



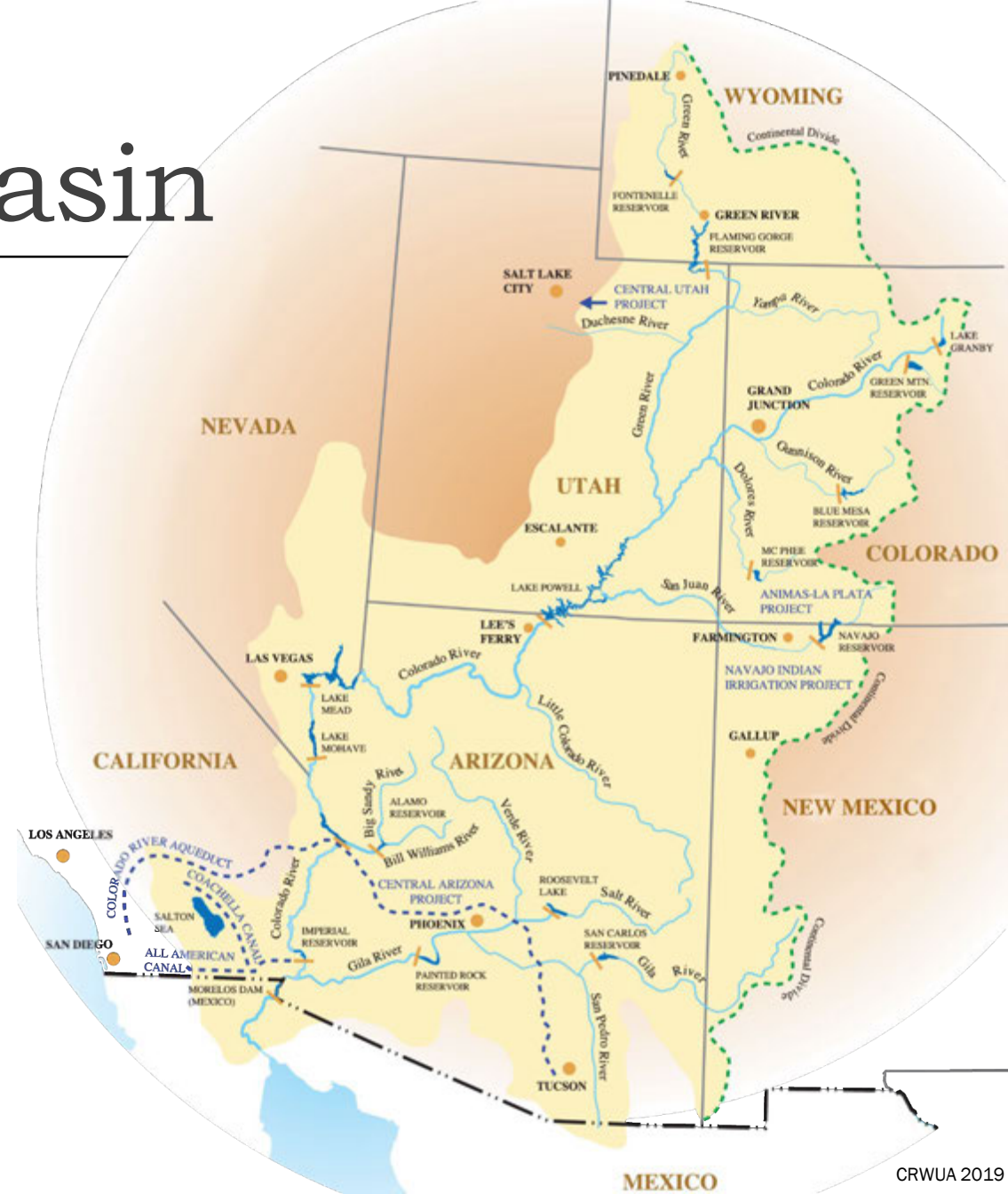
The Colorado River: The View from California

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COLORADO RIVER BOARD OF CALIFORNIA

The Colorado River Basin

- Colorado River managed and administered through the “Law of the River”
- Apportionments include:
 - Upper Basin:
 - Colorado, New Mexico, Utah, Wyoming
 - Lower Basin:
 - Arizona, California, Nevada
 - Republic of Mexico
- 2007 Interim Guidelines and the 2019 Drought Contingency Plans guide operations at Glen Canyon and Hoover Dams



The Colorado River Board of California

- Established in 1937
- State agency charged with protecting California's rights and interests in the resources of the Colorado River
- Represents six major water and power users in California:



Coachella
Valley
Water
District



IID
A century of service.



