



Indio Subbasin Alternative Plan Update Annual Report for Water Year 2023-2024

Public Workshop
March 12, 2025

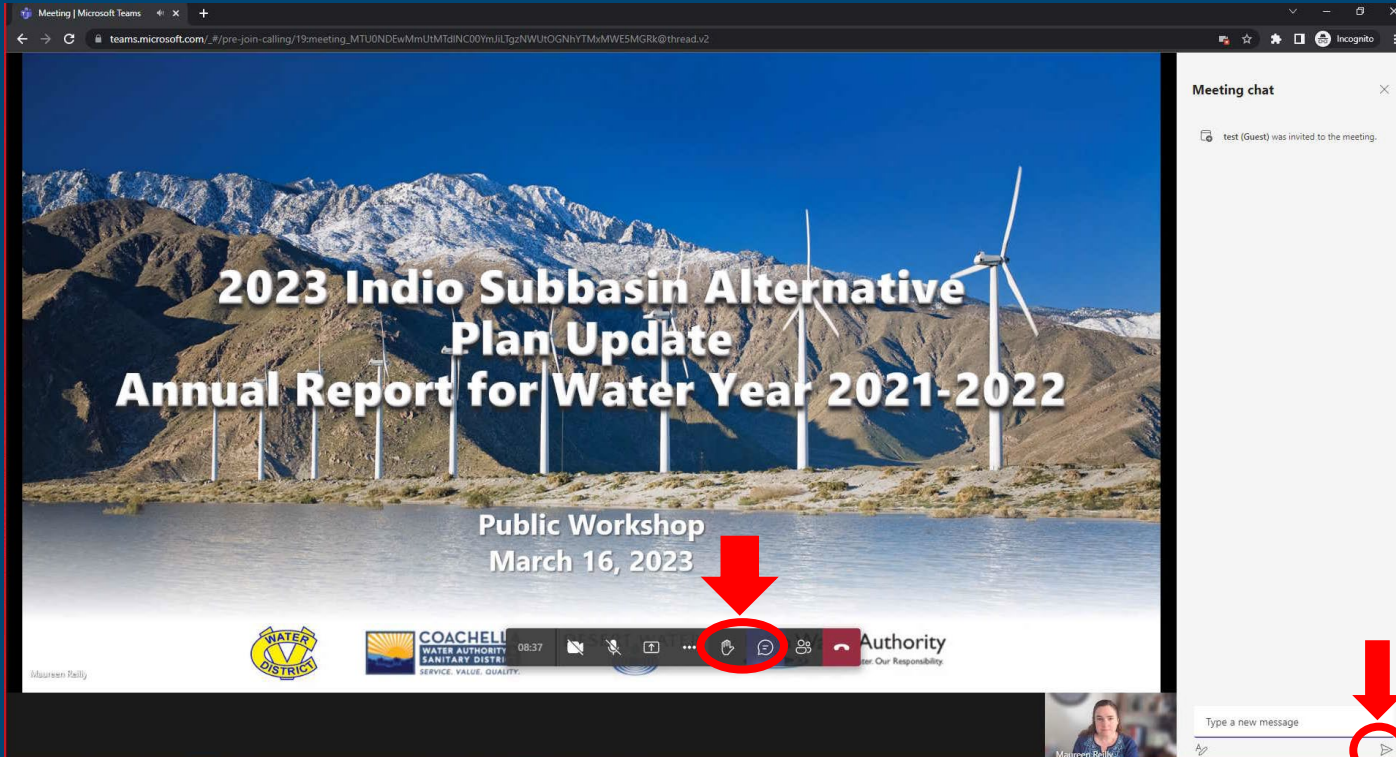


Teams – Quick How To

The screenshot shows a Microsoft Teams meeting window. The main content is a presentation slide with a background image of wind turbines and mountains. The slide text reads: "2023 Indio Subbasin Alternative Plan Update Annual Report for Water Year 2021-2022", "Public Workshop", and "March 16, 2023". At the bottom of the slide, there are logos for "WATER DISTRICT" and "Indio Water Authority". The meeting controls bar is visible at the bottom, with a red circle highlighting the microphone icon. The browser address bar shows the URL: "teams.microsoft.com/_/pre-join-calling/19:meeting_MTU0NDEwMmUtMTdlINC00YmJlTgzNWU0OGNhYTMyMmWESMGRk@thread.v2".

- Turn on/off your Mic (mute) and Camera (video) using the controls along the bottom
- You may need to wiggle your mouse to make the controls appear
- For Callers: use *6 to unmute on the phone

Teams – How to Ask a Question



- Our organizer will mute everyone at the beginning of the meeting
- Let us know you have a question by
 - ❖ Raising your hand (bottom of screen)
 - ❖ Entering the **Chat** (bottom of screen)
 - Click on the right panel, type your message and hit SEND
- Once we receive your request, we will call on you and answer your question
- For Callers: when asked for questions or comments, use *6 to unmute

Agenda

- **Welcome and Introductions**
- Annual Report Status
- Groundwater Elevation Data
- Groundwater Extractions
- Surface Water
- Total Water Use
- Change in Groundwater Storage
- Plan Implementation Progress
- Public Comment

Indio Subbasin Team

- Project Consultants
 - ❖ Todd Groundwater



- Indio Subbasin Groundwater Sustainability Agencies (GSAs)
 - ❖ Coachella Valley Water District
 - ❖ Coachella Water Authority
 - ❖ Desert Water Agency
 - ❖ Indio Water Authority

