

INTRODUCTION

CHAPTER 1

Proposed Action

The Bureau of Reclamation (Reclamation) proposes to renew long-term water service contracts or to convert them to repayment contracts with the Clark Canyon Water Supply Company (CCWSC) and East Bench Irrigation District (EBID). Both water users receive stored irrigation water by contract from Reclamation's Clark Canyon Reservoir in southwestern Montana (see the "Location Map" at the front of this report).

Renewed long-term water service contracts would have a negotiated water rate. The new contracts would have a term of up to 40 years, at which time new contracts would have to be negotiated.

A repayment contract would have a negotiated capital repayment obligation, usually an amount higher than that negotiated for a water service contract. It establishes a repayment schedule of up to 40 years to repay a negotiated amount of the project's costs allocated to irrigation (amortization period). In other words, a repayment contract provides for finality of payment by the contractor: after the repayment period is completed, no further debt is owed. A repayment contract has no contract term or expiration date.

This EA (environmental assessment) analyzes the environmental, social, and economic effects of renewing the contracts. Prepared to comply with the National Environmental Policy Act, the EA could lead either to a Finding of No Significant Impacts (FONSI) if effects were found to be insignificant or to an Environmental Impact Statement (EIS) if effects were found to be significant.

In the chapters to follow, purpose and need for action are discussed (Chapter 1), alternative plans detailed (Chapter 2), environmental aspects discussed (Chapter 3), and effects of the alternatives described (Chapter 4). This EA concludes with the consultation and coordination done with the public, interest groups, and with other agencies during the study.

Purpose and Need

The purpose of this Federal action is to provide for continued beneficial use of a Federally developed water project. The Reclamation Act of 1956 requires Reclamation to provide water users holding contracts a first right of renewal to a stated share of a project's available water supply, as well as the right to convert from a water service contract to a repayment contract.

The action being considered will continue to supply irrigation water to CCWSC and EBID from Clark Canyon Reservoir.

This Federal action is needed to:

- Renew the present long-term water service contracts before they expire at the end of 2006,
- Renew the operations and maintenance (O&M) transfer agreement with EBID before it expires at the end of 2006,
- Provide water stored in Clark Canyon Reservoir to CCWSC and EBID for irrigated crops, and
- Repay the Federal government allocated costs associated with the construction of Clark Canyon Dam, Barretts Diversion Dam, and associated water conveyance facilities.

Decisions to Be Made

This EA will assist decision-makers in answering the following questions:

- What are the environmental, social, and economic effects of renewing the existing long-term water service contracts with CCWSC and EBID under the original terms?
- What are the environmental, social, and economic effects of entering into new long-term water service contracts with CCWSC and EBID that include changes from the existing contracts; such as changes in water allocation priorities, inclusion of a drought management plan, and inclusion of winter release guidelines to name a few?
- Should Reclamation convert the long-term water service contracts with CCWSC and EBID to repayment contracts?
- Would a new contract constitute a major Federal action significantly affecting the quality of the human environment, thereby requiring an EIS?

Background

Clark Canyon Reservoir is part of Reclamation's East Bench Unit, which also includes Barretts Diversion Dam, the East Bench Canal, and other facilities (Location Map). The unit provides irrigation water to CCWSC and EBID, as well as indirect recreation and fish and wildlife benefits.

The Beaverhead River drainage basin in southwestern Montana begins at the confluence of Horse Prairie Creek and Red Rock River. The southern limit of the drainage basin is bounded by the Continental Divide (Centennial Mountains and the Gravelly Range).

The western limit of the drainage basin is bounded by the Beaverhead Mountains, including the Tendoy Mountains. Downstream, the Ruby Range and the Pioneer Mountains confine the basin. The Beaverhead Valley is made up of bottomlands coupled with bench lands along the borders.

East Bench Unit, P-S MBP

Clark Canyon Reservoir

Clark Canyon Reservoir, located in Beaverhead County about 20 miles south of Dillon, Montana, is the primary storage facility for the East Bench Irrigation Unit, Pick-Sloan Missouri Basin Project (P-SMBP). It impounds the Red Rock River and Horse Prairie Creek, forming the headwaters of the Beaverhead River.

The reservoir has a total capacity of 253,442 acre-feet (AF), with an active capacity of 124,160 AF, a joint use capacity of 50,207 AF, and exclusive flood control capacity of 79,075 AF. Reservoir surface area is 5,903 acres. Irrigation and flood control are the primary project purposes authorized by Congress. Recreation, fish, and wildlife are incidental benefits provided by the Federal government.

Barretts Diversion Dam

Barretts Diversion Dam, about 11 miles downstream of Clark Canyon Reservoir on the Beaverhead River, directs water into the East Bench Canal. This canal runs in a northeasterly direction for about 44 miles, with about 60 miles of laterals supplying district lands. Headworks capacity is 440 cubic-feet/second (cfs).



Pivot in operation in the Beaverhead Valley (Steve Cottom photo).

Barretts Diversion Dam also directs stored irrigation water into Canyon Ditch, a private ditch supplying private lands on the west side of the Beaverhead River (Location Map). Headworks capacity is 200 cfs. The ditch conveys water to irrigate about 3,000 acres in Beaverhead County. Excess water from the ditch and irrigation return flows eventually returns to the Beaverhead River.

East Bench Irrigation District

The EBID, organized and officially decreed by a District court on November 1, 1957, is governed by a five member board elected by members of the EBID. The EBID irrigates bench lands on the east side of the Beaverhead River, with principal crops of alfalfa and small grains.

Clark Canyon Water Supply Company

The company is comprised of many individual shareholders as well as several individual ditch companies, each with natural flow water rights from the Beaverhead River. These individual ditch companies include (but not limited to) the West Side Canal Company, Co-Op Ditch, and the Smith-Rebich Ditch. The shareholders of the CCWSC primarily irrigate bottom lands of the Beaverhead River with principal crops of alfalfa and small grains. Although a private company, CCWSC receives a supplemental water supply from Clark Canyon Reservoir.

Project Development History

Pre-Project Development

The East Bench Unit was developed under authority of the Flood Control Act of 1944 (P.L. 78-534). The 1944 Flood Control Act, commonly known as the Pick-Sloan Act, authorized a general Missouri River basin development program. Section 9 of that Act states “the general comprehensive plan set forth in House Document 475 and Senate Document 191 as revised and coordinated by Senate Document 247, Seventy-eighth Congress, second session, are hereby approved and the initial stages recommended are hereby authorized and shall be prosecuted by the War Department and the Department of the Interior as speedily as may be consistent with requirements.”.

Senate Document No. 191 entitled “Missouri River Basin—Conservation, Control, and Use of Water Resources of the Missouri River in Montana, Wyoming, Colorado, North Dakota, South Dakota, Nebraska, Kansas, Iowa, and Missouri,” dated April 1944, considered a full irrigation water supply for 32,400 acres of new irrigation and a supplemental irrigation water supply for 34,100 acres in the Beaverhead River Basin, including tributaries.

Reclamation’s “Board of Review” recommended in its report to the Commissioner, (included in Senate Document No. 191): “(a) That the general plan for the development of the basin as contained in the report be approved subject to such modifications and changes as may be indicated, from time to time, as the plan is effectuated.” Page 17 of Senate Document No. 191 under “Summary Forward” further supported the “general nature” of the estimates with the statement: “The plan is based on specific information with respect to the character and needs of different sections of the basin, and on experience in designing, building, and operating works of the kinds that will be required in the Missouri River Basin. It is adapted to development in stages and to such modifications as changes in physical and economic conditions make necessary.” The general nature of Senate Document No. 191 allows for changes in irrigation acreages that were estimated to be developed as the Missouri River Basin Project was developed.

House Document No. 475 presented the U.S. Army Corps of Engineers’ plan for the Missouri River Basin development, which in many respects was similar to the plan presented by Reclamation in Senate Document No. 191. Senate Document No. 247 reconciled the differences between the two plans. Section 5 of Senate Document No. 247 discussing the Upper Missouri River Basin determined: “there was no conflict in the proposed plans of the two agencies for the Upper Missouri River Basin subdivision.”

