

Compacts at a glance...



U.S. Supreme Court Cases

Nebraska v. Wyoming, 325 U.S. 589 (1945) (North Platte River). Divides water in the North Platte River among Colorado, Nebraska and Wyoming. Limits total irrigation in Jackson County, Colo. to 145,000 acres and 17,000 acre-feet of storage for irrigation in each season. Limits total water exports from transbasin diversions from the North Platte River in Colorado to no more than 60,000 acre-feet during any 10-year period.

Wyoming v. Colorado, 353 U.S. 953 (1957) (Laramie River). Establishes states' rights to water in the Laramie River Basin. Limits total diversions from the Laramie River in Colorado to 39,750 acre-feet.

International Treaties

Mexican Treaty on the Rio Grande, Tijuana and Colorado Rivers (1944). Guarantees delivery of 1.5 million acre-feet of Colorado River water per year to Mexico except in times of extraordinary drought when the United States can reduce deliveries in the same proportion as the United States cuts its consumptive use. If the river does not have adequate water to meet the obligations under the treaty, the Upper Colorado River Basin and Lower Colorado River Basin must share the obligation of reducing use to make up deficiencies.

Convention with Mexico on the Rio Grande above Fort Quitman, Texas (1906). Requires that the United States deliver 60,000 acre-feet of water annually at the International Dam at Ciudad Juarez except during periods of extraordinary drought. Elephant Butte Reservoir in New Mexico was constructed in part to meet this obligation.

Interstate Compacts

South Platte River Compact (1923). Divides the waters of the South Platte River between Colorado and Nebraska, giving Colorado the right to fully use the water between Oct. 15 and April 1. During the irrigation season, Colorado will deliver 120 cubic feet per second to Nebraska at Julesburg. If the flow is less than 120 cubic feet per second, Colorado must curtail junior diversions. The State Engineers are authorized to administer the compact.

Republican River Compact (1942). Divides the waters of the Republican River Basin among Colorado, Kansas and Nebraska. Colorado is granted 54,100 acre-feet of water each year. The compact allocates 190,300 acre-feet of water each year to Kansas and 234,500 acre-feet of water each year to Nebraska. If the water supply of any source varies, the allocations also change. A commission oversees compliance.

Arkansas River Compact (1948). Divides the waters of the river between Colorado and Kansas primarily based on 1940 conditions. An interstate agency administers provisions of the compact and oversees operations of John Martin Reservoir. Principles adopted in 1980 provide for storage accounts in John Martin Reservoir for water users in both states.

Costilla Creek Compact (1944, revised 1963). Establishes uses, allocations and administration of the waters of Costilla Creek in Colorado and New Mexico. A commission oversees compliance. Later amendments specify rights to water in specific facilities.

Rio Grande Compact (1938). Details obligations of Colorado and New Mexico to deliver water for downstream users, including Mexico and Texas; sets forth system of debits and credits and rules to account for fluctuations in stream flow. A commission is established to administer terms.

Colorado River Compact (1922). Apportions 7.5 million acre-feet of consumptive use per year to the Upper Basin and the same amount to the Lower Basin. The Upper states may not cause the flow of the Colorado River at Law Ferry, Ariz., to be depleted below an aggregate of 75 million acre-feet for any period of 10 consecutive years. The State Engineers, Bureau of Reclamation and U.S. Geological Survey administer the compact.

Upper Colorado River Compact (1948). Apportions a percentage of available river water to each Upper Basin state as follows: Arizona, 50,000 acre-feet each year; Colorado, 51.75%; Utah, 23%; Wyoming, 14%; and New Mexico, 11.25%. The Upper Colorado River Commission oversees compliance.

La Plata River Compact (1922). Grants Colorado and New Mexico unrestricted use of the river between Dec. 1 and Feb. 15. At other times, each state can use the flow of the river at the state line if the flow is in excess of 100 cubic feet per second. If the flow is less, Colorado must ensure delivery of flow equal to one-half the flow of the river at Hesperus, Colo.

Aniwas-La Plata Project Compact (1962). Unusual because it addresses a water project rather than dividing river waters, the compact gives New Mexico and Colorado equal priority in rights to store and divert project water. The ambitious project has been repeatedly scaled back. The one remaining reservoir started filling in 2009.



