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One World One Water Center

Metropolitan State University of Denver | Denver Botanic Gardens

What Are We Going to Talk About Today:

1. Things happening in the U.S. & Colorado
2. Water Law of Ancient Cultures
3. Water Law of Colorado
4. Buying and selling water rights in Colorado
5. Other future challenges

Stele of Hammurabi , Louvre Museum, Paris



King Hammurabi,
BCE 1795-BCE
1750, organized
laws of
Babylonia
(Mesopotamia)
into the “Code of
Hammurabi”

If a man has released waters and so has let the water carry away the works on his neighbor's field, he shall pay 10 gur of corn for every bur (of land) flooded.

JUSTINIAN CODE

Although the Code of Hammurabi was one of the earliest sets of laws, the Romans were the first civilization to view law as a science. They also organized and established extensive bodies of law for Roman citizens and their property.⁴

In A.D. 528 Roman Emperor Justinian I (483–565) ordered the compilation of all existing Roman laws, including those for water allocation, which had evolved over the previous 13 centuries. This set of Roman law was called the Justinian Code (also known as the Corpus Juris Civilis, or Body of Civil Law) and was the most elaborate system of law in the world up to that time.⁵

The Justinian Code is the basic premise for all modern civil law.



Frederic Remington, *Fight for the Waterhole*, oil on canvas, 1903.
The painting is on display at the Museum of Fine Arts, Houston, Texas.

**In some ways, we continue to guard precious water resources today
as we have in the past.**

FIRST POSSESSION

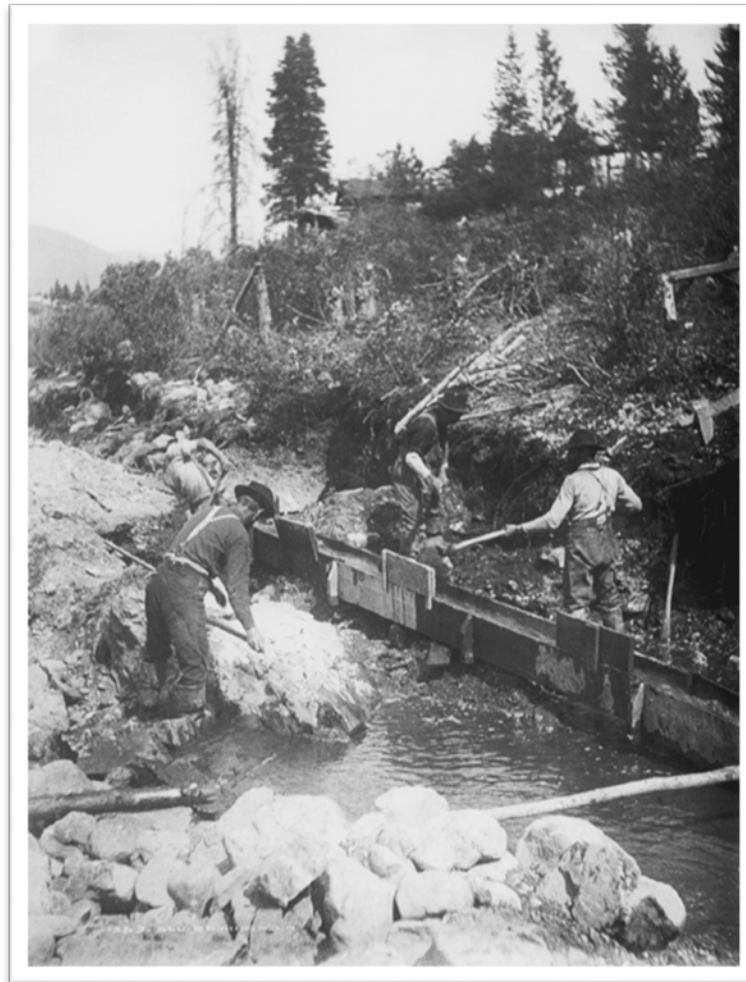
Another method of ownership that has been around for thousands of years is **first possession**. This term could also be called “finders keepers,” or “first come, first served.”

This concept states that the claim of property ownership should remain with the person that initially gained control before other potential claimants.

The rule of first possession is used today with abandoned property, intellectual property, land, radio frequencies, satellite orbits, and water rights.

