



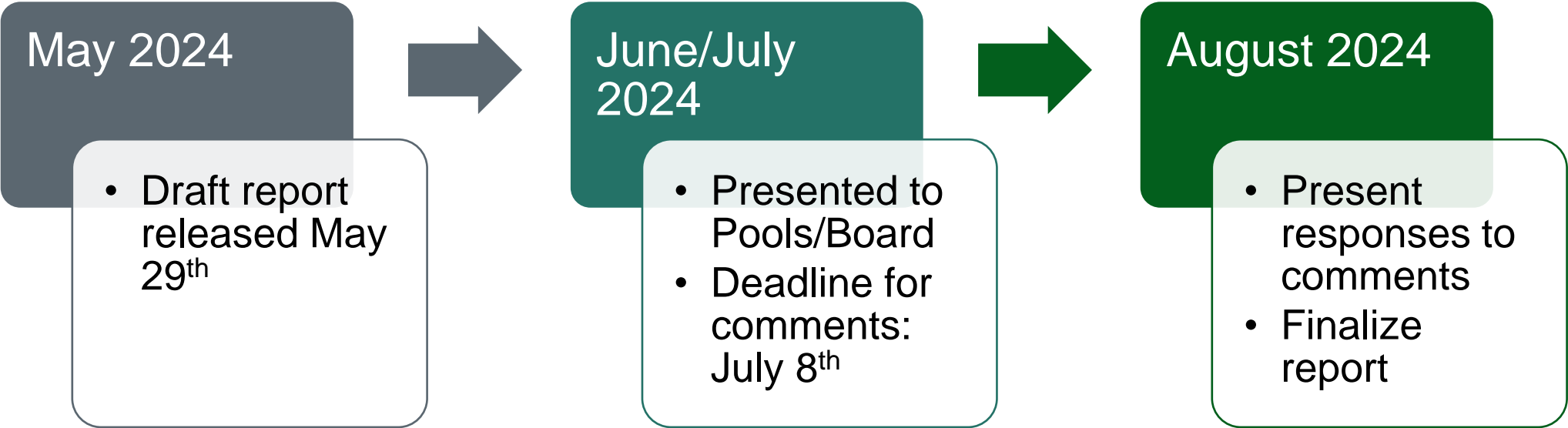
# Data Collection and Evaluation

## Report for FY 2022/23

Advisory Committee Meeting

August 15, 2024

# Data Collection and Evaluation Report FY 2022/23

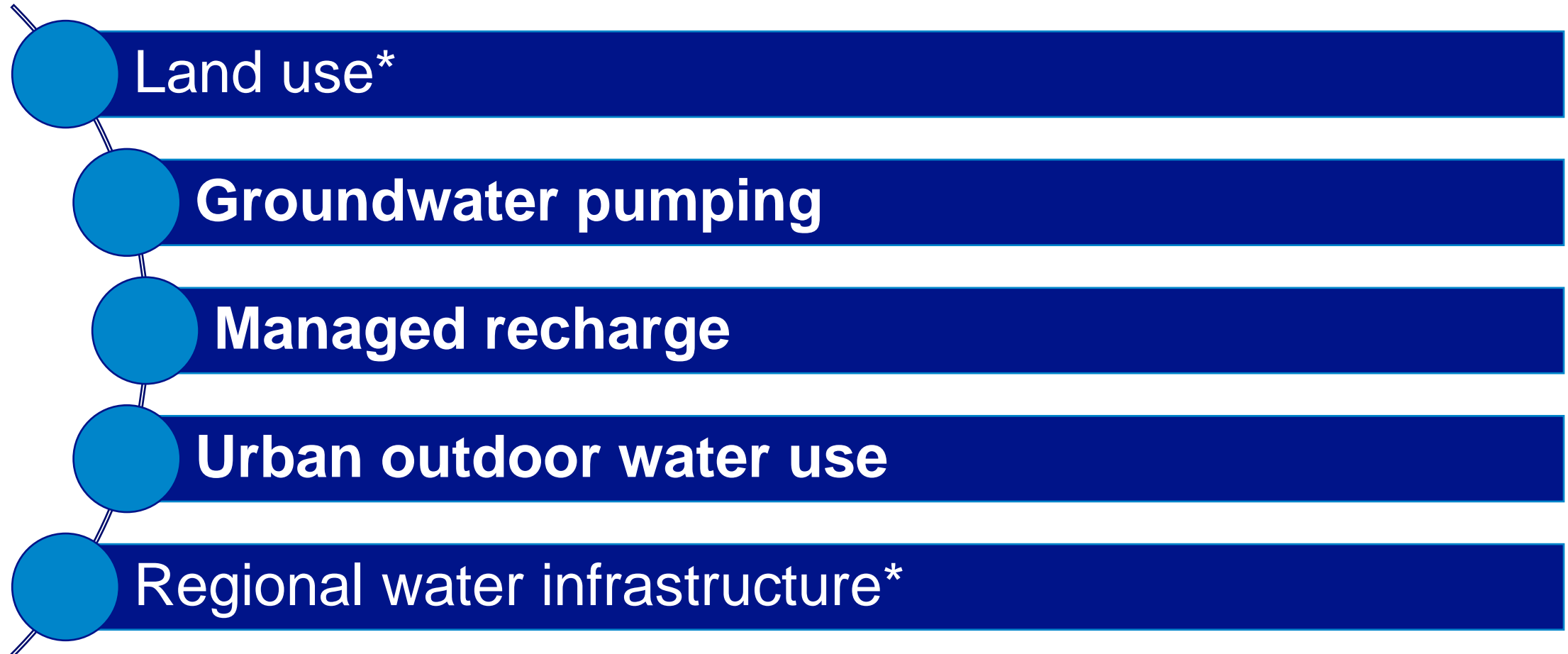


# Background – April 28, 2017 Court Order

## Watermaster obligations for data collection and evaluation:

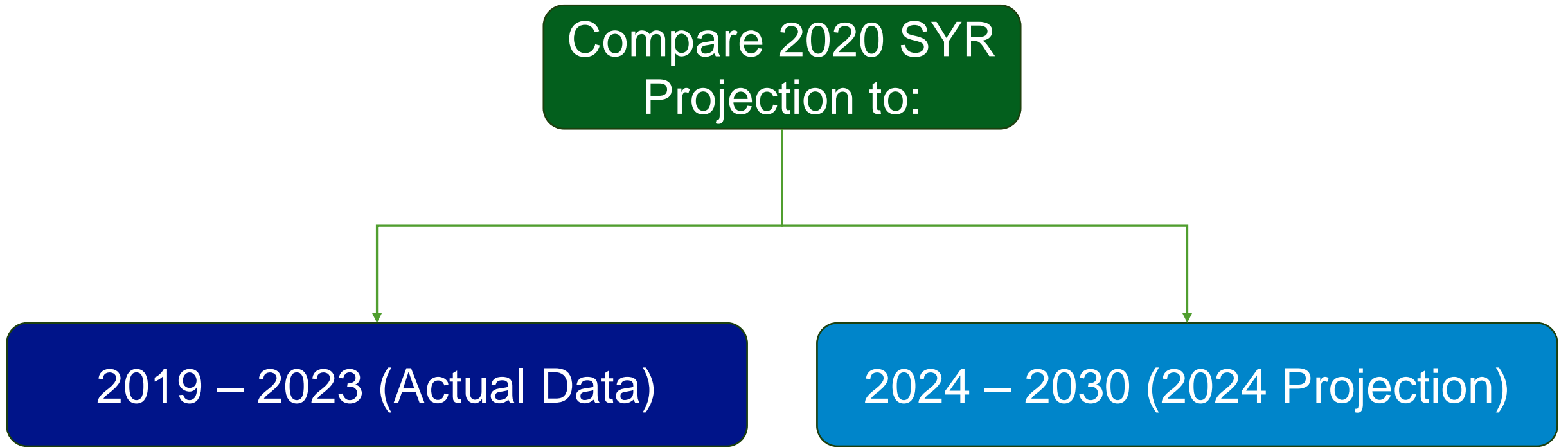
- Ensure that production is metered, reported, and included in Assessment Packages
- Collect data on cultural conditions
- Evaluate data for material changes from existing and projected conditions or threatened undesirable results
- Develop annual budgets for data collection and evaluation

# Scope to Implement Court Order – Collection



\*Evaluation not documented in FY 2022/23 Data Collection and Evaluation Report

# Scope to Implement Court Order – Evaluation



# Scope to Implement Court Order – Evaluation

## Potential for undesirable results

- *Is there a potential for undesirable results that were not identified in the 2020 SYR?*
- Specifically, is there a “potential need for prudent management discretion to avoid or mitigate undesirable results including, but not limited to, subsidence, water quality degradation, and unreasonable pump lifts”? (2017 Court Order, p. 17)

## Significant difference in Safe Yield

- *Is there a reasonable likelihood that the cumulative impact of the differences between the new datasets/projections and the data and assumptions in the 2020 SYR would result in the actual Safe Yield being greater than 2.5 percent (more or less) than the current Safe Yield? (2017 Court Order, p. 15-16)*

# Key Takeaways from FY 2022/23 Report

**Groundwater Pumping.** The comparison of the 2024 Projection to the 2020 SYR Projection indicates the potential for undesirable results from increased risk of new land subsidence that was not identified in the 2020 SYR.

