



South Platte River Water Update

Bradley D. Wind, P.E.
General Manager



Presentation Overview

- ❑ Colorado-Big Thompson Project – The Beginning
- ❑ The Evolution of Northern Water
- ❑ Looming Challenges
- ❑ NISP Update

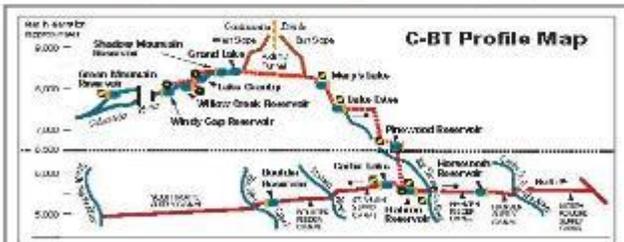
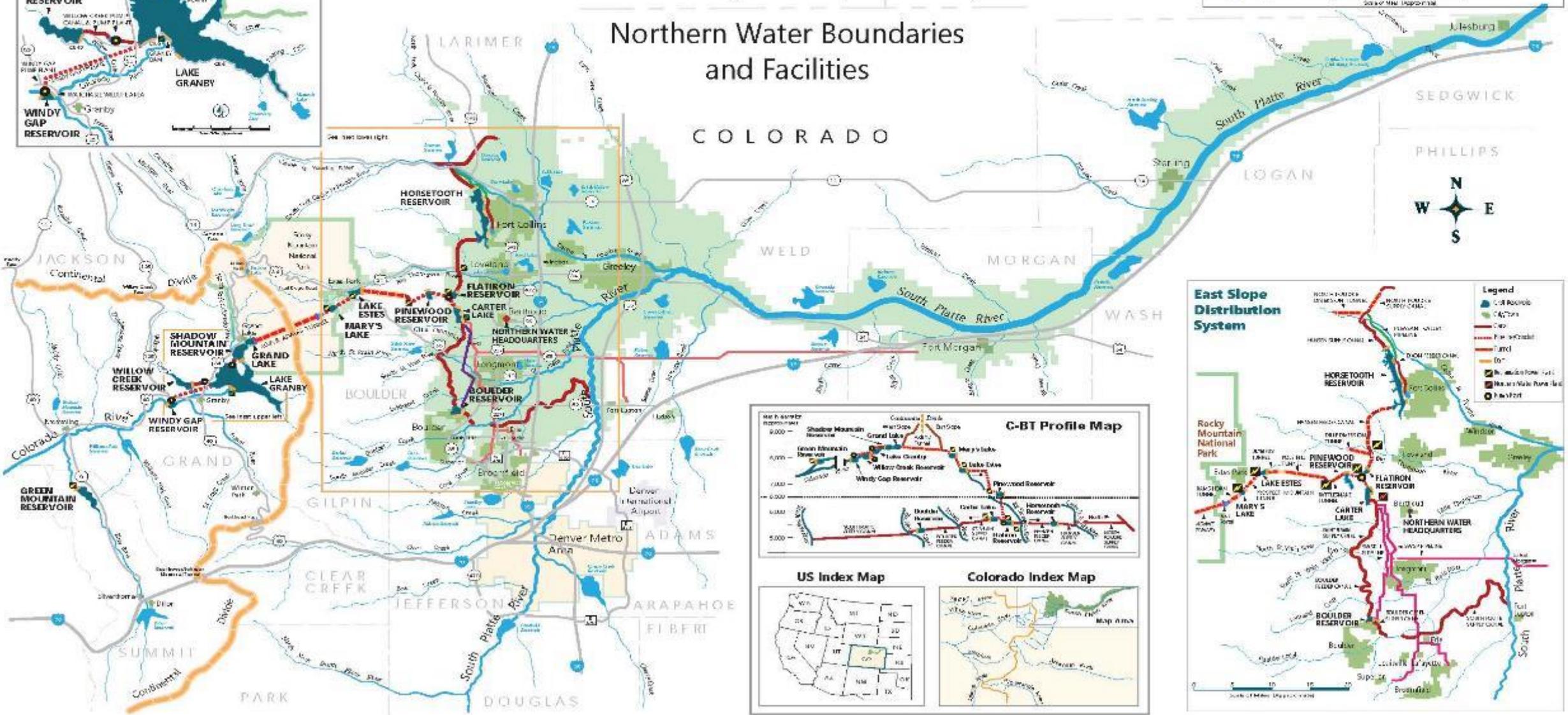


Northern Water

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
 - 1,021,000 residents
- Constructed 1938-1957
- Municipal, ag, industrial and domestic water users
- Average deliveries = 215,000 acre-feet/year





C-BT Project Makeup

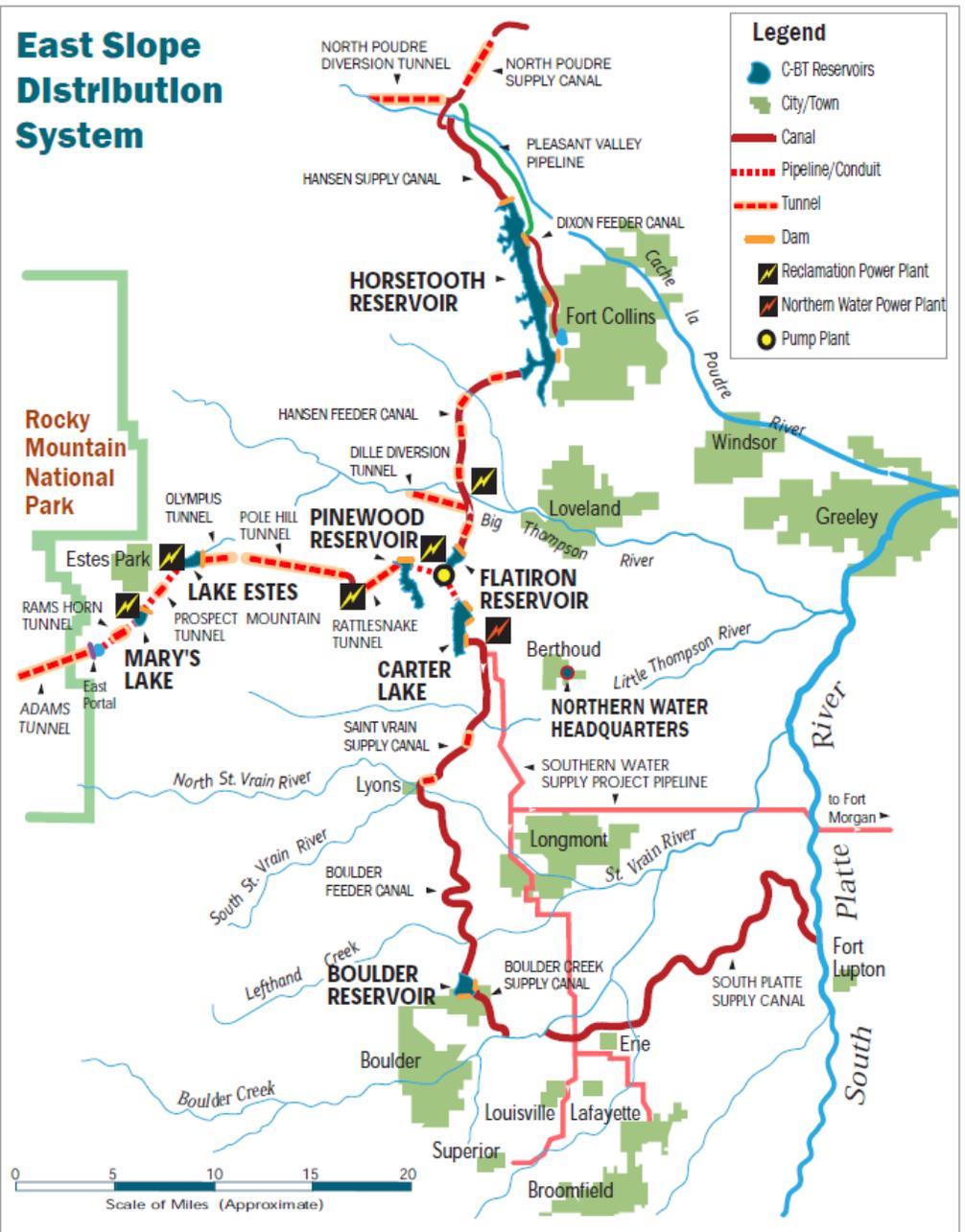
- 12 reservoirs
- 35 miles of tunnels
- 95 miles of canals
- 7 hydroelectric plants
- 700 miles of transmission lines