Centuries ago, it was often used to acquire the best land, prime location on a river, and access to water.

The rule of first possession is a fundamental component of rule-making and social order around the world, and evolved into the concept of water rights.



Placer mining, probably somewhere in Colorado.

Prospectors are shoveling gravel and other sediments from a streambed into a sluice box. In later years, huge crushing machines were transported up steep mountain roads to mining camps to replace this labor-intensive process.



The beginnings of the Greeley Number Three Ditch and the City of Greeley can be seen in this 1870 photograph. Notice the distinct lack of trees and dry landscape.

Colorado Gold Mining



1859 – Gold Rush in Colorado

1876 – Colorado becomes a state, and a strict Doctrine of Prior Appropriation is adopted, an Innovative idea for its time.



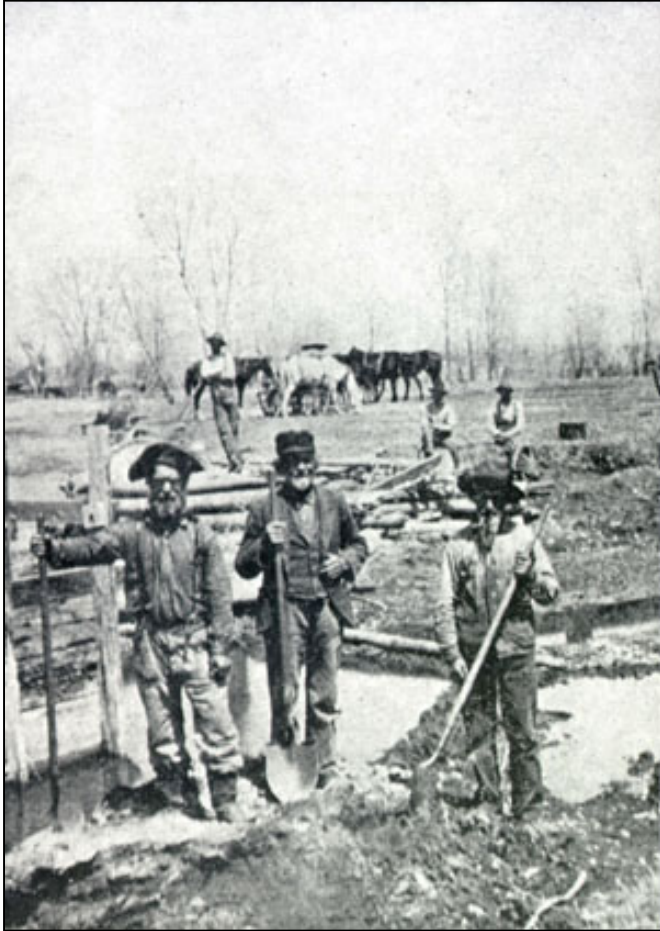
Tin Mining in the United Kingdom 1300 A.D.



Leats (canals) were used to divert water to tin-rich regions away from streams.

This etching shows the removal of overburden and the washing away of unwanted gravel to separate out the heavier tin ore.

Colorado Water Development History



Hundreds of irrigation ditches (canals) were constructed between 1860-1890 along the South Platte River and across Colorado.

Under the Doctrine of Prior Appropriation, irrigation ditches received a river diversion priority date, such as May 2, 1863 for 75 cubic feet/second. Wells received no priority date.



Who Controls the Water?



<https://www.youtube.com/watch?v=jR8oARgIDms>

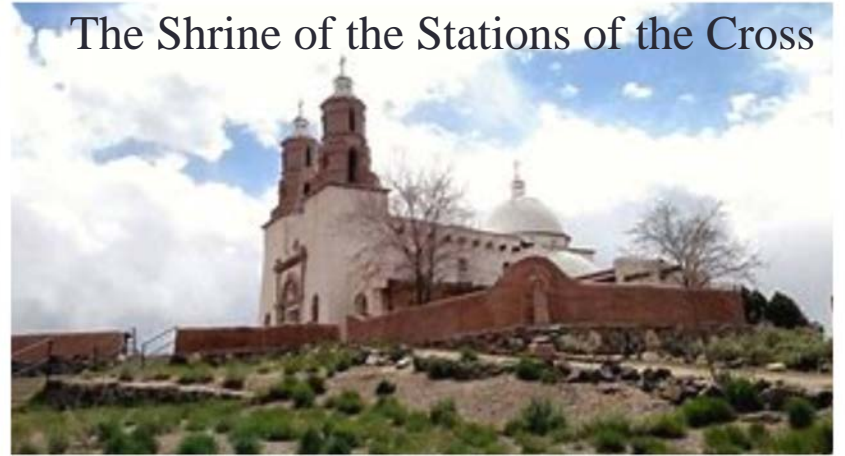
<https://www.youtube.com/watch?v=V33GoE-fzSA>