DELPHUS EMORY CARPENTER









TOMMY FRIELSON















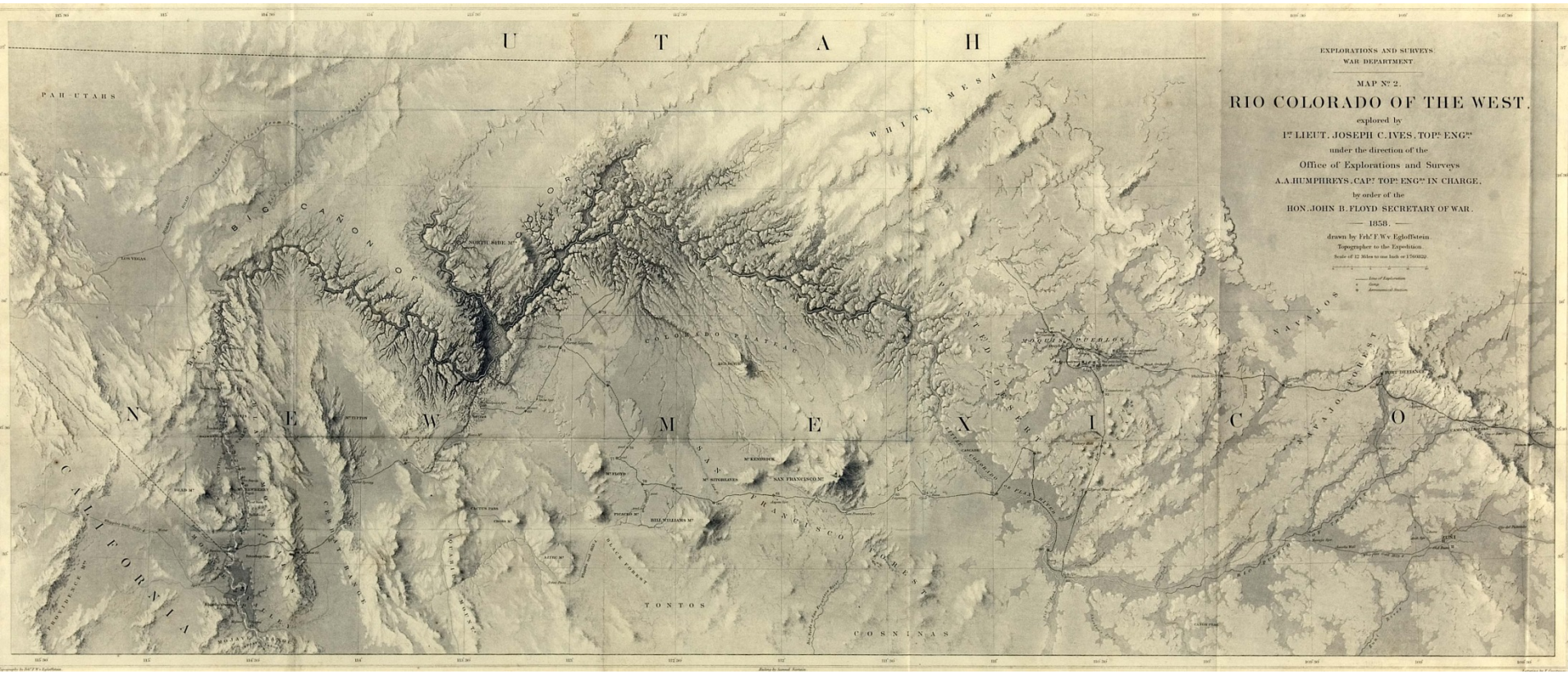












EXPLORATIONS AND SURVEYS
WAR DEPARTMENT

MAP No. 2.

RIO COLORADO OF THE WEST.

explored by
1st LIEUT. JOSEPH C. LIVES, TOP^g ENG^r

under the direction of the
Office of Explorations and Surveys
A. A. HUMPHREYS, CAP^t TOP^g ENG^r IN CHARGE.

by order of the
HON. JOHN B. FLOYD, SECRETARY OF WAR.
1858.

drawn by F. A. C. W. Egloffstein
Topographer to the Expedition.
Scale of 12 miles to one inch of length.

— Line of Expedition
— Rail Road
— Indian Reservation



Products of Manufactures.

Mining and Mechanic Arts.

Slave States,	\$167,906,035
Free " "	845,430,428

Capital in Manufactures.

Slave States,	\$ 95,918,84
Free " "	431,290,35

Area.

Slave States,	851,508 square miles
Free " "	612,597 " "

Opened to Slavery by the Kansas-Nebraska bill
1,472,061 square miles.

No. of Farms in Slave States,	569,20
" " " " Free " "	873,67
" Cotton Plantations, (over five bales,)	74,03
" Acres improved Land, (Slave,)	54,970,32
" " " " (Free,)	57,720,49
" " in Indian Corn,	31,000,00
" " in Pasture,	20,000,00
" " in Hay,	13,000,00
" " in Wheat,	11,000,00
" " in Cotton,	5,000,00
Value of Corn Crop,	\$296,035,55
" Wheat "	100,000,00
" Cotton "	98,603,72
" Hay, "	96,870,49

The Real Estate of the South comprises 238,911 square miles more than the area of the North—an excess equal to the Eastern and Middle States and Ohio—while its value is \$1,016,526,711 less.

Property Valuation.

Slave States, (Total Value,)	\$2,936,090,73
Free " "	4,162,162,09
Slave " (Real Estate,)	1,430,589,16
Free " "	2,447,115,87

Average Value of Farming l s.

Slave States,	4,
Free " "	4,

Post Office Statistics.

Receipts in Slave States,	\$
" " Free " "	4,
Transport expense in Slave States,	2,087,260
" " " " Free " "	2,381,60,
Deficiency in Slave States,	600,285 99
Excess in Free States,	2,010,253 64

No. Miles of Canals and Railroads.

	Canals	Railroads
Slave States,	1,116	4,212
Free " "	3,684	13,105

Statement of 1854; the difference is much greater in 1856.

POLITICAL CHART

OF THE

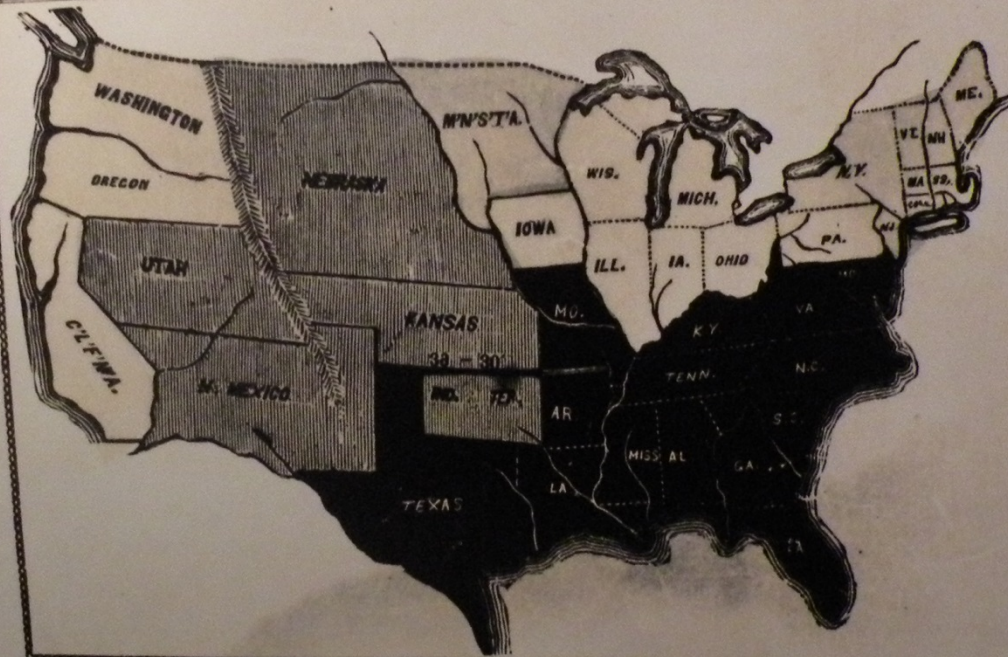
UNITED STATES



NORTH AND SOUTH.

WITH A COMPARATIVE STATISTICAL VIEW OF

PUBLISHED BY THE "ROCKY MOUNTAIN CLUB," SPRINGFIELD, OHIO.