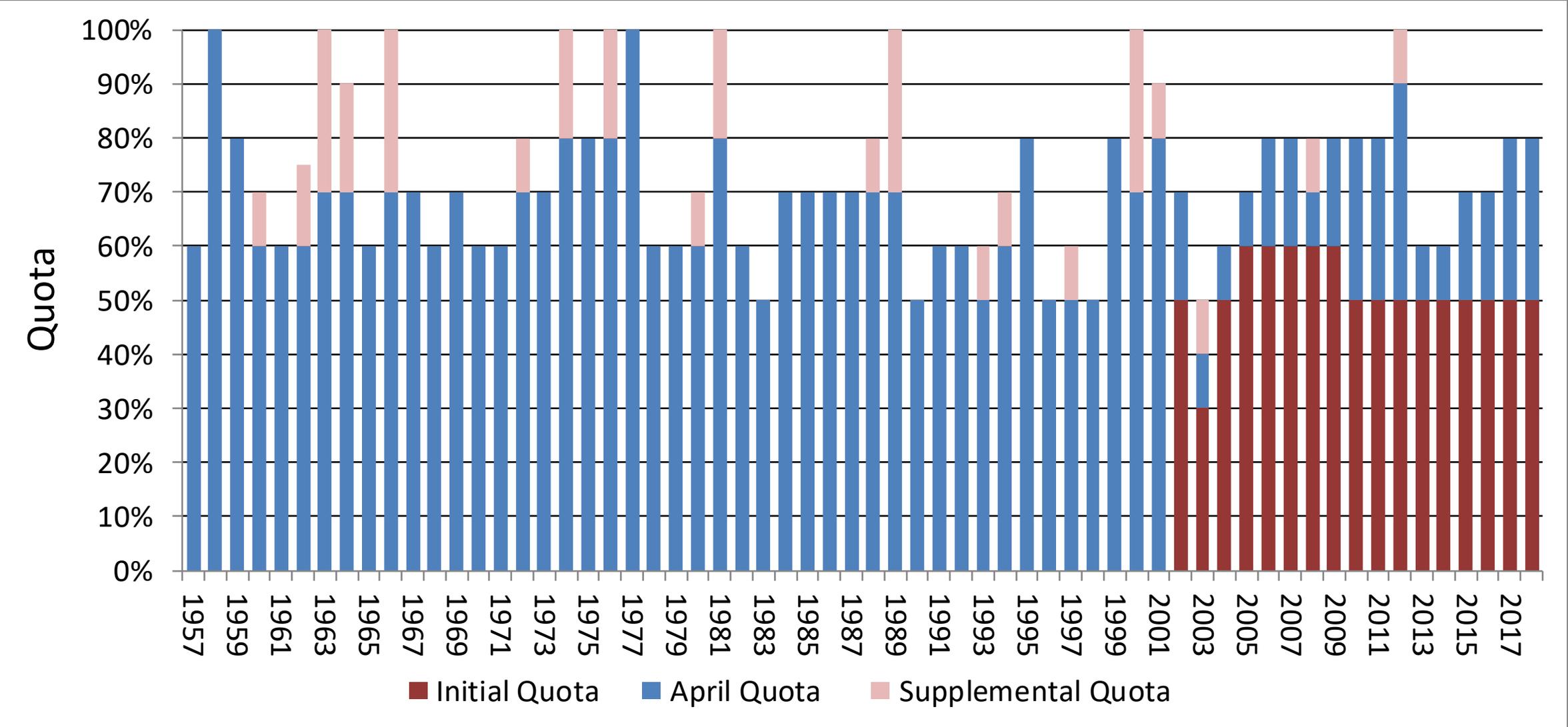
West Slope Collection System



East Slope Distribution System



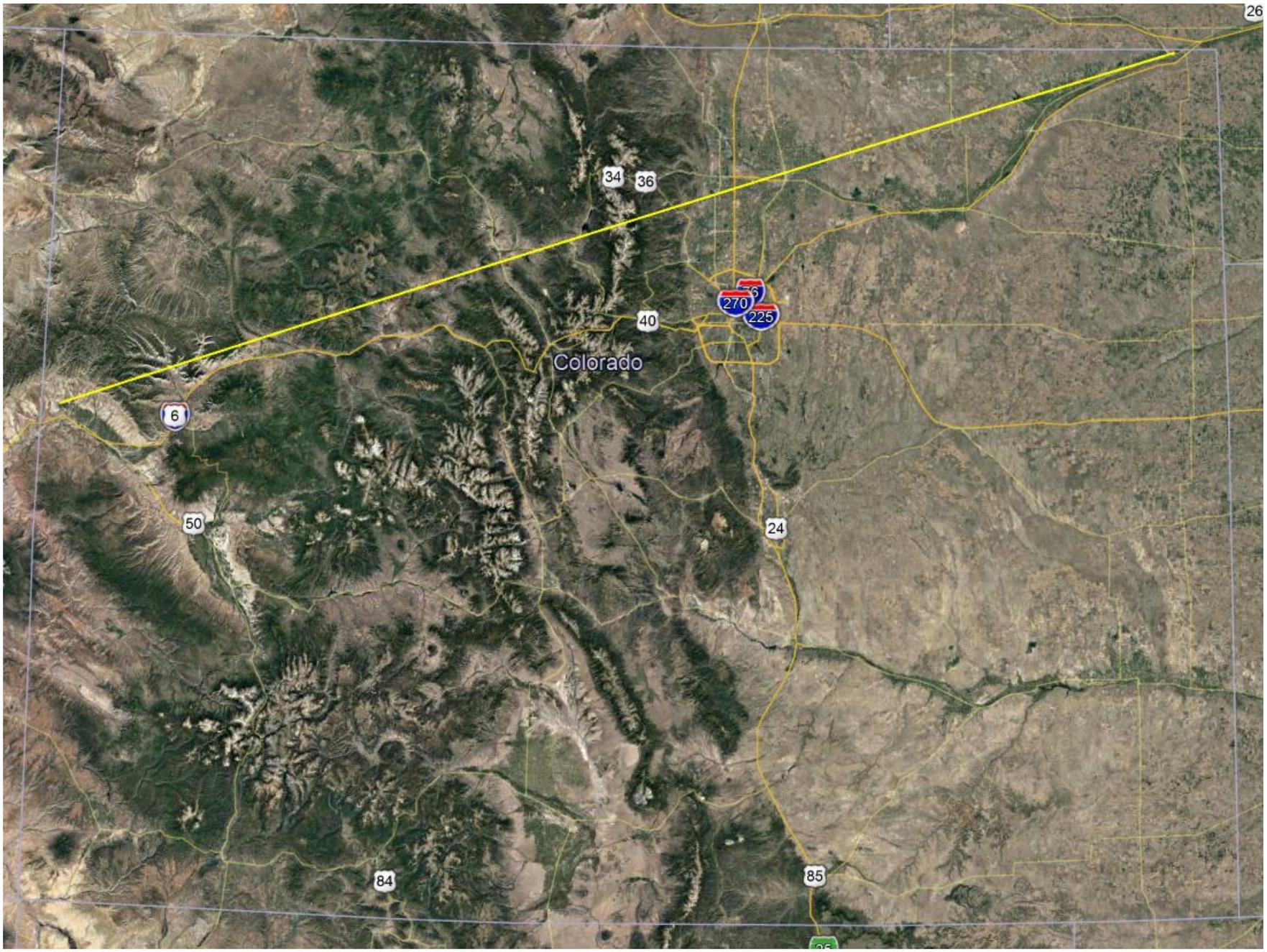
Historical C-BT Quotas



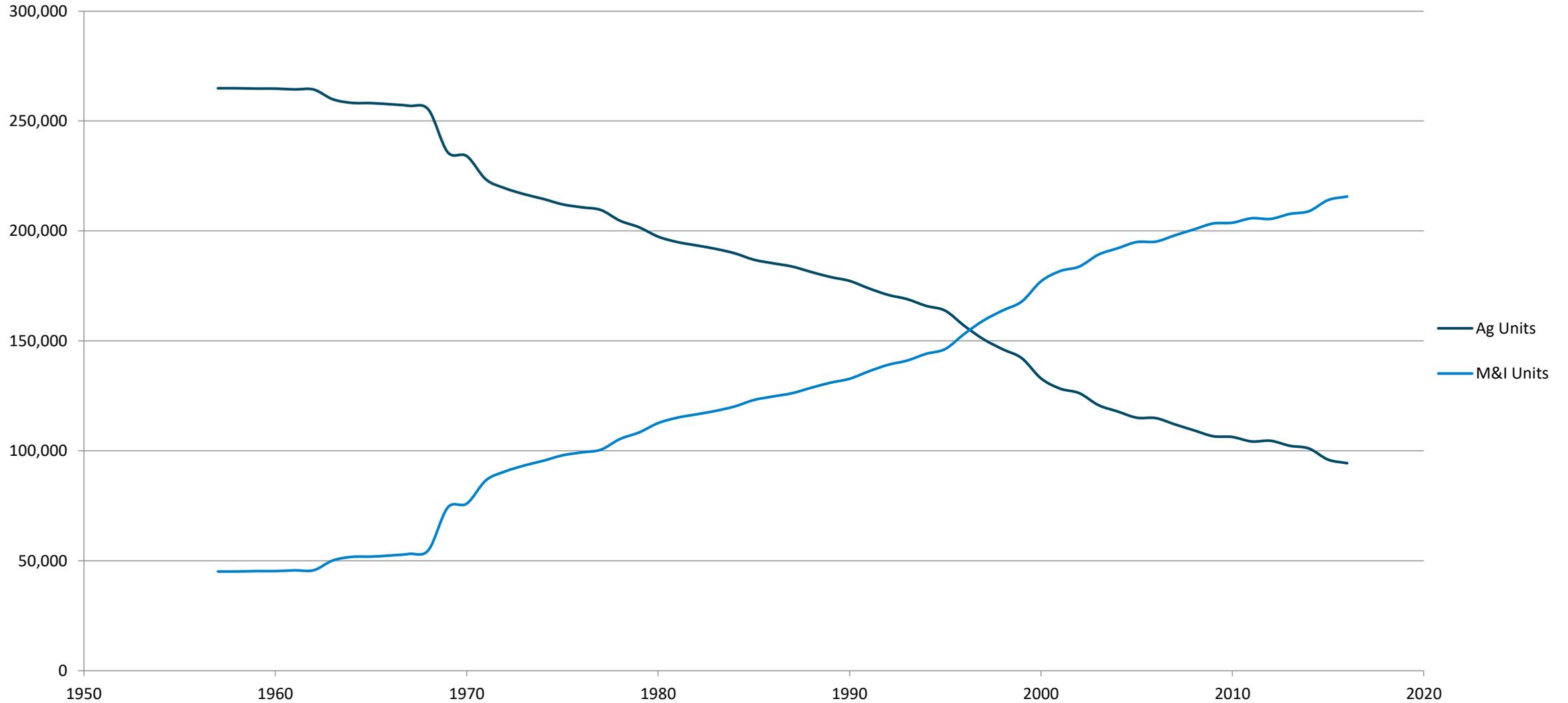
Article 19, Federal Repayment Contract

“There is also claimed and reserved... ..for the use of the District... ..all of the increment, seepage and return flow water which may result from the construction of the project”