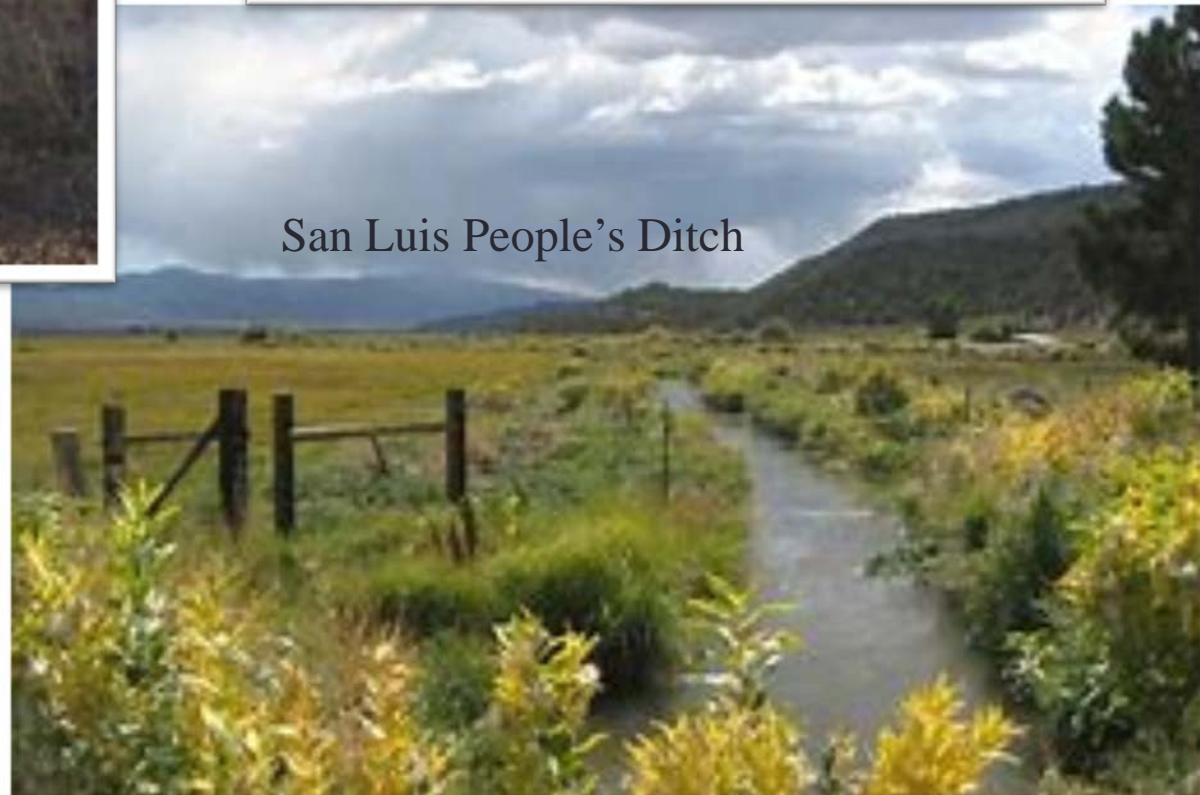
**Water rights are similar to
Broncos football season
tickets.**



