has been estimated at 873 million kilowatt-hours per year. Generation of this amount of hydroelectric energy could save the nation at least 410,000 tons of coal, 1,500,000 barrels of oil, or 9 billion cubic feet of gas each year.

6. In view of the foregoing, and with reference to the discussion of alternatives beginning on page 20, and to preceding mention of relatively recent determinations of unfavorable cost/benefit studies of potential hydroelectric projects, we believe the text should be modified. We realize that the Criteria for Evaluating Alternatives (p. 18, item 8), and considerations given in formulation of alternatives (p. 20), and the text itself were prepared prior to the President's recent policy direction relating to energy sources, conservation, and self-sufficiency. We believe that Forest Service "Criteria" and "considerations" should be reviewed in light of that policy, and that the text should more clearly address the matter of the potential energy source foregone if the Service's recommendation is adopted and affirmative legislation is enacted.

Lacking such considerations in the present text, we are inclined to agree fully with the statement on page 23 that "The no-action alternative serves the NED objective best by keeping development options open and continuing the present level and trend of recreation development."

7. In view of the potential for increased recreation use within the study area, provisions for water supply and sanitary-water disposal facilities should be considered.

Other - The impact statement does not address the possible conflicts between the anticipated increase in visitors and developments, and the intent of the Wild and Scenic Rivers Act to protect and preserve qualifying rivers.

No definitive assessment of impacts was made concerning projected increase in recreational uses (and as inferred, increase of local populations) on the "wildness" quality of the river, sensitive or endangered species, habitat management and problems; nor were associated increases in demand for goods and services addressed.
Mr. Randall Hall, Cody, Wyoming

Some discourse on the three classifications provided by the Act, and any management constraints pertinent to them, would be helpful to the reader. This could be placed in a glossary.

In regard to alternative formulation, the maximum preservation alternative does not usually include such amenities as trail and overlook construction without the opportunity to compare costs and benefits of these amenities to maximum preservation in their absence. Since maximum preservation will be the recommendation in this study, it would be extremely beneficial to display the costs and benefits of trails and overlook by creating another which would be maximum preservation without construction.

Because of its physical characteristics, the Clarks Fork River does not allow easy access. As the draft points out, "floating" is generally impossible and access into the canyon areas is extremely limited. For these reasons, the river has remained essentially unaltered. In our opinion this unique attribute should be largely maintained. We therefore question whether scenic values would be enhanced by construction of some proposed developments, such as the parking lot and the upgrading of Road 119 in the Lower Canyon segment. We believe that maintenance of the river in as natural a condition as possible should be a primary objective. However, we recognize that doing so would require some curtailment of private land uses and potential water developments. Accordingly, we agree that the No Action Alternative is not really viable as it does not place any restrictions on such uses.

Considering the objective we have suggested, Alternatives 2 and 5 appear to be the best options. We think Alternative 2 should be the preferred one, since it would result in less modification of the Clarks Fork River ecosystem.

You will find enclosed a list of editorial comments for your use in revising the draft statement.

Sincerely,

[Signature]
Regional Environmental Officer

Enclosure

RESPONSE TO U.S. DEPARTMENT OF THE INTERIOR

3. No supporting data exists. This judgment was based on observation of similar construction in adjacent areas.
4. "Instream flow" is the amount of water flowing in a river at any one time. "Instream flow needs" and "minimal stream flow" are the same and refer to the amount of stream flow below which decreases would significantly affect the river's "ecological, scenic, or other values". Free-flowing is defined in the USDA, USDI, 1970 Wild and Scenic River Guidelines as "a flowing body of water or estuary or a section, portion, or tributary thereof, including rivers, streams, creeks, runs, kills, rills, and small lakes which are without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway."
5. Agreed. See revision of VII.2.
6. Water supply and sanitary-water disposal facilities will be considered in development of the management plan for the Clarks Fork River.
7. These impacts are discussed in Section VII.B 1-5. Some modifications of the natural environment will occur in areas of the trail and overlook construction including some littering, trampling of vegetation, and loss of solitude. The adverse environmental effects are expected to be minimal based on comparisons with similar developments within the Shoshone Forest. It should be noted that parts of the Upper Canyon, and most of the Middle Canyon, have no existing or planned trail access under any alternative and should remain virtually unvisited and pristine. Management objectives developed for the River, if designated as a Wild River, will follow those listed in USDI, USDA 1970 Guidelines for Management of Wild and Scenic Rivers, which limit motorized land travel, allow management facilities only if no significant adverse effects occur on natural character, and emphasize dispersed primitive recreation.
8. A maximum preservation without construction alternative would have less development than Alternative 1. Both developments in Alternative 1 are currently planned. The river trail is designed...
to meet an existing expressed need for access to the lower part of the Upper Canyon. The river overlook is planned as part of the Beartooth VIS program, a series of interpretative signs, pullouts, short trails, and overlooks along the Beartooth Highway (U.S. 212) and Wyoming Highway 296. Although the types and amounts of constructed recreational facilities within the Clarks Fork Canyon to facilitate Wild and Scenic River management is debatable, an alternative which has no construction is not realistic if the Canyon is going to facilitate at least some diversity of recreation use.

Thank you. Most of these comments have been incorporated into the text.

September 12, 1979

Mark Pearson
CU Wilderness Study Group
MC 166
Boulder, CO 80309

Forest Supervisor
Shoshone National Forest
West Yellowstone Highway
P.O. Box 961
Cody, WY 82414

Dear Sir:

regarding the Clarks Fork of the Yellowstone Wild and Scenic River Study, I wholeheartedly concur with the intent of your recommendation for inclusion of the Clarks Fork as a Wild River in the Wild and Scenic Rivers System. This outstanding river definitely merits such designation. Hopefully, the Clarks Fork will be the first waterway in Wyoming accorded recognition of its irreplaceable scenic values.

Wild River status for the Clarks Fork is particularly welcomed in light of the Bureau of Reclamation's proposed Beartooth Unit. Any administrative action that lessens the possibility of the completion of that contemplated fiasco is preferable to the destruction of the river. As Wild River status would preclude construction of two of the dams and of two of the power plants, designation of the Clarks Fork as such should noticeably reduce the probability of the Beartooth Unit ever being built.

The only aspect of the proposed action I wish to take issue with concerns the upgrading of Forest Development Road #119 as stated in
Alternative 5. Such improvement of a road, albeit already existing, along a Wild River corridor runs contrary to the guidelines set forth in the text Guidelines for Evaluating Wild, Scenic, and Recreational Rivers... by the Departments of Interior and Agriculture. Increased vehicular use of the river corridor will result in the degradation of the qualities which are intended to be protected through Wild River status. As the management objective is to preserve the river in its present wild state (e.g., by the continued limitation of motorized travel in the area), the objective is unattainable if road 119 is upgraded. Having visited the lower canyon on numerous occasions this past summer, I found that vehicles presently using the road are definitely visible from the river’s edge.

Again, I must vehemently disagree with this stated purpose to increase vehicular use of the lower canyon. A much preferable alternative would be to downgrade the road to a trail. Also, discouragement of overnight use of the lower canyon will be made much more difficult after the completion of an improved road with access pullout and a terminal parking facility. This increase of vehicular traffic in the attempt to ease recreational access absolutely contradicts the intent of Section 2(b)—the definition of a wild river—of the Wild and Scenic Rivers Act.

I believe Alternatives 2 or 3 to be more compatible with the intent of preserving the Clark Fork’s present qualities. I sincerely hope that you will reconsider your decision endorsing improvement of road 119 and leave it as is, if not downgrading it completely.

Sincerely,

Mark J. Pearson

RESPONSE TO LETTER OF MARK PEARSON

The Guidelines only give general direction on this point, calling for restricting or prohibiting motorized land travel, “except where such uses are not in conflict with the purposes of the Act”. In addition, the Guidelines “prohibit improvements or new structures unless they are clearly in keeping with the overall objectives of the Wild River area classification and management”. The Deputy Director of Watershed for the Rocky Mountain Region, Milt Robinson, who has worked on all of the recent Wild and Scenic River studies in Colorado, felt that enough latitude exists in Wild River management to upgrade Road 119 in Alternative 5. Note that Wild River is far less restrictive to such improvements than formal Wilderness designation which basically closes areas to motorized use.

Road 119 provides the only access for most of the year to the Morrison or “Switchback” ranch which is on the Diilworth Bench, north of the Middle Canyon. Accordingly, closing Road 119 to motorized travel is not a viable management option at this time.

Note that the improvements to Road 119 are not included in the preferred Alternative 3.
Dear Sir,

I have reviewed the Draft Environmental Impact Statement for the Clarks Fork Study Area, and wish to indicate my support for the alternative selected. Alternative five(5), recommendation that the study area, excluding the private land at the lower end, receive Wild and Scenic River designation best assures protection of the outstandingly remarkable qualities of the river.

One concern regarding the proposal must be voiced. The possibility of a water impoundment project on the river remains under the selected alternative. While the project as planned would not affect the Wild and Scenic designation of the Study Area, my concern focuses on the long term impacts of the dam. Once the project is completed, demand for irrigation water will increase as the area develops. This increased demand may result in pressure being brought to increase the impoundment of water on the Clarks Fork. Increased impoundment would jeopardize the Wild and Scenic designation of the river, as well as the actual environment of the river. With this possibility in mind I submit the following suggestions.

Either (1) the plan should include recommendation that the proposed water project be the max. development of the river allowable, or, (2) the plan should be amended to recommend that the water project be precluded from the river. Realising the sensitive nature of the second suggestion I would be satisfied with the first.

Again, with the single exception noted in this letter, I wish to indicate support of the recommendation that the Clarks Fork receive Wild and Scenic River designation.

Thank you for your time and cooperation.

Sincerely,

Dr. Gary Sturmer

Ray Hall
Shoshone National Forest
West Yellowstone Highway
P. O. Box 961
Cody, Wyoming

Dr. Gary Sturmer
RESPONSE TO DR. GARY STURMER

1. The water project you refer to is the Clarks Fork Reservoir which was studied by the Wyoming Water Planning Program, State Engineers Office (Appendix D). In order for the Forest Service to recommend that the Clarks Fork Reservoir be either: 1) the maximum development of the river allowable, or 2) that the Clarks Fork Reservoir be precluded from the river, the Forest Service, through the NEPA process, would have to study the Clarks Fork Reservoir and file a Final Environmental Statement recommending against that project. This action is infeasible for several reasons:

   1) No proposal for the project exists at this time to be studied and evaluated.

   2) The lands in question are in private ownership and BLM, with only a very small part (0.5 mile) on the Forest. The lead agency for the study would not be the Forest Service.

   3) Such a study would clearly be beyond the authority, study area, and scope of the Clarks Fork Wild and Scenic River Study as authorized by Congress.

The intent of the Wild and Scenic Rivers Act is not to prevent entire rivers from being developed, but rather to preserve those key segments which have "outstandingly remarkable" values. In Section 4a of the Wild and Scenic Rivers Act, Congress directed that, referring to Wild and Scenic River studies, "every such study and plan shall be coordinated with any water resources planning involving the same river which is being conducted pursuant to the Water Resources Planning Act." The implication is that many Wild and Scenic Rivers will have developments (including impoundments, diversions, and other uses) or potential for developments in segments downstream or upstream of the classified reach. In the case of conflict between a designated Wild and Scenic segment and a proposed water development at least three resolutions could occur:

   1) Where the Wild and Scenic River occurs on National Forest lands, the Secretary of Agriculture could determine that the proposal would "invade the area or unreasonably diminish the scenic, recreational, and fish and wildlife values present in the area" and prevent the proposal from affecting those values. This authority is granted in Section 7a of the Wild and Scenic Rivers Act.

   2) The Secretary of Agriculture could determine that the proposal would not "invade the area or unreasonably diminish .... area" and not prevent the proposal from being developed. In some cases, this could involve backing water into short segments of a designated wild and scenic river or regulate and/or reduce the flow of a designated river by construction of an upstream reservoir.

3) Congress could de-classify the conflicting segment of the Wild and Scenic River or in severe conflicts, de-classify the entire Wild and Scenic River if the Congress determined such action was in the better interests of the country.
Randa 11 Ha 11
Forest Supervisor
Shoshone National Forest
Cody, WY 82414

Sept. 4, 1979

Dear Randall Hall,

I would like to submit the following comments on the Clarks Fork Wild and Scenic River Study on behalf of the Sierra Club and its Wyoming Chapter. The Sierra Club is a national conservation organization with 180,000 members dedicated to the protection, exploration and enjoyment of the natural environment.

First, I want to compliment you and your staff on the comprehensive nature of your study and the open manner that you have used to involve the public in your decision-making process. Although I was unable to attend your workshops and public presentations I appreciate the way you kept local residents and other interested parties appraised of your work. Largely because of your forthright approach there is a general consensus emerging in Wyoming that the river and the canyon should be preserved in its natural state.

I would like to put the Sierra Club on record in favor of a "wild" classification for the study area. Such a designation should be accompanied by a permanent mineral withdrawal of the river corridor and a request for sufficient appropriations to insure protective management of the area. Please note that I am not endorsing any of the five alternatives contained in the draft impact statement. Instead, I would like to speak to the associated management proposals separately.