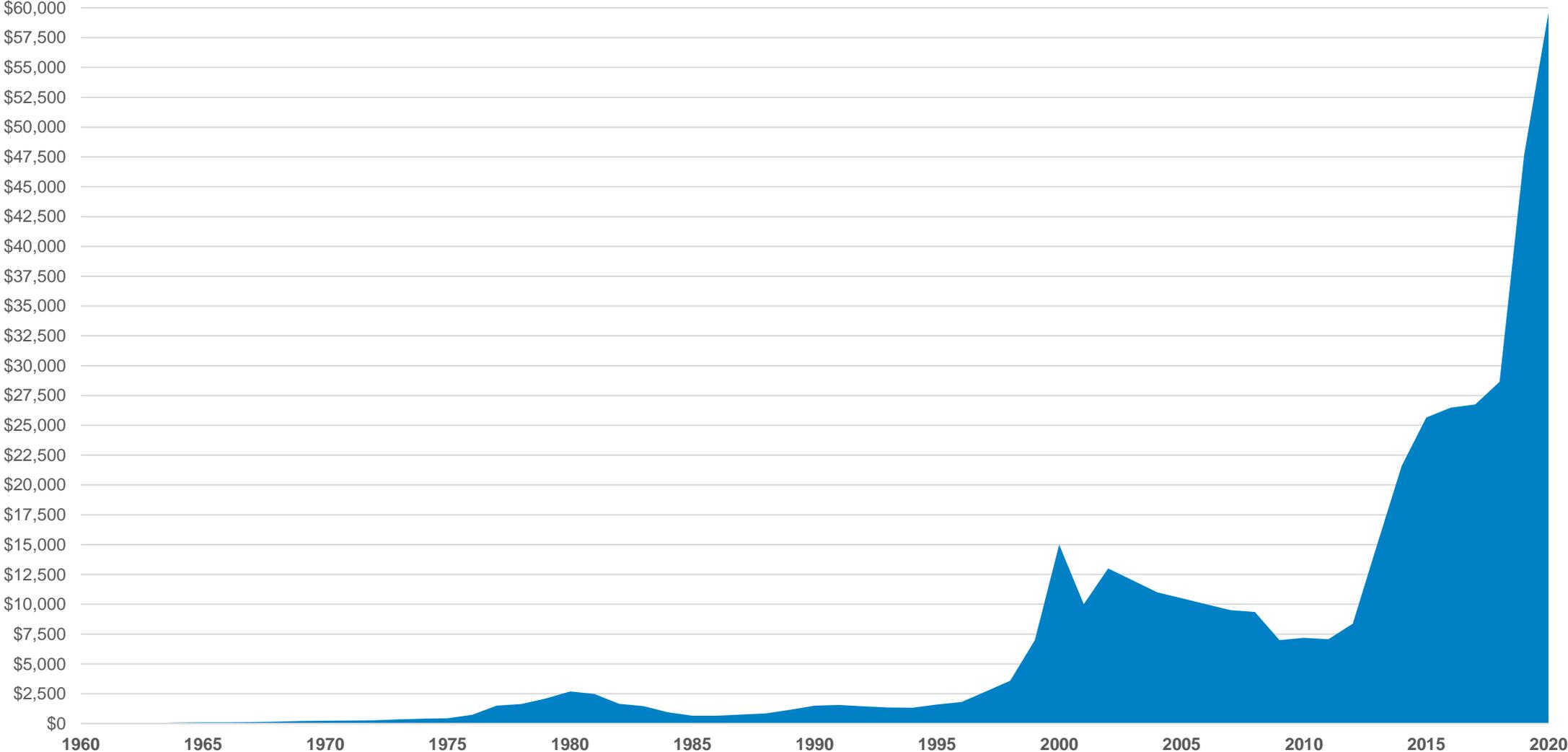




C-BT Ownership Trends



Historical Value Trends of a C-BT Unit



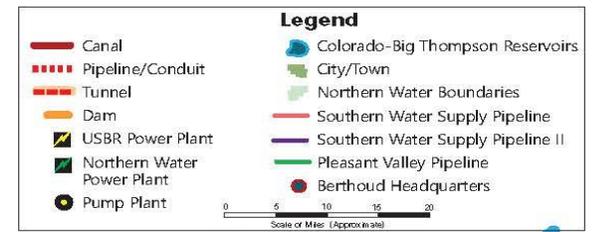


Evolution and Windy Gap

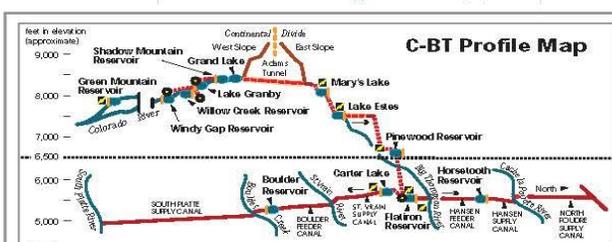
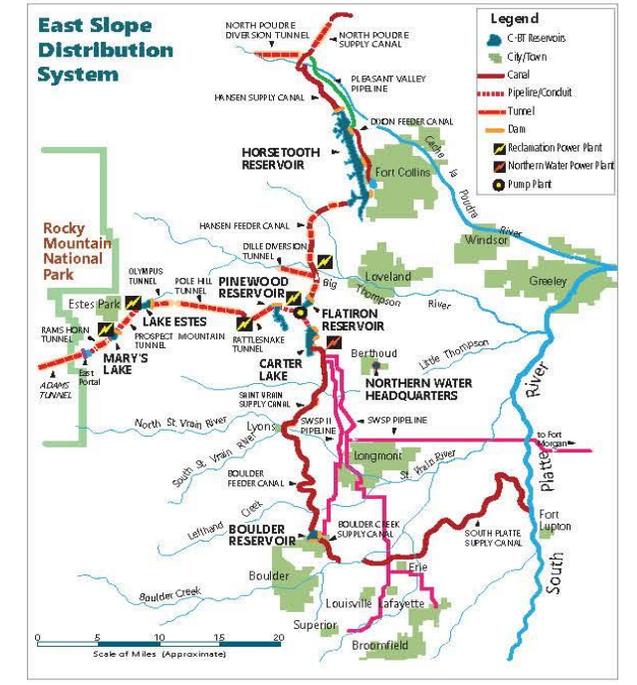
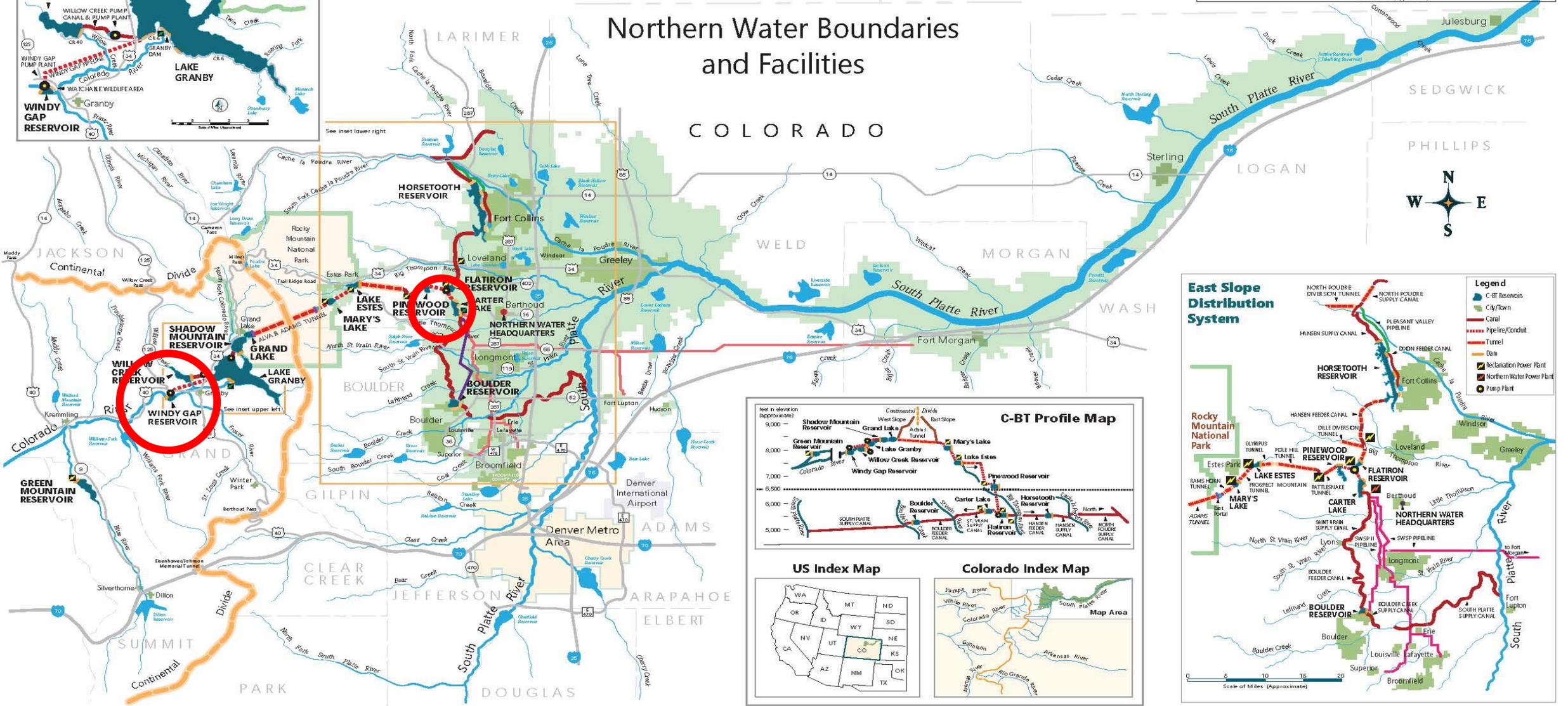


