



DEPARTMENT OF THE INTERIOR

INFORMATION SERVICE

OFFICE OF THE SECRETARY

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LEGISLATION FOR NAVAJO AND SAN JUAN-CHAMA PROJECTS SUPPORTED

The Department of the Interior today recommended enactment of legislation for construction of the Navajo Indian Irrigation Project and the initial stage of the San Juan-Chama Project.

In a report to Congress, the Department supported H.R. 2352 and H.R. 2494, identical bills authorizing construction and maintenance of the two projects as participating projects of the Colorado River Storage Project.

The proposed plan of development for the Navajo Irrigation Project contemplates construction of facilities to provide a water supply for irrigation of lands to be developed solely for Indian use. Construction cost of the project is estimated at \$135,000,000 at January 1959 prices. A net area of 110,630 acres would be irrigated under the project.

The proposed plan for the San Juan-Chama Project is designed to improve the economy of the water-deficient Rio Grande and Canadian River basins of New Mexico by providing supplemental water. As recommended by New Mexico, 110,000 acre-feet would be diverted annually from the San Juan River. Construction cost of the project is estimated at about \$86,000,000 at January 1959 prices.

In the Department's report, Under Secretary Elmer F. Bennett said authorization of the irrigation development such as the proposed Navajo Indian Irrigation Project would implement recognition of the Nation's responsibility to help alleviate the severe economic distress among the Navajo people by providing them an opportunity to maintain a respectable standard of living.

Secretary Bennett said a development such as that embraced in the initial stage of the proposed San Juan-Chama Project might help materially to meet the pressing need for additional supplies of water in the Rio Grande basin where the uses of water have been developed to the point where they far exceed available supplies.

The Bureau of the Budget has advised that it has no objection to the submission of the Department's report.

The text of the Department's report is attached.

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Juan River basin. This would be accompanied by associated water requirements for municipal, domestic, and miscellaneous purposes in the adjacent areas. Prospective municipal and industrial water users have already expressed interest in receiving water from the proposed Navajo Canal and have approached the Department in that regard. Section 4 of the bills would authorize the provision of additional capacity for such purposes over and above the diversion requirements for irrigation on the Navajo Indian irrigation project.

Water for irrigation of the lands proposed to be included in the Navajo Indian irrigation project would be diverted from Navajo Reservoir which is now under construction as a storage unit of the Colorado River storage project. A main gravity canal would extend from Navajo Dam to Kutz Canyon. There the water would be dropped through a powerplant to develop electrical energy for pumping water to lands in the Newcomb and Bennett Peak areas of the project. The main canal would extend an additional 77 miles beyond the powerplant to serve project lands.

A net area of 110,630 acres of irrigable land has been proposed for development. The area would include off-reservation lands to be acquired in the South San Juan Division and Navajo Indian Reservation lands in the Shiprock Division. Section 3 of the bills would provide authority for the acquisition and addition of the off-reservation lands to the proposed project. The project's productive area, which would exclude farmsteads and other nonproductive areas within farm units, would comprise (a) 8,918 acres served by gravity below the main canal in the South San Juan Division and 70,359 acres in the Shiprock Division, and (b) 25,882 acres served from the pump canals in the Shiprock Division, or a total of about 105,100 acres. An average annual diversion of about 508,000 acre-feet of water from San Juan River would be required for that purpose. This would result in an average annual stream depletion of about 252,000 acre-feet, exclusive of reservoir losses.

The estimated construction cost of the proposed Navajo Indian irrigation project is about \$135,000,000 at January 1959 prices. Operation, maintenance, and replacement costs are estimated to average about \$481,000 annually at January 1959 prices for both 50-year and 100-year periods of analysis. The benefit-cost ratio for the project would be 0.64 to 1 on the basis of direct irrigation benefits only, and 1.44 to 1 on the basis of total irrigation benefits. The appraisal of annual economic costs includes the \$2.00 per acre-foot depletion charge of the storage project assigned to all participating projects for all benefit-costs ratio purposes.