**San Luis People's Ditch
1852 - Colorado**



The Shrine of the Stations of the Cross



San Luis People's Ditch

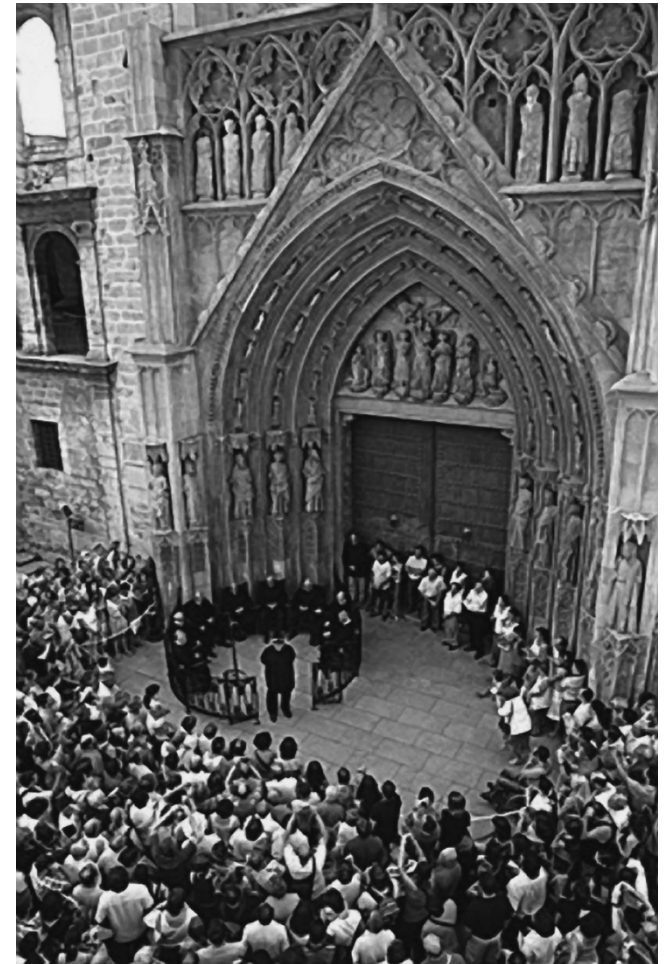


Cleaning the San Luis People's Ditch in the Spring



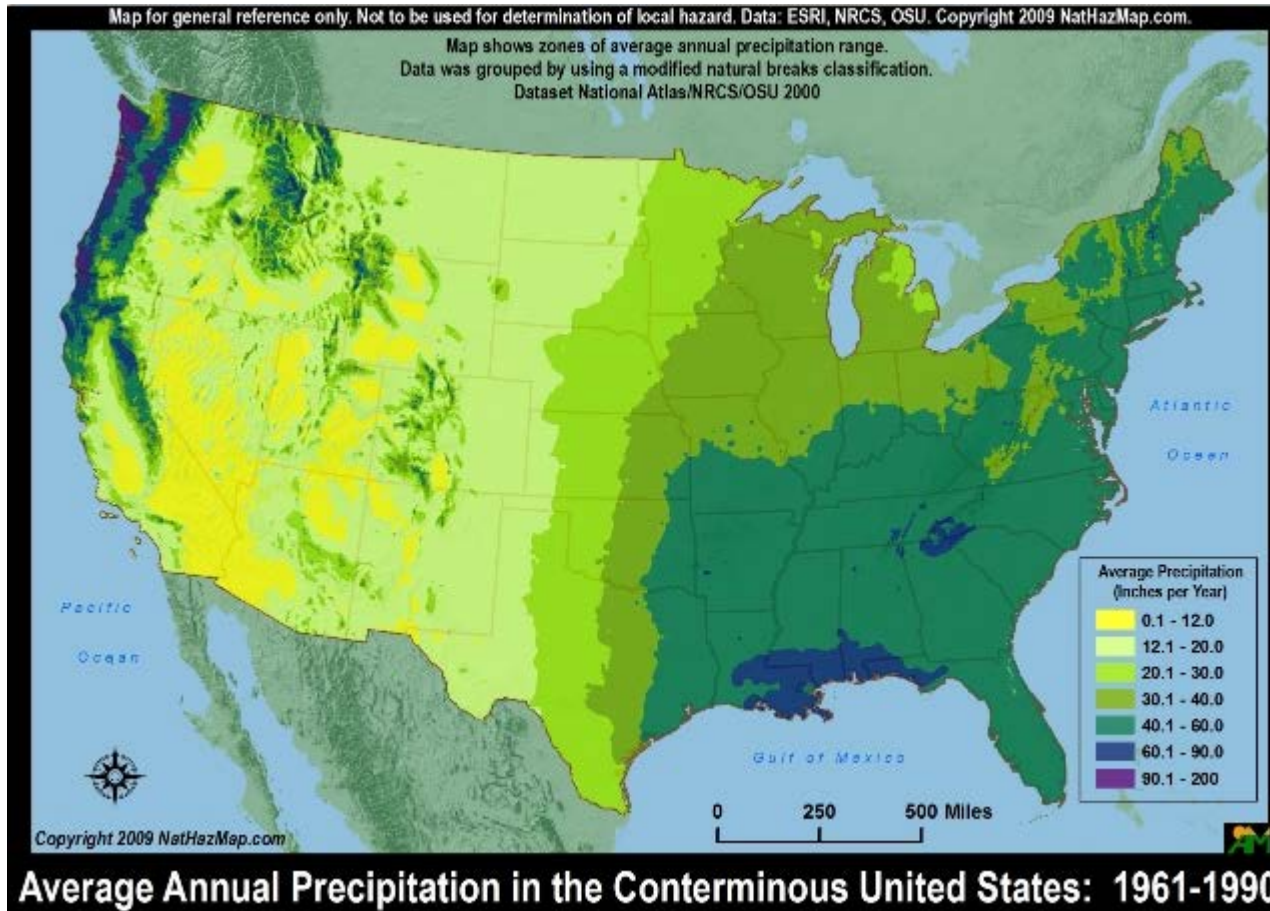
The Water Court (Tribunal de Las Aguas) has been sitting in the Cathedral of Valencia, Spain, since 961, every Thursday at 11 AM, to resolve farm border, irrigation and other water-related disputes between local farmers.