White Population.

Slave States,	6,408,464
Free " "	13,434,784

Population to the Square Mile.

In Slave States,	11 35
" Free " "	21 91

Electoral Vote.

Maine,	8	Delaware,	3
New Hampshire,	5	Maryland,	8
Vermont,	5	Virginia,	15
Massachusetts,	13	North Carolina,	10
Rhode Island,	4	South Carolina,	8
Connecticut,	6	Georgia,	10
New York,	35	Florida,	9
New Jersey,	7	Alabama,	9
Pennsylvania,	27	Mississippi,	7
Ohio,	23	Louisiana,	6
Indiana,	13	Texas,	4
Michigan,	6	Arkansas,	4
Illinois,	11	Tennessee,	12
Wisconsin,	5	Kentucky,	12
Iowa,	4	Missouri,	9
California,	4		
	176		120

Number of Slave Holders.

Alabama,	29,295
Arkansas,	5,969
District of Columbia,	1,477
Delaware,	809
Florida,	3,520
Georgia,	38,456
Kentucky,	38,385
Louisiana,	20,670
Maryland,	16,040
Mississippi,	23,116
Missouri,	19,185
North Carolina,	28,303
South Carolina,	25,596
Tennessee,	23,864
Texas,	7,747
Virginia,	55,063
	347,525

(One in eighteen of Southern whites are Slave Holders.)

Representation.

Senators of Fifteen Slave States,	30
" " Sixteen Free " "	32
One Slave State Senator represents	206,175 constituents.
One Free State Senator represents	413,813 constituents.
Members House of Representatives (slave)	9)
" " (free)	144
One Southern M. C. represents	68,725 constituents.
One Northern M. C. represents	91,958 constituents.

(An advantage to the South of 30 Members.)

Vote in 1852.

	Anti.	Pro.	Free.
Slave States,	385,285	440	445,094
Free " "	1,057,069	148,571	1,195,268

School Attendance of Children.

Slave States,	56.09 % cent.
Free " "	96.90 " "

White Adults unable to Read or Write.

Slave States,	17.33 % cent.
Free " "	4.12 " "



Entered according to Act of Congress, in the year 1856, in the District Court of the Southern District of Ohio.

Public Libraries.

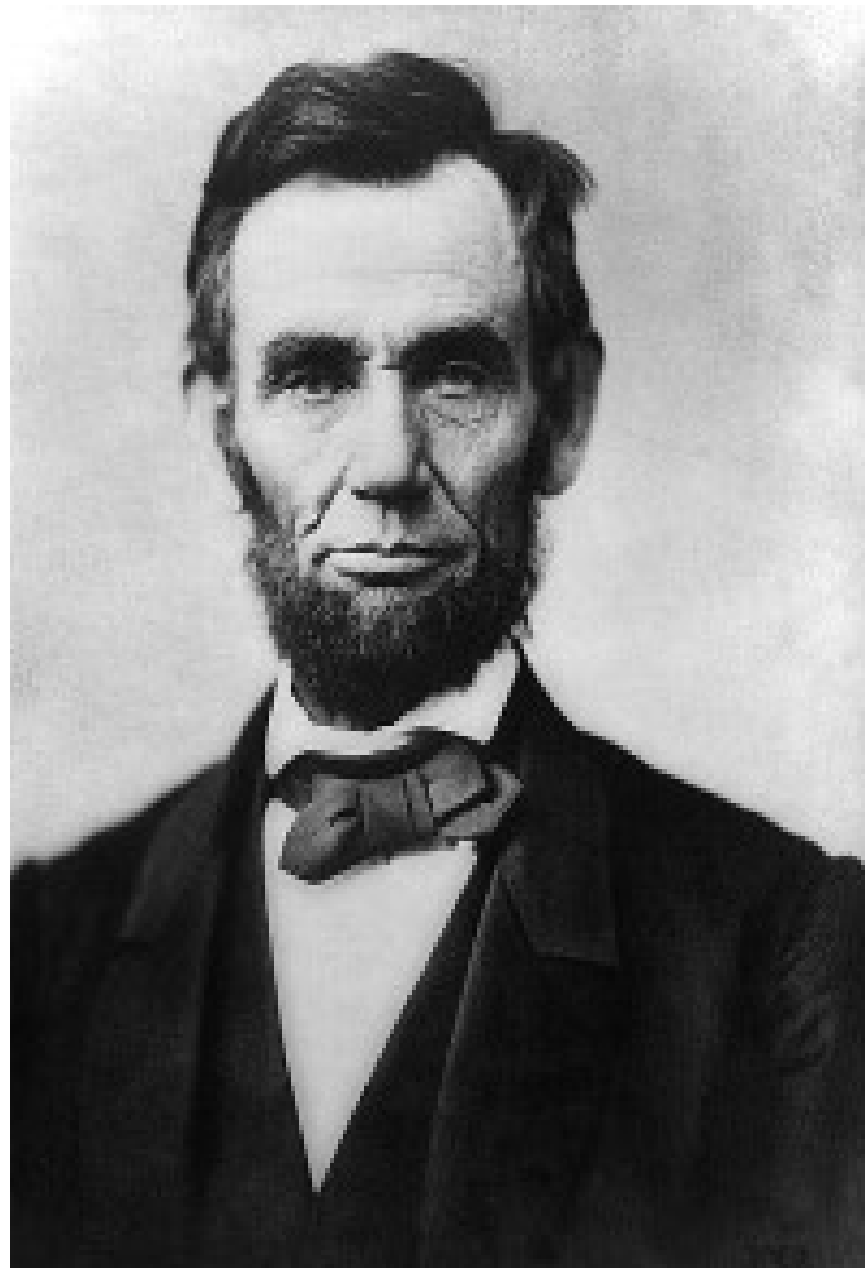
In Slave States,	713 Libraries,	654,194 Vols.
In Free " "	14,893 " "	3,883,617 " "

Value of Churches.

In Slave States,	\$23,038,541
In Free " "	66,773,517

Newspapers and Periodicals.

Slave States,	704—Circulation,	81,038,693
Free " "	1800— " "	334,146,281



HARPER'S WEEKLY.

A
JOURNAL OF CIVILIZATION

Vol. XVIII.—No. 912.]