Project Contract Development

Reclamation entered into water service contracts with CCWSC and EBID in October 1958. The 1958 contracts specified the terms and conditions for the partial repayment of costs incurred by the United States to construct Clark Canyon Dam. The 1958 contracts did not specify the number of irrigated acres in either contract. The EBID contract refers to the “irrigable lands” of the district, which are approximately 38,000 acres as approved by a state district court. The water service contract with CCWSC refers to supplying water “for each acre of land now irrigated by shareholders of the CCWSC and for such additional acres with valid water rights on the date of execution of this contract as may be owned by persons now or hereafter shareholders of the Company,” and later in the contract, describing water with a priority junior to the EBID, states “such water in excess of 4 acre-feet per acre as can be beneficially used during the irrigation season under subsisting water rights on lands of the Company’s shareholders to the extent it is available.” The Company refers to the CCWSC. A brief review of the water right claims filed by water users in the Beaverhead River Basin pursuant to the ongoing general water right adjudication process indicates that water users are claiming historical irrigated acres in excess of the acres proposed under the new contracts. Water right claims from the Beaverhead River and several interconnected sloughs identify approximately 53,000 acres of historical irrigation. All but two of the approximately 310 claims identify priority dates earlier than the 1958 contracts.

When the contracts with CCWSC and EBID were executed in 1958, the primary means of applying water to crops was through various flood irrigation techniques. Over the years, advances of technology and changes in economics have allowed individual producers to make improvements to their irrigation operations to improve their individual economic situations. One of those changes is the conversion from flood irrigation application methodologies which are labor intensive and less efficient to sprinkler type water applications which are less labor intensive and generally more efficient.

Over the period of the 1958 contracts, the total number of acres provided supplemental water under CCWSC’s contract and full service water under EBID’s contract has increased. The increase in irrigated acres may be attributed to changes in irrigation technology, general changes in farming practices and farm size, and agricultural economics.

Reclamation’s 1960 *Definite Plan Report* (1960 DPR) identified 28,004 acres of valley land considered to be eligible in 1958 to receive a supplemental supply from Clark Canyon Reservoir. Of the 28,004 acres considered eligible to be part of the project, the landowners of approximately 3,156 acres elected not to join the project and instead to rely on their natural flow water rights from the Beaverhead River or other sources. This resulted in 24,848 acres of the original planned acres to be provided a supplemental supply under CCWSC’s contract. Shortly before the CCWSC’s first payment under their contract was due to Reclamation, it became concerned about their ability to make their first payment, so additional shares of stock in the Company were sold, bringing the total number of acres covered by subscription agreements to 25,995. The irrigated lands of CCWSC have increased from the 25,995 acres in 1965 to the approximately 33,706 acres of today. This increased acreage of CCWSC does not cause the total of the “supplemental water supply” acres developed within the Beaverhead River Basin to exceed the 34,100 acre figure contained in Senate Document No. 191.

The 1960 DPR identified the irrigated lands of EBID as 21,800 acres. Initial development of the project included 22,689 acres as less land than anticipated was needed for construction of canals, laterals, and drains making more land available for production. Since initial development, the irrigated acres have increased to approximately 28,055 acres that have been historically received irrigation water through EBID’s conveyance system over the term of the contract. Of the 28,055 acres, approximately 918 acres lie outside the legally defined irrigation district boundary as approved by the district court. The 918 acres were classified by Reclamation during the initial investigations of the Unit; however, they were not

included in the original irrigation district boundary. EBID proposes to have the boundary amended to include the 918 acres within the legal boundary of EBID. The remaining 27,137 acres are within the boundary of EBID. The current total acreage of EBID does not cause the total of the “full water supply” acres developed within the Beaverhead River Basin to exceed the 32,400 acre figure contained in Senate Document No. 191.

The 1958 contract with CCWSC is for a supplemental supply from conservation storage in Clark Canyon Reservoir. The shareholders of CCWSC retained their underlying natural flow water rights, most of which had been decreed by the district court. The underlying natural flow water rights of the shareholders of CCWSC are used to fulfill most of their water allotments defined in the contract. The remainder of CCWSC irrigation allotment is provided by supplemental water from Clark Canyon Reservoir. The 1958 contract with EBID is for a full supply consisting of a direct flow diversion from the Beaverhead River supplemented with storage water impounded in Clark Canyon Reservoir.

Water Rights

The water rights for the East Bench Unit, comprising the CCWSC and the EBID, are a combination of natural flow and storage rights owned by private entities, the EBID, and Reclamation. The shareholders of the CCWSC hold natural flow rights, EBID and Reclamation jointly hold the diversion right for the East Bench Canal and Reclamation holds the water right for storage in Clark Canyon Reservoir.

Reclamation filed a notice of appropriation of water and construction of a dam with the State of Montana, County of Beaverhead, on February 21, 1961. The place of intended consumptive use of the water appropriated and claimed for domestic, livestock raising, irrigation, mining, industrial, municipal and other miscellaneous purposes is generally within the Beaverhead Valley in Beaverhead and Madison Counties, Montana, in the general vicinity of Dillon, Montana.

Reclamation filed water right claims as part of the general statewide water rights adjudication process. The general statewide adjudication process is to adjudicate the water rights for pre-June 30, 1973, use. Reclamation filed a direct diversion water right from the Beaverhead for natural flow for the East Bench Canal, with a claim of 30,459 acres (Statement of Claim no. 41B 40850 00) and a claim for the impoundment of water in Clark Canyon Reservoir for use on 83,219 acres (Statement of Claim no. 41A 40854 00) in the Beaverhead River Basin. The Clark Canyon Reservoir claim identifies the place of use on both the lands of CCWSC and EBID. Until such time as the final decree is issued by the Montana Water Court, the statements of claim are considered prima facie evidence of a valid water right. The number of irrigated acres associated with Reclamation’s final adjudicated water rights may be different than the claimed amount. That process is under the jurisdiction of the state.

The shareholders of CCWSC have the responsibility to ensure their individual water rights are in compliance with the Montana Water Use Act, as amended. This includes filing claims as part of the general statewide water rights adjudication process and to ensure existing use is in compliance with state law.

Incidental Project Benefits

The primary project purposes authorized by Congress are irrigation and flood control. However, recreation, fish, and wildlife are incidental benefits provided by the Federal government. A portion of Reclamation’s annual appropriations are allocated to recreation, and fish and wildlife benefits. These funds are used to provide minimum and basic recreation facilities for public health and safety at

Reclamation's facilities where recreation is not an authorized project purpose. The Federal Water Project Recreation Act (Act of July 9, 1965, Public Law 89-72) limits recreation development at Reclamation facilities where recreation is not an authorized project purpose.



Boat ramp at Beaverhead Campground.

Contract Information

The existing water service contracts with CCWSC (Contract No. 14-06-600-3592), EBID (Contract No. 14-06-600-3593), and Reclamation each contain an article that provide them a right to renew their contracts or to convert their water service contracts to repayment contracts. This is in accordance with the Administration of Contracts under Section 9, Reclamation Project Act of 1939 Act which became law July 2, 1956 (P.L. 84-643) (1956 Act). This Act directs that the Secretary of the Interior “shall...include in any long-term contract hereafter entered into under subsection (e) with a contracting organization provision, if the organization so requests, for (1) renewal of the contract as a water service (9(e) of the 1939 Act) contract and (2) conversion of said contract, to a repayment (9(d) of the 1939 Act) contract.” The right to renew and the right to convert are both subject to terms and conditions mutually agreeable to both parties.