1. Road 119. I'm not convinced that there is a need to improve Road 119. It is far from the main tourist route and is not a through road. I'm concerned that by promoting motorized day use of the lower canyon you may create management problems you aren't funded to handle. Tongue River Canyon in the Bighorns has an improved dirt road with pullouts and picnic spots and it has become a severe management problem with vandalism, litter and fires. Why should a road improvement project be part of a wild and scenic river study anyway? If there is road improvement I agree that developed picnic spots should be kept to a minimum and the road should be kept primitive (one lane, unpaved, with passing spots).

Private land. I agree that the Forest Service should work with landowners and local government officials to control development of the private lands within the study area. Local zoning, scenic easements and willing seller-willing buyer arrangements should all be considered. The parcel at the top (west) of the study area by Clarks Fork Bridge could develop into a real eyesore if more heavily subdivided and developed. The Wright Place should be encouraged to remain in agricultural use and road access to the property should continue to be restricted. It is unclear to me why the private land beyond the east forest boundary and the mouth of the canyon was included in the study. I don't see a need to include this parcel in the wild river proposal unless the landowner expresses a desire to participate in the program.

2. Canyon Rim Developments. All alternatives in the EIS propose a series of parking lots, trails and scenic overlooks. I'm not necessarily opposed to these developments, but I haven't seen sufficient information to make me believe they are necessary, on the proper scale and in the proper location. Will the facilities be along Highway 296 or on new spur sideroads? Again, why are such developments part of a wild river study? Shouldn't these proposals come up in more detail in a management plan to be developed after the designation is decided?

Existing uses and proposed developments. I'm pleased to see that grazing will be allowed to continue in the same manner and degree and that the few problems of overgrazing in riparian zones will be corrected without reducing livestock levels. I'm also pleased to see the conclusion that water impoundments within the study area are not economically feasible, and that Wyoming has an opportunity to store its share of the compact water outside the study area. I'm also pleased to see that there is no significant mineralization in the canyon so that a withdrawal will not have a significant impact on the mining industry.

I hope that the Sierra Club and local residents can work closely with you and your agency in the near future to see Congressional wild river designation for this outstanding stretch of the Clarks Fork. Thank you for this opportunity to express my views.

Sincerely,

Bruce Hamilton
Regional Representative
Northern Great Plains

cc: Sen. Al Simpson
    Sen. Malcolm Wallop
    Rep. Dick Cheney
    Gov. Ed Herschler
RESPONSE TO BRUCE HAMILTON

1. Note that improvements to Road 119 are not included in the preferred alternative in the Final Environmental Statement. All recreational developments, including the Road 119, were included in the Wild and Scenic River study to more fully evaluate the management options and impacts of each alternative.

2. See reply to USD1 letter page E-13. Most of the facilities will be on short new spur sideroads to Highway 296. If the Clarks Fork is designated as a Wild and Scenic River, a detailed management plan will be prepared which could modify the proposed developments. In addition, Congressional action could prescribe some of the management features which could specifically authorize or preclude some of the recreation developments.

August 30, 1979

Mr. Randall Hall
Forest Supervisor
Shoshone National Forest
Cody, Wyoming 82414

Dear Mr. Hall:

This letter is in response to your Wild and Scenic River Study, and more specifically, to the alternatives proposed in the study. As a daughter of one of the private landowners of the area studied, and a one-time resident of the Clarks Fork Canyon, and a 20-year veteran of almost every trail and river fork contained in the designated area, I feel qualified to comment on your proposal.

Like you, one of my main concerns is the preservation of the Clarks Fork Canyon in its wild and natural state. There are so few areas left in this country that haven't been fenced, blasted, painted or in some way tamed and altered to fit into a comfortable, "civilized" lifestyle. I have seen too many areas that at one time were breathtakingly beautiful in their natural state, but in an effort to make them easily accessible to the public were gutted by parking lots, super highways, garish sanitary facilities etc. Therefore, what I am looking for in a proposal is one that would not only protect this area (both the upper and lower canyon) from commercial development, but also one that would contain the least amount of physical development. I feel strongly that people who are sincerely interested in seeing this area have ample access now, and only minor upgrading of the already present trails into the canyon is all that is necessary or desired. There were many campers and campsites to be found in the upper canyon this summer, especially during weekends. To ruin the solitude and wildness for these people by over developing the canyon would be an irreversible mistake. I think Development Road # 119 should be kept in its primitive state. One of the fascinations of the lower canyon is the absence of man's interference with Mother Nature's design and it should be kept than way. We have enough smooth, gravel roads and super highways in our national forests now. Leave the Clarks Fork Canyon in its wild and primitive state.

It appears to me from a review of the Wild and Scenic River Study of the Clarks Fork Canyon that of the five alternatives the one that provides the greatest amount of protection with the least amount of development or other adverse environmental effects is Alternative #2. This alternative would leave both the upper and lower canyons undeveloped, while imposing constraints on commercial development of the three parcels of private land in the study. It makes no sense to me to impose constraints on the private land in the upper canyon while leaving the lower canyon vulnerable to commercial designs.
Mr. Robert Hall  
Shoshone National Forest  
August 30, 1979

The only reservation I have concerning Alternative #2 is the "scenic easement" concept. The advantages of "scenic easement" for private landowners would need to be spelled out in more detail in order for it to be a convincing alternative. You state, on page 23, that "the terms of the scenic easements would be negotiated with each landowner.....". I wonder how much leverage a landowner would have when negotiating with a government body who already has the right to control the use of the land (and air space above) according to its own specifications. Governmental control of land that is privately owned by an individual is a frightening thought. Zoning ordinances seem to imply less government interference and therefore seem a more desirable means of controlling the use of the land.

There is one last consideration I think should be discussed. Given our energy crisis and the inevitability of changing travel patterns in our country, there is a strong possibility that the projected increase in recreational use of the Shoshone National Forest may in fact decrease as the cost and availability of fuel become more prohibitive. It may be that the multitude of facilities already present in the area are enough to meet the demands of the public, and that the wisest course of action would be to protect the Clarks Fork Canyon area from either unnecessary development or irrevocable over development, at least until you can be sure of your future needs.

I found the study very interesting. As you can see my concerns are in preserving the wild beauty of this area in its most primitive state. I sincerely hope that the ultimate legislative decision concerning the Clarks Fork Canyon will protect this primitive beauty not only for the present, but also for generations to come.

Sincerely,

Patti Bugas Harris
1881 Willis Road
Grass Lake, Michigan 49240

c/o Den Musso, Forest Ranger
Cody

RESPONSE TO PATTI BUGAS HARRIS

1. Agreed, the recreational developments that are shown for each alternative are based on information that was available to the study team concerning increases in recreational demands in Park County from 1978 to 1990 (see response to Lynne Bama's letter, page E-21). As the cost and availability of fuel become more prohibitive, as you point out, these estimates may be much too high. On the other hand, increased development of fossil fuels in northwest Wyoming to meet national energy needs and resultant growth in population and recreation demands may show these estimates to be too low. If the Clarks Fork is designated as a Wild and Scenic River by Congress, the Shoshone Forest will have one year to prepare a management plan for the river. At this time the projected recreation demands on the Clarks Fork River will be re-evaluated and the plan adjusted accordingly. Substantial changes from the facilities outlined in this document would be re-examined through the NEPA process.
Lynne Bama  
Wapiti, WY 82450  

September 12, 1979

Mr. Randall Hall  
Forest Supervisor  
Shoshone National Forest  
Cody, WY 82414

Dear Mr. Hall:

I am writing to you about the Clarks Fork Wild and Scenic River Study. From my working with the study team on articles I know that it was done thoroughly and well.

My feeling is that the Clarks Fork should receive a "wild" classification for the entire length of the study segment except for the private land east of the forest boundary, (if that is not feasible to manage).

My problem with the study is that all the alternatives propose parking lots, trails, and scenic overlooks. I have thought about this a lot and cannot see what they would contribute to a wild river. If you were one of the hardy souls who had climbed down the walls of the box canyon to the river, would your experience be enhanced if you looked up and saw a group of tourists watching you from an overlook? It seems incongruous.

The Clarks Fork is a very fragile resource and I think it must be very delicately managed to preserve its unique character. The less done to it, the better.

I sincerely hope that the final environmental statement will include a nondeveloped wild river alternative.

Thank you for the opportunity to comment. Also, I would like to express my appreciation for all the help given me in past months by the study team and others in your office.

Sincerely,

Lynne Bama

RESPONSE TO LYNNE BAMA

1. The recreation use figures shown in Table 4 are based on growth studies for Wyoming, conducted primarily by State agencies which predict approximately a 20 to 30 percent increase in recreation use pressure in Park County between now and 1990. This factor combined with the paving of Highway 296 and the increased recognition of the Clarks Fork Canyon (with or without Wild and Scenic River designation) will mean more demand for recreational facilities in the Clarks Fork Canyon. The parking lots, trails, and scenic overlooks are designed to meet these needs which is a basic charter of the Forest Service and of Wild and Scenic Rivers. Throughout the Clarks Fork Wild and Scenic River study, many respondents have expressed an appreciation for the pristine qualities of much of the canyon and a desire to keep it "as is". The parking lots will be adjacent to or on short spur roads to Highway 296 and out of view of the canyon, as well as the river. Both river trails are to the Upper Canyon and do not provide access to the very rugged Middle Canyon. The river overlook is in a section where the Canyon walls plunge vertically to the river. The chance of any hikers being able to navigate through that section to be watched from tourists from an overlook is very remote. The canyon overlook would be about a half mile from the river, and well out of a direct line of sight to the river since the canyon walls are so steep and tall (1000 feet) in the central part of the Middle Canyon.
The following persons or groups each sent letters expressing opposition to Wild and Scenic River designation. Sample letters are on page E-22 to E-27

Shoshone River Water Users Assn.
Willard C. Rhoads, President
Cody, Wyoming

Shoshone & Heart Mtn. Irrigation Districts
Dueane Calvin, Project Manager
Powell, Wyoming

John S. Bugas
Southfield, Michigan

Wesley G. Oliver
Cody, Wyoming

Claytin J. Brown
Powell, Wyoming

Don and Dolores Fraker
Clark, Wyoming

Leonard E. Anderson
Cody, Wyoming

Stanley Bliesemeier
Cody, Wyoming

Marjorie and Vera Ford
San Francisco, California

Helen House
Ralston, Wyoming

Louis and Dorothy Kohnke
Cody, Wyoming

Walter and Virginia Teichert
Clark, Wyoming

Charles and Elaine Mueller
Big Timber, Montana

Ray and Audrey Wilde
Cody, Wyoming

James R. Stebner
Powell, Wyoming

Norman P. Dodd
Cody, Wyoming

Don and Jo Miller
Powell, Wyoming

William and Anna Jane Dunn
Cody, Wyoming

Willard C. Rhoads
Cody, Wyoming

September 4, 1979

Mr. Randall B. Hall,
Forest Supervisor
U. S. Dept. of Agriculture
Shoshone National Forest
Cody, Wyoming 82414

Dear Mr. Hall:

Reference is made to your June 18, 1979, letter enclosing a copy of the Draft Environmental Statement for the Clarks Fork Wild and Scenic River Study. I very carefully perused the Draft and, in accordance with your suggestion, I'm providing my comments herein:

On September 22, 1978, in response to a letter from Mr. Musso, I wrote him a letter on the matter. Since that letter apparently is not a part of the official views on the matter, I will hereinafter quote from that letter since it sets forth my views which I wish to be considered and become a part of the final Environmental Statement:

"You have requested my views on how the Clarks Fork River should be classified under the Wild & Scenic Rivers Act, it having already been determined that it is eligible for inclusion into the '..... System'.

"The status of the River, hence its classification, should not be changed. This is to say that Alternative One should be invoked.

"Reasons for this view can be simply stated. Documentation of or evidence for the reasons require more time and space than seems desirable for this letter. Let me state the reasons:

1. The River is possessed of a wilderness and beauty that is not enhanced one iota by a legislative designation of "Wild River" under the Act.

2. To the contrary, such designation will have the short and long-term effect of robbing it of its primitive, wild, rugged and relatively inaccessible
character by the simple but invidious act of calling attention to it by the inevitably publicized designation. In fact, already the well-intended but short-sighted program of publicity involved in meetings, debates, hearings, etc., has called attention of the curious do-gooder to this gem, that would make its greatest contribution to posterity were it to remain "undiscovered," except to that growing number of individuals that like its nature in the raw.

3. The Act places 'supervision,' with specific authority spelled out, under a government agency. The objective of this supervision is to maintain the wild, primitive character. Implicitly and explicitly the agency is given authority to do a number of things that when done ensure the demise of this wild and primitive character.

"It may be predicted with certainty that, sooner or later, the supervising agency will institute a program and pursue it of creating 'trailheads, trails, sanitation facilities, shelters, picnic facilities, etc.,' totally inconsonant with the stated objective.

"Governmental agencies inevitably strain to justify existence and granted authority. Virtually never does such agency deliberately circumscribe or voluntarily delimit or shrink its delegation of authority. The agency involved here is no exception.

4. The prohibition against building of dams seems persuasive at first glance, but is illusory and should be given little weight. The fact is that before any dam were authorized and built, an overwhelming justification would have to be demonstrated or a public and political outcry would stop such project in its tracks.

"It should be recognized that in the distant future such justification could come to exist and consideration thereof should not be precluded unnecessarily.

5. Finally, the provision for 'scenic easements' is totally objectionable to the writer.
Under no circumstances should the trails, overlooks and road up the canyon with campsites (at the lower end) be built. Can it not be seen that this is precisely against what you say you are for?

