

NEW MEXICO STATE WATER PLAN

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New Mexico being a semi-arid area the water and related land resources development has occurred along the stream systems and in areas of substantial ground water supplies. The state is rapidly changing from a rural to an urban environment. A little more than 90 percent of the water used in New Mexico is for the irrigation of about 1 million acres of crop land and over one-half of this supply is from ground water -- most of which is being "mined". Presently most of the urban and industrial needs are also being met from ground water sources. Some areas in the state where ground water mining is occurring will in the near future require a supplemental source of water to maintain present uses. New Mexico's use of surface water from all major stream systems of the state is controlled by Interstate Water Compacts or Federal Court decrees and our allocation from these systems has already been applied to beneficial use or will be absorbed by beneficial uses expected to arise in the near future. Therefore, projected requirements will need to be met by transfer from present uses or by new sources.

Because of the limited supplies available, and the need to determine how anticipated uses might be met, a State Water Plan has been undertaken.

A series of events over the past 10 years or so have led to the initiation of such a plan. A brief review of these events should help in understanding what the plan will include and how it is being accomplished.

In 1959 the State Legislature created a State Planning Office and directed that it function as the Governor's Staff Agency in the planning for long-range, comprehensive, balanced development of the State's water resources, in the orderly expansion of public facilities, and in other planning matters. In 1961 the Planning Act was amended with the specific reference to water resources being deleted and the area of concern broadened.

In 1961 Amendment provided that the Planning Office "shall function as the Governor's staff agency in planning for the long-range comprehensive, balanced development of the State's natural, economic and human resources and public facilities". The State Planning Office, under the 1959 Act and 1961 Amendment, is preparing a comprehensive resource plan for the State and they have given the Interstate Stream Commission and the State Engineer Office the responsibility of planning the water and related land resource aspects.

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In 1965 Congress passed Public Law 89-80 known as the Water Resources Planning Act. Title III of the act authorizes Federal grants to the states to assist them in developing and participating in the development of comprehensive water and related land resource plans. In May of 1966 the Governor designated the Interstate Stream Commission as the "state agency" to administer New Mexico program under Title III of that act. The Commission is directing the comprehensive water planning being done under Title III independently of the State Planning Office but in careful coordination with the other comprehensive resource planning activities of that office.

In fiscal year 1967, Federal funds were appropriated to the Bureau of Reclamation for studies to bring up-to-date the information on water supplies and uses and to develop measures to insure maximum conservation and optimum use of the limited supplies of the Rio Grande and Pecos River Basins in New Mexico. Discussions between the State and Bureau of Reclamation prompted the state to request that in order to achieve the greatest benefits to both Federal and State interests, that these studies be combined and reoriented toward a statewide approach to water resource development.

The State request resulted in the New Mexico Basins Project (State Water Plan) being budgeted by the Bureau of Reclamation, who has the primary responsibility for preparing the study and publishing the report. Close coordination is being maintained with the Interstate Stream Commission, the State Engineer, and other State and Federal agencies to assure that all basic data and the results of previous and ongoing studies are available for consideration in formulating a comprehensive statewide water plan.

The objective of the study is to develop a long-range statewide water plan which we visualize can be done in four steps.

The first step is to inventory the natural resources of the state and determine the current state of development and use of those resources. The State Engineer Office and the Interstate Stream Commission have completed an inventory of the water resources of New Mexico and their current uses. The other resources have been or are being inventoried by the appropriate agency.

The second step includes the development of projections of the distribution of population and economic activities for the State. The report will develop plans to meet the requirements of two projections. One prepared by the Bureau of Business Research of the University of New Mexico for the State Planning Office and the second prepared by the U. S. Office of Business Economics and the Economic Research Service, commonly known as OBERS, which was developed for use in the ongoing nationwide comprehensive water and related land studies which are being conducted under the direction of the Water Resources Council.

Both of these projections include estimates of population and economic activity for the 1980, 2000 and 2020 time frames. The plan will

include measures to meet the water requirements for these points in the future.

The third step, involving water and related land resources, will be to determine the manner in which water requirements for the projected population and economic activity might be met with supplies available to the State under the existing interstate agreements and court decrees. This portion of the program will include: 1) Study of alternatives for the use of water remaining available from the San Juan River by contract with the Secretary of the Interior; 2) Study of alternatives for the use of water potentially available from the Gila River by exchange through the authorized Central Arizona Project; 3) Study of alternatives for the use of water available from Ute Dam and Reservoir and other works on Canadian River by contract with the New Mexico Interstate Stream Commission; 4) Study of ways and means of reducing consumptive use of water by uneconomic plants, reservoir evaporation and through improved irrigation practices; 5) Study of the potential for meeting water requirements arising from the anticipated urbanization and industrialization of the state's economy by the redistribution of water among types of use within the framework of New Mexico law; and 6) Reconnaissance grade studies of storage and transmission facilities needed to serve the projected distributions of population and economic activity.

The fourth and last step will be to determine the prospects for importation of water, weather modification, and possible desalting of saline waters to maintain our present uses and to furnish projected requirements that cannot be met with presently available supplies.

The Federal agencies and the State have studies of varying intensity underway on portions of the third and fourth phases of the program. The Bureau of Reclamation, Corps of Engineers, and Mississippi River Commission are studying the possibilities of importing waters from the Mississippi River to West Texas and Eastern New Mexico. The New Mexico Soils Group under the leadership of Dr. James Anderson is classifying the land areas of the State to determine their suitability for irrigation. The Soil Conservation Service is preparing a series of maps and tabulations concerned with soils, vegetation and agricultural development and practices. The State Engineer and Interstate Stream Commission are working on various phases of the report and have completed or essentially completed a land ownership map, land status map and are developing water use coefficients for the various economic sectors. The State Engineer Office have entered a contract with the Office of Saline Water to study desalting possibilities at several locations in the State. Other State and Federal agencies are also preparing various inputs for the study.

We believe we are proceeding in an orderly and effective manner which will result in a valuable product to the state with the report scheduled to be completed in fiscal year 1973.