PREFACE TO PANEL WATER USES FOR THE NEXT HUNDRED YEARS

George R. Dawson $\frac{1}{2}$

Charles F. Kettering once said "We should all be concerned about the future because we will spend the rest of our lives there." The aim of this conference has been one that reflects our concern about future water supplies and needs over the coming century, especially as these relate to New Mexico.

When this particular panel was first suggested, it was appropriately called an "imagineering" session. Any attempt to examine water needs one hundred years from now can be nothing more than "imagineering." In looking this far into the future, it became apparent, rather soon, to the participants in this panel that one cannot necessarily prognosticate about the future by looking at the past. To get the point of this statement, one only has to answer the question that might have been asked of a person one hundred years ago as to "What would the world be like today?" Under no sense of imagination would he or could he have visualized the events and technology of 1968.

It is therefore of utmost importance that you bear in mind that our panel members today are probably not blessed with much better predictive powers than were our ancestors of a century ago. The rate of technological change on <u>all</u> fronts probably makes it even more unlikely that this imagineering about the future can be very factual at this point in time. Also, any look into the future is complicated by man's political and social habits. The future in this respect is even more cloudy and uncertain--

With this dismal view as to the seemingly futile and impossible task of saying anything with precision of the next century, it may then logically be asked, "Why are we going to spend the next hour and fifteen minutes talking about water uses for the next hundred years?" The answer is really quite simple.

We do know enough about where we are today - i.e. our uses of water, availability of water, population growth, etc., to realize that planning must start now if we are to meet the future needs. Both time and the stork are working against us.

Time is required to make the necessary plans for water development, transfer, reallocation, etc. Likewise, ample evidence has been presented to support

^{1/} Professor and Head, Department of Agricultural Economics and Agricultural Business, New Mexico State University, Las Cruces, New Mexico.

the views that the world population will double by the year 2000. Man may, during this time interval, bring about a reversal of the population explosion but facts being as they are around the world today, not much change in the growth of populations will be realized in the next 30 years. Optimistically a change will have started that will in fact slow this rate of increase to a tolerable level. The concept of time then is related to the entire spectrum of problems associated with change - be it technological, social, cultural or economic.

Each panel speaker will present a synopsis of a longer and more detailed paper that will be published in the Conference Proceedings. Their assignment in their respective fifteen minute presentations is to give principally the summary and conclusions of the longer and detailed papers. It will become obvious that competition among users of water in New Mexico will without question increase in the future.

Each paper has been prepared independently of the others so as to free each speaker to devote his "imagineering" specifically to the particular topic assigned. We will therefore note variation in the basic assumptions about the future and the forces that might bring about the changes forecasted. I would hasten to underscore the fact that none of the speakers have attempted a definite forecast of the future. Instead their papers will reveal probable uses and needs under assumed and varying conditions. This is all that any prediction of the future a century away can be. Man must continue to make such efforts to look at the future so that over the shorter time span a better job of planning and execution of plans can be possible.

Some states are spending several hundred thousand dollars on studies to determine needs and uses of water in the next hundred years. Our speakers spent several frustrating hours, a few broken pencils and pads of paper. I say this not to conclude that their product is in <u>truth</u> of any less value than some studies costing large amounts of money. We are not reporting results of any formalized study of the magnitude mentioned.

The three papers were prepared with three common assumptions - and these were with regard to population projections, water supplies, and per capita income. We of course did not have the projections presented yesterday by Professor Edgel so may not have made projections compatible with his. In fact, our estimates are much more conservative.

Our population projections were for three levels to the year 2060. These projections were: low-2 million; medium-3.5 million; and high-5 million people for New Mexico. These projections reflect a basic assumption of

in-migration to a state experiencing a healthy economic growth and blessed with a climate and the resources to attract people and capital.

The water supply levels assumed were: (1) existing supplies and depletion of some of these supplies before the year 2060, (2) some importation to maintain current competitive positions of water users, and (3) abundant water supplies for all users through importation and/or weather modification.