

PROBLEMS OF THE INTERSTATE STREAM COMMISSION

T..T. Sanders*

Professor Clark, ladies and gentlemen. I appreciate very much the opportunity of being invited to participate in the Fourth Annual New Mexico Water Conference. New Mexico State University, Dr. Stucky, and Professor Cole, deserve a note of vote of thanks for continuing this educational program with respect to water and water conservation. It is of the utmost importance to all the people of New Mexico.

My topic deals with the problems of the Interstate Stream Commission, and in order that we may better understand the many problems which confront this Commission, it might be well to give a brief history of its formulation.

The Interstate Stream Commission was created by the State Legislature in 1935, and originally consisted of three members. The Commission was enlarged to five members in 1939, and seven members in 1943. Six of the members are appointed by the Governor for a term of six years, and the seventh is the State Engineer. The Act provides that the appointed members shall be representatives of major irrigation districts, and no two members shall be from the same district or section. The present Commission is composed of I. J. Coury, Chairman, of Farmington; W. H. Gary, of Rincon; L. C. Strawn, of Tucumcari; Jack T. Cargill, of Carlsbad; Peter Gallagher, of Albuquerque; S. E. Reynolds, State Engineer, of Santa Fe, and the speaker. Its offices are in the Capital in Santa Fe.

The duties of the Commission are "to negotiate compacts with other states; to settle interstate controversies or looking toward an equitable distribution and division of waters in Interstate Streams System, subject in all cases to final approval by the Legislature of New Mexico, to match appropriations made by the Congress of the United States for investigations looking to the development of Interstate Streams originating in, or flowing through the State of New Mexico, to investigate water supply, to develop, conserve, protect and do any and all other things necessary to protect, conserve and develop the waters and streams system of this State, interstate or otherwise, to institute in the name of the State any and all negotiations and/or legal proceedings as in the judgment of the Commission are necessary to carry out the provisions of the Act creating the Commission. I might say also, the Governor has the same right to institute action to protect water rights in interstate streams by Art. 75-34-7 and 8.

Some funds of the Commission are appropriated by the Legislature, however, the principal source of funds is from lands granted to the then Territory of New Mexico by Congress, under what is known and called the Ferguson Act, dated June 21, 1898, and which said Act made various grants to the Territory of New Mexico, among which was one for 500,000 acres of land to be selected for the establishment of permanent water reservoirs for irrigation

*Attorney at Law and Member of Interstate Stream Commission, Roswell, New Mexico.

purposes. The other was 100,000 acres of land, the income of which is to be used for "The improvement of the Rio Grande River within the State and for increasing the surface flow of water in the bed of the river." Both of these grants directed that the income only from the respective grants could be used for the purposes for which the grants were made.

Thereafter by the Enabling Act, these grants were expressly confirmed to and accepted by the State to be held in trust, as was provided for in the Enabling Act. Therefore, we have the "permanent reservoirs for irrigating purposes permanent fund" and the "permanent reservoirs for irrigating purposes income fund." The same is true of the permanent funds of the Rio Grande and the income funds of the Rio Grande. There is at the present time approximately \$585,000.00 in the permanent Rio Grande Fund, and \$300,000.00 in the income Rio Grande Fund, of which amounts some \$175,000.00 have been committed to various projects. In the water reservoirs for irrigation purposes permanent fund, there is approximately \$860,000.00, and in the income fund there is approximately \$996,000.00, of which amount some \$475,000.00 have been committed to various projects.

The Attorney General of New Mexico has held that the monies belonging to the various funds referred to, can only be used for the express purposes provided in the Ferguson Act, and no portion thereof may be used for the purpose of developing municipal water projects.

New Mexico is an arid state with a scarcity of water and the development of our water supply must be carried out expeditiously if the best use of our water is to be made.

Our waters can best be divided into surface and underground waters; surface waters being those waters from rivers and streams flowing over and upon the surface of the land; and underground waters being those water supplied from underground basins, the boundaries of which are readily determinable. The problems of the Interstate Stream Commission can, therefore, be roughly divided into those dealing first with surface waters and those dealing with underground water.

One of the duties of the Commission is the administration of interstate compacts dealing with surface waters, and as such, New Mexico is a party to seven (7) interstate stream compacts, namely: the Colorado River Compact, La Plata River Compact, the Rio Grande Compact, the Costilla Creek Compact, Upper Colorado River Basin Compact, Pecos River Compact, and the Canadian River Compact. The first two are considered to be self-operative and the other five are administered by Compact Commissions. The engineering staff of the Interstate Stream Commission has in each instance made engineering studies and computations for the administration of the various compacts, and is participating in the making of detailed independent investigations of various phases of the State's water resources. Among most important of these are studies are those having to do with the San Juan River, and participating in the planning of the Navajo Irrigation and San Juan Chama projects, and studies on the lower Colorado River Basin Tributaries for use in connection with the litigation in Arizona VS California referred to herein.

