

Poudre River Forum

Annual Update on the Poudre Water Market



The Poudre Runs Through It February 28, 2020



Brett Bovee WestWater Research, LLC Fort Collins, CO

00:10:00 Update

8mins - Market Supply & Demand 2mins - Market Data



2020 Poudre River Forum – Economic Update

Photo: Poudre River, NPS

WATER MARKET SUPPLY & DEMAND

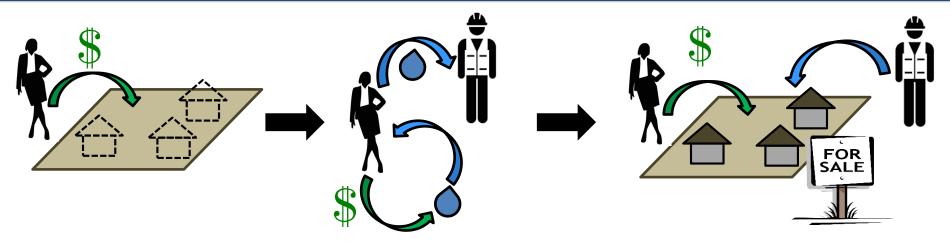
Photo: Poudre River, NPS



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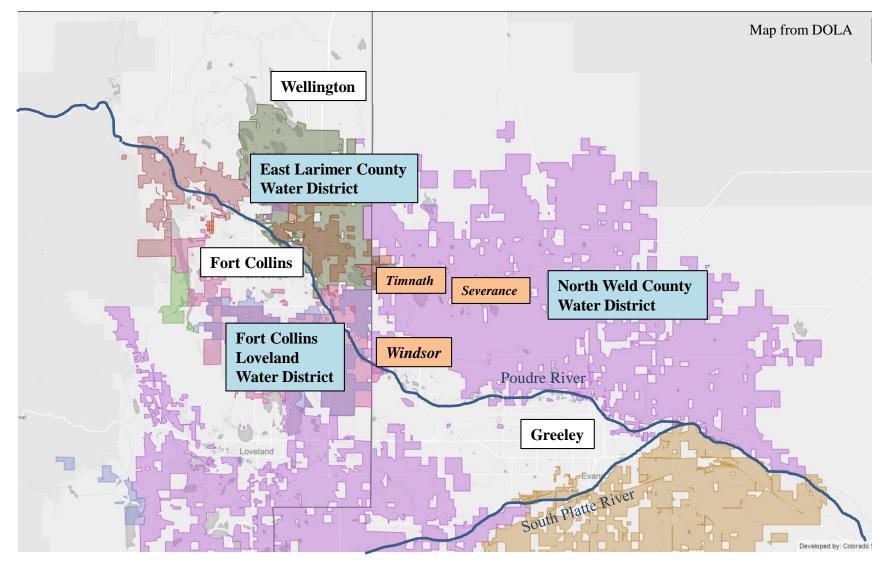
Primary Demand Driver: Land Development

- The water supplies for new growth are satisfied before the homes are occupied
- Water rights or cash equivalent are dedicated to municipal water provider in exchange for permanent water service → it's a one-time transaction
- Monthly water bills <u>DO NOT</u> reflect the market value of water rights
- Poudre water market is driven by the need to satisfy water dedication requirements so that new homes can be built and receive water service





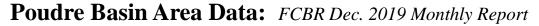
Poudre Basin Municipal Water Providers

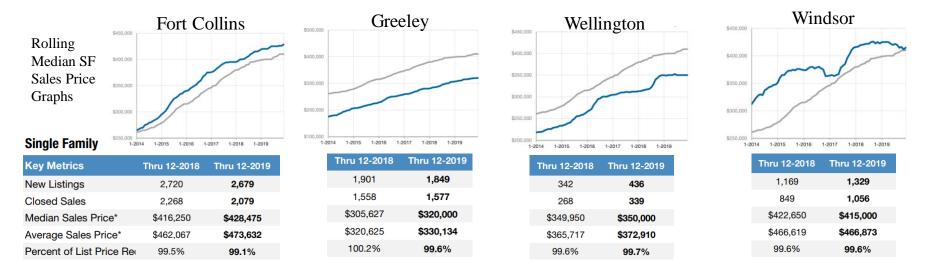




Primary Demand Driver: Land Development

- Continued housing starts
- Continued appreciation in home prices





4,000

3,500 3,00 2.

