

Agricultural water in Larimer County: Issues and Opportunities



Larimer County Agricultural Advisory Board

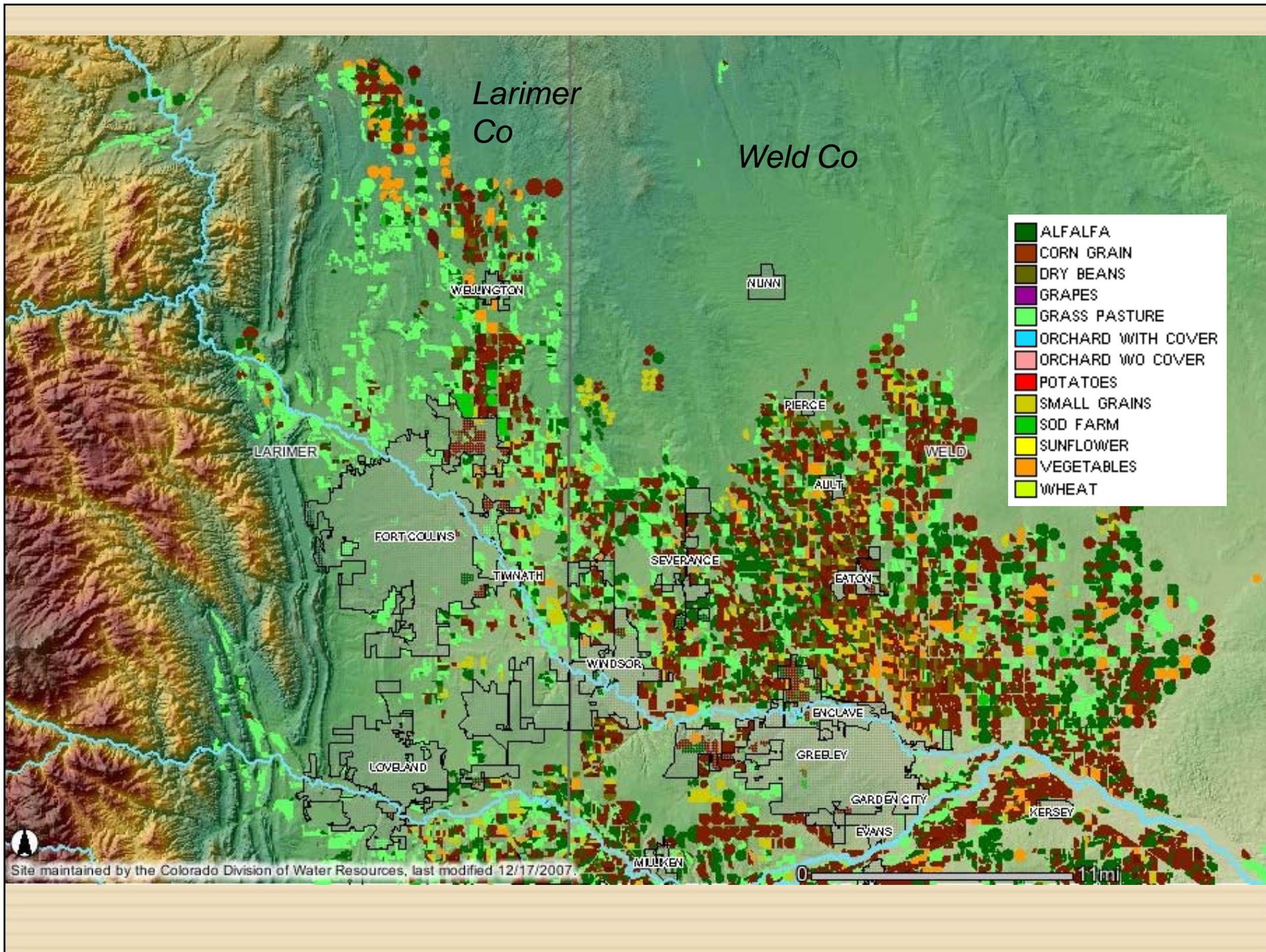


Larimer County Land Statistics 2007

Type of land	Acres
County area	1,684,320
Farms and ranches	489,819
All Cropland	119,984
Pastures and rangelands	313,416
Irrigated cropland, pasture	63,405



