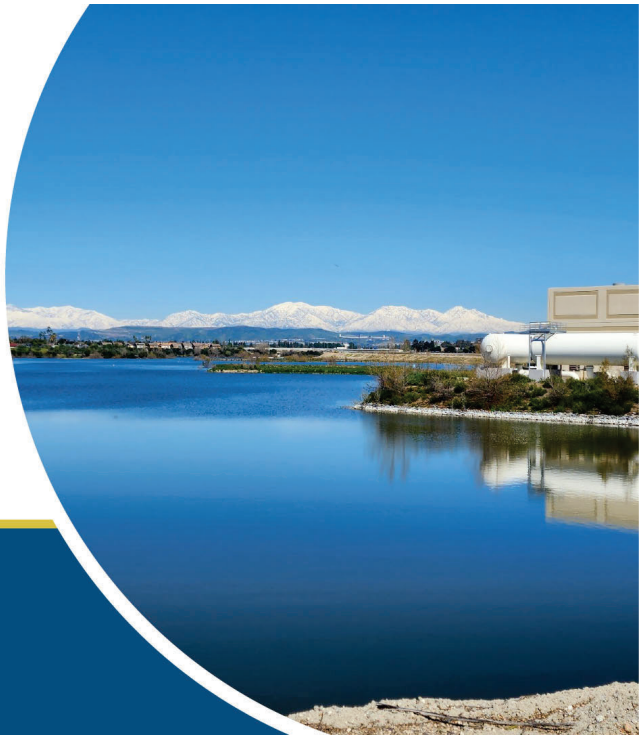
Basin Storage Update
Water Year 2025-26

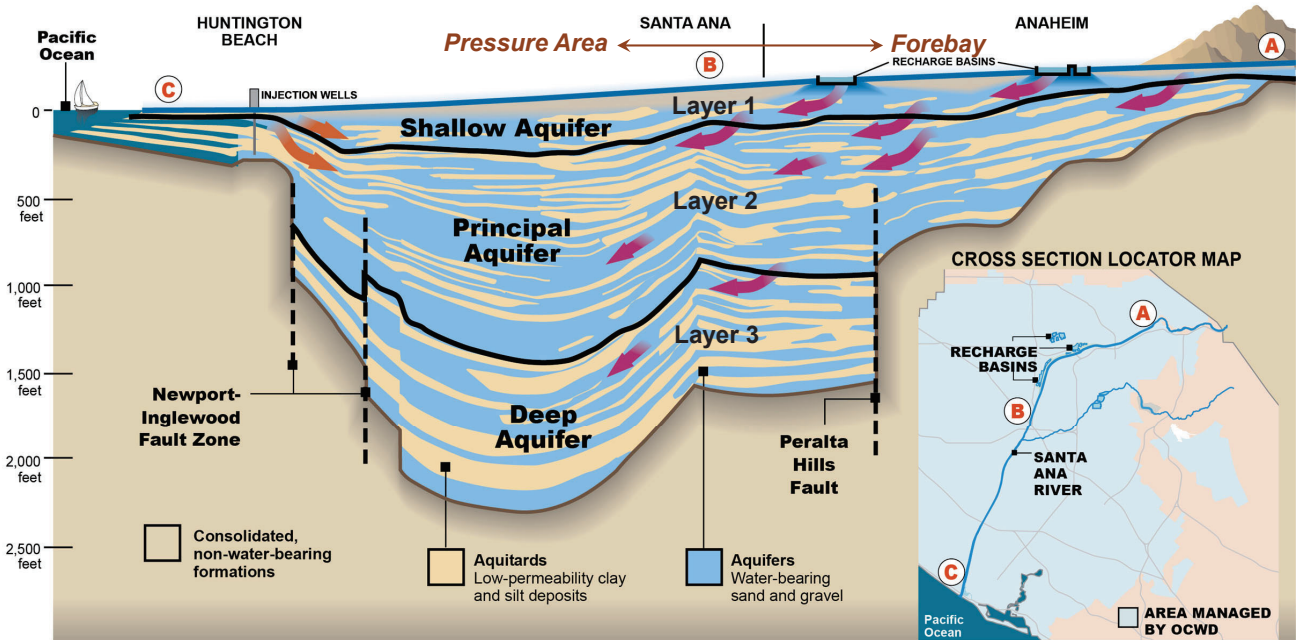


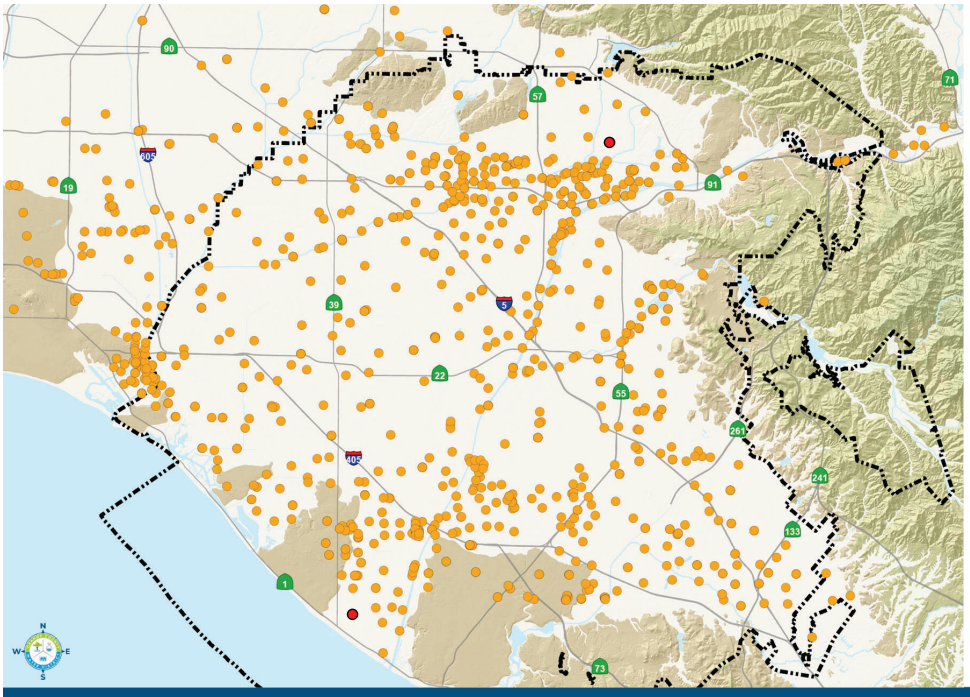
Joint Planning Committee
October 28, 2026

WY 2025-26 Highlights

- Recharge 22,600 AF more than budgeted from SAR
  - 16.1 inches of rainfall at FHQ (~1.2x the 39-year average)
  - Favorable distribution & intensity of rainfall events
  - Forecast Informed Reservoir Operations at Prado Dam
- Incidental recharge 4,800 AF less than budgeted
  - Lower IR and higher storm flow recharge since 2018
- GWRS recharge 15,800 AF less than budgeted
  - Reduced GWRS influent from OC San maintenance/repairs
  - Reduced GWRS production during refurbishment of product water pumps
  - Reduced injection rates

Storage change was calculated for the three aquifer layers in the basin.

