Water Supply

TTTIT

Groundwater, Streams & Imported Water



MARK KRAUSE, GENERAL MANAGER DESERT WATER AGENCY FEBRUARY 9, 2023



Streams

- Chino Creek, Falls Creek, Snow Creek, Whitewater River
- 5 % of DWA water supply
- Less than 1% of supply valley wide



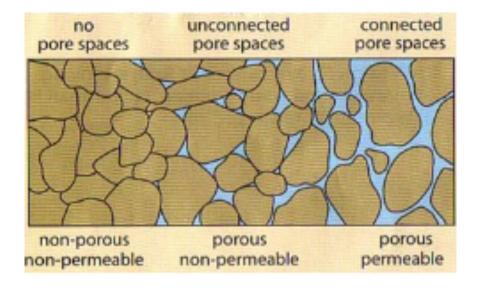


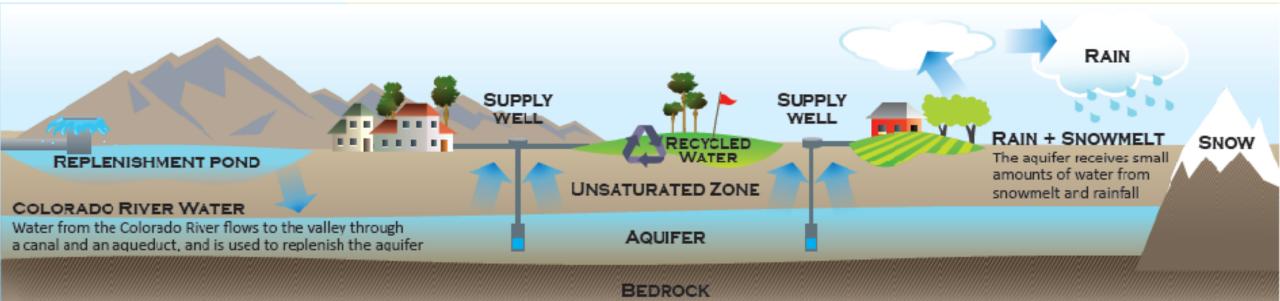


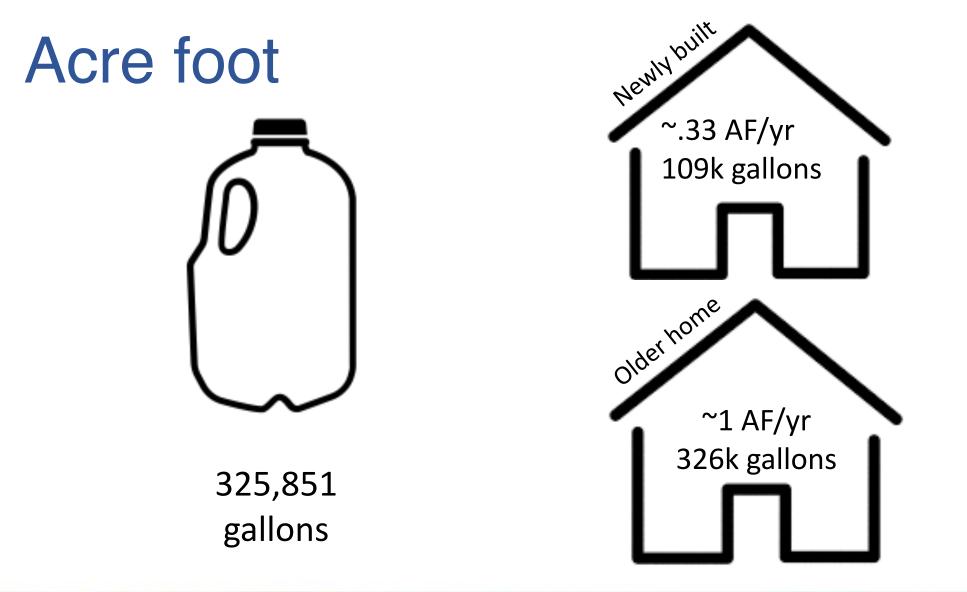


Aquifer

- >34.8 million acre feet stored (MAF) in first 1000 ft
- 39.9 MAF storage capacity in first 1000 ft
- Each year valley uses about .3 MAF of groundwater
- About 130 years worth of water
- Depth to water varies