Northern Water

Colorado-Big Thompson Project



Northern Water Boundaries and Facilities



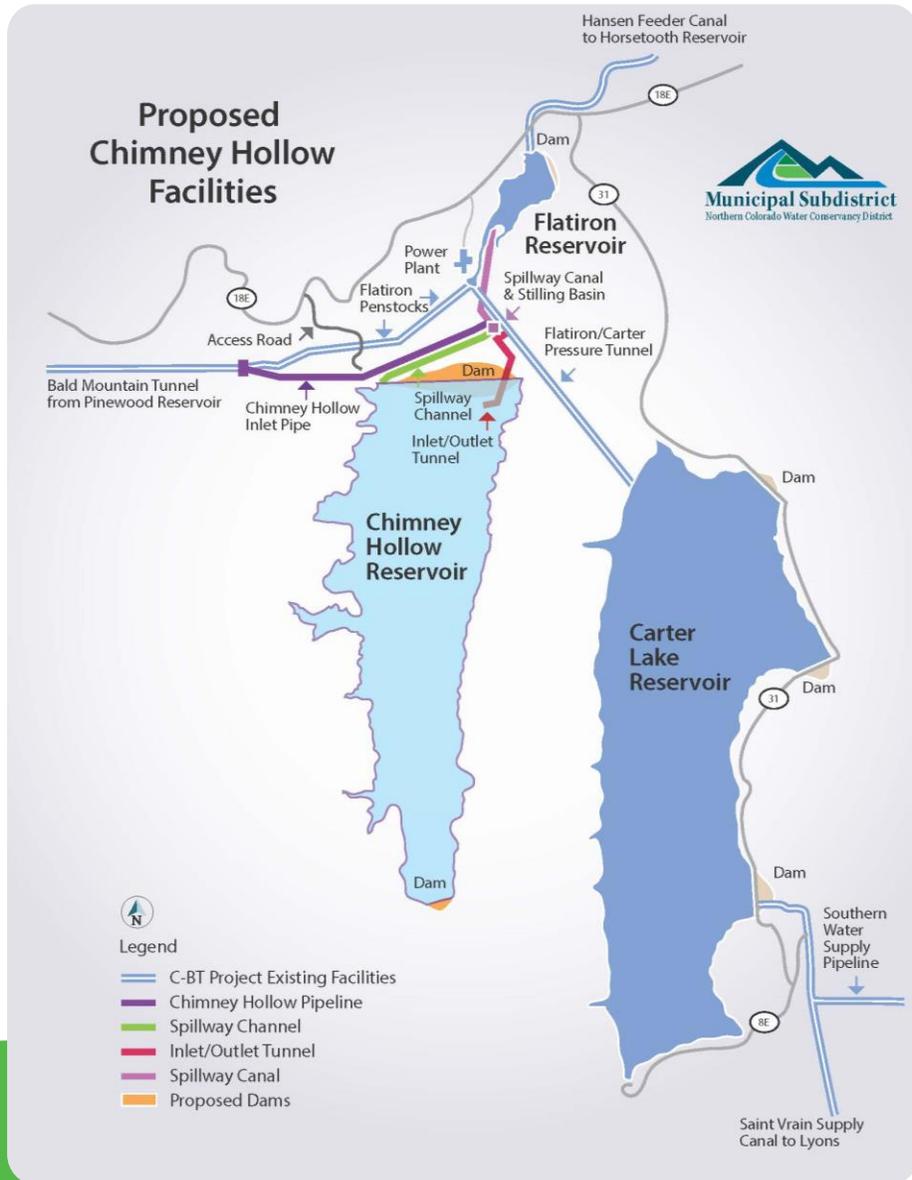






Windy Gap Firming Project

- Build Chimney Hollow Reservoir
- 12 participants
- 30,000 acre-feet/year reliable yield
 - Yield now: zero
 - Junior rights to divert and store
- Estimate Cost: \$620 million
 - \$47.5 million so far
- Entered NEPA in 2003
 - Draft EIS 2008, Final EIS 2011, ROD 2014



Chimney Hollow Reservoir

- 90,000 acre-feet capacity
- 740 surface acres
- Located west of Carter Lake in southwest Larimer County
- Uses established Colorado River rights
- Ties into the C-BT Project





CAT

777

6U9Y88

2665

777

Main Dam Foundation



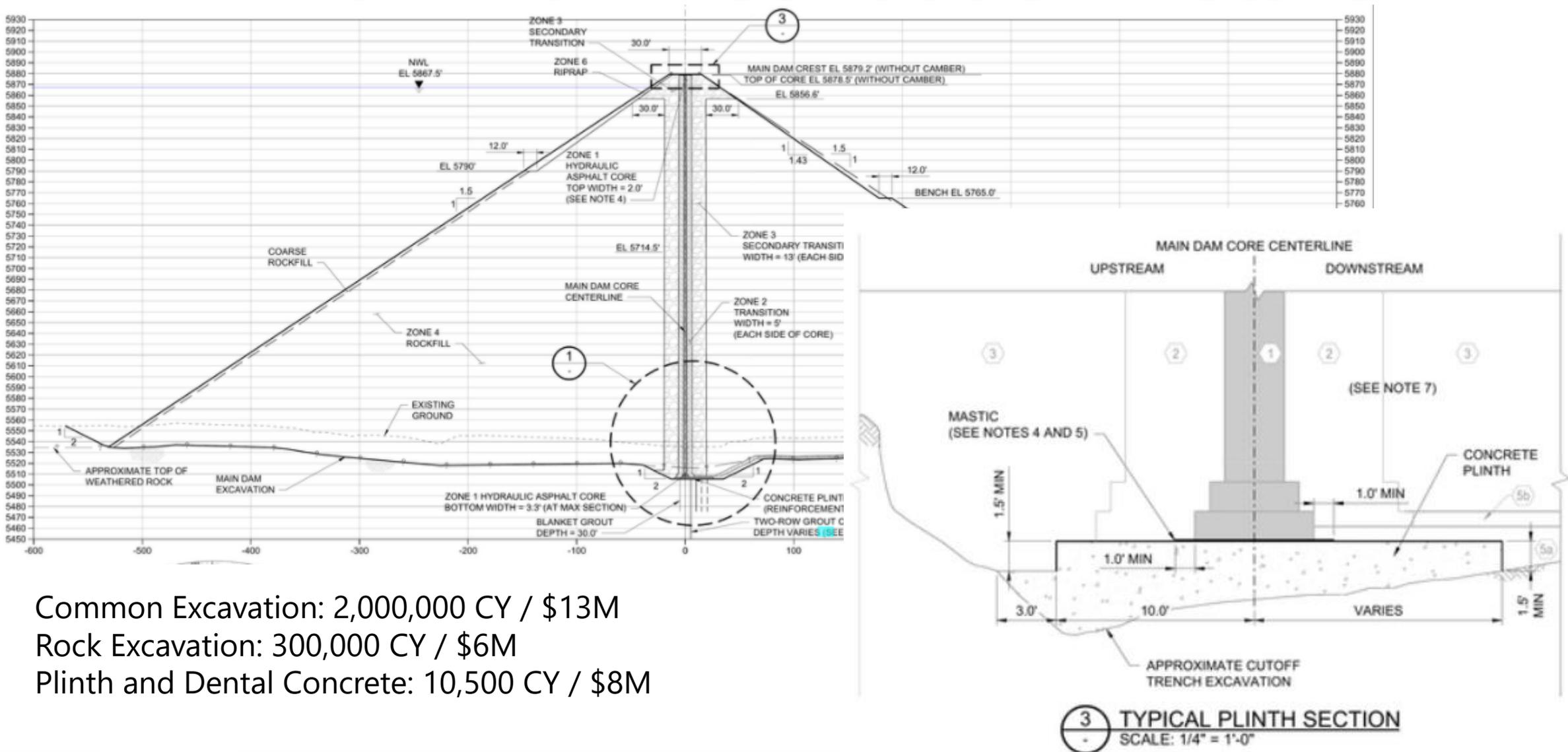
Main Dam Foundation Progress STA 26 to 28



