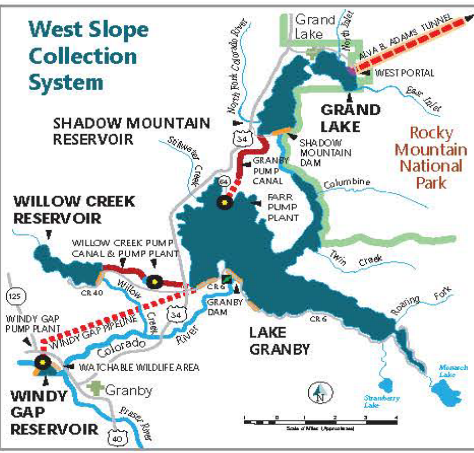


GRAD 592

*The South Platte River
&
Northern Water*

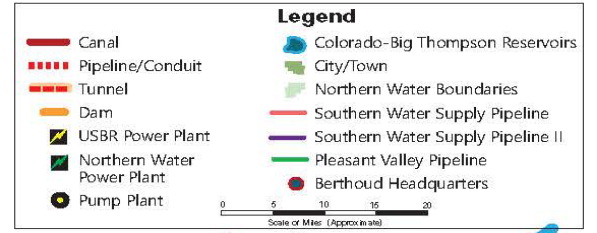
Bradley D. Wind, P. E.

Northern Water, General Manager

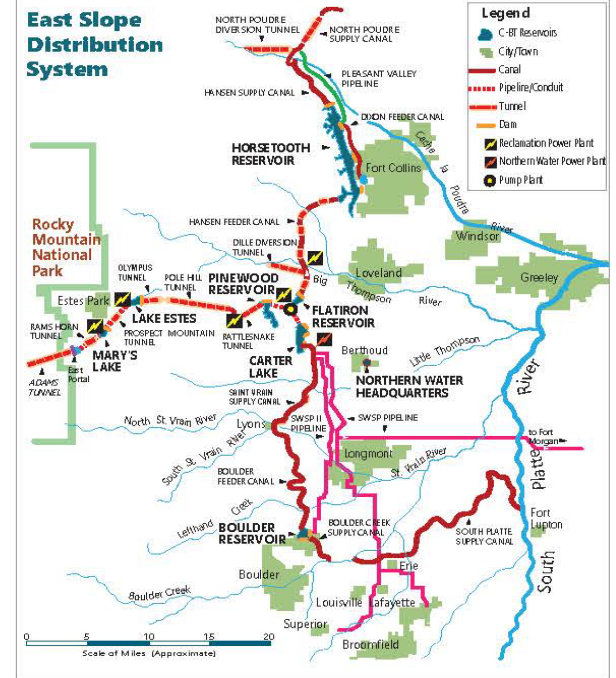
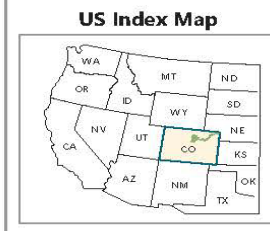
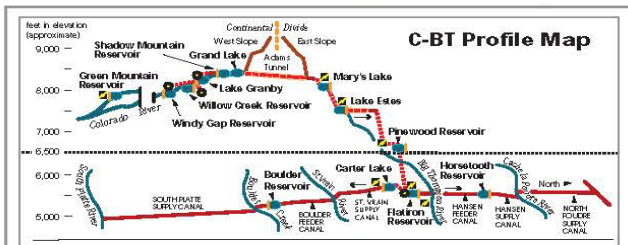
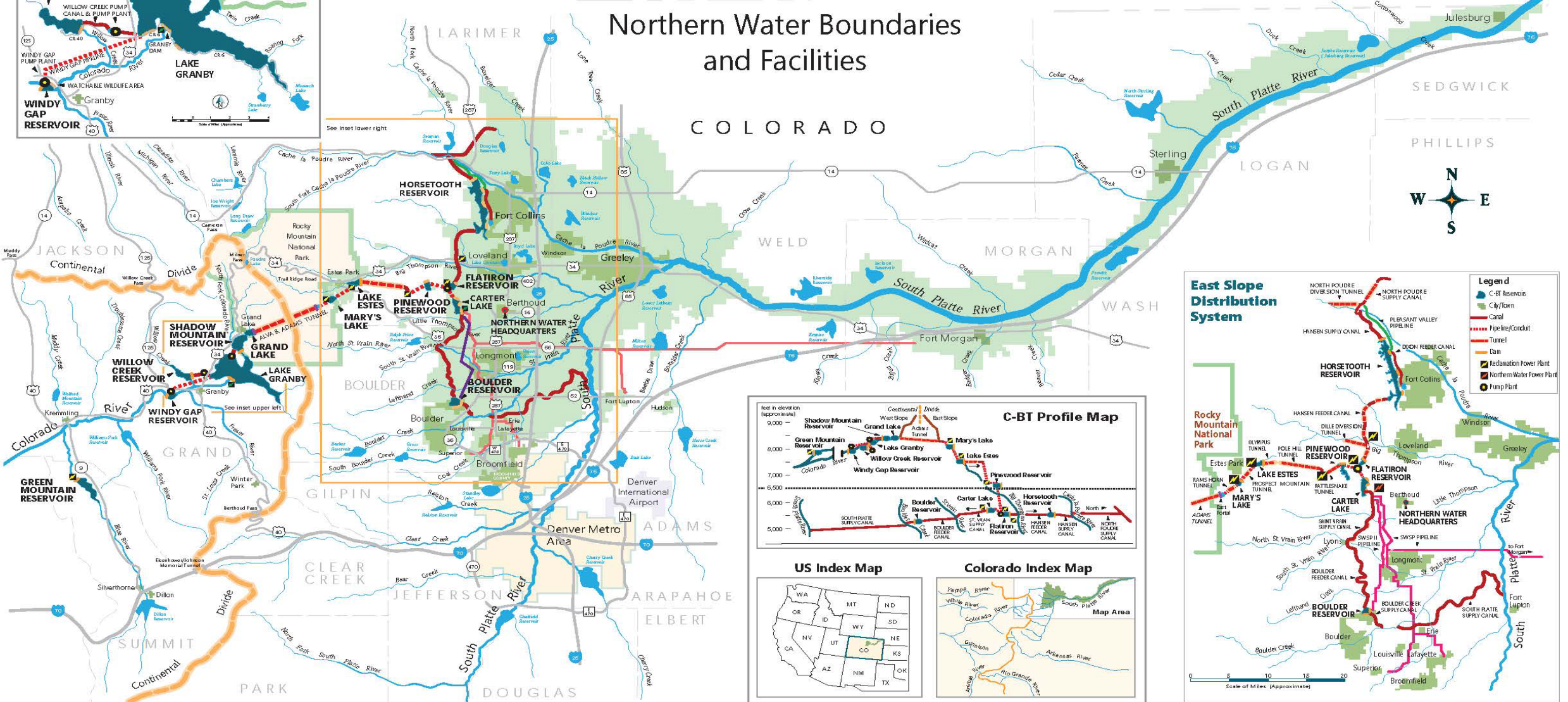


