

environmental review

draft master plan / development concept plans / wilderness study

january 1978

BIGHORN CANYON



NATIONAL RECREATION AREA / MONTANA-WYOMING

Library
Big Horn Canyon
Nat. Rec. Area

ENVIRONMENTAL REVIEW

BIGHORN CANYON NATIONAL RECREATION AREA

I. Proposed Action

1. South Unit - This unit includes that section of the reservoir area extending from Horseshoe Bend south to the tailwaters of the lake. It is proposed that the following action be taken with respect to the four areas identified below:

A. Horseshoe Bend (Reference Map 40,025A, Page 7 of the Environmental Analysis/Draft Master Plan and Development Concept Plan, Volume I)

- 1) Marina Area - Provide a marina area with boat slips, fuel dock, rental boats, marina and fishing supplies, food service, bathhouse and walk-in picnic area.
- 2) Campground Area - The present 126 unit campground will be improved through the development of shade structures, plantings, and irrigation systems. An amphitheater is also proposed for this area.

As the demand for campsites increases, additional units can be accommodated adjacent to the existing campground. Utilities in the existing campground can be extended to serve the proposed expansion. The existing sewage lagoon was designed to handle the additional effluent load.

- 3) Ranger Station and Housing - Construct a permanent ranger station at the site of the present temporary structure and provide additional parking to accommodate visitors. Construct a parking lot for employee residences.
- 4) Boat Storage - A boat storage compound is proposed near the existing boat ramp.
- 5) Storage and Maintenance Area - It is proposed to construct storage and shop buildings in the area now used as a maintenance yard.

B. Chugwater - This area is being reserved for future development when and if the need arises. It is envisioned as a water oriented day-use area but no plans for its development have been formulated.

- C. Kane Bridge - This is a minor day-use area north of U.S. Highway 14A at the east end of the highway bridge across the reservoir. Due to poor design, high cost of maintenance and lack of use, the area will be eliminated and rehabilitated.
- D. M-L Ranch - This historic two acre site consisting of a substantial log bunkhouse and outbuildings will be maintained and interpreted as a historic site.

2. Interior Unit - (Reference Map 40,022, Page 13 of the Environmental Analysis/Draft Master Plan and Development Concept Plan, Volume I.) The Interior Unit is located at about the midpoint of Bighorn Lake and roughly 15 miles north of the development at Horseshoe Bend. It is proposed that the following action be taken with respect to the three areas identified below:

- A. Hough Creek Development - This development will consist of a single entrance road which will provide access to a ranger station, trailhead with corral and loading dock, campground, and an amphitheater. Should the need ever arise there is also a proposed future center for visitor services.

The proposed ranger station complex will contain a maintenance yard, staff quarters, office space, and parking lot. The extent of these facilities will also depend on a future management program.

The archeological resources of the Pretty Creek site and the historical resources of the Old Sorenson Ranch are a part of the development at Hough Creek. It is proposed that a parking area and adjoining day use picnic area be developed near these sites. Foot trails will provide pedestrian circulation and opportunities for interpreting the archeological and historic resources.

- B. Hillsboro - (National Register Property, August 19, 1975.) The property and the structures are the remains of a dude ranching operation which dates back to the 1920's. A "no action" alternative has been approved for the area.
- C. Barry's Landing - (Reference Map 40,021B, Page 19 of the Environmental Analysis/Draft Master Plan and Development Concept Plan, Volume I.) A marina is proposed in the cove at the foot of Trail Creek. This facility will include a fishing dock, floating concession consisting of a fuel dock, fishing supplies, boat rentals, and docking facilities. A parking area with adjoining comfort station and fish cleaning station will also be constructed for this portion of the development.

About 600 feet east of the existing ramp a parking area is proposed. Along the eastern edge of the parking area on a high promontory overlooking the lake and canyon a large picnic area with shelters is proposed. A visitor facility complex at the south end of the promontory will include a fish-cleaning station, a ranger station, a public comfort station, and an overlook containing interpretive exhibits.