Can you not understand that the status quo, while not perfect, is better than so-called improvements of the type you contemplate? Let me make a prediction that this is a nose under the tent approach and even if you presently do not contemplate further so-called improvements, your successors and their successors will have many such ideas on this score and the area, instead of being for the true nature lover who appreciates things in the raw, will become a huge campground on the order of Yellowstone Park.

One further point: I have no objection to maintaining the property I own in a manner compatible with the present wild, primitive character of the locale. Such compatibility exists at present. This has been my plan and such has been the result. I have a right to expect the same of the government rather than a takeover and the so-called "improvements" contemplated, which I regard as a first bad step in a never-ending, continuing governmentally inspired progression which will completely ruin whatever wild and primitive character remains.

Very truly yours,

John S. Bugas

Sept. 10, 1979

USDA Forest Service
Shoshone National Forest
West Yellowstone Highway
F.O. Box 961
Cody, Wyo. 82414

Randall R. Hall
Forest Supervisor

Dear Sir:

We strongly oppose Government control, or regulation, of our private land along the Clarks Fork River below the Clarks Fork bridge, as proposed by the National Wild & Scenic River System. This is an infringement on our Constitutional Rights.

The Clarks Fork River from the bridge through the private land to the canyon certainly is not a "Wild River". It is very calm and smooth flowing. Furthermore, what is to be gained by having the river designated as a "Wild & Scenic River"?

Mother Nature left the river and canyon to be appreciated AS IS. It certainly wouldn't be improved by building trails into the canyon. We feel it is better to leave well enough alone.

Very truly yours,

Andrew M. Wilde

Copies sent to:

Senator Alan K. Simpson
Senator Malcolm Wallop
Representative Dick Cheney
Mr. Randall R. Hall  
Forest Supervisor  
Shoshone National Forest  
Cody, Wyo. 82414

re: Clarks Fork of the Yellowstone Wild & Scenic River Study and Draft Environmental Statement

Sir:

We are owners of a cabin near the Wild & Scenic River Study area, and have visited the area yearly since 1959. We prefer Alternative #1 as presented in the statement, namely that the area not be classified as a Wild and/or Scenic River. We feel that excessive use stimulated by such classification would be more detrimental to the wild state of the area than any developments likely to occur in the absence of classification. The potential for down stream construction or mineral or timber exploitation seems so low that protection against these is not necessary. The private developments in the upper and lower half miles of the study area, although potentially somewhat unsightly, do not have enough bearing on the wild and scenic attributes of the area as a whole to warrant placing any added restrictions on the rights of the owners beyond those restrictions obtaining throughout the area. If classification as a Wild and/or Scenic River is judged essential for the Clarks Fork, we would prefer Alternative #3 which maximizes protection of the genuinely wild part of the river while not interfering with the rights of property owners in the already developed end segments of the area. Alternatives #4 and #5 we consider most objectionable because of the increased development in the lower canyon and, in the case of #5, the inequitable treatment of property owners in the different ends of the study area.

We would like to receive copies of future reports on the progress of this study.

Thank you for your consideration.

Marjorie A. Ford  
Kendall Ford  
mailing address: 153 Terrace Dr.  
San Francisco  
Calif. 94127
I wish to go on record as opposing the classifying of the Upper Clark Fork Canyon as a wild and scenic area for the following reason:

First I am opposed to locking up any more areas for the exclusive use of a select and fortunate few.

Due to the sheer physical inaccessibility of this area it is doubtful if ever a dozen or so of the more rugged individual are able to hike and climb down into this canyon to enjoy the scenery and to fish.

Second, it is only at the most a mile or two to a few hundred yards from a well traveled highway, which makes it rather ridiculous to classify it as wild.

Third: not too many years age the lower end of this canyon was surveyed and found to be a very desirable potential site for a dam and a hydro-electric power plant.

I certainly don't want to see this area locked up to prevent this development. Surely with the existing energy shortage we should be searching for sites of this sort and looking out the possibility of them ever being developed.

The construction of a dam and hydroplant would in no way detract from the scenic qualities of this area. The scenery would still be there. The overall imaccessability would still exist. There would be as wide life food grannds that would be increased.

It would form a lake that would enhance the fishing many times over. It would provide access by boat so that the rugged scenery would be seen and enjoyed by many more people.

It is comparable to the Big Horn Canyon, where Yellowstone Dam and powerplant are providing much needed electricity. Where before it was built only a few people a year ever saw it. Now hundreds of people can enjoy fishing and hunting and are able to view the magnificent scenery. In no way has this resulted in any deteriorations of the environment.

I see nothing to be gained, and much to be lost by designating the Clark Fork as a wild and scenic area.

Thank you,

Weley G. Oliver

Virginia Rechtel
Willard C. and Elaine Rhoads
Box 657, Cody, Wyoming 82414

Mr. Randall E. Hall,
Forest Supervisor,
Shoshone National Forest,
Cody, Wyoming 82414

Dear Mr. Hall,

I have been a citizen of Park County for 66 years. I now serve the State of Wyoming on the Western States Water Council and as a member of the newly established "Wyoming Water Development Commission" which is charged by 41-2-116 (X) with the duty and the authority to conduct studies, develop plans, and recommend legislation which may be enacted for the purpose of securing full utilization of the waters of the State of Wyoming, giving priority to projects for utilization of waters not now being beneficially used in Wyoming."

As mentioned in your Study Wyoming has entitlement under the Yellowstone river compact for about 400,000 acre feet of water and various proposals have been made to utilize this water. A study of the Clarks fork river has been proposed to the Commission. Designation of the area would severely hamper plans to make this water available to Wyoming.

As a long time citizen of the State of Wyoming, I have always found the U.S. Forest Service competent to manage the public resources withdrawn for their management and jurisdiction and I therefore recommend Alternative #1 or As is—with no further restrictive covenants.

Sincerely yours,

Willard C. Rhoads
Dear Sirs:

The County of Park, Wyo., believes that, between the County and the Shoshone National Forest, the administrative tools necessary to regulate land use policies in the area described in the draft environment statement of the wild and scenic river study already exist.

The County will implement a land use resolution before the end of this year which calls for nine advisory boards (one of which will be in the Clarks Fork area). The boards will make recommendations from performance standards for development proposals.

Open lines of communication between the advisory board, the county and federal agencies will exist to facilitate effective land use management practices in the Clarks Fork area of both private and public lands.

The county also believes that the Forest Service presently is quite capable of managing the area in question and does not see the need for additional regulatory measures that could tie up potential resources in the future.

It is not that Park County is making a blanket statement that we do not want any more government. It is that the county does not see the need for more administrative and regulatory acts when the government agencies already involved have good working relationships and adequate regulatory tools. Therefore, the County of Park, Wyo., recommends that the National Forest Service adopt alternative 1 in the Clarks Fork wild and scenic river study.

Please feel free to contact my office if you have any questions.

Respectfully Submitted,

Richard V. Lindsey
Park County Planning Co-ordinator
September 5, 1979

Dear Sirs:

Comments and answers to Environmental Impact Statement complied by Forest Services on Wild and Scenic River Study for the Clarks Fork of the Yellowstone River by Chester A. Blackburn, Water Commissioner, District 9 & 10, Division 3,Ralston, Wyoming.

1. The impact statement is very complete and covers the area fairly well.

2. The summation and statements seem to be slanted in favor of making it a Wild and Scenic River. This is done by giving more emphasis to certain criteria and less to others.

3. No comparisons are made to show the relationship of energy that is denied to our use as to barrels of oil or tons of coal.

4. Some of the summations are based on the term "the foreseeable future". There is no definition of this term in the Impact Statement. My conclusion is that this is only speculation and cannot be termed a fact.

5. There are no letters from the Bureau of Reclamation or the State Engineer's Office in Cheyenne that plans and studies for development of hydro-electric power, irrigation, municipal and/or industrial water in this area have been abandoned.

Below are listed specific parts that are misstated or don't address the facts.

1. Page 25, item 2 (a) "There is no individual, industry, municipality, or government agency expressing a current or foreseeable need for the output of such a development".

I attended one of the public hearings in Powell and heard four individuals say that this development should be done in the near future. I have also heard municipal and county officials express the same opinion. The cost/ratio of 1975 is invalid in 1979 because of the raise in cost of electricity.

Regardless of the cost/ratio the power that could be produced in the Canyon is non-polluting and renewable annually. It is here and does not have to be imported. It helps the balance of payments. The energy produced by the Beartooth Project would be the equivalent of 410,000 barrels of oil annually.

2. Page 25, item 2 (c). The "foreseeable future" is only speculation and should not be used as criteria in any way on a project that can tie up a renewable source of energy.

3. Page 25, item 3. Exxon has filed mining claims for uranium on Bald Ridge which ends at the south wall of the Canyon. All during the summer of 1979 several seismograph crews have been working at the mouth of the Canyon. This would indicate that there is oil/gas bearing structures in this area.

4. On page 9 under section J-Water- is a statement that Wyoming is entitled (under the Yellowstone River Compact) to 429,000 acre feet of water in a normal year. It further states that the Wyoming Water Planning program has plans for a reservoir that would back water into the Study Area one and one half miles.

In this section it is also stated that for Wyoming to develop it's share of the Clarks Fork River water it must be stored and the only site that can effectively do this is the one proposed by the Wyoming Water Planning Program. All other sites are either too small or too low in elevation.

I suggested at the hearing in Powell that if the above site was denied by the Wild and Scenic River designation that the State of Wyoming be compensated annually for the resource that was denied. I didn't see that included in the impact statement as an economic loss to the people of Wyoming.
5. In table 3 on page 27 there is an indication that "increased recreation would enhance the water quality". There is no way you can increase the number of people in an area and improve the quality of the water.

6. If the developments that have been planned for this area are accomplished, it will stabilize the flow downstream and would be a great help to downstream users and irrigators.

In summary I would like to state that all that has been said by Government officials and leading citizens of this county about shortages of energy and water in the United States I think that any action to give a river an ascetic status rather than to produce energy and supply water for recreation, irrigation, municipal and industrial, etc. is really doing great harm to the production capacity of the U.S.

The beautiful part of hydro electric power is that it is non-polluting, renewable annually, and does not have to be imported. Also making the electric power does not consume the water. It is still available for recreation, irrigation, municipal and industrial use.

I do not believe that it is right for any government department or legislature to deny or tie up any natural resource that belongs to any area or state with out due process and proper compensation.

In the western states to get full potential development from the water and land it is imperative that the right to dam, store and divert not be abridged.

Therefore, alternative 1 is the only recommendation that I can approve of at this time.

Respectfully submitted,
Chester A. Blackburn
Water Commissioner

RESPONSE TO CHESTER BLACKBURN

1. No plans for development of hydro-electric power, irrigation, municipal and/or industrial water within the study area exist. Appendices A, B, C, and D and Sections II.J. and V.B.2 summarize all information concerning studies and potentials for water development within the study area and concludes that, at the present time, no economical water development projects within the study area exist.

2. The "foreseeable future" in this context is that pertaining to the Yellowstone Level B Study with as stated in that study "primary focus upon major problems, needs, and issues requiring solutions within the year 1975-2000 time frame".

3. The entire study area is with Precambrian granite which has no oil or gas-bearing structures. Seismograph crews working in the summer of 1979 in the Lower Canyon were examining the Clarks Fork Fault along the Lower Canyon which will provide information concerning the faulting and potential oil-bearing strata of the uplifted sedimentary rocks along the Beartooth face which are out of the study area.

4. The Lower Clarks Fork reservoir (Appendix D) will not be denied by Wild and Scenic River designation. It could, however, be modified in Alternative 2 and to a lesser degree in Alternatives 3, 4, and 5 (VII.A). Section 13b of the Wild and Scenic Rivers Act states that "The jurisdiction of the states and the United States over waters of any stream included in national wild, scenic, or recreational river area shall be determined by established principles of law. Under the provisions of this Act, any taking by the United States of a water right which is vested under either State or Federal law at the time the river is included in the National Wild and Scenic Rivers system shall entitle the owner thereof to just compensation". At the present time, water rights vested by the State of Wyoming (about 11,000 acre-feet) in the Clarks Fork River (Section II.J) are not in conflict with the potential instream flow needs (Section VI.B) of the Clarks Fork River in the study area. It should be noted that potential for consumptive water use within the study area is very low.

5. Opportunities to emphasize water quality protection or improvement would be enhanced by provisions in Section 10 of the Wild and Scenic Rivers Act. In fact, the Wild and Scenic Rivers Act specifies that a river within the system should be of high quality water or susceptible of restoration to that condition. Guidelines developed by the Secretaries of the Interior and Agriculture in 1970 direct that for wild and scenic rivers "a concept of non-degradation whereby existing high water quality will be maintained.
to the maximum extent feasible will be followed in all river areas included in the National System. In the case of the Clarks Fork within the study area, water quality is excellent and would not likely be degraded by any activities occurring within the study area. Additional mitigation measures could be applied to water quality problems upstream with emphasis provided by the wild and scenic designation downstream. See reply to letter of Russell Faus, page E-37.

**Federal Timber Purchasers Association**

July 6, 1979

Mr. Randall Hall
Forest Supervisor
Forest Service, USDA
Shoshone National Forest
P. O. Box 961
Cody, Wyoming 82414

Dear Mr. Hall:

Federal Timber Purchasers Association appreciates the opportunity to comment on the Draft Environmental Impact Statement for the Clarks Fork of the Yellowstone River Wild and Scenic River Study.