Northern Water

Colorado-Big Thompson Project

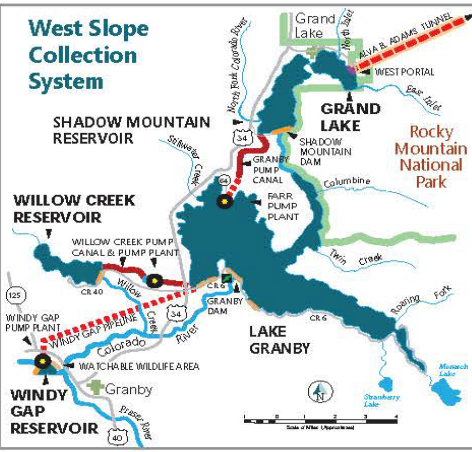


Northern Water Boundaries and Facilities



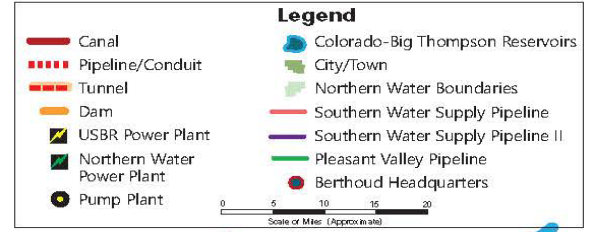


Colorado-Big Thompson Project

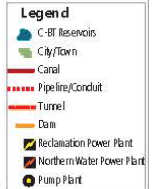
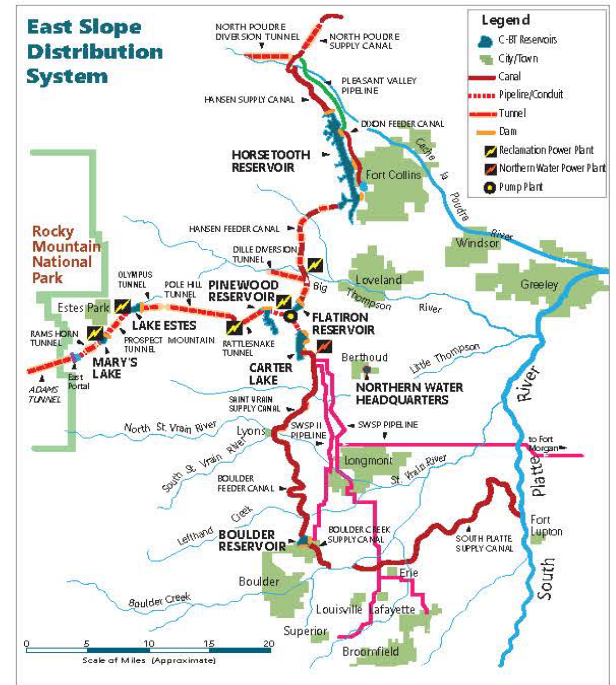
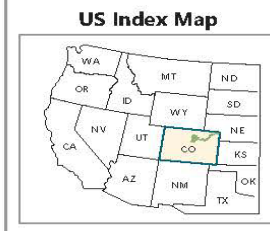
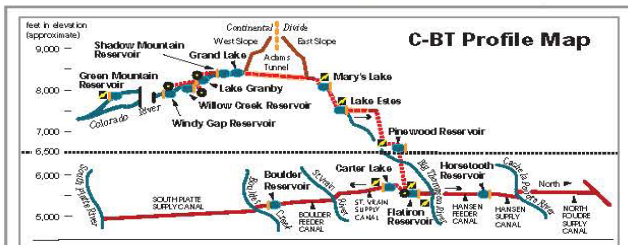
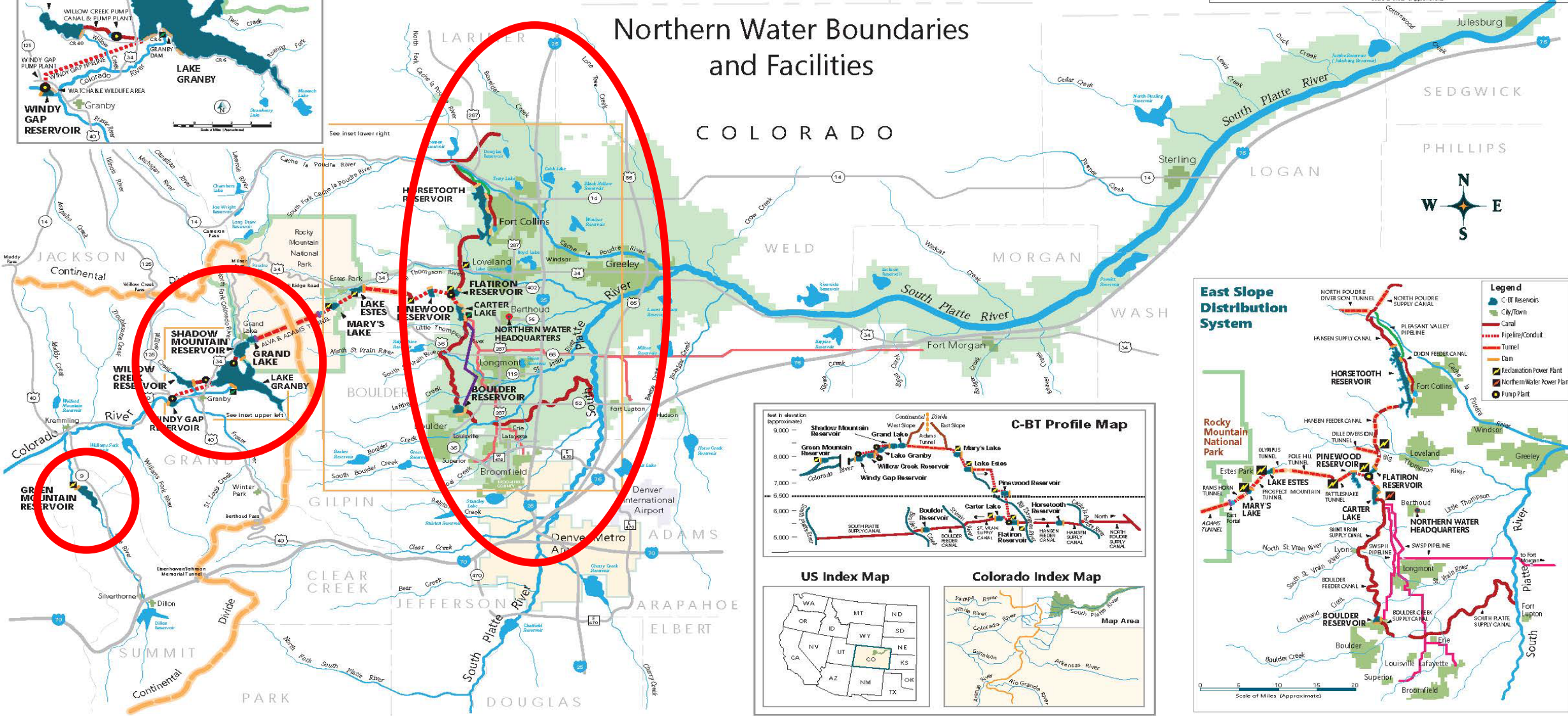


