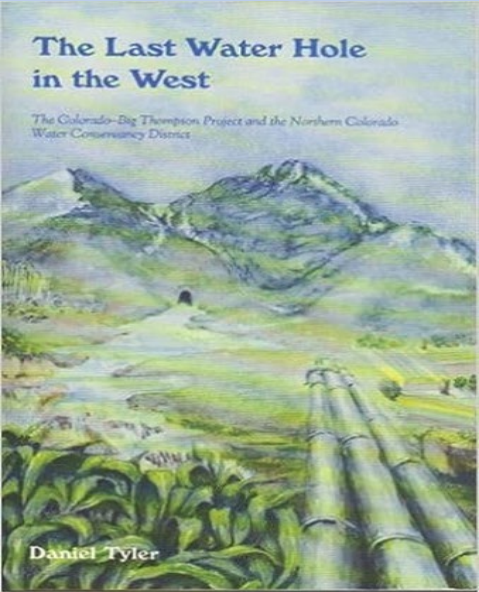
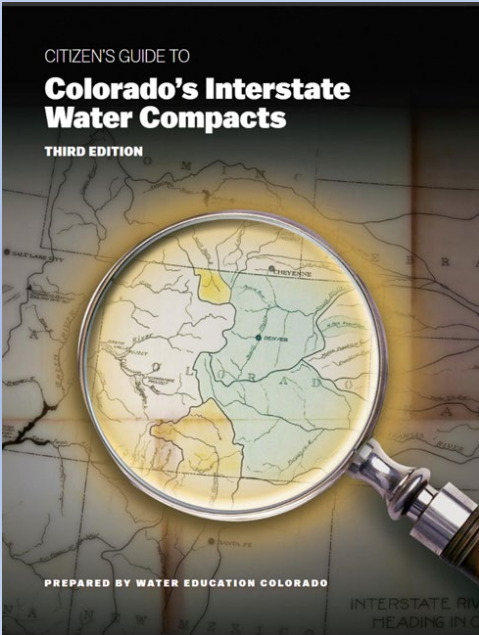
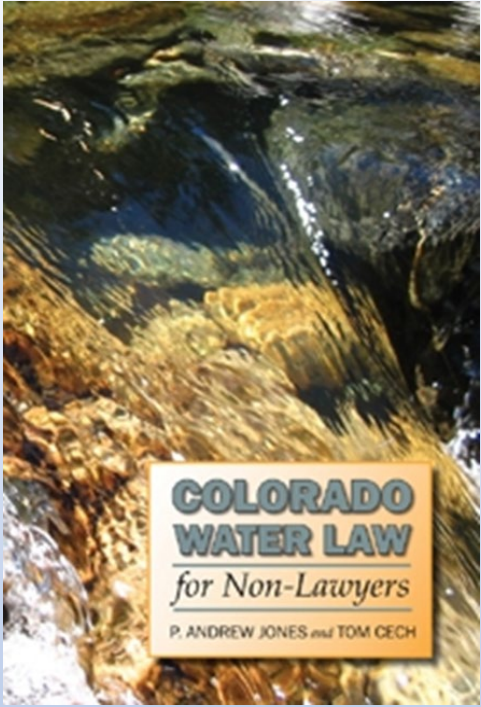
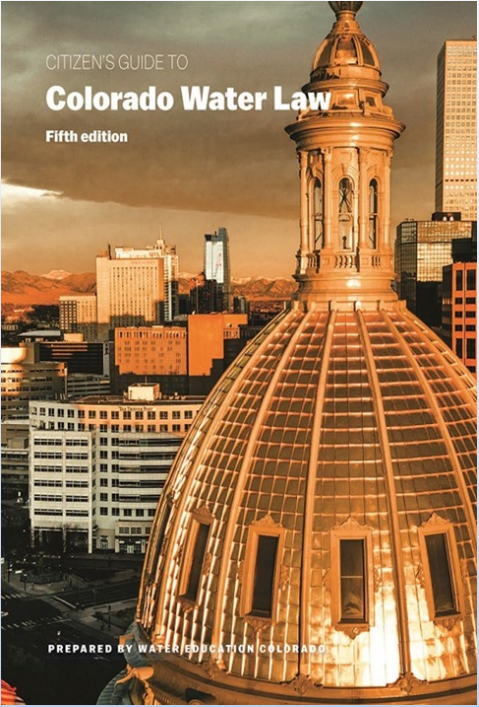




Water Law and Governance of the South Platte River

**Jennifer Gimbel
Colorado Water Center
GRAD 592
Sept. 5, 2023**

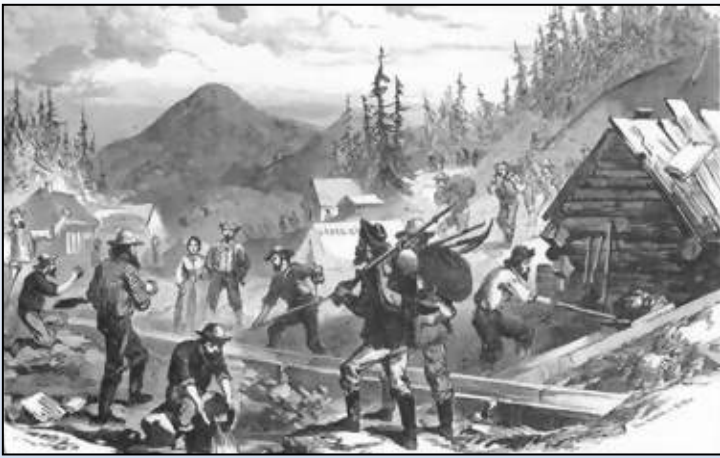
Reference Materials



Riparian Water Rights

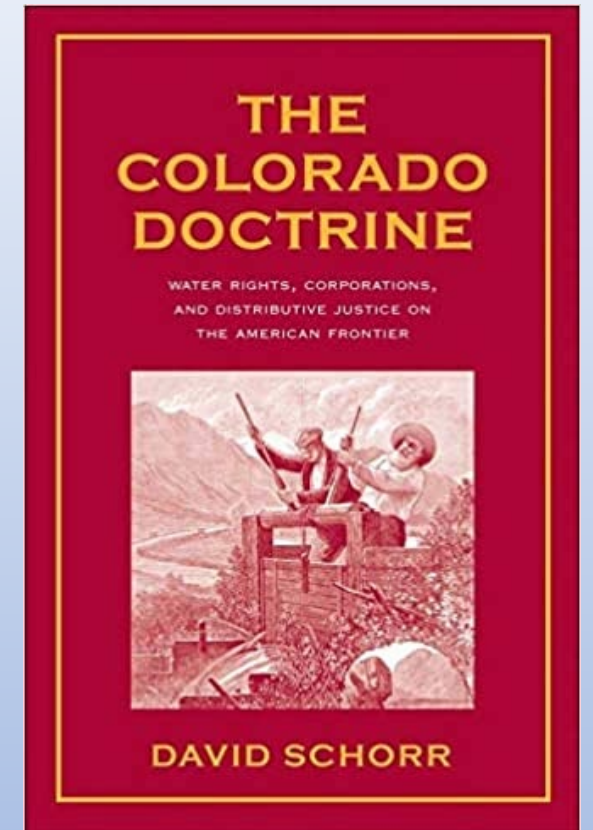
- ❖ “Reasonable use” by owner of land bordering stream or lake
- ❖ Upstream and downstream water users are coequal
- ❖ Share shortages
- ❖ Some states permit its use and require conditions to prevent harm to others.





Development of the Colorado Doctrine

- ❖ 1859 Gold Rush in the Rockies.
- ❖ Claims were based on first possession
- ❖ Any party could use water and take away from stream
- ❖ In shortage- “First in time, first in right”
- ❖ Rights transferable

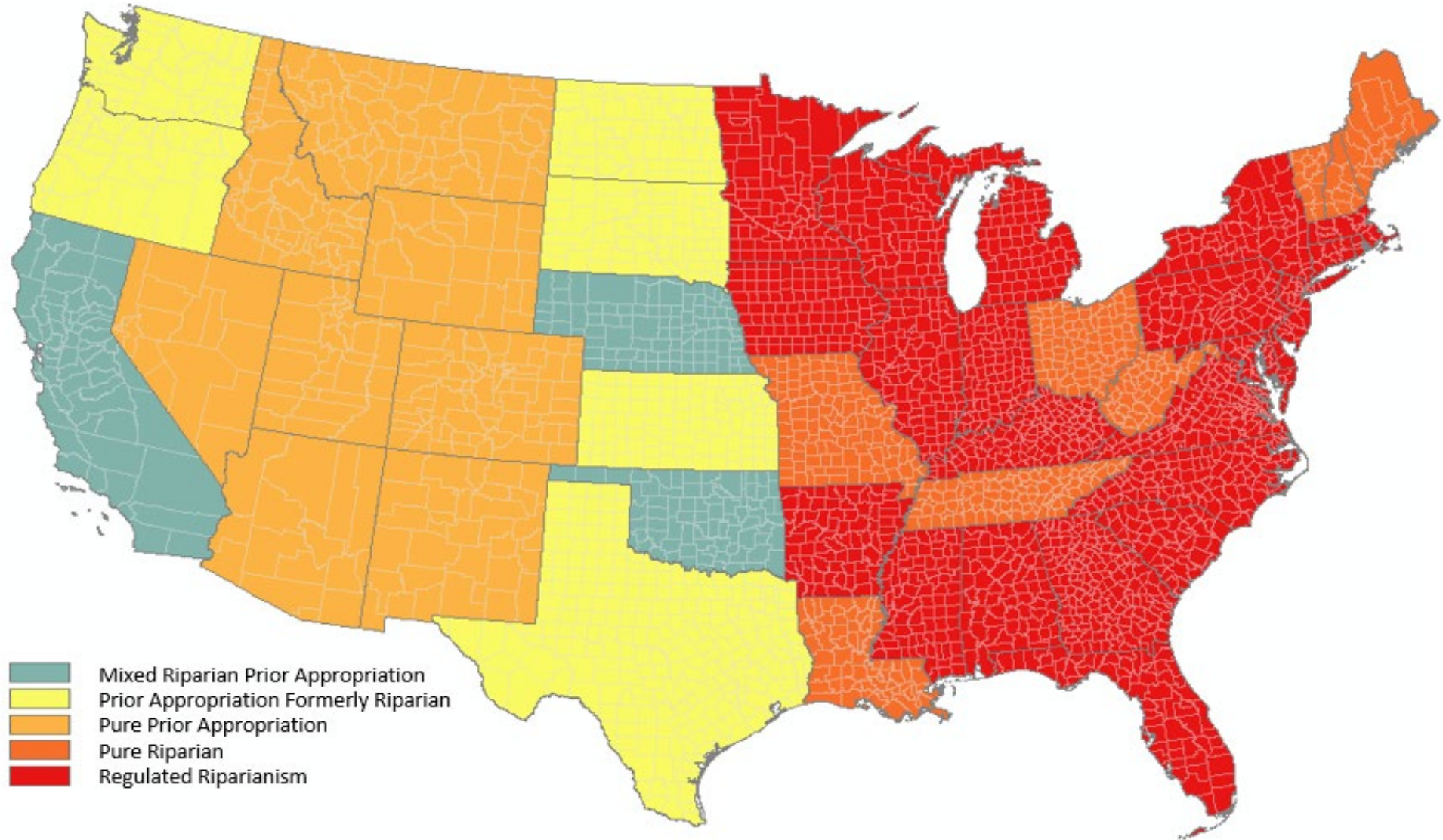


Prior Appropriation Doctrine

- ❖ Earliest appropriators have the **highest priority**; “First in time, first in right.”
- ❖ Water must be put to **beneficial use** without waste or speculation.
- ❖ **Remote uses** and **transfers** allowed.
- ❖ Right of use can be **forfeited by non-use**.



