Testimony

Colorado Field Hearing

United States Senate

Agriculture Committee

Subcommittee on Conservation, Climate, Forestry, and Natural Resources

Hearing on the High Plains: Combatting Drought with Innovation

Wednesday, June 26, 9:00 AM MDT

Burlington, Colorado

Introduction of witness: **Cleave Simpson**

Cleave Simpson is a native of Colorado's San Luis Valley, which is the headwaters of the Rio Grande. He has a degree from the Colorado School of Mines and currently serves as the General Manager of the Rio Grande Water Conservation District. He is also elected as a state of Colorado Senator for the tier of Counties across the southwest border of the State of Colorado. In addition to his roles at the District and in the Colorado General Assembly, Mr. Simpson is the operator of an agricultural operation in the center of the San Luis Valley, with his wife Cathy, where they grow predominantly alfalfa.

The Rio Grande Water Conservation District (RGWCD or District) encompasses most of the watershed of the Rio Grande in Colorado and the center of the District is called the San Luis Valley, thought to be the largest Intermountain Valley in the world. It is approximately 7500 feet above sea level and very flat. The San Luis Valley grows alfalfa and other hay along with, potatoes, wheat, barley, rye and some vegetables.

History:

The Rio Grande basin in Colorado is very different from the Republican River basin where we are meeting today. The Rio Grande receives significant amounts of surface water, coming from snow melt in the surrounding mountains, which was the initial source of the irrigation in the San Luis Valley. Surface water irrigation developed in the period between 1850 and 1870 but by 1900 the streams and rivers of the San Luis Valley were over appropriated, meaning there was insufficient streamflow to serve the needs of all of the irrigators.

The San Luis Valley is underlain by a series of aquifers with a fairly shallow unconfined aquifer (150 feet thick) near the land surface, which, in turn, is underlain by a series of confined aquifers that exist at depths approaching 3000 feet. The surface system streams and the aquifer systems are interconnected to varying degrees with both the unconfined aquifer and the deeper confined aquifers influencing the others water supplies, so consumptive water use from any source has an impact throughout the Valley.

The San Luis Valley rests at 7500 feet above sea level and consequently has a relatively short

growing season from approximately 90 to 120 days depending on the year. The Valley floor receives only an average of 7 inches of precipitation each year, primarily snow, making it one of the dryest producing agricultural areas in the country. This phenomenon requires that any crop being grown must be supported by irrigation. Although available water supply from the surface streams has never been sufficient to serve all of the potentially irrigated land within the San Luis Valley, the recent conditions driven by global climate change, have caused the available supply to reduce even more resulting in the loss of surface water irrigation for many priorities by June or July of each year, which in turn has required the agricultural community to thereafter rely on groundwater irrigation from the underlying aquifers.

Well development began in the early 1900s, until approximately the 1970s, from both the confined and unconfined aquifers to provide this supplemental irrigation for both surface water irrigated lands and as a single supply for well only irrigated lands. For at least 50 years the court system in Colorado, including the Colorado Supreme Court, have determined that the native water supply from both the surface streams and groundwater systems are over appropriated, meaning that the consumptive use from all sources of supply in the San Luis Valley exceeds the average annual water supply from precipitation. As a result, the agricultural producers in the San Luis Valley began to experience declining water levels in the groundwater system and were forced to accept the reality that they had to find a way to reduce the total amount of water use in the San Luis Valley and develop an agricultural economy that matched the average available water supply year-by-year. Only with the achievement of that goal would the San Luis Valley be able to be confident that an active and viable agricultural economy could continue in the future.

Response to shortage:

The San Luis Valley agricultural community, led by the Rio Grande Water Conservation District, determined to reduce the total number of irrigated acres within the Valley. And to thereby reduce the overall pumping from the Valley aquifers in order to ensure the protection of soil health, stream health, wetland health, and community sustainability. Having developed the governmental structures necessary to undertake this effort to purchase existing irrigated agricultural land and return it to native conditions, the local community reached out to the US Department of Agriculture through the Natural Resources Conservation Service and the Farm Service Agency in order to take advantage of several conservation programs that were offered.

In furtherance of their goal of reducing overall consumptive use and irrigated acreage within the San Luis Valley the District entered into cooperative agreements with the State of Colorado and its Department of Agriculture and its Department of Natural Resources in order to ensure that all levels of government were participating in this conservation effort. These agencies initially developed a Conservation Reserve Enhancement Program (CREP) program for one of the more intensely irrigated parts of the Valley and agreed to provide locally funded bonuses in addition to the required cost-share to encourage agriculturalists to include land within the CREP program. In addition, they created an Environmental Quality Incentives Program (EQIP) to also remove irrigated land permanently from production and again provided local funding for a bonus payment to compensate the participants for the inclusion of land in the program to remove acreage from present and future irrigation. Other entities within the San Luis Valley also applied

for Regional Conservation Partnership Program funds and access to other tailored programs. In addition to the use of the available federal programs to support the efforts of the RGWCD, we would like to report, and seek your support of, the unique groundwater easement program being pioneered by the District, local irrigators, with leadership and support from Colorado Open Lands. We seek your support of this unique program as well.

