

Long-Term Planning



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Denver Water overview

- Founded in 1918.
- Governed by five-person board of water commissioners to provide separation from City of Denver.
- Water supply comes from mountain snowpack.
- Provide potable and recycled water.
- Serve 1.4 million customers with only 2 % of water used in the state.
- 3,000 miles of pipe.
- 4,000 miles of watershed land.



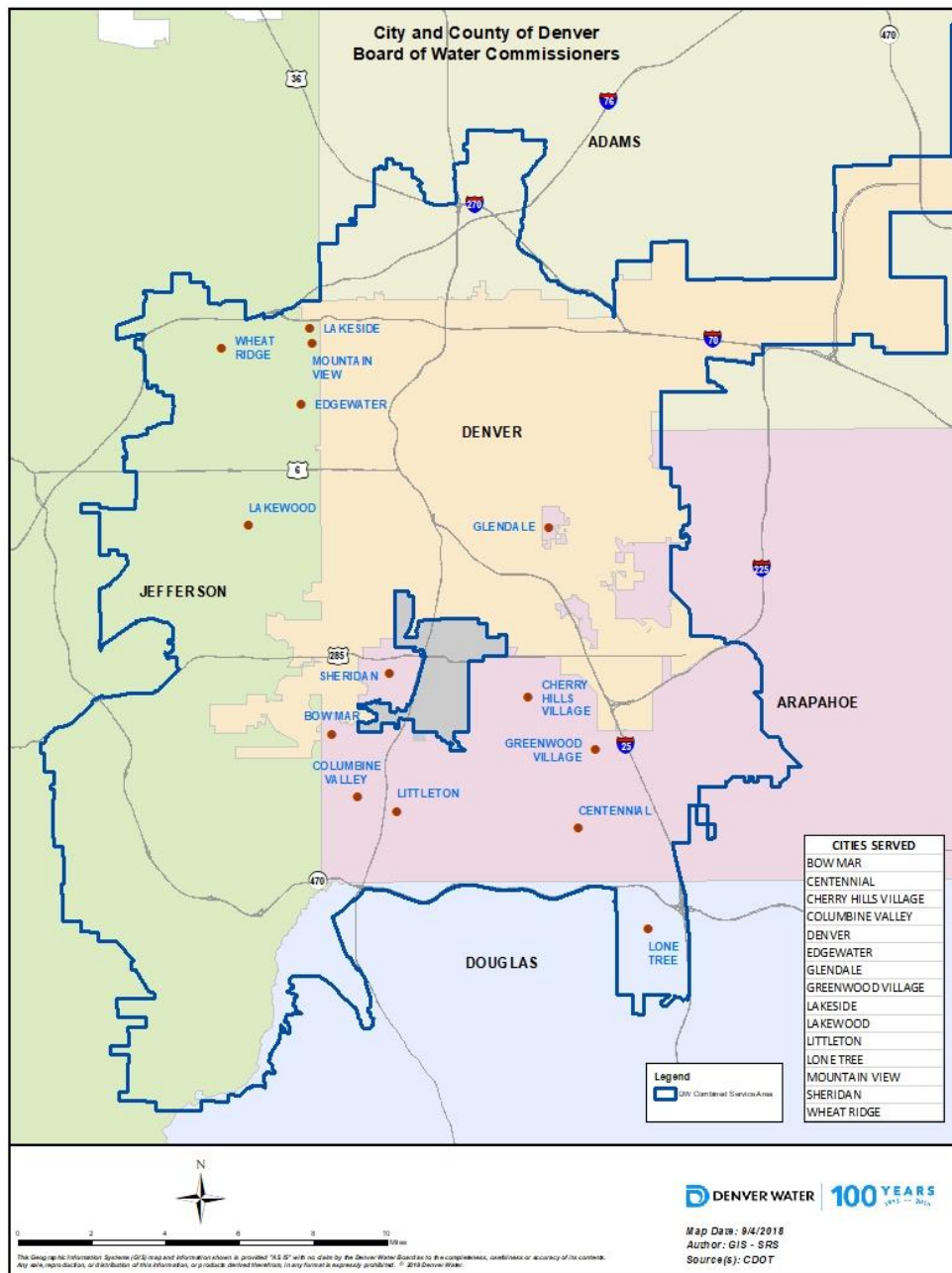
Dillon Reservoir

Cities & Counties Served

Denver Population: 700,000