Surface Water Appropriation Governance Systems



Data Source: Christian-Smith, Juliet, et al., 2012.

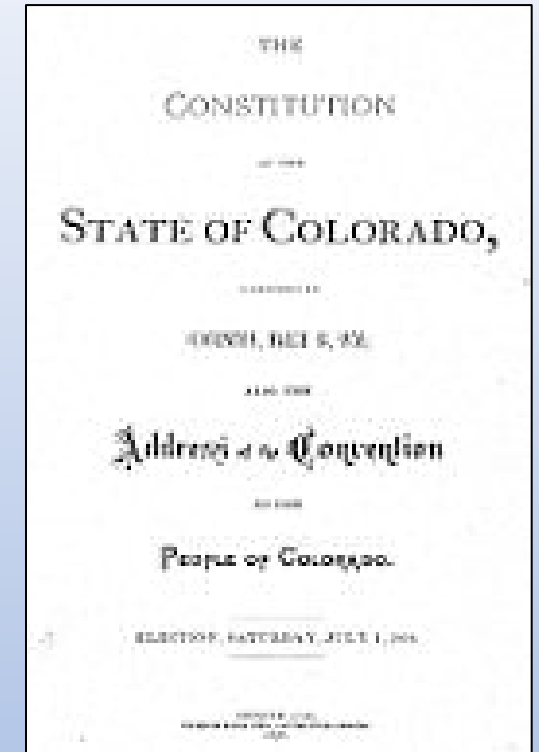
Water Markets LLC (2018)

1876 – Colorado becomes a state

A strict Doctrine of Prior Appropriation is adopted in the state constitution.

"The right to divert the unappropriated waters of any natural stream to beneficial use shall never be denied."

Colorado Constitution 1876



Early Beneficial Uses

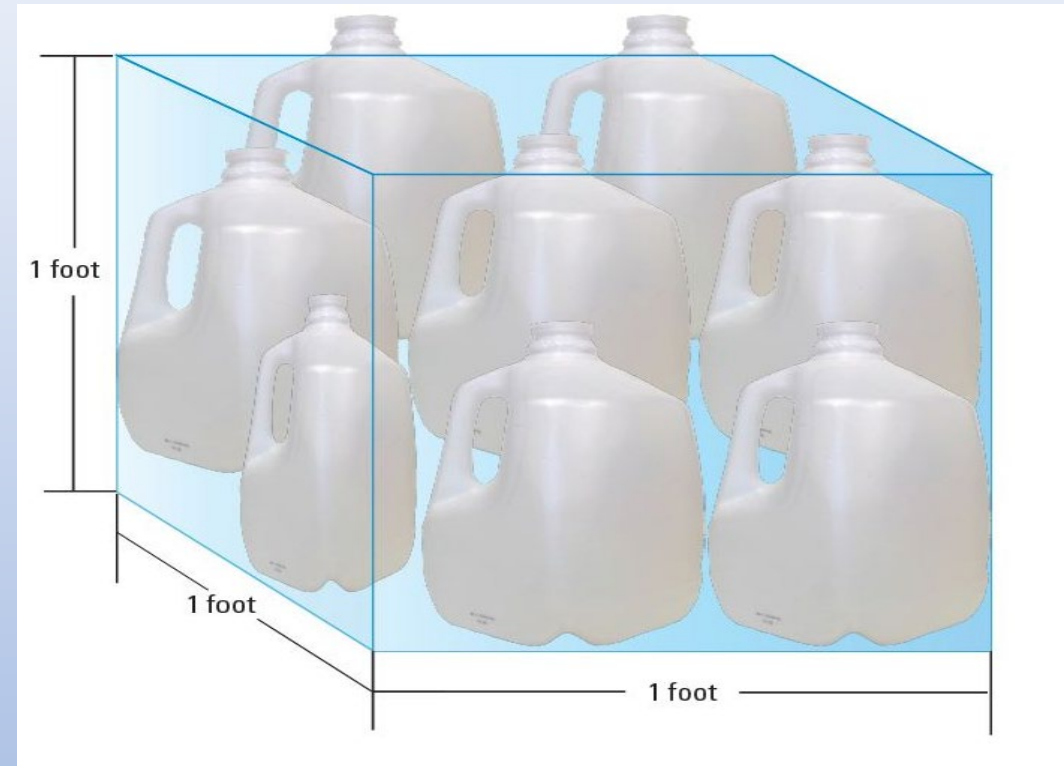
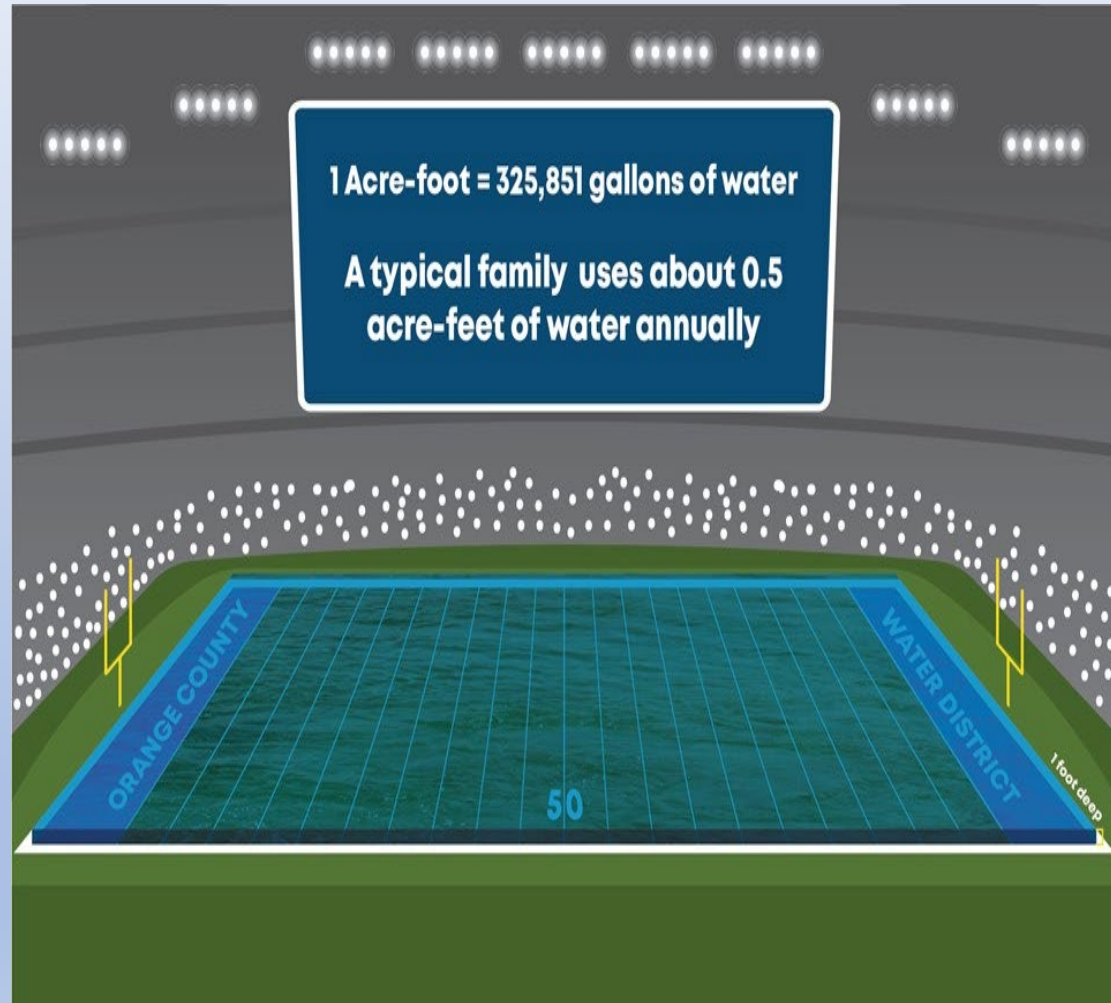


Definition of Beneficial Use Expands



Acre-Foot (AF)

Cubic Feet per Second (cfs)