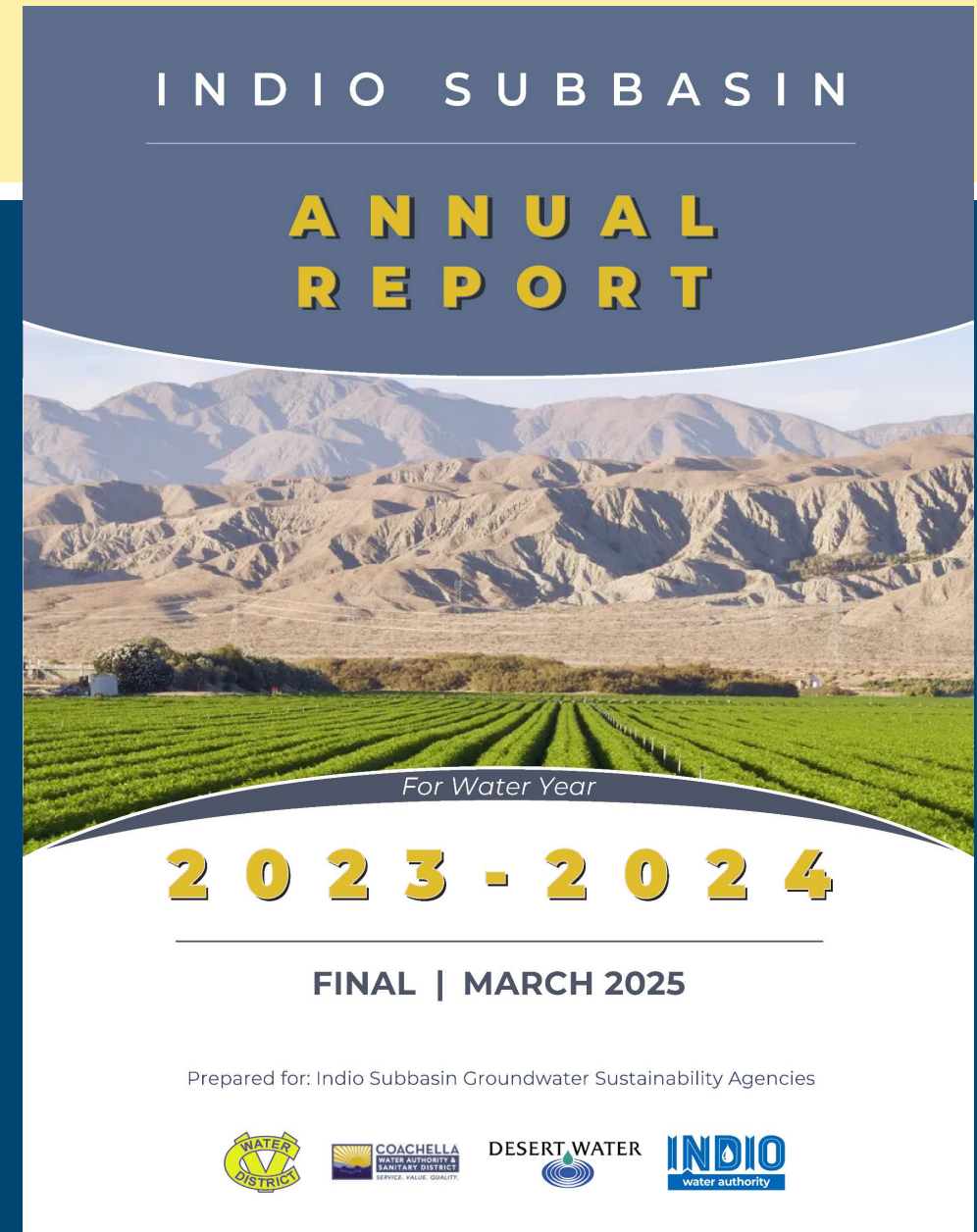


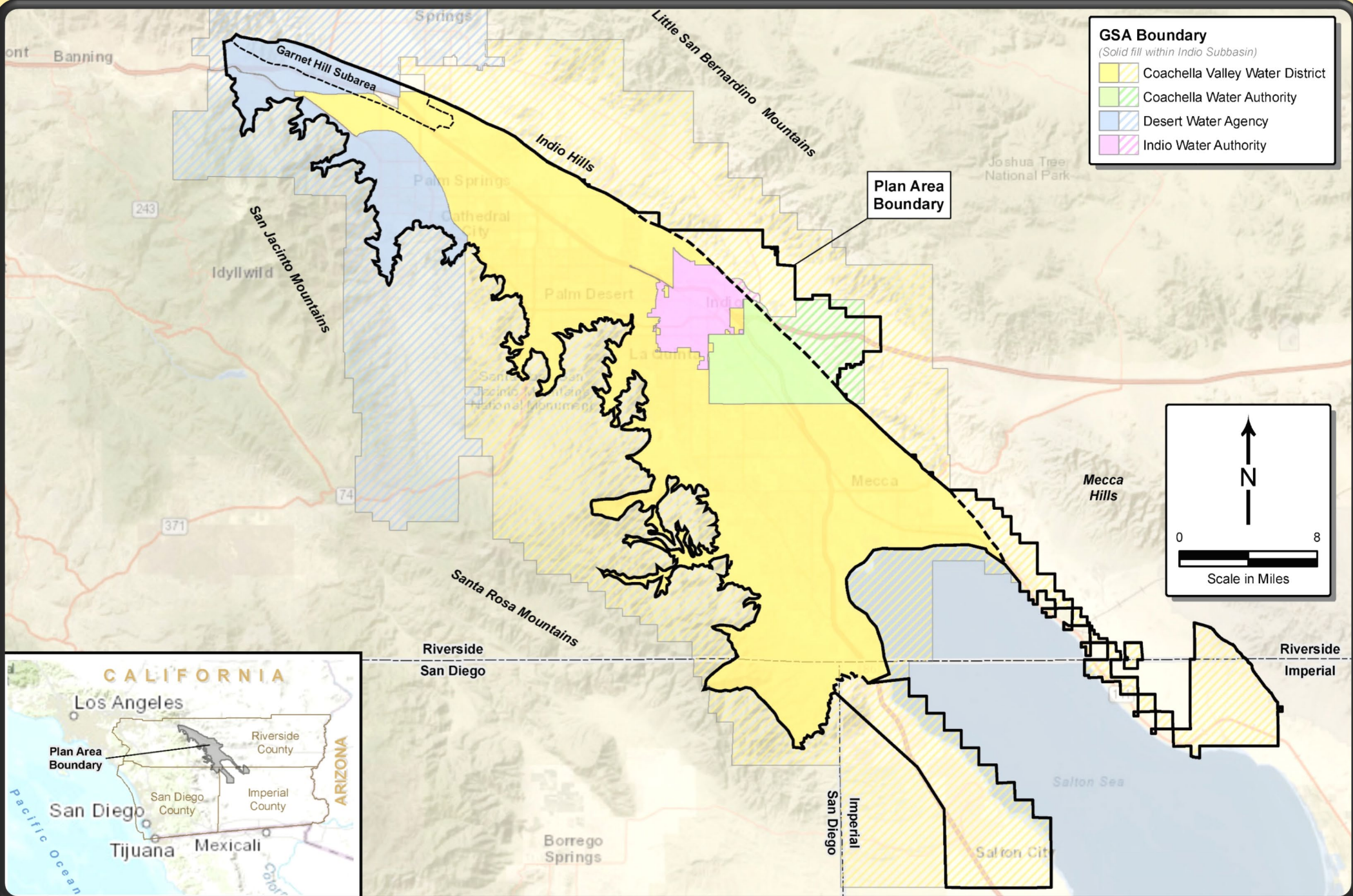
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Indio Subbasin Annual Report for WY 2023-2024

- Annual Report is required by Sustainable Groundwater Management Act (SGMA)
 - ❖ General information
 - ❖ Subbasin conditions
 - ❖ Implementation progress of projects and management actions (PMAs)
- 8th Annual Report (4th report following submittal of *Indio Subbasin 2022 Alternative Plan Update*)
 - ❖ Covers WY 2023-2024 (Oct. 1, 2023 – Sept. 30, 2024)
- Will be submitted to DWR by April 1, 2025

