

THE FARMER'S INTEREST IN WATER RESOURCE PLANNING

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When we were asked to talk on a farmer's interest in water resource research, we accepted because we thought the subject would not be too hard to discuss. However, as we began to look for information from different sources and to evaluate the proposition, it seemed to become more and more axiomatic as to be comparable to the proposition that two and two make four.

Water in New Mexico is in an opposed category from food and fiber. Not too many years ago men's winter apparel was generally wool and summer wear in society was white linen. No doubt many of you remember your mother rendered her own lard and churned her own butter. Today any number of substitutes are available for the then limited number of fibers and vegetable fats to a large degree, more replaced animal fats. Not so with water. Without it, you do not sustain either animal or vegetable life, either withers and dies.

Water in the state of New Mexico is one of our most limited resources, consequently, if the economy of the state is to expand and grow it behooves every segment of society to be water conscious and employ such practices as will be most beneficial for the people of the state. Of all segments of society agriculture is most vitally affected. The state has already recognized that the sustenance of human life has a priority in the use of water over agriculture in that it has given municipal needs the right of condemnation over agriculture.

The state of New Mexico operating upon the general theory that all water is property of the state and an individual, or group of individuals, establish their right to its use by prior, continuous, and beneficial use is naturally thereby comparable to the quotation in the scriptures, "The Lord giveth and the Lord taketh away." We hear much these days of old existing water rights, but it would seem a fair assumption that in the event of necessity, in order to continue the development of the state's economy, the state would in all probability revise the then existing rights for the benefit of its population along fair and equitable methods. If that day should come, then agriculture will suffer, for it certainly cannot go into the open market and compete financially for the use of water.

It is not my intention to be an alarmist, but my experience as a member of the Interstate Streams Commission for a period of some eight

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years have shown that with the exception of some 200,000 acre feet of water a year in the Canadian River Basin and as soon as the San Juan Basin is developed, all of the surface water of the state is in effect over appropriated today. These appropriations have been made more or less on a fifty year average of availability of water in the several basins. Yet the precipitation and flow in these areas is so erratic that frequently we are faced with a period of years of subnormal water supply. Certainly no one would advocate limiting the use of water to that available in drought years and let the abnormal runs go on down the streams. Because of this condition of erratic flows, problems are created and it is these problems we have to resolve to the extent possible.

There are no doubt many approaches to the problem, some that appeal to me are:

1. Through research locate and develop within the realm of feasibility all the underground basins within the state. A few years back it, at least, was not common knowledge that there were underground basins in Lea and Hidalgo counties. How many more are available through searching and drilling wells?
2. Make a more effective use of the water being diverted. Records show that in practically every irrigation project from forty to fifty percent of the water diverted is consumed by seepage. Does this seepage return to the stream in sufficient volume and at such a rate as to become available for use by others or is it in effect lost and wasted? Naturally every project will have its own peculiar circumstances which no doubt will require different procedures to reclaim the wasted water to the maximum extent.
3. An investigation in a limited way is under progress now to determine the feasibility of underground storage of water in abnormal rainfall years to conserve it for future use when needed. What the result will be, is anybody's guess, yet if it can be done with justifiable volume and with reasonable expense it will mean much for the economy of the state. No doubt there are numerous other solutions to the problem that will be developed as the necessity arises, so may I close by saying that a farmer who is not interested in water research is displaying his ignorance of the subject, his lack of information, or else he is a person operating on the theory of "Let the Lord provide" and if some one has to take the Lord's place that is perfectly alright with him. Yet in my book the Lord helps him who helps himself, not to the disadvantage and deprivation of others, but in those things that help him and at the same time helps his friends and neighbors.