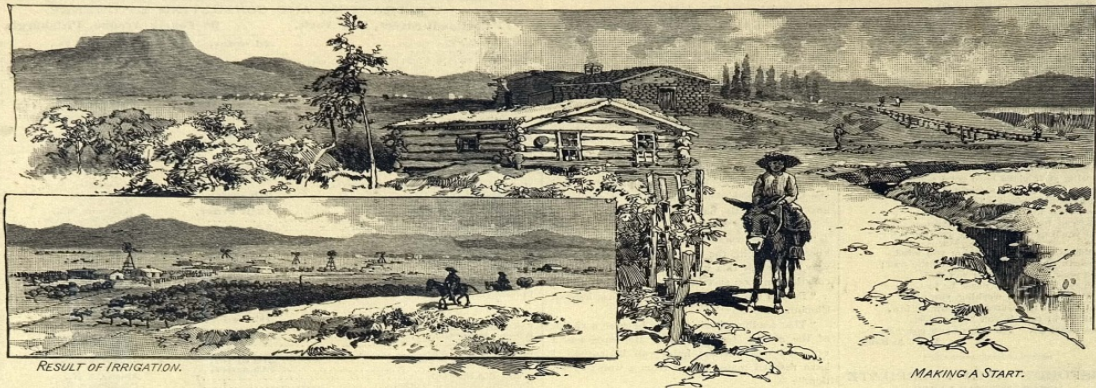
NEW YORK, SATURDAY, JUNE 20, 1874.

[WITH A SUPPLEMENT.
PRICE TEN CENTS.]

Entered according to Act of Congress, in the Year 1874, by Harper & Brothers, in the Office of the Librarian of Congress, at Washington.

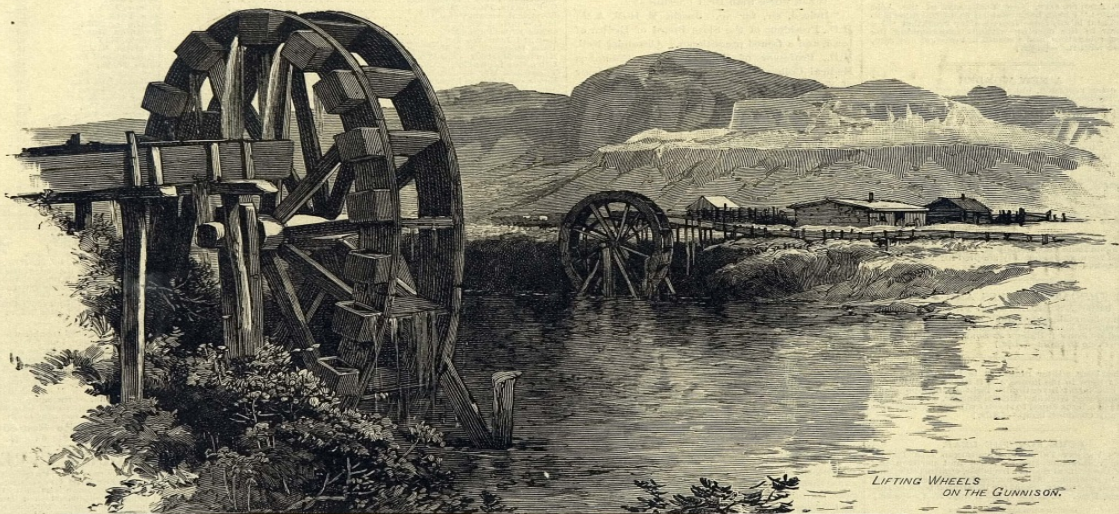


IRRIGATION IN COLORADO—LETTING WATER INTO A SIDE SLUICE-WAY.—[SEE PAGE 514.]



RESULT OF IRRIGATION.

MAKING A START.



LIFTING WHEELS ON THE GUNNISON.



THE BAD LANDS.



**RAIN CHART
OF THE UNITED STATES**

GENERAL DESCRIPTION OF THE
HYDROLOGICAL FEATURES OF THE
CONTINENTAL UNITED STATES
FOR THE YEAR

PREPARED BY THE
HYDROLOGICAL COMMISSION
OF THE UNITED STATES
DEPARTMENT OF AGRICULTURE
WASHINGTON, D. C.
1901

EXPLANATION OF THE CHART
The light blue shaded areas represent the
drainage basins of the principal rivers of the
United States.