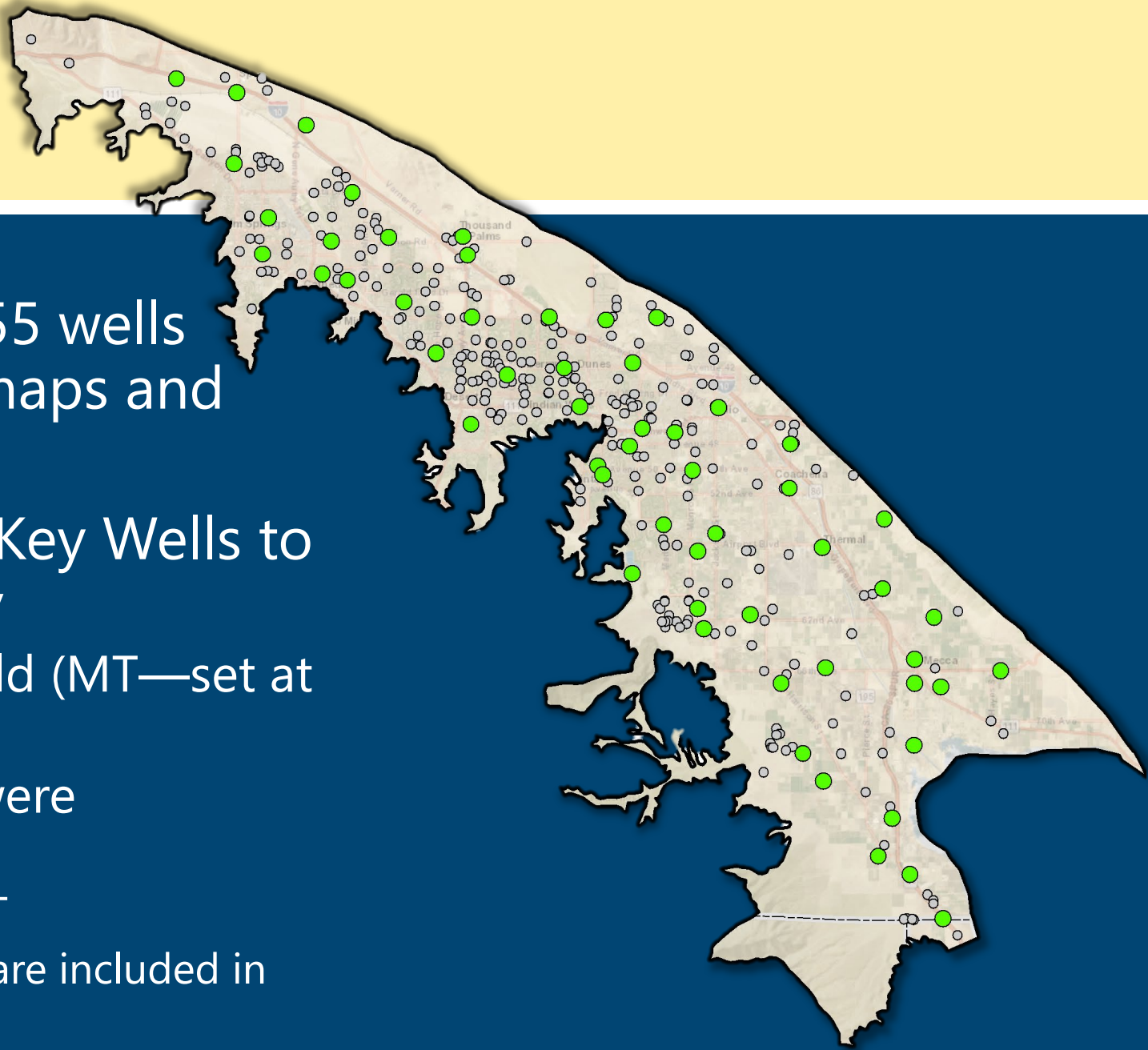




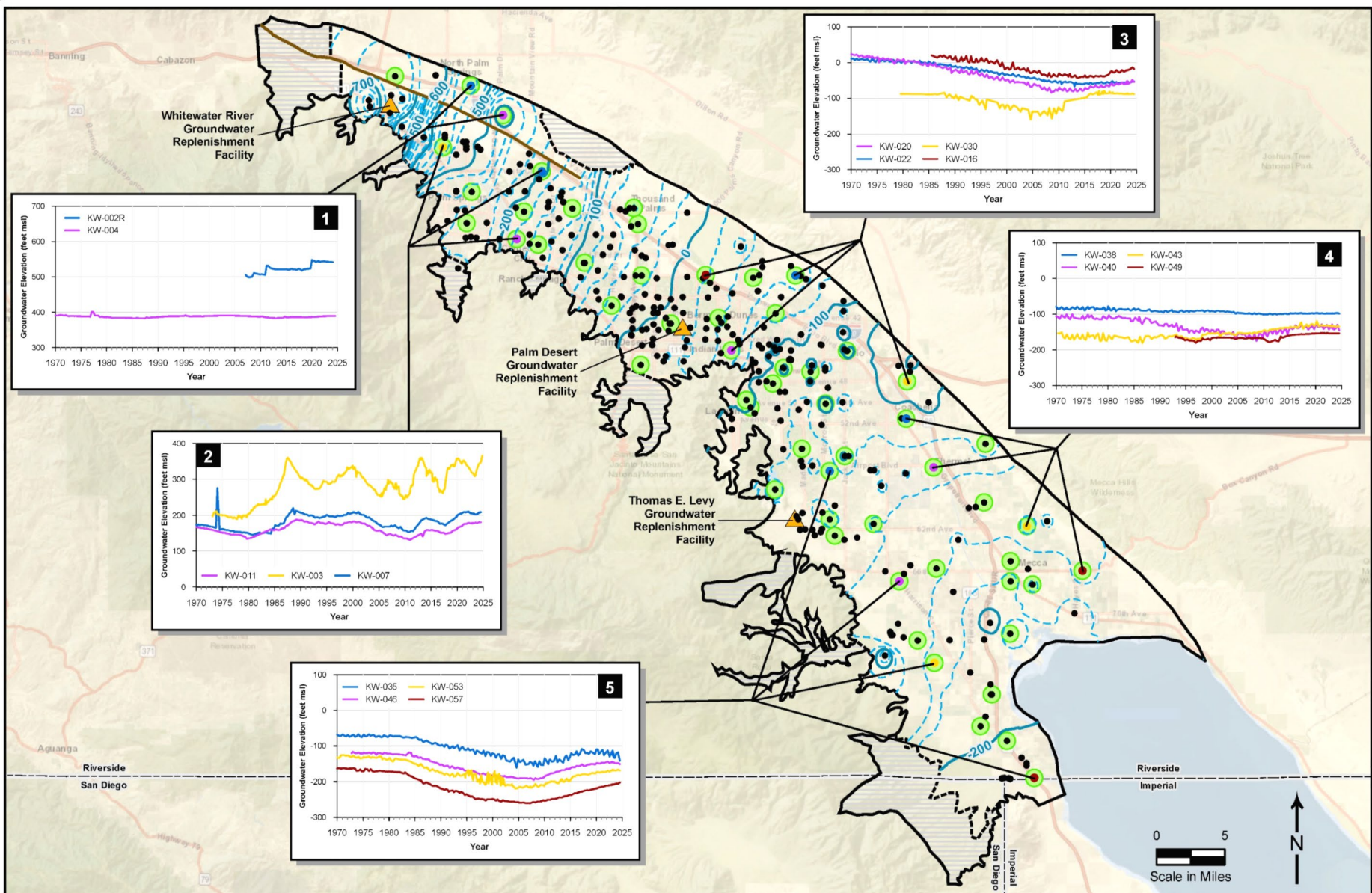
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Groundwater Elevation Data



- Groundwater elevations from 355 wells were used to develop contour maps and change in storage maps
- 2022 Plan Update identified 57 Key Wells to track groundwater sustainability
 - ❖ Each well has a minimum threshold (MT—set at recent observed lowest elevation)
 - ❖ Current groundwater elevations were compared to the MTs
 - Levels in all wells were above the MT
 - Hydrographs of each of these wells are included in the report as an Appendix



- Well Location
(color matched with associated hydrograph line)
- ▲ Replenishment Facilities
- Hydrograph of Key Well Location
- Garnet Hill Fault Trace
- Indio Subbasin
- ▭ California County
- ▭ Water Level Data Not Available

January 2025

TODD **GROUNDWATER**

Figure 3-2
Indio Subbasin
Groundwater Elevation
Contours WY 2023-2024



Questions?