First, there seem to be inconsistencies in the timber data as presented. On page 9 under the heading "Timber" it is stated, "The only suitable forested lands on the basis of productivity and operability are located on the alluvial bottoms of the Upper Canyon." On page 20, third paragraph from the bottom, it is stated, "Timber production in the canyon is infeasible because of low productivity and inaccessibility." If the lands described do in fact contain operable timber and the sites can be regenerated, then it is our opinion that the timber classification "unregulated," as used, is an improper classification.

The width of the study area is not described or displayed, and this causes us great concern. Without a description of the area under study, it is difficult to respond to the conclusions drawn by the Forest Service.

The fact that the Forest Service chose Alternative 5, a very restrictive alternative, is very disturbing. The Environmental Impact Statement acknowledges the fact that the land use plan can describe and control land uses which affect this watercourse and still maintain future options and opportunities for the benefit of all the people of this nation.

While the seven thousand acres in this plan may seem insignificant in the total land area administered by the Forest Service, it is in fact a further erosion of the managed land base and production therefrom. The inflation created in loss of production of all resources is one more penny that in total is measured in dollars.

The water will flow with or without a formal designation as a "Wild River." If the current generation of Americans can afford restrictive land management from the area involved, then restrict the use in the land management planning. If future generations need the production of goods and services from the land, the management plan can then be revised to provide such goods and services in an environmentally sound manner.
Federal Timber Purchasers Association urges the Forest Service to give this land area the professional land management that is expected by the taxpayers of this nation. It urges that the recommendation to Congress be to manage this area for the multiple benefits of all the resources for the benefit of all the people. Federal Timber Purchasers Association favors environmentally sound land management without special and restrictive land designations.

If the Forest Service recommends a special designation, all the potential losses of goods and services should be presented, as well as all potential losses already given up in special designations on the total Shoshone National Forest area.

Sincerely,

Lloyd E. Stahl, Manager
Rocky Mountain Forest Resource Affairs

cc: Mr. Craig W. Rupp
    Mr. Richard C. Newman
    The Honorable Ed Herschler
    The Honorable Alan K. Simpson
    The Honorable Malcolm Wallop
    The Honorable Richard B. Cheney

1. The Shoshone National Forest Timber Management Plan (Final Environmental Statement, approved May 20, 1976) defines the unregulated component as areas which are suitable for timber management but not part of the regulated, standard, special, or marginal component because of limited access, occurrence in developed sites, or lack of kinds of trees that are currently utilized for wood production. Only a very small part of the study area is suitable for timber harvesting, these being a few timbered alluvial bottoms of the Upper Canyon. These areas are included in the unregulated classification because they are inaccessible and no plan to develop access to the area exists.

2. Study Area Location, Part 1.C has been amended to include a description of the study area width. See map of preferred alternative, Section VIII.A.
I am writing in answer to the Draft Environmental Statement on the Wild and Scenic River Study for the Clarks Fork of the Yellowstone River produced by the Shoshone National Forest, Rocky Mountain Region, United States Forest Service. In addition, this letter is also in response to the USFS' request for specific individual comment as outlined in paragraph IV of the Summary Section.

As a long-time resident of the Big Horn Basin of Northwestern Wyoming and having resided in the Clarks Fork area and as an active participant in the petroleum and ranching industries, I feel it necessary to comment on the Draft Environmental Statement in a number of areas. Additionally, my family and I have been engaged in livestock operations in the Clarks Fork area, and also own private land in close proximity to the Clarks Fork River.

First, I should like to state that I irrevocably support the historical concept of "multiple-use" of public lands. As you are well aware, over one-third of the surface of this country is owned and controlled by the Federal Government. When you add to that, the amount owned by state and municipal governments, over fifty percent of this country is under the ownership and control of one governmental entity or another.

From the time of the colonization of the west, where a vast majority of our public lands are located, until recently the concept of public land management has been one of "multiple-use." Multiple-use meaning the lands would not only be preserved for their scenic and geological or geographical qualities, but more importantly, they would also be used as a means of resource production ranging from timber, mining, petroleum, livestock as well as for recreational and other uses. This multiple-use concept has been clearly enunciated, defined and embodied by Congress in existing laws and has been the philosophical basis for public land management.

Unfortunately, within the past few years, a number of those involved in interpreting these laws and promulgating regulations for the management of public lands have narrowly construed this proven concept to where more and more of the resource production activities are being severely limited through restrictions upon access to public lands. This has mushroomed to where today somewhere between two-thirds to three-fourths of all public lands are closed to resource development whether it be mining, petroleum, livestock, timber or, as a matter of fact, even many recreational uses.

It is with this background and concern I approached and read the Draft Environmental Statement covering the 23 mile segment along the main stem of the Clarks Fork River from the Crandall bridge to mouth of the Clarks Fork Canyon, which by the way extends one mile beyond the east boundary of the Shoshone National Forest. Without detailing many of my reactions, I would like to briefly share with you some specific areas of concern:

1. I would disagree with the EIS as to the amount of private lands within the study area. Being intimately familiar with the area concerned and knowing of the privately owned parcels within that area, I think the Draft EIS does not properly reflect the extent of such private ownership, not only near the banks of the river itself, but also within a reasonable distance on each side of the river.

2. In Section II, D entitled, "The Socio-Economic Setting" there seems to be a number of mis-statements about the economic basis of the surrounding area. Particularly, wherein the statement is made that the economy is primarily ranching, farming, and tourist related with some industry. A check of the Park County tax rolls will reveal that over 70 percent of the tax burden is shouldered by the petroleum industry alone. The petroleum industry is one of the largest employers within the county. Also, in that same section I think the statement, "local interests favor full range of use with minimum constraints," is a masterful understatement.
In fact, survey would show that the public is overwhelmingly in favor of the "multiple-use" concept rather than a continuation of the erosion of access to public lands and placing them into restrictive categories such as Wild and Scenic Rivers, wilderness, etc.

3. In addition, Section IX, F, has not taken into consideration the number of out-of-state hunters, fishermen, campers, and recreationists who use the transporation routes in this area. Those people come from not only the surrounding areas, but from distant states as well.

4. Sections II, H and I, covering range and timber seem to be inadequate in their coverage of these resources. The entire scope of cattle and timber operations are not covered by this statement and these potentials probably exceed those stated within the comments of these paragraphs.

5. I strongly disagree with comments contained in Section II, J, regarding water resources. As you are well aware, one of the most critical and valuable resources available within the West is water. Due to the scarcity of this vital commodity, everything possible must be done to utilize and conserve it. Section II, J, is not a valid analysis and appraisal of the priorities that must be assigned to the conservation and storage of water. Particularly, the need for not only water conservation but also the utilization of that water for the dual purposes of producing hydro-electric power as well as for irrigation, culinary and industrial purposes places an extremely high value on the construction of proposed projects within the study area and also the Clarks Fork Reservoir. From what I understand from reading the study, the Clarks Fork Reservoir is outside of the study area and would back water about 1 to 1 1/2 miles into the study area.

The further development of the regional economy and continued support of the present economic base makes it essential these water projects and power projects be allowed. A current, up-to-date, cost-benefit ratio analysis, considering alternative energy sources, and our energy dependence on imported petroleum, would strongly indicate the potential benefits to be derived from the construction of a hydro-electric generation project would far out-weigh other values. In short, the world of energy has changed drastically in the last few years. There are not that many hydro-electric sites available. We should not exclude the potential for the generation of an environmentally attractive and renewable energy resource.

6. I had problems reconciling Section III, A, as to the criteria that is used to establish and determine a wild and scenic river. Particularly, III(A)(8) wherein it addresses the subject of a meaningful experience opportunity. It goes on to say that the river must be long enough to provide a "meaningful experience" for boaters. Many years ago I surveyed this river to determine its potential for boating or floating and found it is absolutely impassable. It certainly does not meet the III(A)(8) criteria, where it asks, "is it a meaningful experience opportunity," under Table 42. It is answered with a "yes", which is absolutely false. Although there may be short portions of the river suitable for boating or rafting, this river is not "suitable" within the context of Section III (A)(8). In fact a picture of typical physical obstacles is contained on page 15 of the Draft EIS and graphically illustrates this point.

I firmly agree with some of the other sub-sections of Section III, particularly (A)(4) in which this does not meet the "outstandingly remarkable" criteria. However, I have no objections as to any efforts to make the river more accessible to the public, such as constructing turn-outs or access roads. This is in keeping and compatible with the multiple-use concept.

7. It is also unclear as to whether or not proper study has been given to the mineral potential of this area. I am sure you are well aware of the current exploration activity that is going on in the Sunlight and Crandall Creek areas this summer to assess the mineral potential for the area. This activity must be allowed to continue to determine if there is a potential for all types of mineral resources.
8. I strongly support Alternative #1 as outlined on page 23. I believe it would serve not only the needs of the area, the states of Wyoming and Montana but more importantly, the nation. Particularly Alternative #1 could be accomplished while still preserving the scenic and environmental quality of the study area.

9. Section V (B) (1) is another subject in itself and is something that very much needs to be further studied and discussed.

10. In light of my previous comments about the energy situation, it is hard for me to fathom how the study could arrive at the conclusion it did under section V(B)(2) a, b, and c. The potential for hydro-electric power, as a clean renewable energy resource far out-weighs the other considerations. It is unconceivable that at a time when the President of this country is calling for increased domestic energy production, the opportunity for this environmentally acceptable and renewable energy source is not even being considered let alone given a high priority.

11. A few general comments as to the analytical methodology employed in the Draft EIS: After reading this report several times, one has the feeling that a goodly amount of personal bias has been allowed to creep into the study favoring non-development and non-access proposals. The proper assessment and weight given to factors supporting alternative number one were not thoroughly considered. Rather, some erroneous conclusions have been reached as to the costs and the benefits to all segments of society by following that alternative. Instead however, the preparers of this study seem to have bent over backwards to give undue weight to factors in support of Alternatives two and three. Unfortunately, it appears this bias may cast suspicion over the Draft EIS and raise the spectre of the credibility of the entire study.

I will conclude by saying that one of the popular misconceptions today is that resource development and the preservation of scenic and environmental qualities are mutually exclusive. You must have one or the other, but you can not have both. These concepts could not be further from the truth. Rather, as I am sure you are well aware as a land manager, both resource development and the preservation of scenic and environmental qualities can co-exist and be accomplished in a manner wherein both goals are attained. There are numerous examples where resource development has been conducted on public lands, (particularly, forest lands), and have taken into consideration not only the protection of these scenic and environmental values, but in many instances have actually enhanced them.

The federal land management agencies must awaken to the fact that we cannot take our social and economic environment for granted any more than we can take our physical environment for granted. The "Human Environment" is like a three legged stool: If we cut too much off the physical, economic or social leg, the stool begins to wobble; if we cut an entire leg off, the structure collapses.

I would be most happy to discuss this with you in person or at a meeting and further express My views. It is my hope that all factors are taken into consideration and given the proper weighing. Hopefully, we will not be stampeded into locking this area up in an effort to "protect" a so-called wild river that would have long-term disastrous economic effects on this area and the entire nation.

Sincerely yours,

James E. Nielsen

JEN:dkd
RESPONSE TO JAMES NELSON

1. Note that I.C. paragraph 2 has been amended to include a description of the width of the study area. The private land within the study area is accurately shown in Figure 2 and described in II.K.

2. Paragraph 1, Section II.D. has been amended to include petroleum industry as a primary part of the surrounding economy.

3. Sections II. H and I are based on reports prepared for the Wild and Scenic River Study by the Clarks Fork District and are available in the Shoshone National Forest Supervisor's Office. Sections H and I are an accurate summary of these reports.

4. Section II.J and associated appendices and literature citations are a discussion of all information that was available on water resources within the study area. Clarks Fork river water yield and water quality reports, prepared for the Wild and Scenic River Study are available in the Shoshone National Forest Supervisor's Office as well as Bureau of Reclamation, Soil Conservation Service, State of Wyoming and Yellowstone Level B study reports concerning the potential and feasibility of water development within or near the study area. Section II.J is an accurate compilation of the information.


6. The Shoshone National Forest geologist reviewed all known information concerning mineralization in the study area including literature review and consultation with the Bureau of Mines and U.S. Geological Survey. The Clarks Fork Study Area is entirely with Precambrian granitic rocks with known tertiary intrusives or related dike and vein systems. No known economic or subeconomic mineralization deposits are known to occur within the study area. The geology and minerals report on the Clarks Fork Canyon is available at the Shoshone National Forest Supervisor's Office.

Randall R. Hall, Forest Supervisor
U.S.D.A. Forest Service
Shoshone National Forest
Cody, Wyoming 82414

Dear Sir:

In reply to your letter of June 14, 1979, transmitting a copy of the Draft Environmental Statement for the Clarks Fork Wild and Scenic River, I have the following comments and suggestions to make.

D. Transportation, Page 7

1. I suggest that it be made clear that the roads to the confluence of the Clarks Fork and Crandall Creek start from Wyoming Highway #296 and go down either side of Crandall Creek on Forest Service land, and not from the extreme upper end.

E. Land Ownership and Use, Page 10

2. I think the sentence "Three parcels of private land occur within the study area" is misleading and should be clarified by giving the number of current owners for each parcel. For instance, in the parcel in the upper 0.5 mile below the bridge there are currently thirteen owners.