Outside City Population: 700,000

15 cities served within service area boundary



Issues facing Denver Water supply

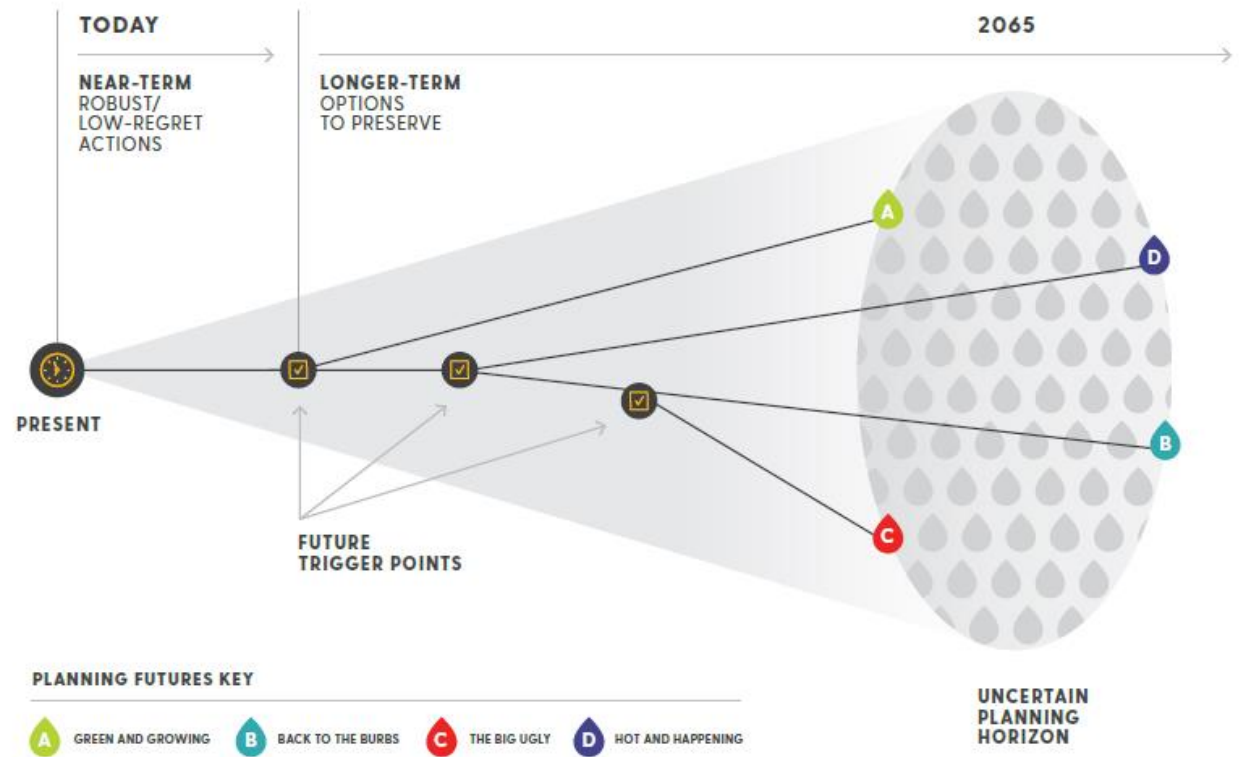


Strontia Springs Reservoir

- Climate change
- Growth
- Colorado River

Scenario Planning

- Plan for entire water system
- Encourage innovation
- Drive capital plan

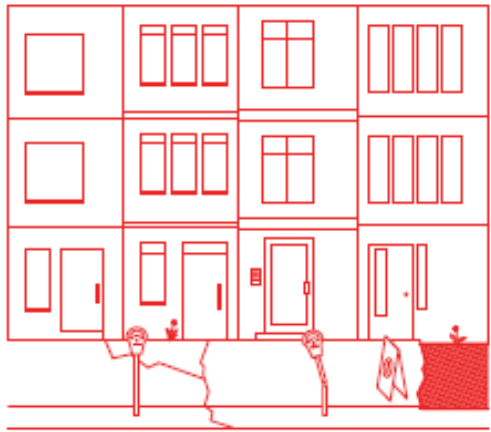




**BACK
TO THE
BURBS**



**GREEN
AND
GROWING**



**THE
BIG
UGLY**



**HOT
AND
HAPPENING**



IRP Drivers – How are we tracking?

Climate



- ✓ More days above 90 degrees in last 20 years