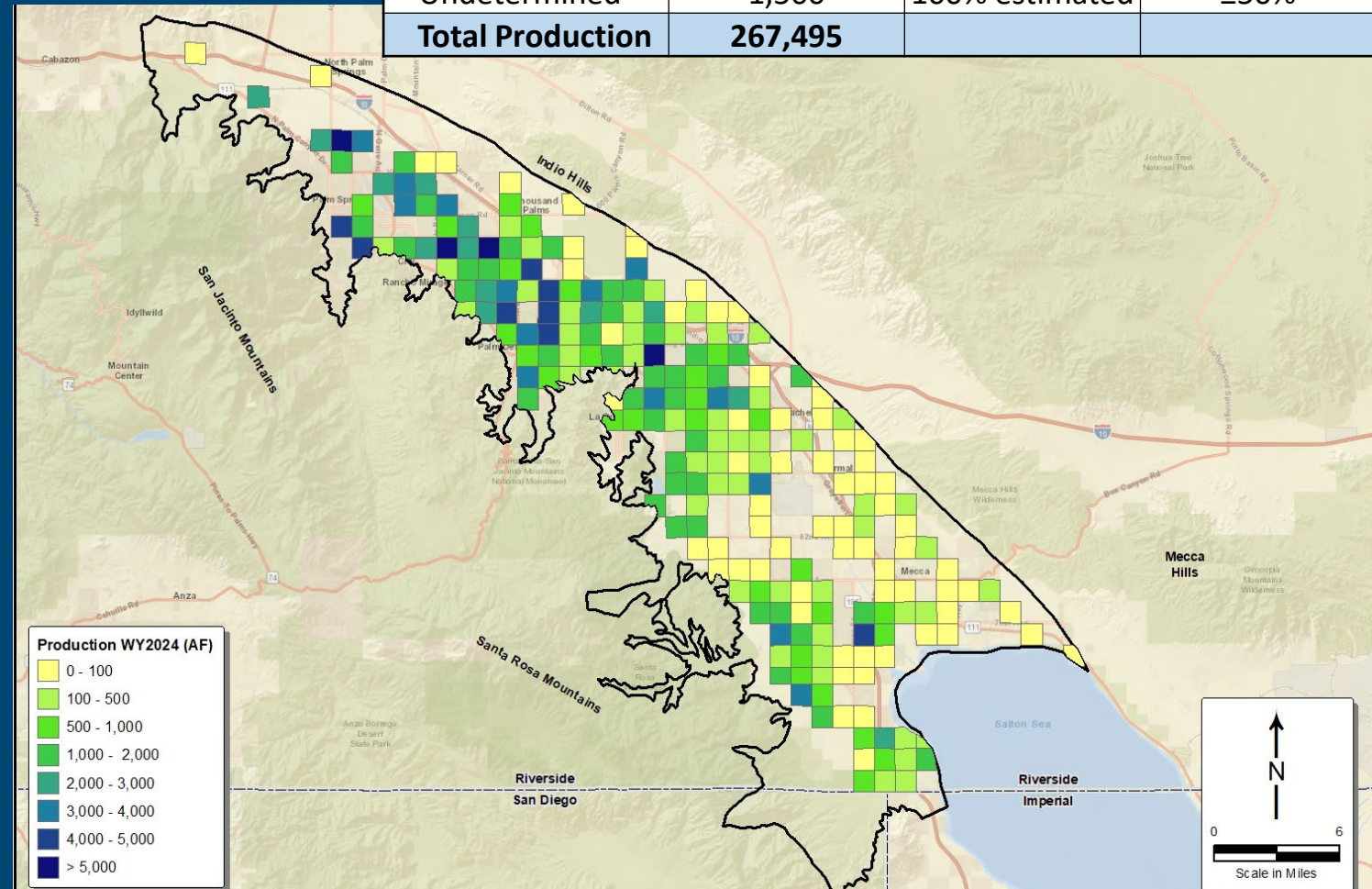
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Groundwater Extractions

- Groundwater extractions from metered use except
 - Minimal pumpers
 - Tribal trust lands
- 267,495 AF
- Groundwater pumping increased 3 percent from last water year

Water Use Sector	Groundwater Extractions (AF)	Method of Measurement	Accuracy of Measurement
Agriculture ¹	39,708	100% metered	±2%
Industrial ²	1,808	15% metered	±2%
		85% estimated	±50%
Urban ³	224,479	99% metered	±2%
		1% estimated	±50%
Undetermined ⁴	1,500	100% estimated	±50%
Total Production	267,495		





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Multiple Water Sources

- Capture and recharge of Whitewater River stormflows began in 1918
- Coachella Canal completed in 1949
- CVWD and DWA contract for State Water Project (SWP) water in 1963
 - ❖ Recharge at Whitewater River Groundwater Replenishment Facility (GRF) begins in 1973
- Water recycling began in 1965



Local Surface Water

- DWA stream diversions
 - ❖ Snow, Falls, and Chino Creeks
- 607 AF surface water use in DWA's service area
 - ❖ 49% agriculture
 - ❖ 51% urban



WY 2023-2024 Direct Use of Local Surface Water in the Indio Subbasin

Water Use Sector	Surface Water Use (AF)	Method of Measurement	Accuracy of Measurement
Agriculture ¹	298	100% metered	±2%
Industrial	0	Not applicable	--
Urban ¹	309	100% metered	±2%
Total Surface Water Use	607		

Imported Water – Direct Use

- CVWD receives Colorado River water from the Coachella Canal
- 273,121 AF imported water for direct use in Plan Area
 - ❖ 85% agriculture
 - ❖ 15% urban
- 6 percent increase last year



Coachella Canal

WY 2023-2024 Imported Water for Direct Use in Plan Area

Water Use Sector	Water Source	Imported Water Use (AF)	Method of Measurement	Accuracy of Measurement
Agriculture ¹	Coachella Canal	231,659	100% metered	±2%
Urban ²	Coachella Canal	41,462	100% metered	±2%
Industrial	Coachella Canal	0	100% metered	±2%
Environmental ³	Coachella Canal	0	Not applicable	--
Total Imported Water for Direct Use⁴		273,121		

Groundwater Replenishment

WY 2023-2024 Total Groundwater Replenishment

Replenishment Facility	Water Source	Volume Recharged in WY 2024 (AF)
Whitewater – GRF	Imported Water	281,207
	Local Surface Water	2,297
Palm Desert – GRF	Imported Water	11,855
TEL – GRF	Imported Water	1,368
Total		296,726

- Three sources of water used for replenishment:
 - ❖ DWA and CVWD receive State Water Project exchange water from Colorado River Aqueduct (CRA)
 - ❖ CVWD receives Colorado River water from Coachella Canal
 - ❖ DWA recharges local surface water



PD-GRF

- 296,726 AF water for replenishment
 - ❖ 11,855 AF at Palm Desert GRF
 - ❖ 1,368 AF at Thomas E. Levy GRF
 - ❖ 283,503 AF at Whitewater River GRF
- 63 percent increase over last year

Recycled Water

- Three water reclamation plants (WRPs) provide recycled water
 - ❖ Palm Springs WWTP/DWA WRP
 - ❖ CVWD WRP-7
 - ❖ CVWD WRP-10

- 13,164 AF recycled water produced
 - ❖ 100% urban



WY 2023-2024 Recycled Water Use in the Indio Subbasin

Water Use Sector	Water Source	Recycled Water Use (AF)	Method of Measurement	Accuracy of Measurement
Urban ¹	DWA WRP	3,122	100% metered	±2%
Urban ¹	CVWD WRP 7	2,055	100% metered	±2%
Urban ¹	CVWD WRP 10	7,987	100% metered	±2%
Total Recycled Water Use		13,164		