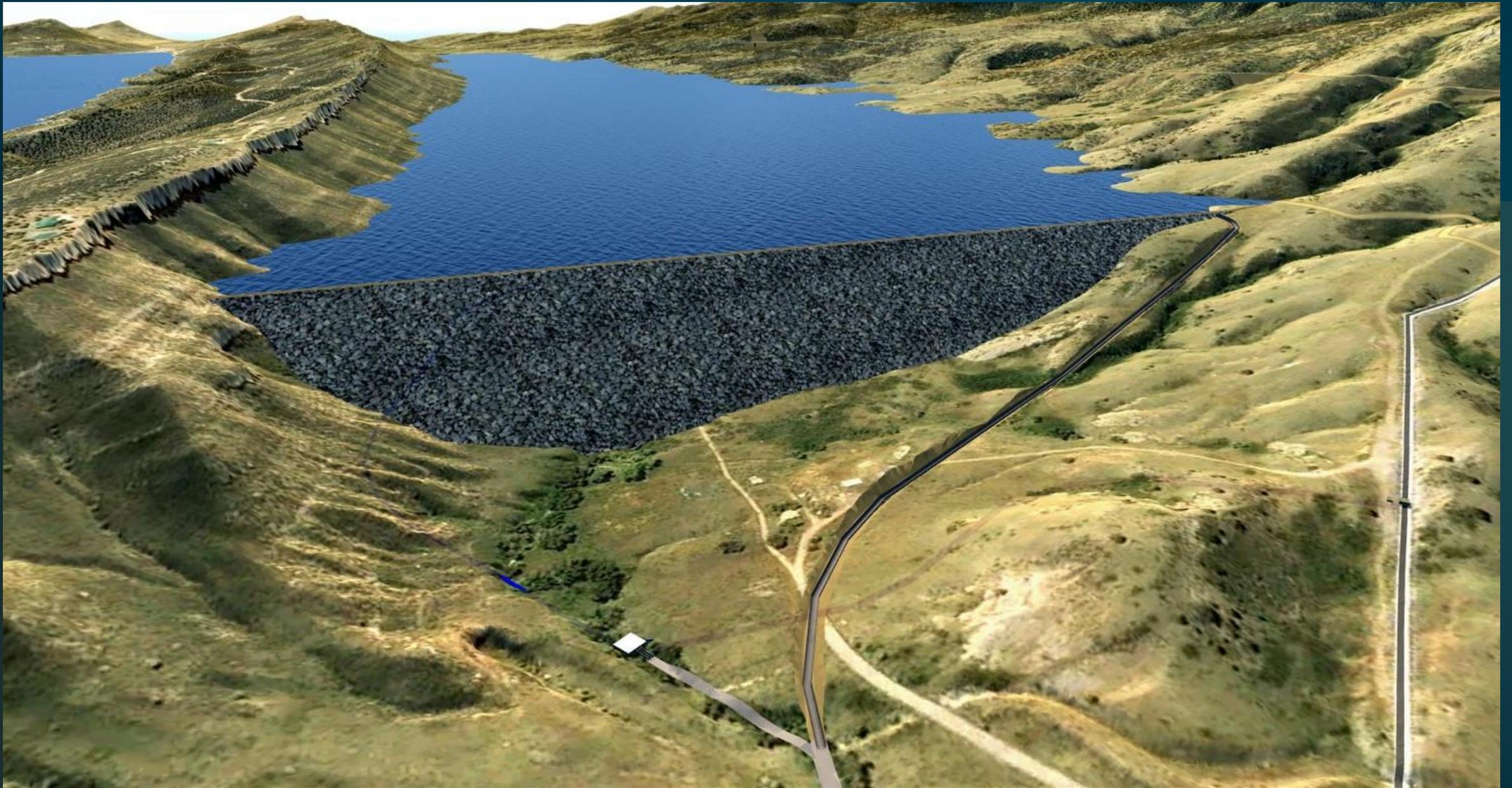


Main Dam Foundation Cleaning

Main Dam Foundation Details



Common Excavation: 2,000,000 CY / \$13M
 Rock Excavation: 300,000 CY / \$6M
 Plinth and Dental Concrete: 10,500 CY / \$8M