It is proposed that the area around Chain Canyon Cove and along the shoreline of the reservoir north of the cove be developed as a primary day use area. The proposed development includes a pedestrian bridge to provide access across the cove, picnic tables, parking area, a comfort station, and a fish-cleaning station. A combination pedestrian and horse trail is proposed starting at the parking area, circling Chain Canyon Cove and continuing northward along the shore of the reservoir to Barry's Island and Medicine Creek, then up the Medicine Creek drainage to the Lockhart Ranch area where it would tie into the main trail system proposed for this section of the recreation area. A corral and loading chute for horses are proposed near the parking area.

At Medicine Creek Cove it is proposed to expand the existing primitive boat-in campground at the mouth of the cove. It is also proposed to establish a primitive group camping area in the riparian bottomlands in the Medicine Creek drainage about $\frac{1}{4}$ mile back from the reservoir.

A special study of the water potential and sewage disposal requirements for both the Barry's Landing and Hough Creek developments was conducted. For a water supply of the Barry's Landing development, the report recommended developing springs along the North Fork of Trail Creek, filtering the water through a simple sand filter, chlorinating with an automatic chlorinator, and providing a 30,000 to 40,000 gallon underground storage reservoir. For the disposal of sewage a single six-acre lagoon which would serve both Barry's Landing and Hough Creek will be constructed.

3. North Unit - (Reference Map 40,040A, Page 23 of the Environmental Analysis/Draft Master Plan and Development Concept Plan, Volume I.) Recognizing the existing differences between Crow Tribe of Indians and the National Park Service over the 1967 Memorandum of Agreement, future development will be confined only to those Federal properties included within the boundary of Bighorn Canyon National Recreation Area by Congress by the Act of October 15, 1966, P.L. 89-664. This will preclude development of Medicine Wheel Visitor Center - Crow Cultural Center, Fort Smith Historic Site, Hayfield Fight Site, connecting link of the Transpark Road, Pretty Eagle Site, Bozeman Trail, and the campground development $1\frac{1}{2}$ miles downstream from the Afterbay Dam.

Any further consideration for development of these sites will be contingent upon the tribe expressing an interest in such development and following the revision of the Memorandum of Agreement.

Development of those Federal properties within the North Unit will consist of:

- A. The construction of a bridge across the Afterbay and 1.8 miles of surfaced road is scheduled for construction in 1978 under the final environmental impact statement #74-17. This improved access will provide better opportunities to develop future alternatives for upgrading and expanding recreation facilities on the north side of the Afterbay. Development concept plans for this area will be required.
- B. Ok-A-Beh - Below the 3,675 contour elevation at Ok-A-Beh, marina facilities including ranger/first aid station, boat rentals, gas and oil service, dumping station, small food service, and fishing supplies are being considered as future improvements. Development concept plans for this area will be required.

4. Wilderness - It is recommended that Wilderness Alternative "B" Roadless Area "A" be adopted as the Wilderness Proposal. This alternative provides for 7,645 acres of wilderness and identifies 462.81 acres of private land as potential wilderness. (Reference Map 80022, Page 21 of Wilderness Study.)

5. Boundary Adjustments - The three boundary adjustments identified in the Environmental Analysis and Draft Master Plan/Development Concept Plan were proposed in order to incorporate within the recreation area lands required for the construction of the Transpark Road. However, due to objection from the Crow Tribe to the acquisition of tribal lands for any purpose and a recent moratorium on any further action without tribal consent, it is proposed at this time that the three boundary adjustments be dropped from any further consideration.

II. Environmental Impact and Mitigating Measures

1. Areas of Development - The "Comparative Environmental Impact Summary Matrix" on page 142 of the Environmental Analysis/Draft Master Plan and Development Concept Plan indicates there will be no major impact on the environment as a result of the proposed developments.

The two environmental elements most affected overall are vegetation and water. Those immediate areas where roads, trails, and various structures are to be located the vegetation will cease to exist. By increasing the number of people in the developed areas secondary impacts on the vegetation will occur. Since the vegetation is sparse in nature, every effort will be made to retain existing vegetation in the final location of roads, building and utilities. Construction operations will be kept within prescribed limits, and places for the storage of equipment will be identified. The secondary impacts on vegetation will

be mitigated by providing reinforced walks or well designed trails. A greater degree of site reinforcement will be provided in such areas as the campgrounds, picnic grounds, and other areas of intense use to minimize impacts on the vegetation and soils.