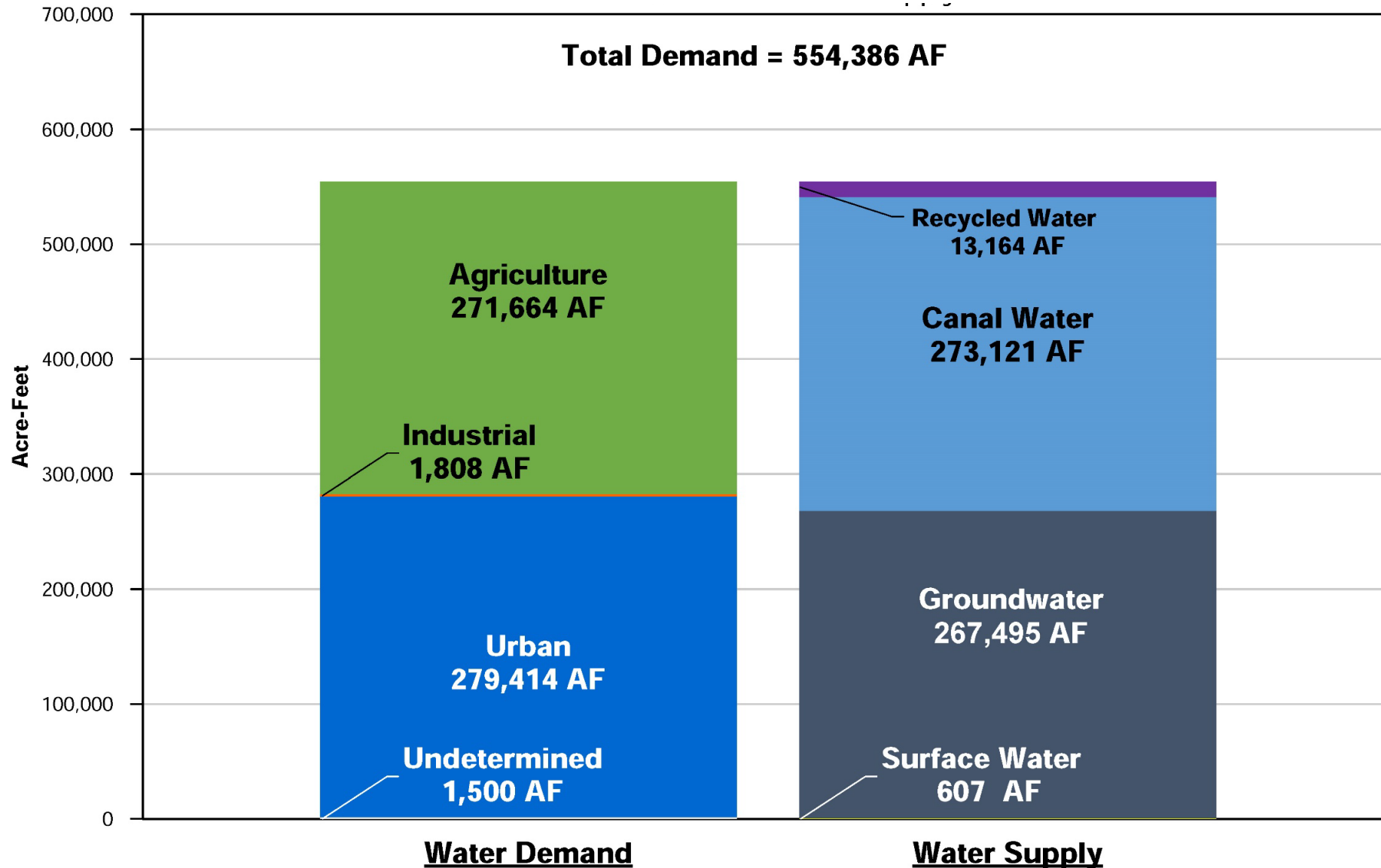
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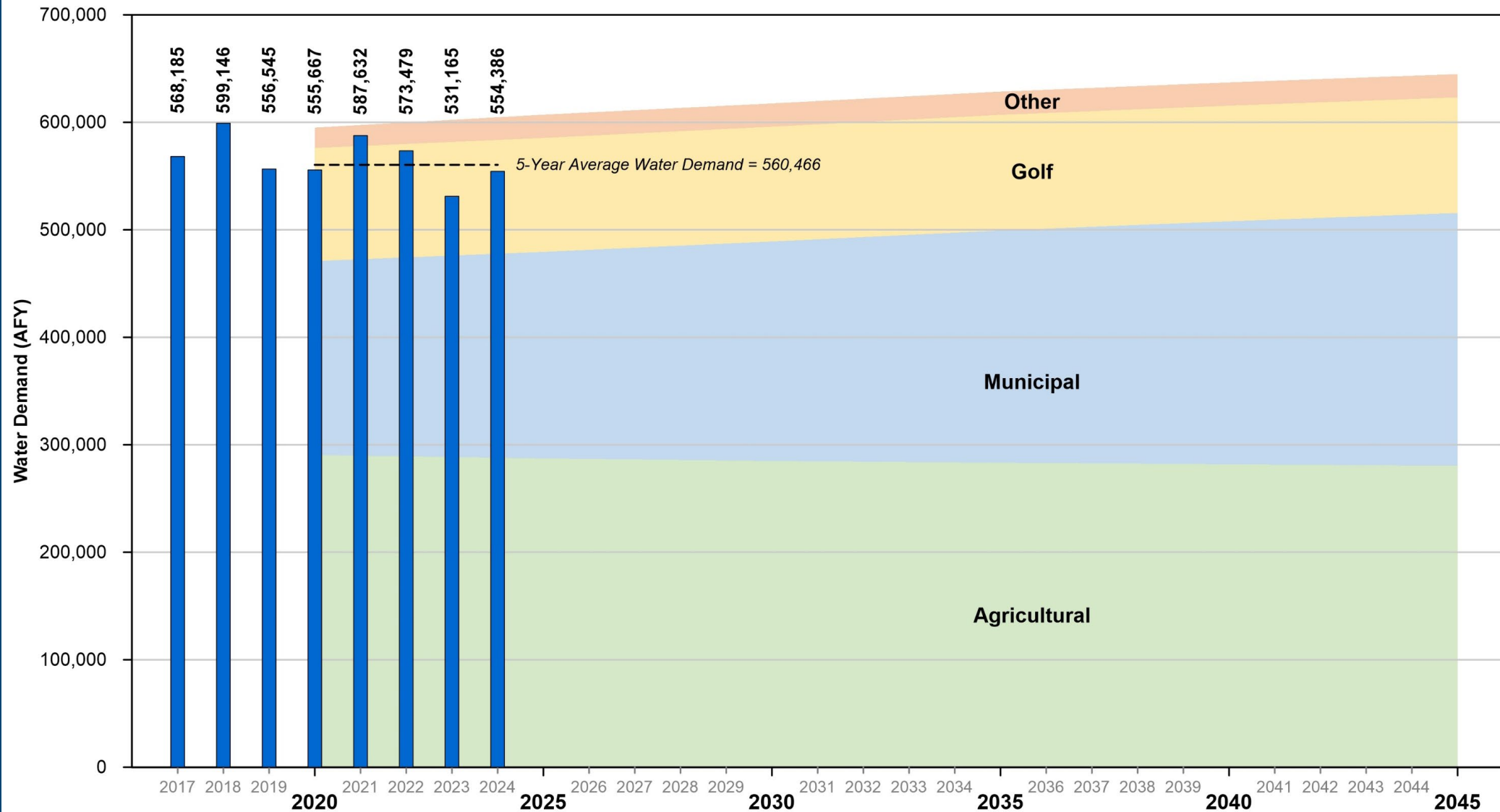
Total Water Use