- ✓ Forest fires are becoming more intense and frequent
- ✓ Minimum temperatures are rising across our watersheds

HOT



Economy



- ✓ Denver MSA unemployment has been historically lower than U.S. average
- ✓ Colorado consistently ranks in the top 5 in the country for strength of economy and top 10 of places to live in the U.S.

COVID



Growth



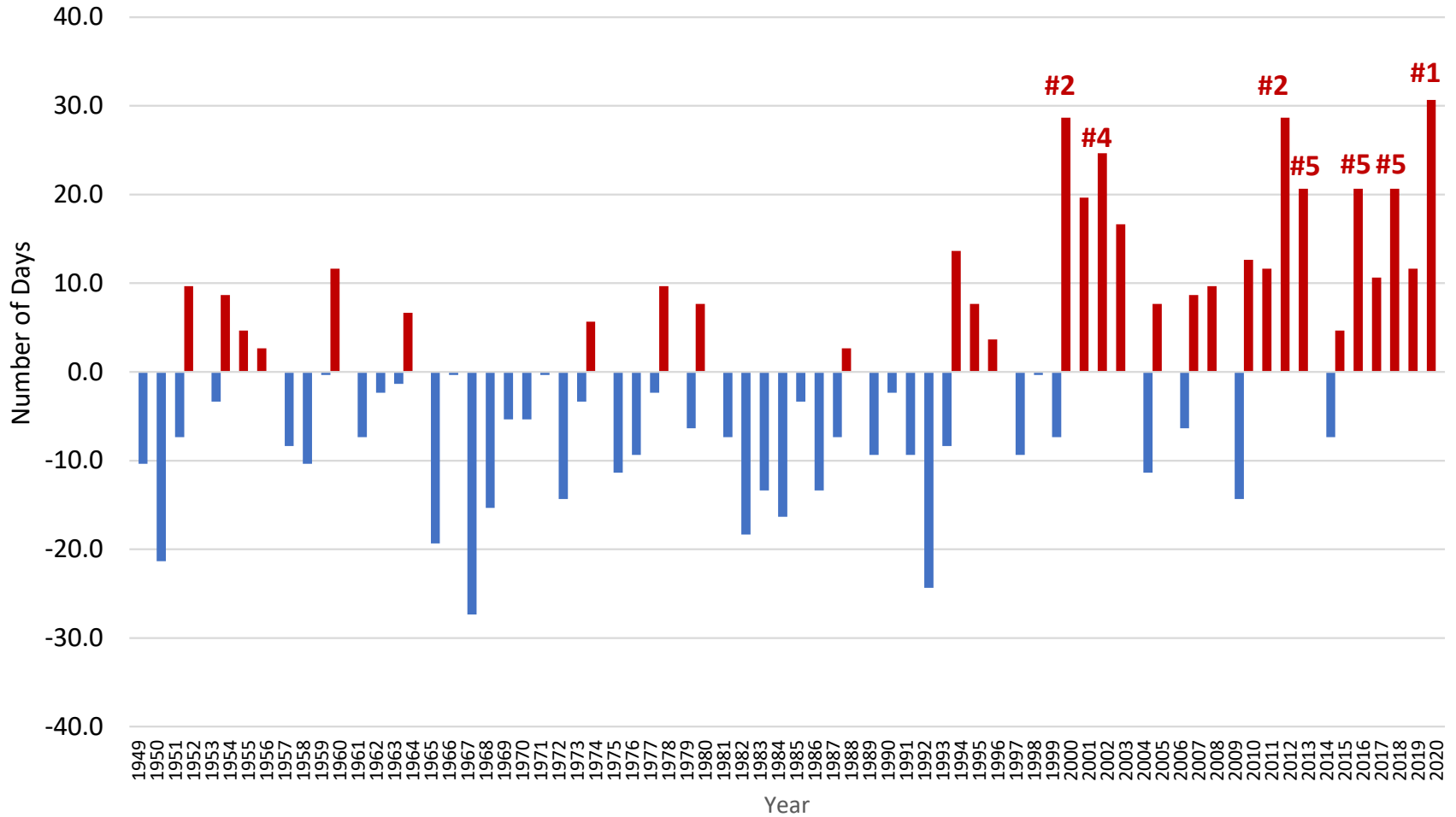
- ✓ Urban growth patterns continue throughout the service area
- ✓ 70% of residences built from 2010-2015 were multi-family residences