*Source: USDA
2007 Ag Census*



Larimer
Co

Weld Co

- ALFALFA
- CORN GRAIN
- DRY BEANS
- GRAPES
- GRASS PASTURE
- ORCHARD WITH COVER
- ORCHARD W/O COVER
- POTATOES
- SMALL GRAINS
- SOD FARM
- SUNFLOWER
- VEGETABLES
- WHEAT

Ag Water Transfers

- **Developers must provide water shares to cities to obtain water service**
- **These shares are often adjudicated for domestic and agricultural use**
- **The ag portion has traditionally been rented back to farmers and ranchers**



Owned and Rented Water

- **Many large producers now depend on a combination of owned and rented water**
- **Small producers are even more dependent on water rental**



Agriculture to Urban Water Transfers

- ❑ Originally 85 % of the CBT Water was allocated to and owned by agriculture
 - ❑ Currently, only 34% of CBT water is owned by agriculture
-
- ❑ 72% of the 10,000 shares of the North Poudre Irrigation Company stock is now owned by cities and water districts (Ft. Collins Has 35.5%)

Benefits of Renting Water to Ag

Water rental is now essential to local irrigated agriculture

... which in turn provides benefits essential to a sustainable future

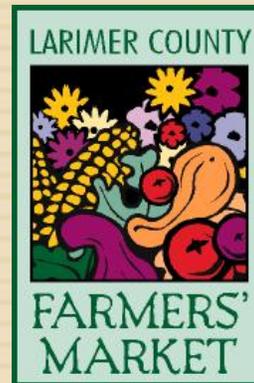
.....which “buy and dry” will quickly diminish

- **Locally-grown food/fiber**
- **Open space**
- **Community separators**
- **Wildlife habitat**
- **Robust economic activity**
- **Potential for water sharing**
- **Ground water recharge**
- **Flood surge control**
- **Boating flows in July/Aug**
- **Agricultural tourism**

Local Food Supplies are in Demand

Rapidly growing interest in:

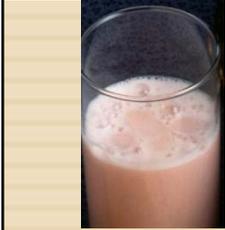
- Farmers' markets
- Community-supported ag (CSAs)
- Knowing where food comes from
- Knowing when food is safe
- Buying from within the region
- Reducing carbon footprint of food production



Irrigated Agriculture in Larimer Co Produces a Wide Range of Crops

- ❑ Livestock, poultry,
- ❑ Dairy products
- ❑ Grains and forage
- ❑ Vegetables and fruit
- ❑ Landscaping and nursery stock
- ❑ Specialty crops, herbs, flowers





High-value livestock

Feeding this type of livestock depends on many acres of irrigated farmland and reduced shipping costs

Larimer County Farms, Ranches Provide Open Space

- **Public-private entities have chosen to invest millions in open space**
 - **Yet most private land open space is provided free by ag**
 - **Farms and ranches without needed water are more likely to be sold and subdivided**
- \$\$ It takes millions more to replace that lost open space**



Irrigated Ag Provides Wildlife Habitat

- Removing water from ag removes habitat across a large landscape
- Migratory waterfowl depend on the combination of irrigation reservoirs, wetlands and nearby crops