As provided by sections 4(d) and 6 of the Colorado River Storage Project Act of April 11, 1956 (70 Stat. 105), authorizing the Colorado River storage project and participating projects, in the event that the Navajo participating project is authorized, payment of costs allocated to irrigation of Indian-owned, tribal or restricted lands within, under, or served by such project within the capability of the land to repay is subject to the Act of July 1, 1932 (47 Stat. 564); the costs beyond the capability of such lands to repay are to be determined and, in recognition of the fact that assistance to the Navajo Indians is the responsibility of the entire Nation, shall be nonreimbursable.

The proposed plan of development for the San Juan-Chama project is designed to improve and stabilize the economy of the water-deficient Rio Grande and Canadian River basins of New Mexico by providing supplemental water to meet rapidly increasing needs. This would be accomplished by diverting water from the upper tributaries of the San Juan River. The water would be used for supplemental irrigation, for replacement of watershed depletions in the Rio Grande basin, and for an additional supply for municipal, domestic, and industrial purposes. Recreation and conservation and development of fish and wildlife would also be purposes of the project. On the basis of January 1959 prices, the estimated construction cost for the project facilities studied in the plan of development is about \$149,000,000. The evaluated total annual benefits for such a development would exceed the estimated annual costs in a ratio of about 1.7 to 1.

The proposed plan for initial stage development of the San Juan-Chama project, as recommended by the State of New Mexico, contemplates an average annual diversion of about 110,000 acre-feet from the San Juan River for utilization in the Rio Grande in New Mexico. The imported waters would be used for an additional municipal and industrial water supply (57,300 acre-feet) for the City of Albuquerque; a supplemental irrigation water supply (30,100 acre-feet) to about 39,300 acres of land in the Cerro, Taos, Llano, and Pojoaque tributary irrigation units in the Rio Grande basin in New Mexico; and supplemental water (22,600 acre-feet) for irrigation of about 81,600 acres of irrigable land in the existing Middle Rio Grande Conservancy District. Recreation and conservation and development of fish and wildlife would also be purposes of the initial stage of development.

The proposed plan of development for the initial stage would involve three major elements, namely, diversion facilities (diversion dams and conduits), regulation facilities (Heron No. 4

Dam and Reservoir, and enlargement of outlet works of the existing El Vado Dam), and water use facilities (principally for the tributary irrigation units). Minimum basic recreation facilities would also be provided at the five project reservoirs.

The estimated construction cost of the project features of the proposed initial stage, on the basis of January 1959 prices, is about \$86,000,000, which includes about \$400,000 for minimum basic recreation facilities. Project operation, maintenance, and replacement costs are estimated at about \$346,000 annually for a 50-year period and about \$378,000 annually for a 100-year period. Of the estimated project construction costs, reimbursable allocations of about \$29,200,000 have been made tentatively to municipal and industrial water supply, \$53,400,000 to irrigation, and \$3,000,000 to future uses. The recreation costs would be nonreimbursable. The proposed initial stage development would have engineering feasibility and would be economically justified in that the evaluated total benefits would exceed the estimated annual costs in a ratio of 1.26 to 1 for a 100-year period of analysis. If direct benefits only are considered in a 50-year period of analysis, that ratio would be about 0.81 to 1.

Costs allocated to municipal and industrial water supply, including interest during construction, would be repaid over a 50-year period with interest on the unamortized balance. The total to be paid by the municipal and industrial water users would be about \$58,600,000. The cost of raw municipal and industrial water would be about 7.7 cents per 1,000 gallons, or about \$25 per acre-foot.

This estimated municipal and industrial water rate would apply to water developed by initial stage construction. Repayment contract terms and water rates under subsequent development would be subject to re-examination as plans develop and additional quantities of municipal and industrial water would be contracted. Where necessary, in the adequate financing of any subsequent development, water rates and repayment provisions could be designed to reflect any significant change in municipal and industrial use, operation and maintenance costs associated therewith and other relevant considerations.