URBAN



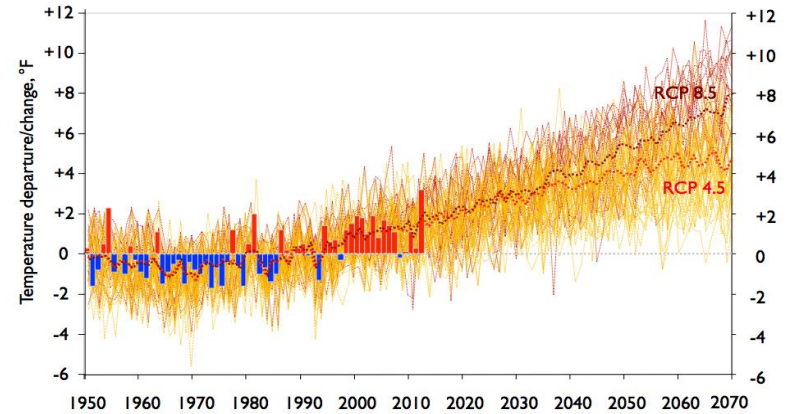
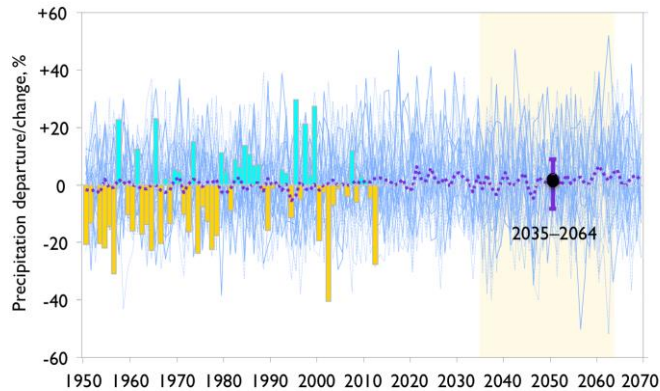
90 Degree Days

Difference from Average



Based on 3-station average of 34 days (1949-2020)