Subbasin map

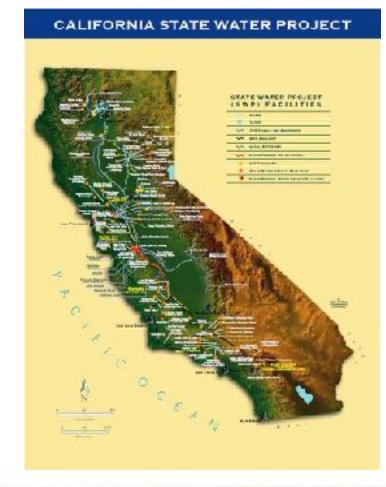


Groundwater Basins in Coachella Valley





State Water Contractor



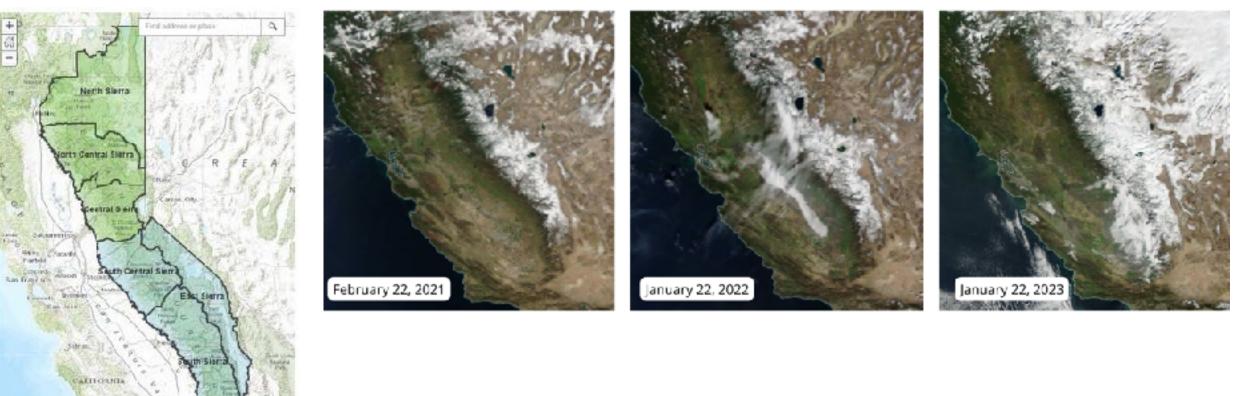
- Two of 29 in the state
- That's why DWA was formed back in 1961
- Work with DWR to maintain statewide system
- Pay to import water



Sierra Nevada

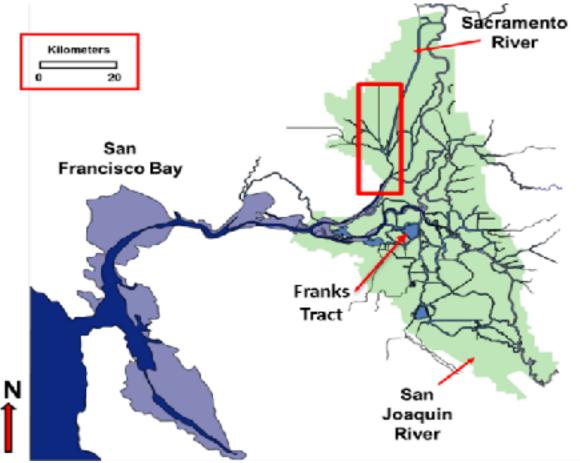
Br. Delorne FAO, USUS, NOAA EFA

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The Delta





The Delta



- More than 30 million acre feet flow through each year
- About half the total river flow in the

state passes through this region

 Supplies an estimated 7 million acre feet of water per year to approximately 23 million people