F. Recreational Values, Page 13

3. This paragraph does not support the conclusion of "outstandingly remarkable" recreational value. Traditional forms of water-based recreation (fishing, canoeing and swimming) are not only greatly limited by rugged access but also by the cold, turbulent and dangerous waters. As you know there have been several drownings in the past twenty years in the Clarks Fork immediately upstream of the study area. These waters are much less dangerous than those in the majority of the study area.

The two water influenced opportunities seem to belong under scenic rather than recreational value.

4. I am a great admirer of the 1300 mile Nez Percé trek led by Chief Joseph. To assign an "outstandingly remarkable" historic value to the study area because a few miles of the trek may (or may not) have been in the lower canyon is not justified. Had one of the several battles been within the canyon I would agree.

5. Meaningful Experience Opportunities, Page 18

8. The criteria, Page 8, says "The river must be long enough to provide a meaningful experience for boaters." The discussion on Page 16 does not relate to this definition. Certainly the river is long enough but other factors I have outlined above under Recreational Values do not allow a meaningful experience. Of course getting drowned might be a meaningful experience.

Billings, Montana
September 12, 1979
2. Recreational River Areas, Page 16

Note for later reference that "The Clarks Fork is essentially pristine throughout the study area, except for the one-half mile section immediately below the Grandall Bridge."

The last paragraph on this page gives the impression that there are no cabins on the north shore. There is one.

IV. Criteria for Evaluation Alternatives, Page 18

Criteria 3 "Change the Clarks Fork River to maximize diversity of the Shoshone National Forest resources and uses, with emphasis on dispersed recreation." I worked for the Federal Government for 33 years but the exact meaning of this criteria escapes me. It seems to be government jargon that can be interpreted by the writer to mean anything he wants.

2nd Paragraph, Page 23

Explain how you will enhance the historic value of the study area.

Alternatives 2 and 4, Page 24.

The phrase "willing buyer-willing seller" is confusing. This is a term used for a method of a racial in a land taking action whether it is friendly or a condemnation. To me it means that the acquisition is not made on the basis of a Forest sale. If you mean that you will not condemn why not say so.

Alternatives 2, 3, 6, 7, 8, and 10, Page 25.

Regarding scenic easements the statements (Page 23) "The intent is not to change present private land use..." on p 1 "...without the owner's consent, any public use must be exercised prior to the acquisition..." and "...scenic area would be negotiated with each landowner so that allowances for such compatible developments by the landowner would be built into the easements." (Page 24) "It local government then adopts and maintains certain ordinances that meet the spirit of the Federal Statutes..." (Page 25) "Private Landowners would be fully compensated for losses of development rights."

These statements to me to be a shotgun approach and to allow and disallow development. Several owners of lots south of the river below the bridge have not yet built. Will they be allowed to build after scenic easements are placed? And are the Federal Statutes an end to move them?


8. How is the water quality likely to be adversely affected?

2. Alternatives 2 and 5, Page 25

"The tax assessment is probably based on current types of land use..." What is the basis for this statement? Do you have a commitment from the taxing authorities?

"Public access is not a feature of the scenic easement type recreationists and other visitors would not be allowed on private land without the land owner's permission." (A similar statement is made under Alternatives 3 and 4) Would it be up to the landowners to enforce this?

Table 3 Page 27 and third paragraph, Page 29

Table 3 gives Alternative 1 as "on water quality and all other Alternatives (including Alternative 3) a "4." Par 29, Page 29 says "Existing water quality should be maintained in all Alternatives." This paragraph also says "Opportunities to maintain or enhance water quality would improve with Alternatives 2, 3, 5, and 6 as additional emphasis is given to protection of water quality as specified in Section 16 of the Wild and Scenic Rivers Act." This last statement is misleading in that the State might change or rescind their Section 1 designation.

From these statements and Table 3, I conclude that the exclusion of the private lands on either end of the study area (Alternative 3) will not make any difference on the opportunity to maintain or enhance the quality of the water.

I am not familiar with Section 10 of the Wild and Scenic Rivers Act but if it contains some provisions for controlling the water quality of the Clarks Fork it should be included as a part of the Environmental Statement. The sediment that frequently enters the Clarks Fork (Last par Page 13) "from tributary streams upstream and within the study area is a major concern of water quality. Section 10, notwithstanding, I find it difficult to believe that the Forest Service can possibly control the sediment entering the stream. Actually the best possibility would be the construction of the dams allowed under Alternative which would at least control the sediments at entering the stream. If no development along the river is a concern for water quality (and you have not acknowledged that as noted above) how about the developments and ranches on the stream upstream of the bridge and on Grandall and Sunlight Creeks. What opportunity does Section 10 provide to control these developments? If there is some practical way to control the water quality it should be explained rather than to indulge in wishful thinking.

Table 5 Page 29

I find it hard to believe that you expect to get scenic easements on ranch undeveloped and developed land for approximately the same price per acre. (about $20,000)

The line references to obtain Total Construction and Improvement Costs are incorrect.

Total yearly cost for Administration and Maintenance are inadequate to do the job unless there is a subsidy not shown.
to show that it is necessary to include the upper 0.5 mile to meet Criteria 1 to a high degree.

How do you protect the historical value assigned to the study area by law?

Table 7. Page 37 and detailed discussion of Table 7, Page 38.

Criteria 2 (Note this is out of place and belongs on the preceding page after Criteria 1.)

I don’t understand the language of this Criteria and still believe it only means what the words mean to it. If “Longest is best” for Criteria 1 and 2 why isn’t the most the best for Criteria 3? If so Alternative 4 should be “++”. If least is best Alternatives 1, 2 and 3 should rate “++”. It does seem that you have rigged Alternative 5 to best meet this very vague Criteria. Why wouldn’t Alternative 3 with the addition of the lower development in Alternative 5 meet this Criteria equally?

8. Summary of Comments Received. Page 41.

“Alternatives 5 combined features of Alternatives 2 and 4.” On Page 24, the statement that Alternative 5 is a combination of Alternatives 2, 3 and 4 is incorrect.

The above comments and suggestions, I think, support the conclusions and recommendations that follow.

Through experience I know that it is difficult to write an Environmental Statement in the format prescribed by EK that is rational, concise and clear to the reader. Through experience, I know too, that any Environmental Statement opposed by environmental groups and persons must have all the conclusions wrapped up in the documentation of facts and studies. Regrettably I must say that the Draft Environmental Statement is full of assumptions, conclusions, and speculations that are often contradictory and are not supported by the facts.

1. I do not agree that the study area has outstanding scenic, recreational and historic values. Scenic—recreational and historic—no.

2. I do not support your selection of Alternative 5 as the preferred Alternative.

3. I prefer Alternative 1 and believe the Environmental Statement can be made as good a case for this Alternative as any of the others.

4. My second preference would be Alternative 3 with possible addition of the improvements in the lower canyon to “maximize diversity of resources and uses, with emphasis on dispersed recreation.”

I am opposed to Alternative 5 because of the inclusion of the upper 0.5 mile of private land, for the following reasons.
1. There are no facts given that this 0.5 mile of private land is necessary to meet Criteria 1, 2 and 3 other than longest is best and I don't consider this a valid reason. It may be the upper 0.5 mile was included because it is within the Forest boundary and that the lower parcel was excluded because it is outside the Forest boundary. This would not be a valid reason either.

2. There is no public access to the upper 0.5 mile of the river. One land holding crosses the river immediately below the bridge and extends downstream approximately 450 feet. I have owned my place for over 10 years and know of no way to get on the 0.5 mile of river without trespassing. Recreational possibilities on this section of the river for the public are therefore nil. It is possible to get on the river below the 0.5 mile section by taking the trail from Hwy. 280 along the north side of Crandall Creek or by taking Trail 628 north of the private land.

3. Historical value is not associated with this section.

4. As to scenic value the 0.5 mile is pleasant, possibly pastoral but certainly not wild. You do say in the statement that the study area is virtually pristine except for this 0.5 mile.

5. There is no showing in the statement that the 0.5 mile is necessary to maximize diversity of resources and uses, with emphasis on dispersed recreation.

6. The inclusion (or exclusion) of this 0.5 mile of land will have no affect on water quality.

7. The granting of scenic easements will compound trespass problems even though you say that public access will not be a part of the easement. The simple knowledge that a scenic easement has been granted will be an invitation to the public to invade and compound a trespass problem that is bad enough under the present circumstances.

I am grateful to you for the opportunity to discuss the Draft Environmental Statement and hope you find my comments and suggestions useful in your Final Environmental Statement. I would be pleased if you would send a copy of the Final Statement when it is available to my permanent address at 903 Van Eren or Drive, Billing s, Montana, 59102.

Sincerely,

Russell Faus

RESPONSE TO RUSSELL FAUS

1. Agree. See wording changes, Section II.F.

2. Agree. See wording changes, Section II.K.


4. See response to Sparhawks' letter, page E-47.

5. See response to Sparhawks' letter, page E-47.

6. Historical values can only be protected, not enhanced. See wording changes, Section V.A., last paragraph.

7. Note that this section is not recommended for designation in this Final Environmental Statement, having been found to be ineligible for Wild and Scenic River status. No scenic easements will be sought on these lands in the preferred alternative in this statement.

8. The potential for water quality degradation, particularly from sewage treatment effluent, increases as the upper section is developed. See wording changes, Section V.C.1.

9. This statement was based on Forest Service experience with tax assessment methodology generally used in Wyoming and Colorado. Becky Robinson, who works in the Park County Assessor's Office, confirmed that tax assessments in Park County are based on current type of land use with several modifications. Land which is encumbered with zoning or scenic easements would not be taxed for potential uses clearly not compatible with the growth constraints of the zoning or easements.

10. In most instances, trespass violations would be handled by the landowners with assistance from the Park County Sheriff's Department. This is the same as the existing situation.

11. Section 10a of the Wild and Scenic Rivers Act directs that a concept of nondegradation of water will be emphasized to the maximum extent possible in all areas included in the National Wild and Scenic Rivers system. See response to Blackburn
letter, page E-30. Section 10d gives authority to the Secretary of Agriculture to "utilize the general statutory authorities relating to the National Forests in such manner as he deems appropriate to carry out the purposes of this Act". Section 10e gives the Federal agency managing the river the authority to enter into cooperative agreements with State, county, or local government in planning or administration of the component. These authorities and agreements could be used to control water-polluting activities both along the designated section of the Clarks Fork or upstream sections or tributaries.

12. Agreed. See revised Table 5.


14. Agreed. An examination of the rationale for citing classification of a longer segment as attaining criteria #1 to a higher degree shows that a defensible rationale is lacking. Accordingly, see revised Table 7 and Section VIII.D.1.

15. Agreed. See revised Table 7 and Section VII.D.2.

16. Agreed. See revised Table 7 and VII.D.

17. By recognizing topographic features, artifacts, structures or anything else of noted historical value and managing so as not to impair the historical remains, this could be accomplished by restricting motorized or even foot travel in sensitive areas, removing nonharmonious improvements which conflict historical remains, locating public use areas (such as trails or overlooks) so as not to physically impair historical remains. See comments to letter to the Advisory Council on Historic Preservation, page E-51.

18. See revised Table 7 and Section VII.D.

19. See revised Table 7 and VII.D.

20. By recognizing topographic features, artifacts, structures or anything else of noted historical value and managing so as not to impair the historical remains, this could be accomplished by restricting motorized or even foot travel in sensitive areas, removing nonharmonious improvements which conflict historical remains, locating public use areas (such as trails or overlooks) so as not to physically impair historical remains. See comments to letter to the Advisory Council on Historic Preservation, page E-51.

21. See revised Table 7 and Section VII.D.

22. See revised Table 7 and VII.D.

23. By recognizing topographic features, artifacts, structures or anything else of noted historical value and managing so as not to impair the historical remains, this could be accomplished by restricting motorized or even foot travel in sensitive areas, removing nonharmonious improvements which conflict historical remains, locating public use areas (such as trails or overlooks) so as not to physically impair historical remains. See comments to letter to the Advisory Council on Historic Preservation, page E-51.

24. See revised Table 7 and Section VII.D.

25. By recognizing topographic features, artifacts, structures or anything else of noted historical value and managing so as not to impair the historical remains, this could be accomplished by restricting motorized or even foot travel in sensitive areas, removing nonharmonious improvements which conflict historical remains, locating public use areas (such as trails or overlooks) so as not to physically impair historical remains. See comments to letter to the Advisory Council on Historic Preservation, page E-51.

Sincerely,

Mrs. Garnet L. Cary

Hunter Peak Ranch

LICENSED OUTFITTERS AND GUIDES
MRS. GARNET CARY
CODY, WYOMING

Sept. 10, 1979

Supervisor Hall, Shoshone Forest

Honorable Senator Malcolm Wallop

Honorable Representative Allan Simpson

The publicity leading to the designation of the Shoshone River as a "Wild River" under proposed five alternatives study in Falla. The land described starts at the present Clarkfork bridge and includes the private land below that bridge. In the booklet published by the Shoshone Forest the description on page 25, Alternative three and four the bridges indicated is called the Cranwell Creek Bridge and as such does not include any private land. There are actually two bridges in question not one as published in the study.