Northern Water

Colorado-Big Thompson Project



Northern Water Boundaries and Facilities



C-BT Project

- Project created to provide a supplemental water supply
 - 1.6 million acres in 8 counties
 - 615,000 irrigated acres
 - 1.1 million residents
- Constructed 1938-1957
- Municipal, ag, industrial and domestic water users
- Average deliveries = 215,000 acre-feet/year





C-BT Project Makeup

- 12 reservoirs
- 35 miles of tunnels
- 95 miles of canals
- 7 hydroelectric plants
- 700 miles of transmission lines



SD-80 – Introduction:

The Colorado-Big Thompson project in Colorado contemplates the diversion of surplus waters from the headwaters of the Colorado River on the Pacific or western slope to lands in northeastern Colorado on the Atlantic or eastern slope greatly in need of supplemental irrigation water.

(1) Storage on the Blue River in what is called Green Mountain Reservoir located about 16 miles southeast of Kremmling, Colo., where the Blue enters the Colorado River. This reservoir is to be used to replace water diverted to the eastern slope that would be required by prior rights along the Colorado River.

SD-80 – History & Project Need:

The difficulties experienced by these colonists in distributing the water between them led to the creation of Colorado's irrigation laws which have been copied by most of the irrigation States of the West.

Under such conditions only the older water rights have any assurance of an adequate water supply, and in the dryer years the owners of junior rights are forced to confine their farming to crops that can be matured by the early flood flow or that require a minimum amount of water. In years when the supply is not correctly estimated considerable loss results. Ordinarily the crops raised in this and other irrigated areas do not compete with those grown under rainfall conditions, but a shortage of water always leads to the raising of more of the competing crops. Such crops also cut the income of the irrigation farmer below what he can earn with the higher type, noncompetitive crops.

stream flow. It must be emphasized that the additional water supply here contemplated is to be used for a supplemental supply and not to create a large new additional irrigated acreage.

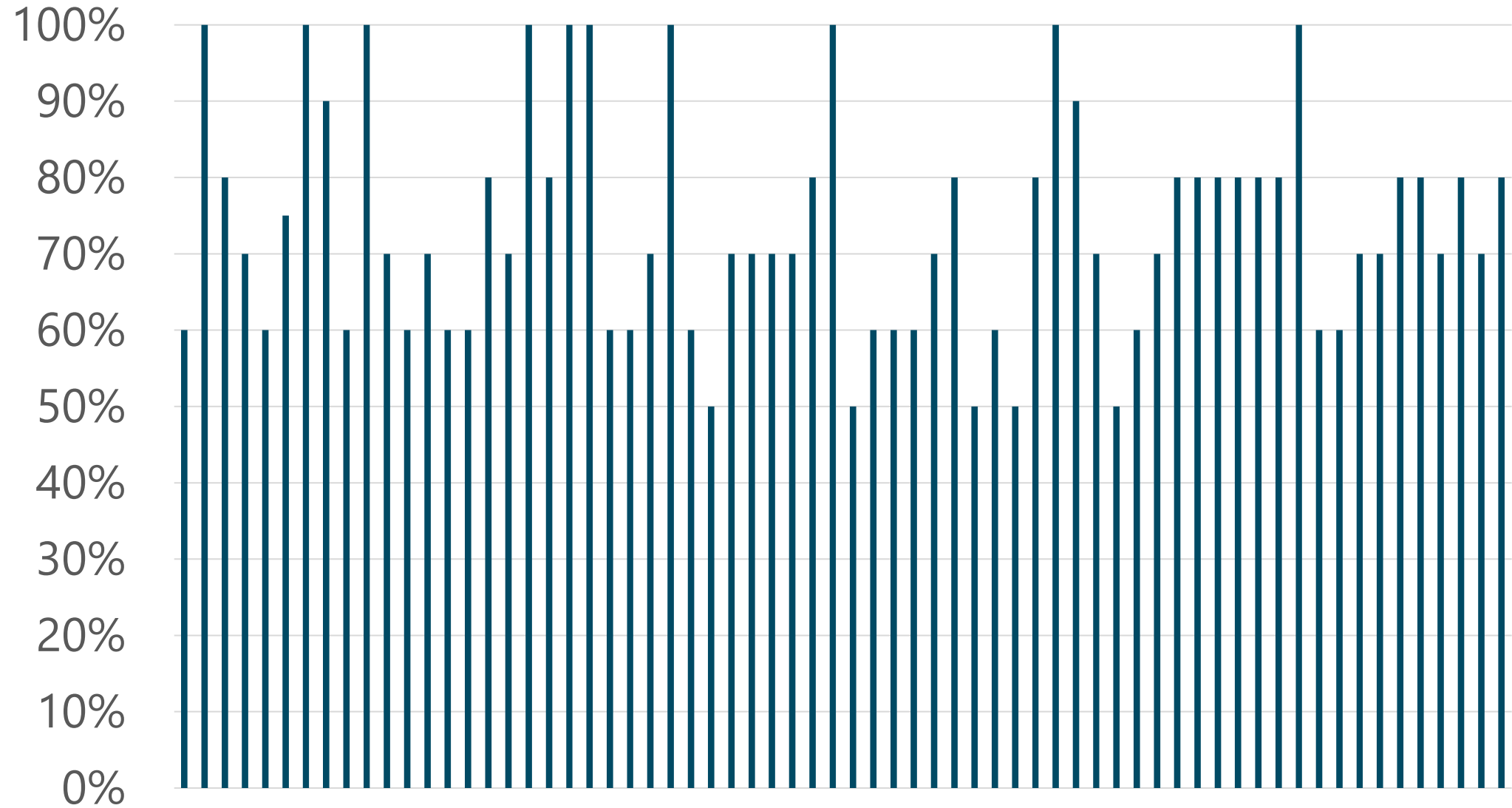
SD-80 – History & Project Need:

