

USES PERMITTED AND CONTROL ON USES
Under the General Topic of
Physical and Economic Trends in Beneficial Uses of Water

Frank E. Irby^{1/}

"Physical and Economic Trends in Beneficial Uses of Water" is the general topic of the first item of the program this morning. "Uses Permitted and Control on Uses" is the subject of my remarks, under the general topic.

In order to avoid confusion it is necessary to define the word permitted. In the sense used here the word means all uses within the legal concept of the law. The Constitution, the Statutes, and the Courts of New Mexico state that beneficial use is the basis, the measure and the limit of the rights to the use of water. The Constitution and the Statutes are based on the doctrine of prior appropriation which means that first in time is first in right. Appropriations which will detrimentally affect existing rights are prohibited.

In conformity with the theme of this conference "Water in 50 Years of Statehood--With a Look to the Future," I will begin with the situation in 1912, or as nearly thereto as historical information available to me will permit.

In 1912 public waters were being used for agriculture, industry and municipal and domestic purposes. The United States Census has reported that 461,718 acres of land were under irrigation in the year 1910. I have been unable to find a figure for the year 1912, so I will use the 1910 figure, 461,718. It is assumed that the water used per acre, statewide, was 2.0 acre feet per year which computes to be 923,436 acre feet for the year.

Industrial uses in 1910 included manufacturing, power, mining, milling, and smelting, lumbering, and water for transportation facilities such as railroads. I have been unable to obtain any statistics, if they exist, concerning the amount of water which may have been used by these industries at that date. Municipal and domestic uses of water at the time New Mexico was admitted to statehood, exclusive of any water used for minor industries, have been computed. In making this computation, I have used the United States Bureau of Census figure for the population of New Mexico which in 1910 was 327,301 persons, and have assumed that the per capita use was 50 gallons per day. Using these figures and this method of computation, I have found that 18,331 acre feet

^{1/} Chief, Water Rights Division, New Mexico State Engineer Office.

per annum were used in municipal and rural domestic consumption. This added to the 923,436 acre feet of agricultural use gives a total accountable use of 941,767 acre feet.

Data for uses in 1962 are not available. However, reasonable assertions can be made by the use of the data contained in New Mexico's statement to the U. S. Senate Select Committee on National Water Resources (September 1959).

It is estimated that there are approximately 960,000 acres irrigated now. The estimated depletion is 2 acre feet per acre which gives a total consumptive use of 1,920,000 acre feet by irrigation.

Municipal, industrial, and rural non-agricultural consumptive use in 1962 is estimated at 110,000 acre feet.

Based on these figures we have a total consumptive use of 2,030,000 acre feet for 1962.

Therefore, consumptive use for irrigation has increased by about 110% during the period of statehood, the consumptive use for municipal, industrial, and rural non-agricultural use has increased by 500%, and the increase in all consumptive uses amounts to 115%.

Please bear in mind that these figures are based on what are considered to be reasonable estimates and that reliable statistics to make such computations could not be found.

Control on Uses

As stated in my earlier remarks, New Mexico water law is based on the doctrine of prior appropriation for beneficial use. The basic surface water code under which the State Engineer administers the water of this State became effective on March 19, 1907 and has been amended, to at least some small extent, by almost every regular legislative session since that date. The basic groundwater code became law in June 1931, after the ground-water laws passed in 1927 were declared unconstitutional by the courts. This 1931 code also has been amended from time to time by our legislature. All of the waters of the State of New Mexico are declared to be public waters and the foundation law, as we might say, is very similar, for both ground and surface water. Agricultural rights are appurtenant to specifically described lands and may not be severed therefrom without the consent of the owner.

I will discuss control on uses of surface water first.

Creation and change of water districts and sub-districts and appointment of a watermaster to administer the surface waters thereof in accordance with the decrees of the courts and the permit issued by the State Engineer are authorized by statute. Five (5) such districts have been created and are presently being administered by the State Engineer.

All surface water rights initiated prior to 1907 were recognized as vested and existing rights by expression of the legislature. Declarations of these vested and existing rights are accepted and filed by the State Engineer; and are considered prima facie evidence of the truth of their contents. Appropriation of water, construction of storage or diversion dams, or canals, change of place or purpose of use of water and change of point of diversion after 1907 can be accomplished only by application to and permit from the State Engineer.