WY 2023-2024 Water Demand and Supply – Plan Area



Total Water Use

Total Water Demand Actual and Forecasted – Plan Area





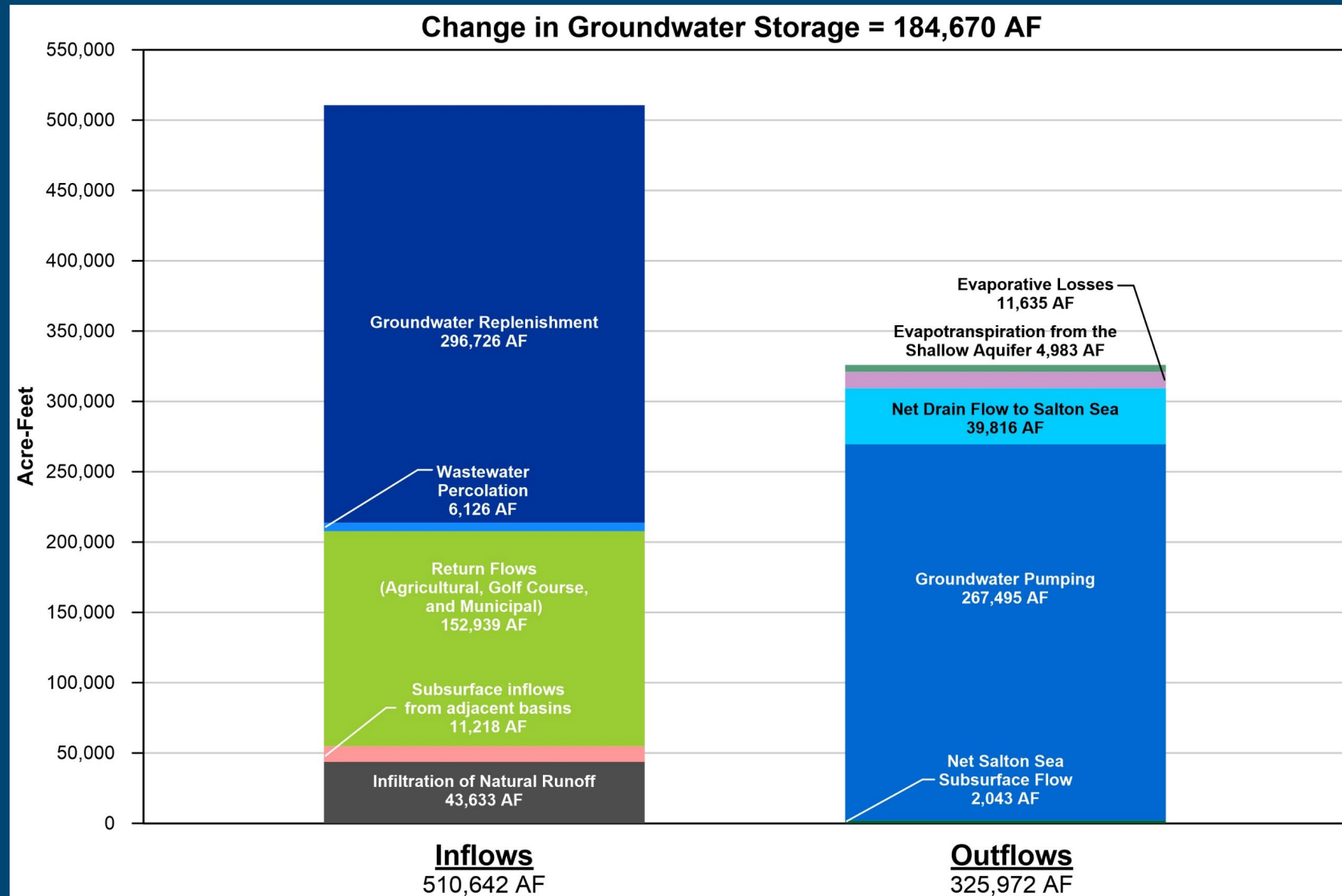
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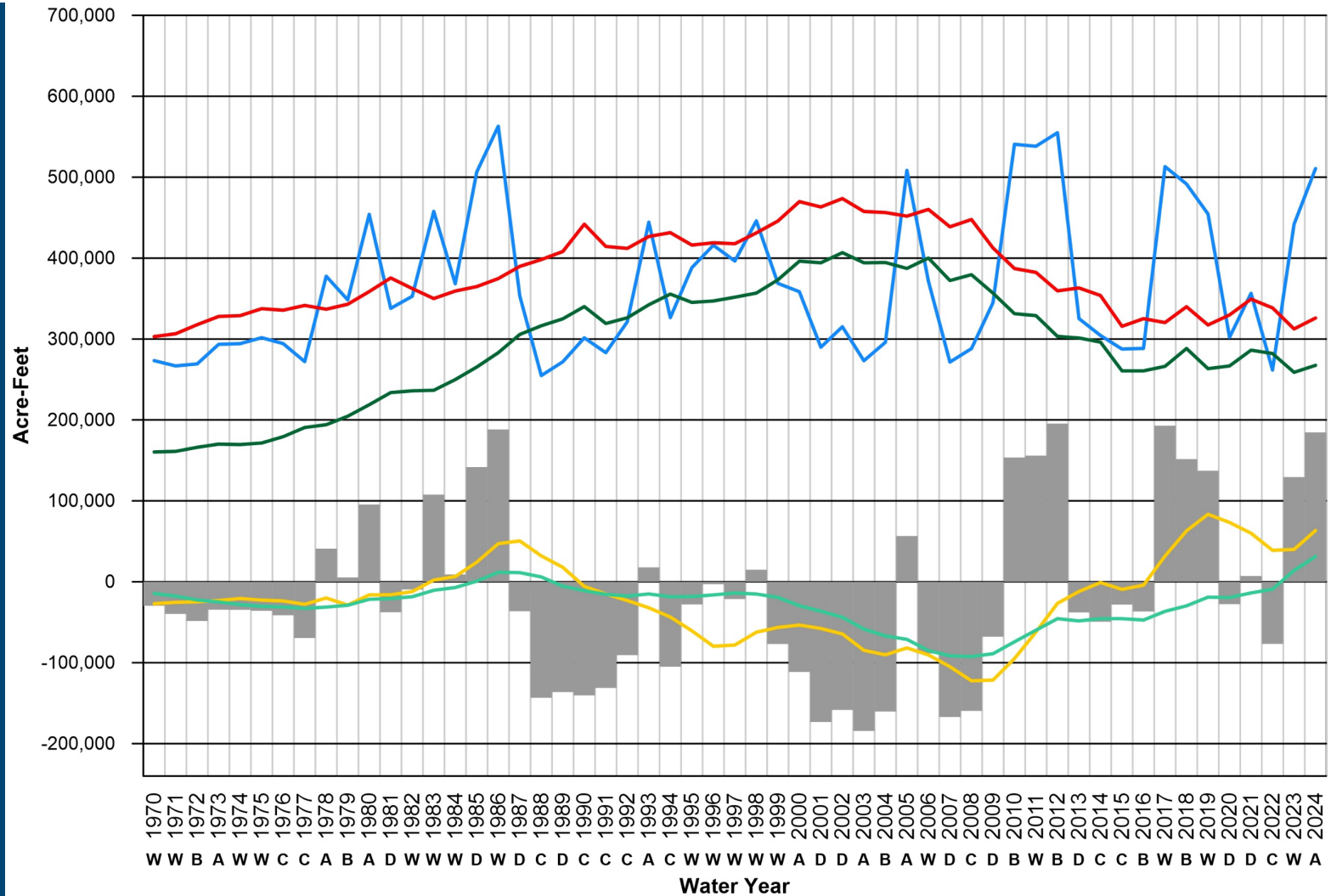
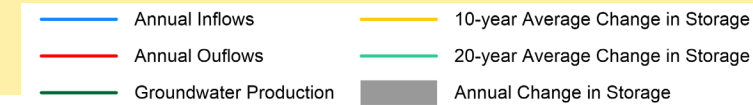
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Change in Groundwater Storage

