SLV Doppler Radar Subdistrict Progress and Aquifer Conditions

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San Luis Valley Doppler Weather Radar Partnership
The Problem

• The Rio Grande River basin within the San Luis Valley is not covered by current National Oceanic and Atmospheric Administration (NOAA), National Weather Service (NWS) radar systems.

• Why lack of radar matters in the valley

• In 2015, about $42.5M in water was not forecasted or observed based on using NRCS and NWS modeling using SNOTEL sites alone.

• Impacts = loss of water for agriculture, diminished weather forecasting, impact on public safety on roads and in the air.
San Luis Valley radar coverage
national radar vs rented radar

Figures 9 & 10: (Left) Currently-operational radar-based 24-hr accumulated QPE derived by the WRS-88D radar
Rented Radar Coverage

$30,000/month = $1,000 day to rent a radar unit
County Road & Bridge dug this house out with people inside

No NWS warning issued
MEMORANDUM

TO: San Luis Valley Notification List

FROM: CDWR Modeling and Decision Support System Team
Office of the Colorado State Engineer

DATE: July 7, 2017

SUBJECT: Five Year Average Groundwater Withdrawals in Confined Aquifer Response Areas in Division 3:
July 2017 Requirement of Division 3 Groundwater Rules Section 8.1.5

Below is the table listing the metered total annual withdrawals beginning in 2009 and the 5 year (2012 – 2016) average of the metered total annual withdrawals for the previous five Water Administration Years for the Response Areas subject to Rule 8.1.5. The last column is the estimated average groundwater withdrawal for the 1978 – 2000 period.

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Figure 1. Composite Water Head by Response Area