Los Angeles
Department of
Water & Power



San Diego County
Water Authority

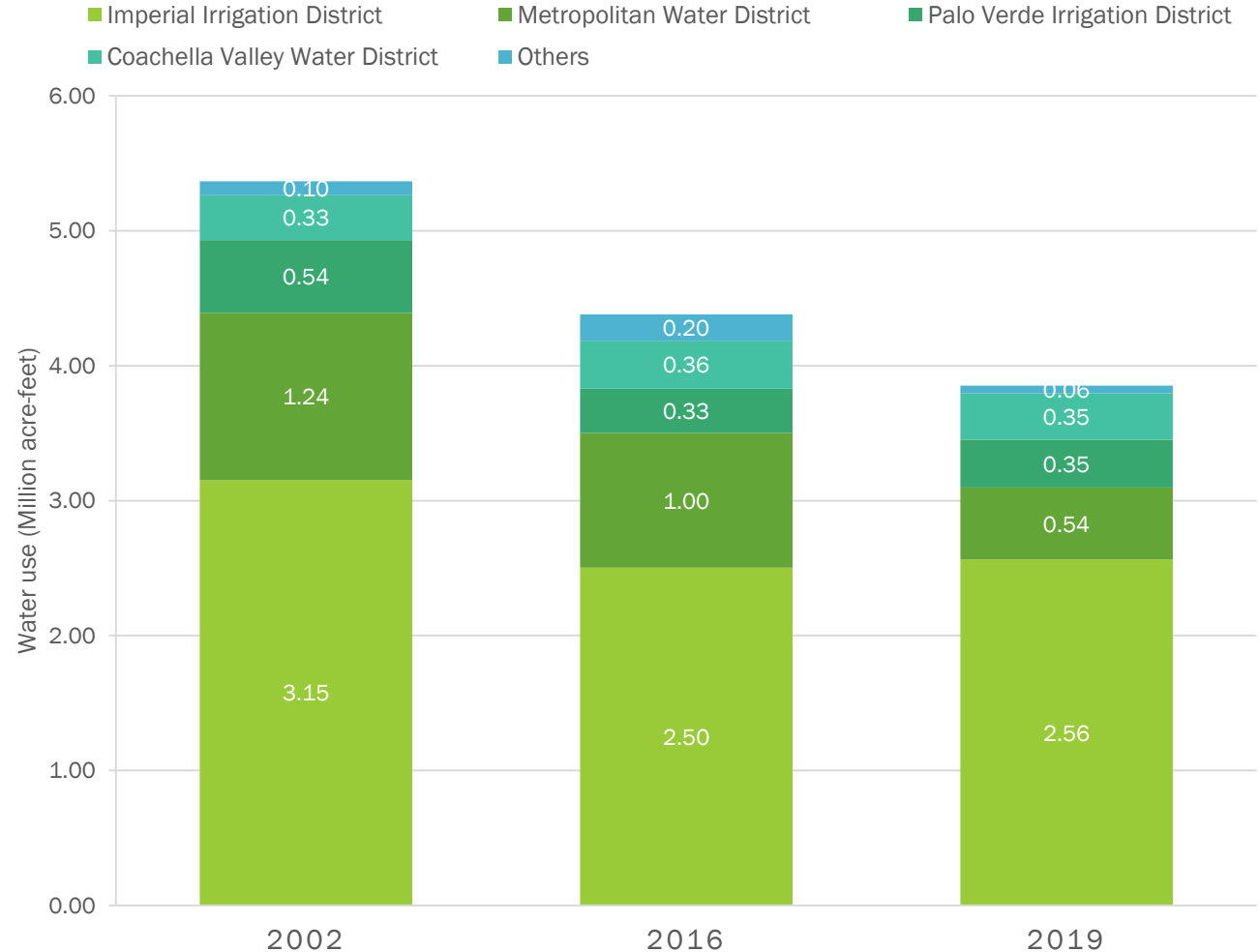


California Colorado River Service Areas



Colorado River Water Use in California

- Basic mainstream apportionment of 4.4 MAF, plus one half of surplus water
- Some users quantified, some unquantified
- Agreements and transfers over the last 30 years have shifted water use pattern among contractors



How California Uses its Water

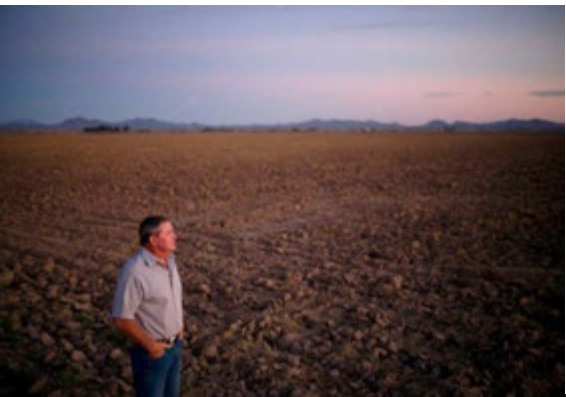
- Over 800,000 acres of irrigated agriculture
- Major crops include alfalfa, cotton, wheat, Bermuda grass, lettuce, sugar beets, carrots, grapes, dates, bell peppers, melons, citrus
- Colorado River water resources provide billions of dollars in economic benefit for SoCal
- Support habitat restoration projects
- Provide water to 20 million people over 5,200 square miles
- City of Los Angeles water use at 104 gallons per capita per day



Innovation and Adaptation

- Sharing water:
 - Transfers allow the state to live on ~800,000 AF less water per year since 2003
 - 1988 MWD/IID Transfer: 110,000 af/yr
 - QSA/Canal Lining transfers: ~400,000 af/yr at full implementation
 - MWD/PVID Fallowing Program: between 1.9 to 3.9 MAF of water over 35-year agreement
- Making do with less:
 - Investments of >\$1 billion on conservation, recycling, and groundwater recovery
 - Finding new water sources: nation's largest desalination plant, recycled water, stormwater capture