Projected Changes for Central Mountains in Colorado



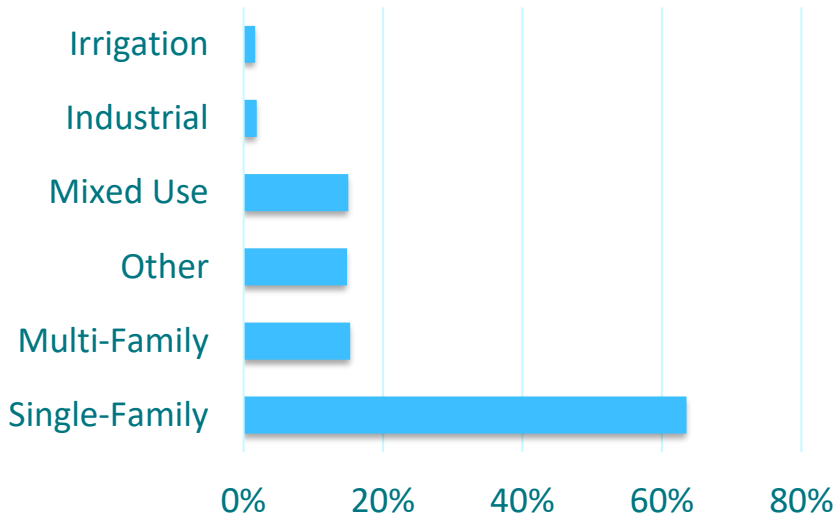
...precipitation variability will continue (and increase)

...warming will continue and accelerate

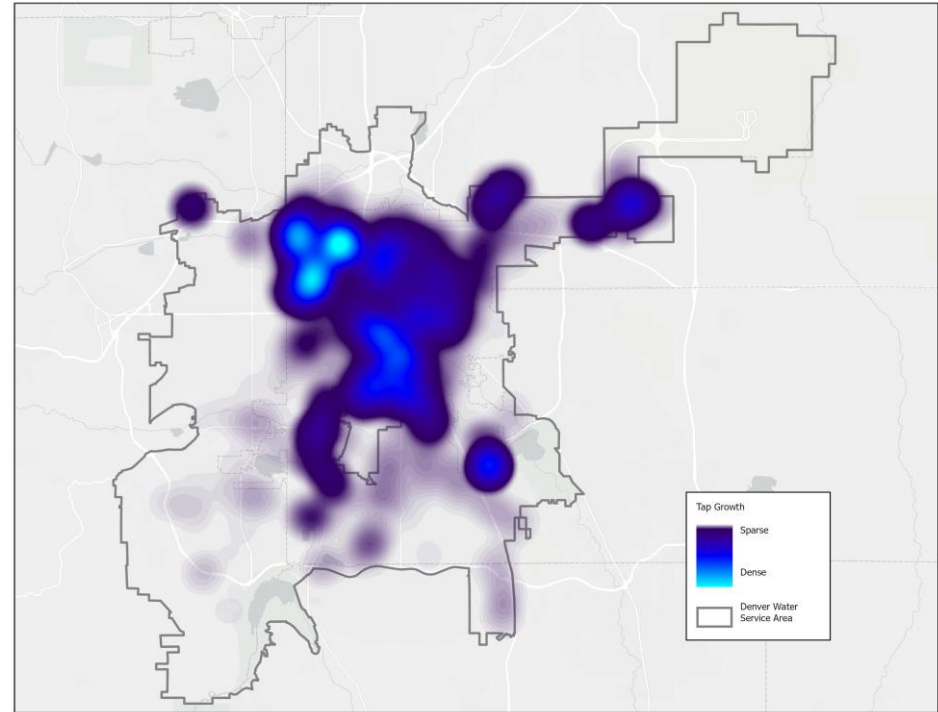
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Growth