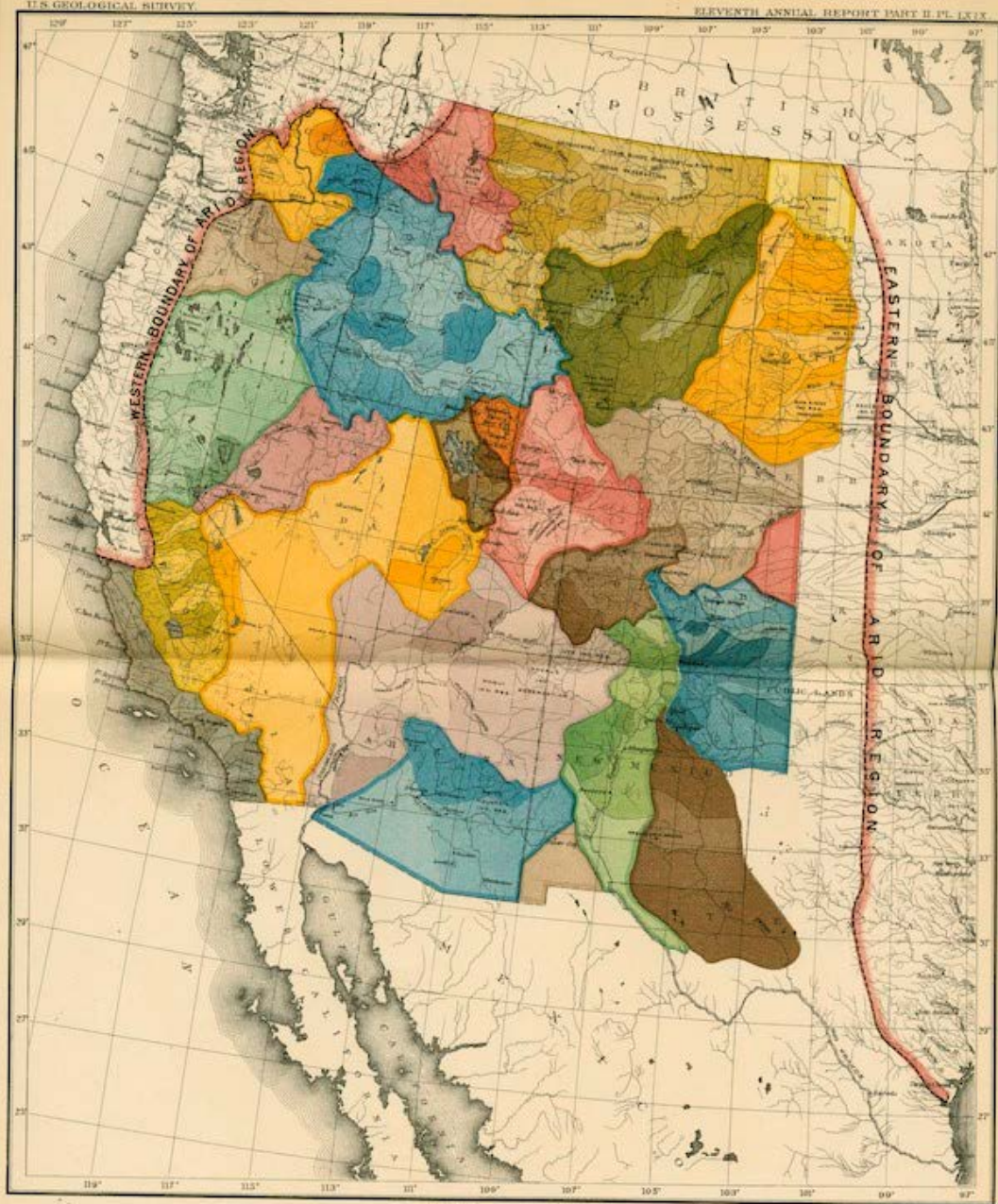


**MAP
OF THE
ROCKY MOUNTAIN REGION**

SHOWING THE APPROXIMATE LOCATION AND EXTENT OF
FOREST AREAS AND IRRIGATION DITCHES IN 1885.
COMPILED FROM COUNTY RETURNS

BY
COL. E. T. ENSIGN, Forestry Agent of the
Department of Agriculture.

REFERENCES
Forest Lands shown in green.
Main Irrigating Canals shown in red lines.



ARID REGION
OF THE
UNITED STATES
Showing Drainage Districts.

