

Economic Contributions of Agriculture to the San Luis Valley

Renewable Water Resources' plan to export water from the Valley has Front Range and statewide implications.

FACT SHEET

Agriculture is the Economic Engine in the San Luis Valley

Every aspect of our economy is connected to agriculture. The roughly 1,600 farms and ranches in the Valley accounted for \$369.7 million market value of products sold in 2017.¹ Agriculture is the largest private employer in the San Luis Valley, accounting for 16.6 percent of all jobs.² Four different agricultural sectors rank among the top ten sectors for economic output in the Valley, including potato farming, alfalfa farming, agricultural production support and beef cattle. The four sectors combined contribute \$490.6 million annually to the economy.

Recent data shows \$61 million in capital investment was made by 383 businesses in the San Luis Valley. The top investments by sector were:

\$37M

Ag, Forestry, Fishing and Hunting

\$5M

Wholesale

\$4.5M

Transportation and Warehousing

\$2.8M

Retail

\$2.7M

Information

The Growth of Agriculture

Both agriculture and irrigation in the San Luis Valley began when Hispanics from northern New Mexico settled in the south end of the Valley in the 1850s. This was followed by other European settlers who began entering the Valley in the early 1860's. Those early settlers raised a variety of crops still grown today.³ A generation later, agriculture would undergo a major expansion thanks to the arrival of the railroad in 1878⁴ and its ability to link farmers to larger markets. Over the next decade the Valley's biggest irrigation canals would be built and roughly 2,000 artesian wells would tap the deep aquifer.⁵ The amount of land under irrigation would peak in 1927 at 779,671 acres.⁶

Today the main crops grown in the Valley are potatoes, barley and alfalfa. In 2018, there were 51,600 acres of potatoes harvested, nearly all of which end up on supermarket produce stands, as opposed to processing plants for chips or French fries. Colorado ranks seventh in the U.S. for potato production due in large part to San Luis Valley growers.

Barley, which is often farmed in rotation with potatoes, was harvested on 43,500 acres. The grain typically ends up in beer, as the majority of the crop is sold to Molson-Coors and a fair portion of the remainder is sold to Proximity Malt, who in turn markets to craft brewers.

Alfalfa is the area's largest crop at 152,000 acres.⁷ Because the region's high elevation bolsters the nutrition content in the Valley's alfalfa, it's often sold to dairies in New Mexico, Texas and Oklahoma.

Reliance on Water

None of the region's current crops could be grown if growers depended only on the 7.5 inches of annual precipitation that hits the Valley floor. The Valley is one of the world's largest high altitude deserts. Water users draw from the Valley's rivers and streams to irrigate their crops but the peak flows that are common in May and June dry up by July and August. Given the lack of reservoir storage in the region, growers turned to groundwater to finish watering their crops.⁸

Irrigators have a long history of pushing for more efficient water use and some practices used today include:

- Transition from sub-irrigation to center-pivot sprinklers⁹ and the capping and valving of free-flowing artesian wells.¹⁰ The pivot sprinkler system provides a high degree of uniformity of applied water.
- The use of cover and green manure crops¹¹ (plants that are grown to cover or be turned into the soil to help manage soil erosion and improve soil health, rather than being harvested for a profit).
- Growing crops that use less water.
- Experimentation with deficit irrigation¹² (a practice where water is applied during drought-sensitive growth stages of a crop and outside these periods, irrigation is limited).
- Incentivizing farmers to reduce water use at times.¹³

Every Facet of the Economy is Dependent on Ag

The impacts of irrigated agriculture ripple out across the Valley beyond farmers and ranchers. Every aspect of the economy is tied to agriculture. Most directly, increased sales mean greater employment. In 2013, every million dollars in potato sales produced the equivalent of 10.4 full-time jobs.¹⁴ Moreover, every dollar of potato sales generated an additional 47 cents due to related economic activity such as purchase of fertilizers and equipment, as well as the wages that were then spent locally.¹⁵ The benefits of that economic activity also flow to local governments in the form of sales tax.

Water exports schemes would require the purchase of farmers' water rights and the dry up farms. Taking land and water out of agriculture production would have a dire impact on the local economy and hinder the survival of agriculture in the region.

The latest attempt to pipe San Luis Valley Water to the Front Range is led by "Renewable Water Resources," based in the city of Centennial near Denver. This scheme is undermining local farmers' efforts to address water issues and could set a dangerous precedent; one that will further dry up the Valley's economic base.