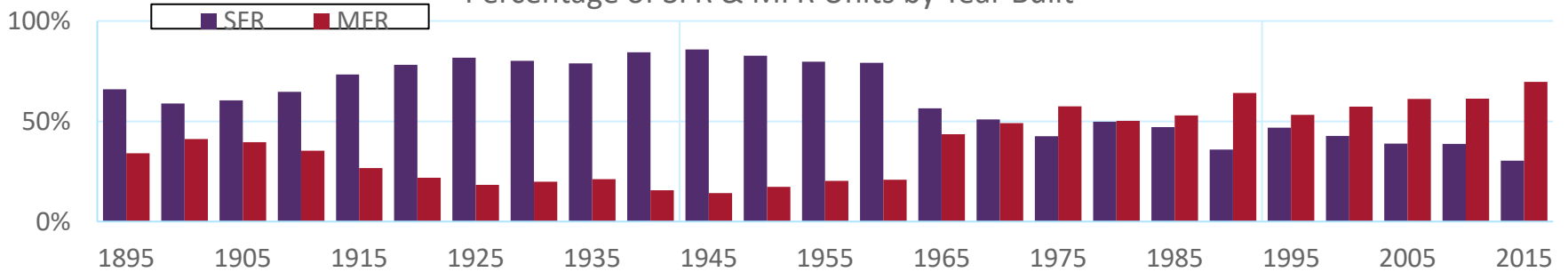
Account growth



Growth density

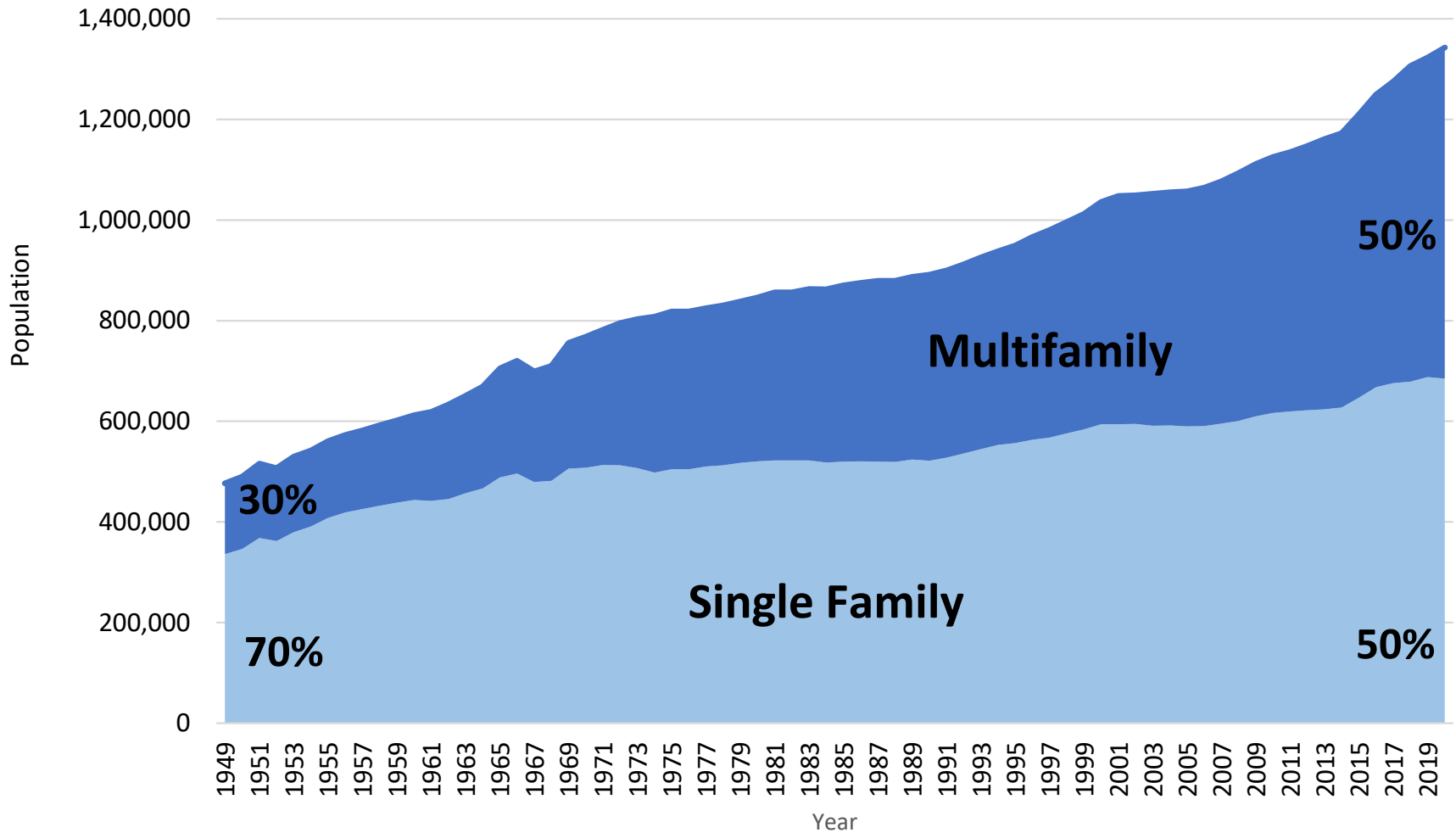


Percentage of SFR & MFR Units by Year Built



Population

Denver Water Service Area



Does not include population served through fixed contracts



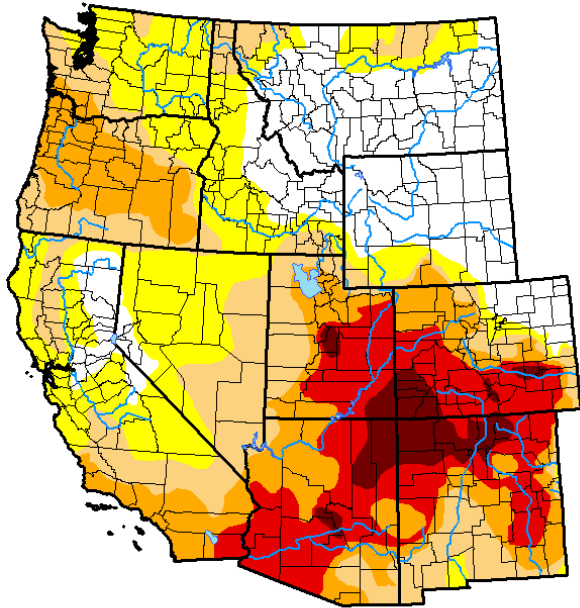