- Comparison of Inflows and Outflows
- Inflows
 - ❖ Return Flows
 - ❖ Replenishment
 - ❖ Natural Infiltration
 - ❖ Subsurface Flow
 - ❖ WW Percolation
- Outflows
 - ❖ Pumping
 - ❖ Drains
 - ❖ Evapotranspiration (ET)
 - ❖ Subsurface Flow



Change in Groundwater Storage



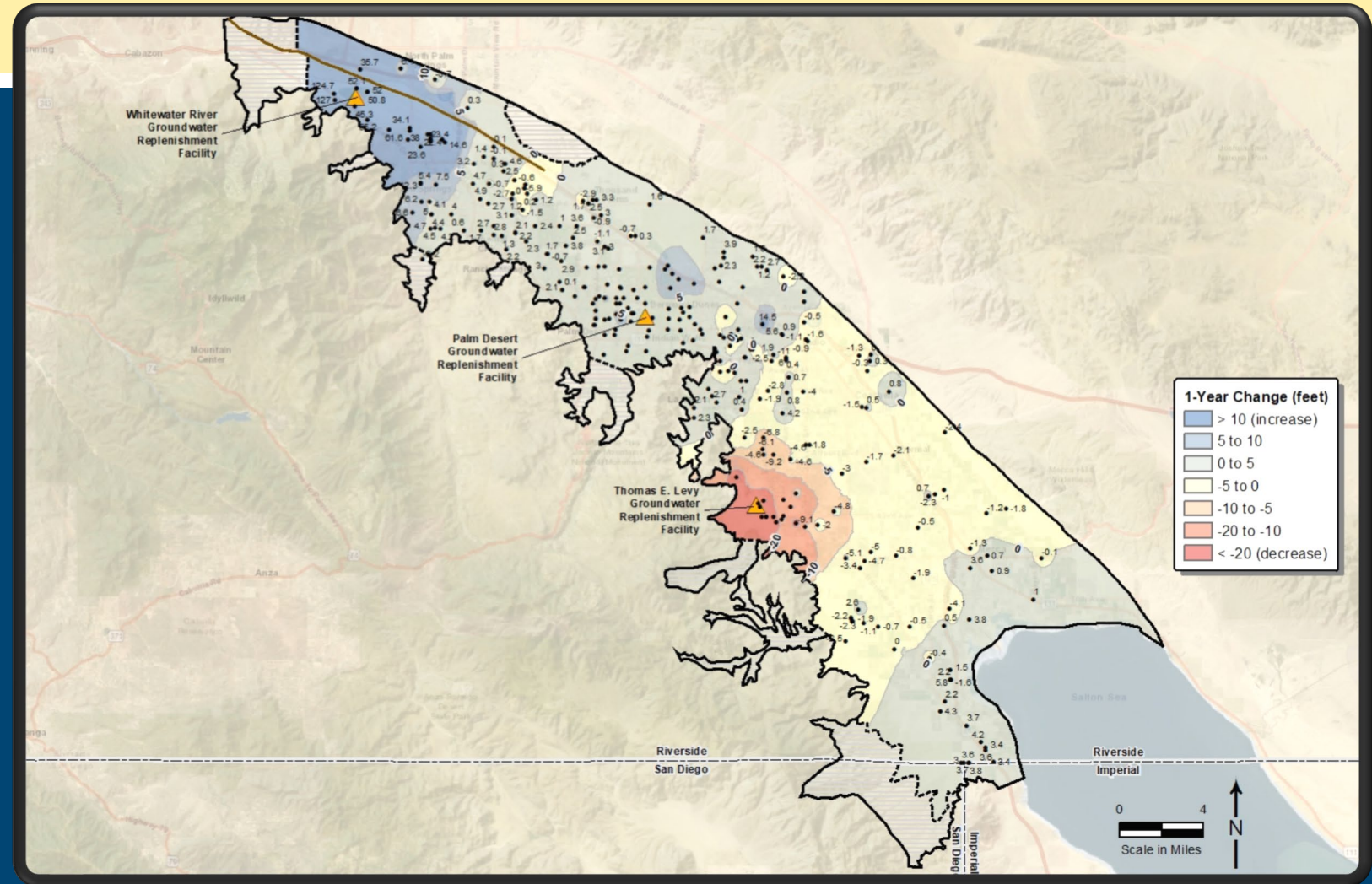
- Annual change in storage
 - ❖ Wet Conditions (+129,357AF)
- Average change in storage
 - ❖ Since 2009, 10-year average (yellow line) is positive and the 20-year average (green line) since WY 2023
 - ❖ Shows the Indio Subbasin is still sustainable

Change in Groundwater Levels

- Maps show change in groundwater levels
 - ❖ One year change (next slide)
 - ❖ Long-term change since 2009 historical lows (following slide)
- Change in groundwater levels is a proxy for change in storage
- Based on measured water levels at 355 wells throughout the Indio Subbasin

