

COLORADO WATER CONSERVATION BOARD
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SAN MIGUEL PROJECT

The San Miguel project area is in southwestern Colorado in the San Miguel River basin area. The principal towns in the area are Norwood, Nucla and Naturita. The project was authorized by the Congress in 1968 as a participating project of the Colorado River Storage Project. The San Miguel Water Conservancy District was organized in 1957 as the sponsoring and contractual agency for the project. The district includes portions of Montrose and San Miguel counties.

Plan of Development

The San Miguel project would regulate flows of the San Miguel River for irrigation, municipal and industrial use, fish and wildlife conservation, recreation and flood control.

River flows would be regulated at the Saltado Reservoir. Releases would be made from the reservoir to the river for existing water rights, municipal and industrial use, and fish and wildlife. Other water for irrigation, municipal and industrial use, and fish and wildlife would be released into the Norwood Canal which would divert from the outlet of Saltado Dam. The Norwood Canal would be the first link in a chain of irrigation facilities that would extend west from Saltado Reservoir, generally along the southern perimeter of the irrigable land area. This chain would include in successive order the Naturita Reservoir at the terminus of the Norwood Canal, the Basin Canal heading at the Naturita Reservoir, the Radium Reservoir which would receive water from the Basin Canal, and the Paradox Canal heading on West Fork of Dry Creek below the outlet of Radium Reservoir. The Mailbox Park Canal would branch northwest from the Norwood Canal and the Long Park lateral would branch from the Paradox Canal. Other distribution laterals and land drains would be provided as needed. Existing reservoirs and distribution systems would be integrated with the project irrigation system and exchanges effected to bring water to some lands above project works.

Municipal and industrial water would be made available in the San Miguel River and in the Naturita and Radium Reservoirs. Recreational facilities would be provided at the three project reservoirs. The Saltado Reservoir would be operated for flood control on the basis of runoff forecasts. Measures for fish and wildlife would include maintenance of minimum flows and channel improvements in the river below Saltado Reservoir, provision for two interconnected sections at Radium Reservoir and control of water elevations for waterfowl in the east section, a 200-acre irrigated waterfowl preserve adjacent to Radium Reservoir, and sport fisheries at each project reservoir.

Project Costs (Estimated)

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|--------------------------|------------------|
| Irrigation | \$ 77,802,000 |
| Municipal and industrial | 16,247,300 |
| Fish and wildlife | 5,382,700 |
| Recreation | 1,068,000 |
| Flood control | <u>1,500,000</u> |
| Total Cost | \$102,000,000 |

Water allocation

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|---|-----------------|
| Irrigation | 77,800 a.f. |
| Municipal and industrial | 44,000 a.f. |
| Fish and wildlife | <u>500 a.f.</u> |
| Total | 122,300 a.f. |
| Annual depletion of the Colorado River | 85,000 a.f. |
| Annual salinity contributed to Colorado River | 4 to 6 ppm |
| Benefit-cost ratio (3 1/4%) | 1.34 to 1 |
| Benefit-cost ratio (5 1/2%) | 0.86 to 1 |

Environmental Impact

No major environmental problems have been identified as yet in the San Miguel project. Construction of Saltado Reservoir in the San Miguel River Canyon would convert a few miles of stream fishing to reservoir fishing and sufficient releases downstream would be made to maintain fishery below the dam. Diversion of water from the reservoir to the project lands would be largely by tunnel, thereby reducing the impact of construction on aesthetics of the surrounding scenic area. Conversion of rangeland to irrigation, as was included in feasibility plans, would have some impact on the deer population in portions of the area and would increase the salinity of the Colorado River downstream from the project. Advance plans are now under way to reduce significantly the new land acreage to be included in the project, which would modify or alleviate these environmental problems.

Current Status

Advance planning studies were initiated in F.Y. 1972 with partial funding derived from F.Y. 1971 appropriations placed in budgetary reserve until F.Y. 1972. Advance planning studies will continue through F.Y. 1973 at which time they will be curtailed until funds are made available. The F.Y. 1974 program of \$100,000 is based upon carryover funds from F.Y. 1973 and is to be used to determine the effect of the project on the salinity of the Colorado River and to estimate the cost for facilities to offset salinity effects of the project.

Total investigation costs to June 30, 1972, including feasibility and advance planning, amount to \$1,073,880.

Advance planning studies will recognize changing physical conditions and priorities that have occurred since completion of the authorizing report in order to arrive at a selected plan of development.

Conclusions and Recommendations

The entire area of the San Miguel project is encompassed within the boundaries of the Four Corners Economic Development Region because of persistent unemployment and depressed incomes. The area has considerable mineral resources and a temporary economic boom occurred in the 1950's as the result of uranium exploration, mining and processing. This activity has tapered off to a relatively low level leaving many unemployed people. The coal resources are considerable, although of a fairly low quality. A sizable thermal generating plant utilizing local coal resources

has been constructed and is being operated by the Colorado-Ute Electric Association. A potential for much greater energy production exists in the area if adequate water supplies can be provided.

The principal economy of the area is based upon livestock production and the associated growing of livestock feeds. The area is quite arid and irrigation is necessary for the production of crops. Local interest for the project has been very strong and persistent.

A major problem with the present plan of development is that the project feasibility depends to a large extent upon the sale of water for municipal and industrial purposes. A market for this type of water in the area in the immediate future is doubtful, although such a market will probably develop at some time in the future. In this respect, the project faces a problem similar to that which faces the West Divide project.

Advance planning on the project up to this time has barely progressed due to lack of funding. It is therefore recommended that advance planning on the project be deferred until F.Y. 1976. For that fiscal year, it is recommended that the sum of at least \$200,000 be sought to resume advance planning.