At the present time the Commission is representing New Mexico in the litigation styled Arizona VS California in the U. S. Supreme Court, which is a suit brought by Arizona against the State of California in connection

with waters of the Colorado River, and in which the State of New Mexico was impleaded with respect to waters claimed, by it principally in the Jila, Zuni, Prieto River, and Black Creek area in Western New Mexico, having a combined drainage area of some 10,000 square miles. The claim of New Mexico to water from these tributary streams amounts to some 115,000 acre feet annually. The main interest of New Mexico in the present hearing is to provide a means whereby the water belonging to this State and claimed by it can be taken from tributary streams.

Hearings are being held and it will be some time before it is finally determined.

The Commission is furthermore assisting in a Cause styled State of New Mexico, ex rel Reynolds VS W. S. Ranch Company, which is a suit pending in the District Court of Taos County, New Mexico, brought by the State Engineer against the W. S. Ranch Company, to enjoin the use by said company waters from Costilla Creek above the reservoir, upon 1300 acres of lands. The Defendant answered the Complaint of the State Engineer, claiming all water users from Costilla Creek both above and below the reservoir, and in the State of New Mexico, as well as Colorado, are necessary parties to any suit brought for the purpose of determining his rights to such water; furthermore claiming a prescriptive right to use the waters from said Creek, claiming by virtue of the terms of the compact between the State of New Mexico and Colorado, his rights to the use of such waters were recognized. The District Court in a preliminary opinion held that all parties claiming any rights in and to the waters of said Creek, both in this State and Colorado were necessary parties to the lawsuit, and the suit at the present time is in the process of being appealed to the New Mexico Supreme Court, for the purpose of determining whether or not the State Engineer has right to bring an action to enjoin an individual from using waters from a stream system under which he has no adjudicated right, without requiring that all parties having rights thereunder, both in this State and without being made necessary parties to such action. The Court will be asked to determine the question of whether or not a water right in this State can be acquired by prescription.

The Colorado River Compact, as you doubtless know, is a compact of what is known and called the Upper Basin States, which are Arizona, Utah, New Mexico, Colorado and Wyoming, and the Lower Basin States, composed of Arizona, California, Nevada, New Mexico, and Utah. The waters involved in the Arizona VS California litigation mentioned above, are waters belonging to the State of New Mexico, are claimed by this State under and by virtue of the Lower Colorado River Compact while under the terms of the Upper Colorado River Basin Compact, we have acquired substantial water rights, and have five major projects planned and in the process at the present time. These projects are the Navajo Dam and Reservoir, the Hammond Project, the La Plata Project, the Navajo Irrigation Project, and the San Juan Chama Project. The Commission has been engaged in studies to determine the best uses of the waters afforded to the State of New Mexico under and by virtue of the various compacts. The Navajo Dam Reservoir at the present time is being built in the Farmington area of New Mexico, and will have a total capacity of 1,700,000 acre feet of water. The original contract in this connection has been let, and there is at the present time being built the Earthan Dam at a cost of some \$25,000,000. This Dam will provide 110,000 acres of new lands lying South of the San Juan River, with irrigation water, and will be

supplied by a 150 mile main canal extending from the Navajo Reservoir. In this same connection the San Juan Chama Project, the initial development of this project calls for the diversion of 110,000 acre feet of water annually from the San Juan River Basin, to the Rio Grande River Basin, to supply municipal and industrial needs and for supplemental irrigation water. This water will be supplied out of the Navajo Reservoir, and it will provide about 57,000 acre feet of water annually for municipal and industrial uses in the Albuquerque vicinity, about 23,000 acre feet to supply supplemental irrigation to the Middle Rio Grande, and about 30,000 acre feet to supply supplemental water to four tributary irrigation units on the Upper Rio Grande River.

In addition to the projects above mentioned out of the San Juan and the Navajo Reservoir, there is the Hammond Project in New Mexico, providing for approximately 3,500 acres of new land, and the Animas-La Plata area, which will provide for approximately 86,000 acres of land in Colorado and New Mexico together, of which amount some 16,000 acres will be new land to be put into cultivation in the State of New Mexico.

The Commission and its engineers and advisors have met numerous times with representatives of the Department of the Interior, the Navajo Tribal Council, and other affected interests, and have assisted in the drawing of legislation presented to the Congress in connection with the Navajo Dam, the San Juan Chama project and the Hammond project, all of which legislation has been submitted to and passed the Congress through the efforts of Senators Chavez, Anderson, and Representative Montoyo and Morris of New Mexico, for which they deserve a vote of thanks.