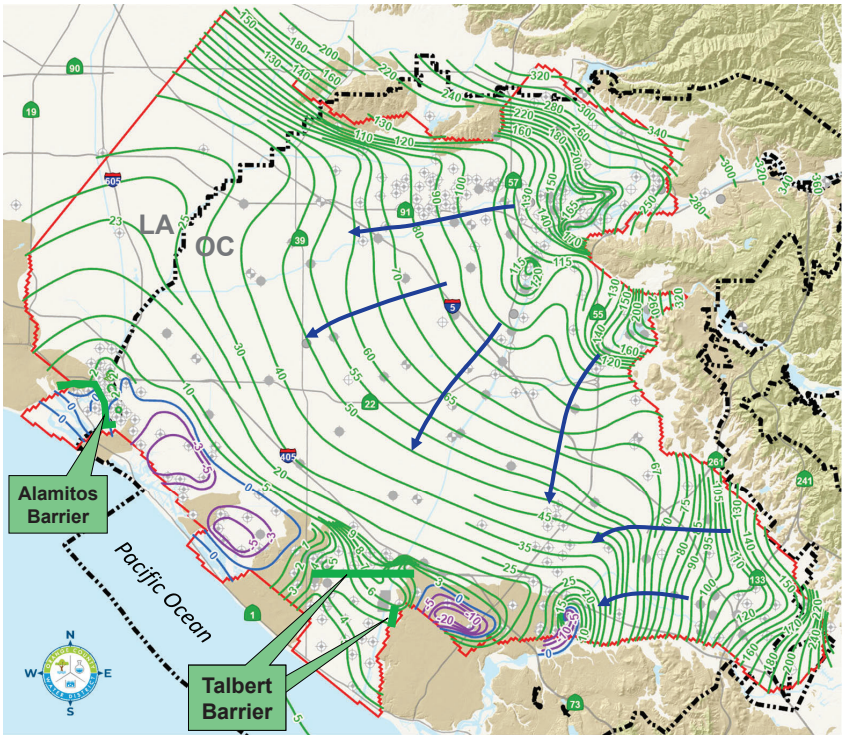




Several hundred water levels used for constructing groundwater contour maps…

Collaboratively measured near June 30:

- OCWD staff
- OC Producers
- LA Producers
- WRD

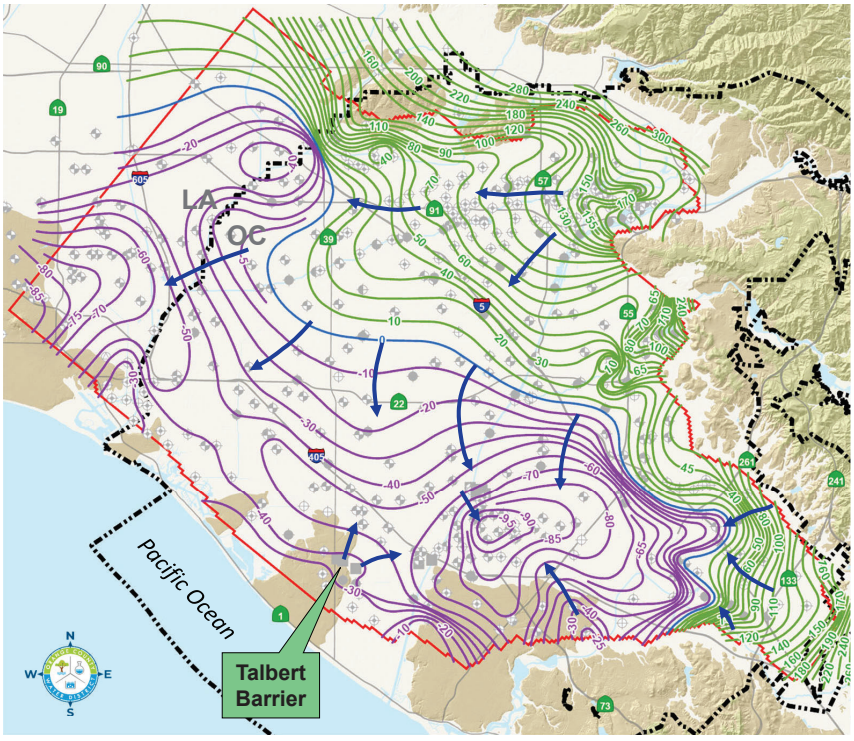


Shallow Aquifer Groundwater Elevations June 2026

Relatively smooth parallel contours since not much shallow pumping.

Groundwater flows to the SW from Forebay towards the coast.

Groundwater levels at or above protective elevations seaward of Talbert Barrier.

