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Impacts of Water Transfers on the Agricultural Sector

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Key Point: Agriculture is a fundamental source of what most Coloradans want and need—less sprawl and greater environmental quality, as well as wholesome food, economic diversity, and western heritage. Continued transfers of water from agriculture to other uses will affect the quality of life for all Coloradans.

1. A Snapshot of Colorado Agriculture [from 1997 federal Census of Agriculture]
   a. 28,000 farms and ranches on 32.6 million acres—49 percent of Colorado’s land area of 66.6 million acres.
   b. Cropland: 10.5 million acres (16 percent of Colorado’s land area); irrigated land, including irrigated pastureland: 3.4 million acres (5 percent).
   c. Market value of crops and livestock totaled $4.5 billion. Agribusiness (inputs, production, marketing and processing) represents 86,000 jobs and generates more than $13 billion annually for Colorado’s economy.

2. Agriculture’s Dependence Upon Water
   a. Department studies indicate that in a normal year, the net irrigation requirement for Colorado crops and pasture is 5.4 million acre-feet—about 80 percent of Colorado’s total consumptive use of water.
   b. In 1995, Department studies estimate that more than 80 percent of the net irrigation requirement for Colorado agriculture came from corn, hay, and pasture for livestock. The value of all livestock production in 1997 was $3.2 billion.
   c. The value of all crops produced in 1997 was $1.3 billion. Approximately two-thirds of this total value depended upon irrigation.
   d. The amount of land under irrigation has remained fairly stable over the past 20 years at 3.4 million acres. But at least 20 percent of all irrigated land is now dependent upon finite groundwater sources, such as the Ogallala Aquifer in eastern Colorado.
3. **Agriculture and Growth**

a. Agricultural land is being converted to other uses at a rate of 140,000 acres/year (1987-97). The rate of conversion has nearly doubled in the last five years to 270,000 acres/year (1992-97).

b. The heart of our agricultural sector lies in counties most affected by growth—primarily the Front Range and the central region of the western slope. These 18 counties have more than 25,000 people and contain:

- 27 percent of our land in farms and ranches
- 33 percent of our irrigated land
- 50 percent of our total crop and livestock value
- 51 percent of our farms and ranches
- 73 percent of all our jobs in agribusiness

c. Future patterns of growth will be shaped by the future of agricultural lands. Land in farms and ranches accounts for more than 85 percent of the privately-held, undeveloped land in the state. [Federal land: 36%, state land: 5%, developed land: 3%, other rural land: 8%. So ag land/private land ≥ 49%/(49% + 8%) ≥ 85%.

4. **Agriculture and the Public Interest**

a. In 1996, CSU conducted an extensive survey of public attitudes about Colorado agriculture. 84 percent of those interviewed agreed with the statement that ‘Maintaining land and water in agricultural production is very important.’

b. The millions of acre-feet water ‘used’ by agriculture come back to our entire population in the form of food and fiber. Since agriculture represents less than 2 percent of the nation’s (and state’s) population, it would be more accurate to say that 98 percent of ‘agricultural water use’ is really ‘domestic use’.

For example: More than 100 gallons of irrigation water are needed (consumptive use) to meet the average daily per person demand for milk and related dairy products. Thus, four million Coloradans require 450,000 acre-feet of water each year for milk and related products! Estimates can be given for other foods as well.

c. Confined animal feeding operations – feedlots, dairies, poultry operations, and hog farms – are indispensable components of Colorado agriculture. They provide markets and profitability for corn and hay producers, who in turn are providing open space and wildlife habitat as environmental benefits. Feedlots also provide markets for ranchers, who own more than 20 million acres of rangeland – agricultural open space.

Please contact the Resource Analysis Section (303-239-4112) for data references or visit the section’s home page for additional data and reports on agriculture, growth, and water: [www.ag.state.co.us/resource analysis](http://www.ag.state.co.us/resource analysis).