Plans and specifications must be filed and approval of the State Engineer obtained therefor if the dam exceeds 10 feet in height above the lowest natural ground surface elevation, or impounds more than 10 acre feet of water, except for stock dams whose maximum storage capacity does not exceed 10 acre feet, and works designed solely for silt retention which do not impound or divert water.

The application must be advertised once each week for three consecutive weeks and a period of ten days must elapse before action is taken by the State Engineer. If such applications are protested before the end of the ten-day waiting period, the State Engineer must hold a hearing and render his decision on the basis of the information available after the hearing. If no protest is filed, the State Engineer may act on the application at the end of the 10-day period following advertisement. In order to approve the application, it must be determined that unappropriated water is available for the beneficial use applied for and that no existing right will be detrimentally affected thereby. Any decision of the State Engineer may be appealed to the District Court in 30 days after it is rendered, if the aggrieved party so desires. If no appeal is taken before the expiration of the 30 days, the State Engineer's decision becomes final.

Headgates and measuring devices may be required by the State Engineer if he deems it necessary for the measurement and apportionment of the water.

Forfeiture of a water right occurs after four consecutive years of non-use unless circumstances beyond the control of the owner have caused non-use, such that the water could not be placed to beneficial use by diligent efforts of the owner and unless the lands are officially in the Soil Bank.

Unauthorized use of water to which another person is entitled, or the willful waste of water to the detriment of another or the public is an illegal act.

Within the external boundaries of irrigation districts and conservancy districts the delivery and apportionment of water is a function of the officers of the district. The authority and duty of the State Engineer in such districts pertains generally to the total diversion of water, the points of diversion, the storage of water and the safety of the structures.

Section 75-14-60, New Mexico Statutes, deals with ditches or acequias and exempts the officers of public community acequias established and in operation prior to March 19, 1907 from making any application to, or obtaining any permit from, the State Engineer in order to change place of diversion; Provided that by such change no increase in the amount of water appropriated shall be made beyond the amount to which the acequia was formerly entitled.

Now I will discuss the control on uses of underground water.

The laws governing the appropriation and use of Underground Waters and the drilling of wells were passed by the 1931 session of the Legislature, as mentioned in my general remarks.

The general basic laws, which apply to surface water and have been related previously, are also applicable to the ground-water law. This refers to the waters being the property of the public, to the appropriation doctrine, to the requirement that the use be beneficial and to the statutes which prohibit the impairment of existing rights. Although the basic law covers the entire state no jurisdiction in the administration of the law is assumed by the State Engineer except in basins which have been declared by him. Nineteen basins have been declared and are now administered by the State Engineer. The statutes provide that applications for domestic and stock use, properly submitted to the State Engineer, shall be approved. It is necessary that a person, firm or corporation desiring to appropriate water, other than for domestic and stock use, make application to the State Engineer and advertise the application and if objection is entered go through a hearing before the application can be acted upon as in case of surface water. Rights initiated prior to the enactment of the 1931 ground-water laws were recognized as vested existing rights by the expression of the legislature. Changes of place or purpose of use of water and change of location of well are provided for in the statutes upon the showing that such a change or changes will not impair existing rights. As in the case of

an original appropriation it is necessary that application to, and permit from, the State Engineer be made. Advertisement, hearing and decision are necessary in these cases if the application is protested, the same as in surface water law. Also the State Engineer's decision must be made on the basis of the information before him after the hearing. As in the case of surface water, the State Engineer's decision becomes final within 30 days after it is rendered unless appealed to the District Court by an aggrieved party.

Permits are also granted to drill and pump wells in lieu of taking surface water provided the granting of the permit will not impair existing rights of others. A surface water user may desire to transfer only a portion of his surface water right into such a well and this is also permissible if the conditions are such that impairment will not occur to existing rights.

Permits granted for a change of purpose in the use of water must be computed on the basis of the water consumed by the different uses. For example, in irrigation an appreciable amount of water is returned to the ground water system and thereby to the entire drainage system. This may vary in different localities because of the difference in texture of soil and other reasons. Returns from most municipal uses are measurable because they necessarily go through sewage plants and the effluent therefrom can be measured. Returns from most industries, such as power production, manufacturing, etc., are measurable both in quantity and quality. Returns from construction, such as highways and airports, are so insignificant that they are not measurable.

Declarations of rights to beneficial use of water which were initiated prior to the declaration of a ground-water basin or extension thereof are accepted and filed by the State Engineer and are considered prima facie evidence of the truth of their contents.