 - Increasing storage: new and enlarged reservoirs, CVWD storage of nearly 4 MAF in its groundwater basin
- Conservation in Lake Mead:
 - Currently, California has ~1 MAF stored in Lake Mead
 - 2019 water use at 3.8 MAF*, the lowest level since 1950
 - California contract holders signed onto 2019 DCP, agreeing to take cuts of up to 350,000 af/y

*provisional





Environmental Efforts on the River

- Ensuring natural systems affected by damming, diversions, and application of water are sustainably managed
- Compliance with NEPA, ESA, CESA, CEQA
- For California that includes:
 - Salton Sea management
 - Lower Colorado River Multi-Species Conservation Program
 - Runs through 2055
 - 27 covered species
 - 8,132 acres of habitat creation
 - \$626 million (2003\$)
 - Colorado River Delta restoration (currently through Minute 323)
 - Glen Canyon Dam Adaptive Management Program

California and the GCDAMP

- Law of the River sets annual operations, LTEMP and GCDAMP guide monthly, daily, hourly releases
- Releases and operations at Glen Canyon Dam have direct impact on Lake Mead reservoir operations, power generation, and water availability for Lower Basin users, including California
- Promote health of downstream resources, to avoid unexpected restrictions on movement of water



Future Challenges

- Climate change uncertainty
- Managing drought in California and the Colorado River Basin
- New regulatory rules that might change the operations of Lakes Mead and Powell
- ???



Questions?