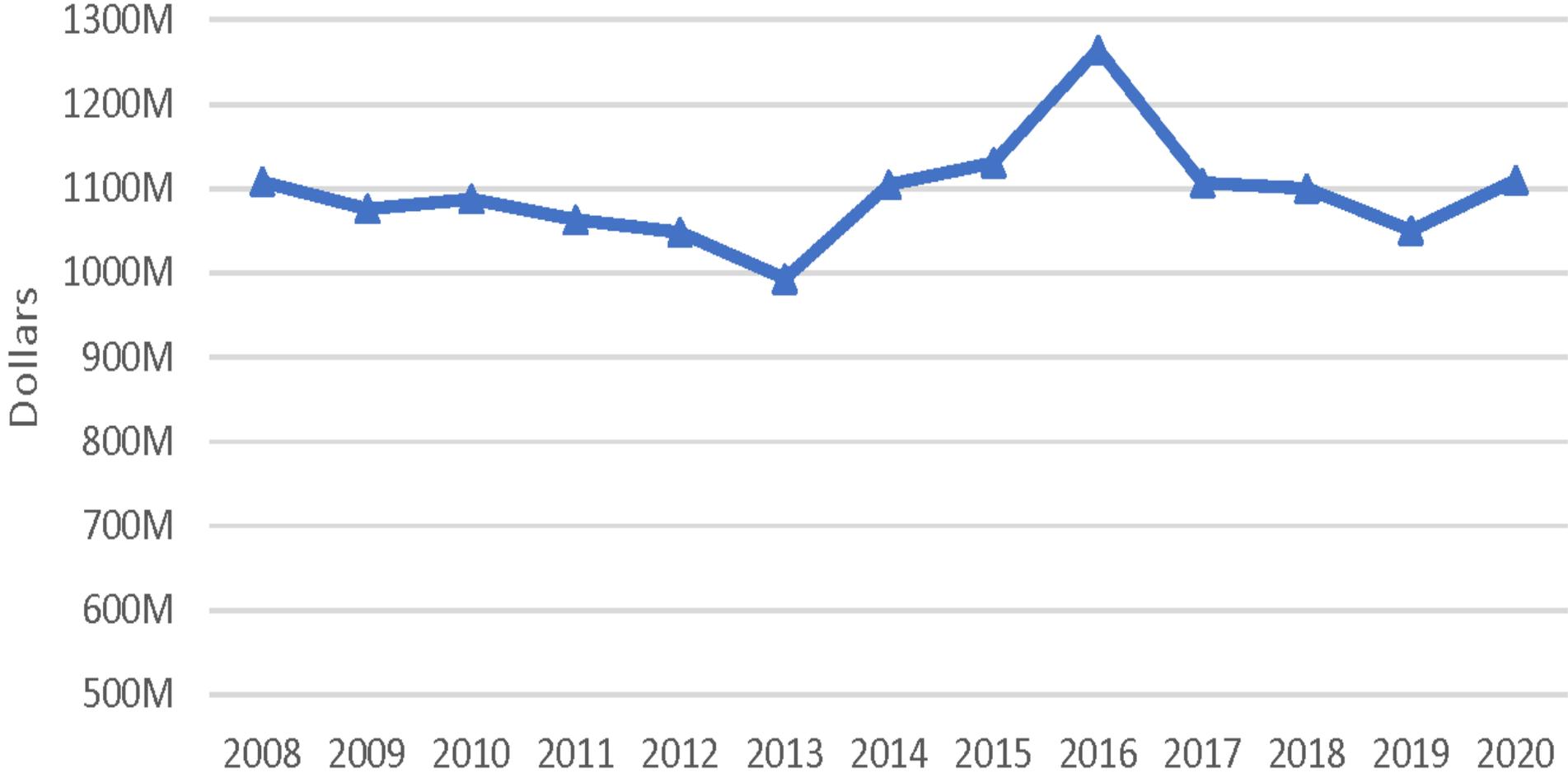


Chimney Hollow Reservoir (computer rendering)



