

RIO GRANDE WATER FOR AGRICULTURAL USES

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Some 1900 years ago a fellow by the name of Ptolemy advanced the idea that the earth was the center of the universe and the sun and stars revolved around it. 1400 years later a Prussian, Copernicus by name, decided that Ptolemy's view was limited and that the sun was the center of the universe and the earth only one of a number of bodies that revolved around it.

Except for one previous lapse we have been discussing New Mexico's water problems from a Copernician point of view. In discussing the problems of the Rio Grande from a Ptolemaic view, I don't know what to do and hardly know where to begin. Several previous speakers have alluded to the unprecedented water restrictions on the Rio Grande project. Without reviewing this in detail let me recall for you that in each of the last three years the irrigation allotment in the project has been six inches or less per acre foot.

Thus far in the conference we have managed to steer clear of controversy because we have been discussing the broader aspects of water resources. Statistics are nice. They enable us to cut a problem down to size so our finite minds can work on it. But they cannot tell us the whole story and they can be misleading like the logging camp where two women cooked for 100 lumberjacks. One of the lumberjacks married one of the cooks. 50% of the women married 1% of the men.

C. E. Busby says, "The more valuable water becomes, the more conflicts of interest arise over its use and management. These conflicts may lead to insecurity of investments and impeded economic growth if basic law is not provided to assure protection of rights and a fair apportionment of the supplies to satisfy the rights. Permits and licenses issued as in the case of appropriations of surface water, are specific, as to time, place, and quantity. The license constitutes real property and may be conveyed in the same manner that land is conveyed", unquote.

The first and foremost cause of our present plight is drouth. We are in the throes of the worst drouth on record. As far back as the Spanish conquistadors there is no recorded evidence of such a severe and prolonged drouth.

The present drouth situation is aggravated by the failure of the Rio Grande compact to operate in an effective manner. This compact became effective in 1939 after ratification by Texas, New Mexico, and Colorado legislatures, the Congress and approval by the President. It was supposed to settle for all times controversies between the three states over the diversion of waters of the Rio Grande. In New Mexico we have been faced

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with a situation where from the attitude and actions of upstream users it appears that no serious and sustained attempt has been made to comply with the compact and apparently little effort has been made to conserve water or reduce waste and make required deliveries downstream prior to the advent of the Bureau of Reclamation in the Middle Rio Grande Area.

This attitude, coupled with the failure of the state to see that its citizens and political subdivisions comply with the compact have made it necessary for Texas to file suit to compel compliance. We now find the state of New Mexico, as Mr. Reynolds pointed out, in the paradoxical position of being engaged in internecine conflict with its own political subdivisions, questioning interpretations of the compact previously accepted, refusing to officially accept the computations of engineering advisors to the compact commissioners, and doing everything possible to prevent the suit from coming to trial so that determination can be made of the issues.

The state of Colorado, while not a party to the suit, has refused to officially acknowledge data determined by compact engineering consultants which define the extent of their debit to the Rio Grande project.

So much for the controversial.

We in the project appreciate the effective work of the Bureau of Reclamation in the middle Rio Grande Valley which has resulted in considerable conservation of water and which will effect greater conservation in the future. The San Marcial channel has been extended further north and rehabilitation of drainage, irrigation and distribution systems is well underway. We commend the Bureau for its efforts to change the methods of operation of the conservancy district to make better use of available water.

Nor can we pass up the opportunity to express appreciation to the State Engineer, the Governor and the legislature for appropriating and making available funds for the purpose of keeping down the growth of water consuming vegetation north of Elephant Butte.

In view of the experience of the past few years, it seems that it would behoove the state and its organized irrigation districts up and down the river to attempt to make the best possible use of available waters by reducing wastes and losses and, consistent with finances available from users, strive for maximum efficiency. Our water users board of directors is now considering a rather ambitious plan for lining certain portions of the river below Elephant Butte. The proposition involves a very heavy financial burden on water users which cannot be entered into lightly. We realize that we in the project are not perfect in water use efficiency but significant progress has been made in the past ten years.

In spite of some differences it seems we should all unite in a sustained effort to achieve maximum conservation. It may well mean survival in the long run.

Like Lady Godiva, I'm approaching my close, the after thought on San Juan additions.

We in the project certainly do not object to the importation of additional water from any source provided quality is satisfactory but we are keenly interested for obvious reasons in the methods of operation to be employed and particularly in the accounting methods adopted and how and by whom will diversions be controlled. The question naturally arises - "Then why did you reject the opportunity to participate?" Stream flow records indicate close correlation between flows in the San Juan and the Rio Grande. No firm delivery offer was made but simply a supply fluctuating according to stream flow. When we, on the basis of past experience, might be in the greatest need of water there would be little available and when we might need it the least, a normal supply would be available.

To obtain this fluctuating supply it would have been necessary to assume a financial burden of \$90 per acre, equal to the total original cost of the project including Elephant Butte, to assure a maximum delivery of one-half acre foot to the farm. Water users felt that it was simply not financially feasible.

We do, however, feel that as residents of the Rio Grande basin in New Mexico we are entitled to find out who will handle the water and how. How will the mingled waters be unscrambled? What allowances will be made for transportation losses. Will the diversions be accurately and fairly measured and properly controlled so that no more water will be taken out of mingled flows than the San Juan users on the Rio Grande may be entitled to use.

In closing let me pose this question to irrigations users. If you set up municipal uses of imported water and such uses expand to maximum amounts of imported water available for that purpose as they inevitably will; and we run into a series of years of subnormal stream flow, can the irrigation users be sure that municipal uses will be curtailed in proportion to the reduction in stream flow?

Thank you for your courteous attention.