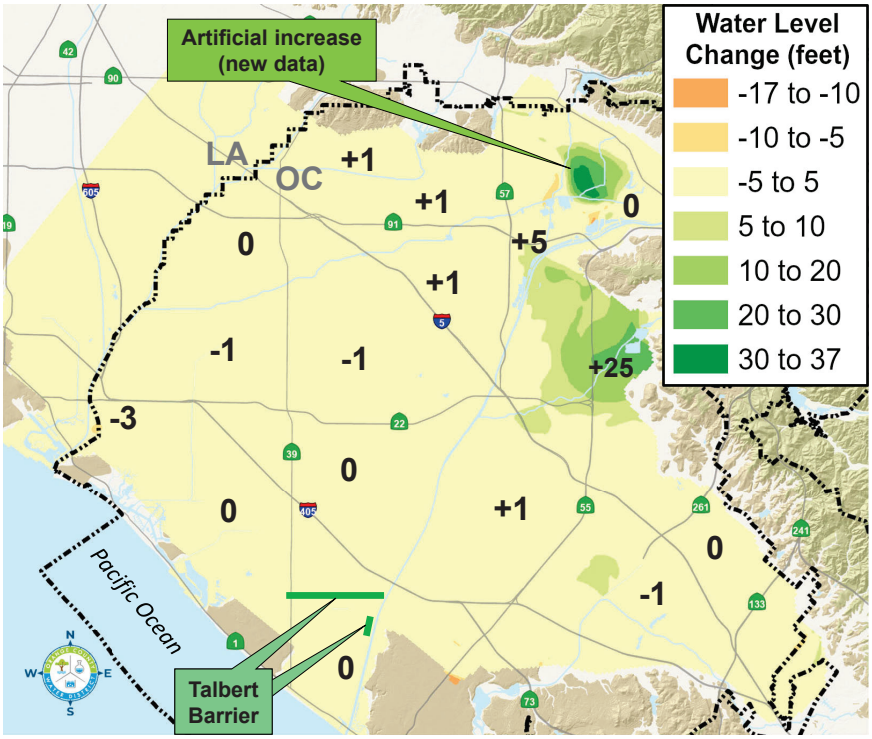


Principal Aquifer Groundwater Elevations June 2026

Groundwater flows from Forebay towards the coast and LA County

Steep hydraulic gradients and depressions below sea level due to pumping

Typical low point around IRWD DRWF and Mesa Water wells (-95 ft msl)



