Professional Services Agreement (PSA) with Montrose Environmental Solutions, Inc for California Environmental Quality Act Compliance Technical Services for the Santa Rosa Water Supply Alternatives Plan

Board of Public Utilities Meeting

November 7, 2024

Peter Martin – Deputy Director Water Resources

Santa Rosa WATER

Background - Water Supply Alternatives Plan

Purpose

Enhance Santa Rosa's water supply resiliency and reliability to mitigate impacts of shortages due to severe droughts and emergencies.

Approach

Assess the feasibility of new water supply options and develop a plan for increasing resiliency.

Water Supply Portfolio

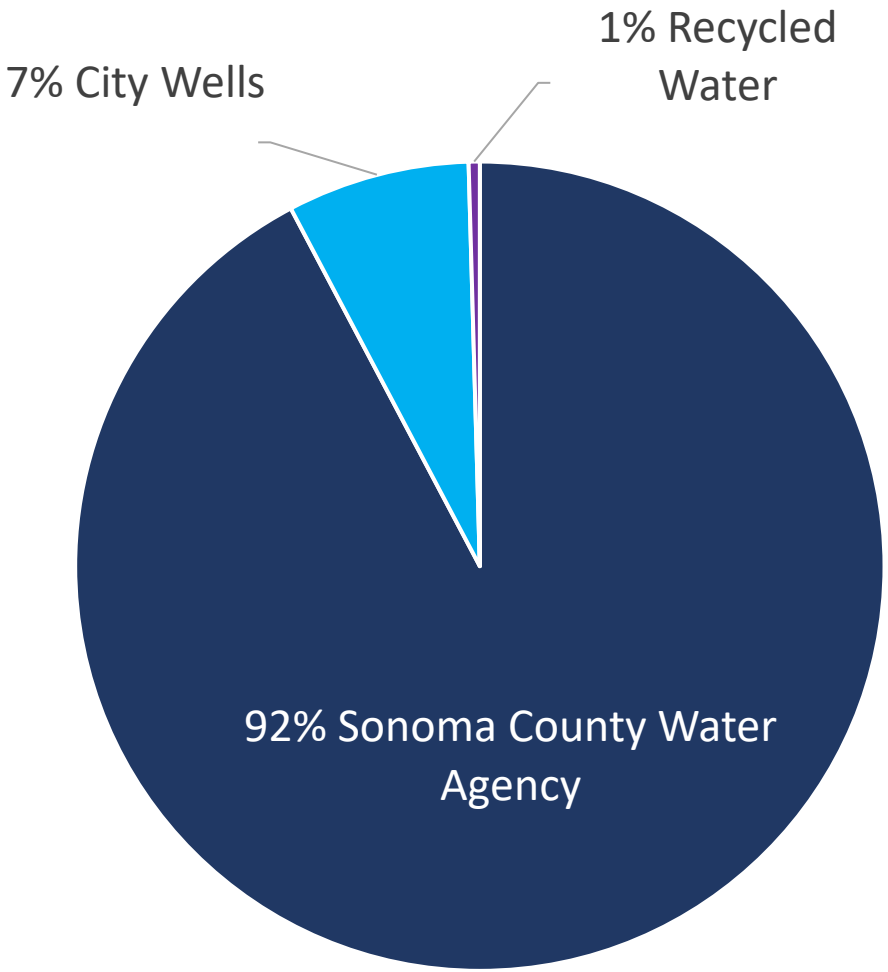
Sonoma County Water Agency
29,100 acre-feet per year (AFY)

City Wells (Farmers Lane)