Using all of the available resources offered through USDA programs, the Rio Grande Water Conservation District has defined success as the permanent withdrawal of 40 to 60,000 acres from irrigation, to improve the quality of the irrigated area of this San Luis Valley, achieve sustainable aquifers, improve the environment of the Valley and protect the way of life in the San Luis Valley. After about 20 years of effort the RGWCD has successfully removed approximately 20,000 acres from irrigation.

Challenges created by the current CREP and EQIP programs:

Because of the unique environment in which the San Luis Valley agriculturalist must function, the current legal provisions applicable to the CREP and EQIP programs present significant challenges to the Rio Grande Water Conservation District and its agriculturalists, however many of these issues related to the CREP program are addressed in Senator Bennet and Senator Marshall's CREP Improvement Act, which we hope will be included in any Farm Bill reauthorization:

1. Revegetation. While the program allows a farmer participating in CREP to apply up to 18 inches of irrigation water over the 3 years following the enrollment of the land in the program, this quantity of water may work well if annual precipitation is 20 inches or 30 inches or 40 inches, however it doesn't work at all when the annual precipitation is only 7 inches. We specifically request that the managing agencies of the US Department of Agriculture be given the legal authority to have flexibility to design revegetation programs that can meet the actual circumstances existing on the ground. In the case of the San Luis Valley, it should include the ability to increase the number of years where limited irrigation could occur and to allow for more water to be applied than is currently permitted. Only with a right to apply more water over a longer period of time is there a realistic opportunity to ensure that a permanent natural cover can be created on land that has often been disturbed and managed as irrigated farm ground for close to 100 years.

2. Seed Mix. A second area that must be addressed for conservation programs involving the end of irrigated agriculture and the return of land to native cover is to allow significantly more flexibility in choosing the type of cover crop to be used in highly unique environments. In the San Luis Valley, at 7500 feet above sea level, with a limited duration growing season it is unrealistic to think that simply applying a grass mix that might succeed in the rest of the country will have any chance of success on our farm ground if the hope is that a permanent cover is well established. The natural conditions in the San Luis Valley generally don't include a predominately natural grass cover. The natural vegetation would include forbs and woody stemmed bushes. Choosing seed mix that is predominately gathered from the local species should be encouraged to increase the chance of a successful revegetation and increase producer confidence in the program.

3. Alfalfa. It is one of the predominant crops grown in the San Luis Valley. Although it was not always the case, the cultivation of alfalfa has been encouraged by the shift in the location of the American dairy industry from its historical home in the Midwest to large dairies in the dry Southwest including West Texas, New Mexico, and Arizona. The demand for good-quality alfalfa to support those dairies is intense and as a result alfalfa is often continuously grown on farms and ranches in the San Luis Valley. The CREP and EQIP programs have historically discouraged alfalfa as an eligible crop included under their purview. Alfalfa needs to be made directly eligible for participation in these programs. Although steps in that direction are occurring independent of this testimony it should be emphasized that there is no reason to make it harder for farmers to participate in these programs even if they have engaged in continuous cropping of alfalfa over the past decade or more.

4. Increase the annual payment limit. Currently, a single individual's or entity's annual federal payment is capped at $50,000. We support raising that cap to $125,000 per year. The District understands, and supports, the idea that a limitation on total rental payments is necessary to assure that there is an ability for the small producer to participate in the CREP and not have the entire CREP go to large corporate farms. However, the $50,000 limit is now out of date. The annual CREP rental rate is based on the local per-acre lease rate in arms-length transactions. As you are no doubt aware, the price of irrigated lands within Colorado continue to increase, both for outright purchase and for lease. This increase is long overdue and will allow producers to enroll more than a single irrigated pivot under the program, expanding the number of producers who are eligible to enroll.

Closing.

I would like to thank Sen. Michael Bennet and Sen. Roger Marshall for holding this Field Hearing. Even with my fellow witnesses testifying to conditions in other parts of Colorado and Kansas I hope it is evident that there are significant differences in the proper application of these programs to meet the challenges in parts of the landscape that have little or no rainfall and require total reliance on irrigation to ensure success and even to depend upon irrigation in order to return land removed from irrigated agriculture to a natural uncultivated state. Including the flexibility that I've described today is vital to the health of our communities now and in the future.