GROUND WATER ADMINISTRATION IN ARIZONA

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As Mr. Reynolds has said, "I appear here substituting for Mr. Lassen, State Land Commissioner for the State of Arizona, in which capacity there devolves upon him in addition to administration of State lands, the administration both of appropriable waters and ground waters."

First he has asked me to extend to the sponsors and to those persons in attendance at this 6th Annual New Mexico Water Conference his best wishes for a successful conference and his regret that he was unable to attend and participate in this panel discussion. To me, however, it is a pleasure to be here and to renew so many old friendships and make some new ones.

A little history appears appropriate as introductory to Arizona's ground water administration. When Mr. Lassen arrived in Phoenix in 1906, practically all of the irrigated land was irrigated from gravity flows of water diverted from brush dams placed in the rivers, consequently farming operations were geared to the amount of water which could normally be expected from that source.

Following construction of Roosevelt Dam on the Salt River completed in 1911 additional land was brought under irrigation adding to the 152,000 acres then under irrigation. This was not all good, for in the early '20's roughly 55,000 acres was becoming water logged in the lower Tempe country and in the area west of Phoenix. To cure that condition, drainage canals were constructed but were soon found to be unsuccessful. Thereafter, extraction of water by wells was started. All went fine for awhile and most, if not all the water logged lands were restored to a high state of cultivation but the extraction of ground water did not stop there. Soon more water was being removed than recharged was restoring.

The Eloy area was the first to experience difficulties. Studies by geologists and engineers showed that it would not be long before it would be uneconomical to farm due to the high cost of developing ground water. Other areas were soon in the same situation. It was under these conditions that the Arizona Legislature was asked to enact legislation establishing controls over ground water. After a period in which all drilling was prohibited in certain designated areas and many hectic special and regular sessions, Arizona's ground water code was evolved.

By this code the Land Department is charged with administration of "Ground Water" which is defined as "water under the surface of the earth regardless of the geologic structure in which

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it is standing or moving. It does not include water flowing in underground streams with ascertainable beds and banks.

The Department's duties appear to be four in number.

(1) A despository for compiling and maintaining records and factual data.

(2) Designating and altering the boundaries of ground-water basins.

(3) Designating and altering critical ground-water areas.

(4) The source of permits for new and for replacing or deepening irrigation wells within critical ground-water areas.

Before discussing these duties, it is probably well to clarify our terminology and for that purpose, we will use the definitions of the Code.

"Ground-water basin" means land overlying, as nearly as may be determined by known facts, a distinct body of ground water, but the exterior limits of a ground-water basin shall not be deemed to extend upstream or downstream beyond a defile, gorge, or canyon of a surface stream or wash.

"Ground-water subdivision" means an area of land overlying, as nearly as may be determined by known facts, a distinct body of ground water. It may consist of any determinable part of a ground-water basin.

"Critical ground-water area" means any ground-water basin as defined in paragraph 5 ("Ground-water basin") or any designated subdivision thereof, not having sufficient ground water to provide a reasonably safe supply for irrigation of the cultivated lands in the basin at the then current rates of withdrawal.

"Exempted well" means a well or other works for the withdrawal of ground water used for domestic, stock watering, domestic water utility, industrial or transportation purposes.

"Irrigation well" means any well or works for the withdrawal of ground water primarily used for irrigation purposes and having a capacity in excess of one hundred gallons per minute.

The 1st of the duties is fulfilled by a requirement that all wells existing prior to October 3, 1945 had to be registered, giving location, depth and other pertinent information and by the continuing requirement that any person desiring to drill any well give notice of intention to drill providing information as to location, depth, etc., and thereafter requiring the filing of the log by the driller.

The 2nd duty is being fulfilled as factual data for the determination becomes available.

The 3rd duty has been fulfilled in part by the designation of seven (7) critical areas with the prospect of several more in the near future. (This is a difficult duty to perform in that it is generally not popular with the people in the area until too late.)

Lastly is the problem of granting permits. Permits for new irrigation wells within critical areas are only granted for the irrigation of lands that were irrigated at the date the area was declared critical or within five years prior thereto.

A permit for replacing or deepening an irrigation well may be had on a showing that the well will no longer yield sufficient water to irrigate the land normally supplied by it within the five (5) years immediately prior to filing application for the permit.

In summary, primarily the law prohibits new irrigating wells in critical areas leaving restrictions on the use of water from existing or proper new wells to be suppled by the general Arizona Case Law, in particular the case of Briston vs. Cheatham, 75 Ariz 228, 240 P2d 185 (1952), rev. 75 Ariz 227, 255 P2d 173 (1953) which reaffirms the rules that percolating waters belong to the landowner and that the burden falls upon an appropriator of ground water to rebut the presumption that the water is percolating and established the doctrine of reasonable use as the test of the landowners right to use the water.