Irrigated Ag Enables Habitat Mitigation

- Shelterbelts, windbreaks
- Habitat patches
- Food plots
- Nesting areas





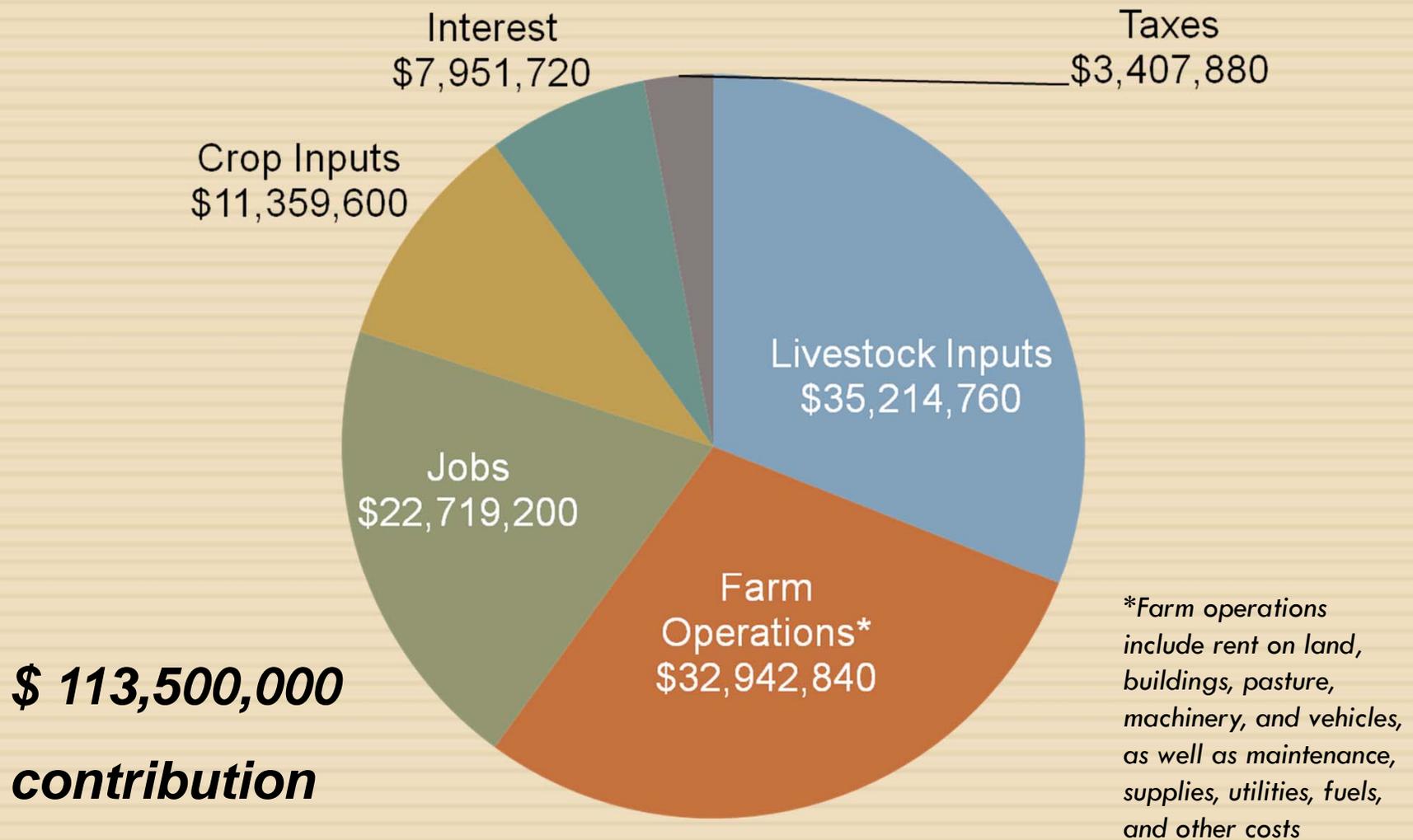
Crop residues are food sources for ducks, geese, ibis, cranes, deer, antelope, pheasants, song birds

The Value of Agricultural Production in Larimer County

- Larimer County has 1757 farms with \$128,122,000 in sales
- 199 farms sell \$838,000 ag products directly to consumers
- 179 farms have developed value-added practices
- Direct sales to local consumers have increased

*USDA data in No. Colorado
Regional Food Assessment.*

Larimer County Production Expenses from 2007 USDA Census of Agriculture





95% of all farms in Larimer County are family owned and provide us with a knowledge base that crosses generations



Irrigated farmscapes are reservoirs

They can provide water in dry years if water-sharing agreements are developed

The physical infrastructure is already in place
(has been since 1900)



Partnerships: Win-Win for Cities, Farmers and the Taxpaying Public

Farmers and ranchers can forgo some rental water and trade or lease some owned water to urban areas in dry years ...

