

COLORADO WATER CONSERVATION BOARD
823 State Centennial Building
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Denver, Colorado 80203

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DOLORES PROJECT

The Dolores Project is located in Dolores and Montezuma Counties in southwestern Colorado. Most of the project area lies outside of the present Dolores River Basin. Geologists believe that the Dolores River once flowed across the Montezuma Valley towards the southwest, but was subsequently blocked and turned to the northwest by slowly rising mountains.

The project was authorized by the Congress in 1968 as a participating project of the Colorado River Storage Project. The Dolores Water Conservancy District was organized in 1961 as the sponsoring and contractual agency for the project. The district includes portions of Dolores and Montezuma Counties. The Ute Mountain Ute Indian tribe is also a project sponsor.

Plan of Development

The Dolores Project would develop and manage water from the Dolores River for irrigation, municipal and industrial use, recreation, and fish and wildlife enhancement. It would also provide flood control, improve summer and fall river flows downstream, and aid in the economic redevelopment of the area. Supplemental irrigation supplies would be delivered to the Montezuma Valley area located in the central portion of the project area. Full irrigation water supplies would be provided to the Dove Creek area in the northwest and the Towaoc area in the south. Municipal and industrial water would be furnished to Cortez, Dove Creek, and the Ute Mountain Ute Indian tribe at Towaoc.

Primary regulation of the Dolores River would be provided at the 381,100 acre-foot McPhee Reservoir, which would be formed on the river at the eastern edge of the project area by McPhee Dam and Great Cut Dike. Municipal and industrial storage for the Town of Dove Creek would be provided at the 690 acre-foot Monument Creek Reservoir, located at an offstream site near the Town of Dove Creek, Colorado.

On the recommendation of the Fish and Wildlife Service, several measures are planned for wildlife management. A reservoir is to be constructed at Dawson Draw in the Montezuma Valley area for the enhancement of waterfowl. This reservoir would also provide opportunities for fishing, boating and picnicking. Project funds would be provided for acquisition and improvement of land north and east of the Dolores River for winter range to mitigate big game habitat losses caused by the project.

Project water would be distributed by a canal and lateral system constructed as part of the project. The Dove Creek Canal would be the major project canal. It would receive water pumped from McPhee Reservoir at Great Cut Dike by the Great Cut Pumping Plant and extend about 39 miles northwest to Monument Creek Reservoir. Other project conveyance facilities would include the South Canal, a branch of the Dove Creek Canal; the Dolores Tunnel, extending from McPhee Reservoir to the existing system of the Montezuma Valley Irrigation Company; and the Towaoc Canal extending through the Montezuma Valley to the Towaoc area. All main canals would be open and earthenlined.

Sprinkler irrigation systems are planned for all of the full service lands. Lands in the established Montezuma Valley area would continue to be served by existing gravity systems. The sprinkler systems in the Dove Creek area would include six pumping plants to provide pressure at farm turnouts. In the Towaoc area, pressure would be developed in the pipe lateral systems by the difference in elevation between the canal and the irrigated land. The lateral systems would be asbestos-cement and concrete pressure pipes and would be buried (to aid in preservation of the scenery). Project drainage will be provided for the Dove Creek and Towaoc area.

Irrigation scheduling would be implemented on all full service land to assure the application of the proper amount of water for a given crop at the proper time. The ideal quantities and timing of the irrigation applications would be predicted from analyses of temperature, precipitation, solar radiation, and local soil moisture and crop characteristics.

Municipal and industrial water would be available from project features to treatment facilities to be constructed by the water users. The water users would provide facilities for distribution of the water. The project reservoirs--McPhee, Monument Creek and Dawson Draw--would provide new lake fisheries, waterfowl habitat and significant water-oriented recreational opportunities. Basic recreational facilities would be provided at each of the reservoirs. Fishing and recreational opportunities would be improved at the Narraguinnep, Totten and Ground Hog Reservoirs which now provide irrigation storage for the Montezuma Valley Irrigation Company. The water surfaces of these reservoirs would become more stable because the storage of irrigation water would be largely accomplished by McPhee Reservoir.