Water district no.	Area irrigated	1926 diversion, acre-feet	Average diversion, 1925-35	Difference, 1926, 11-year average required supplementary water in acre-feet	Tentative allocation of supplemental supply			
					Colorado-Thompson project water	Moffat and Jones Pass tunnel water return	Present seepage return acre-feet	Total supplemental supply, acre-feet
(1)	(2)	(3)	(7)	(15)	(16)	(17)	(18)	(19)
3	213,640	530,000	398,000	132,000	104,000	--	49,500	153,500
4	68,408	235,000	163,000	72,000	44,100	--	21,000	65,100
5	81,806	113,000	94,000	19,000	38,800	--	18,500	57,300
1	92,394	663,000	457,000	206,000	81,400	11,000	83,000	175,400
2	37,899	170,000	154,000	16,000	5,000	4,500	5,100	14,600
64	121,289	513,000	383,000	130,000	36,700	14,500	37,400	88,600
Total	615,436	2,224,000	1,649,000	575,000	310,000	30,000	214,500	554,500

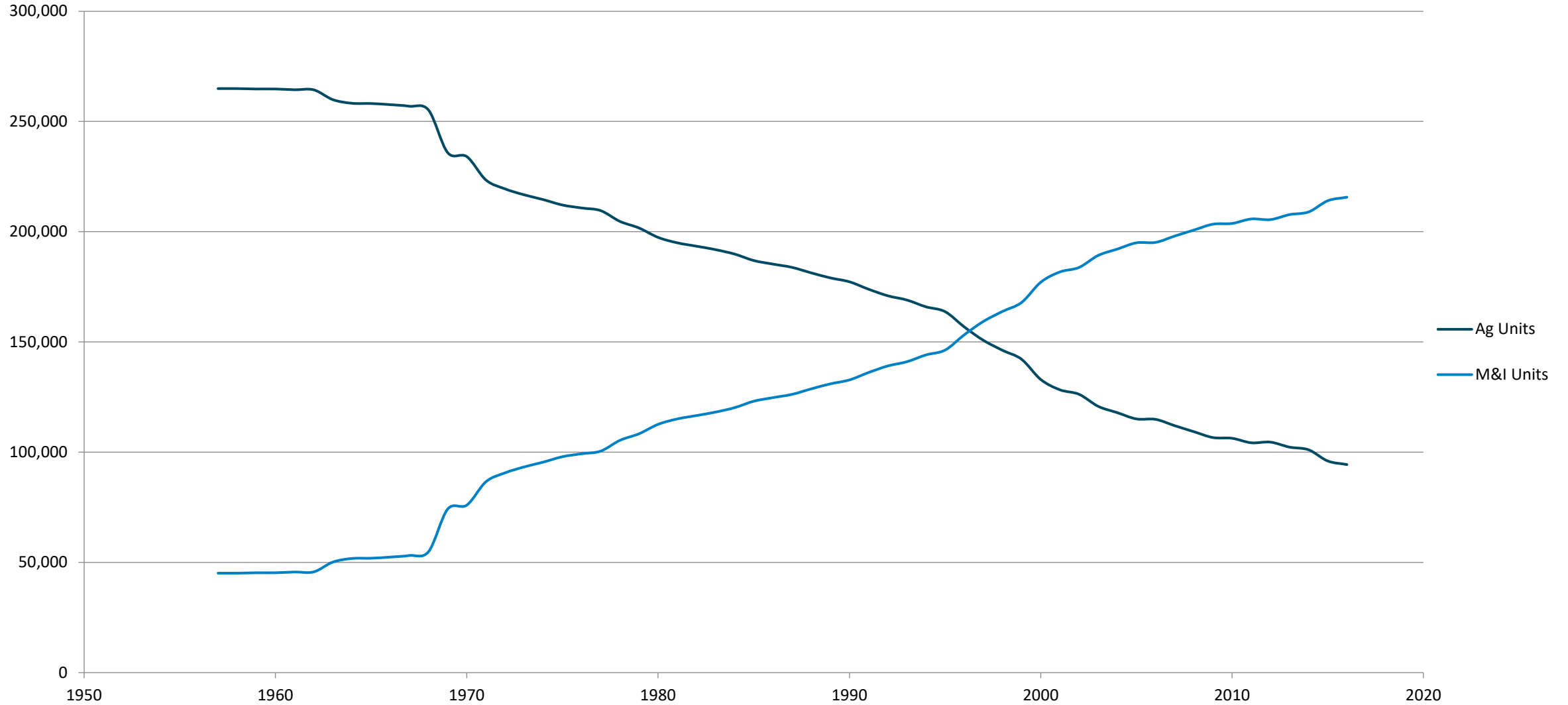
Repayment Contract [1938]:

There is also claimed and reserved by the United States for the use of the District for domestic, irrigation and industrial uses, all of the increment, seepage and return flow water which may result from the construction of the project and the importation thereby, from an extraneous source, to-wit, from the