Shallow Aquifer Water Level Change

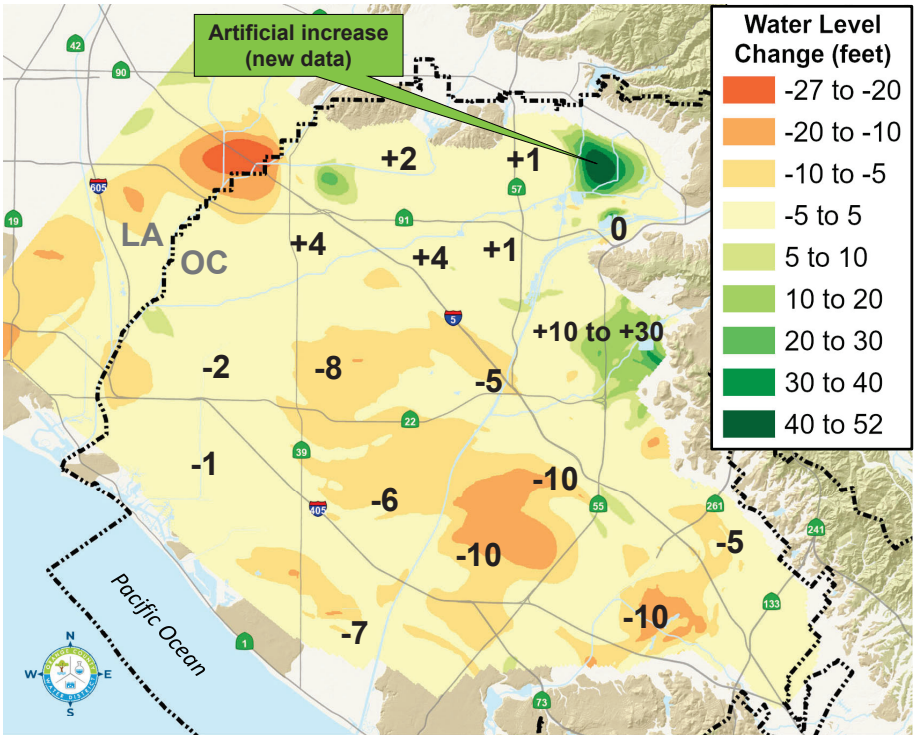
June 2025 to June 2026

Santiago Recharge Basins:
moderate increase

Greater Forebay Area:
mild increase

Pressure, Coastal and Irvine Area:
minimal change

Talbert Barrier:
stable



Principal Aquifer Water Level Change

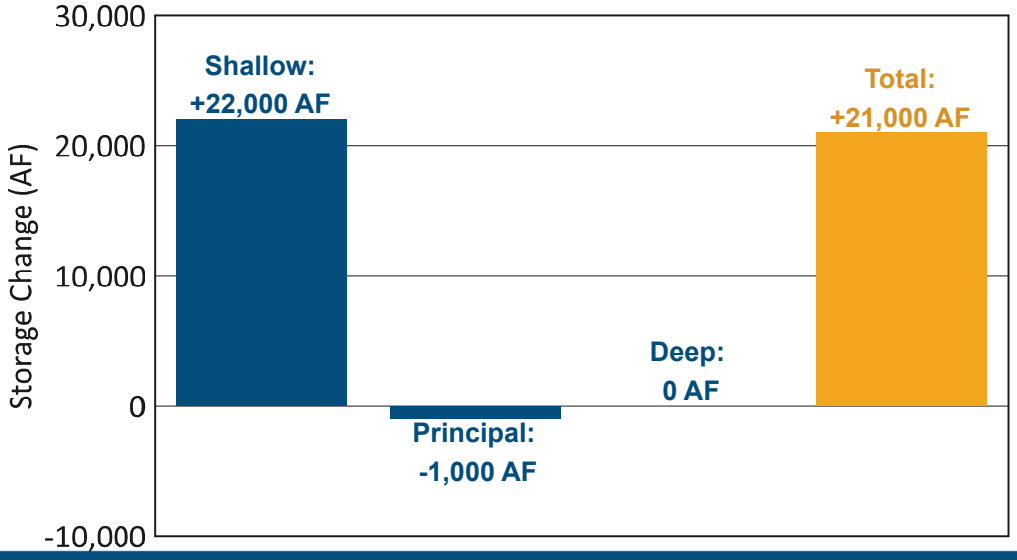