Annual Growth

1,500

,000

500

0

2011

Windsor

Timnath
Severance
Greeley
Fort Collins

Wellington

2012

2013

2014

2015

2016

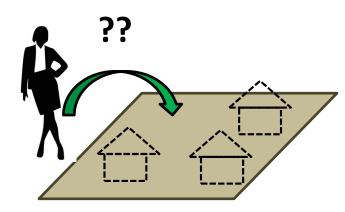
2017

2018



Primary Demand Driver: Land Development

- Housing starts where developer can afford to make investment

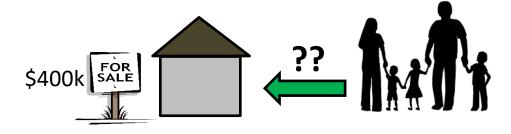


Poudre Basin has seen rising water right
values due to competitive demand from
land development



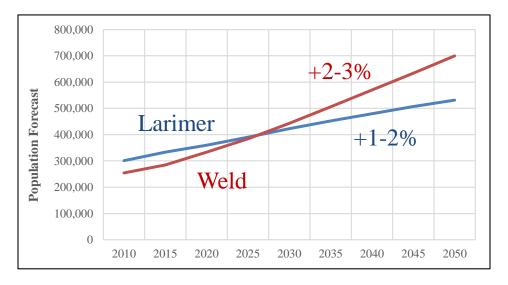
Demand from land development exists only to the extent homes can be developed and sold at reasonable profit

TOTAL	\$400k)
Profit	\$10k	
Overhead / A	Admin \$40k	
House	\$180k	
Water	\$30k	
Permits / Fe	es \$50k	
Land & Lot	s \$90k	



Demand Driver: *Population Growth?*

State Demographer Population Forecast to 2050:



450 400 (-2%) Weld **USGS** Municipal 350 300 Water Use Rates, GPCD 250 Past 30 Years: 200 150 Larimer 100 50 0

1990

1985

1995

2000

• Will this growth occur?

- Jobs & salaries
- Affordable housing
- Quality of life

• Will growth impact water market?

- Where homes are built
- Type of housing & demand
- Water portfolio of provider
- Water policies of provider
- Will growth result in shortages?
 - Probably not → water is secured before occupancy
 - Risk is unspent CIL fees