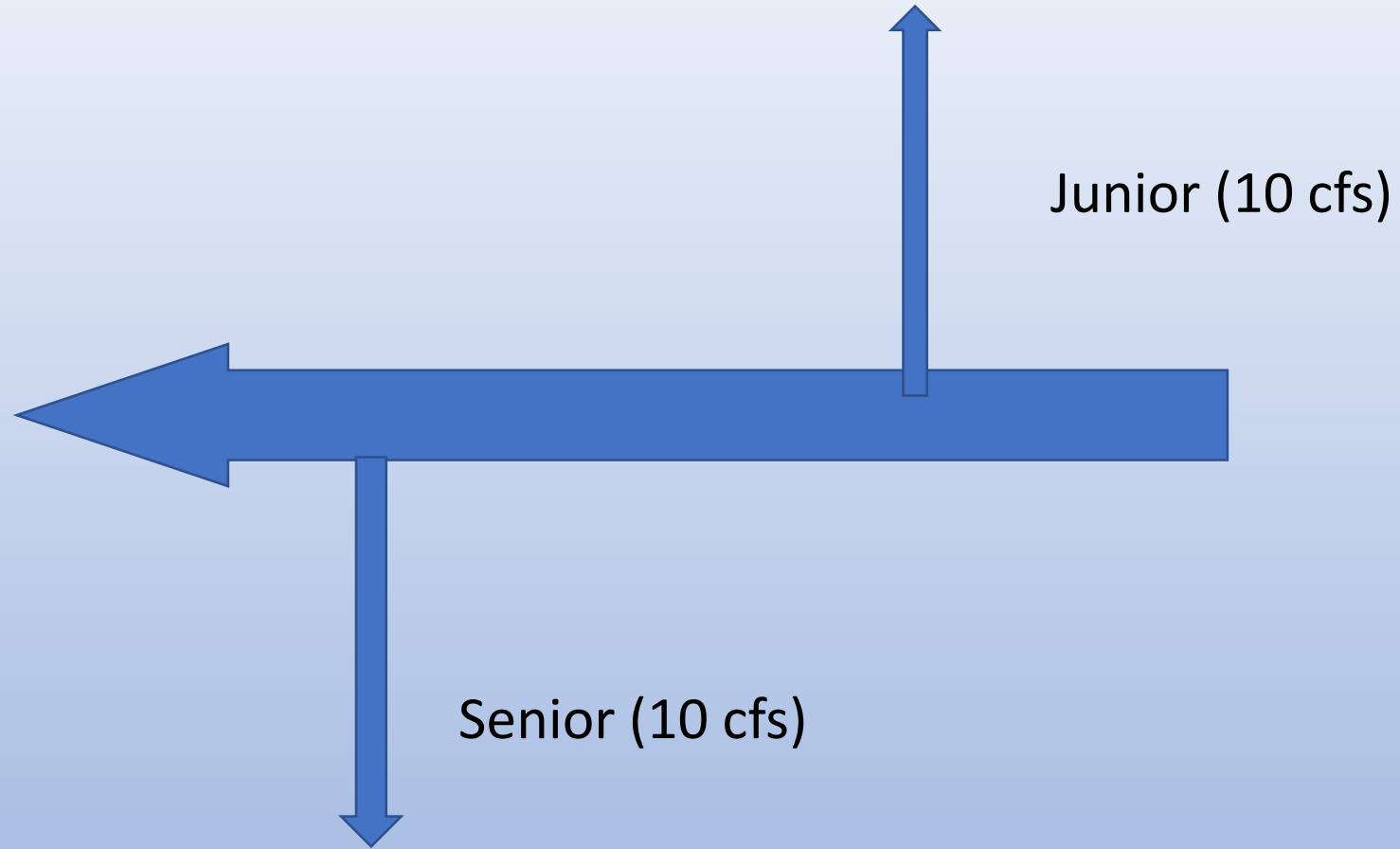
Flow rate or discharge equal to one cubic foot of water per second. This rate is equivalent to approximately 7.5 gallons per second.

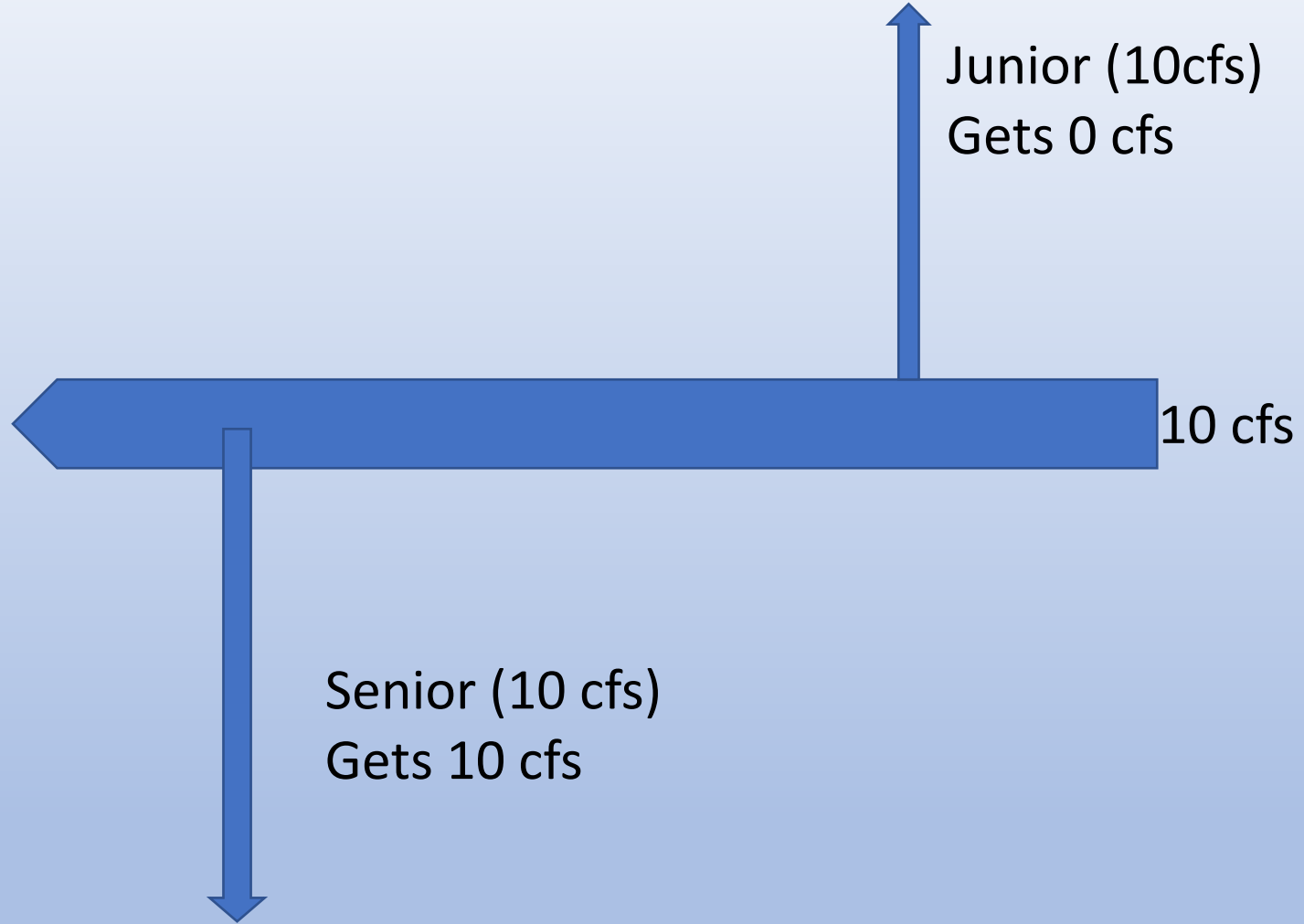
Streamflow Example from USGS

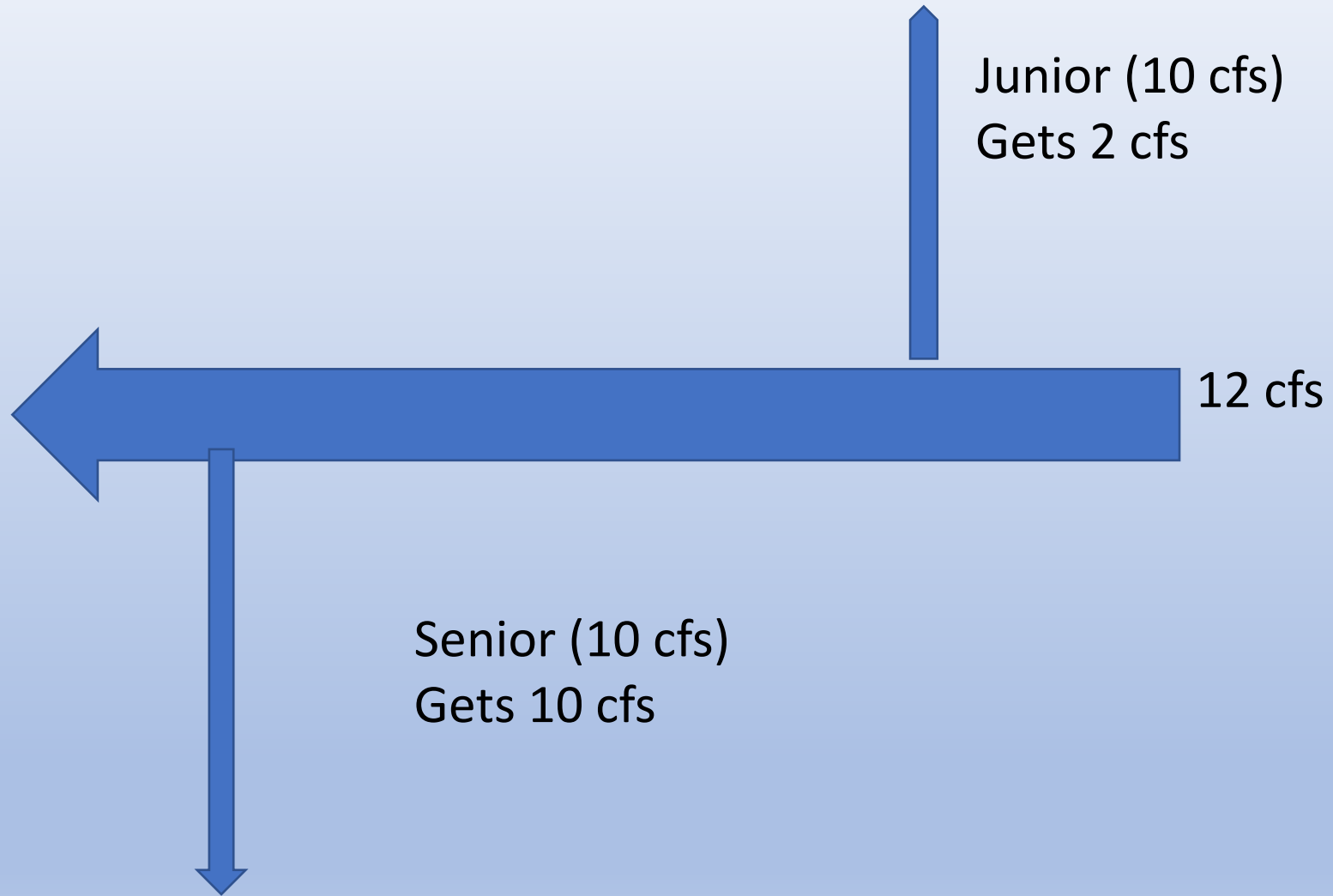


This is a typical flood on Peachtree Creek, shown in "before and after" pictures from the homeowner's 10-foot-high entryway. Base flow at Peachtree Creek (picture on the left) is around 2.5 feet, with a streamflow of about **25 cubic feet per second (cfs)**. The flood picture (on the right) was taken on May 6, 2003 in the late afternoon when stream stage was about 17 feet. The flood peaked that day at 7:30 PM Eastern Time in the evening, when the stream stage reached 17.77 feet with a corresponding instantaneous streamflow of **6,960 cfs**.