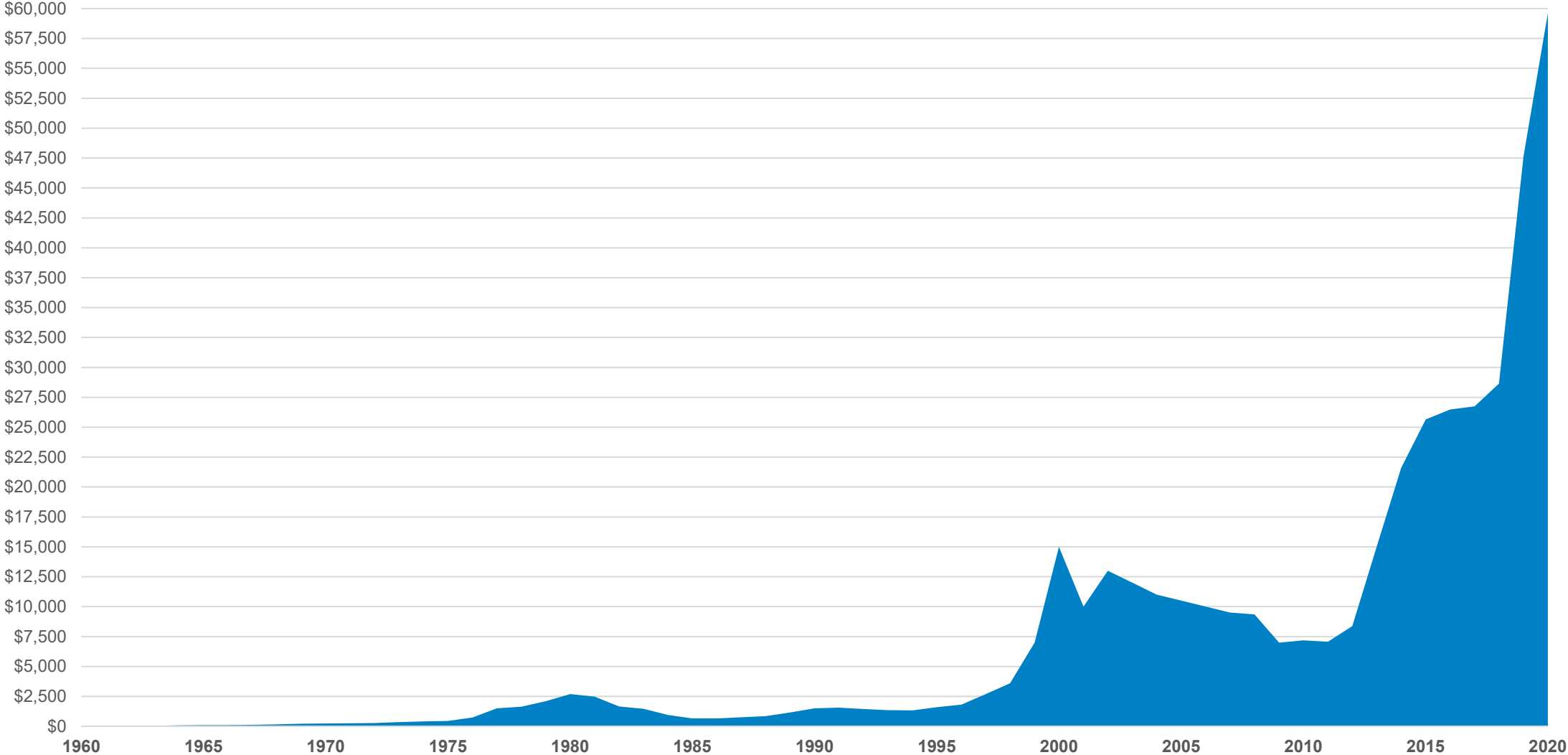
CBT Quota



C-BT Ownership Trends

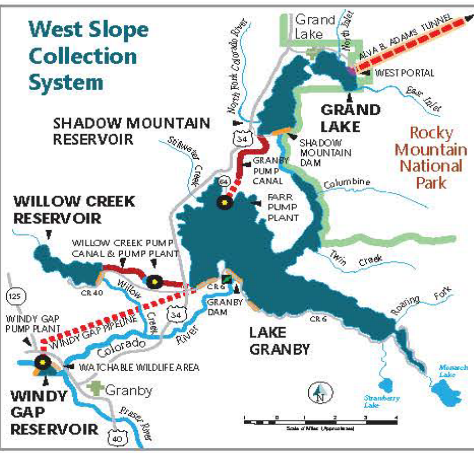


Historical Value Trends of a C-BT Unit



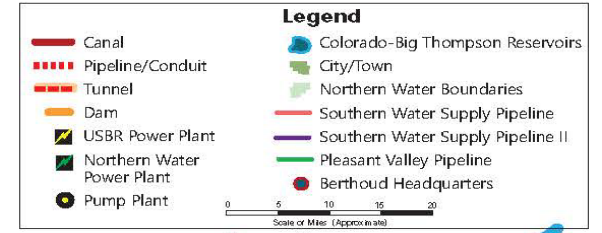