... in return, they would want to be able to count on stable ag decrees, rental water and full production in normal years



... We can develop and share “conserved water”

Future partnerships



***Sustainability requires policy changes,
collaboration and thinking about the long-term
together***

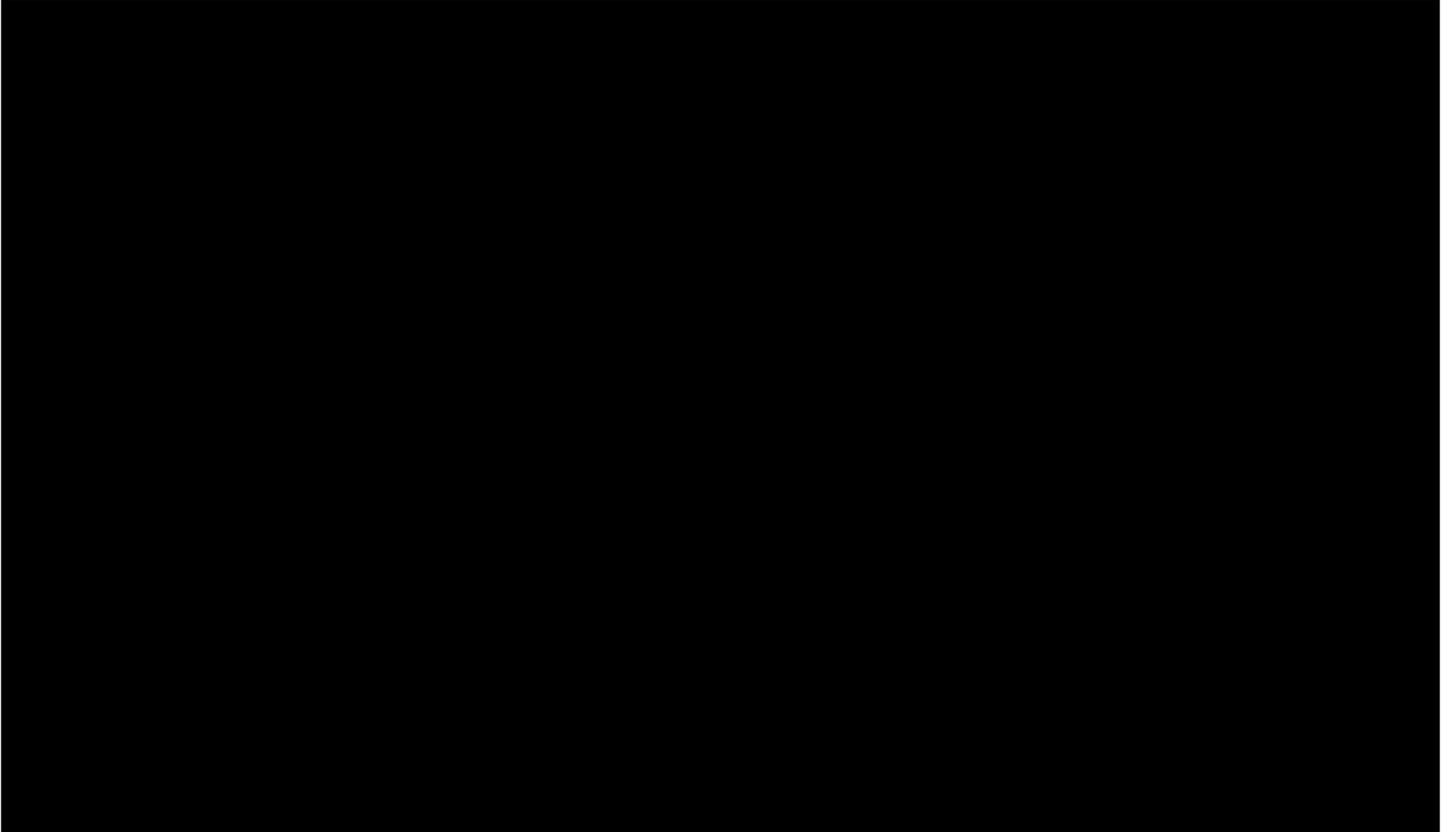
Irrigation in Waverly

- Long standing tradition
- Requires healthy lateral ditch/irrigation associations
- Strengthened by ownership of water shares
- Cost sharing available from agencies like NRCS
- Potential for sharing infrastructure, information, practical ideas and using the Waverly community group to do so.

