

Draft Data Collection and Evaluation Report for FY 2022/23

Pool Committee Meetings
June 13, 2024

Background – April 28, 2017 Court Order



Enabled update of the Safe Yield Reset methodology (completed in 2022)



Required 2025 Safe Yield Reevaluation



Required annual data collection, evaluation, and reporting



Allowed for an interim correction of Safe Yield (+/- 2.5%)



Required a peer review process



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



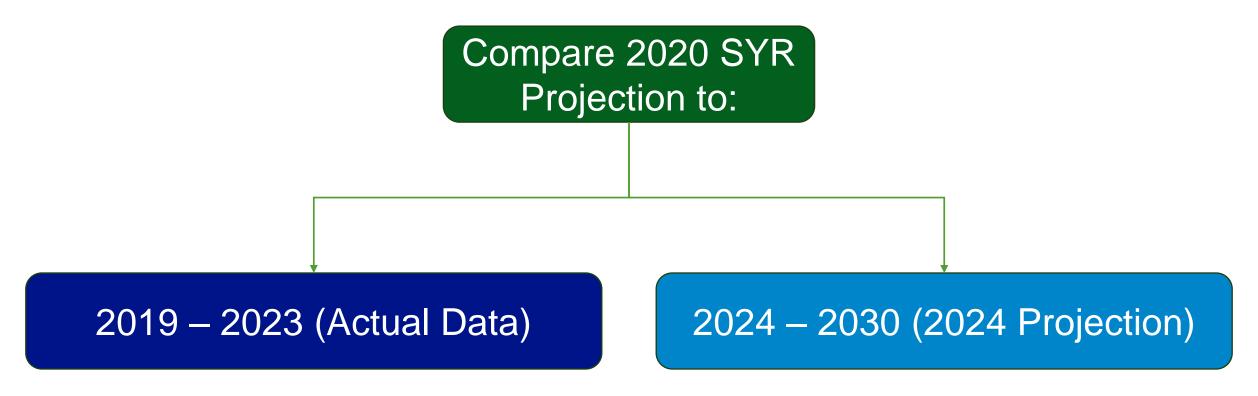
Scope to Implement Court Order – Collection

Land use* Groundwater pumping Managed recharge Urban outdoor water use Regional water infrastructure*

^{*}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)



Comparison of Actual Groundwater Pumping to 2020 SYR Projection FY 2019-2023

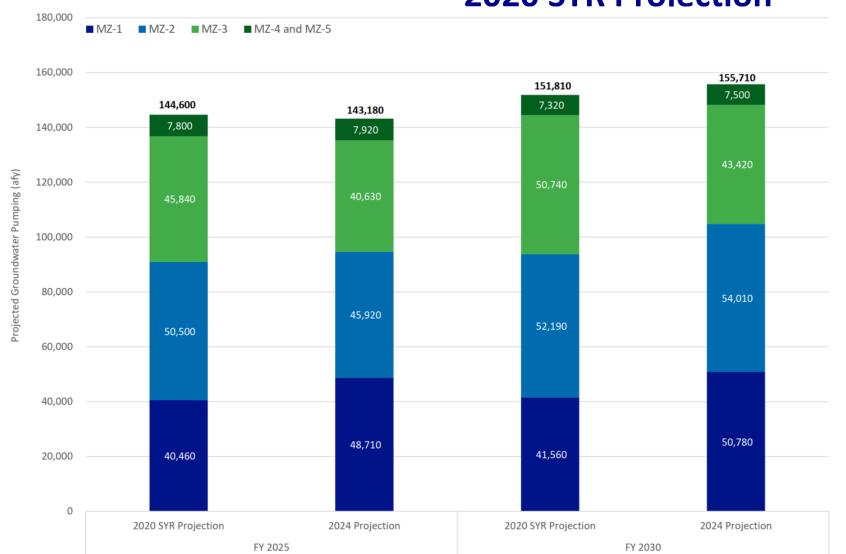


Overall, the Actual
Pumping is similar to
the 2020 SYR
Projection for
groundwater pumping

Some annual fluctuations due to Dry-Year-Yield Program and demand conditions



Comparison of 2024 Projection for Groundwater Pumping to 2020 SYR Projection

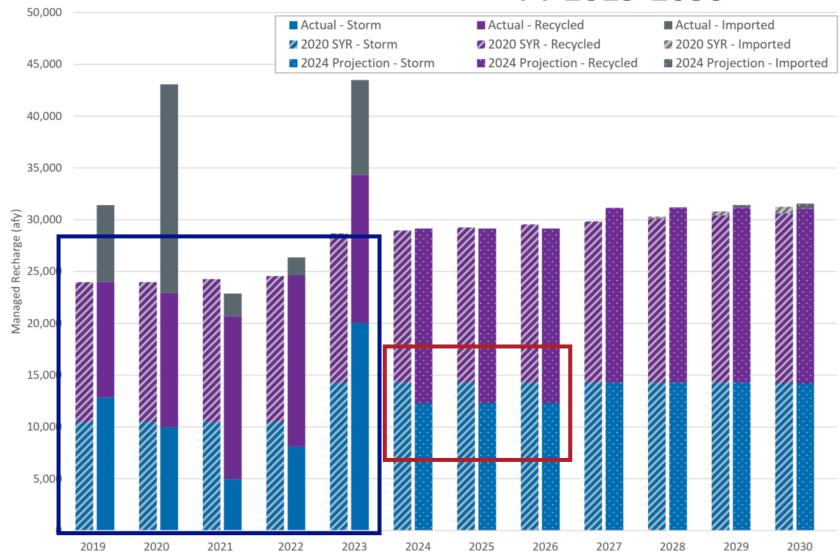


Overall, the 2024
Projection is similar to
the 2020 SYR
Projection for
groundwater pumping

