COLORADO
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Groundwater Rules and Regulations for Division 3 and Upper Rio Grande Water Users

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The stability of the San Luis Valley's water resources has often required adaptation and cooperation. The new groundwater/pumping rules for Colorado Division of Water Resources, Division 3 are no exception. Division Engineer, Craig Cotten recently shared some of his thoughts on these new policies which were submitted to the water court in September of 2015.

The process establishing these regulations came as result of Senate Bill 222 from 2004. Cotten explained, "Basically, we have an issue in the valley where irrigation wells are impacting senior surface water rights." This impact has been known to exist since 1975. The most important goals of these rules are to protect surface water rights from injury and work towards matching water supplies with the amount of groundwater that irrigators are pumping. This is a concept that is defined as sustainability. Senate Bill 222 also authorizes the State Engineer to put rules and regulations for groundwater and irrigation in to place. The rules are designed for helping to ensure the Rio Grande Compact is upheld. The compact is an agreement between Colorado, New Mexico and Texas. It is an interstate compact which obligates the State of Colorado and the San Luis Valley to send water downstream via the Rio Grande.

Quite simply, the Division 3 Groundwater Rules state that all large capacity (Non-Exempt) wells are required to replace their depletions. Well owners have three options: 1) They can be in a court approved Subdistrict; 2) they can be part of a court approved augmentation plan; 3) they do not pump at all. According to the rules and regulations, wells are not 'relieved' of their obligation to replace or otherwise provide a remedy for stream depletions that are injurious. Furthermore, the rules state that any withdrawal that would interfere with The Rio Grande Compact is not allowed. There are Exempt and Non-Exempt wells. An exempt well is exempt from the requirements of administration, including the new rules. Examples of this type of wells includes those that are for household use, domestic use, livestock watering, firefighting, or small capacity commercial use. Non Exempt wells are most often larger commercial, municipal, or irrigation wells.

The San Luis Valley is the only place in the State of Colorado where aquifer sustainability is a requirement for a well's continued use. Essentially this requirement is meant to recover the Valley's underground aquifers and help to prevent a further decline in the water table. As of today, there is only one Subdistrict established in the San Luis Valley which is known as Special SubDistrict 1. Established in 2006 and recognized as a legal entity, Subdistrict 1 exists for the purpose of taking action and working to restore balance between available water resources and current water use. The members within this district were allowed to develop their own plan for upholding sustainability and replacing injurious depletions to the surface water rights. For Subdistrict 1, there is a specific test for sustainability- bring aquifer the back to sustainable levels.

Unconfined Aquifer levels have been monitored by the Rio Grande Water Conservation District since 1976. The levels are measured using zero as the baseline for the measurements beginning in 1976. As the water level and rises and declines it has been recorded in the positive and negative. Between 1985 and 1999, water levels were in the plus 200,000 acre feet to minus 200,000 acre feet range. When the drought of 2002 hit, the aquifer level spiraled downward to around negative 700,000 acre feet. These levels continued to decline, resulting in a low point of approximately negative 1.3 million acre feet in 2012. The Subdistrict 1 is required to recover the aquifer to a sustainable level of negative 400,000 to negative 200,000 acre-feet. These levels are used in determining a viable, operable, consistent aquifer level that matches the levels seen during the 1978-2000 time period..

Thanks to Subdistrict 1's efforts, aquifer levels are now moving upwards. This has happened because of the remedies implemented by Subdistrict 1 that include the buying and drying up of land within the District, Financial incentives from the Conservation Enhancement Reserve Program (CREP). The CREP program has a goal of enrolling up to 40,000 acres for the purposes of reintroducing habitat, reducing soil erosion, reduction of fertilizer and pesticide use, and of course, the reduction of irrigation. Also, the improvement of stream flows to the natural watersheds is paramount. Landowners in Rio Grande, Saguache, and Alamosa Counties are eligible to offer their property and become participants in the program. The temporary fallowing of currently farmed circles, that have been incentivized by the Subdistrict board and Preventative Plant incentives, have helped farms and ranches in the Subdistrict change their current operations to become more water sustainable Farmers opting to be more conservative with their water and their crop choice have certainly helped to expedite these efforts as well.

The Rio Grande Water Conservation District has also significantly aided in the success of Subdistrict 1 through its oversight and by providing technical support. Through Senate Bill 222, Subdistricts are required to develop a Plan of Water Management as well as submit an Annual Replacement Plan to the State Engineer. Subdistricts can have their own plans as long as they meet the goals named in Senate Bill 222, and they are approved by court. Senate Bill 222 also allows for fluctuations in the aquifer levels. Division Engineer Cotten also pointed out that Subdistrict 1 had good data on wells in the area from a study done by Davis Engineering beginning in 1976. Cotten noted that this is an advantage not many areas in the Valley have. A challenge that

any new Subdistricts will face, will be establishing a consistent set of groundwater data. This is especially the case for the areas of the valley south of the Rio Grande.

Another new aspect that the Groundwater Rules bring is a defined irrigation season. While there has always been a season of irrigation use in the San Luis Valley, a strictly defined irrigation season is something the irrigators of the San Luis Valley have never experienced. This new approach is expected to reduce the impact that pumping has on senior water rights, as well. An irrigation season will also give irrigators specific beginning and ending dates within which they can operate. Water users with a decreed irrigation right will not be allowed to operate their water rights outside of this time period."

In terms of the impact the rules will have on the San Luis Valley, Cotten expressed optimism. He said, "Obviously, there are going to be cutbacks." He also believes that farmers paying for their water will bring about a significant change as well. In addition, there has been concern over how these policies will affect land prices. However, in a new era of water governance, land prices have been better than expected thus far. The rules are set to take once objections are resolved.