WATER SUPPLY

Vulnerability in Colorado River Basin

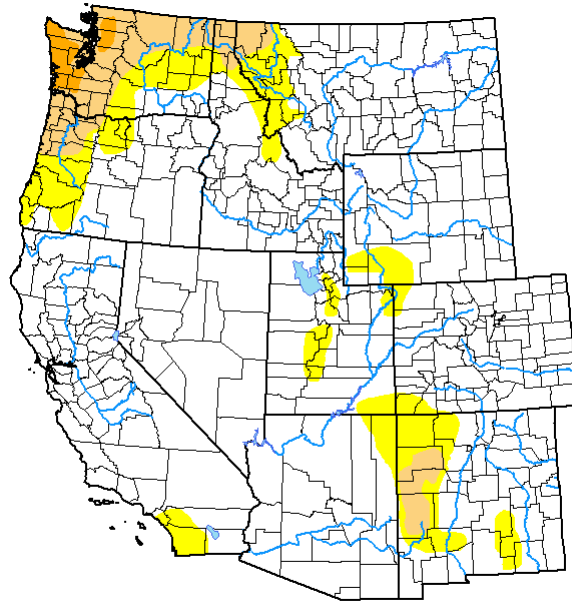


- Current 20-year period driest on record
- 2000-2018 2nd worst since 800 CE, (paleo-record analysis: A.P. Williams, 2020)
- Other studies show aridification from increasing temperatures
- Powell + Mead storage < 50%