Irrigation water users probably would repay about \$8,000,000 of the allocation to irrigation. Repayment contracts would be negotiated and entered into with organizations of the type provided in section 4 of the Colorado River Storage Project Act of April 11, 1956 (70 Stat. 105), for contracting on the participating projects authorized by section 1 of that Act. The costs allocated to irrigation in excess of the irrigators' ability to repay would be

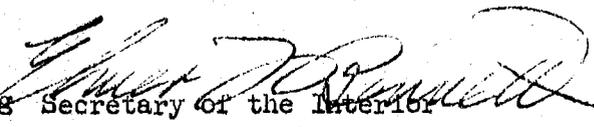
paid from New Mexico's apportionment of the Upper Colorado River Basin Fund revenues as provided in the Act. Costs allocated to future uses, which would involve the provision of excess capacity in the initial stage to permit later project expansion would also be an obligation against New Mexico's share of the Basin Fund revenues, to be paid from that apportionment if not otherwise collected as a result of subsequent allocations to the water users.

Authorization of an irrigation development such as the proposed Navajo Indian irrigation project would implement the recognition given in the Act of April 11, 1956, of the Nation's responsibility to help alleviate the severe economic distress among the Navajo people by providing them an opportunity to earn a respectable standard of living. It would enable an estimated 1,400 families to establish homes on irrigated farms. The proposed project has the support of the Navajo Indian Tribe and it is our understanding that an on-the-farm training program, financed with Tribal funds, has been undertaken already to prepare members of the Tribe for irrigation farming.

A development such as that which is embraced in the initial stage of the proposed San Juan-Chama project might help materially to meet the pressing need for additional supplies of water in the Rio Grande basin where the uses of water have been developed to the point where they far exceed available supplies. This need of the Rio Grande basin vitally affects the welfare of more than half of the population of New Mexico and, if it is not satisfied in the near future, threatens to check the economic development of the State. Besides the requirements for irrigation, more water is needed to meet the domestic requirements of a growing urban population and of industry, particularly in the Albuquerque area.

The Bureau of the Budget has advised that there would be no objection to the submission of this report to your Committee.

Sincerely yours,


Acting Secretary of the Interior

Hon. Wayne N. Aspinall, Chairman
Committee on Interior and Insular Affairs
House of Representatives
Washington 25, D. C.

Enclosure

EXECUTIVE OFFICE OF THE PRESIDENT

BUREAU OF THE BUDGET

WASHINGTON 25, D. C.

May 19, 1960

My dear Mr. Secretary:

This is in reply to your letter of July 3, 1958, transmitting your coordinated report on the San Juan-Chama project in New Mexico and Colorado and the Navajo Indian irrigation project in New Mexico, both of which are proposed for authorization as units of the authorized Colorado River storage project. You request advice as to the relationship of the two projects to the program of the President.

The initial stage of the San Juan-Chama development, recommended for authorization in your report, would provide for a maximum annual diversion of 110,000 acre-feet of water from the Upper Colorado River basin to the Rio Grande basin to supply supplemental irrigation water for about 121,000 acres and additional municipal and industrial water for the Albuquerque metropolitan area. The principal features of the initial stage include three diversion dams, about 29 miles of conduit, and one storage dam and reservoir. The total estimated cost is \$86,000,000, based on January 1958 prices, tentatively allocated as follows:

Municipal and industrial water	\$29,200,000
Irrigation	53,400,000
Future use	3,000,000
Recreation	<u>400,000</u>
Total	86,000,000

All the costs allocated to municipal and industrial water supply would be repaid with interest within 50 years. About \$8 million of the costs allocated to irrigation would be repaid by irrigation water users over a 50-year period and the balance would be repaid from New Mexico's share of surplus power revenues of the Colorado River storage project. The allocation to future use would also be repaid from these power revenues if it is not otherwise collected from water users. The benefit-cost ratio for the project, based on a 50-year period of analysis, is estimated at 1.03 using total benefits, and 0.81 using direct benefits only.