Windy Gap Project

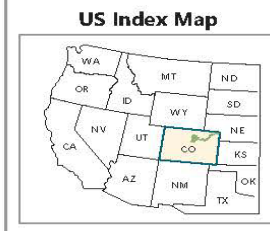
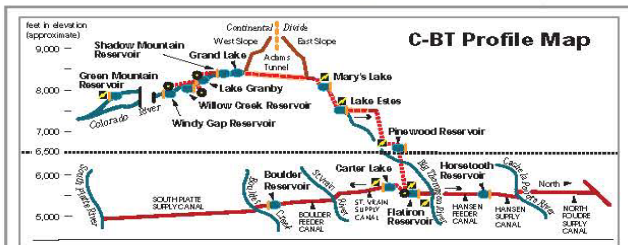
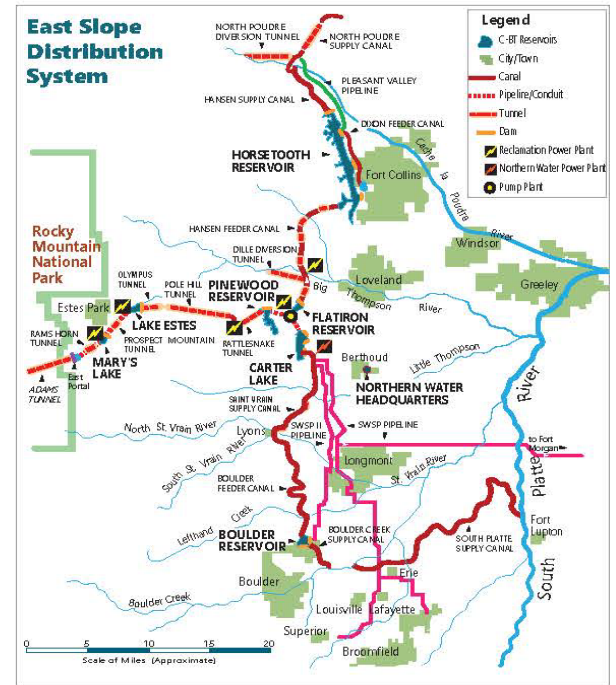
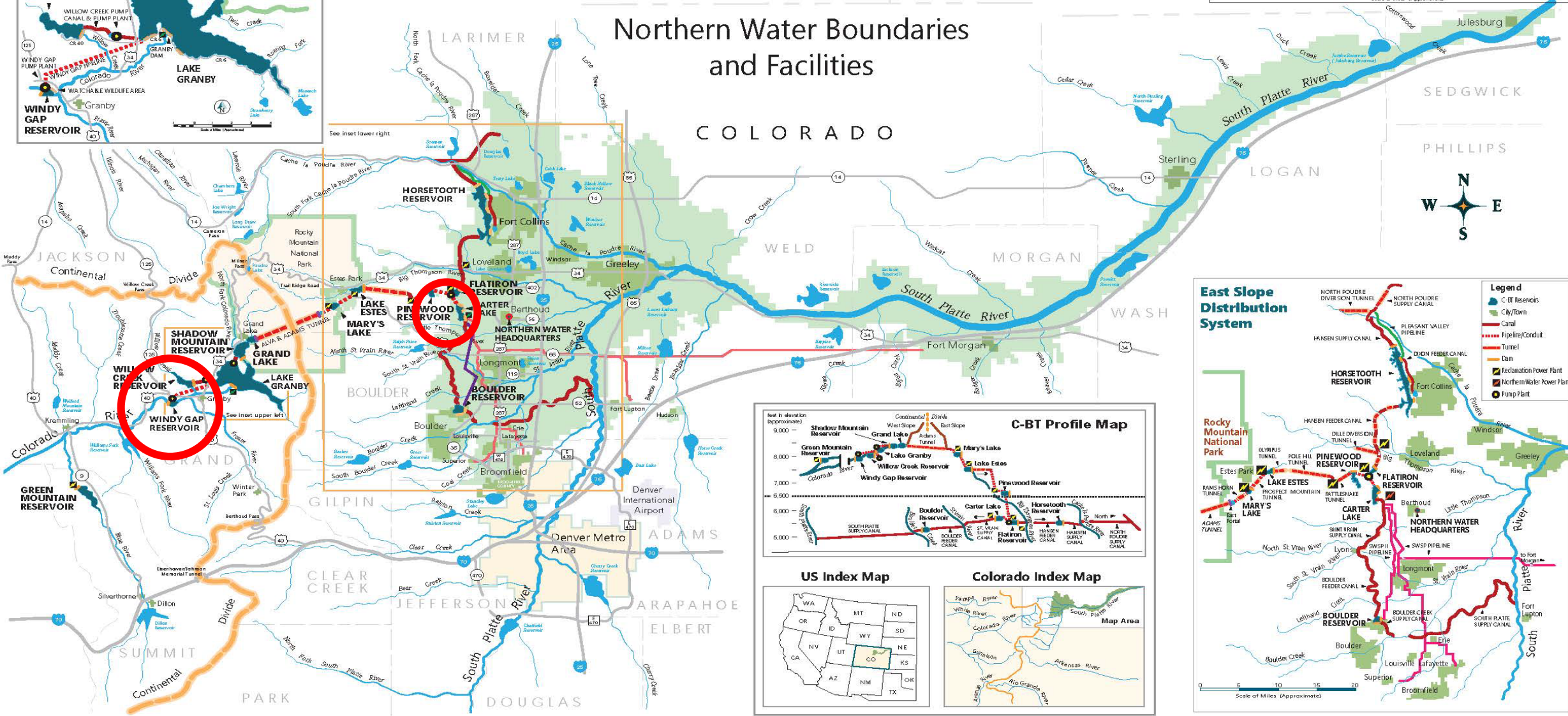