In Alternatives two and three, private land to be confiscated under the lease plan will involve some fifty cabin or land owners. Same twenty other land owners in the area should beware of the motives of the Forest Service as indicated by the proposed purchase of private land in the Sunlight area, policies of land purchase in the Jackson, Wyo. area. The development of the Wild River proposes improvements. In Alternatives three and four, page 22, a map is shown with access Jeep roads and parking areas. The use of the existing jeep road in the area with more parking areas does not conform to the idea of keeping the area as a primitive park for hikers and inaccessible to most of the public.

In a public meeting on June 23, 1979, Supervisor Hall stated the present policy of the Forest Service to leave trails on the Forest in a natural state without altering the width or natural appearance of the trail. Then in the Wild River Study in the maps on page 22, improved trails and parking areas are indicated to be built adjoining State road 287. Again there seems to be conflicting viewpoints.

It is my contention that Alternative one, leaving the river designated as a scenic river in the best one for the welfare of the area and the good of the State of Wyoming. It leaves the already inaccessible canyon area to the care of nature.

Sincerely,

Mrs. Garnet L. Cary

[Signature]
RESPONSE TO MRS. GARNETT CARY

1. Examination of written statement and testimony by U.S. Representative Roncalio in hearings before the Subcommittee on National Parks and Recreation, U.S. House of Representatives, Hearing Record, October 29 and 30, 1973, on H.R. 8501 indicate that the upstream terminus of the segment of river Congress designated to be studied is the Crandall Bridge (locally referred to as the Clarks Fork Bridge) where Wyoming Highway 296 crosses the Clarks Fork River. The Forest Service has understood the upper end of the study area to be the Crandall Bridge (across the Clarks Fork River) since Representative Roncalio's testimony in 1973 and passage of Public Law 93-621 in 1975 which authorized the Clarks Fork Wild and Scenic River Study.

2. No private lands would be confiscated in any alternative. In the preferred alternative in this Final Environmental Statement, only the "Wright Place" below Reef Creek would be affected by scenic easements. The 0.5 mile section of private land just below the Crandall Bridge, which includes your property, was found to be ineligible for Wild and Scenic River designation in an eligibility re-evaluation prompted by public input to the Draft Environmental Statement. See Sections III.A. and B.

3. The present policy of the Forest Service is to leave trails in as natural state as possible with only minimal alterations for erosion control, safety, and esthetics. This policy certainly does not preclude construction of new trails, as are proposed in each of the alternatives, but sets guidelines for width, grade, and alignment of new trails.

U.S. Forest Service
Shoshone National Forest
Cody, Wyoming 82414

August 25, 1979

Gentlemen: Re: Clarks Fork W & S Rivers Study, etc.

With reference to the above subject and the letter received from Charles Wright for the Supervisor, Randall Hall, I wish to go on record as very strenuously objecting to the Forest Service acquiring control of private land in the Crandall area. This can be nothing but detrimental from any standpoint.

I have made a careful study of the Environmental Statement which your office mailed to me and am convinced that this is just another instance of governmental interference into an area where they have no business whatsoever - in fact, it could even be considered presumptuous and meddlesome by many.

During the almost 50 years that the homestead has been in my family, I have sold a few parcels of land to friends for cabins. They have built - according to my specifications - attractive log cabins at considerable expense, in keeping with the character of the environment. I incidentally was a strict environmentalist long before there ever was a Sierra Club or Friends of the Earth etc. etc. and nothing unattractive or commercial has ever been allowed.

Several years ago a public highway split my homestead but eventually I was able to turn a disadvantage into an advantage by subdividing into the few cabin sites mentioned, 11 of which are along the Clarks Fork River below the Clarks Fork Bridge (mistakenly called in the Statement the Crandall Bridge). It is this 3/4 mile strip of land with the cabins that for some strange reason the Forest Service wishes to get control of, including my personal land adjacent on which I have 5 log cabins.

I have discussed this take-over with the cabin owners and they are all opposed to it and are sending in letters of protest or have already done so.

Along this strip of land the Clarks Fork River is a quietly flowing placid stream with low banks; no rocky cliffs, no falls, nothing especially wild or scenic for about one-half mile east. There, at that point and on down to the canyon it could be called wild and scenic and even spectacular in some places, but this area is many miles from our cabins. No one that I have talked to has any objection to its being designated a "wild and scenic" river which it truly is.

The Forest Service has much land to administer in the area, several campgrounds, etc. Why do they wish to get control of private land? One employee mentioned: so no one would erect a "condominium" or anything as terrible (the implication is mine). Why not? An attractive, rustic well-managed and maintained multiple-use dwelling in this area, not necessarily on the bank of the river, would be able to handle the overflow of people from Yellowstone park, 2 miles to the North. The Forest Service public campgrounds on the banks of the Clarks Fork are nothing to brag about - with their open fires, litter and garbage cans and stinking outhouses. I understand that more campgrounds are planned for the area. Are these better than multiple-use dwellings? Not to me.
It is not my intention at present to build any buildings of any sort or to subdivide any more land - but if I should decide to, I consider it my inalienable, constitutional right to do so.

We do have a Planning & Zoning Board composed of local, concerned citizens (none, incidentally who live anywhere near the area in question) but who would probably not allow any garish or ugly buildings to be built in or on the Clark's Fork River. I would hope they would also wish to maintain some sort of balance between any development of natural resources in this area (which your statement casually refers to as "minimal"). How do you know, since no exploration has ever been done - or my homestead at least? Or has some valuable discovery been made without my knowledge and possibly this is another reason the Forest Service wants control of the land?

I am quite sure that after almost 50 years, I know my own land better than anyone else - every inch of it - and, in fact, there are minerals and some oil. The amounts, however, may be debatable.

Notwithstanding the foregoing paragraph, obviously the Forest Service is well aware that any controls such as they so assiduously seek would substantially reduce the market value of all the property in question and be considered encumbrances.

Very truly yours,

(Mrs. J. S. Higgins)

RESPONSE TO MRS. J. S. HIGGINS

1. As a result of yours' and several other responses on this subject, we have reviewed the eligibility of the upper 0.5 mile and determined that this section, which includes your property, does not meet the eligibility criteria and therefore, is not eligible for designation as a Wild and Scenic River. See Sections III A and B. The preferred alternative in this Final Environmental Statement recommends Wild River classification downstream and below your property. No scenic easement will be sought on your property.

2. The purpose of development constraints in Alternatives 2-5 are simply to insure a continuation of present private land use and to avoid commercial encroachments and visually unconforming uses. See page 23.

3. If scenic easements are purchased by the Federal government, the development potential of the land in question would be appraised by an independent appraiser, agreeable to both parties. The landowner would be paid for the development rights specifically foregone in the scenic easements.
Howard E. Sparhawk, M.A.I.
1123 Main 25th Street
Helena, Montana 59601

September 13, 1979

Randall R. Hall
Forest Supervisor
Shoshone National Forest
West Yellowstone Highway
P. O. Box 961
Cody, Wyoming 82414

Dear Mr. Hall:

We are writing in regard to the "Clarks Fork of the Yellowstone 3
River Wild and Scenic River Study Draft Environmental
Statement" (hereafter the Draft Study). We have read the study
and make the following comments:

In consonance with our letter of December 5, 1978, we feel
that the Clarks Fork River should not be included within the
Wild and Scenic River program. For reference we have
attached a copy of our previous letter. In light of the Draft
Study, we make the following observations:

In relation with the Eligibility Determination and Classi-
ification(pp 12-17),* our analysis indicates

1. That the subjectivity of the eligibility criteria
has not been adequately removed. The Draft Study admits
that the "evaluation can be highly subjective" (p 12) and so
the criteria were submitted to a public workshop for review.

However, the maximum attendance at the workshops was 31 people
(p 41). The low public input can scarcely be considered to be
an objective sampling of public opinion, an adequate
representation of the population of Northern Wyoming and
Southern Montana or a rational evaluation of the evaluation
criteria. As a result, the criteria remain subjective.

2. That the specification of Criterion #2 (Recreational
Value) and Criterion #5 (Historic Value) are vague. The
definitions are too general to provide a clear, adequate
understanding in order to differentiate acceptance from
rejection. The Recreation Value criterion is based upon the
concept of a "water-influenced recreation opportunity" (p 12).

However, a water-influenced activity can refer to anything
remotely relating to water: such as looking at it or
walking by it. Many people will comment on the "viewing
scenery" of the Hudson River from the heights of the Steven's
Institute of Technology; yet, the Hudson River hardly would
be included in the Wild and Scenic River program.

Further, the Historical Value criterion is vague. This
criterion is built around the concepts of "regional or
national interest" or "regional or national significance" (p 12).
Unfortunately, the current boom in local museums, in ethnic
heritage studies and in discovering our "roots" amply testifies
to the fact that almost everything will have or could have
regional interest to somebody.

3. That contrary to the study (Refer p 13, table 2), the
Clarks Fork River meets only one of the main evaluation
criteria and only 3 of the additional criteria.

a. The Clarks Fork River does not meet the Recrea-
tional Value criterion. As the Draft Study indicates, the
River does not meet the criterion of traditional water
recreation-use.

However, the Draft Study then goes on to argue that water
recreation also means "viewing scenery" and enjoying environ-
ments (p 13). However, this recreational activity, in point of
fact, belongs under the Scenic Value criterion by the very
definitions used by the study itself: for the Draft Study
defines Scenic Value as: "The area contains a high variety of
landforms, vegetative patterns, and waterforms, which possess
unalso and distinctive characteristics not common to the
general area." Thus, the supposed Recreational Value does
not exist in fact; it is only an aspect of the Scenic Value
which has been misplaced into the wrong category.

We have already seen why this mistake occurred: the definition
of Recreation Value was too vague to serve as a reliable means for
deciding what does and what does not belong to this category.

b. The Clarks Fork River does not meet the Historic
value criterion. It is difficult to conclude that one minor
episode of the Chief Joseph chase has "outstandingly remarkable"
(p 16) nationwide interest, especially since Chief Joseph
effectively eluded the cavalry for most of the 1,300 mile
chase. It is something of a semantic stretch to conclude
that one often repeated evasion is outstandingly remarkable
for all of the United States.

This is not to downplay the historical significance of Chief
Joseph and his attempted flight to Canada. However, Chief
Joseph's flight is nationally preserved in memory at the more important Big Hole Battle and Little Bear Paw monuments.

More specifically in terms of the Clark's Fork Canyon, as the Draft Study indicates the exact escape route is unknown. It hardly seems fitting for an "outstandingly remarkable nationally significant event" to occur in an unknown place. This locational ambiguity would make placing a market or monument very difficult.

5. c. The Clarks Fork River does not meet the "Meaningful experience opportunity" (p 16) criterion as defined in the Draft Study itself. While the draft report argues that the Clarks Fork River meets the meaningful experience criterion, this is clearly inappropriate for the River does not provide a "meaningful experience for boaters" which is the only definition given for this criterion (p 12).

Further, in another passage, the Draft Report (p 13) itself indicates that boating is limited on the River. Thus, the River does not provide a meaningful boating value and the meaningful experience opportunity criterion is not met.

The Draft Report makes this mistake because it inappropriately construes the meaningful experience opportunity to mean scenery, recreation, and history. The following aspects are wrong with this approach:

1. As indicated above, these are not the criteria used in the Draft Study's own definitions.

2. All of these criteria are redundant with previously used criteria. Thus, the effect is a little like counting the same object twice.

3. The recreation criterion is redundant with the scenery criterion. This redundancy becomes clear when we turn to the paragraph discussing the recreational value of the River (p 13). We learn here that the River offers few opportunities for traditional water activities. Instead, the River offers the presumably "new water recreation" of looking at it.

Such an attribute, however, is not water recreation but scenery. But viewing scenery is a scenic value and since we already have a category for scenery, we cannot construe recreation as equaling scenery. Thus, again, we discover that the River does not meet the recreational criterion as set up by the Wild and Scenic Rivers Act.

4. The historical value criterion is not met by the River. See out early comments on this point.

As we indicated in our earlier letter and as the Draft Study indicates, a central concern is overuse of the Canyon. The Canyon area is small; the potential damage to the environment is great.

The Draft Study itself indicates that the short-term adverse environmental effects under Alternative One (i.e., No designation) are the most limited (p 34). Under all of the other alternatives the environmental impact will be greater. In its discussion of this finding (p 35), the Draft Report does not call enough attention to its Table 4, p 28: "Changes in Recreation Use in 1990." According to this table, the continuation of the current policy (i.e., the Draft Study's Alternative One) would result in an increase of Study Area's visitation by 70.9%. However, Alternatives 2 through 5 would increase visitation by 133% to 279% depending upon the Alternative.

Clearly, then, Alternative One provides the best protection to the environment. The publicity resulting from the Canyon in the Wild and Scenic Rivers Act would increase Canyon use and threaten damage to the environment.

The long-term protection of the Canyon and River would be equally provided for by both inclusion or the status quo. Currently, the water quality is protected because Wyoming has designated the Clarks Fork River as a Class I river. Adequate management of the River is assured because the bulk of the River is already under U. S. Government supervision as part of the Shoshone National Forest or Bureau of Land Management.

The Secretary of the Department of Agriculture has responsibility and authority to preserve and protect the River and its environment.

In the very long run, it is possible that water storage or hydropower projects may alter the Canyon environment. Such projects, however, have an equal probability of occurring no matter what alternative is chosen.