2,300 AFY

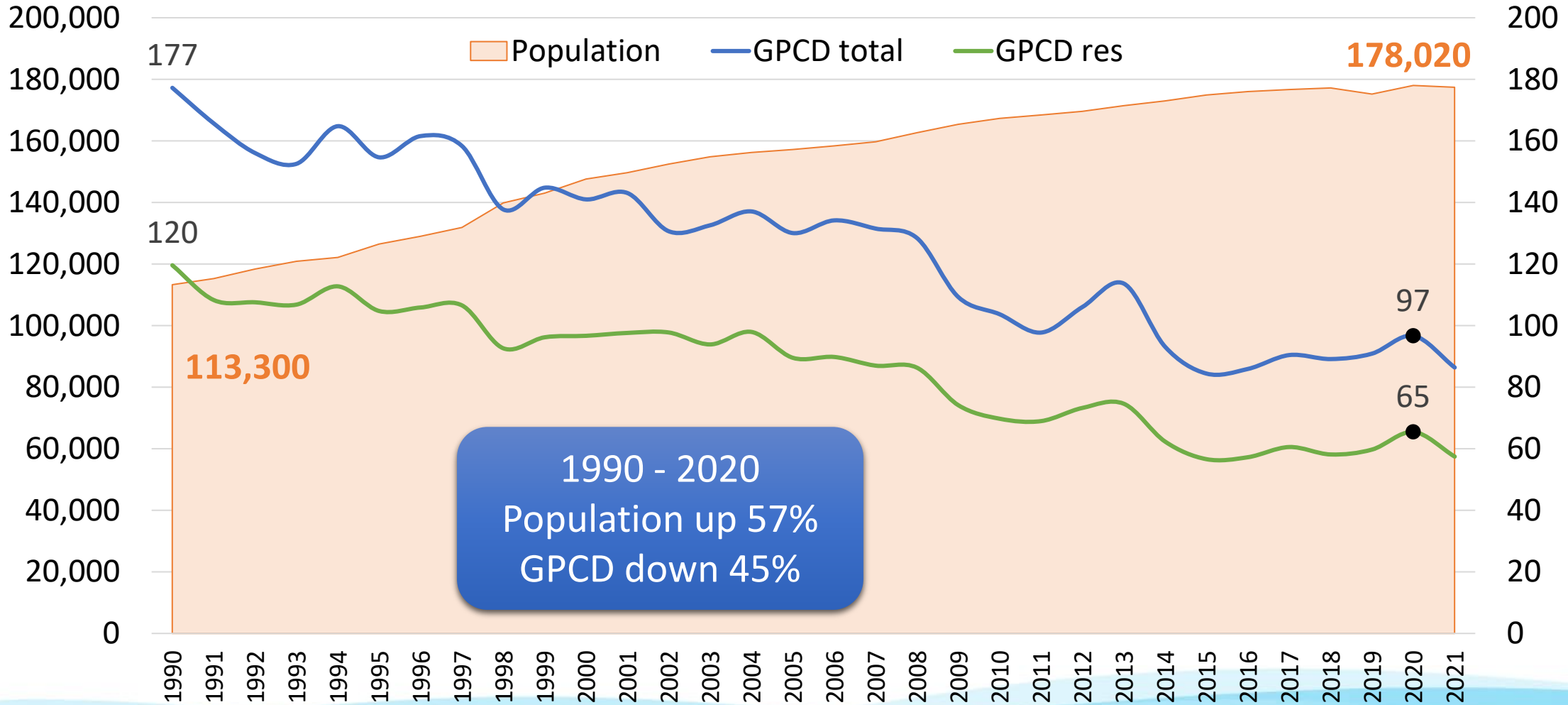
Recycled Water
140 AFY

Water Conservation



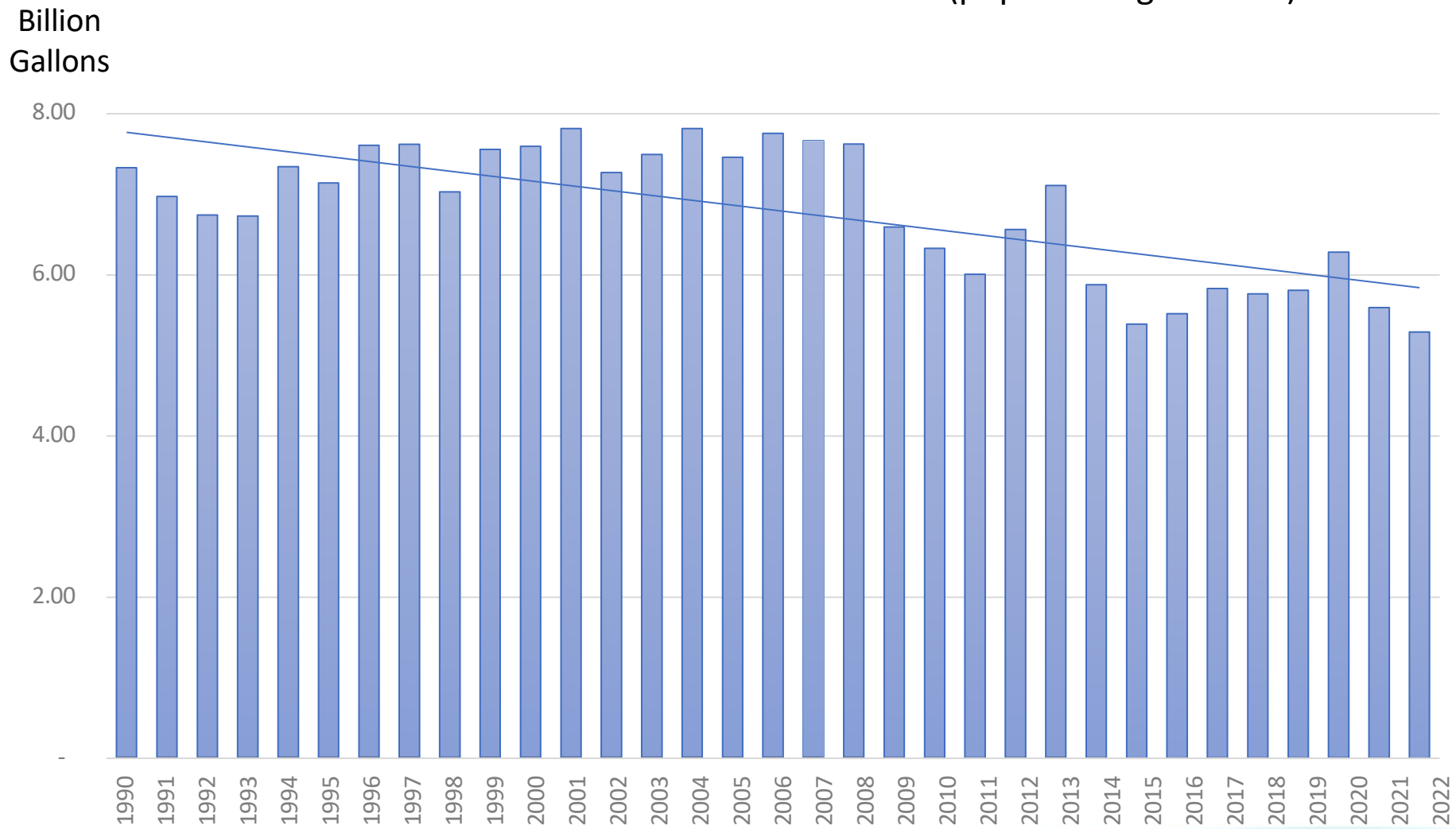
Santa Rosa has improved water use efficiency during period of growth

(GPCD = gallons per capita per day)