Northern Water

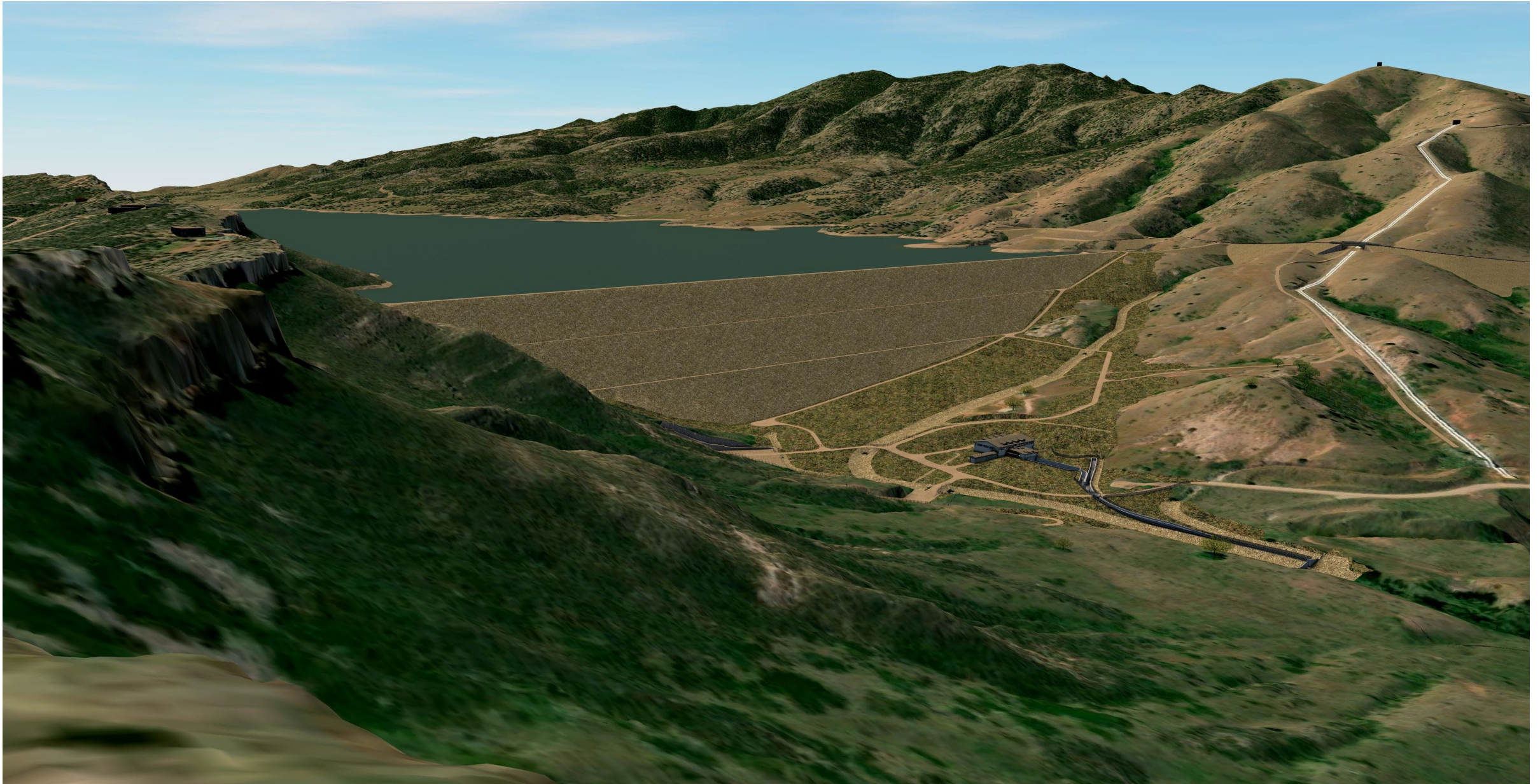
Colorado-Big Thompson Project



Northern Water Boundaries and Facilities





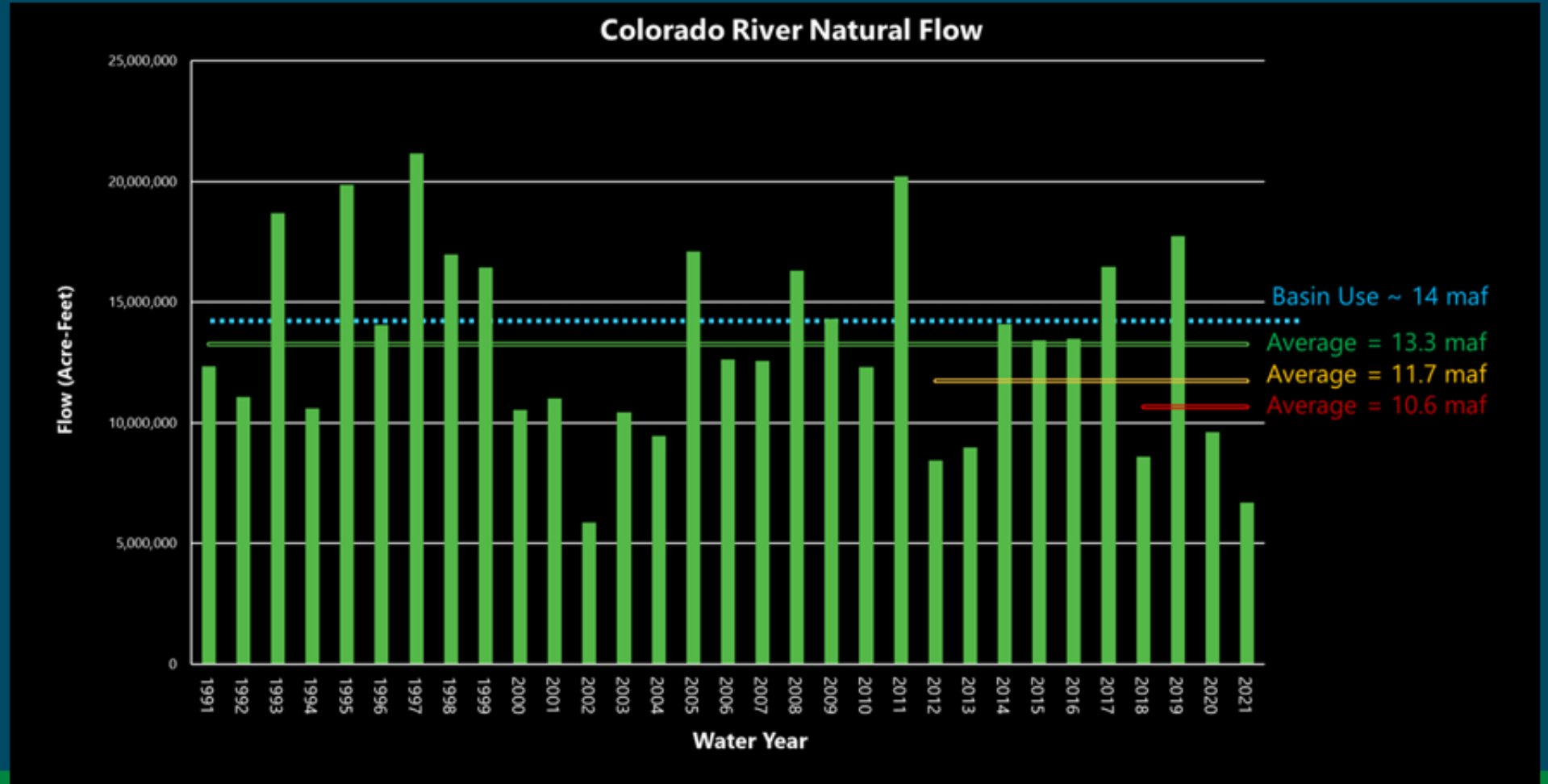


COLORADO RIVER CONNECTIVITY CHANNEL

PARTNERS

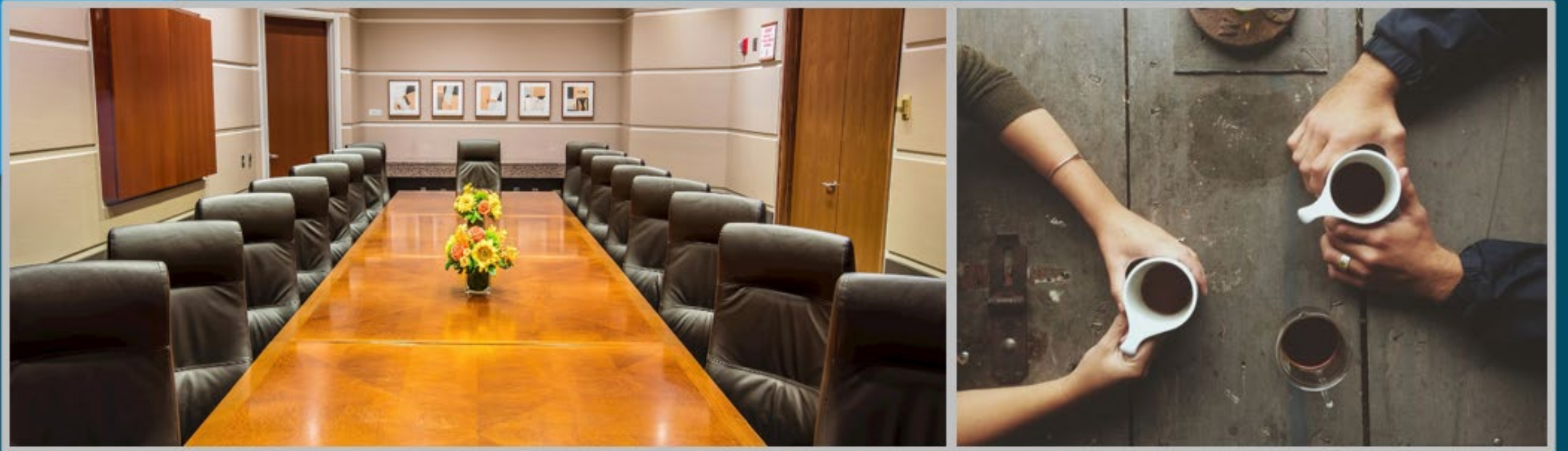


Where from Here?



