

PROPOSED ESCALANTE VALLEY POLICY
ON CHANGE APPLICATIONS

The State Engineer has been advised that during the past several years a number of water users in the Escalante Valley area have been changing from flood irrigation systems to sprinkler irrigation systems in order to improve their irrigation efficiency. In other words, if a water user had proved up on a right for 100 acres, the present duty being 4 acre feet per acre, that individual would have a total award of 400 acre feet annually. By using sprinkler irrigation he is now able to irrigate 200 acres instead of the original 100 because of increased efficiency. However, it appears that some water users have expanded their acreage without having approval of the change by the State Engineer and are presently irrigating more acreage than was originally certificated to them. Because of these and other problems it is felt that the State Engineer should set forth his policy on this matter which, hopefully, will lead to a solution of many of the problems which seem to be developing in this area. During the summer of 1973, the State Engineer conducted a crop survey in the Escalante Valley to determine the exact amount of acreage being irrigated at that time. It is anticipated that this information will be used as an aid in fulfilling the provisions of this policy.

In 1967 the State Engineer set the following policy at a public meeting.

1. The State Engineer declared that approval of any pending applications would only cause more water to be mined from the basin and would accelerate the downward trending of water levels and would also create interference with the established rights. Therefore, all pending, unapproved, consumptive-use applications on file will be rejected.

2. All future applications to appropriate ground water from the basin will be rejected until such time as additional hydrologic information might warrant reconsideration of this policy.

3. In order for future new projects such as industrial and subdivision developments to continue, the State Engineer indicated that he would favorably consider permanent changes in point of diversion, place of use, and nature of use under existing perfected rights and approved applications, and that each right sought to be changed would be carefully reviewed and considered individually on its possible direct interference with other rights.

The reason for this policy announcement was that the State Engineer concluded that this ground water basin was fully appropriated and to allow additional rights would impair the established rights of existing water users. Since 1967 the State Engineer has, in conjunction with the U.S.G.S., continued to gather data concerning the water supply of this basin. This data has only served to confirm the conclusions of the 1967 policy decision that there is no additional water available for appropriation. Of course, it also follows that if those users with existing rights were to enlarge these rights in such a manner that there would be a substantial increase in water consumed from this basin this could impair other rights just as effectively as a new appropriation. This, of course, is the reason for the concern of some of the users in this basin and the reason why the State Engineer deems it necessary to further define his policy with regard to changes which are made on existing rights. Before reviewing the criteria which the State Engineer proposed to adopt when evaluating changes it should be noted when a change is required. Section 73-3-3, Utah Code Annotated, 1953, provides that a water user may change his point of diversion, place of

use or nature of use. However, a change application must be filed and approved by the State Engineer. This statute further provides that the State Engineer must conclude that the change will not impair other rights. It is to this latter proposition that this discussion is directed. In evaluating changes from flood irrigation to sprinkler irrigation on expanded acreage the net depletion to the ground water basin must remain substantially the same, otherwise there will be an enlargement of the right to the detriment of other users.

This office has been studying the problem through most of the summer, researching available data on consumptive use by the crops, deep percolation of the applied water back to the underground source and other matters relating to this problem. In studying the deep percolation aspect of this problem, it is our preliminary conclusion that deep percolation in this ground water basin ranges from figures as high as 84% to as low as 8% of the applied water. Nearly all of those areas studied using flood irrigation as the method of application seem to have quantities ranging from 20% to 30% of the water basin. When a farmer goes to sprinkler irrigation, the deep percolation is reduced because of the increased efficiency of application.

Due to the problems described, the following policy is proposed for consideration of all the pumpers of the Escalante Valley.

1. All future change applications requesting permission to expand acreage by going from flood irrigation systems to sprinkler irrigation systems will be evaluated and will receive a reduction in their annual acre foot aware to compensate for the loss of water to deep percolation after this expansion. Our preliminary findings indicate that this figure should be approximately 25%. Of course, each change application will have to be evaluated on the individual facts surrounding that particular change application.

2. On those farms that have already expanded without proper change application, the owners will be notified and given a change to file a proper change application which will be evaluated along the same guidelines.