The 1958 water service contracts with CCWSC and EBID were entered into under Section 9 (e) of the Reclamation Projects Act of 1939 (P.L. 260) (1939 Act). Section 9(e) of that Act states that “...Each such contract shall be for a period, not to exceed forty years, and at such rates as in the Secretary’s

judgment will produce revenues at least sufficient to cover an appropriate share of the annual operation and maintenance cost and an appropriate share of such fixed charges as the Secretary deems proper....” At the time the 1958 contracts were negotiated, an annual payment to fulfill the fixed charges as deemed proper by the Secretary was negotiated. Both CCWSC and EBID have made their annual payments to Reclamation to cover both their appropriate share of the annual operation and maintenance costs and their appropriate share of the fixed charges related to the construction of Clark Canyon Dam during the term of the existing contracts.

Clark Canyon Reservoir was constructed under the authority of the 1944 Flood Control Act, commonly referred to as the Pick-Sloan Act. The Pick-Sloan Act allowed for a portion of the construction costs for the facilities constructed as part of the Missouri River Basin Program to be reimbursed to the Federal Government through “aid to irrigation.” Repayment of the costs assigned to aid to irrigation is primarily accomplished through the sale of power generated at Federal hydroelectric dams in the Missouri River Basin. A portion of the construction costs associated with Clark Canyon Dam and the East Bench Irrigation District canal conveyance system are assigned to aid to irrigation. A portion of the cost for the construction of the Clark Canyon Dam is also allocated to flood control, recreation, fish & wildlife, which are all non-reimbursable by the irrigation entities. The primary purpose of the proposed contracts is for the collection of the allocated cost to irrigation for the construction of the water supply and conveyance facilities.

The majority of the O&M costs for Clark Canyon Dam and Reservoir are allocated to irrigation and are paid by East Bench Irrigation District and Clark Canyon Water Supply Company. A portion of the O&M cost is also allocated to flood control for the benefits derived from this project purpose. An allocation of O&M cost is assigned to the incidental benefits associated with recreation and fish and wildlife. Reclamation requests annual appropriations from Congress for the portion of O&M costs allocated to flood control, recreation, and fish and wildlife benefits.

As per the terms of their contracts and consistent with the 1956 Act, both CCWSC and EBID are provided the opportunity to renew their contracts under section 1(1) of the 1956 Act or convert their contracts to repayment contracts under section 1(2) of the 1956 Act. Renewal of their contracts under Section 1(1) would be another water service contract, subject to renewal at the end of the contractual term, which can be up to 40 years. Section 1(2) of the 1956 Act allows the conversion of their existing water service contracts to repayment contracts. Repayment contracts have no term and are not subject to renewal. Both CCWSC and EBID have indicated their interest to enter into repayment contracts as specified by section 9(d) of the 1939 Act.

If repayment contracts are negotiated, both entities will be required to make 40 years of payments to repay to the federal government the negotiated amount of their allocated cost of the construction of the water supply facilities. At the end of the 40 years, they will have fulfilled their financial obligations related to the repayment of construction costs of the water supply works and the remainder of the contract will remain in effect.

Both types of contracts—repayment or water service—will require both CCWSC and EBID to pay their appropriate share of the annual O&M costs as determined appropriate by the Secretary.

Other Actions Occurring in the Beaverhead River Basin

- “Shoulder” season irrigation is irrigation that occurs before and after stored irrigation water is released from Clark Canyon Reservoir. The typical irrigation season is April 15-October 15. CCWSC irrigates during the shoulder season, but does not use stored water from Clark Canyon Reservoir and thus is not subject to Reclamation’s approval or authorization. Therefore, it is not part of this Federal action, but CCWSC would like the shoulder season irrigation to be acknowledged by the proposed new contracts. The CCWSC would divert natural flow water from the Beaverhead River in priority and according to Montana water laws, ending once stored irrigation water was released from Clark Canyon Reservoir in the spring. The fall shoulder season would begin once reservoir releases were set at their winter level and the contract water users will be a part of setting that date (sometime after Labor Day). Any shoulder season irrigation by EBID would be included as part of this Federal action and will further described in Chapter 2.
- Reclamation has completed the *Final Clark Canyon Reservoir and Barretts Diversion Dam Resource Management Plan (RMP)* and EA/FONSI for the RMP. A planning document, the RMP recommends the best uses of recreation and land resources, while the EA analyzes environmental effects of these recommendations. Some baseline information from that EA has been used in this EA.
- Reclamation completed a water quality study of the reservoir in 2003, including a section of the Beaverhead River. This study was in addition to the water quality study of EBID. Findings of these studies also were used in this EA.
- Reclamation entered into a cooperative agreement with Montana State University in 2004 to initiate a study of water distribution amount the various entities withdrawing water from the Beaverhead River. In order to address the issues of water allocation, MSU identified major diversions along with major tributaries and areas of return flow. Data loggers were then installed to quantify the volume of water associated with each diversion, tributary, and area of return flow to establish a water budget for the basin. Additional data were gathered in 2005 and collection will continue in 2006, with a final report to be issued following all data collection.
- Reclamation entered into a cooperative agreement with Montana Tech in 2006 to assist with a continuing groundwater study which began in 2003. This study provides an opportunity to evaluate the groundwater system contributing to the Beaverhead River, tributaries, underlying aquifers, and area wetlands. This will evaluate the nature and extent of supplemental well irrigation in the area, and the effects of pumping on surface water, and provide a numerical modeling tool for the evaluation of additional development to make best management decisions.
- The Montana Department of Environmental Quality (DEQ) is in the process of completing the Total Maximum Daily Load (TMDL) for the Beaverhead watershed. The earliest the DEQ plans to complete the TMDL is 2008. Reclamation will provide all available data from these and other studies for inclusion in the TMDL planning and implementation phases.
- The Bureau of Land Management prepared an RMP/EIS and completed the documents in February 2006.

- The Forest Service is revising the Beaverhead-Deerlodge Forest Management Plan and preparing an EIS associated with that Federal action. These documents are currently scheduled to be completed in spring 2007.
- Irrigation use by the non-signers (irrigators who typically have senior water rights and did not sign up with CCWSC when the East Bench Unit was first established) will continue regardless of this Federal action. This continued irrigation use will be in accordance with the prior appropriation doctrine and state water law, and would be subject to water availability.
- The development of new housing subdivisions continues to occur throughout the Beaverhead Valley. The approval of wells and additional use of groundwater associated with these subdivisions will be administered through the Montana Department of Natural Resources and Conservation (DNRC).

Concerns

The concerns below were expressed by the public at scoping meetings, or by the Reclamation study team in the process of writing this EA.

- Water Supply and River Flows—flushing flows, minimum flows, return flows,
- Water Quality—sedimentation, nutrients, low river flows,
- Fisheries—arctic grayling, low river flows, low reservoir levels
- Wetlands—irrigation effects, loss,
- Wildlife—effects on species dependent on wetlands and riparian area,
- Economics—benefits and effects to agriculture, fisheries, recreation, and tourism,
- Threatened and Endangered Species—effects on sensitive species that may use the area,
- Recreation—effects on visitors’ experiences.

ALTERNATIVES

CHAPTER 2

Reclamation developed several alternatives for this EA using information from the study team; public scoping meetings; technical meetings with CCWSC and EBID; and consultation with state and Federal agencies. The alternatives were required (and constrained) in part by laws and regulations, existing contracts, and physical or economical limitations. They were designed to provide stored irrigation water supply to CCWSC and EBID, meet other contractual obligations, provide opportunities for environmental and resource benefits, and ensure repayment to the Federal government for a share of the East Bench Unit's construction and O&M costs.

Reclamation examined several alternatives for this EA: a No Action Alternative, a Negotiated Alternative, a Beaverhead River 200 cfs minimum (environmental priority) Alternative, a Beaverhead River 50 cfs minimum Alternative, a Split Reservoir Alternative, two Adjusted Water Allotment Alternatives, and a No Contracts (total environmental) Alternative. Through preliminary analysis, meetings with various groups, and information from the 1st comment period; several alternatives were dropped from further analysis and are explained further in the "Alternatives Considered but Eliminated from Detailed Study" section at the end of this chapter.