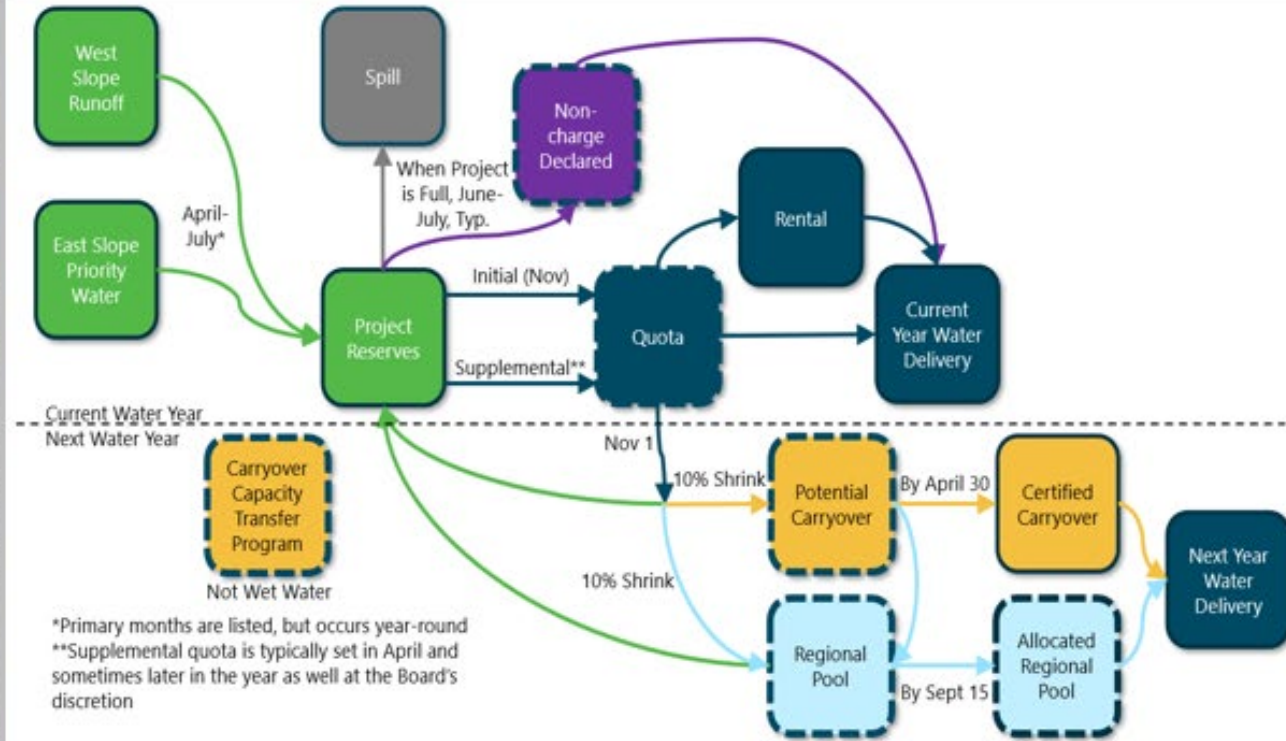
Where from Here?

Engage, Support & Guide



Where from Here?

Increase Resiliency



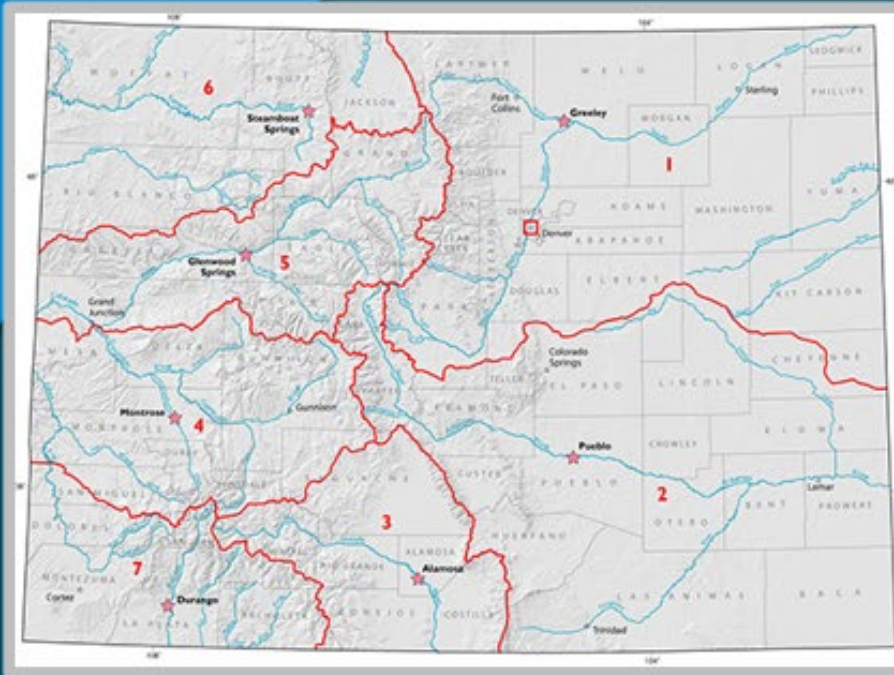
Where from Here?

Increase Resiliency



Where from Here?

Protect Native Supplies



Where from Here?

Improve Watershed Health



A large blue triangle pointing to the right, located in the top-left corner of the slide.

GRAD 592

*The South Platte River
&
Northern Water*

Bradley D. Wind, P. E.

Northern Water, General Manager

A solid green horizontal bar at the bottom of the slide.