The seven members are elected by local farmers and the hearings are held without oaths, written records or lawyers. The Court sits on a circular velvet couch to listen and render judgment in the local Valencia dialect. The Court was created by Moorish farmers.



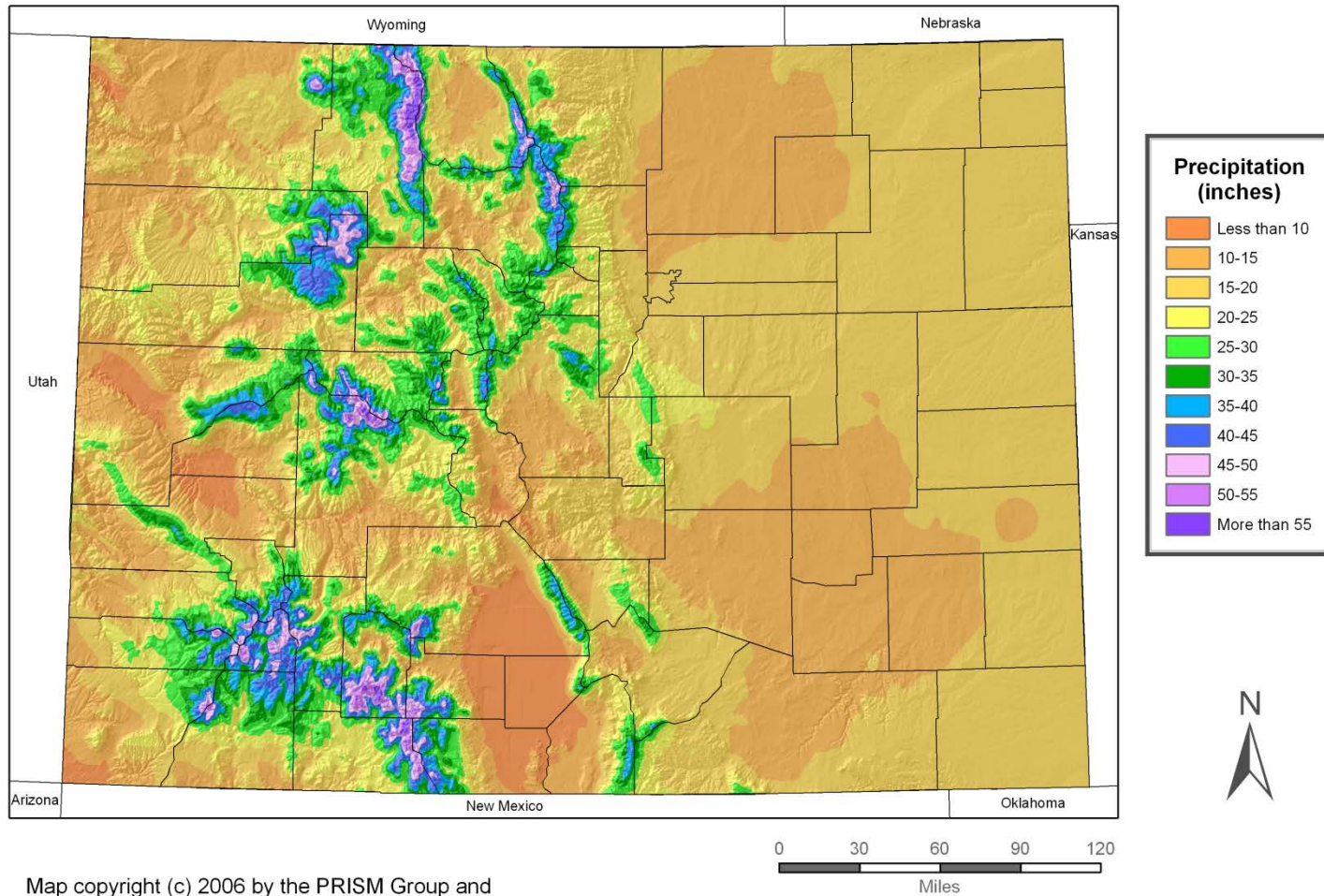


Division One Water Court in Greeley, Colorado -
a relatively new innovation in the West