2024 Projection for pumping in MZ-1 is 8,000 to 9,000 afy greater than the 2020 SYR Projection



Comparison of Actual Managed Recharge to Projected Managed Recharge FY 2019-2030



Historical stormwater recharge is almost identical to the 2020 SYR Projection

Due to delays in 2013 RMPU projects, the 2024 Projection for stormwater recharge is less than the 2020 SYR Projection by 900 afy



Comparison of Actual Urban Outdoor Water Use to 2020 SYR Projection FY 2019-2023

Historical urban outdoor water use is less than the 2020 SYR Projection (21,000 afy)

Differences could result in ~4,000 afy less deep infiltration of precipitation and applied water (DIPAW) to the vadose zone compared to the 2020 SYR Projection

Impacts to DIPAW to the vadose zone take time (years) to impact net recharge due to travel time to saturated aquifer

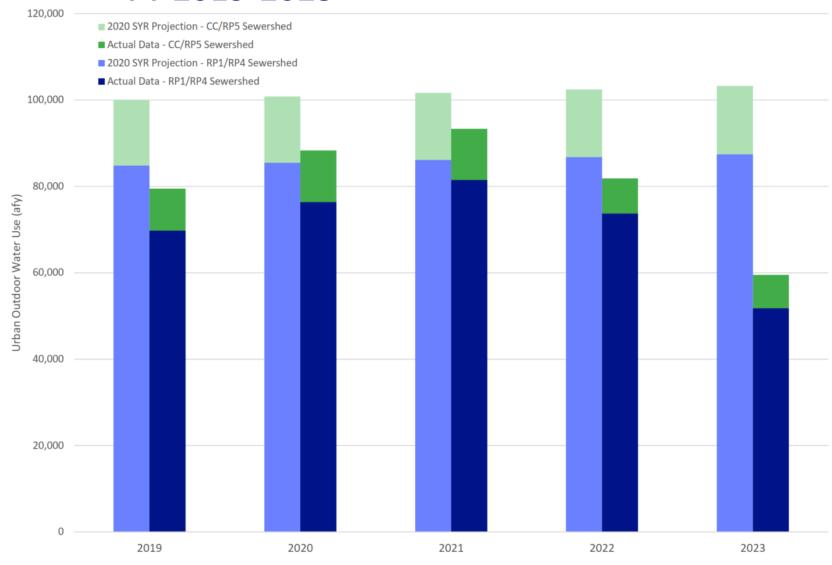
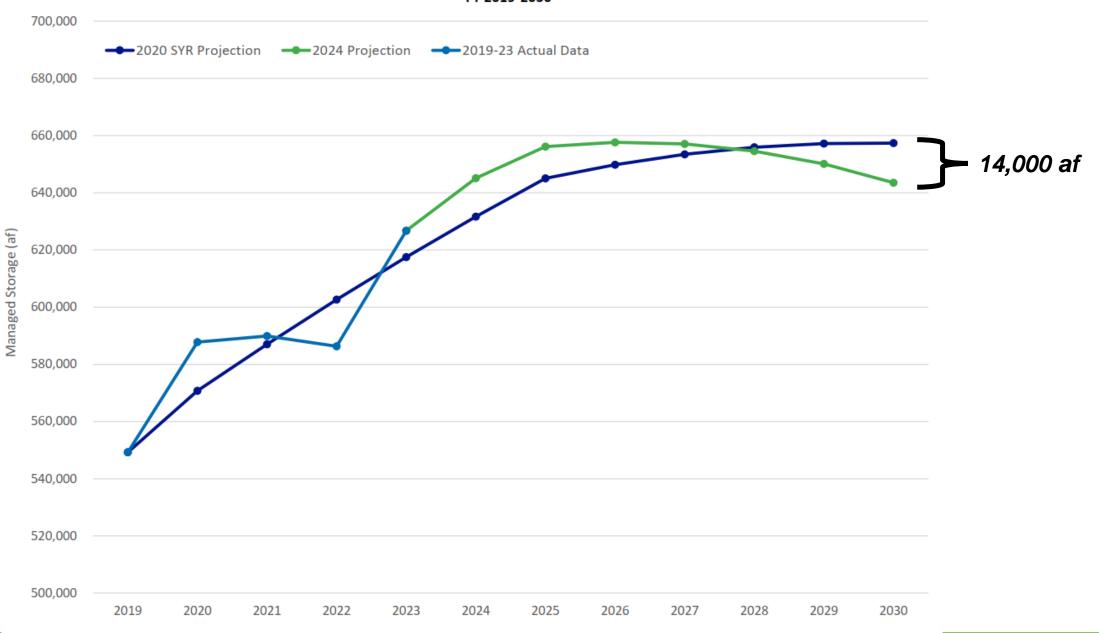




Figure 5-1. Comparison of 2019-23 Actual Data and Projected Managed Storage in the Chino Basin, FY 2019-2030





Key Takeaways

- **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



Next Steps



Comment period through Friday, June 28th



Respond to comments and publish final report in July