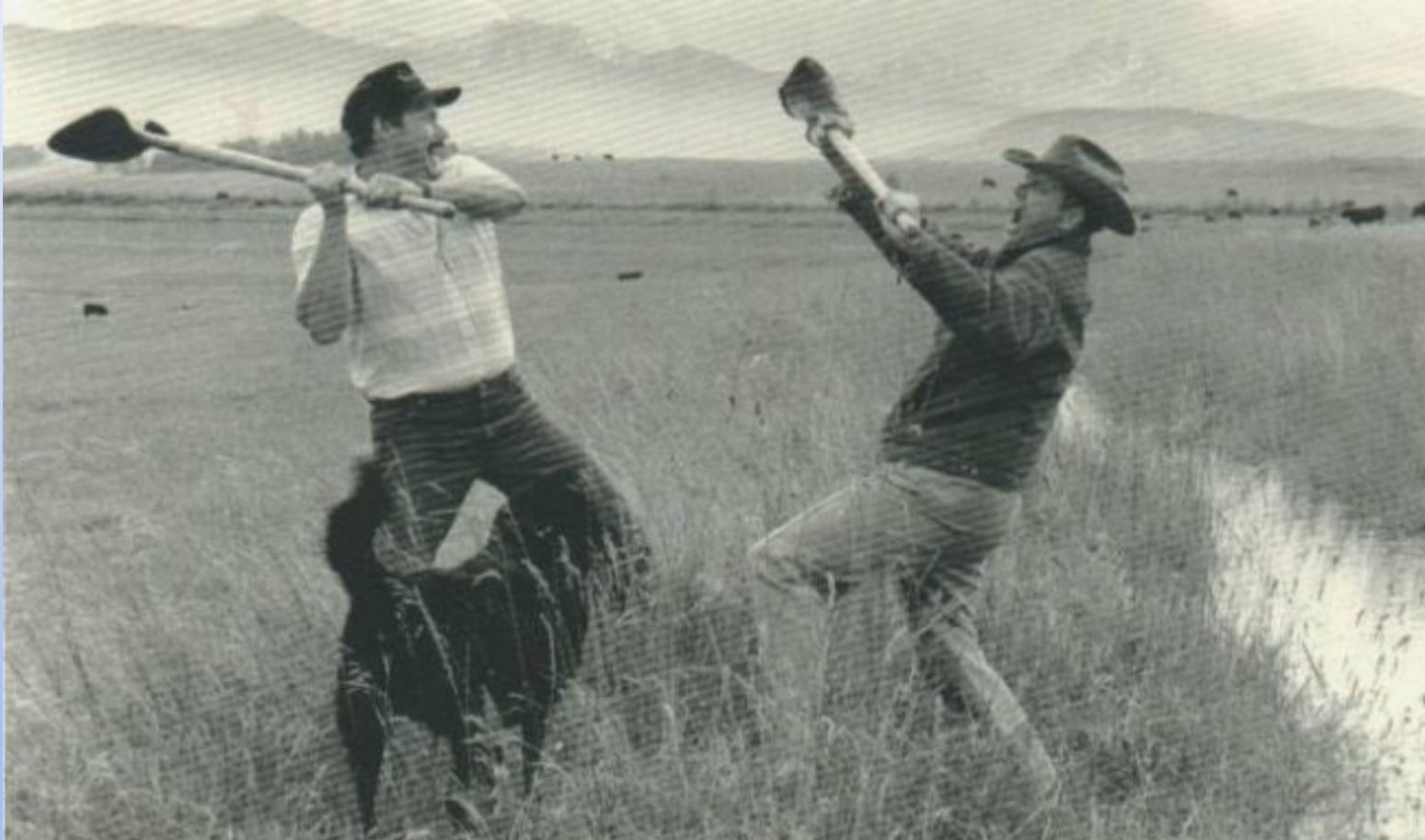
Water Administration Examples



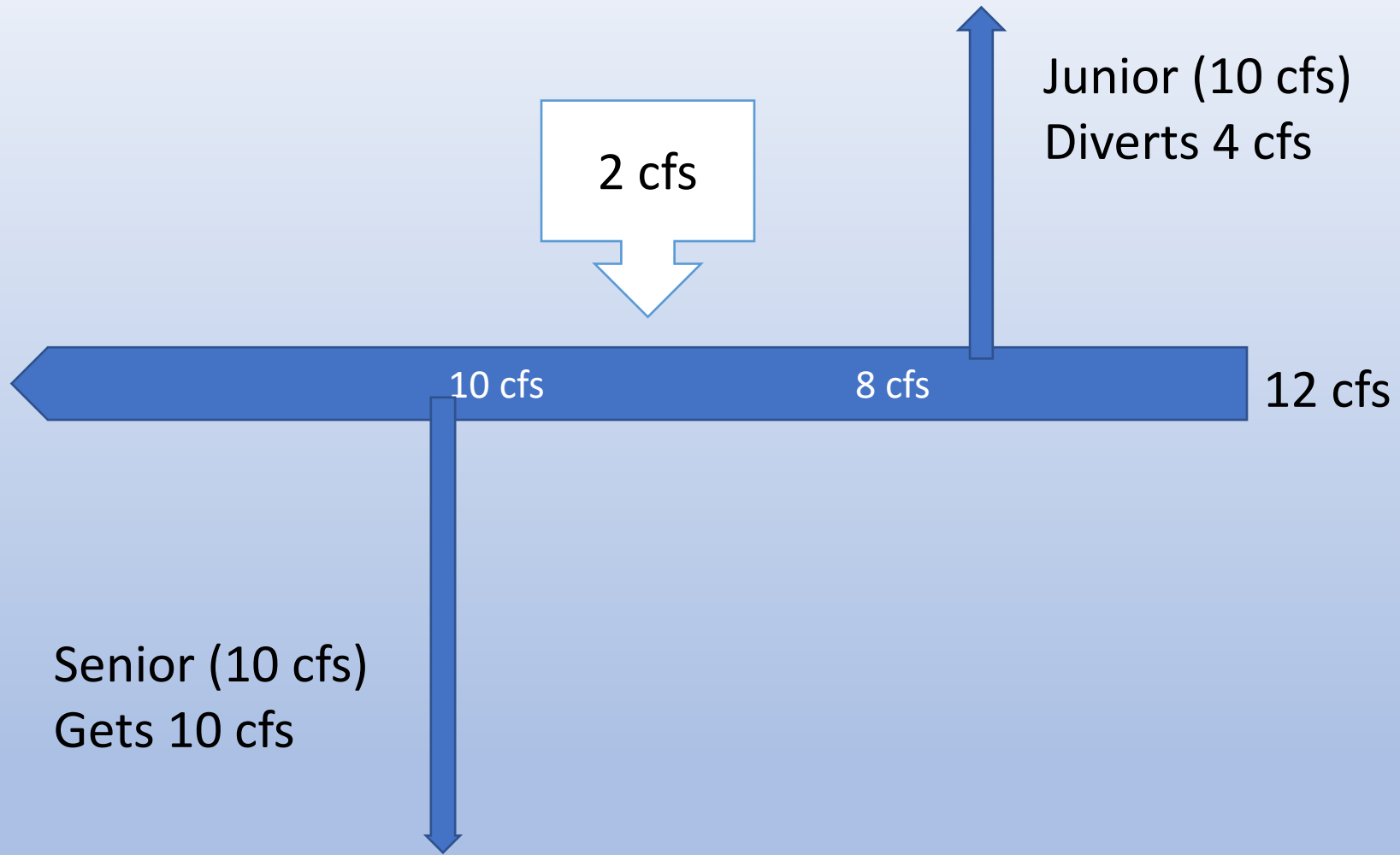




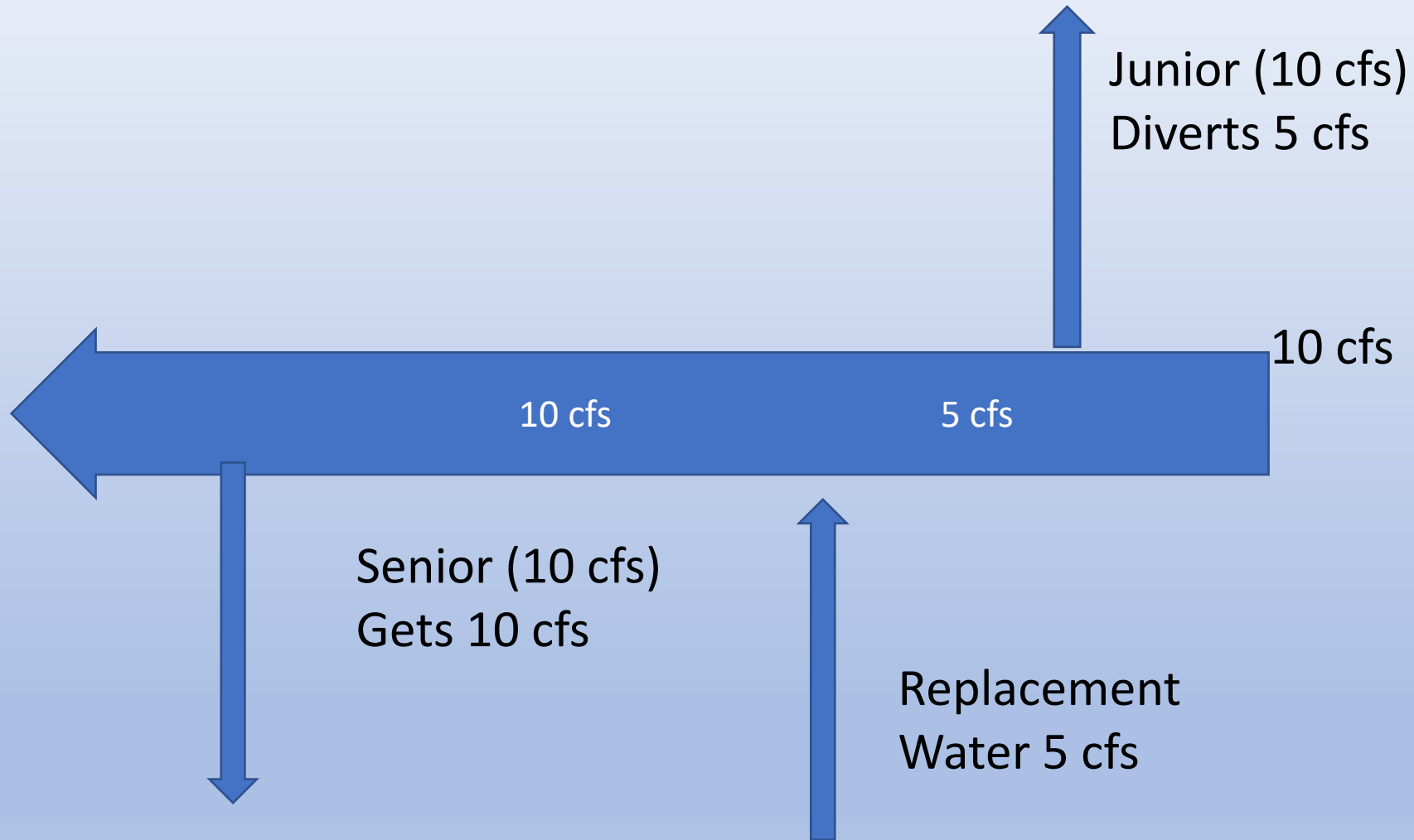
Maxim



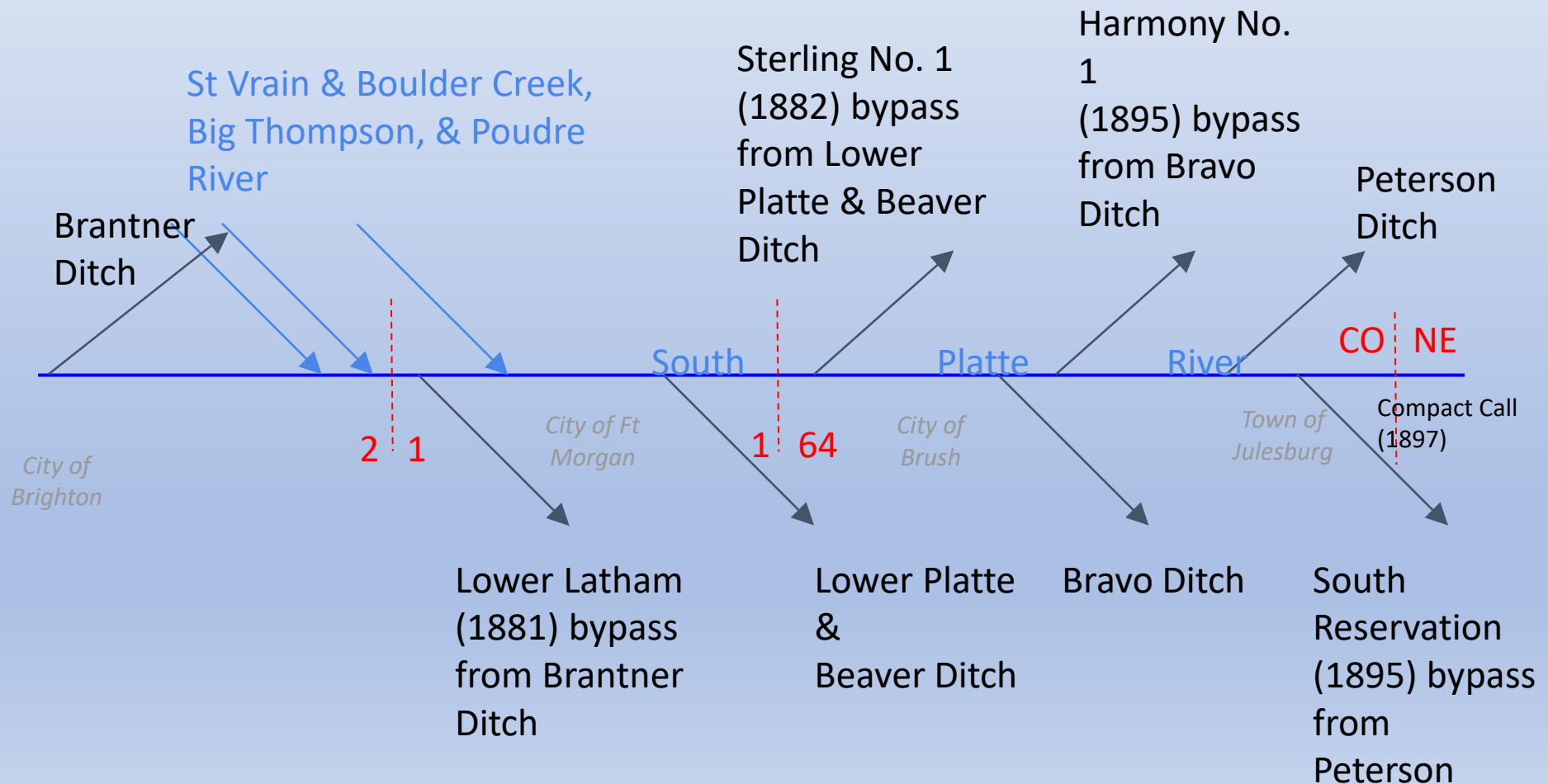
I'd rather be upstream with a shovel than downstream with a water right.