The problems of the Commission are not limited solely to problems of interstate streams. The use of ground water for irrigation has developed very rapidly and it is estimated that in 1940 approximately 140,000 acres were irrigated with underground water, and in 1955 588,000 acres were irrigated with underground water. The picture with respect to underground water is bleak, and in the Mimbres, Animas, Playas, Portales, Lea County, and Estancia basins, water is being withdrawn primarily from storage, and water levels will continue to decline. The same is furthermore true of the Roswell underground basin wherein it is estimated that approximately 190% of the annual recharge is being taken out annually. As you know, the Roswell basin is a rechargeable underground basin, however, the remainder of the basins are rechargeable from surface percolation, and as to those areas we are in effect mining the water. The policy of the State Engineer has been insofar as is possible, to limit withdrawal from those areas to that which can be sustained for a reasonable payout period of approximately 40 years.

It is estimated that by 1966 approximately 19,000 acres of the Portales area will not be irrigable from present sources and the Commission at present is studying a project which would supply water for about 20,000 acres in the most heavily pumped area in the vicinity of the City of Portales. The project would consist of a series of wells drilled in a sandhill area nearby under which the ground water reservoir has not as yet been developed, and thereafter the construction of works conveying the water some 20 miles. It is estimated that should this project prove feasible the water supply for the Portales project would be reassured for an additional 40 year period.

In many areas of the State surface waters and ground waters are intimately related and ground waters have been used to supplement surface waters. This practice has been approved and encouraged by the State Engineer in the Carlsbad, Hondo, and Rio Grande basins. It is a good economic use of ground water storage and it is anticipated that this practice will be developed in other areas in the State.

One of the most acute problems confronting the State, and with which the Commission is vitally concerned, is the rejuvenation and rehabilitation of underground water projects throughout the State for the reason that in every instance the underground waters that have been developed are being depleted in excess of the estimated safe yield. The depletion and overdraft of underground waters has in some instances resulted in serious salt encroachment, head lowering, and depletion of water in storage in underground aquifers. The principal source of the supply of water for many cities in the State of New Mexico is underground waters, and it is most essential to the economy of these cities that their underground water supplies be preserved and protected. There is at the present time some eighteen (18) cities in New Mexico each having a population in excess of 1,000 using substandard water in connection with their public water supply. A great majority of substandard water is derived from underground sources, and as the underground waters are depleted, fluorides, sulphates, and other solids increase and render the water less usable.

Prompt, and in many cases extreme measures must be taken to preserve, protect and maintain the underground water supplies which are so essential to our State.

There are large quantities, and in fact, almost inexhaustible quantities of brackish water located within the State of New Mexico, and if an economic method can be determined whereby brackish water can be converted, it will be of the utmost benefit to the people of the State of New Mexico, and the Commission is actively participating in an effort to obtain a demonstration plan somewhere in the State for the desalting of water, thereby rendering it usable for both individual and industrial consumption.

Our water problems, both as to surface and underground waters daily become more acute. The tremendous increase in population has accelerated industrial development, increase of acreage under cultivation, subnormal rainfall, acute drought conditions in the water shed areas, all of these factors have contributed toward the water shortage which confronts us at the present time. I do not feel that the average citizen is at all conversant with the acuteness of the water problem. However, I must say that the legislature of New Mexico has, over the past several years evidenced a growing appreciation of the problems confronting the State with respect to the protection and development of our water resources and the legislature did in 1955 pass a small projects Act which was designed to implement the conservation and efficient use of water through small irrigation projects.

This Act transferred the income from the "water reservoirs for irrigation purposes fund" to a new fund called the "New Mexico Irrigation Works Construction Fund." The Commission was authorized to issue revenue bonds for projects conserving and developing water, and the Commission authorized studies in connection with the Canadian River Investigation, the Black River Acre, Cabestro Dam Rehabilitation, Monticello Valley Area, and others.

The 1955 Act was amended by the Legislature in 1959, by Article 75-34-9 et seq and the powers of the Commission were broadened. The power of condemnation, purchase and exchange of property was given to the Commission.

The Commission furthermore has the power to sell, lease and otherwise dispose of all waters, which may be impounded under the provisions of the Act, and they may be sold for the purpose of irrigation, development of power, watering of stock, or for any other purpose.

The Commission may issue revenue bonds, fix rates, charges and prices in connection with projects; however, such rates, charges and prices shall be sufficient to pay all maintenance, and operational expenses, and provide for the payment of interest and sinking funds requirements.