Reclamation examined in detail two alternatives for this EA: the No Action Alternative and the Proposed Action/Negotiated Alternative (Reclamation's Preferred Alternative). Both alternatives examined in detail would divert roughly the same volume of water and would irrigate approximately the same number of acres. However, the Proposed Action/Negotiated Alternative contained additional components that were not included in the No Action Alternative. Many of these components were added to this alternative to protect various environmental interests in the Beaverhead Valley during times of extreme drought while continuing to supply stored irrigation water. Some of these components included minimum river releases, minimum reservoir levels, and a drought management plan. Complete discussion of both alternatives and components are discussed below.

No Action Alternative

In this alternative, Reclamation would renew existing long-term water service contracts with CCWSC and EBID for another 40 years. These renewed water service contracts would be identical to the expiring contracts, with the exception of updating minor administrative and/or legal language in the new contracts. This is consistent with the definition of No Action for contract renewal recommended by the Council on Environmental Quality (Federal Register, Vol. 54, No. 128, Thurs. July 6, 1989, pp.28477-78). The environmental effects of implementing this alternative will be analyzed in Chapter 4 and those effects will be compared to the effects of the Preferred Alternative. These contracts represent Reclamation's contractual obligations to provide a supplemental water supply to CCWSC and a full water supply to EBID according to water delivery priorities.

The renewal of the O&M transfer agreement between Reclamation and EBID for O&M of Clark Canyon Reservoir, Barretts Diversion Dam, and the irrigation delivery system would also be included as part of this alternative.

The nearly 4,350 acres around Clark Canyon Reservoir and the 38 acres at Barretts Diversion Dam would continue to be managed by Reclamation primarily for recreation and wildlife. The various recreation

facilities would also continue to be managed as they have in the past, with recreation opportunities being fishing, boating, camping, and hiking.

Irrigation Demands

Stored irrigation water from the reservoir would be delivered according to the following priority system:

1. *1st priority* would provide supplemental irrigation water to CCWSC at their original water diversion rate of 4.0 AF/ac for 25,995 contract acres,
2. *2nd priority* would provide primary irrigation water to EBID at their original water diversion rate of 3.1 AF/ac for 22,689 contract acres,
3. After the 1st and 2nd priorities were filled, the *3rd priority* would provide additional water for irrigation based on “beneficial use” (what crops could beneficially consume) and water availability. This would be equal to 7,711 acres for CCWSC and 4,448 acres (not including 918 added acres) for EBID.

Shoulder Season

As described in the “Other Actions Occurring in the Beaverhead River Basin” of Chapter 1, “shoulder” season irrigation occurs before and after stored irrigation water is released from Clark Canyon Reservoir. CCWSC shareholders exercised their natural flow rights for shoulder season irrigation during the term of the expiring contracts. However, the CCWSC expiring contracts did not authorize the use of shoulder season irrigation water, because such authorization was not required. The No Action Alternative would continue to not authorize the use of shoulder season water.

The EBID utilized shoulder season irrigation water during the term of the expiring contracts by using the natural flow water right held jointly by Reclamation and EBID in accordance with Montana water laws. Shoulder season irrigation by EBID will be included as part of the No Action Alternative. EBID will continue to use Federal facilities to divert and convey water during both the spring and fall shoulder seasons for irrigation and to charge up the canal conveyance system.

Other Project Benefits

Indirect project benefits, such as recreation and fish and wildlife habitat would continue to be provided as part of this alternative. As indicated previously, the recreation facilities and lands around Clark Canyon Reservoir, including recreation facilities associated with Barretts Diversion Dam would continue to be operated as they have in the past. Water surface elevations and releases from the reservoir would remain similar to what has occurred under the existing water service contracts.

It should be noted that non signers also irrigate out of the Beaverhead River. Non signers are irrigators who typically have senior water rights and did not sign up with CCWSC when the East Bench Unit was first established. Their estimated 6,620 acres would not be included in this alternative as delivering water to them is not part of the Federal action. However, since non signers divert irrigation water directly from the Beaverhead River, their diversions were included as part of the hydrology model (explained later) in order to get an accurate reflection of water availability and impacts to the Beaverhead River.

Proposed Action/Negotiated Alternative (Preferred Alternative)

The Beaverhead watershed has experienced a severe drought for more than 6 years, with inflows into the reservoir about 40% of normal (U.S. Bureau of Reclamation, 2005b). Reclamation—concerned about continued economic viability of the East Bench Unit—developed this alternative in an attempt to deliver available water to all project users even during drought conditions while maintaining basic environmental health of the aquatic resources.

This alternative is Reclamation’s Preferred Alternative. It would execute new long-term (40-year) water service contracts or allow CCWSC and EBID to convert to repayment contracts (no term). The new contracts would be based on a priority system similar to No Action Alternative. In addition, the Preferred Alternative would establish a Joint Board made up of representatives from Reclamation and the two contract water user groups, implement winter release guidelines, set minimum reservoir levels, implement a Drought Management Plan, establish reserve funds, establish an agreement between Reclamation and the Montana Department of Fish, Wildlife and Parks (MDFWP), and the Preferred Alternative would renew the O&M transfer agreement. The transfer agreement would be between Reclamation and the EBID for O&M of Clark Canyon Reservoir, Barretts Diversion Dam, and the East Bench Unit irrigation delivery system.

Irrigation Demands

Stored irrigation water from Clark Canyon Reservoir would be delivered according to the following priority system similar to the No Action Alternative.

1. **1st priority** would provide CCWSC irrigation water equal to diverting 4.0 AF/ac measured at the point of diversion for 25,995 acres (consistent with the 1st priority contract acres in the expiring contract). CCWSC would be authorized to use that volume of water to irrigate the 25,995 acres and up to 7,711 acres (formally 3rd priority acres in the expiring contract) identified for irrigation.
2. **2nd priority** would provide EBID irrigation water equal to diverting 3.1 AF/ac measured at the point of diversion for 22,689 acres (consistent with the 2nd priority contract acres in the expiring contract). EBID would be authorized to use that volume to irrigate the 22,689 acres and up to 4,448 acres (formally 3rd priority acres in the expiring contract) identified for irrigation. Approximately 918 acres that currently lie outside of the district’s boundaries are proposed to be included in this 2nd priority. The landowners would need to petition the local district court to have these acres included within the EBID according to Montana statute. Reclamation would need to approve the inclusion before EBID could irrigate these acres.
3. **3rd priority** would provide irrigation water for beneficial use (what crops could beneficially consume) on the CCWSC and EBID acreage described above. The 3rd priority would only be implemented when the 1st and 2nd priority full allotments had been met and subject to availability. The increased water allotment would be determined by the Joint Board.

Beaverhead River Flows

The Joint Board would make a recommendation about winter releases from Clark Canyon Reservoir to the Contracting Officer (Area Manager – Reclamation’s Montana Area Office) for concurrence. The Joint Board will utilize the best available forecasting data and will also give due consideration to

applicable, credible, scientific data in making the recommendations. In addition, Table 2.1 presents a guideline to assist the Joint Board in recommending a minimum winter release. The guideline consists of the September 1 physical storage in the reservoir and the actual inflow during July-August to establish the recommend winter releases.

Table 2.1: Clark Canyon Reservoir Winter Release Guidelines

Sept. 1 Storage plus July-August Inflow (AF)	Minimum Release (cfs)
Less than 80,000	25
80,000 – 130,000	50
130,000- 160,000	100
160,000 or greater	200

The minimum release of 25 cfs from the reservoir was designed for periods of extreme drought. During the same period, irrigators would be implementing their Drought Management Plan, thereby establishing reduced allotments. Both Reclamation and the irrigators agree that a higher minimum flow could be established in the future if improvements to the water distribution systems, such as canal lining projects, were implemented. A partnership of water users, Federal, state, and private entities is anticipated in order for this to be achieved.