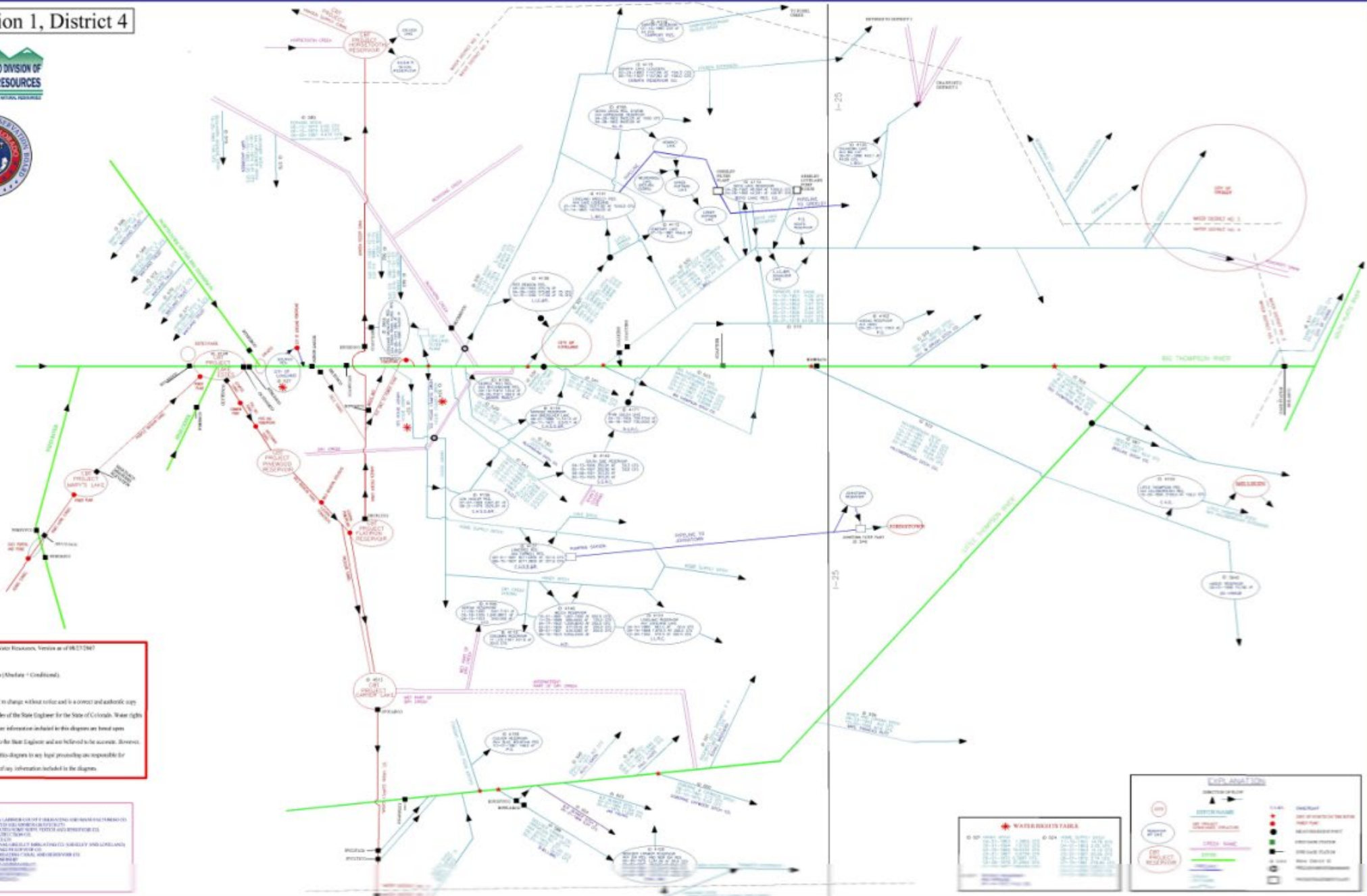
Water Augmentation Plans



S. Platte River Calls - July 23, 2007



Division 1, District 4

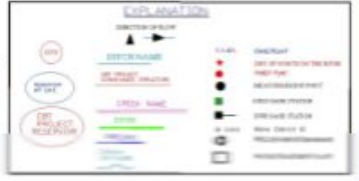


ABBREVIATIONS

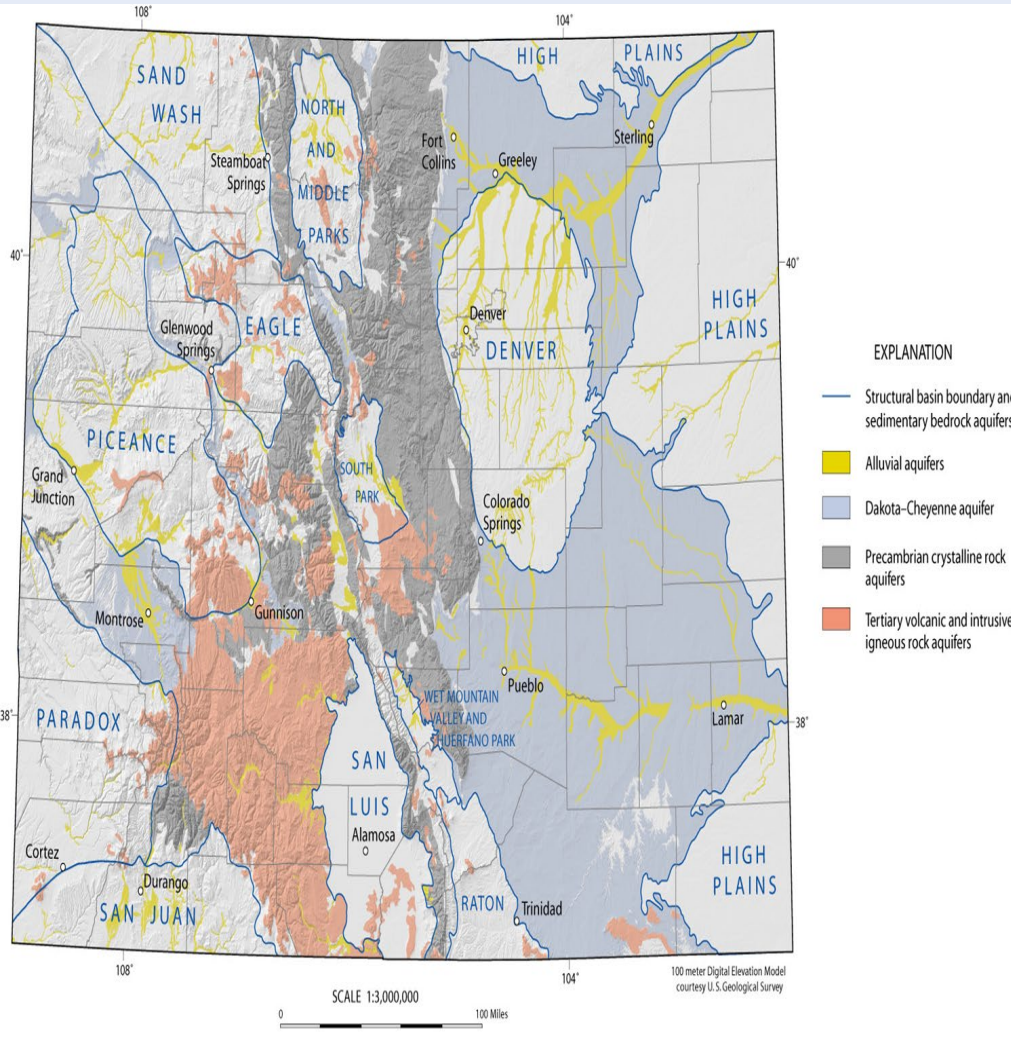
C-1000	WATER RIGHT
C-1001	WATER RIGHT
C-1002	WATER RIGHT
C-1003	WATER RIGHT
C-1004	WATER RIGHT
C-1005	WATER RIGHT
C-1006	WATER RIGHT
C-1007	WATER RIGHT
C-1008	WATER RIGHT
C-1009	WATER RIGHT
C-1010	WATER RIGHT
C-1011	WATER RIGHT
C-1012	WATER RIGHT
C-1013	WATER RIGHT
C-1014	WATER RIGHT
C-1015	WATER RIGHT
C-1016	WATER RIGHT
C-1017	WATER RIGHT
C-1018	WATER RIGHT
C-1019	WATER RIGHT
C-1020	WATER RIGHT
C-1021	WATER RIGHT
C-1022	WATER RIGHT
C-1023	WATER RIGHT
C-1024	WATER RIGHT
C-1025	WATER RIGHT
C-1026	WATER RIGHT
C-1027	WATER RIGHT
C-1028	WATER RIGHT
C-1029	WATER RIGHT
C-1030	WATER RIGHT
C-1031	WATER RIGHT
C-1032	WATER RIGHT
C-1033	WATER RIGHT
C-1034	WATER RIGHT
C-1035	WATER RIGHT
C-1036	WATER RIGHT
C-1037	WATER RIGHT
C-1038	WATER RIGHT
C-1039	WATER RIGHT
C-1040	WATER RIGHT
C-1041	WATER RIGHT
C-1042	WATER RIGHT
C-1043	WATER RIGHT
C-1044	WATER RIGHT
C-1045	WATER RIGHT
C-1046	WATER RIGHT
C-1047	WATER RIGHT