Looming Challenges

Annual Federal Appropriation Bureau of Reclamation



Colorado River Uncertainty



Colorado River Basin Overview

Colorado River Allocations

1922 Colorado River Compact established Upper and Lower Basin States' allocations

UPPER BASIN STATES - 7.5 MAF

1948 Upper Colorado Basin Compact established the Upper Basin States' apportionment

LOWER BASIN STATES - 7.5 MAF

California – 4.4 MAF

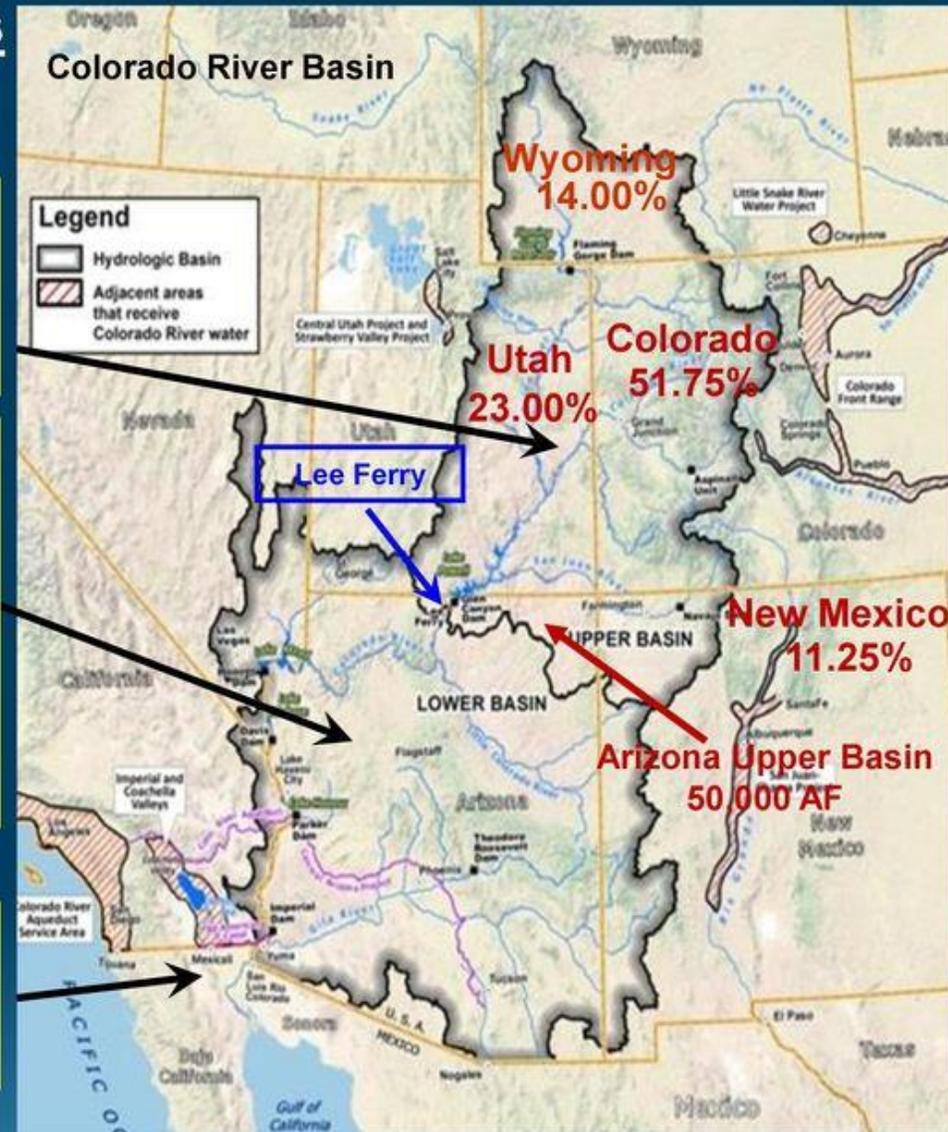
Arizona – 2.8 MAF

Nevada – 0.3 MAF

1928 Boulder Canyon Project Act established the Lower Basin States' apportionment