One Year Change

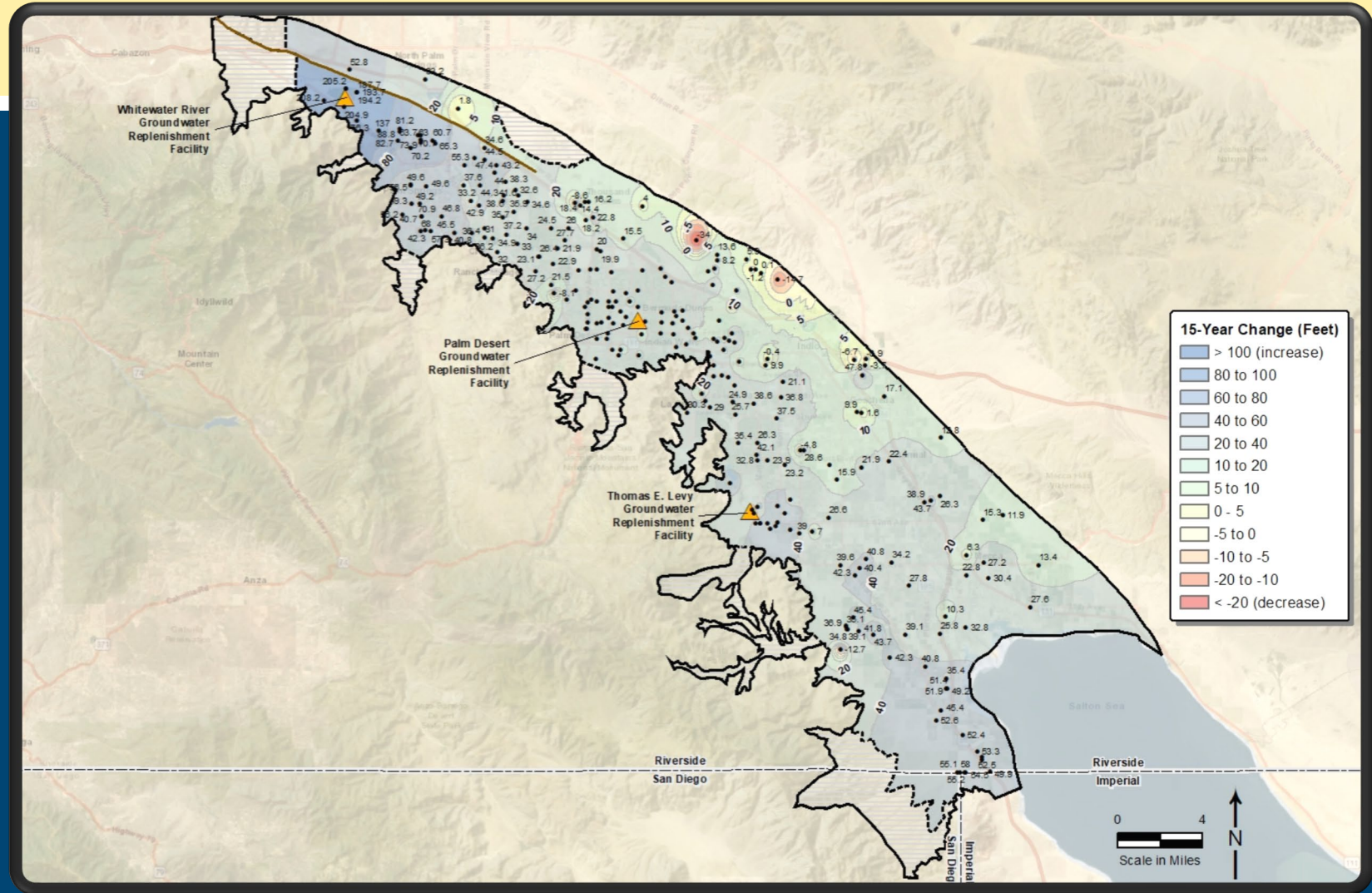
- Groundwater levels generally increased in the past water year
 - ❖ Increases near WWR-GRF but declines downstream due to variability in recharge
 - ❖ Declines in the western part of the Subbasin due to less TEL recharge



WY 2023 to WY 2024

Long-Term Change

- Basin-wide increases since 2009 historical lows
- Water levels have increased or stabilized
- Very localized declines in Mid-Valley area



WY 2009 to WY 2024



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Projects & Management Actions

Water Conservation

- 1: Urban Water Conservation
- 2: Golf Water Conservation
- 3: Agricultural Water Conservation

Water Supply Development

- 4: Increased Surface Water Diversion
- 5: Delta Conveyance Facility
- 6: Lake Perris Seepage
- 7: Sites Reservoir
- 8: Future Supplemental Water Acquisitions
- 9: EVRA Potable Reuse

Source Substitution & Replenishment

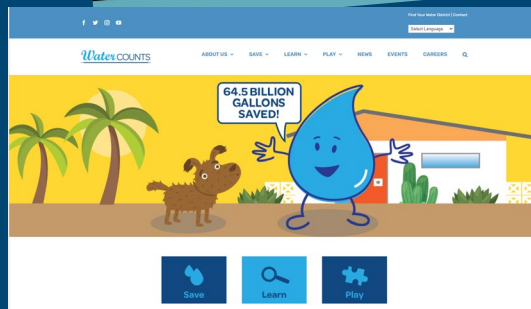
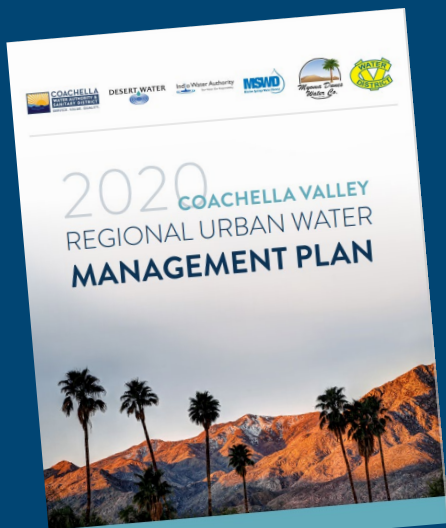
- 10: Mid-Valley Pipeline Direct Customers
- 11: East Golf Expansion
- 12: Oasis Distribution System
- 13: WRP-10 Recycled Water Delivery
- 14: WRP-10 Tertiary Expansion
- 15: Canal Water Pump Station Upgrade
- 16: WRP-7 Recycled Water Delivery
- 17: WRP-4 Tertiary Expansion & Delivery
- 18: DWA WRP Recycled Water Delivery
- 19: PD-GRF Phase 2 Expansion
- 20: TEL-GRF Expansion
- 21: WWR-GRF Operation

Water Quality Protection

- 22: Eliminate Wastewater Percolation
- 23: Wellhead Treatment
- 24: Small Water System Consolidations
- 25: Septic to Sewer Conversions
- 26: CV-SNMP GW Monitoring Program Workplan
- 27: CV-SNMP Development Workplan
- 28: Colorado River Salinity Forum
- 29: Source Water Protection

Projects & Management Actions – Progress in WY 2022-2023

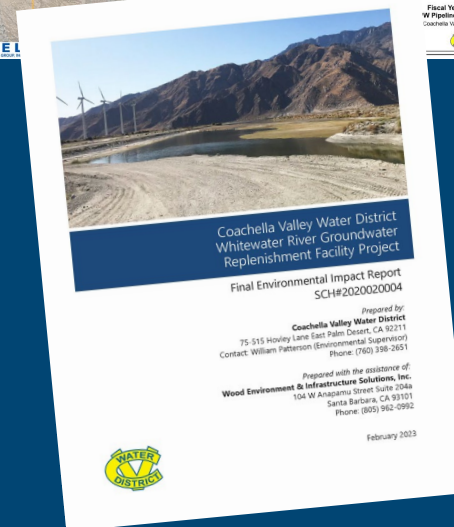
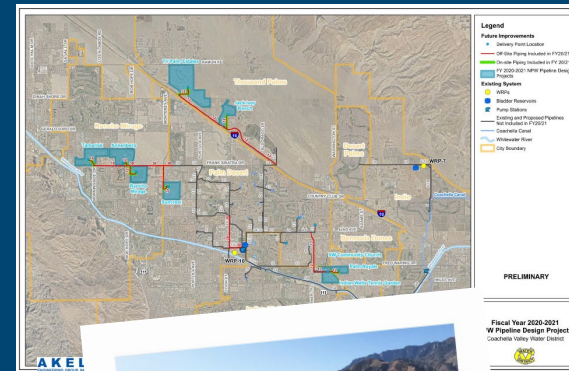
Water Conservation



Water Supply Development



Source Substitution & Replenishment



Water Quality Protection





Questions?

Public Comment

Input and feedback are welcomed

For Callers – you may need to press *6 to unmute

Next Steps

- WY 2023 Annual Report can be downloaded:



www.IndioSubbasinSGMA.org

- Indio Subbasin Annual Report for WY 2023-2024 Council/Board Presentation
 - ❖ Coachella Valley Water District – March 11, 2025
 - ❖ Coachella Water Authority – TBD
 - ❖ Desert Water Agency – TBD
 - ❖ Indio Water Authority – TBD

Stay Involved – Visit our Website