SCALE
10 20 30 40 50 60 70 80 90 100 MILES

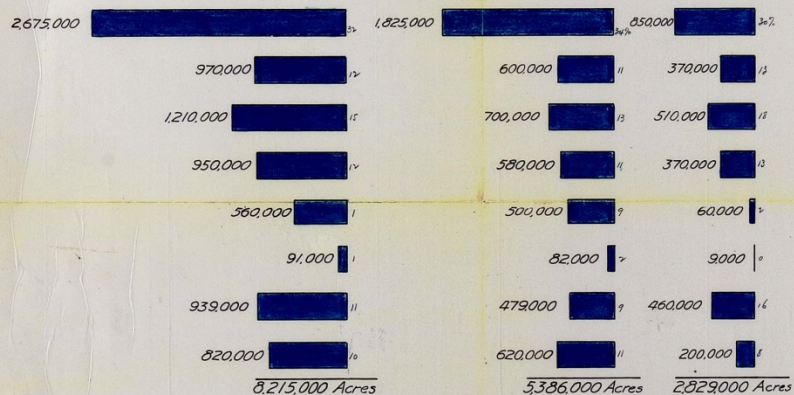
COLORADO RIVER BASIN

LAND

WATER

TOTAL IRRIGABLE · FUTURE IRRIGABLE · IRRIGATED

VALUES IN ACRES



ORIGIN WATER SUPPLY

VALUES IN ACRE-FEET

ULTIMATE WATER REQUIREMENT



Total Irrigable
3,155,000 Acres

UPPER BASIN

18,320,000 7,790,000

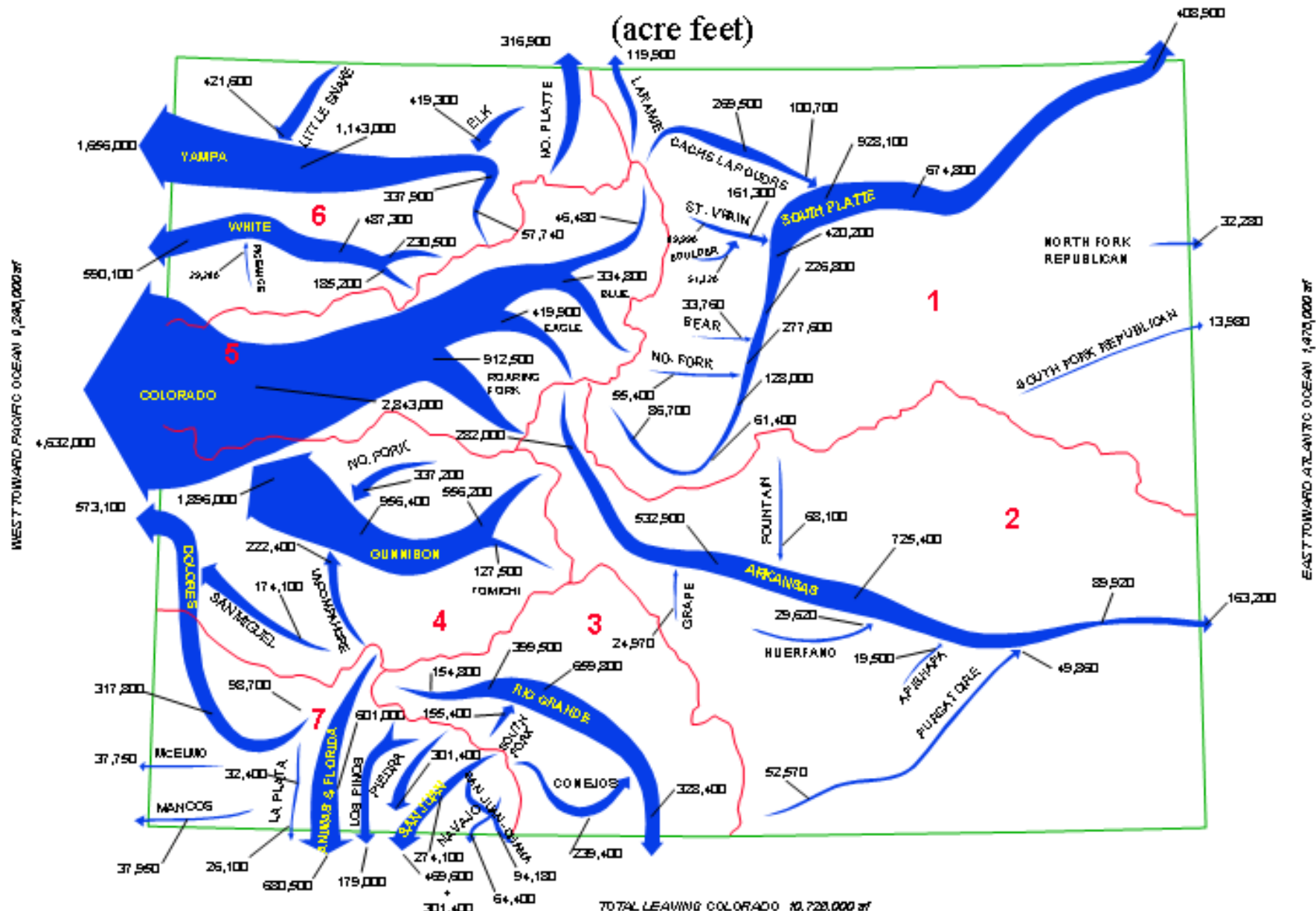
Total Irrigable
3,060,000 Acres

LOWER BASIN

2,623,000 12,549,000