The water resources within the vicinity of the developed areas could be impacted as a result of marina development, pedestrian impacts and construction activities. The severity of this potential impact depends largely on the manner in which marina facilities are operated, the techniques used in designing sites with regard to reinforcing surfaces subject to impact, controlling vehicular and pedestrian circulation, and manipulating surface runoff. The manner that construction activities are controlled will also determine the degree of surface disturbance and the contamination of water quality that might result.

2. Wilderness - As indicated in Wilderness Study, Bighorn Canyon National Recreation Area, page 23, the adoption of Roadless Area "A" Wilderness Alternative "B" will not result in any significant impact. Wilderness designation will impose a more stringent management guideline for the protection and preservation of the environment than presently exists. The intent of wilderness is to protect the environment in its natural condition.

III. Summary of Public Response from Workshops Conducted in Lovell, Wyoming, and Hardin, Crow Agency, and Billings, Montana - October 11-14, 1977

1. Development of Bighorn Canyon National Recreation Area - The response to the proposals for management and development of Bighorn Canyon National Recreation Area was divided.

Support of the general development plan and the development concept plan as proposed was received from workshop participants in Lovell, Wyoming, and Hardin, Montana. Service representatives were complimented for what "seemed comprehensive and well planned." Supportive statements were recorded in the workbooks and at the workshops for the Transpark Road and the recreational development proposed. Similarly, comments related to the South Unit, Interior Unit, and North Unit development plans were supportive. Their overall desire was to see the recreation development go forward. Some issues raised related to questions on visitation projections and whether too much or too little development is being proposed.

Opposition to the existing memorandum of agreement proposed Transpark Road and associated development on reservation lands dominated the workshops at Crow Agency and Billings, Montana. No major concern or interest was expressed for any of the proposed development at the Interior Unit and South Unit.

2. Boundary Adjustments and Land Acquisition - Overall, general support was received for acquiring additional lands for the proposed Transpark Road as shown on the Land Ownership Inventory Analysis Map 617/40,0118, May 1977. However, the National Park Service received considerable objections from the Crow Tribe to the acquisition of tribal lands for any purpose and has declared a moratorium on any future action without tribal consent, with the exception of one parcel where negotiations are ongoing.

3. Access and Circulation - Of the three forms of alternative transportation considered, air, ferry, and Transpark Road, the Hardin and Lovell workshop participants supported the Transpark Road as being vital to the overall concept. No support was expressed for air transportation, and only minor support was received for a ferry system, in particular the 30 to 50 foot passenger carrying only class.

4. Wilderness Study - Of the comments received, most favored the declaration of established wilderness within the recreation area boundaries. However, expressions of preference for one alternative over another were inconclusive.

5. Other Issues - Resolution No. 76-32 of the Crow Tribal Council emphatically states the current position of the Crow Tribe with regard to three major points:

- A. Withdrawal of all tribal lands formerly included in the Bighorn Canyon National Recreation Area.
- B. Denial/rejections for the construction of any roads across tribal lands.
- C. Invalidation of the December 1, 1967, Memorandum of Agreement.

IV. Magnitude of the Project

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| 1. Major Federal Action, Significant Effects | No |
| 2. Federal | Yes |
| 3. Substantive Adverse Impacts | No |
| 4. Highly Controversial | Yes |
| 5. First Time Precedent Setting | No |
| 6. Commits Service to Future Action | *Yes |

*For preservation, development, maintenance, and operation.

V. Recommendation

The proposed action from the development standpoint is major and has potential for creating significant controversy.

An environmental statement is required.

Recommended: Homer Z. Rouse 1/3/78
Superintendent, Bighorn Canyon NRA DATE

Approved: Glen T. Bean 1/17/78
Acting Regional Director, Rocky Mountain Region DATE