MEXICO - 1.5 MAF

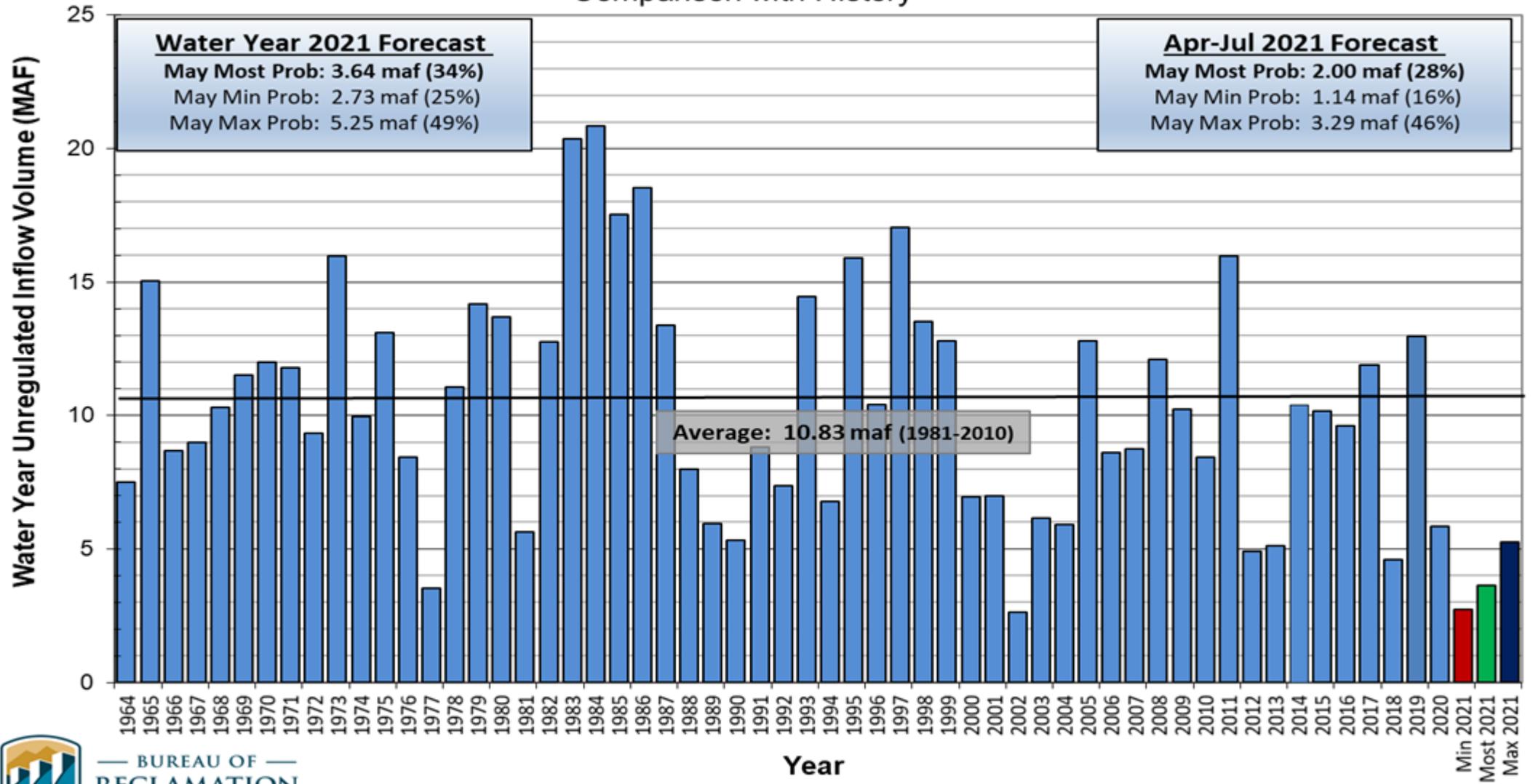
1944 Treaty with Mexico established Mexico's treaty deliveries



Lake Powell Unregulated Inflow

Water Year 2021 Forecast *(issued May 5)*

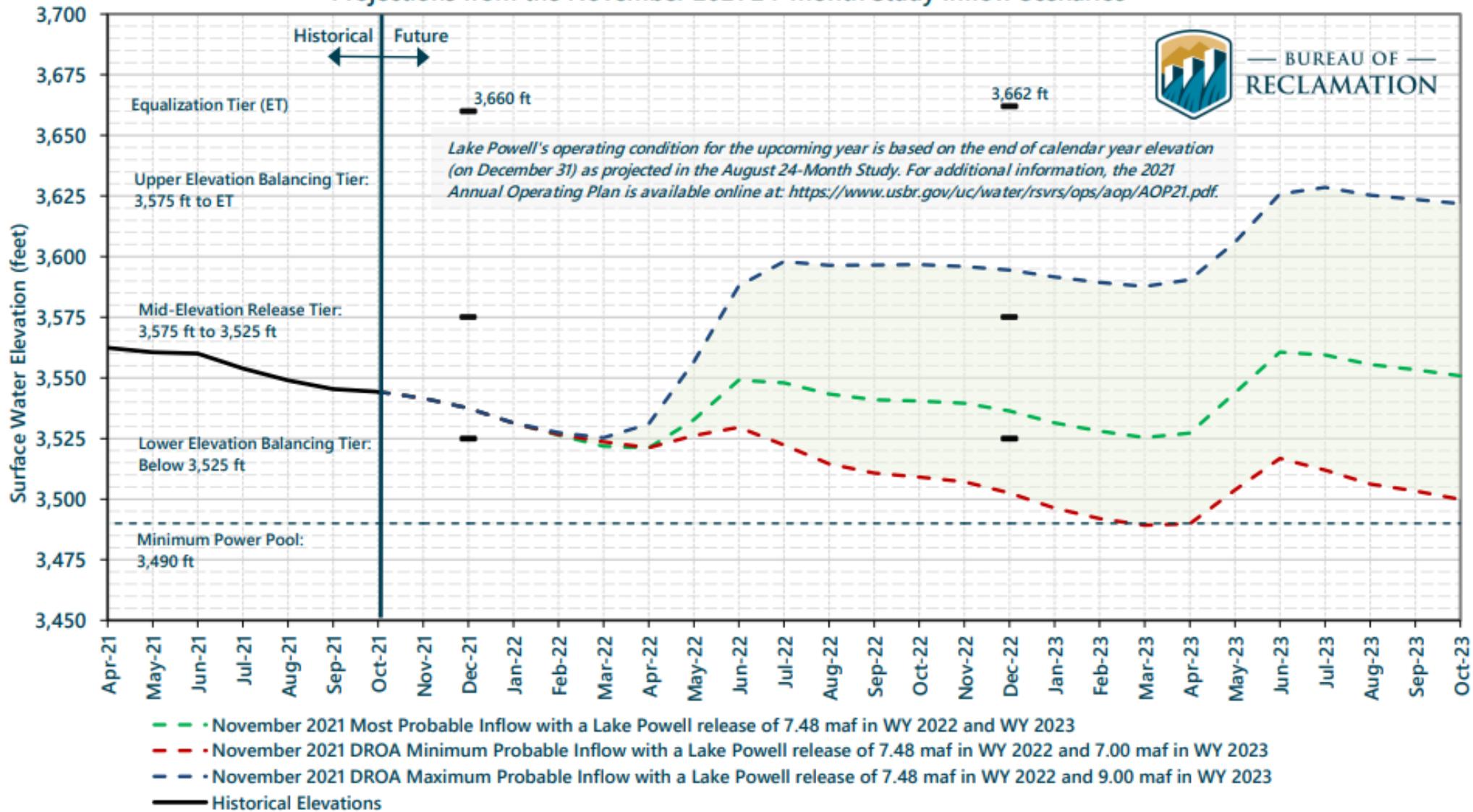
Comparison with History



BUREAU OF RECLAMATION

Lake Powell End of Month Elevations

Projections from the November 2021 24-Month Study Inflow Scenarios



The Drought Response Operations Agreement (DROA) is available online at: <https://www.usbr.gov/dcp/finaldocs.html>.

2-yr
Model
Results:

3,624 = 14 maf

3,500 = 4.5 maf