June 2025 to June 2026

Santiago Recharge Basins:
moderate increase

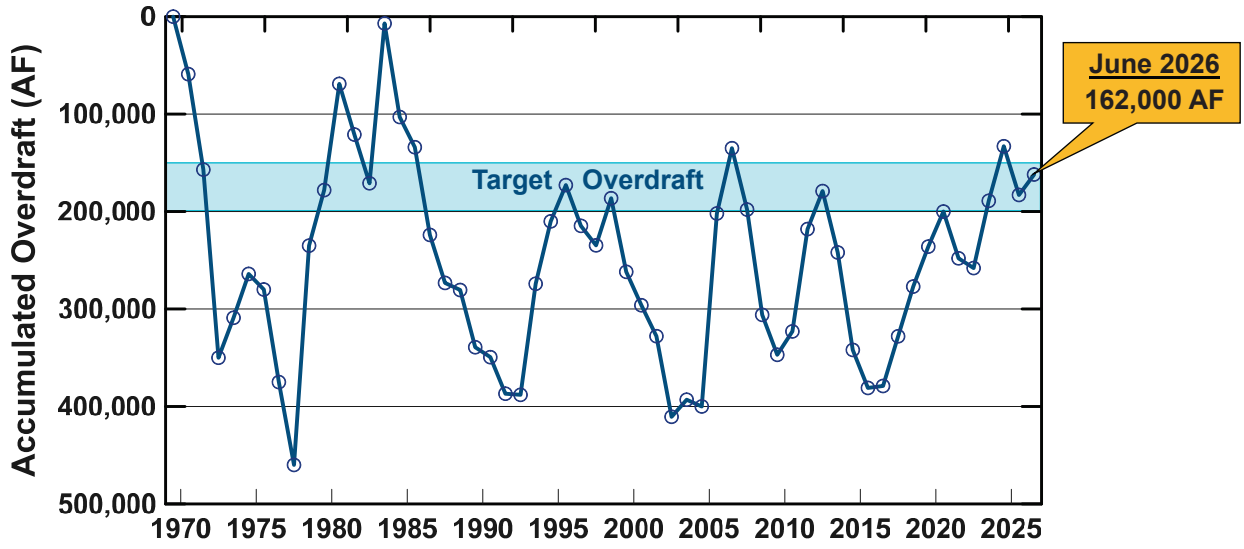
Greater Forebay Area:
mild increase

Pressure, Coastal and Irvine Areas:
small decrease

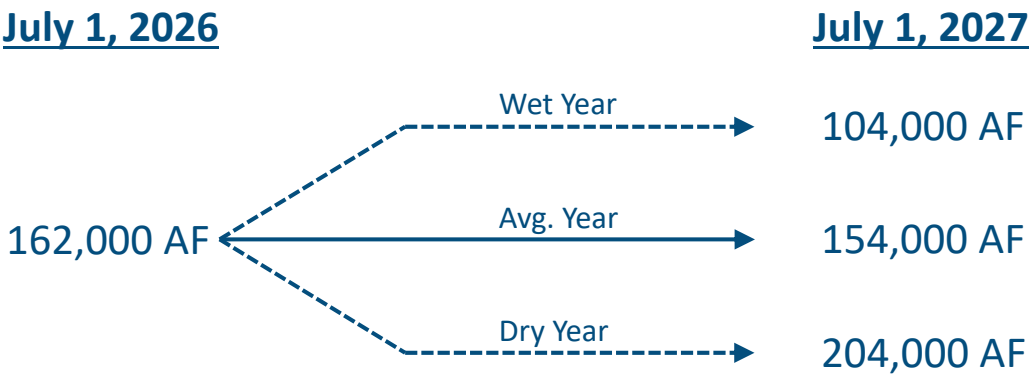
WY 2025-26 annual storage change was calculated for all three aquifer layers