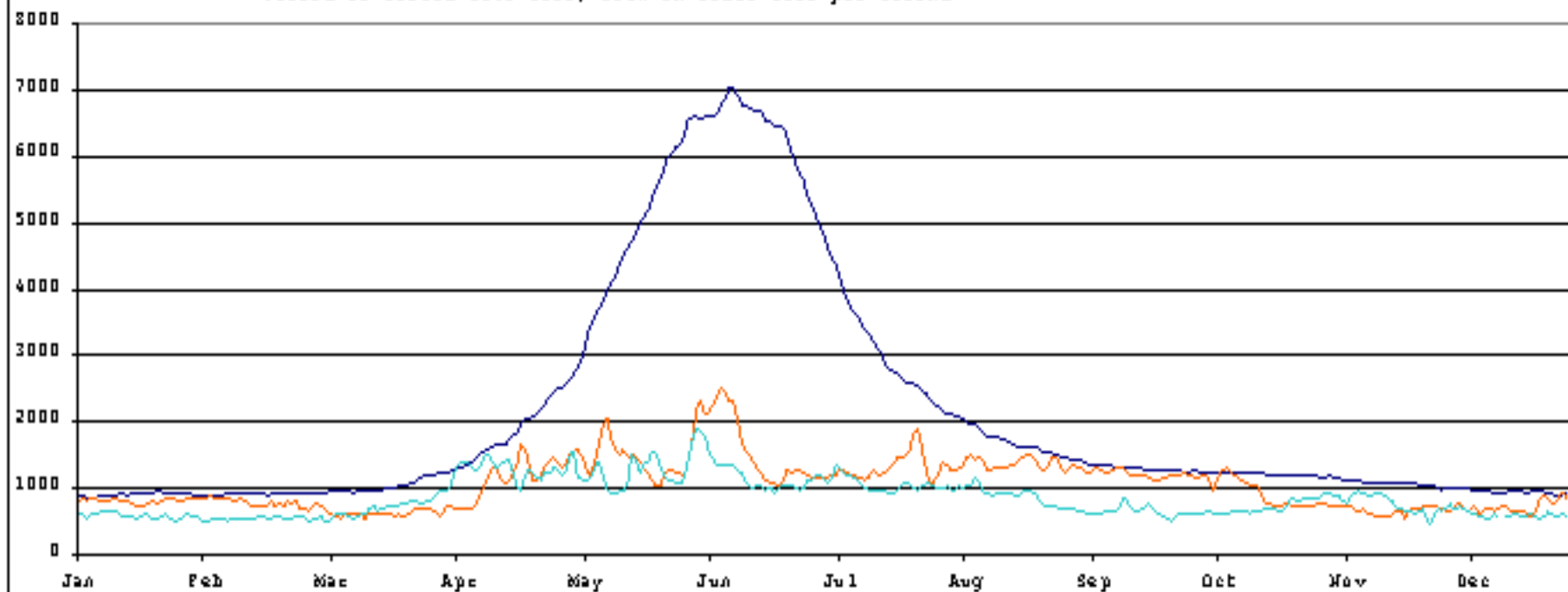
COLORADO HISTORIC AVERAGE ANNUAL STREAM FLOWS

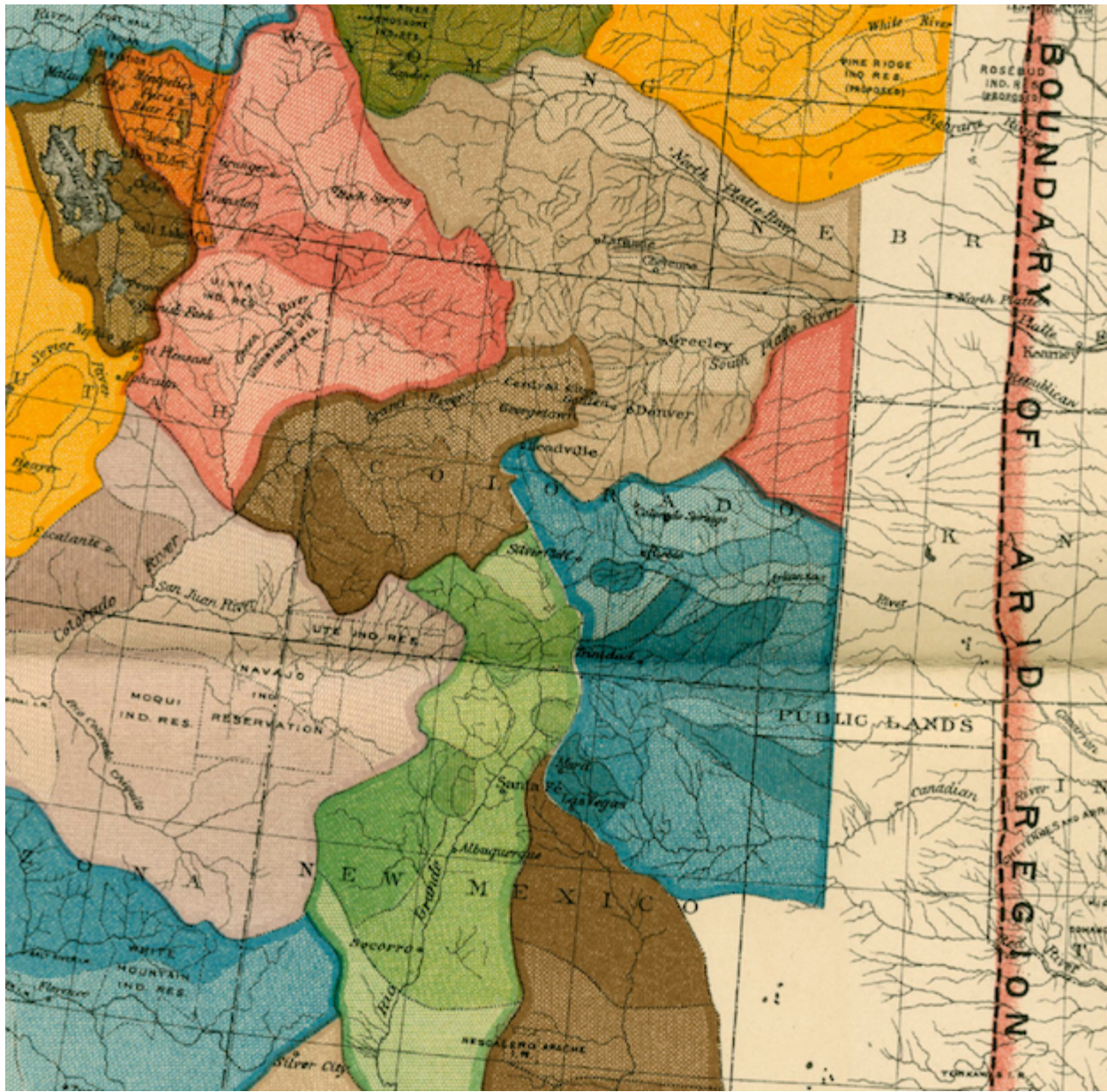


Prepared by the Hydrographic Branch (2000 Revision)
 Historic averages obtained from USGS Water-Data Report CO-99

OFFICE OF THE STATE ENGINEER
 COLORADO DIVISION OF WATER RESOURCES

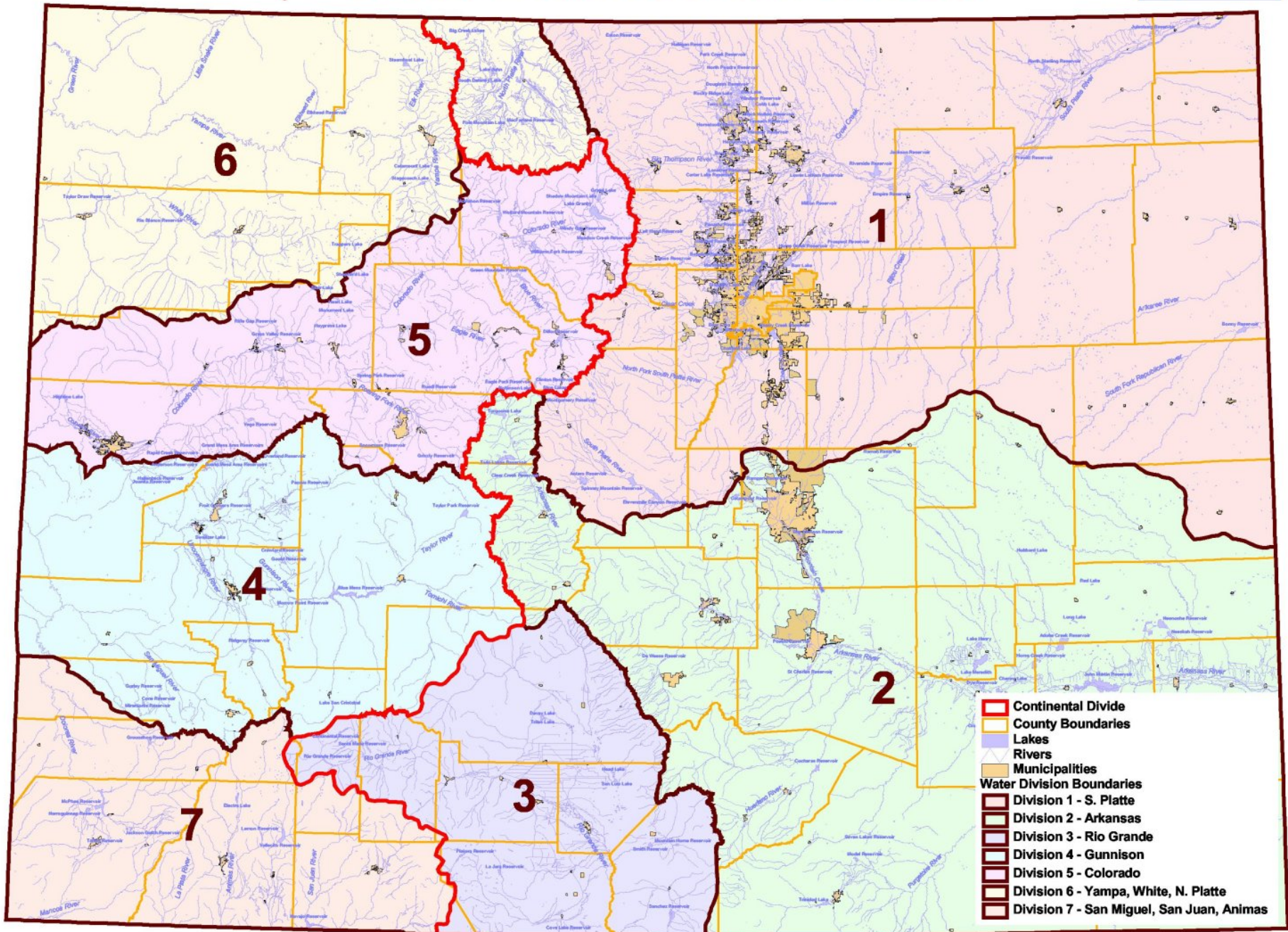
Colorado River near Dotsero
Period of record 1941-2001, flow in cubic feet per second