**Combined impacts of differences in managed recharge and urban outdoor water use could result in a significant change in net recharge (> 2.5% of current Safe Yield)**

# Recommendations



Address the potential for undesirable results resulting from greater groundwater pumping in MZ-1 through development and implementation of the Subsidence Management Plan for Northwest MZ-1



Reevaluate the Safe Yield consistent with the 2017 Court Order



# Responses to Comments

# State of California

## Clarification on wells identified as “No Longer Ag Owner” (Appendix A)

- Most of these wells are on lands that have been purchased by developers or other businesses that intend to develop the land.
- Prior to land conversion, the new landowners will allow the prior owners to use the well and land until the entity is ready to move forward with development.

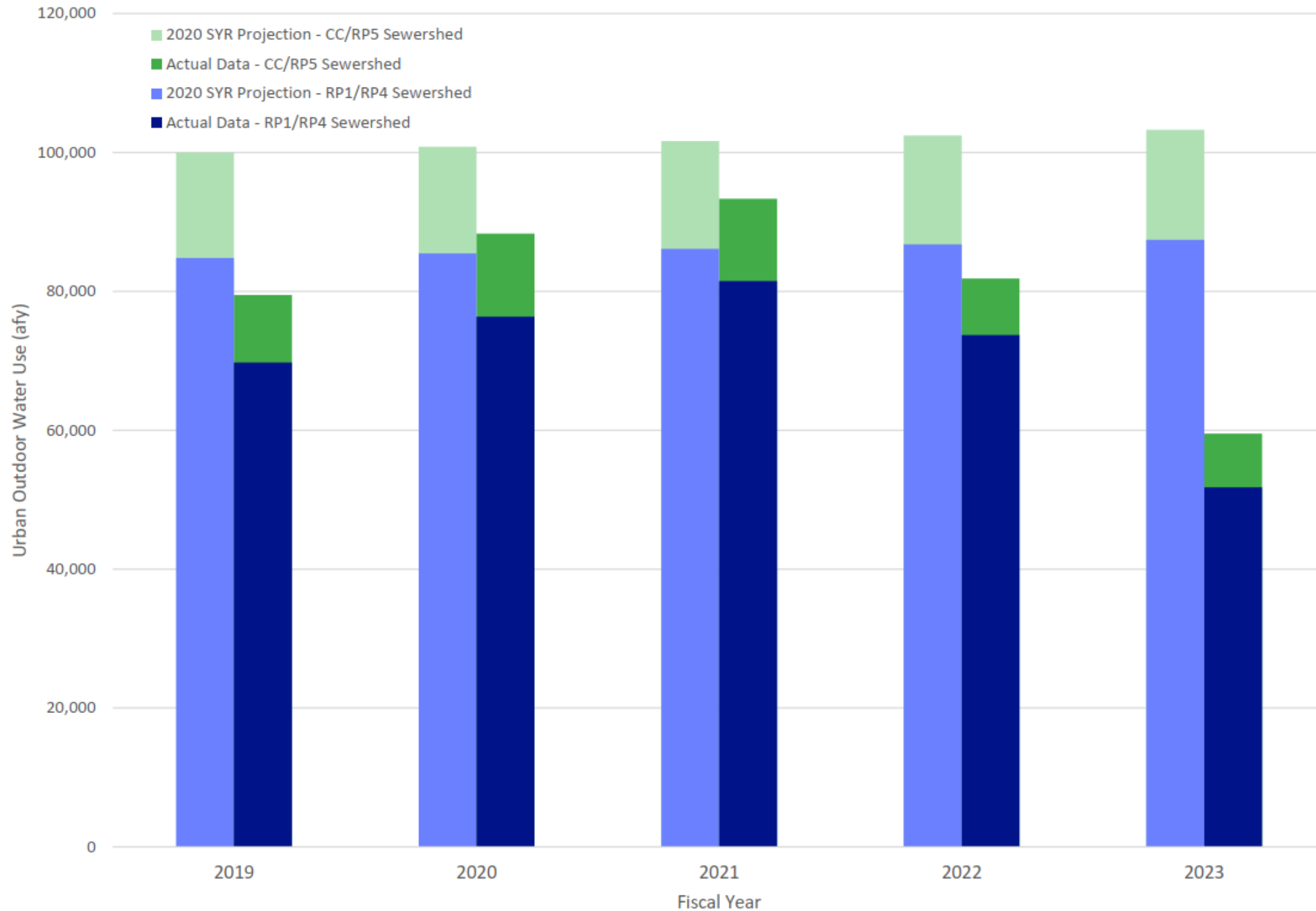
Updated/corrected tables and text as suggested