Reservoir Levels

The Preferred Alternative would include a target minimum pool of 60,000 AF in Clark Canyon Reservoir that would likely be achieved in most years. During severe drought years, this alternative would provide for a minimum reservoir pool of 10,000 AF for protection of aquatic resources. The Drought Management Plan would be triggered when August end-of-month (EOM) forecasts were 50,000 AF or less.

Drought Management Plan

The Drought Management Plan in the new contracts would be triggered at specific reservoir levels based on Reclamation’s August EOM forecasts. In the last 74 years of record, Clark Canyon Reservoir was below 50,000 af in 18 of those 74 years. Therefore, approximately 25% of the time, the drought management plan would be triggered if similar hydraulic conditions are repeated. The Joint Board would determine before the irrigation season if August EOM forecasts were lower than predetermined reservoir level triggers. In such a situation, they would then set reduced water allotments for the upcoming irrigation season. The various reservoir triggers and water allotment reductions are shown in Table 2.2. These water allotment reductions will be measured at the individual points of diversion.

Table 2.2: Reservoir Triggers and Resultant Water Allotments

<u>August EOM Forecasted Levels</u>	<u>CCWSC Allotments</u>	<u>EBID Allotments</u>
50,000-40,000 AF storage	3.5 AF/ac	2.7 AF/ac
40,000-30,000 AF storage	3.25 AF/ac	2.25 AF/ac
30,000-10,000 AF storage	3.0 AF/ac	2.0 AF/ac
10,000 AF minimum storage	3.0 AF/ac	<2.0 AF/ac or bank*

*bank is defined as carrying over irrigation water saved from one irrigation season to the next irrigation season

In the event of unforeseen circumstances, the Joint Board would have authority to take emergency measures to meet its drought management objectives.

Shoulder Season

As described in the “Other Actions Occurring in the Beaverhead River Basin” of Chapter 1, “shoulder” season irrigation is irrigation that occurs before and after stored irrigation water is released from Clark Canyon Reservoir. CCWSC will utilize shoulder season water as part of their natural flow water rights. CCWSC shoulder season water use will not be part of this preferred alternative as stored water will not be used and no Federal action is needed for CCWSC to exercise their natural flow water right. The EBID will utilize shoulder season irrigation as part of this Preferred Alternative because EBID will use the natural flow water right that is jointly held by Reclamation and EBID and use Federal conveyance facilities. The EBID will divert water during both the spring and fall shoulder seasons for irrigation and to charge up the canal conveyance system through exercise of the natural flow right in accordance with Montana water laws.

Reserve Funds

Both CCWSC and EBID would be required to establish reserve funds that would provide funding to cover emergencies, such as a canal breach repair, and to fund future project enhancements and modernization. Future project enhancements and modernization could cover such items that increased canal efficiencies and provided tools to manage the available water supply more effectively.

Environmental Measures

Reclamation have agreed to the following measures as part of this Preferred Alternative.

- Reclamation and the MDFWP have developed a partnership agreement (a copy is in the Appendix) to work cooperatively on issues; such as fisheries, water quality, and flow alteration that affect the Beaverhead River basin. This agreement will foster communication between the two agencies. Through this cooperation and coordination; Reclamation will also encourage other interested entities to participate—including (but are not limited to) CCWSC, EBID, the Beaverhead River Watershed Committee, special interest groups, and any others that would like to contribute to the well being of the Beaverhead River.
- Continue data collection through MSU-Bozeman and Montana Tech to fill data gaps in existing water quality information. Additional studies would be initiated as needed.

- Work cooperatively with MDEQ during the TMDL planning and implementation process to work toward improving water quality on a watershed scale.
- Work cooperatively with the Beaverhead Watershed Group and other interested parties to collaboratively work toward improved water quality conditions within the watershed.

Other Project Benefits

Indirect project benefits, such as recreation and fish and wildlife habitat, would continue to be provided as part of this alternative. As indicated previously, the recreation facilities and lands around Clark Canyon Reservoir, including recreation facilities associated with Barretts Diversion Dam, would continue to be operated as they have in the past.

As with the No Action Alternative, non signers and their estimated 6,620 acres would not be included as part of this alternative. As explained in the No Action Alternative, non signer diversions were included in the hydrology model.

Alternatives Considered but Eliminated from Further Study

Six alternatives were considered but eliminated during the study. The following paragraphs explain the alternatives and why they were not carried forward for further analysis.

Beaverhead River Alternative with a 200 cfs Minimum Release from Clark Canyon Reservoir

This alternative would have provided stored water in Clark Canyon Reservoir to be primarily used for environmental considerations in the Beaverhead River. As part of this alternative, the Beaverhead River would have minimum releases of 200 cfs (as recommended by MDFWP) from Clark Canyon Reservoir, would try to provide full irrigation demands, and the reservoir would have had a minimum storage of 60,000 AF as recommended by MDFWP. In this alternative, no stored water would have been released for irrigation if the minimum flows set for the Beaverhead River could not be met. Under this event, it would have been likely that storage levels in the reservoir would fall below the set minimum level in order to satisfy the minimum 200 cfs in-stream flow.

The renewed contracts with this alternative would have been the same priority system as the No Action Alternative; however, the irrigation season would likely be shorter than the typical irrigation season of April 15-October 15. Irrigation deliveries from stored water would have been reduced at any time during the irrigation season if the reservoir levels were forecasted to be too low to provide water for the 200 cfs minimum in-stream flow requirement. Once stored water releases were discontinued for the irrigation season, the minimum release of 200 cfs at the outlet works would be maintained in the Beaverhead River. As indicated earlier, the 200 cfs minimum releases would have taken priority over the minimum 60,000 AF reservoir levels; that is, there would likely have been times when the reservoir dropped below 60,000 AF in order to satisfy the 200 cfs minimum releases. Irrigation deliveries would also have taken priority over the 60,000 AF minimum reservoir levels. This alternative would not have included a Drought Management Plan associated with it.

This alternative would have provided more flows in the Beaverhead River while trying to achieve a minimum storage pool that would have provided habitat for a diversity of fish and other aquatic organisms. Increased flows in the Beaverhead River would have provided a better riparian corridor and adequate water for brown trout spawning. Reservoir populations of trout, burbot, and whitefish, the primary game fishes, would have been stable at the minimum reservoir storage level and any level above that would have created optimal conditions; however, levels below that would have resulted in decreased fish survival.

Reclamation conducted hydrology models with 200 cfs as the minimum in stream flow releases, while trying to deliver irrigation water. The results of the model indicated that storage levels in Clark Canyon Reservoir would have been at 60,000 AF the majority of the time (50th percentile – median) and would have been 60,000 AF for 2 months out of the year (80th percentile) even in wet years (Figure 2.1). Reservoir EOM contents would have been 10,000 AF 28% of the time. The model also indicated that by maintaining the 200 cfs in-stream minimum: stored irrigation water deliveries for CCWSC would have been short 20% of the time for 1st priority acres and 65% of the time for 3rd priority acres, and; stored irrigation water for EBID would have been short 41% of the time for 2nd priority acres and 66% of the time for 3rd priority acres (Figure 2.2). EBID would also have received no water 28% of the time, causing a severe financial hardship on the district and its members.