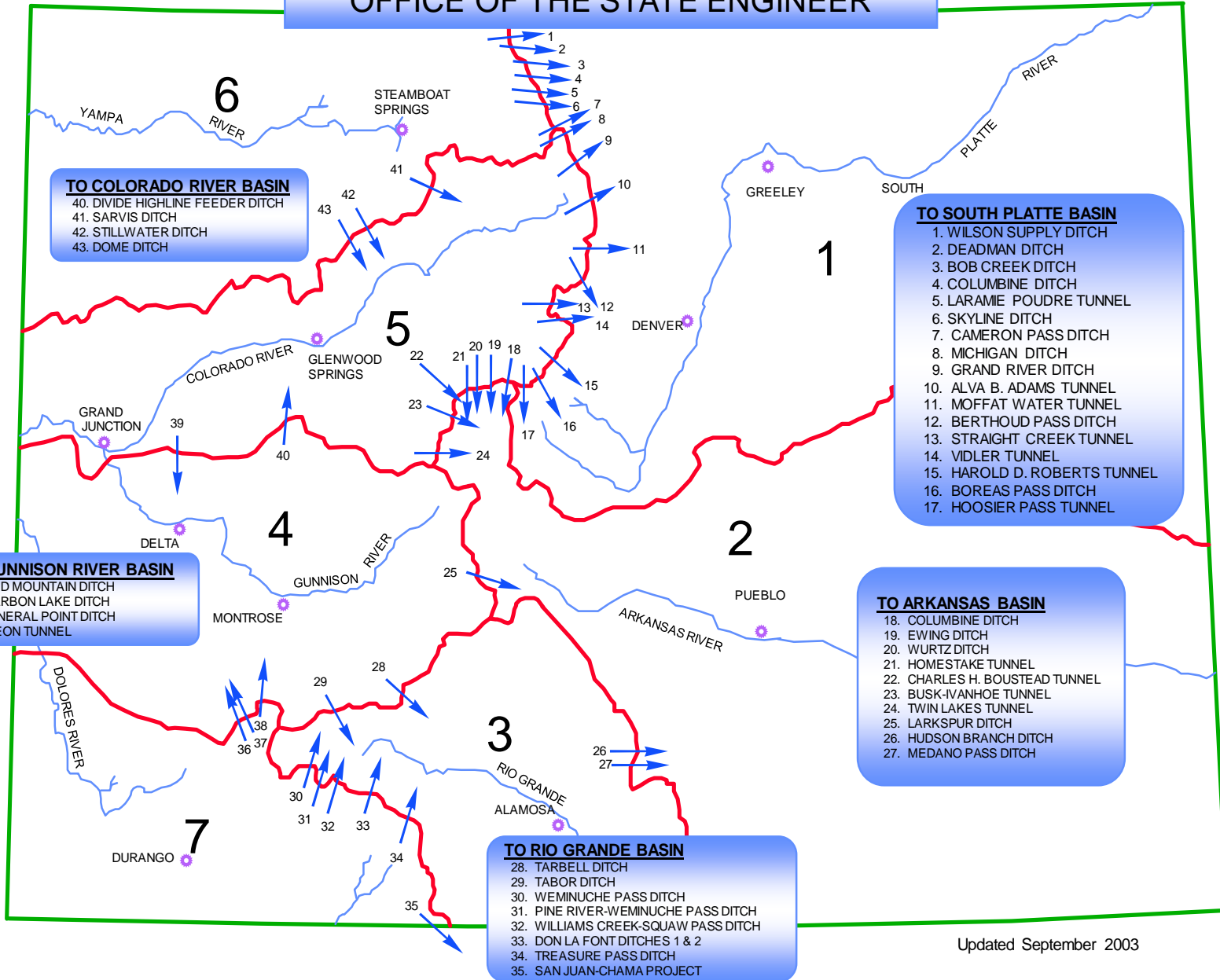
Water Divisions of Colorado





TRANSMOUNTAIN DIVERSIONS

OFFICE OF THE STATE ENGINEER



TO COLORADO RIVER BASIN

- 40. DIVIDE HIGHLINE FEEDER DITCH
- 41. SARVIS DITCH
- 42. STILLWATER DITCH
- 43. DOME DITCH

TO SOUTH PLATTE BASIN

- 1. WILSON SUPPLY DITCH
- 2. DEADMAN DITCH
- 3. BOB CREEK DITCH
- 4. COLUMBINE DITCH
- 5. LARAMIE POUFRE TUNNEL
- 6. SKYLINE DITCH
- 7. CAMERON PASS DITCH
- 8. MICHIGAN DITCH
- 9. GRAND RIVER DITCH
- 10. ALVA B. ADAMS TUNNEL
- 11. MOFFAT WATER TUNNEL
- 12. BERTHOUD PASS DITCH
- 13. STRAIGHT CREEK TUNNEL
- 14. VIDLER TUNNEL
- 15. HAROLD D. ROBERTS TUNNEL
- 16. BOREAS PASS DITCH
- 17. HOOSIER PASS TUNNEL

TO GUNNISON RIVER BASIN

- 36. RED MOUNTAIN DITCH
- 37. CARBON LAKE DITCH
- 38. MINERAL POINT DITCH
- 39. LEON TUNNEL

TO ARKANSAS BASIN

- 18. COLUMBINE DITCH
- 19. EWING DITCH
- 20. WURTZ DITCH
- 21. HOMESTAKE TUNNEL
- 22. CHARLES H. BOUSTEAD TUNNEL
- 23. BUSK-IVANHOE TUNNEL
- 24. TWIN LAKES TUNNEL
- 25. LARKSPUR DITCH
- 26. HUDSON BRANCH DITCH
- 27. MEDANO PASS DITCH

TO RIO GRANDE BASIN

- 28. TARBELL DITCH
- 29. TABOR DITCH
- 30. WEMINUCHE PASS DITCH
- 31. PINE RIVER-WEMINUCHE PASS DITCH
- 32. WILLIAMS CREEK-SQUAW PASS DITCH
- 33. DON LA FONT DITCHES 1 & 2
- 34. TREASURE PASS DITCH
- 35. SAN JUAN-CHAMA PROJECT

Updated September 2003