# Cucamonga Valley Water District

Section 3.3.3 – Potential reduced net recharge due to differences in outdoor water use focuses on applied water without considering other factors (i.e., precipitation and imported water restrictions). Actual irrigation efficiency is less than assumed in the report.

- The scope is limited to evaluating the impacts of cultural conditions, including applied water (excludes precipitation).
- Patterns in cultural conditions are evaluated in the context of historical hydrology; hydrologic impacts on outdoor water use are described qualitatively.
- Detailed quantitative analysis of hydrologic impacts is beyond the current scope; will be considered in the 2025 Safe Yield Reevaluation.
- Historical period includes dry (2020-2022) and wet years (2019, 2023); actual outdoor water use is consistently less than 2020 SYR Projection.
- Revised report to clarify assumptions, resulting in impacts ranging from 4,000 to 8,000 afy compared to 2020 SYR Projection.

**Figure 3-1. Comparison of 2019-23 Actual Data versus 2020 SYR Projection for Urban Outdoor Water Use, FY 2019-2023**



# Monte Vista Water District

MVWD questions findings on subsidence and does not expect increased production above historical levels. MVWD does “not believe the threshold for ‘prudent management discretion to avoid or mitigate undesirable results including, but not limited to, subsidence...’ has been reached for an Interim Correction to Safe Yield.”

- Finding of increased risk of land subsidence in MZ-1 is based on findings in this report and work for the Ground-Level Monitoring Committee.
- We do not recommend management actions beyond the current work at this time.

# Monte Vista Water District

Report relies on short-term data (FY 2019-23) rather than long-term hydrology (1921-2023), as mentioned in Paragraph 4.4 of the 2017 Court Order.

- Paragraph 4.4 applies to Safe Yield resets, not data collection and evaluation.
- Evaluation focused on cultural conditions impacting current Safe Yield (FY 2019-2030).

# Monte Vista Water District

Near-term conditions (emergency conservation, wet-year precipitation) should not influence long-term projections.

Watermaster should work with the Chino Basin's urban water agencies to better understand how we and our customers may respond to the Conservation Regulation; a full understanding of the material change to existing and projected conditions due to this new regulation is needed but does not yet exist.

- Significant near-term patterns indicate material differences impacting Safe Yield (see responses to CVWD).
- Watermaster is working with agencies on Conservation Regulation impacts for the 2025 SYR.

## Monte Vista Water District

Report lacks evaluation of deep infiltration of precipitation outside of managed recharge, which offsets irrigation reductions during wet years.

- The scope is limited to evaluating the impacts of cultural conditions, including applied water, but excludes precipitation.
- See response to CVWD's comment.



# City of Chino

It is not clear how the provided information supports the conclusion for a potential MPI due to subsidence in MZ-1.

- Finding of increased risk of land subsidence in MZ-1 is based on findings in this report and work for the Ground-Level Monitoring Committee.
- Managed recharge differences may mitigate pumping impacts.
- Recent work indicates that aquifer compaction is due to deeper aquifer pumping; surface spreading basins have limited impact on subsidence.
- Additional text added in Chapter 2 for clarity.


Please provide a table that breaks down by Management Zone the actual and projected pumping, outdoor urban water use, and managed groundwater recharge.

- After subsequent discussions to clarify this comment, Watermaster will prepare exhibits that depict this information in a future report.

**Resources**

Various documents and informative videos may be found through the links below. For an interactive map, click the button at the bottom.

- Watermaster's Files
- Forms
- Published Maps
- Optimum Basin Management Program
- 2025 Safe Yield Reevaluation and Related Efforts**
- GIS MAP



# Chino Basin Watermaster

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Home / 2017 Safe Yield Court Order Implementation

## 2017 Safe Yield Court Order Implementation

- Background
- 2025 Safe Yield Reevaluation
- Data Collection and Evaluation**
- Safe Yield Reset Methodology Update

- FY 2020/21 Final Report
- FY 2021/22 Final Report

**FISCAL YEAR 2022/23**

- Report**
  - FY 2022/23 Draft Report





**THANK YOU**