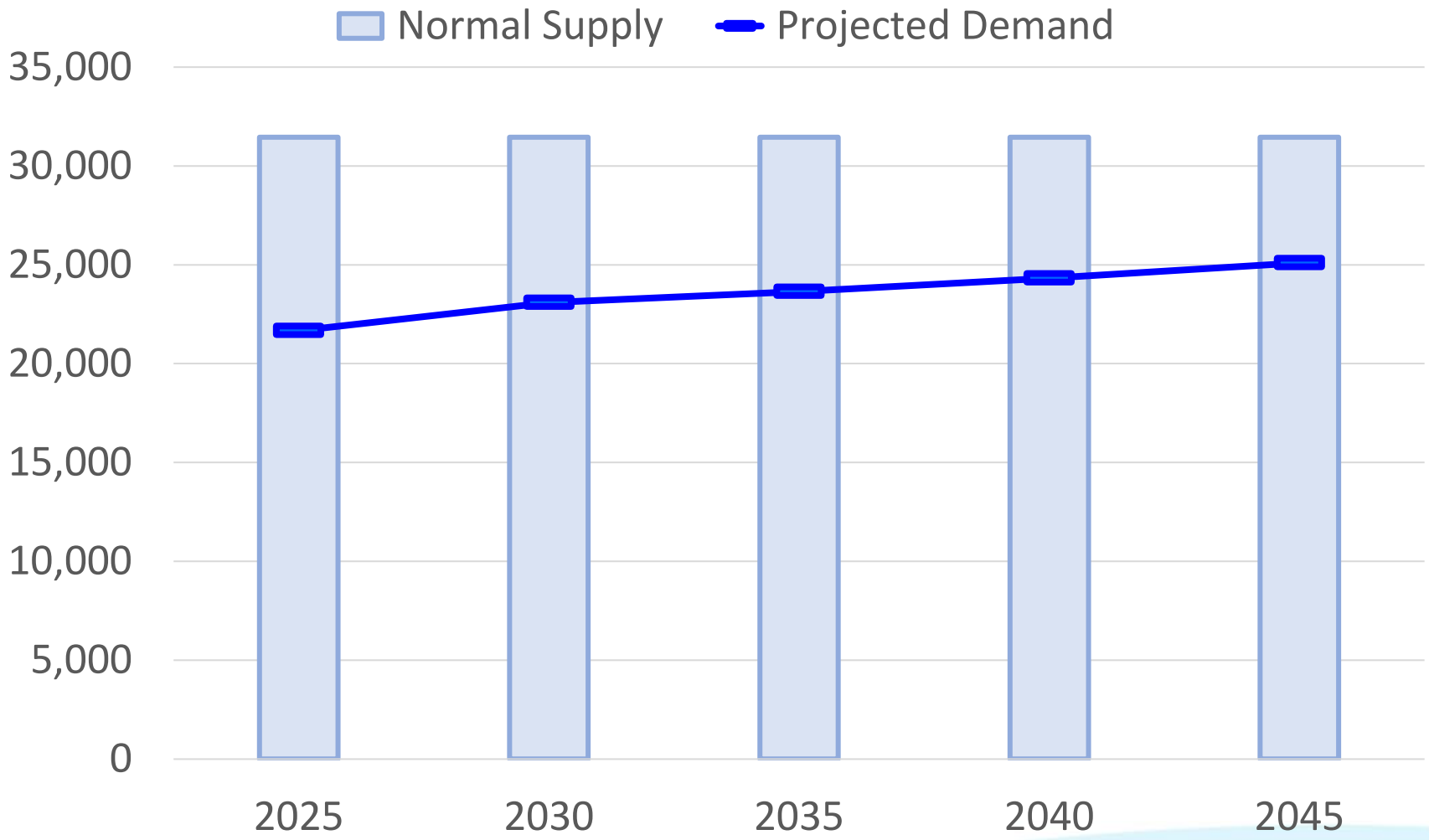


Santa Rosa's total water consumption has decreased.

2020 water use was 14% less than 1990 (population grew 57%).



Normal Water Supply (average rainfall years) Compared to Projected Demand through 2045