C-1048	WATER RIGHT
C-1049	WATER RIGHT
C-1050	WATER RIGHT

WATER RIGHTS TABLE

WATER RIGHT	OWNER	CLASSIFICATION	STATUS
C-1000
C-1001
C-1002
C-1003
C-1004
C-1005
C-1006
C-1007
C-1008
C-1009
C-1010
C-1011
C-1012
C-1013
C-1014
C-1015
C-1016
C-1017
C-1018
C-1019
C-1020
C-1021
C-1022
C-1023
C-1024
C-1025
C-1026
C-1027
C-1028
C-1029
C-1030
C-1031
C-1032
C-1033
C-1034
C-1035
C-1036
C-1037
C-1038
C-1039
C-1040
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C-1046
C-1047
C-1048
C-1049
C-1050



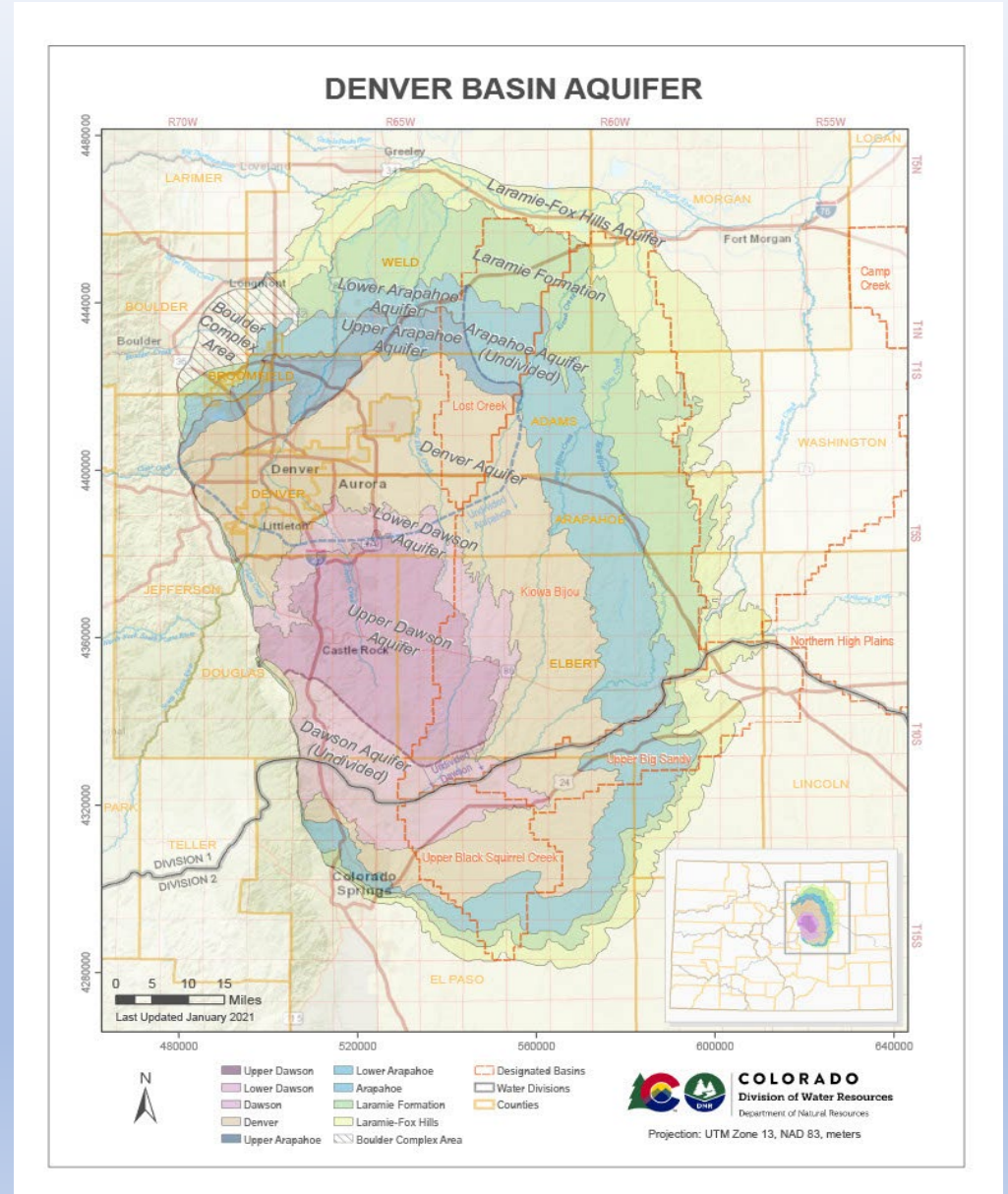
Groundwater



- Tributary: hydraulically connected to surface water
- Non-tributary: pumping will not materially effect surface water
- Not non-tributary: Denver Basin
- Designated Groundwater: not connected to surface water

Denver Basin Aquifers

- Water allocated to overlaying landowners at the rate of 1% per year over 100 years
- Not non-tributary: must replace 4% of pumped water must be returned to stream
- Non-tributary: must replace 2% to stream



Adjudication and Administration of Water Rights

Water Courts



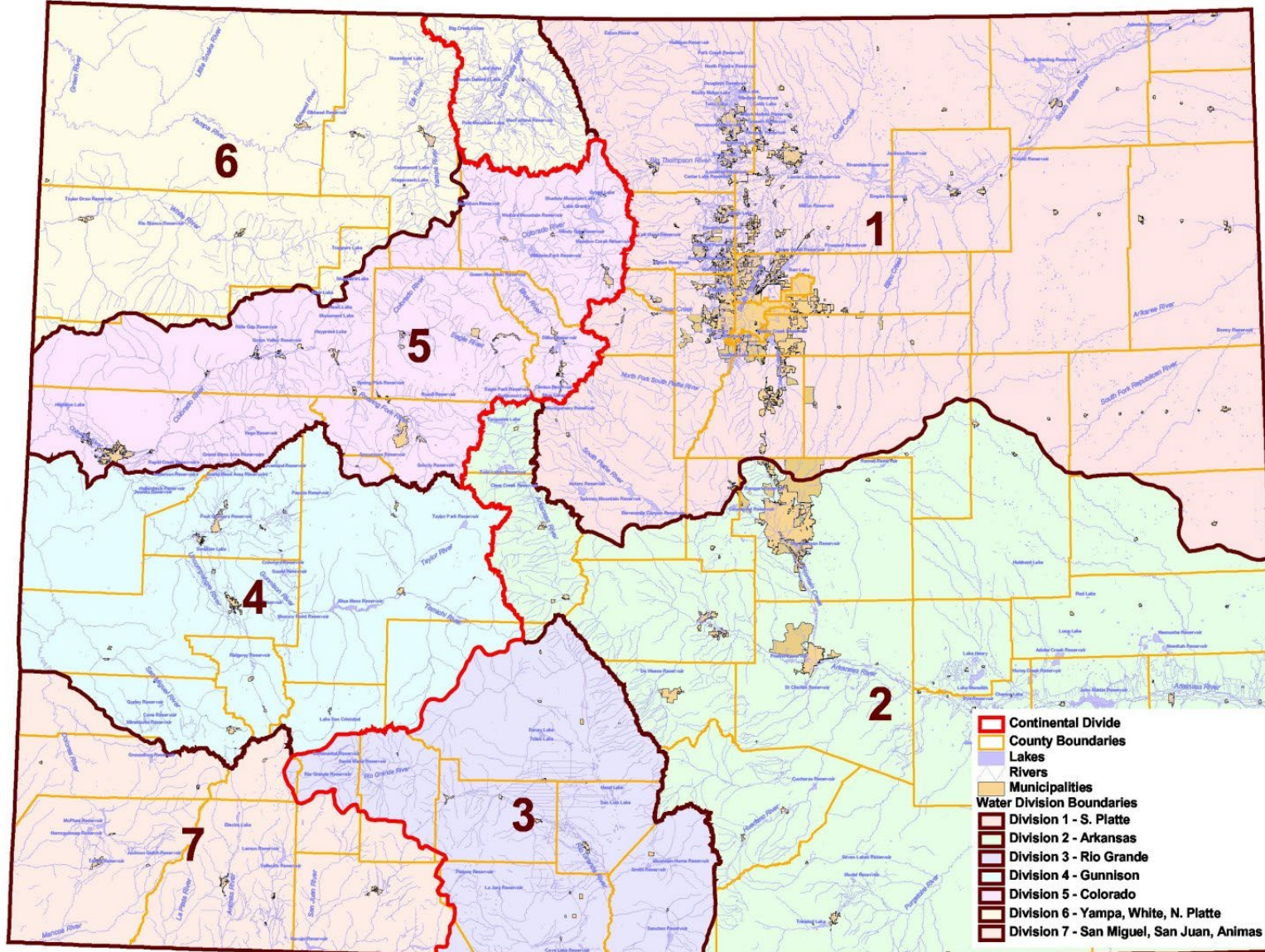
Todd Taylor
District Court Judge/Water Judge