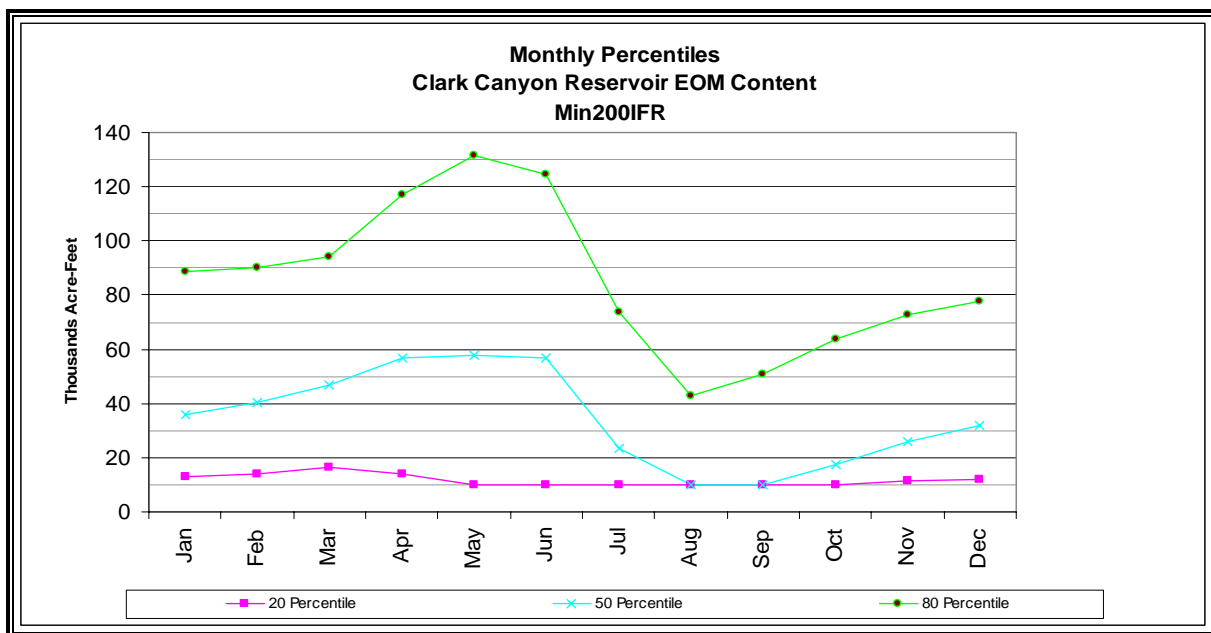


Figure 2.1: Reservoir EOM Levels with Minimum 200 cfs In-stream Flows

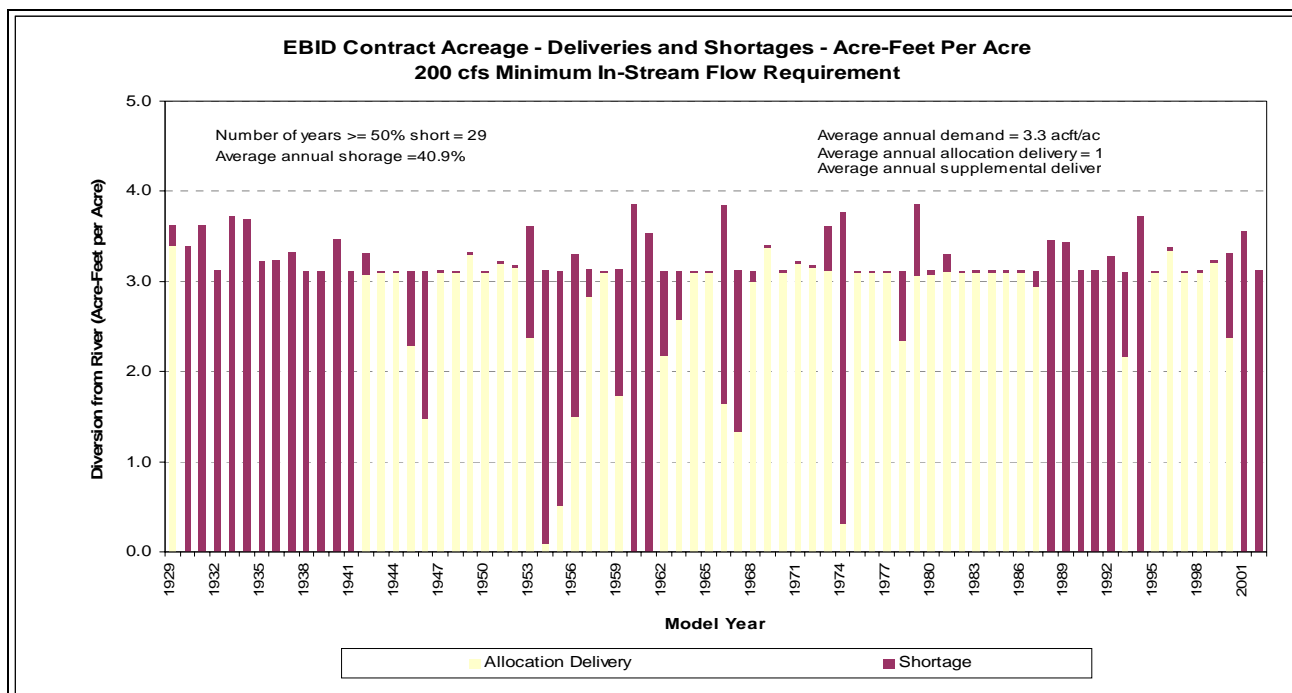


Figure 2.2: EBID Deliveries and Shortages (AF/acre) with 200 cfs Minimum

This alternative was eliminated primarily because of the shortage of water deliveries for irrigation and the severe financial impacts to the contract water users. This alternative would have jeopardized the financial viability of the East Bench Unit. Other reasons for eliminating this alternative included the decreased reservoir levels and the severe financial impacts to the recreation/outfitting community and because it would not meet the purpose and need of the Federal action. In addition, the Reclamation Act of 1956 requires Reclamation to provide water users holding contracts a first right of renewal to a stated share of a project’s available water supply. Lastly, this alternative would not have ensured the economic viability of the East Bench Unit and repayment to the Federal government would not be achieved.

Environmental Alternative with a 50 cfs Minimum Release from Clark Canyon Reservoir and the Drought Management Plan for Reduced Irrigation Allotments

This alternative would have been similar to the Preferred Alternative with one key exception: instead of a bottom line minimum release of 25 cfs from the reservoir during periods of extreme drought, the minimum release would be 50 cfs. The same number of acres would be irrigated with similar water allotment priorities as the Preferred Alternative.

This alternative would have increased the frequency that EBID would not have a sufficient water allotment to divert water into their irrigation main canal from 5% to 11% of the time. Figure 2.3 demonstrates the number of years EBID would have shortages if a 50 cfs minimum is maintained.