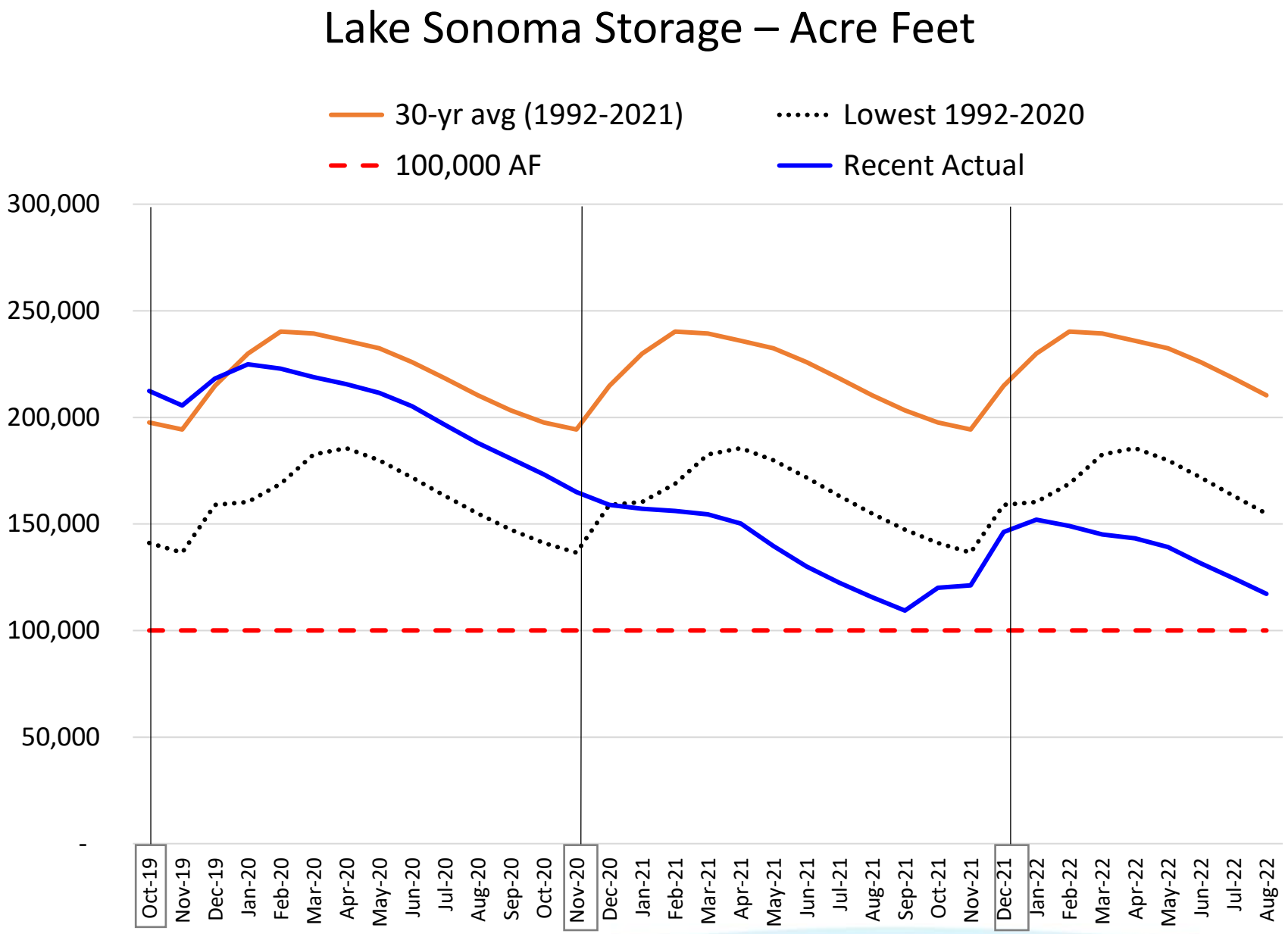


Risk of Severe Shortage

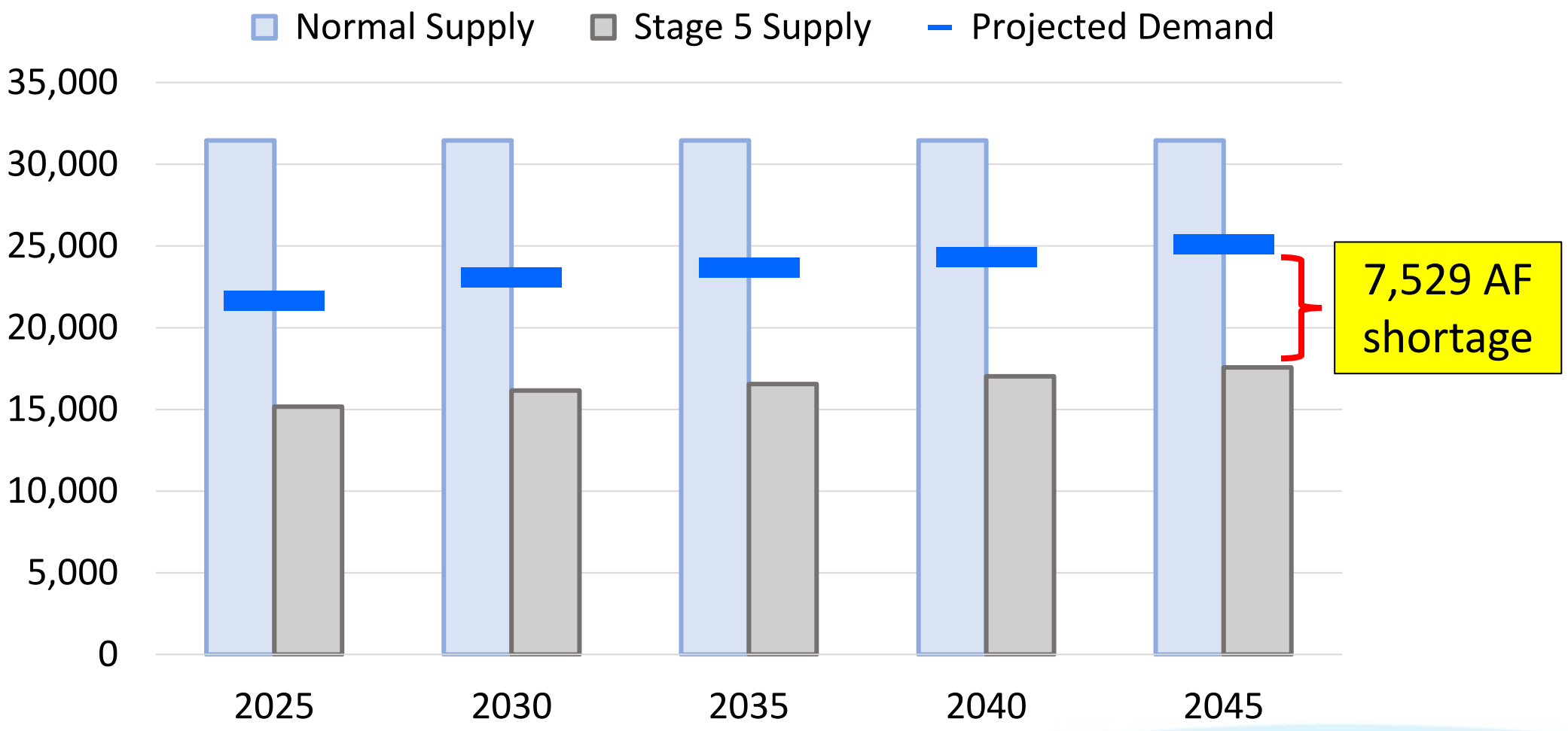
Storage in Lake Sonoma reached historical lows during last drought.