Kevin Rein
State Engineer



Water Divisions of Colorado

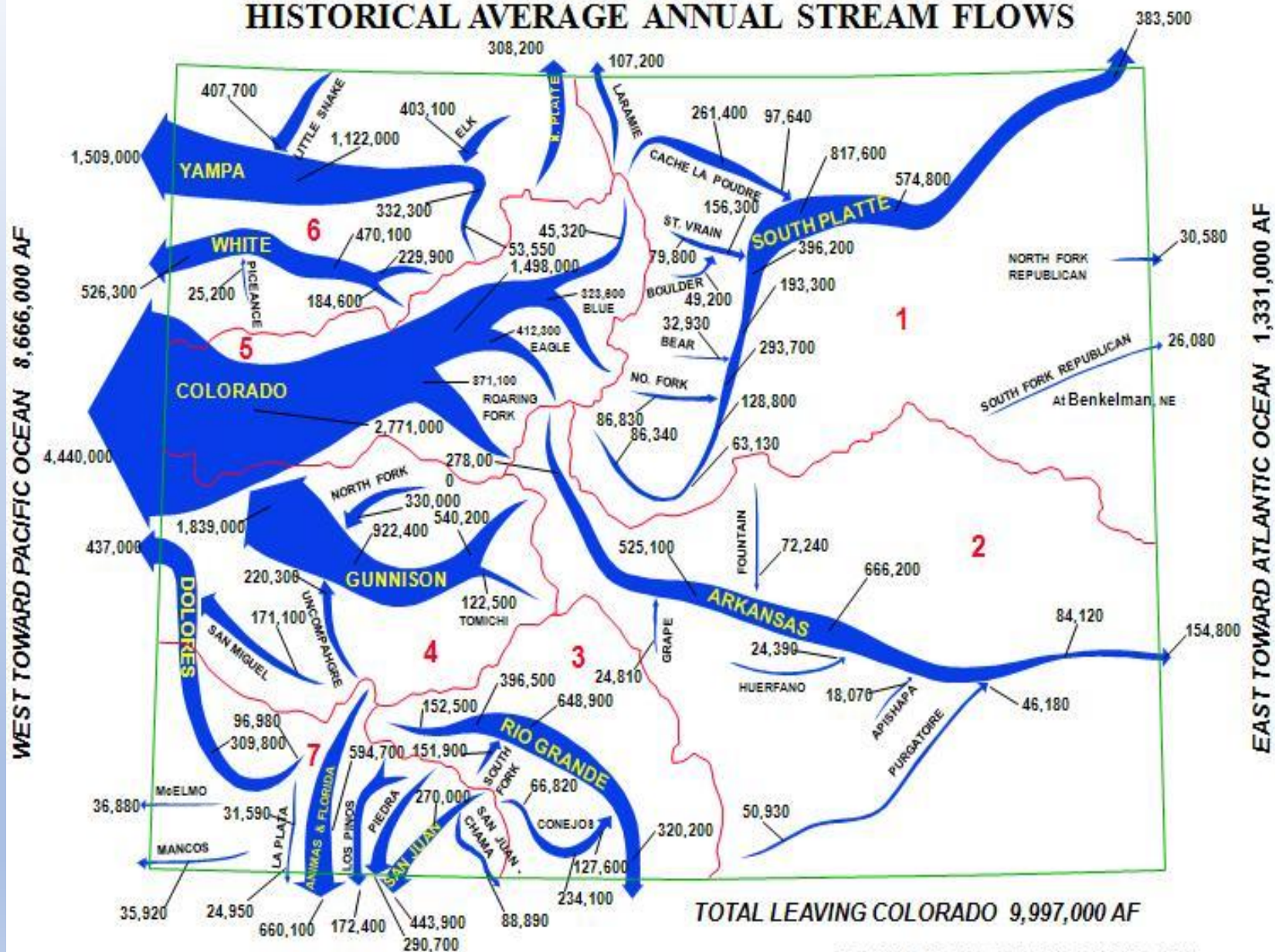


Colorado State Engineer Division of Water Resources

- Administers water rights (curtail or adjust diversion)
- Issues water well permits
- Represents Colorado in interstate water compact proceedings
- Monitors streamflow and water use
- Participates in water court
- Approves construction and repair of dams and performs dam safety inspections,
- Issues licenses for well drillers and assures the safe and proper construction of water wells
- Maintains numerous databases of Colorado water information.

COLORADO

HISTORICAL AVERAGE ANNUAL STREAM FLOWS

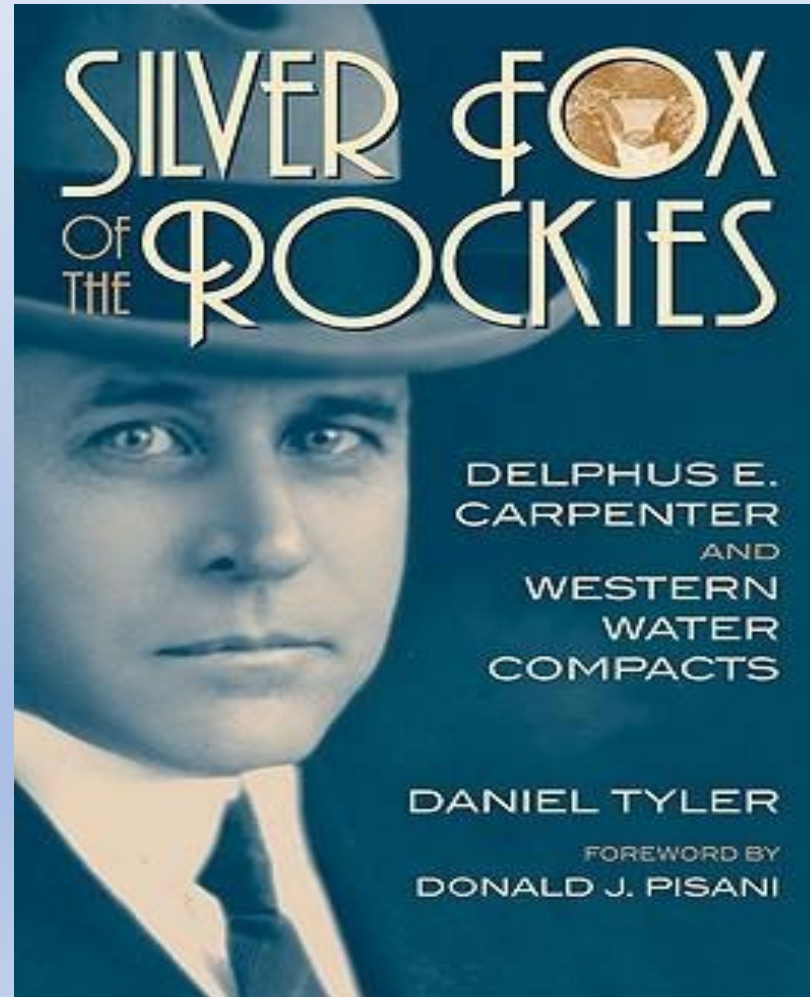


Sharing Colorado's Rivers

Prepared by the Hydrographic Branch (2011 Revision)
[all values in acre feet (AF)]