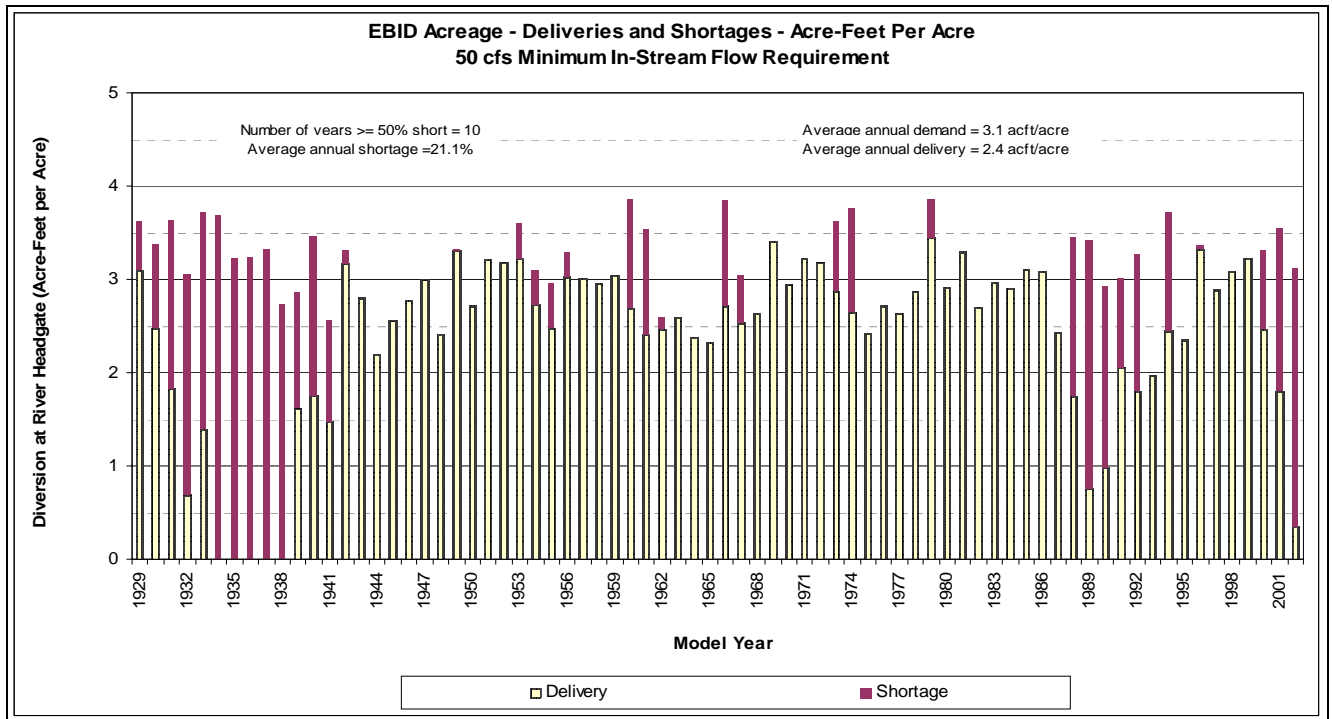


Figure 2.3: EBID Deliveries and Shortages (AF/acre) with 50 cfs Minimum

In addition, there would have been 5 successive years where EBID could not divert any water into their canal for irrigation. Five successive years without irrigation water would likely have bankrupted many of the individual producers and jeopardized the financial viability of EBID.

The impacts to the CCWSC would have been less severe. The 50 cfs minimum flow would have increased the time they would have been under reduced allotments by invoking the Drought Management Plan by 2.5%.

In addition to impacts to the irrigation community, there would also have been impacts to reservoir storage, which could impact both the aquatic community and the recreating public. The 50 cfs minimum release would have increased the number of months the reservoir would reach the 10,000 AF minimum storage content, from 1.6% in the Preferred Alternative to 2.4% of the time in this alternative during the period of study. The 50 cfs minimum release would also have increased the number of months the reservoir would be below the 60,000 AF minimum storage content recommend by MDFWP from 19.9% in the Preferred Alternative to 25.2% of the time in this alternative during the period of study (Figure 2.4).

The main reason this alternative was eliminated was due to the projected impacts to EBID. This alternative would have jeopardized the financial viability of the Unit. Other reasons included increased impacts to Clark Canyon Reservoir aquatic resources and recreation.

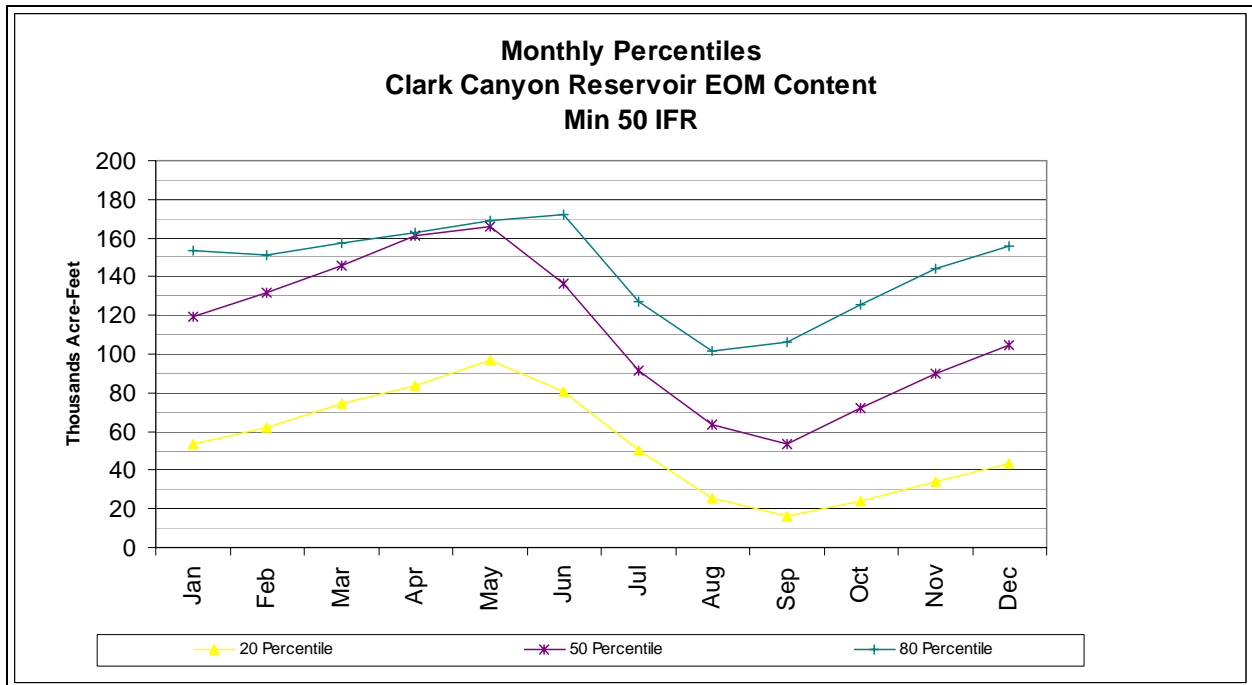


Figure 2.4: Reservoir EOM Levels with Minimum 50 cfs In-stream Flows

Split Reservoir Alternative

This alternative would have split the reservoir pool allocated to irrigation between CCWSC and EBID. Once senior water rights/demands were met according to Montana water laws, monthly reservoir inflows would have been split into separate reservoir storage accounts as explained below.

CCWSC

CCWSC would have received between 36-69% of reservoir inflow, the final percentage to be determined during contract negotiation. CCWSC would then have been responsible for allocating water from their reservoir storage to provide supplemental irrigation for beneficial use by irrigators. They would have been limited to irrigation of 33,706 acres.

EBID

EBID would have received between 31-64% of reservoir inflows, the final percentage to be determined during contract negotiation. Like CCWSC, they would have been responsible for allocating water from their reservoir storage to provide full irrigation for beneficial use by irrigators. EBID would have been limited to irrigation of 28,055 acres. Legal changes would have been necessary before EBID could irrigate the 918 acres currently outside district boundaries.

This alternative would have executed new 40-year water service contracts or allowed CCWSC and EBID to switch to repayment contracts. Other elements of this alternative would have been similar to the No Action Alternative. In addition, this alternative did not include a Drought Management Plan, the establishment of a Joint Board, or any mitigation measures.

This alternative was not feasible or agreeable to the CCWSC board or membership because it potentially restricted their 4.0 af/acre allotment in more years than the current and proposed priority system. Due to

the disagreement of implementing this alternative, there was a high likelihood that a new contract between Reclamation and CCWSC would not be negotiated. Therefore, this alternative was eliminated from further analysis because it did not meet the purpose and need of the Federal action and would have jeopardized the financial viability of the project.

Adjusted Water Allotment for 1st and 2nd Priority Acres Alternative

Similar to the No Action Alternative, this alternative too was based on a water delivery priority system. However, it would have reduced water allotments to both CCWSC and EBID based on the current 1st and 2nd priority acres. The allotment reduction would have ranged from 3.0-3.5 AF/ac for CCWSC's 1st priority acres, and from 2.3- 2.7 AF/ac for EBID's 2nd priority acres. Once those full allotments were met, additional water could have been applied to 3rd priority acres in a stair-step approach between CCWSC and EBID. It would have executed new 40-year water service contracts or allowed CCWSC and EBID to switch to repayment contracts. Other project benefits would have been as described for the No Action Alternative. In addition, this alternative did not include a Drought Management Plan, the establishment of a Joint Board, or any mitigation measures.

This alternative was not feasible or agreeable to the two contract water users because it restricted their allotted share on the 1st and 2nd priority acres. Due to the allotment reduction with implementing this alternative, there was a high likelihood that a new contract between Reclamation and CCWSC would not be negotiated. Therefore, this alternative was eliminated from further analysis because it did not meet the purpose and need of the Federal action and would have jeopardized the financial viability of the project.