There is widespread opposition in the Valley to the RWR export scheme. Locals are concerned that RWR's plan could turn Saguache County into another Crowley County, an area east of Pueblo, that has been devastated economically by the sale of its water. See www.coloradoindependent.com/2015/07/09/buying-and-drying-water-lessons-from-crowley-county

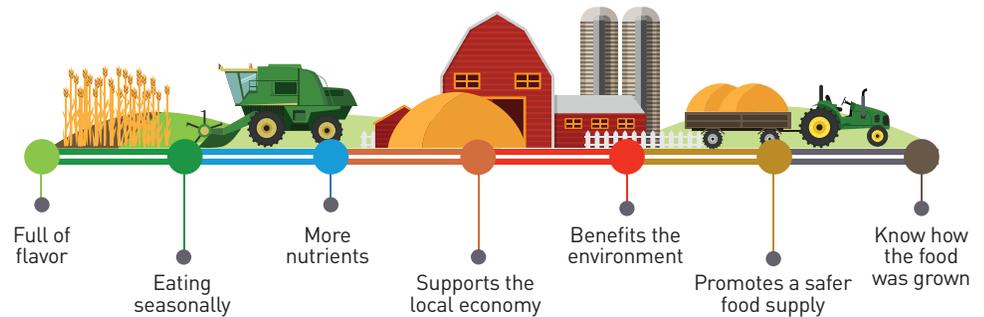
See Why Water Export Attempts Fail in the San Luis Valley fact sheet for more details on failed attempts to pipe water out of the Valley.



Water Connects the San Luis Valley

Benefits of Locally Grown Food

Colorado-grown produce keeps food supplies closer to home, and therefore more secure. COVID-19 has reinforced the critical importance of both water and food security. Agriculture is an important part of Colorado's economy. It contributes \$40 billion annually and 173,000 jobs.



Source: https://www.canr.msu.edu/news/7_benefits_of_eating_local_foods

Front Range water users should evaluate local sources, seek opportunities for win-win alternatives, and enhance conservation before they import from outside water basins. The San Luis Valley is a beloved place for many Colorado residents and travelers from across the country and world. With the Great Sand Dunes National Park and Preserve, three extraordinary National Wildlife Refuges, the Rio Grande Natural Area, the Rio Grande National Forest and many other public lands, the Valley's water sustains wildlife for viewing, hunting and fishing, and many other forms of recreation. Sandhill crane viewing is a major draw to the area. Water export threatens the enjoyment and economic benefits they provide and could impact wildlife.

In a survey conducted for the Colorado Department of Agriculture by Colorado State University, 90% of Coloradans say agriculture is important to their quality of life. Nearly all Coloradans say maintaining and protecting agricultural land and water is important (95%).

¹ USDA, "2017 Census of Agriculture," County Profiles, accessed at https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/Colorado/index.php

² San Luis Valley Development Resources Group, "2018 Community Economic Development Survey," pg. 26.

³ Virginia McConnell Simmons, "The San Luis Valley: Land of the Six Armed Cross," Second Edition, pg. 96.

⁴ Ibid, 159.

⁵ San Luis Valley Advisory Committee, "History of Water Development," pg. 3. Accessed May 9, 2020 at <https://dnrweblink.state.co.us/dwrsearch/DocView.aspx?i d=3579064&searchid=e6ded11d-4e0c-4578-b98c-9303c93d9683&dbid=0>

⁶ "The Rio Grande Joint Investigation in the Upper Rio Grande Basin ..." Pg. 69. Accessed May 5, 2020 at <https://archive.org/details/regionalplanning1938riogrande/page/68/mode/2up>

⁷ All harvest statistics are from 2018 and can be found at USDA Quick Stats Lite, https://www.nass.usda.gov/Quick_Stats/Lite/index.php

⁸ "Confined Aquifer New Use Rules," 2004CW24, Pg. 20

⁹ "Confined Aquifer New Use Rules," 2004CW24, Pgs. 22-21.

¹⁰ "State Engineer's Statement of Basis and Purpose for Rules Governing the Withdrawal of Groundwater ..." pg. 5. Accessed at <https://rgwcd.org/attachments/Final%20Statement%20of%20Basis%20and%20Purpose.pdf>

¹¹ Leah Todd, "San Luis Valley Farmers Exploring the Efficiency of Cover Crops," Sept. 6, 2016, The Pueblo Chieftain. Accessed at <https://www.chieftain.com/14567aba-0623-5fa0-92d3-f8b9aace89f4.html>

¹² Rohat Gultekin and Ahmet Ertek, "Effects of Deficit Irrigation on the potato tuber development and Quality," International Journal of Agriculture, Environment and Food Sciences." Accessed at https://www.researchgate.net/publication/325452427_Effects_of_deficit_irrigation_on_the_potato_tuber_development_and_quality

¹³ Lisa Marshall, "When Farmers Must Pay for Groundwater, They Cut Use by a Third," CU Boulder Today, June 22, 2017. Accessed at <https://www.colorado.edu/today/2017/06/22/when-farmers-must-pay-groundwater-they-cut-use-third>

¹⁴ Ibid, pg. 8

¹⁵ Ibid, pg. 6

#StopWaterExport

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