If the status quo is maintained, no project would be initiated without an environmental analysis process (p 35). On the other hand, the Wild River designation does not give protection because, as the Draft Study clearly points out, "Congress has the authority to change or rescind Wild and Scenic designation if the need occurs" (p 36). Hopefully, no major development project would ever be undertaken in the Canyon unless there is a clear need. And, in such a case, the Wild and Scenic designation offers no sure protection.

As a result of our analysis, we see that the inclusion of the
Canyon in the Act offers no clear long-term advantage and is redundant given the current situation. Alternative One (the status quo) is preferable.

The Draft Study's own tabular analysis supports this conclusion, Table F (p 37), "Evaluation of Alternatives," tabulates the advantages of the various Alternatives. If the evaluation marks are weighted the following way,**

<table>
<thead>
<tr>
<th>Weight</th>
<th>Points</th>
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<tr>
<td>++</td>
<td>3</td>
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We discover that Alternative One is the most efficient Alternative:

- Alternative 1: 13 points
- Alternative 2: 9 points
- Alternative 3: 9 points
- Alternative 4: 11 points
- Alternative 5: 11 points

Thus, the Draft Study itself indicates the inclusion of the Clarks Fork River in the Wild and Scenic River Act is not the most efficient way to meet the intent of the Act. While the Draft Study does rank the evaluation criteria, there is no methodological discussion as to the basis of the ranking.

We are concerned about the derivation of the criteria used for evaluating the alternative proposals (p 18). No clear methodology is given for their derivation. Thus, it is possible that the criteria do not represent a balanced point of view but are slanted toward the Wild and Scenic River Act.

Further, there is no clear methodological relation between the evaluation criteria (p 18) and the eligibility criteria (p 12). This disjunction creates some problems:

1. Only the eligibility criteria are directly related to the Wild and Scenic Rivers Act. Since this Act is the raison d'être of the Draft Study, the proposed alternatives should be evaluated by criteria clearly related to the Act itself. It would make sense to form this link through the eligibility criteria for these criteria were related to the Act (p 12). However, this linkage was not formed. So the Draft Study Alternatives were evaluated by criteria not related to the Act, thus rendering their consideration void in terms of the Act.

2. The ambiguity concerning the referent of the evaluation criteria can be pointed out in another way. Assume that the evaluation criteria relate to the intention of the Act, as do the eligibility criteria.

According to the eligibility criteria as analyzed in the Draft Study only, the Clarks Fork River is eligible for inclusion in the Act. However, as we have seen above, according to the evaluation criteria Alternative One (i.e., the status quo) on the average serves the interest of the Act better than inclusion. This is a simple contradiction and indicates a methodological flaw.

In the discussion of the reason for nonselection (p 40) of Alternative 1, the draft states, "the alternative can provide only short-term protection to the 'outstandingly remarkable' values and free-flowing characteristics of the river." As previously discussed, we feel that the water quality is protected because Wyoming has designated the Clarks Fork River as a Class I river.

Furthermore, since the study area is almost entirely under the supervision and control of the U.S. Forest Service, it appears redundant that they would be incapable of providing a long-term policy of preserving the "outstandingly remarkable" values of the river.

Another reason for nonselection of Alternative 1 stated by the Draft Study is "the alternative cannot greatly enhance recreation diversity because the costs of new roads and trails would be relatively low in priority forest-wide without classification of the river." (p 40)

We do not feel that the purpose of the Wild and Scenic Rivers Act is to provide funding for recreational developments for the U.S. Forest Service.

The Wild and Scenic River Act (as quoted on p 12) states that "it is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environment, possess outstandingly remarkable... values."
The Act states it must "posses" certain values and that these existing values "shall be preserved." It appears that the intention is not to provide funding for recreational development.

We feel that this indicates a methodological flaw and provides no validity to the Study's reason for nonselection of Alternative 1.

While our analysis indicates that the Draft Study points to Alternative One, we do find that Alternative 3 and 5 are superior to Alternatives 2 and 4. We feel however, that the B.L.M. (Bureau of Land Management) parcel located towards the east end of the Lower Canyon (Lot 8 (SW1/4SW1/4 Sec. 7, TWP 56 N. Range 103 W.) lying between the U.S. Forest Service Boundary and the private land must be included within the Wild River Designation. This modification is required due to:

(A) Given the proximity of the B.L.M. land to the study land and river, and its government ownership, the B.L.M. parcel should be included in the Wild River designation.

(B) The B.L.M. parcel is heavily used, especially since the pavement of Wyoming Highway No. 292 abruptly ends there (on Lot #8). The parcel is littered with the flotsam and jetsam of modern camping: broken glass, empty cans. The vegetation is destroyed by unrestricted vehicle use; the river is used for dumping wastes.

The Wild River designation will result in increased publicity and, hence, an increased use of the area. Thus, it is logical to include this B.L.M. parcel within the Wild River designation so that the parcel will have the benefit of supervised use.

Both Alternatives 3 and 5 provide a Wild River Designation having improvements with Alternative 5 recommending the improvement of Forest Development Road No. 119 in the Lower Canyon.

As stated in our letter of December 5, 1978, "The damage potential of increased recreational use can be seen in the present use pattern of the canyon. Since the construction of the paved highway into the canyon (1969), there has been a significant increase in the use of the area. This increased use, however, has been to the general detriment of the environment. Trash and litter, indiscriminate campfires, and the off-road use of motorcycles and fourwheel drive vehicles has led to a decay of the natural environment." Further study of the environmental impact of the specific area designated for improvement is necessary.

The Draft Environmental Study does not analyze the impact of the recommended improved Road No. 119 in the Lower Canyon Area. Policy and programs for the protection and preservation of the Lower Canyon Environment are not discussed.

It is imperative that such an analysis of the impact on the environmental quality be thoroughly studied prior to final recommendations.

In summary, then, our analysis indicates that Alternative One is the superior Alternative.

Our Analysis shows that:

1. The eligibility criteria are of a subjective nature.
2. The Clarks Fork River meets only one of the six main criteria for inclusion in the Wild and Scenic Rivers Act. Although the Clarks Fork River does meet three of the four secondary criteria, these criteria are also met under the status quo for the River is designated Class I by the State of Wyoming.
3. Inclusion of the Clarks Fork River in the Wild and Scenic Rivers Act threatens overuse of the Canyon and damage to the environment. The inclusion will result in from 133% to 279% increase in use by 1990.
4. The long-term protection of the River is equally provided by inclusion and exclusion in the Act.
5. Based upon the Draft studies own evaluative criteria, Alternative One is the most efficient Alternative for meeting the intent of the Act.
6. The derivation of both the eligibility and the evaluative criteria is not clear. This methodological ambiguity casts doubt on the reliability of the Draft Study's findings.
7. The reason for nonselection of Alternative 1 as given by the Draft Study (p 40) is a departure from the purpose of the Act and is not related to the eligibility criteria.
Therefore, we conclude that Alternative One is the most efficient alternative.

Of the four remaining alternatives, we find Alternative 3 and 5 the best. However, these Alternatives must be modified to include the B.L.M. parcel (Lot 8, SW1/4SW1/4, Sec. 7 TWP 56 N., Range 103 W.) in the Wild River designation and a study of the environmental impact along with a definite program of supervision be prepared for those areas where recreational development is considered.

Thank you for the opportunity to review the Draft Study. Your consideration and reply to our analysis will be appreciated.

Sincerely,

Steve J. Sparhawk

RESPONSE TO SPARHAWK

1. Formulation of the eligibility criteria is an effort to reduce the inherent subjectivity in defining what constitutes "outstandingly remarkable" values in evaluating the candidacy of a specific river for inclusion in the National Wild and Scenic Rivers system. These criteria can never be finite as different people will have different perceptions as to what "outstandingly remarkable" means. The evaluation criteria on page 12 represent the consensus of opinion of eleven employees of the Shoshone National Forest, fifteen people who attended an eligibility workshop on July 10, 1978 in Powell, Wyoming, and review by Forest Service people in the Regional Office in Denver and the Washington Office. In addition, copies of the study plan which included evaluation criteria, were sent out to about fifty individuals, organizations, or agencies, requesting review of the evaluation criteria. The evaluation criteria were published in the Cody and Powell newspapers for public review prior to the July 10th workshop.

2. Eligibility criteria for "outstandingly remarkable" recreation value is based on a very broad definition of "water-influenced" recreation opportunity, recognizing that nearly all of the canyon environment is "water-influenced" and that the waterforms within the study area are some of the most notable features. The recreational criteria simply says that the area must have potential to produce a lot of at least one form of recreation or several kinds of high quality recreation.

3. In analyzing the recreation potential of the river, several forms of recreation, including floating, swimming, fishing, hunting, viewing scenery, nature study, enjoying unique or unusual environments, hiking, camping, picnicking, horse riding, and rock climbing were rated for access, use area availability, potential use frequency, physical challenge, and diversity of experience. Each activity was rated as to low, moderate, or high in quantity and/or quality for each of the categories. The analysis concluded that the Clarks Fork River in the study area provides high potential capacity for two water-influenced recreation opportunities: viewing scenery and enjoying unique or unusual environments. The very high visual qualities of the river afford excellent scenic viewing. Throughout the study area, views of the canyon and surrounding country consist of a large variety of natural features of high scenic quality that are unique for a large portion of the Absaroka-Beartooth area. In addition, the river affords tremendous potential for enjoying unique or unusual environments occurring within the study area including the sheer power, noise, and violence of many of the river's rapids, cascades and waterfalls, tributary stream...
waterfalls, hydric microclimates, and extremely constricted and narrow river and tributary canyon walls in some sections. In this regard, viewing scenery and enjoying unique or unusual environments were considered to be recreational activities.

4. The Chief Joseph event gained considerable nationwide newspaper publicity and has been the subject of several books, movies, and television programs, and recently proposed formation of a Nez Perce trail. The Clarks Fork Canyon event was a major episode in the chase and was judged to be an event of nationwide interest.

5. The meaningful experience opportunity should not be limited to boating as incorrectly defined on A.8 of the DES. Guidelines for evaluating rivers for inclusion in the National Wild and Scenic River system, written by the Secretaries of Agriculture and Interior in 1970, merely say that "the river or river unit must be long enough to provide a meaningful experience". The study team judged that the river provides a variety of meaningful experiences as described in Section III.A.

6. In the short run, recreational use will be greater in Alternatives 2-5 than in Alternative 1. Associated short-term probable adverse environmental effects are discussed in Section VII.B. and not considered to be significant. See response to Park County letters.

7. The evaluation criteria were not considered to be of equal importance as explained in Sections IV and VII.D. and therefore, were not numerically weighed. Section VII.D., paragraph 1 states "the ratings must not be added vertically because the evaluation criteria are not equally important". The first group of evaluation criteria (1, 2, and 3) were considered to be the most important (Section VII.D., paragraph 2) and were assigned highest priority in analyzing goal satisfaction.

8. The evaluation criteria are derived from a number of laws, regulations, policies that direct Forest Service management of public lands. The criteria reflect the judgment of the study team, Shoshone National Forest Supervisor and staff, Regional Forester and staff, and Washington Office. No clear methodological relation exists between the evaluation criteria and eligibility criteria because the eligibility criteria reflect the spirit and intent of the Wild and Scenic Rivers Act only while the evaluation criteria reflect a much broader range of legislation, regulations, policies, and professional judgment.


10. The BLM parcel would be located within the Wild River designation in Alternative 2. See response to Wyoming Game and Fish Division letter, page E-11.

11. See response to Wyoming Game and Fish Department letter, page E-11.

12. Note that the proposed improvements to Road 119 are not included in the Final Preferred Alternative.
The following persons or agency sent letters not favoring or opposing Wild and Scenic River designation, but provided input or substantive information:

Wyoming State Highway Department
Cheyenne, Wyoming

Advisory Council on Historic Prevention
Washington, D.C.

Soil Conservation Service, USDA
Washington, D.C.

Department of Energy
Washington, D.C.

Federal Energy Regulatory Commission
Washington, D.C.

Department of Army
Washington, D.C.

Dept. of Housing & Urban Development
Washington, D.C.

Department of Transportation
Denver, Colorado

Nancy Lissawa
Pasadena, California

Craig Wilcox
Powell, Wyoming

Wyoming State Highway Department
Cheyenne, Wyoming

Clarks Fork Road
RS-1507 (FLH-18)
Park County

May 15, 1978

Mr. Randall R. Hall
Forest Supervisor
Shoshone National Forest
Cody, Wyoming 82414

Dear Mr. Hall:

This is in response to your question relative to the Wyoming Highway Department's plans for development in the area of the Clarks Fork River.

As you know, the Department selected the route over Dead Indian Hill connecting with Wyoming 120 approximately 16 miles north of Cody. This will be the final route corridor. There are no plans for this or any other road to follow the canyon corridor toward Clark.

Included for your information is a map showing segments projected for construction, though the dates depend on availability of funding. The project is completed for 16.8 miles. 7.6 new miles are to be contracted for construction with temporary surfacing this summer and another 4.5 projected for contracting in FY 79/80. Again, this may fluctuate with availability of funds. A copy of our programming on these segments is also attached.

I hope this information is of service to you. Please do not hesitate to contact me or my staff if you require further cooperation in the Wild and Scenic River analysis of this area.

