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POSSIBLE EFFECTS OF STREAM CLASSIFICATION

presented by

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The Arkansas Valley Ditch Association represents thirteen canal companies beginning at Pueblo and running the length of the Arkansas River to the Kansas State line. Its membership includes municipal, industrial and agricultural water users. These thirteen canal companies represent over 70 percent of the people in the Arkansas Valley, and its economy is based upon the water they supply their stockholders. The water diverted by the agricultural canals irrigates 350,000 acres.

The Arkansas is an over-appropriated river. Very seldom does it supply all of its diverters with 100 percent of their needs. Irrigated agriculture has been developed through the use and reuse of this limited amount of water.

The PACOG concern is with the quality of return flow to the stream. We share this same concern. However, we also feel the maintenance of quantity in regard to return flow is equally important. Any attempt to restrict return flow in order to enhance quality will have an adverse effect upon the amount of water available to a downstream diverter that depends upon return flow for his supply.

The importance of these return flows is illustrated by the fact that District 14 and 17 diversions are 154 percent of average flow at Pueblo, and the combination of these districts plus District 67 diversions are 184 percent of Pueblo flow. Most of the diversions of the Fort Lyon Canal Company, Las Animas Consolidated Canal Company and John Martin storage are return flows.

Because of this dependence upon return flow, we are concerned with the present stage of the 208 Water Quality planning program. Stream segment classification and its possible effect upon these return flows.

In arriving at these segment classifications, we must not lose sight of the economic and technical feasibility of implementation of an upgraded classification. That is, the degree to which any particular type of discharge would be subject to treatment. The economic feasibility of treatment techniques, and the extent to which the discharge is to be controlled. Particularly, the volume of discharge that some future type of treatment may limit this discharge in order to meet an unrealistic classification.

In arriving at stream classification we must not forget beneficial use. The first basic of Colorado Water Law. Proposed stream classifications are strongly biased toward the propagation of terrestrial and aquatic life. The propagation of terrestrial and aquatic life is not a beneficial use of water under Colorado law. We are not against this use where practical or realistically attainable. We would strongly object to the requirement that use classification be based upon this use as a higher priority use than beneficial use.

If all our stream classifications are to be biased toward recreation and aquatic life, it can only be done at the expense of the valley's agricultural economy.

This would be particularly true in regard to Segment C of the Arkansas below Pueblo where return flows from the City of Pueblo, CF&I, and agriculture

become the makeup of the stream. Treatment of the two point discharges are as of yet undetermined as to type and degree necessary to bring the un-ionized ammonia levels low enough to allow for the classification of warm water aquatic life. We don't know what type of treatment will be diverted toward agricultural non-point discharges, but any kind of treatment will entail some type of retention or evaporation if the classification is unrealistic for the segment.

Another factor to consider is the Winter Water storage program. During the winter most of the natural flow would be stopped and stored in Pueblo Reservoir. This would lessen the volume of water below Pueblo. The Pueblo and CF&I discharges would become the stream. The maintenance of a warm water aquatic standard would become even more difficult through this period. The classification for the stream from Pueblo down should be agricultural only.

We do not question the sincerity of the 208 planning staff in attempting to put together an overall plan to enhance Pueblo County waterways. We have reviewed their analysis of the side stream segments, and also their suggestions for classification. Most of these suggestions are based upon the assumption that these streams are capable of supporting a higher future use for which the water is to <u>become suitable</u>.

The staff has identified pollutors within the segments and also suggested methods and installations by which the entities involved could clean up their discharges. Most of these methods are evaporative or restrictive in the amount of water allowed back to the stream, a restriction on return flow that a downstream appropriator has put to beneficial use, and is legally entitled to.

Although some of the side streams mentioned are intermittent in nature, all are hydrologically connected to a viable groundwater aquifer that supports the main stem and an irrigator downstream. The lower segments of these streams should also be classified agricultural only.

In regard to storm water runoff, the 208 Water Quality planners may regard silt in a stream as a problem but to our irrigators it is a valuable asset. Irrigators welcome a periodic supply of water with a high silt content. Many farmers value muddy water at one and one-half times above the value of clear water. It reduces transportation losses both downstream and within the canals themselves. Also, water that has a silt load goes further in the field.

As an example, the Bessemer Irrigating Canal Company is currently in litigation with the Bureau of Reclamation. Object of contention - Deprivation of Historical quality of water for irrigation. To the Bessemer, Historical quality means water that contains a certain amount of silt. The company now receives clear water from the Pueblo Reservoir and the effect has been much higher canal transportation and field losses due to this change in water quality. A definite economic loss to the farmers under the system.

Another problem in regard to storm water runoff is that structures or retainers that may be built for control. If operated incorrectly will tend to change the magnitude and quantity of water to the stream, and would inevitably become sources of controversy, and of possible litigation as to ownership of the flood water.

We feel that in most cases storm water runoff can be controlled by effective soil management. We also feel that most farmers practice soil management as a matter of course.

In summary, it is not the intent of the Arkansas Valley Ditch Association to impede or prevent a program to enhance the quality of water in our streams provided that our streams are kept whole and not materially depleted in usable quantity in the process. We do feel that under our system where use and reuse are a fact of life, we cannot afford the luxury of an excessive anti-degradation plan. The plan must be developed with care and consideration and must be compatible with all facets of the valley's economic need.