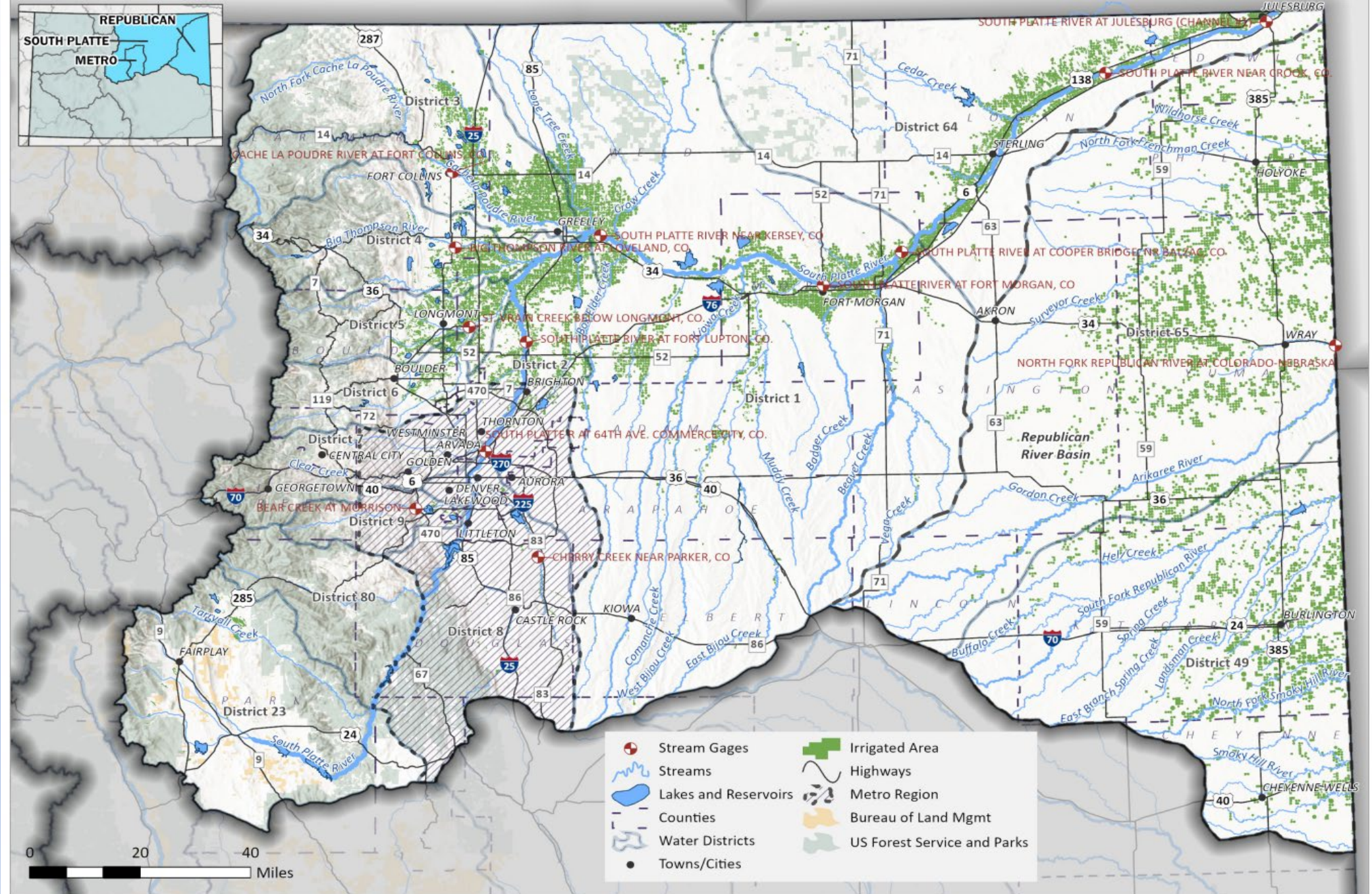
OFFICE OF THE STATE ENGINEER
COLORADO DIVISION OF WATER RESOURCES

Delphus E. Carpenter Father of Interstate Compacts

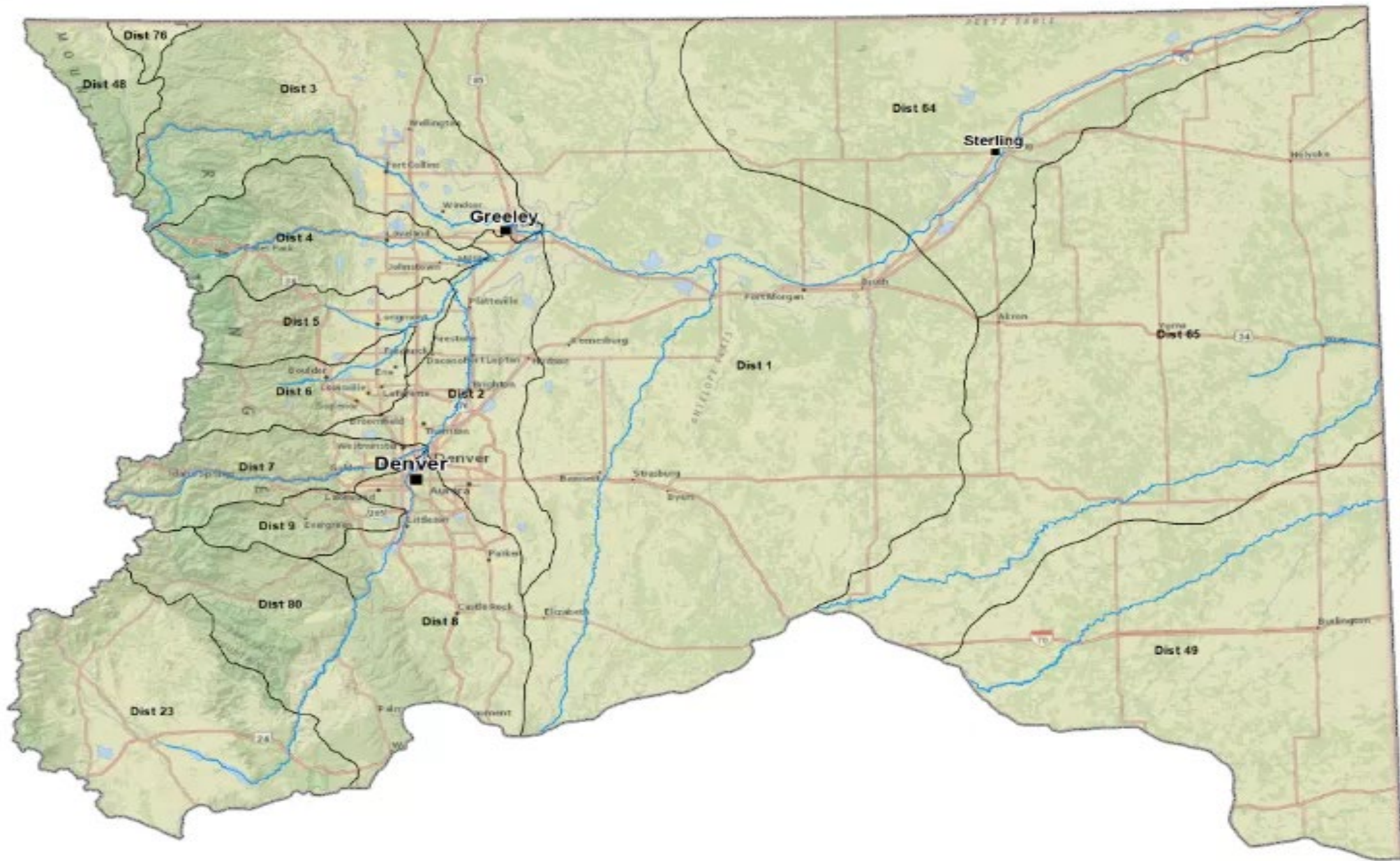


Colorado Interstate Compacts & U.S. Supreme Court Decrees

- 1922 Colorado River Compact
- 1922 La Plata River Compact
- 1923 South Platte River Compact
- 1938 Rio Grande Compact
- 1942 Republican River Compact
- 1944 Amended 1963 Costilla Creek Compact
- 1948 Upper Colorado River Compact
- 1949 Arkansas River Compact
- 1969 Amended Animas-LaPlata Project Compact
- Wyoming v Colorado (Laramie River Decree) 1922, amended 1957
- Nebraska v. Wyoming (North Platte Decree) (1945)



South Platte Basin Implementation Plan



South Platte River Compact (1923)

- Divided into upper and lower segments in Colorado
- Apportioned river in two seasons:
 - April 1 – October 15 (irrigation)
 - October 16 – March 31 (non-irrigation)
- During irrigation season:
 - Colorado must deliver 120 cfs to state line.
 - Only in district 64, water rights junior to 1897 may be curtailed to meet delivery obligations
- During non-irrigation season no restrictions on diversions in Colorado for compact purposes
- Colorado has continued to meet its obligations under the compact

Whiskey's for Drinking Water's for Fighting



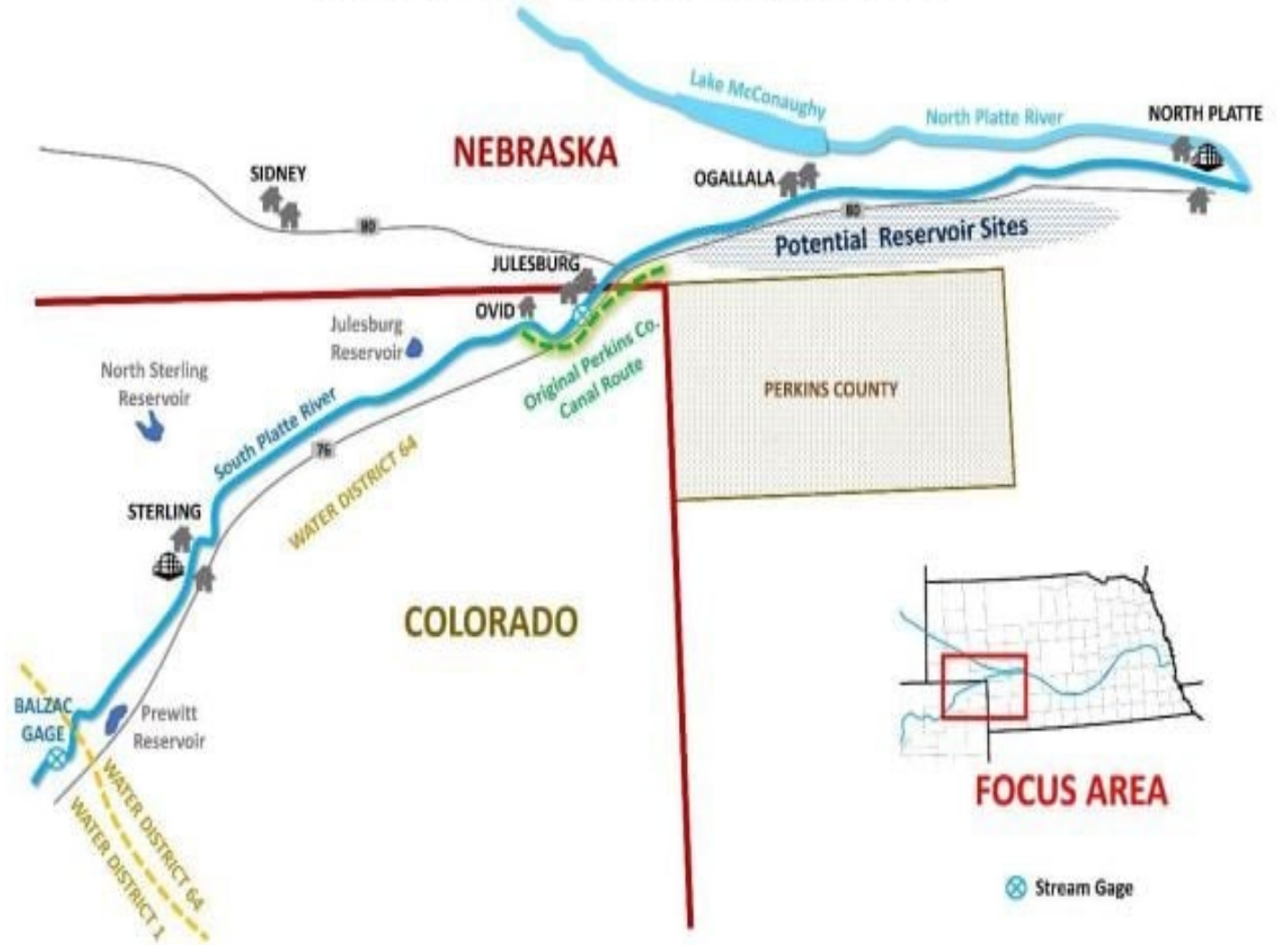
Perkins County Canal

Article VI South Platte River Compact

- Colorado consents to the construction of the canal and diversion of up to 500 cfs for irrigation in Nebraska during the non-irrigation season.
- Colorado is NOT required to deliver 500 cfs to the canal. Canal gets whatever is available in river.
- Colorado reserves “the prior, preferred and superior right to store” 35,000 acre-feet if canal diverts from river.



Perkins County Canal Project Area





**COLORADO
WATER CENTER**
COLORADO STATE UNIVERSITY