Accumulated Overdraft Since 1969



WY 2026-27 Accumulated Overdraft Projection



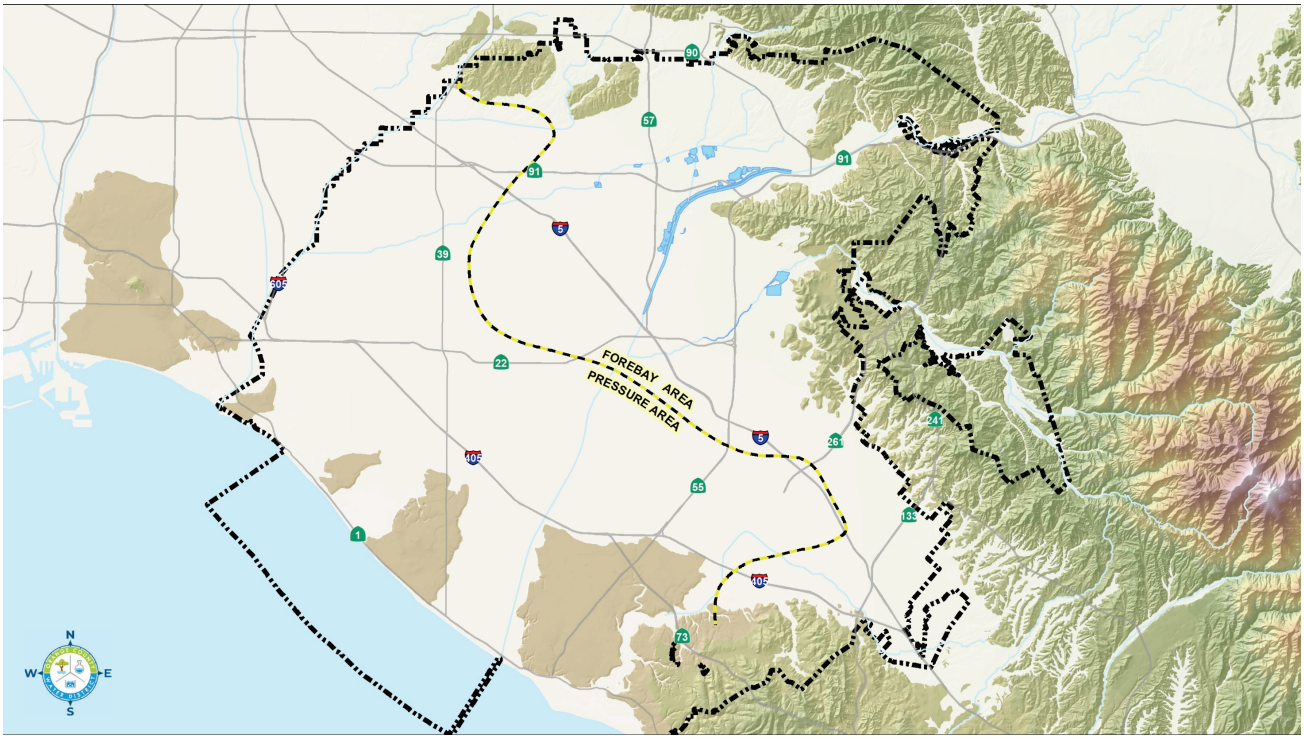
Thank You

Brendan Neel
Hydrogeologist
Orange County Water District
bneel@ocwd.com

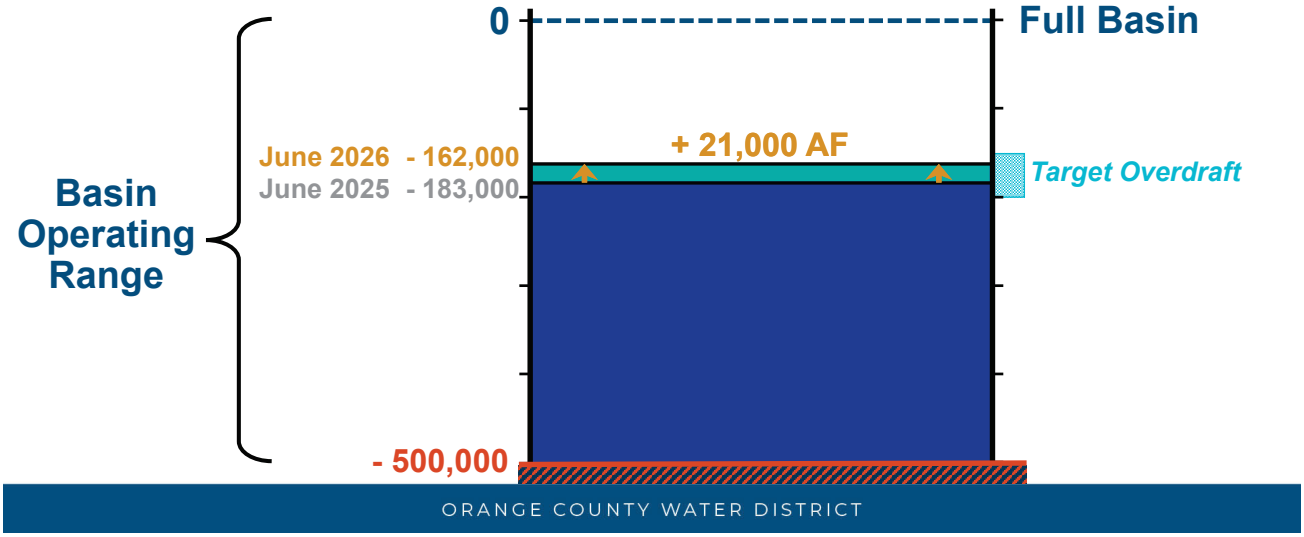
ocwd.com
(714) 378-3200

18700 Ward St.
Fountain Valley, CA 92708

@OCWaterDistrict



Accumulated Overdraft for June 30, 2026: 162,000 AF below Full



WY 2025-26 Groundwater Balance

Inflows & Outflows (acre-feet)	Budget (Rain~13 in.)	Actual (Rain 16.1 in.)	Difference
SAR Base and Storm Flow Recharge	146,000	168,600	22,600
Incidental Recharge	40,000	35,200	-4,800
GWR System (Forebay, Barrier, and MBI)	128,000	112,200	-15,800
MWD Supplies	0	0	0
Other (Alamitos Barrier, Talbert OC-44)	3,000	2,000	-1,000
Total Water Into Basin	317,000	318,000	1,000
Total Basin Pumping @ 85% BPP	-297,000	-297,000	0
Storage Change	+20,000	+21,000	
Accumulated Overdraft	163,000	162,000	

FY 2026-27 Groundwater Basin Water Balance

Water Source	Amount (afy)
SAR Baseflow	74,000
SAR Stormflows	72,000
Incidental Recharge	30,000
GWR System	128,000
MWD untreated supplies	0
Other	3,000
Total Water Into Basin	307,000
Expected Pumping @ 85% BPP	299,000
Subtotal Basin Gain/(Loss)	8,000