Forfeiture of a water right after four consecutive years of non-use also applies to the ground water; however, the exceptions to forfeiture are slightly different than those stated in the surface-water statute. Upon applications to the State Engineer and a proper showing of reasonable cause for delay, the State Engineer shall have the power to grant extensions of time, not to exceed a term of one year for each such extension, in which to apply to beneficial use the water for which a permit to appropriate has been issued or a water right has vested, was appropriated or shall have been adjudicated; Provided, further, however, that periods of non-use when irrigated farm lands are placed under the

acreage reserve program or conservation program provided by the Soil Bank Act (Public Law 540, 84th Congress) shall not be computed as part of the four-year forfeiture period; Provided, further, however, that period of non-use when water rights are acquired and placed in a water conservation program adopted by an Artesian Conservancy District shall not be computed as part of the four-year forfeiture statute.

Removal of underground waters from the State of New Mexico to any other state is prohibited, except that water produced in New Mexico may be transported to another state by tank truck where the water is used for exploration and drilling of oil and gas. The owner of the well from which the water is withdrawn shall have the duty to ascertain that the water exported is used only for the above purposes and such owner shall keep and maintain accurate records of the amount of water withdrawn and make such records available to the State Engineer upon request. The amount of water withdrawn from any one well for such exploration shall not exceed 3 acre feet.

Drilling of wells in any basin declared by the State Engineer of New Mexico is prohibited unless the driller has been licensed by the State Engineer. Drillers licenses are subject to revocation for failure to comply with the laws governing the drilling of wells.

Under certain conditions the owner of a water right may drill and use a replacement well drilled within 100 feet of the original well, prior to application to the State Engineer, and the publication and hearing. He must file application or notify the State Engineer Office of the facts and the location of the proposed replacement well by registered letter prior to drilling, and he must file application for a permit within 30 days after drilling commences.

The owner of a water right may drill and use a replacement well drilled more than 100 feet from his original well after making application but without waiting for the completion of publication and hearing; Provided the State Engineer finds that the change does not impair existing water rights and grants him a permit authorizing the drilling and use of the replacement well prior to the publication and hearing.

Under certain circumstances, the owner of a water right may drill and use a supplemental well after making application but prior to publication and hearing if the State Engineer finds that the supplemental well does not impair existing rights and grants him a permit authorizing the drilling and use of the supplemental well.

When the State Engineer has declared an underground water basin, which shall include an area in which any person has drilled a well or wells either for production purposes or as test wells and has proved the existence of underground waters in such a basin with the intent at the time to establish or augment a water supply for beneficial use, or when the State Engineer shall hereafter include such an area within the boundaries of an existing underground water basin, such a person shall have 90 days from the date of first declaration of such a basin, or its enlargement, by the State Engineer, in which to file with the State Engineer plans for the development of such water for beneficial use in accordance with such intent. Such plans shall set forth all information required by the State Engineer to judge the matter.

The State Engineer upon application of such a person prior to the expiration of the time limitation, may grant an extension or extensions of time for application of water to beneficial use and for the development of water according to the plans so filed.

After the filing of the plans mentioned above with the State Engineer, such a person shall have the right to proceed with the development of such water for beneficial use in accordance with the statutes and subject to the limitation imposed by the act. Before placing any such well on production or drilling any additional wells in such a basin or extension, the person shall make application to the State Engineer for permit to do so and for the appropriation of waters to be produced therefrom. The application shall be executed on forms furnished by the State Engineer and set forth all pertinent information required on the form. Advertisement of the proposal shall be made in the same manner as on all other applications required to be published. A 10-day period in which protests may be filed must elapse before the State Engineer can take action on the application. If a protest is filed a hearing must be held by the State Engineer as in the case of other protested applications. If, after such a hearing, it shall appear that there are no unappropriated waters in said underground basin or that the proposed appropriation would impair existing rights the application shall be denied. Successive applications within the limit of the intent of such a person at the time of drilling the initial well or wells, as such intent shall be determined by the State Engineer, may be made and filed with the State Engineer and each such application shall be treated separately by the State Engineer and notice thereon shall be given and hearing thereon shall be had and determination with respect to the allowance thereof shall be made as provided above. No right to the use of water under this act shall rest in any person until after the granting of the permit and application of the water to beneficial use.