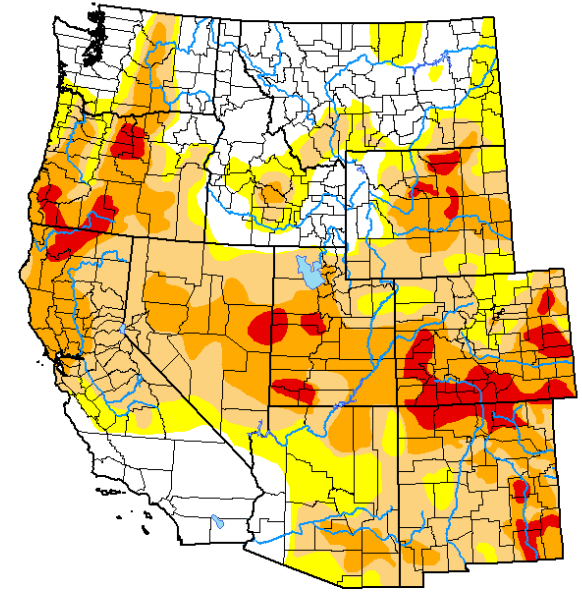
2018/19/20 Drought Comparison



July 2018



July 2019



July 2020



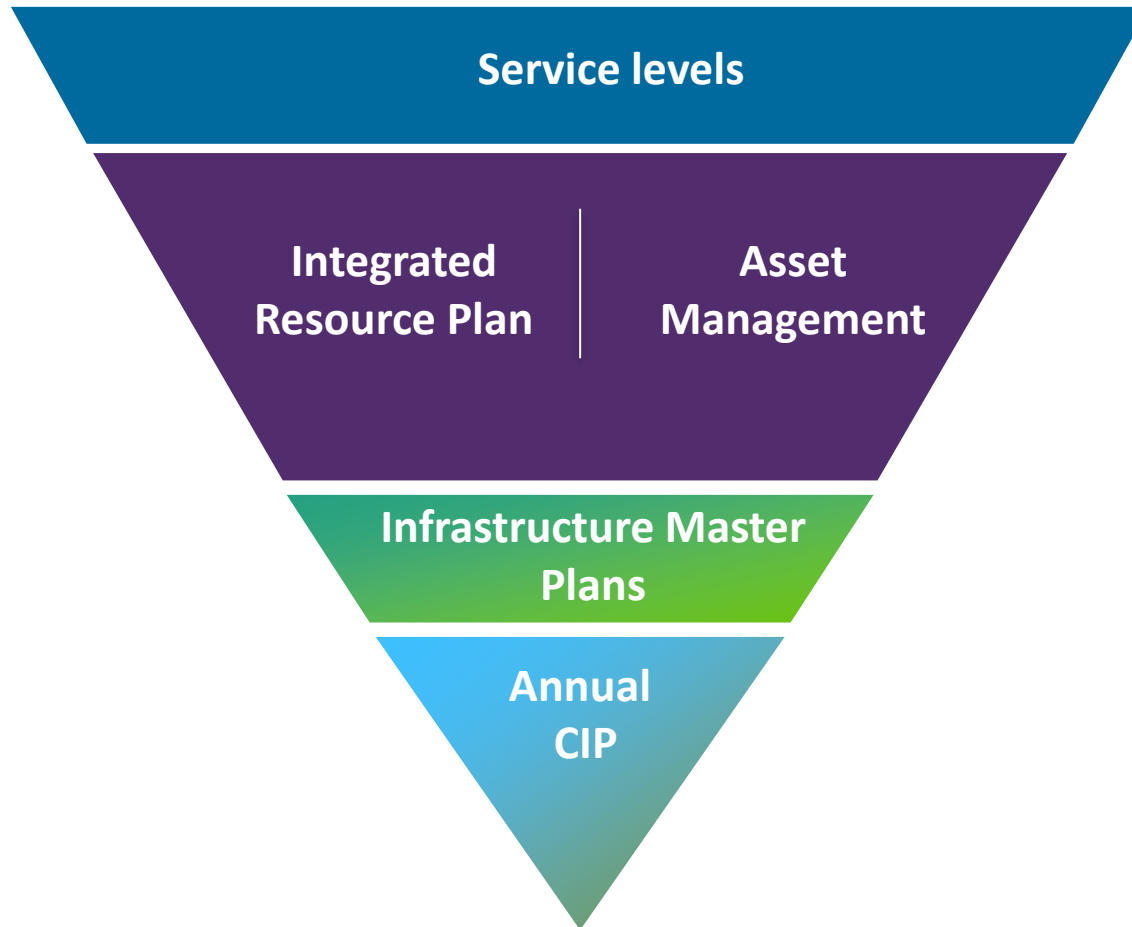
CLIMATE CHANGE

Spectrum of Climate Adaptation



CAPITAL PLANNING

Project development



Project filtering

