Legislative Changes Impact Groundwater Management in Utah

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Introduction

While legal right to access Utah’s limited water supply has been in place since territorial times, those rights were focused on surface water source-lakes, streams and reservoirs. During this time, groundwater supplies were not accessible except through free-flowing springs and crude wells. However, as hydrology and technology improved, access to groundwater became easier. This led to a greater utilization by agriculture and municipalities that in turn led to conflicts over supplies. In 1935, in response to a ruling by the Utah Supreme Court, the Legislature passed a bill including groundwater in the law governing water rights in the state.

After 1935, technology to access groundwater increased rapidly while the scientific understanding of the impacts of groundwater usage on the ecosystem lagged behind. Therefore, the state engineer’s office often, unknowingly, over-appropriated groundwater rights to certain aquifers. This over-appropriation was not known until serious environmental damage had taken place; as evidenced by large sinkholes in fields and towns in rural Utah. Other damage includes toxic chemicals that leached into groundwater supplies in urban areas. As science has caught up with usage, hydrologists have discovered that every groundwater aquifer has a “recharge rate” and that to appropriate water above this recharge rate can contribute to this damage. A recharge rate is simply how quickly an aquifer can refill. A shallow aquifer underneath porous soil in the mountains can recharge very quickly, since there is a large quantity of moisture available in the form of snow that will rapidly seep through the ground. Conversely, a deep aquifer beneath hard granite in the West Desert may take years, if not decades, to recharge. If users take water from that aquifer more quickly than it can be put back, this is when environmental damage begins. Additionally, water taken out today is no longer available for tomorrow, thus users can ultimately hurt themselves, or future generations when the groundwater supply runs dry.

This point is especially concerning given the rapid increase in population that Utah is seeing now and will probably continue to see into the future. There are two bills under review in the current Legislative Session that develop the last two readily accessible sources of surface water—the Bear River project and the Lake Powell pipeline. With these two bills, all of Utah’s surface water sources are developed. Thus, in the future, water needs will be increasingly met from groundwater sources or more and more costly surface development. For this reason, policymakers in the state need to start thinking about water from a management side rather than a development side.

All of these factors contributed to the introduction of HB 228. The bill contains key provisions to allow the state engineer’s office to effectively manage surface and groundwater rights concurrently and congruently. The following paragraphs highlight the provisions of the bill.

HB 228

According to the bill text, the key provisions of HB 228 are as follows:

- The bill authorizes the state engineer to create a groundwater management plan for any groundwater basin or aquifer;
- Allows conjunctive management of hydrologically connected ground and surface water;
- Describes the purpose or effect of a groundwater management plan;
- Outlines the requirements for creating a groundwater management plan; and
- Eliminates a provision addressing administration of groundwater rights

So what does this bill mean in plain terms? This bill is perhaps the largest step forward the state has taken in water policy in a long time. To return to the history of water in Utah, it has always been a localized effort. Early water development projects were the sole responsibility of local municipalities or irrigation districts. Even as projects got larger and the state became involved in financing development, the water was meant for a specific area and its residents. Once the project was completed, management of that resource was completely in the hands of the local entities involved. HB 228 changes course from this policy, albeit a small one. By authorizing the state engineer to create groundwater management plans and allowing conjunctive management of resources, this bill gives the state engineer the ability to consider all water users and projects in the context of their impacts of a basin, and the ability to shift some power from local interests to the state.

However, this bill does not allow the state engineer to rescind or take away existing water rights without due process, as has been the concern of some water interests. The court process to do so is still in place. This process can be long and costly, which is a concern if water shareholders cannot afford an attorney to defend their rights in court.

**Policy Intent**

The first intent of this legislation is to move the water community from thinking about this resource in terms of development to thinking about managing finite resources. All water resources are connected within a basin; if surface waters are over-allocated, the ground water sources that fed the surface source are also over-allocated.

The second intent of this legislation is to begin to shape a statewide policy on water. Beyond the coordinated management of a limited resource, Utah needs water policy to move from a local to state level for one important reason—neighboring states. As the Colorado River Compact negotiations are stymied for the foreseeable future and as states downstream from Utah continue to develop and seek additional water to fuel that development, without a state-level coordinated effort, Utah could be shortchanged in the water game. The “water war” brewing with Nevada over its desire to develop the groundwater resources of an aquifer straddling the state line is an example of where a state-level effort is needed. The small irrigation district set up by the West Desert farmers does not have the resources or capital to fight the Southern Nevada Water Authority, if it comes to that. However, with the expertise of state officials behind them, it may be possible to work out a compromise with Nevada over the aquifer.

**Conclusion**

HB 228 takes water policy in Utah in a new direction. It does give the state more authority over groundwater and, by extension, surface water resources in Utah. This bill comes at a time when most of Utah’s readily accessible water sources are developed. Additionally, it comes at a time when regional water interests are at an impasse with each other and individual neighboring states are trying to develop resources within their own borders to offset the uncertainty over the Colorado River Compact. However, borders are meaningless when it comes to water resources, as highlighted by the Utah/Nevada dispute. Without a coordinated effort at the state-level, Utah may be jeopardizing the most critical resource for sustaining life in the desert-water.