About 10 miles of a relatively poor stream fishery on the Dolores River would be flooded by McPhee Reservoir. The stream fishery in the river below the reservoir, however, would be greatly enhanced as a result of project operations. The fishery would benefit from reservoir releases made specifically for fish, from controlled spring reservoir releases made in anticipation of spills, and from releases for downstream rights. As a result of the spring releases made in anticipation of spills, white water boating would be maintained and in some aspects improved. Good boating days could be grouped together and accurately predicted, whereas the boating opportunities now are dependent on nature and are unpredictable.

The Dolores Project Definite Plan Report is scheduled for completion in April 1977.

The Dolores Water Conservancy District, which encompasses the Dove Creek area, the Montezuma Valley area, and McPhee Reservoir in the Dolores River Valley, would be the principal administrative and contractual agency for the project. Repayment negotiations between the district and the Bureau began in August 1975. The District Board of Directors approved the contract as to form on October 21, 1976. In the General Election conducted by the district on February 8, 1977, the vote was 3921 in favor and 229 opposed, or 94.5% in favor of accepting the repayment contract. The Secretary of the Interior usually approves the repayment contract after the Environmental Impact Statement has been on file for 30 days with the Council on Environmental Quality. The district then would sell the water supplies to municipalities, water user's organizations and individuals. The district could also levy taxes against property within its boundaries at rates of 1½ mills prior to delivery of project water and 3 mills thereafter.

The Montezuma Valley Irrigation Company would continue to operate its existing facilities in the Montezuma Valley area, distributing both non-project and project supplemental water supplies. It would also administer the existing Ground Hog and Narraguinnep Reservoirs and Totten Lake. The district has negotiated a contract with the company which is consistent with terms in the district's repayment contract. The Boards of Directors of the district and company approved the contract as to form on October 21, 1976. The MVI company election was held December 13, 1976, and the company shareholders approved the contract by a vote of 86.5% in favor.

The Ute Mountain Ute Indians could contract with the Federal Government for the operation, maintenance and replacement of project facilities required to provide water on the reservation.

The U. S. Forest Service would administer the specific recreation facilities at McPhee Reservoir, located partially within the San Juan National Forest. It is possible that the boundaries of the forest would be expanded to include the entire reservoir area. The U.S. Fish and Wildlife Service or an equivalent state agency would probably administer the specific recreation facilities at the Dawson Draw Reservoir and Monument Creek Reservoir.

Project Statistics

Estimated project costs (January 1976 prices)	\$187,000,000
Water allocation:	
Irrigation (61,660 acres)	90,900 a.f.
Municipal	8,700 a.f.
Recreation, fishing and aesthetics	27,000 a.f.
Total	<u>126,600 a.f.</u>

Annual depletion of the Colorado River	80,900 a.f.
Salinity increase at Imperial Dam from salt loading	1.1 mg/l
Salinity increase from depletion	10.1 mg/l
Benefit-cost ratio	1.30 to 1
Annual benefits	9,947,400

Environmental Impact

1. A portion of the scenic canyon of the Dolores River will be inundated, resulting in loss of some scenic area and aesthetic damage from the construction.

2. Stream fishery and recreational enhancement of the Dolores River will take place.

3. White river boating activity could be curtailed by impoundment of spring flows. Present operational plans provide less boating days but those days can be scheduled with project operation.

Current Status

Advance planning studies were initiated on the Dolores Project in FY 1971 with funds appropriated in FY 1970, but held in budgetary reserve. Total investigation costs to September 30, 1976, including feasibility and advance planning studies, and participation in the research and demonstration farm, amount to \$2,096,677.

The following schedule has been discussed by the Dolores Water Conservancy District as one that could be achieved and lead to a construction start for the Dolores Project in 1977.

Definite Plan Report	April 1977
Environmental Impact Statement (Draft)	November 1, 1976
Public Hearing (Draft EIS)	December 4, 1976
Final EIS	March 1977
Execution of Repayment Contract	April 1977
Construction Start	Spring 1977

If this schedule is followed the Dolores Project construction could be initiated by the obligation of funds to construct an access road to the site of the Great Cut Dike. Negotiations concerning these two items are currently underway.