

## AGRICULTURAL WORKSHOP REPORT

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The first question that the agricultural workshop addressed was that of the water use conflicts that come about as demand grows for our limited supply of water.

I'd like to make note that in our workshop we did not restrict ourselves to only "new" conflicts, but we covered all the important water use conflicts. Although some of these conflicts have been discussed and dealt with before, they still remain vitally important. They become increasingly important as time goes on and the inevitable water shortages draw increasingly near.

The agriculture workshop was the largest of the workshops and I think it is worth mentioning that we had a high degree of participation. Almost everyone contributed to the discussion and we made an extensive list of water use conflicts.

The over-riding theme of the discussion was the survival of agriculture. Of prime concern was the evergrowing problem of agricultural land being taken out of use and converted to residential tracts. This process is not reversible. With world hunger a major problem, we should not even be removing a single acre of land from production; other compensating steps should be taken.

The term "beneficial use" has multiple meanings and is intimately related to the state's water problems. Should it continue to be defined in economic terms such as, the best use of water is that which brings

the highest economic return? A conflict arises. Other benefits should also be considered, such as the importance of the food produced. Also, both the short-term and long-term impacts of water use need to be considered. In some cases it might become "more beneficial" to save a water supply for a future use. In some cases the water supply is not a renewable resource -- it is mined and will eventually become extinct.

Many conflicts concerning the allocation of the water supply will arise. Just how should the water supplies be divided up during shortages? Is it solely a problem of economics? How will it be divided between the "haves" and the "have-nots"? How will domestic water shortages be dealt with? Lifestyles, health, and welfare are bound to change. The "eminent domain process" associated with water rights have already been evoked! Raton, New Mexico, is an excellent example of this. Cities do have this right to take land and water rights away from the farmer through the power of eminent domain. Interstate conflicts will also appear more often in the future. Both surface and groundwater resources need to be evaluated and the two are interrelated. Two current conflicts exist: 1) Texas and New Mexico boundary, and 2) El Paso case. We cannot, however, close the borders of New Mexico to the exportation of water by-products such as electricity. Closing our borders to export will inevitably harm our imports. This problem of state sovereignty of water rights will be more directly addressed as water shortages increase.

Another allocation conflict is that which is based on our treaty obligations. Indian rights to water will probably be decided in court. We also have our obligations to Mexico which will be increasingly difficult to meet.

One additional category of conflicts is also of major importance -- the concern of water quality. Ground water and surface water pollution control regulation is in question. Different qualities of water have different uses -- this needs to be recognized. Increasing salinity also continues to be a major problem and needs to be solved.

All of these water use conflicts will be surfacing more often and more severely in time and will need to be solved individually.

The second question our workshop addressed was the development of management schemes and technologies to use our water supply more effectively. Again, we did not limit ourselves to only "new" ideas. We were unanimous in agreeing that we can use our water much more efficiently -- the major principles being: 1) reuse and recycling of water (greenhouses are a good example of water reusing); 2) more efficient routing procedures (why store water in Elephant Butte which has such a large evaporation rate, when we can use other reservoirs such as Abiquiu); and 3) better agricultural practices need to be adopted.

The most important concept is to reduce evaporation and seepage. Drip irrigation is only one of the practices that strikingly reduces the total amount of water applied to a crop. But we also need to learn to use our poorer quality water resources more efficiently. Perhaps then we can save the better quality water for other uses.

We need to develop better breeds of plants, especially ones that are more salt-tolerant and use less water.

Finally, we need to look into public education. We need research and education to prevent the usual increase in per capita use that comes with time and affluence. Incentives to conserve need to be aroused.

New Mexico has the rare opportunity to live on the mesa and farm in the valleys -- we should change our ways and do so.

The last question addressed yesterday was that concerning information required (again, not only new information). The discussion evolved around the need to develop alternatives to our present practices. We need new incentives, new ideas. Biologists, engineers, and economists are currently approaching the problem with models. This is an important beginning. We then need to communicate our new ideas -- teach the people of New Mexico, explain the alternatives they have to minimize future water conflicts. Early awareness should be stressed in the schools. Because this is a democratic society, the people of New Mexico will make these decisions.

This morning other special problem areas were discussed. I'd like to restate these as a summary of our workshop.

The first was water allocation. In addition to what I stated earlier, the future involvement of the courts was stressed. If unresolved, serious water shortages will exist, affecting all the people of New Mexico, both those involved in agriculture along with those involved with municipal, industrial, and recreational uses.

The second issue discussed in the morning session was water quality. In addition to items discussed earlier, it was stressed that it is not necessary to remove or prevent all water pollution. Agriculture does not need water of as high quality as the home owner does for consumption uses. If the water quality issue is not resolved, unnecessary

compromises will be made. Domestic water quality may suffer to the same degree as agricultural water. This could cause severe health hazards.

Thank you.