



ADVANCING THE LEGACY

8833 Ralston Road
 Arvada, CO 80002
 303.431.6422
 info@coloradocattle.org
 www.coloradocattle.org



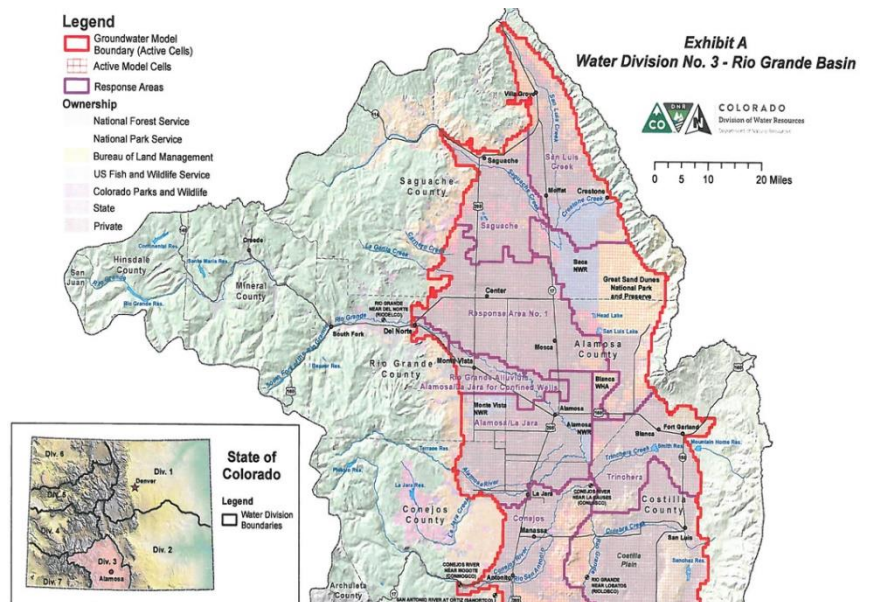
Ag Water NetWORK

WEBINAR #7 Highlights – Rio Grande Water Conservation District (RGWCD) Subdistrict No. 1 Water Management Plan (Presenters: (Amber Pacheco, Program Manager, RGWCD and Marisa Fricke, Program Manager, Subdistrict #1).

Recorded November 13, 2018.

Background on irrigation in the San Luis Valley

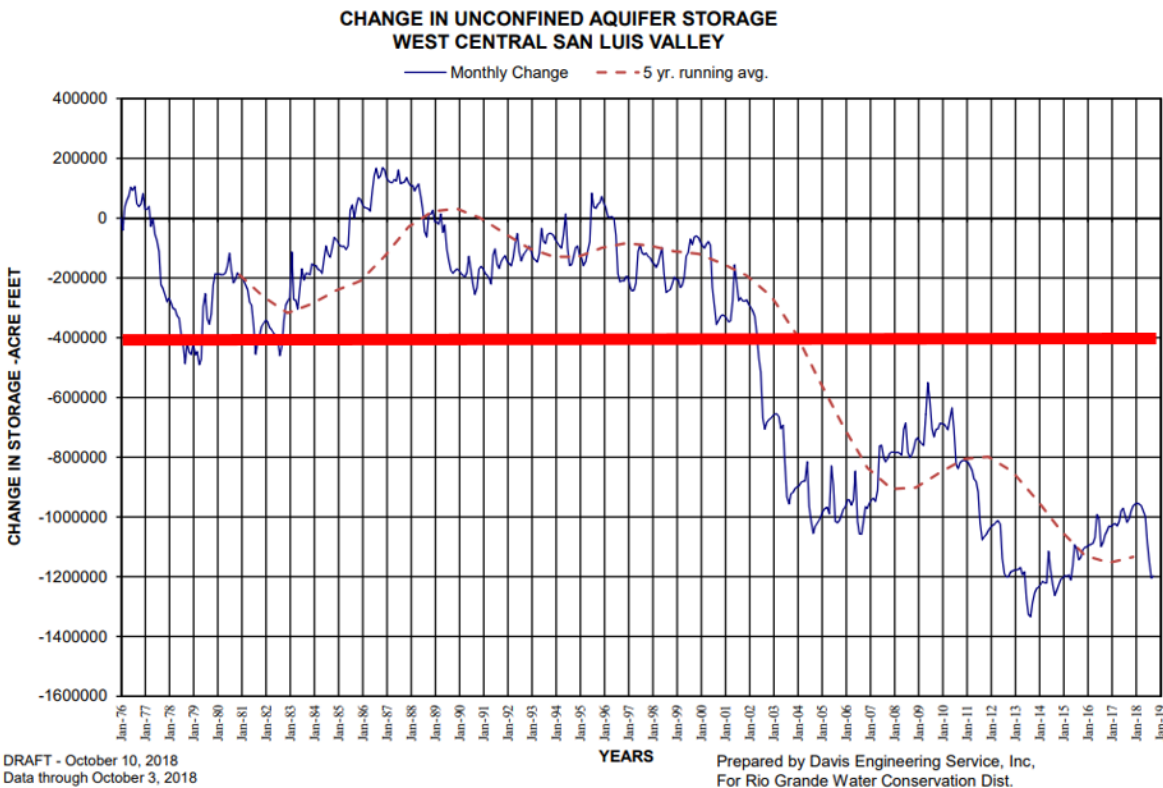
- The Rio Grande River was first diverted in 1866. By 1899, about 300,000 acres were under irrigation.
- The Rio Grande Valley is underlain by confined and unconfined aquifers.
- In 1960, irrigators began switching from furrow and flood to wells and sprinkler irrigation, which enabled more efficient crop irrigation but led to excessive withdrawals from both the confined and unconfined aquifer.