Average Annual Precipitation of Colorado: 18-127 cm

Average Annual Precipitation, 1971-2000 Colorado



Map copyright (c) 2006 by the PRISM Group and Oregon Climate Service, Oregon State University.

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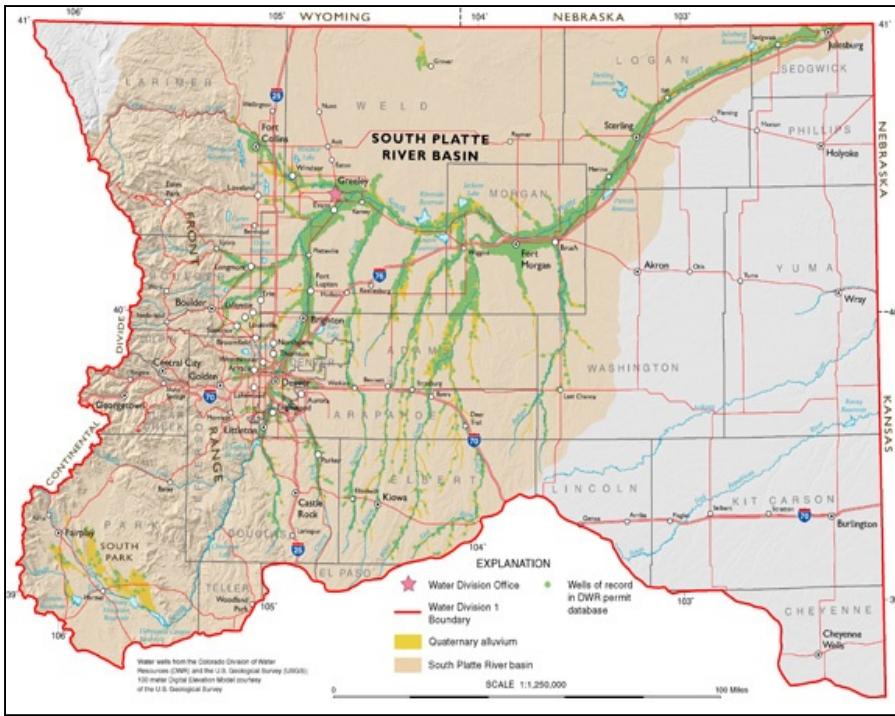
**40,000 students on
Auraria campus**

157 acre campus
at Speer Blvd.