Regulations



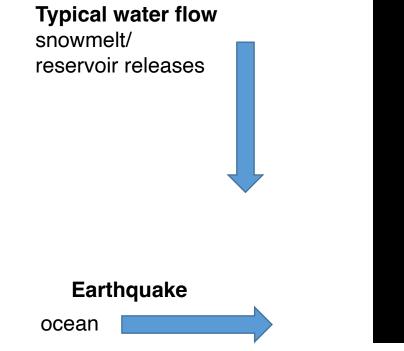


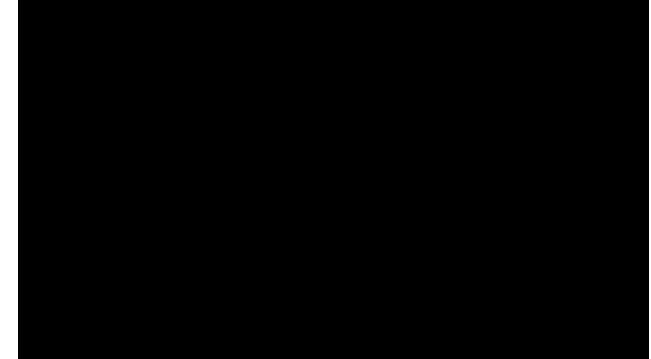
Earthquakes





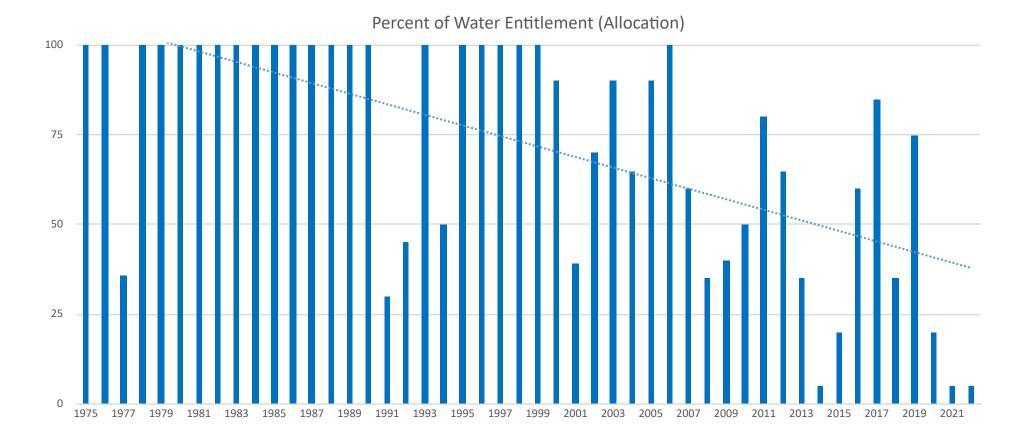
Earthquakes





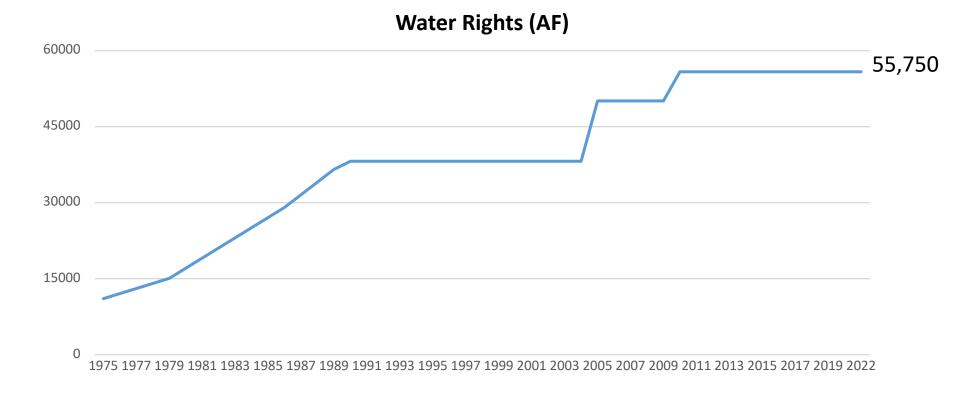


State Water Project reliability



DESERT WATER

DWA State Water Project imports

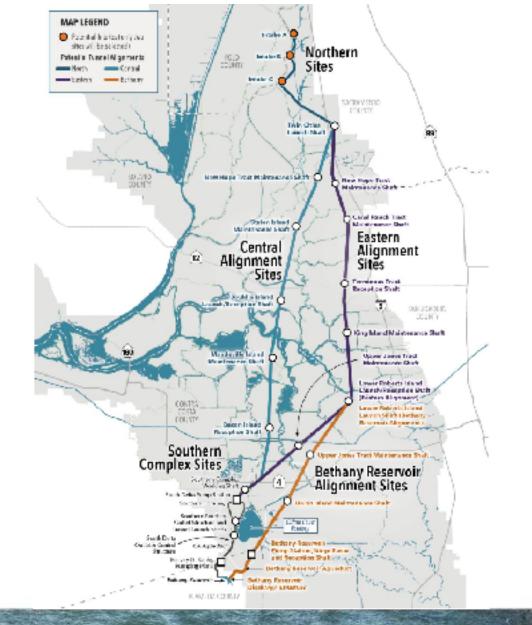


- Water Rights (AF)



Delta Conveyance Project

- Single tunnel
- Increase reliability and deliveries
- Less vulnerable to quakes
- Won't be completed for decades
- Still pending Environmental Permitting





Sites Reservoir

Flexible Storage Solution

- Does not rely on Snow Pack
- Is adaptable to future climate change
- Fills during more frequent flooding events
- Is ideal for dry year water supply
- Increases flexibility of other California Reservoir operations and potentially increases overall water supply for domestic and irrigation purposes





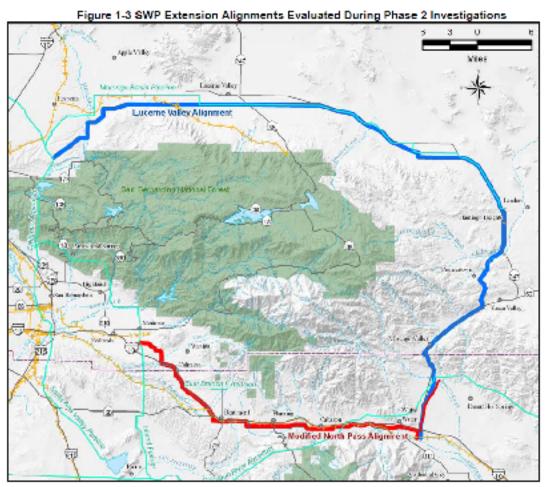
SoCal end point

- Ends at Lake Perris
- Furthest east extension in Beaumont





Possible routes to valley



- Two routes
 - Lucerne Valley
 88 miles
 - San Gorgonio Pass
 38 miles
- Would cost about \$1.6B (not adjusted for inflation)



MWD exchange





- Trade Colorado River water for State water
- Avoid building +\$1.6B pipeline
- Saves ratepayer money
- Guaranteed delivery
- Get advanced deliveries to help groundwater levels





Colorado River



- Trade Colorado River
 water for State water
- Avoid building +\$1.6B pipeline
- Saves ratepayer money
- Get advanced deliveries to help groundwater levels



Water replenishment

- Two west valley facilities for SWP
- One mid-valley location
- One east valley location



Whitewater Hydro





Whitewater River





Whitewater River



DESERT WATER

Whitewater Groundwater Replenishment Facility





Mission Creek Groundwater Replenishment Facility





Thank you!

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