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COLORADO WATER CONSERVATION BOARD  
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Denver, Colorado 80203

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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 (Feasibility Report)

The San Miguel project is a multiple-purpose water resource development which 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 project water to some lands above project works.

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Municipal and industrial water would be made available in the San Miguel River and in the Naturita and Radium Reservoirs. The industrial water would be used to develop the natural resources of the area which include coal, oil, potash, gypsum, timber, uranium, vanadium, copper, lead, zinc, silver and gold. It is anticipated that 20,000 acre-feet per year will be needed by 1980 and 44,000 acre-feet by 1990. 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 inter-connected 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 Statistics (Estimated)

Estimated project cost (Jan. 1975) \$130,000,000

Water allocation

Irrigation (39,000 acres)	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	1.03 to 1
Annual benefits	\$5,250,000

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

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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

Plan formulation studies are in full swing with selection of a plan occurring in the near future. Adjustments to the authorized plan are being investigated, but the basic concept of a reservoir on the San Miguel River to store water for the Norwood-Redvale, Lilylands, and Dry Creek basin irrigation areas is still used.

The primary change to the authorized plan will be the deletion of all Paradox Valley lands and much of the land in Dry Creek Basin. Other lands are being investigated to replace the project lands which are deleted. Most of the full service lands will be sprinkler irrigated to decrease salinity and lessen the amount of water needed from the San Miguel River. Alternative methods of getting water from the San Miguel River are being investigated. Also alternatives to Saltado Reservoir are being reviewed with the possibility of not inundating Placerville. High elevation runoff collection does not appear to be feasible after reviewing recorded runoff data from last spring and summer.

The San Miguel Water Conservancy District Board has stated that its primary objective is to expand the agricultural base as much as possible and current studies indicate this can be done while reducing the project's salinity in return flows.

Total investigative costs to June, 1975, including feasibility and advance planning, amount to \$1,416,000. The definite plan report and the draft environmental statement are scheduled to be completed in December, 1977.

### 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.

The President has recommended the appropriation of \$480,000 for F.Y. 1977 to continue the advance planning. It is recommended that the Governor and the members of Colorado's congressional delegation be requested to support this recommended appropriation.

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