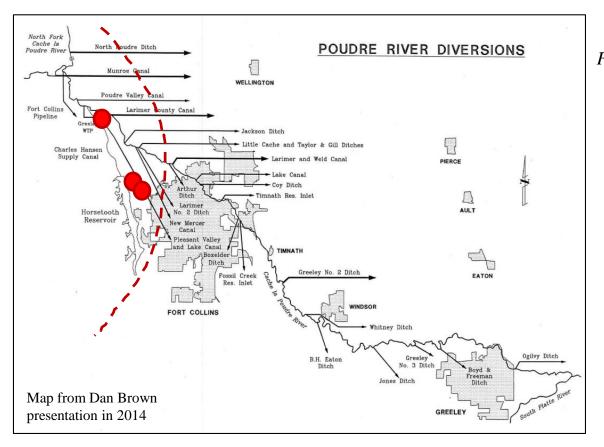
2010

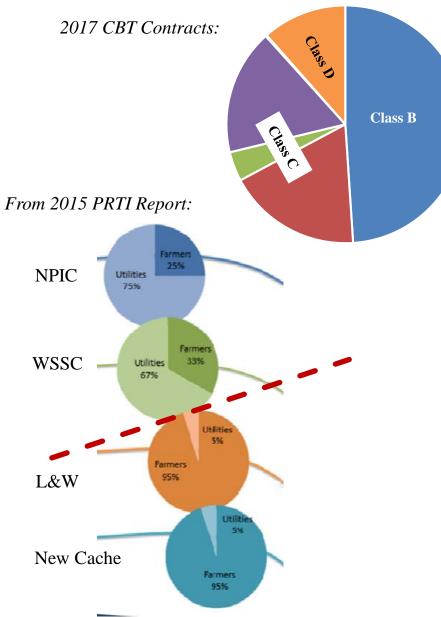
2015

2005

Supply Driver #1: Desirable Water

- Not all water rights are created equal
- Historical sources have more limited inventory
- More projects on the horizon (NISP, Halligan, Seaman, ATMs)







Supply Driver #2: Agricultural Socio-Economics

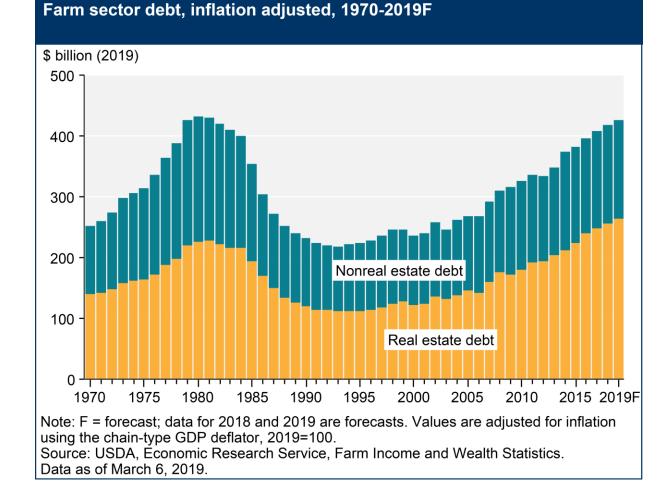
- Aging of farm landowners with no succession
- Relatively low net income from farming

U.S. farm debt soars to levels seen during 1980s farm crisis: Agriculture secretary

Here's Why More American Farms Are Going Bankrupt

'This One Here Is Gonna Kick My Butt'-Farm Belt Bankruptcies Are Soaring Trade disputes over agriculture add pain to low commodity prices that have been grinding down American

Trade disputes over agriculture add pain to low commodity prices that have been grinding down Americ farmers for years





WATER MARKET DATA

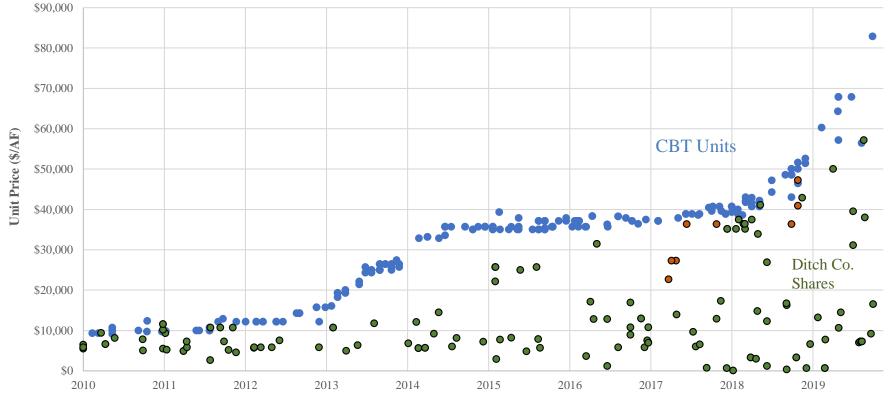


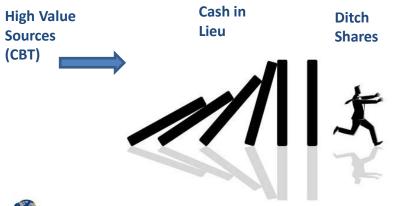
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Photo: Poudre River, NPS

Poudre Water Supplies





Huge Variability in Value

- Location
- Reliability
- History



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Photo: South Platte River, USGS