We note that about 57,000 acre-feet of water--over half of the total annual diversion--would be allocated to municipal and industrial water supply. In view of the rapid growth of population and the increasing emphasis on industrial development in the Rio Grande basin of New Mexico, we believe this feature of the project would make an important contribution to the future development of the region.

Information in the report indicates that the Cerro, Taos, Llano, and Pojoaque tributary irrigation units are suffering increasing economic distress as the result of increasing population pressure, erratic water supplies, deterioration of existing irrigation works, and subdivision of ownership among heirs resulting in uneconomic farm units. Although the economic justification for undertaking these works at this time appears to be somewhat questionable, their inclusion in the overall recommended plan may be warranted because of the anticipated beneficial effects in sustaining the economies of these existing agricultural communities. We would recommend, however, that their inclusion on this basis be contingent upon the development of a joint Federal-State program to provide for the consolidation of farm developments into units large enough to provide reasonable family incomes.

We note that several of the concerned States have not furnished views on the project. We also understand that Colorado and New Mexico interests have been involved in negotiations over differences with respect to the proposed transfer of Colorado River basin waters originating in Colorado for use outside the basin in New Mexico. We have been advised, however, that Colorado and New Mexico have recently reached agreement on the proposed transfer of waters.

The proposed Navajo Indian irrigation project would require the annual use of about 280,000 acre-feet of water of the San Juan River allocated to New Mexico under Colorado River compacts to irrigate about 110,000 acres within and adjacent to the Navajo Indian Reservation. These lands would be solely for Indian use. The principal features of the project include a main canal over 150 miles in length, pumping plants, a power plant to provide project pumping energy, and associated works. The total cost, based on January 1958 prices, is estimated at \$135,330,300 tentatively allocated entirely to irrigation. The benefit-cost ratio on the basis of a 50-year period of analysis is estimated at 1.3 using total benefits and 0.52 using direct benefits only.

We believe this proposal raises a number of important questions of public policy with respect to Federal water resources and Indian assistance programs.

In a dry area like New Mexico, availability of water is essential to continued economic growth. On the basis of present trends, demands for water for industrial and municipal use can be expected to increase substantially in future years. Notwithstanding this fact, this project would result in committing to agricultural uses a major part of the last source of unappropriated water in the State of New Mexico, the waters of

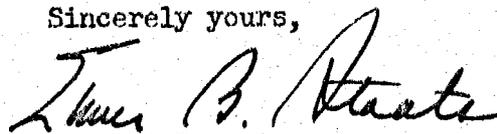
the San Juan River allocated to the State under Colorado River compacts. We recognize, however, that the project is primarily intended as an Indian assistance measure, and that other factors are involved in these circumstances.

The plan of development for the Navajo project indicates that eventually about 1,400 families would be operating irrigated farms. It is predicted that service industries in the project area would support 2,800 families and that, in total, sufficient employment opportunities would be provided to support 20,000 Indians. The construction period for the project, however, is estimated to be 14 years. Although construction could be accelerated, this period appears desirable to allow the integration of the irrigated land into the Indian economic base. Considering the normal lag between authorization and initiation of construction, it could be 16 to 20 years before the full benefits from the project become available if it were to be authorized this year.

Current population estimates on the Navajo Reservation range from 75,000 to 100,000. In view of the recent interest which has developed in industrial utilization of the large coal deposits on the Navajo Reservation, commitment of a major portion of the waters of the San Juan River to agricultural purposes could impede industrial development on the reservation and the correspondingly greater employment opportunities which such development would provide. We would, therefore, question whether a Federal investment of \$135 million is justified for a project which would ultimately establish not more than 25 percent of these people in an agricultural enterprise of marginal economic value.

Accordingly, subject to your consideration of the above views, the Bureau of the Budget would have no objection to the submission of your proposed report to the Congress. No commitment can be made, however, as to when any estimate of appropriation would be submitted for construction of these projects, if authorized by the Congress, since this would be governed by the President's budgetary objectives as determined by the then prevailing fiscal situation.

Sincerely yours,


Director

The Honorable

The Secretary of the Interior