Thank You

We look forward to a productive discussion about potential partnerships and ways to strengthen the irrigation in Waverly and elsewhere in the coming months





Agriculture to Urban Water Transfers

Example

72% of the 10,000 shares of the North Poudre Irrigation Company stock is now owned by:

- ❑ **the City of Fort Collins (35.5%)**
- ❑ **Ft Collins Loveland WD (11.2%)**
- ❑ **East Larimer County WD, (9.6%)**
- ❑ **North Weld Co WD (7.5%)**
- ❑ **Windsor (3.5)**
- ❑ **Other Municipalities, Districts (+/- 5%)**

Water Sharing Instead of “Buy and Dry”

- If farmers can rent water during normal years, they are more likely to fallow part of their irrigated land and share rented and owned water with urban users during droughts
- Such “fallowing” or “interruptible supply” agreements are in place or being developed in other parts of Colorado
- Sharing with ag reduces pressure to invest in costly and controversial infrastructure like transbasin pipelines
- In 2004, with State approval, producers in Larimer County provided agricultural water for domestic use



Widespread Public Support for Maintaining Water for Ag

- **96% of the 500 randomly selected Colorado residents surveyed felt it was important to maintain water for ag production***

- **Respondents felt that in a dry year, after domestic use, water for ag was a much higher priority (75%) than water for:**
 - **Instream flows (20%)**
 - **Landscaping (1.8%)**
 - **Rafting and fishing (1.5%)**

*Studies done by Dr Alan Bright and others at CSU in 1996, 2001, 2006 for the Colorado Department of Agriculture

Irrigated Ag Provides Wildlife Habitat

- Irrigation produces many associated wetlands
- Canals & ditches provide habitat and serve as movement corridors for wildlife



Water in the arid West is a finite and precious resource

- **Water uses competing for optimal balance**
 - **Domestic use**
 - **Agriculture**
 - **Wildlife habitat**
 - **Recreation**
 - **Amenity/aesthetics**



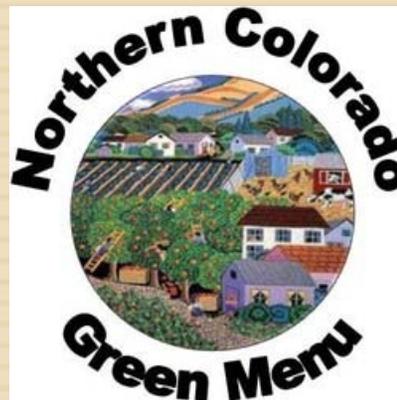
Agriculture's Importance to the Economy

- **Another important reason to rent water to farmers and ranchers is the large contribution that ag makes to the region's economy:**
 - **Value of sales and expenditures**
 - **Ag-related business and the multiplier effect**
 - **Diversity and robustness (other businesses depend on current trends, ag can produce from water, sunlight, soil year after year)**
 - **Current value-added efforts (agritourism, local processing more direct sales etc.) could increase economic contributions, jobs.**

>New Organizations that Promote Local Food Production and Consumption



Northern Colorado Food Incubator



Community Marketplace





Irrigated food plot and shelterbelt

These irrigated plots also compensate for the loss of habitat to development elsewhere

Produced Locally in Larimer County

- Dairy: Milk, cheese, yogurt
- Livestock: Beef, lamb, goats, poultry, eggs, equestrian operations



Produced Locally in Larimer County

- **Grains:** Wheat, pinto beans, barley, oats, sunflower seeds, corn, sugar beets
- **Forages:** Alfalfa, grass hay, sudan grass, oat hay



Produced Locally in Larimer County

- **Vegetables:** Potatoes, onions, cabbage, spinach, sweet corn, melons, pumpkins, broccoli, chard, kale, lettuce, squash, tomatoes, green beans
- **Fruit:** Apples, cherries, plums, berries





**Breweries, sugar factories, future biomass
energy producers ...**

... all require irrigated farmland

Produced Locally in Larimer County

- Landscaping: Trees, shrubs, turf grass, flowers
- Also: herbs, honey, and recently, wine grapes