Very truly yours,

George H. Bell
Assistant Chief Engineer
Planning and Administration

cc: Pat Brown, District Engineer, Basin
August 28, 1978

Mr. Randall Hall, Supervisor
Shoshone National Forest Headquarters
Cody, Wyoming 82414

Dear Mr. Hall:

The Planning Branch of the Highway Department has reviewed the four alternative designations for the Clarks Fork River under the Wild and Scenic River Study you are presently conducting. We are forwarding these comments because Mr. Sundby, who is working with you, has a commitment for the date of your upcoming workshop and cannot attend.

None of the alternatives are objectionable to the Highway Department. We feel that it is essentially up to those in the area of the study to determine the final outcome, with the knowledge that their actions may or may not preclude development, including highways. We do not in this case have any plans of either a short or long term nature that will have any effort whatsoever on the Clarks Fork River. As you know, the closest development is the construction being done on Wyoming 296 that will connect the Cooke City-Cody corridor, over Dead Indian Hill, and it has been determined in discussion with your staff that this presents no problems.

We would like to emphasize once again, because we understand the sensitivity of the issue, that the new road is not going to go along the "canyon route" to Clark. This should be stated emphatically in response to any questions that should arise. I refer you to the May 15 letter from Mr. George Bell which stated that position. The road will be constructed over Dead Indian Hill and connect with Wyoming 120 approximately 16 miles north of Cody. Your copy of the EIS on this project provides the precise location. If this position is not clear to anyone in the area we will invite them to discuss it with us.

I hope this information will be helpful in the completion of your study. Please contact us if you have need for further cooperation.

Very truly yours,

F. O. Witters
State Planning Engineer

cc: George A. Brown
Basin

THE STATE OF WYOMING

Wyoming State Highway Department
P. O. Box 1708
Cheyenne, Wyoming 82001

June 27, 1979

Mr. Randall R. Hall
Forest Supervisor
Forest Service
Shoshone National Forest
Cody, Wyoming 82414

Dear Mr. Hall:

Thank you for your request of June 18, 1979, for comments on the draft environmental statement (DES) for Clarks Fork Wild and Scenic River. Pursuant to Section 102(2)(C) of the National Environmental Policy Act of 1969 and the Council's regulations, "Protection of Historic and Cultural Properties" (36 CFR Part 800), we have determined that your DES mentions properties of cultural and/or historical significance; however, we need more information in order to evaluate the effects of the undertaking on these resources. Please furnish additional data indicating:


The environmental statement must demonstrate that either of the following conditions exists:

1. No properties included in or that may be eligible for inclusion in the National Register of Historic Places are located within the area of environmental impact, and the undertaking will not affect any such property. In making this determination, the Council requires:
   -- evidence that you have consulted the latest edition of the National Register (Federal Register, February 6, 1979, and its monthly supplements);
   -- evidence of an effort to ensure the identification of properties eligible for inclusion in the National Register, including evidence of contact with the State Historic Preservation Officer, whose comments should be included in the final environmental statement. The State Historic Preservation Officer for Wyoming is Ms. Jan L. Wilson.

2. The undertaking will affect a property included in or that may be eligible for inclusion in the National Register. In making this determination, the Council requires:
   -- evidence of your attempts to avoid the effect on the property, including consideration of less environmentally damaging alternatives to the undertaking.

I hope this information will be helpful in the completion of your study. Please contact us if you have need for further cooperation.

Very truly yours,

F. O. Witters
State Planning Engineer

cc: George A. Brown
Basin
2. Properties included in or that may be eligible for inclusion in the National Register of Historic Places are located within the area of environmental impact, and the undertaking will or will not affect any such property. In cases where there will be an effect, the final environmental statement should contain evidence of compliance with Section 106 of the National Historic Preservation Act through the Council's regulations, "Protection of Historic and Cultural Properties".

Should you have any questions, please call Brit Allan Storey at (303) 234-4946, an FTS number.

Sincerely,

[Signature]

Louis S. Hall
Chief, Western Office of Review and Compliance

RESPONSE TO LETTER TO ADVISORY COUNCIL
ON HISTORIC PRESERVATION LETTER

The Wyoming State Archaeologist and State Historic Preservation Officer submitted a report entitled "The 1978 Archaeological Program on the Shoshone National Forest" by George M. Zeimens, Associate State Archaeologist, to the Shoshone Forest on November 24, 1978. Among the six sites investigated was the lower Clarks Fork Canyon. The report consisted of a literature search (Level 1 Study) which concluded that no known sites were found to exist in the Lower Canyon but recommended that a field survey be conducted before these lands receive any special designation. On August 6, 1979, the Shoshone Forest received a report by Michael Spitzer, Staff Archaeologist for Centuries Research, Inc. of Montrose, Colorado entitled "Archaeological Clearance Survey of a Proposed Seismograph Line in Shoshone National Forest, Wyoming". The survey consisted of a cultural resource inventory of a proposed seismograph line along Road 119 in the Lower Canyon for Shell Oil Company. The survey reaffirmed a tepee ring site which was previously recorded and found nineteen pieces of pottery at a previously unrecorded site. Simple avoidance procedures were prescribed for both sites. Both of these reports are available in the Shoshone National Forest Supervisor's Office.

Four sites on the Shoshone National Forest are included in the National Register of Historic Places (February 6, 1979, and monthly supplements) including Union Pass, Dead Indian Archaeological Site, Wapiti Ranger Station, and Buffalo Bill Historical Cabin. None of these are within the Clarks Fork Wild and Scenic Study Area.

A survey report on historic and cultural resources of the study area, done in conjunction with the eligibility analysis of the Clarks Fork Wild and Scenic River Study (June, 1978), discusses several archaeological sites along the Beartooth face outside the study area but only had record of the tepee rings also pointed out by Spitzer. This report is available in the Shoshone National Forest Supervisor's Office.

In order to comply with Section 106 of the National Historic Preservation Act of 1966 and other directives relating to archaeological sites, the Shoshone Forest will conduct archaeological investigation in cooperation with the State Archaeologist of all ground disturbance activities, which will be primarily road, trail and overlook construction. If archaeological sites are found, they will be protected through measures such as relocating, modifying or not doing the construction or fencing off the archaeological site.
This is in response to your memorandum of June 13, 1979, requesting our review of the subject report and draft environmental statement.

The report and environmental statement are silent regarding the existing water rights for the private properties located within the reaches proposed for designation. Also, there is no statement about the impact of designation on either the water rights or the planned subdivision and camper park. We believe that the wild and scenic river designation should not foreclose existing agricultural water rights.

Robert E. Kohnke
Chief
River Basin Planning Branch
1. Page 9 indicates that no economically feasible hydro-electric sites are likely in the study area. As support, the Bukee study of the Clarks Fork Division of the Beartook Project is cited as having a benefit/cost ratio of only 0.47 in the National Economic Development (NED) account. However, page A-3 indicates that measuring benefits by more recent costs of power from coal-fired plants might substantially increase this ratio; page B-1 seems to indicate that if the potential power generation were to be sold at going private sector rates and pumped-storage provisions are included, the ratio would somewhat exceed 1.03. Even though the report states that this would still represent a marginal potential for hydropower, some specific updating for current (or future) real energy costs should be included in the report to better define energy opportunities foregone by the proposed designation. In addition, page A-4 indicates regional benefits that seem to exceed the NED values; the text should more clearly discuss the overall ratio balance including these regional factors (even though strict application of principles and standards would not include this approach.)

2. Although Congress can reverse any designation, in the event of need (see page 36 first paragraph), it is not clear that significant advantages would be gained by designation (above the protection achievable under existing management options) to actions that might be needed from an energy standpoint (particularly since the study area does not seem in any imminent danger of additional stress). The report might briefly examine any potential need for such energy growth in this area. It should be noted that page A-3 indicates that if the hydropower is not developed, a coal-fired plant in eastern Montana or Wyoming would be built. This may mean that there could be indirect costs or benefits which have not yet been factored into evaluations of hydroplant desirability (for instance environmental costs of air pollution due to coal-fired generation at other locations).

3. Page 6 indicates that exploration for oil, gas, and coal is active in the area, yet page 39 stated that no known economic minerals exist in the area. Are these consistent? If there are economic minerals in this area, the report should show these on a map so that any opportunities foregone are made clear.

4. Page 41 notes that the recommended Alternative 5 has not been considered by the public but that regional inputs will be documented later. Since the preferred alternative includes some portions of Alternative 2, which was found least preferred by local people, the final report should be sure to fully include any negative public opinion.
Mr. John R. McGuire, Chief
Forest Service
United States Department of Agriculture
P.O. Box 2417
Washington, D.C. 20013

Dear Mr. McGuire:

This is in response to your letter of June 13, 1979, requesting comments on your Department's wild and scenic river study and draft environmental statement on the Clarks Fork of the Yellowstone River, pursuant to the provisions of the Wild and Scenic Rivers Act (P.L. 90-542).

The 1975 amendment (P.L. 93-621) to the Wild and Scenic Rivers Act required the study of the 23-mile segment along the main stem of the Clarks Fork River from Crandall Bridge downstream to the mouth of the Clarks Fork Canyon one mile east of the Shoshone National Forest boundary. According to the material furnished, this entire segment and approximately 7,400 acres of associated lands are eligible for inclusion in the National Wild and Scenic Rivers System under Wild River classification. The report recommends including 22 miles of the study area as a wild river in the system.

We have reviewed the materials furnished to determine the effects of the proposal on the Commission's responsibilities. Such responsibilities relate to the development of hydropower under the Federal Power Act, and the construction and operation of natural gas pipelines under the Natural Gas Act.

Our review indicates that there are no natural gas pipelines within the 7,400-acre study area, and an examination of information as of August 1978, indicates no exploratory activity within the river study corridor. However, a 4-mile long river segment at the eastern end of the study area is located within the Bighorn structural basin. In July 1977, a significant discovery of natural gas was made in the basin about 3 miles from the proposed area. This discovery is expected to encourage further oil and gas exploration in the Bighorn structural basin.

Our review indicates that there are no existing hydropower projects and no FERC licenses or preliminary permits pending for hydropower developments within the river segment recommended for inclusion in the National Wild and Scenic Rivers System. However, as indicated in your report, there are three potential hydroelectric power sites, located on the Clarks Fork River and one located on Sunlight Creek, a tributary to Clarks Fork. These four sites, commonly referred as Beartooth Unit of Clarks Fork, could collectively provide about 175,000 kilowatts or more of electrical capacity and would be capable of generating 873 million kilowatt-hours of energy annually. The Bureau of Reclamation evaluated the Beartooth Unit project in 1956, and determined the benefit-cost ratio to be 1.09 to 1.0. A 1975 economic update of the multipurpose project showed the benefit-cost ratio to be 0.47 to 1.0.

We have performed a cursory economic update to determine the current project economics. Our studies show that the project as conceived would probably still not be economically feasible. However, the project's capacity, as presented, may not be appropriate, given today's energy situation. A more economically feasible project might result from installation of greater capacity with lower plant factors. For example, our study indicates that, if approximately twice the electrical capacity were installed, more valuable, lower plant factor power, with characteristics resembling that from combined-cycle type plants, would be produced with power values of about $65 per kilowatt per year and 29 mills per kilowatt-hour. The total value of power produced would approach $50 million per year -- in the neighborhood of roughly approximated annual costs. Because of the relative price shift between the cost of fossil fuels and the inflation rate in general, power benefits are expected to increase faster than hydroelectric construction costs. Therefore, hydroelectric development at this site is expected to become more economically feasible in the future.

Based on consideration of the report of your Department, the draft environmental statement, and our review we conclude that the proposed wild and scenic river designations of the study area, including 22 miles of the Clarks Fork of the Yellowstone River, would conflict with
the possible future development of hydroelectric capacity. The possible power benefits foregone should be carefully considered in deciding whether or not to include this reach of the river in the National Wild and Scenic Rivers System.

Sincerely,

William W. Lindsay
Director
Office of Electric Power Regulation

Dear Mr. Secretary:

This is in response to your recent request for comments of the Department of the Army on your proposed report and draft environmental impact statement for the wild and scenic river study of the Clarks Fork of the Yellowstone River in Wyoming.

The preferred alternative would classify the 22 mile segment of the Clarks Fork River in Park County, Wyoming, between Crandall Bridge and the mouth of the Clarks Fork canyon, as a Wild River. Presumably, this segment will be recommended in your final report for inclusion in the National Wild and Scenic Rivers System.

There are no projects or anticipated water resource developments of the Department of the Army which would be affected by wild river classification of this segment of Clarks Fork River nor by its inclusion in the System. The Department of the Army, acting through the U. S. Army Corps of Engineers, exercises regulatory jurisdiction over Clarks Fork River under Section 404 of the Clean Water Act (33 USC 1344). Designation and inclusion of this river segment should not impact upon our regulatory responsibilities.

I appreciate the opportunity to comment on your proposed report and draft environmental statement.

Sincerely,

Michael Blumenfeld
Assistant Secretary of the Army
(Civil Works)
Dear Sir:

Thank you for the opportunity to review the draft environmental impact statement for Clarks Fork of the Yellowstone, Wild and Scenic River Study.

We have no objection to any of the alternatives proposed for classification. We would object to any proposal which would interfere with the continued reconstruction of Wyoming Route 296 through the Clarks Fork Valley, Sunlight Basin, and over Dead Indian Hill. As stated in the DEIS, highway construction down through the canyon to connect with Wyoming Route 292 has been ruled out.

Sincerely yours,

Daniel Watt
Regional Federal Highway Administrator

cc:
EPA, Washington D.C. (5)
EPA, Denver, Colorado (5)
OST, Denver, Colorado
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