Established in 1965

South Platte River Basin Facts

Colorado Population – 5.0 million
 2030 projection – 7.1 million
 Denver Metro Population – 2.4 million
 (30% growth since 1990)
 Denver projected
 2030 projection – 3.9 million



Water shortfall by 2030 in the South Platte Basin
 410,000 acre-feet (134 billion gallons)
 Acres of irrigated land expected to be dried up by
 2030 in the South Platte Basin –
 133,000 – 226,000 acres

Channel 7 News Report

<https://www.bing.com/videos/search?q=water+rights&&view=detail&mid=5C9FCFBDF65A3E9792D05C9FCFBDF65A3E9792D0&&FORM=VRDGAR>

Historic Options Used for New Water Supplies for the Front Range of Colorado

West Slope Diversions



New Reservoir Construction



Buy & Dry



Improved Water Conservation

Future Challenges

1. Population Growth

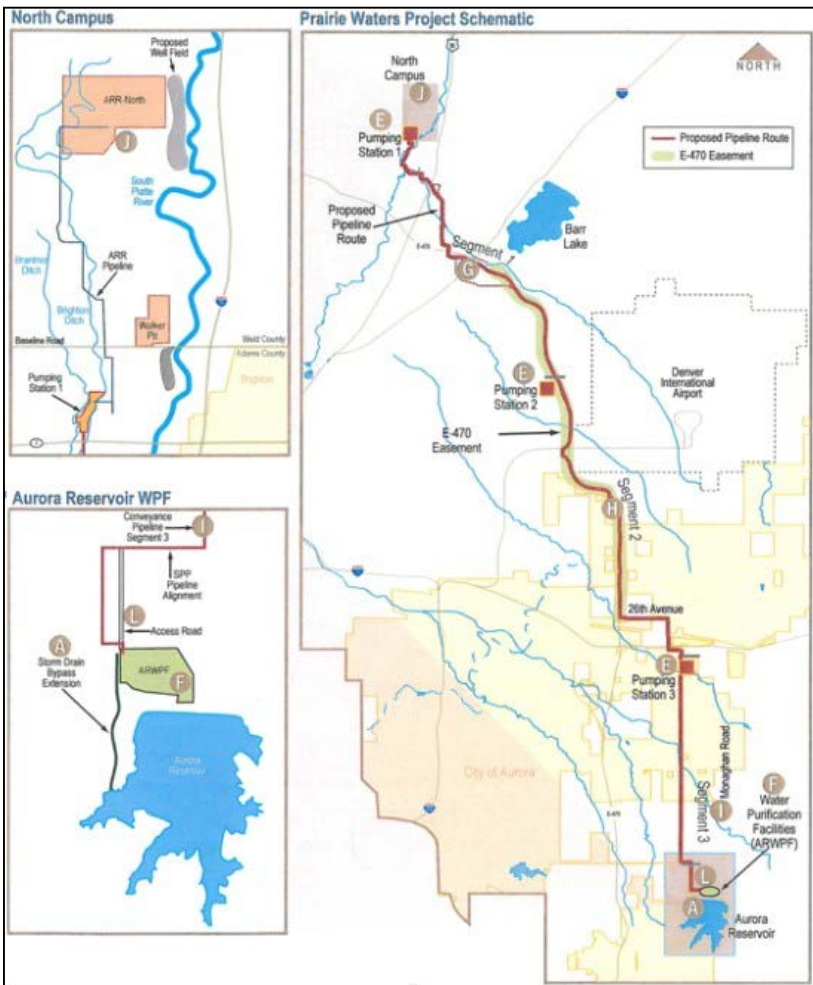


Denver, Colorado

Future Challenges

2. Loss of irrigated agriculture

Aurora Prairie Waters Pipeline



Future Challenges

3. Protecting the Environment



Colorado State Capitol Murals

Here is a land where life is written in Water
The West is where the Water was and is
Father and Son of old Mother and Daughter
Following Rivers up immensities
of Range and Desert thirsting the Sundown ever
Crossing a hill to climb a hill still Drier
Naming tonight a City by some River
a different Name from last night's camping Fire
Look to the Green within the Mountain cup
look to the Prairie parched for Water lack
look to the Sun that pulls the Oceans up
look to the Cloud that gives the oceans back
look to your Heart and may your Wisdom grow
to power of Lightning and to peace of Snow
Thomas Hornsby Ferril



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