While under the amended Act the Commission has the authority to pledge so much of the income from the Permanent Reservoirs for Irrigation Purposes Fund as it may desire to provide for the repayment of bonds issued by the Commission, it is well to bear in mind the Commission is engaged in water conservation work in the entire State and the income from such Fund is barely sufficient at present to pay current expenses of the Commission in connection with its work it is improbable that any appreciable portion of such fund could be pledged for bond debt retirement of some particular section of the State. The Act furthermore contains a provision stating that the Legislature "knowing that the owners it confers upon Interstate Stream Commission are broad. It is, therefore, in order that the Legislature declare its policy is not that the State Interstate Stream Commission should construct or repair irrigation works now owned, or which will revert to private individuals or corporations, under the powers granted by this amendment, unless the individuals or stockholders of such corporation are also all owners of lands under the irrigation works and users of water supplied by it for agricultural or domestic uses, and the works will result in a substantial conservation of water." The Commission is also authorized to make loans on such terms and for such length of time not to exceed 50 years, as it shall deem proper for irrigation purposes out of unpledged funds in the Irrigation Works Construction Fund, for the purpose of doing engineering and design work on a project, construction of a project, rehabilitation of an existing project, and in connection with feasibility studies, or may make loans for feasibility studies, if it so desires.

The Commission is expressly given the right for the purpose of building, operating and maintaining dams on the Canadian River, to anticipate the proceeds of the collection of taxes imposed upon natural resources to the extent of not exceeding \$5,000,000, provided, however, the Commission shall not allow construction to commence until it has reasonable assurance that this project will produce sufficient income with which to pay the cost of operation and maintenance of the dams constructed. The payment of this particular \$5,000,000 of bonds is guaranteed from severance tax funds, subject to a prior call upon such funds, as provided by Chapter 24 Laws of 1951, and by other Statutes as set forth in Article 75-34-38. It can thus readily be seen that the powers of the Commission have been greatly broadened, and at the same time the burden placed upon the Commission is much greater than ever before. We are charged with the duty of doing any and everything necessary, or which we may think proper for the development and preservation of the waters, interstate and otherwise, within the State of

New Mexico. We are given the authority in our discretion and with the approval of the State Board of Finance, to issue revenue bonds, yet at the same time the responsibility rests squarely upon the Commission to determine the feasibility of these various projects, and no standards have been set up whereby we can determine what factors should be used in determining the feasibility of these projects. The standards which we might or should apply may or should be entirely different from those of the Federal agencies, such as United States Bureau of Reclamation. It would appear that under the language of the Statute authorizing the Commission to issue bonds, no projects be authorized or constructed unless according to our estimates the revenues to be derived therefrom will be sufficient to pay the cost of maintaining, repairing and operating the same, and to pay the principal and interest of revenue bonds which may be issued for the cost of such project. The powers given to the Commission as can be seen are very broad, and the responsibility placed upon the Commission in connection with the issuance of bonds and the ability of the various projects to repay the same is tremendous. It might be recalled that the Government, through the Bureau of Reclamation, takes into consideration as to the repayment of obligations many factors not set forth in our Statutes here with respect to the ability to repay. For example, one of the factors used by the Government is power credits which is anticipated income from power sales, another is the value of recreational and wildlife benefits received, which are given a value set by the Bureau of Reclamation.

Drouth, and in acute shortage of water, has amplified the problems of the Commission, and many, many requests for help and the extension of credit, and funds have come from municipal areas and various other areas of the State, for help and assistance in checking and assisting in their obtaining adequate municipal and other water supplies. Regrettable as it may be, the funds of the Commission cannot be used for any purpose other than investigations, loans, and construction expenditures directly related to the development of water for irrigation purposes. This language contained in the grant of land whereby from which the funds are obtained to carry on the work of the Commission, prohibits the use of such funds for any purpose other than those directly relating to irrigation purposes.

The Commission is and has for sometime, participated with the United States Geological Survey, and the United States Bureau of Reclamation, in connection with surveys throughout the State of New Mexico, and in particular upon the Pecos and Rio Grande Rivers, with respect to cooperative programs whereby water may be salvaged and the supply of water increased, and the salinity of water may be studied and efforts made to combat the same.

At the present time the Commission is cooperating with the Hagerman Irrigation District in the Eastern part of the State for the purpose of assisting and making a survey relative to the feasibility of concreting canals, the drilling of new wells, for the purpose of supplying the users of irrigation water within such district. The Commission has in such connection, pledged to the Hagerman Irrigation District, a loan in the amount of \$250,000, at such time as a study has been completed and proper plans, engineering data and specifications have been submitted to the Commission, and repayment of which is to be secured by revenues from the District itself.

My brief experience with the Commission leads me to believe that since

its inception the Interstate Stream Commission has served the people of New Mexico long and well, and has obtained, preserved and protected for the State and its people, many, many, thousands of acres of water, the value of which to this area cannot be calculated in dollars and cents. I feel that the Commission and its entire staff are fully and wholly devoted toward trying to preserve, protect and obtain for the State of New Mexico, all water from any source obtainable that can be used to benefit the people of this State.

THANK YOU.