

**THE UPPER ARKANSAS WATER CONSERVANCY DISTRICT'S WELL AUGMENTATION PLAN**  
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**"OUR LIVES ARE WRITTEN IN WATER"**

When the first Europeans explored the lands we now call the arid southwest, they characterized it as uninhabitable and undesirable. But as development spread west the early pioneers used their ingenuity to divert water from the streams that were filled from the annual melt-off of winter snow. Storage facilities were built to extend the availability of water and to stave-off drought. The land was cultivated and an agricultural industry was built especially around livestock raising.

Today, under the water law doctrines established upon these arid southwest lands, prior appropriation and beneficial use, roughly 90 percent of available water in Colorado is dedicated to agricultural use. History has made it this way. As we prepare to solve the water problems associated with growth in Colorado, there are only two ways to achieve a solution. Change the use of agricultural water to municipal and industrial uses or under take at an aggressive rate the development of increased storage vessels with minimal use of existing agricultural water. The latter preserves our agricultural base and the former, although more immediate and initially less painful, destroys forever the green fields and meadows that have lured so many to Colorado.

**THE PLAN**

The Upper Arkansas Water Conservancy District, recognized this dilemma and undertook a bold plan in 1992 to establish a blanket well augmentation decree to enable it to accomplish the goals of:

- 1) making well augmentation available at a reasonable cost to residents and all entities within a defined area in the Upper District
- 2) encouraging xerophytic landscape designs.
- 3) providing a means for existing in-house exempt well owners to legally irrigate landscapes
- 4) increasing the amount of water stored in existing and new storage facilities thus protecting the senior water rights in the District's streams
- 5) minimizing the use of agricultural water for well augmentation thus maintaining an agricultural base in the District.

The success of the augmentation program has been exemplary. We now have 4 major storage facilities in addition to utilizing the Fryingpan Arkansas project system for storage and twin lakes water and related storage. The Upper Arkansas is in an area uniquely designed for a successful augmentation program. With transmountain water available, there is a reduced need to buy agricultural water and dry irrigated lands. A combination of minimal amounts of senior irrigation water and transmountain water placed in storage creates an ideal situation for maintaining the green meadows and solving the water problems associated with growth. The continued use of irrigation on the land helps maintain ground water, and augmentation releases maintain the water in the streams for surface water users.

## UNDERSTANDING AUGMENTATION

There are some who do not understand the concept of augmentation. Augmentation of wells puts no water in the well. It is not designed to recharge the aquifer. It is however designed to protect senior water users from the damage caused by the depletions associated with well use by junior well water users. As history teaches us the vast majority of senior water rights are surface water rights. The Kansas lawsuit forced the state to recognize that ground and surface water need to be administered under the same priority system. This placed greater emphasis on the need to have available to individuals and communities a well augmentation plan. Communities without an augmentation plan like the Upper Arkansas's blanket plan are faced with problems such as municipal well water systems that are suddenly out of priority. Typically the only solution for them is to buy the closest ranch, with senior water rights, and dry-up those green fields and meadows for their water supply unless a blanket augmentation plan similar to the Upper Arkansas Water Conservancy District's is available.

Another misconception is that "Availability of water causes growth"!! Historically growth follows the availability of jobs. Jobs come to communities with good transportation, communication and an available supply of power. In addition, the availability of resources that are comparatively less expensive than other areas attract industry and thereby create jobs and growth. If these synergies are present growth occurs, and the necessary well augmentation plans are developed by entities financially able to buy the area's best water rights and ranch. This is the easiest method and normally the only available method for private entities and municipalities without a modern blanket plan similar to the Upper Arkansas Water Conservancy District's.

## WHO IS UTILIZING WELL AUGMENTATION?

Over 90 percent of the operating wells in the Upper Arkansas area are not in the district's plan of augmentation. These wells are operating in one of the following fashions:

1) exempt wells on a 35 acre parcel-The state does not require augmentation here but this well owner can potentially deplete nearly 2 acre feet per year. Under the district's plan, the typical augmented well depletes only 1/10th of an acre foot per year.

2) In-house exempt wells on a minimum of 2 acres - In recent years the state has begun to enforce the in-house requirement, but still there are those who irrigate small lawns and shrubs outside their homes with in-house wells. Under the district's plan, many individuals have come forward and augmented their wells in order to legally irrigate outside. Nearly half of all district augmentations have been for existing wells many of which came from this group. However, many still exist un-augmented in this category.

3) Private augmentation plans that came of vogue in the late 1960's. There are approximately 50 private augmentation plans in operation in the Upper Arkansas Valley. These early plans typically dried up old ranches and utilized many older water rights. Early plans did not have the advantage of utilizing proven methods that today assure delivery of the depletions to the streams most affected. The administration of these plans are cumbersome and difficult to monitor whereas modern plans such as the UAWCD'S are meticulously administered by district staff in close cooperation with the division and the state engineers staffs.

## THE DISTRICT PRESERVES BUSINESSES AND JOBS

26 percent of the wells augmented through the district's plan are commercial wells representing nearly half of the water dedicated to replace stream depletions in the upper valley. These commercial applications require individual engineering in many cases to determine the depletion requirements.

79 percent of commercial augmentations were for existing businesses. In the wake of the Kansas victory and the new well regulations in the Arkansas Valley these businesses were able to turn the district for affordable well augmentation. From recreation, wholesale, retail, agricultural and service sectors these businesses came to the Upper Arkansas Water Conservancy District for augmentation in order to remain in business. What this plan has done is preserve as well as help create new business and jobs.

## A CHALLENGE TO PROVIDE SOLUTIONS WITH THE DISTRICT

Growth has been coming since Colorado was discovered and it will continue. We need to prepare for growth so that the inevitable problems associated with growth can be solved. Water can and will be made available for growth either by private augmentation plans calling for dry up of vast amounts of ranch land or can be achieved through a blanket plan like the Upper Arkansas Water Conservancy District's utilizing storage and a majority of transmountain waters with a minimum of native water. The directors of the district believe we have made the right choice by planning ahead. We believe that municipalities should embrace our concept and refrain from the acquisition of ranch land for water and join with the District in building storage facilities and increase the utilization of project water and other methods for future water needs.