Adjusted Water Allotment for All Acres Alternative

This alternative was also based on a priority system similar to No Action Alternative. It would have reduced the water allotment to both CCWSC and EBID for all 1st, 2nd, and 3rd priority acres. The reduction would have ranged from 2.0-3.0 AF/ac for all CCWSC's 1st and 3rd priority acres and from 1.55-2.33 AF/ac for all EBID's 2nd priority acres. Once those full allotments were met, additional water could have been applied to all acres in a stair-step approach between the CCWSC and EBID. It would have executed new 40-year water service contracts or allowed CCWSC and EBID to switch to repayment contracts. Other aspects of this alternative would have been as described for the No Action Alternative. In addition, this alternative did not include a Drought Management Plan, the establishment of a Joint Board, or any mitigation measures.

This alternative was not feasible or agreeable to the two contract water users because it restricted their allotted share on the 1st, 2nd, and 3rd priority acres. Due to the allotment reduction with implementing this alternative, there was a high likelihood that a new contract between Reclamation and CCWSC would not be negotiated. Therefore, this alternative was eliminated from further analysis because it did not meet the purpose and need of the Federal action and would have jeopardized the financial viability of the project.

No Contracts Alternative

This alternative would not have renewed the existing water service contracts. The stored water would not be used for irrigated agriculture. The reservoir would remain at a higher level because consumptive use of the stored water would decrease. Water rights held jointly by EBID and Reclamation would not be exercised for irrigation purposes. The majority of water would be passed through the reservoir and go

down the river and used to support aquatic habitat, recreation, and other beneficial uses. It was eliminated because it would not have met the purpose and need of the Federal action. This alternative would not ensure the economic viability of the East Bench Unit and repayment to the Federal government would not be achieved.

Summary of Alternatives

Table 2.3 summarizes environmental effects of the two alternatives detailed in this EA, the No Action Alternative and the Preferred Alternative.

Table 2.3: Effects of the Alternatives

Description	No Action Alternative	Preferred Alternative
<p>Federal Action</p>	<p>Water would continue to be delivered by these priorities:</p> <p>1st—CCWSC would receive a supplemental irrigation water supply of 4.0 AF/ac diverted for 25,995 acres;</p> <p>2nd—EBID would receive a primary irrigation water supply of 3.1 AF/ac diverted for 22,689 acres;</p> <p>3rd—After 1st and 2nd priorities filled, water would be supplied to 7,711 ac for CCWSC and 4,448 ac for EBID.</p> <p>No Clark Canyon Reservoir winter release guidelines are included in this alternative.</p> <p>No contractual minimum reservoir levels.</p> <p>No contractual minimum in-stream flows.</p> <p>Water elevations and releases would remain as at present.</p> <p>Shoulder season water in priority would be used by EBID.</p>	<p>Water would continue to be delivered by priorities:</p> <p>1st—CCWSC would receive a supplemental irrigation water supply of 4.0 AF/ac diverted for 25,995 acres, to be used on the entire 33,706 acres;</p> <p>2nd—EBID would receive a primary irrigation water supply of 3.1 AF/ac diverted for 22,689 acres, to be used on the entire 28,055 acres (including 918 irrigated acres currently outside EBID's boundary);</p> <p>3rd—After 1st and 2nd priorities filled, additional irrigation water for the 1st and 2nd priority acres would be supplied.</p> <p>Clark Canyon Reservoir winter release guidelines would be based on storage plus July-August inflows.</p> <p>Target minimum pool of 60,000 AF, bottom-line pool of 10,000 AF in reservoir.</p> <p>Target minimum in-stream flows in Beaverhead River of 200 cfs at the dam, bottom-line in-stream flows of 25 cfs.</p> <p>A Drought Management Plan would require water delivery reductions if forecasted August reservoir EOM contents were 50,000 AF or below.</p> <p>Shoulder season water in priority would be used by EBID.</p>

Description	No Action Alternative	Preferred Alternative
Federal Action (con't.)	No environmental measures are included with this alternative.	Mitigation measures including development of partnerships and agreements with MDFWP, MSU-Bozeman, MT Tech, MDEQ, and the Beaverhead Watershed Group.
Water Supply	<p>Reservoir storage could be drawn down to 10,000 AF to supply irrigation water;</p> <p>March EOM reservoir contents would average 147,600 AF and average 58,600 AF during droughts periods;</p> <p>Return flows would average 87,900 AF in the Beaverhead near Twin Bridges during droughts.</p>	<p>Reservoir storage would have a target minimum pool of 60,000 AF, but could be drawn down to 10,000 AF during drought years to supply irrigation water;</p> <p>March EOM reservoir contents would average 151,000 AF and average 66,500 AF during drought periods because of delivery reductions;</p> <p>Return flows would average 86,200 AF in the Beaverhead near Twin Bridges during droughts due to delivery reductions.</p>
Water Quality	<p>Water quality trends and conditions in Clark Canyon Reservoir, the Beaverhead River, and the Jefferson River would remain similar to conditions present during the previous contract period.</p> <p>High nitrogen levels in Spring and Stone creeks would remain high as they have in the past.</p>	Effects to water quality would be similar to that described in the No Action Alternative.
Fisheries	September EOM contents, reservoir fisheries would be "optimal" or "good" 46% of the time, "fair" or "declining" 54% of the time.	Based on the September EOM contents, reservoir fisheries would be "optimal" or "good" 50% of the time, "fair" or "declining" 50% of the time.

Description	No Action Alternative	Preferred Alternative
Fisheries (con't.)	<p>The upper Beaverhead River would be “optimal” or “good” 33% of the time, “fair” or “declining” 67% of the time, based on October-March average flows.</p> <p>The lower Beaverhead River dropped below the target levels of 200 cfs in 48 of the 74 years modeled.</p>	<p>The upper Beaverhead River would be “optimal” or “good” 32% of the time, “fair” or “declining” 68% of the time, based on October-March average flows.</p> <p>The lower Beaverhead River dropped below the target levels of 200 cfs in 47 of the 74 years modeled.</p>
Wetlands	<p>Wetlands associated with the irrigated acreage along canals, laterals, drains, and areas of return flow would continue to receive similar volumes of water as present since water deliveries and management would be unchanged.</p>	<p>Effects to wetlands would be similar to what was described in the No Action Alternative.</p>
Wildlife	<p>Since water deliveries would remain similar to what is presently being delivered; there would be no effects to wildlife in this alternative.</p>	<p>The effects to wildlife would be negligible under this alternative, very similar to the effects described for the No Action Alternative.</p>
Threatened and Endangered Species	<p>There would be no effect to the five threatened species found within the action area.</p>	<p>There would be no effect to the five threatened species found within the action area.</p>
Social and Economic Conditions	<p>CCWSC would receive an average of 1.45 AF/ac delivered to the crop root zone for all of its shareholder's irrigated land.</p> <p>EBID would receive an average of 1.04 AF/ac delivered to the crop root zone for all of the District's irrigated land.</p>	<p>CCWSC would receive an average of 1.36 AF/ac delivered to the crop root zone for all of its shareholder's irrigated land.</p> <p>EBID would receive an average of 1.05 AF/ac delivered to the crop root zone for all of the District's irrigated land.</p>
Recreation	<p>Clark Canyon Reservoir would be operated similar to present conditions, so recreation at both the reservoir and at Barretts Diversion Dam would not be affected in this alternative.</p>	<p>The effects to recreation would be similar to the effects of the No Action Alternative.</p>

Description	No Action Alternative	Preferred Alternative
Recreation (con't.)	The management of the 8 campgrounds, 6 day-use areas, and the marina at Clark Canyon Reservoir and Barretts Diversion Dam would remain as it has in the past.	
Other Effects	Water conservation; cultural resources; noxious weeds; and prime and unique farmlands would be similar to present conditions in this alternative.	Effects to water conservation; cultural resources; noxious weeds; and prime and unique farmlands would be similar to those described for No Action.