The Creation of Subdistrict #1

- Increased well pumping during the 2002-2003 drought caused aquifer levels to plummet, causing some wells to go dry, river levels to drop and senior surface water right holders to be impacted by the well pumping.
- SB 222 passed in 2004 enables the State Engineer to adopt rules for groundwater withdrawals in the Rio Grande Basin. Groundwater withdrawals can continue if they do not injure senior surface right holders and if they maintain sustainable aquifer levels.
- To meet the requirements, the Rio Grande Water Conservation District created Subdistrict #1 in 2006 so individual farmers did not have to develop their own augmentation plans.
- A 'Variable Fee' – collected by the Subdistrict - is used for purchasing and storing water to replace depletions and to help pay for fallowing and other land conservation programs. The Variable Fee is funded by water usage fees paid by irrigators in the district.

- The aquifer recovery plan gives Subdistrict #1 twenty (20) years to raise aquifer levels to between 200,000 and 400,000 AF of the storage volume that existed on 1/1/1976.
- Twenty-seven (27) monitoring wells have been installed within the subdistrict's boundary. Subdistrict #1 does monthly and annual reporting of the aquifer levels.
- An Annual Replacement Plan, which is prepared by the subdistrict, estimates for the coming year the amount of water to be withdrawn from the aquifer, the amount that will be owed to the river, crops that will be planted, and other pertinent information.
- Recharge ponds are being used and tested to enable wet year recharge.



Subdistrict #1 uses multiple programs to reduce aquifer usage and improve water quality:

1. USDA's Conservation Reserve Enhancement Program (CREP) is a 15-year program that offers temporary and permanent options to farmers for different incentives that help reduce aquifer use, protect water quality, reduce fertilizer and pesticide usage, establish native vegetation, and reduce soil erosion. Annual payment rates to farmers range from \$22 to \$66. Subdistrict #1 offers a signing bonus in addition to the CREP payment.
2. The Subdistrict's new Fallow Program pays producers \$200/acre for fallowing land.
3. An NRCS Resource Conservation Partnership Program (RCPP) grant offers matching dollars for water-saving practices such as irrigation upgrades, cover crops, etc.
4. Workshops that provide updates to producers on the data collected and progress.

Five (5) additional groundwater subdistricts have been created in the valley. All focus on implementing water replacement programs and reducing groundwater withdrawals.