If storage drops below 100k AF, mandated reductions of 30% or more can be required.

Climate change is expected to cause more frequent and more severe droughts.



30% shortage in Santa Rosa supply is Stage 5 Water Shortage Emergency.



Water Supply Goals

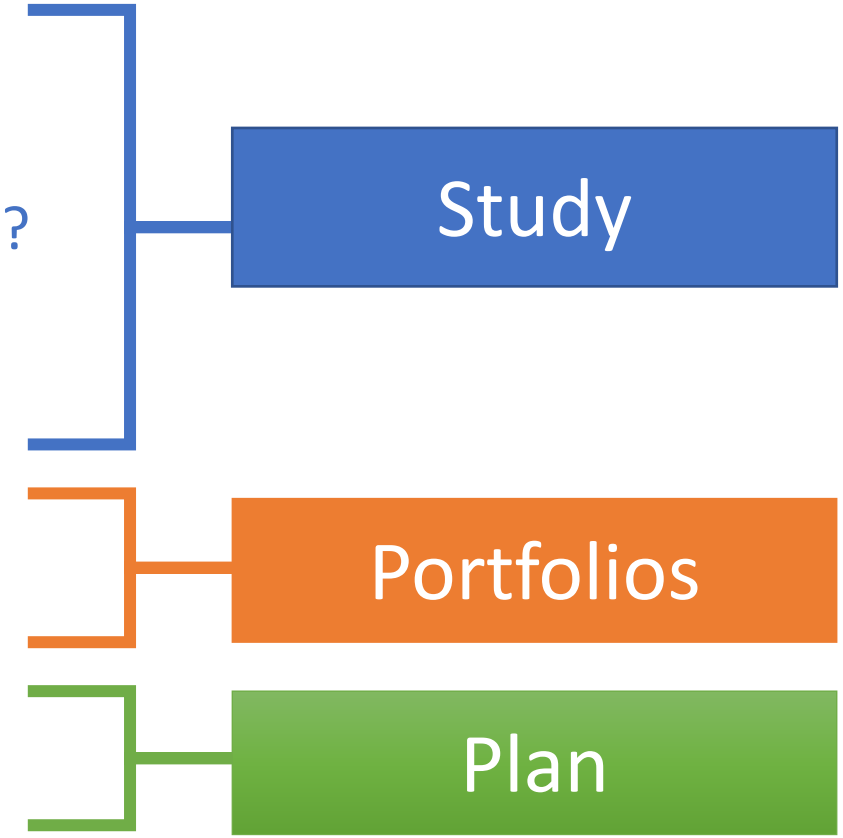
Mitigating Droughts	Mitigating Natural Disasters & Catastrophic Events	Mitigating Peak Day Demand
Meet 30% of City's water demand with municipal supplies to mitigate impacts of Russian River supply shortages (e.g., due to prolonged and/or severe drought). Based on current City demand projections, the volume of water required to meet this is 7,500 acre-feet per year (AFY) by 2045.	Provide 50% of normal domestic/indoor demand for potable water with municipal supplies during Russian River supply disruption. Based on current City demand projections, the volume of water required to meet this is 9 million gallons per day (MGD) by 2045.	Meet 30 percent of peak month average day demand for potable water with municipal supplies. Based on current City demand projections, the volume of water required to meet this is 9 MGD by 2045.

Background - Water Supply Alternatives Plan Project

- How much new water supply is optimal to mitigate the risk of shortages?
- Which supply options should be studied?
- What criteria should be used to assess each supply option?

- Which mix(es) of options will best help us meet our supply resiliency goal?

- What is the most reasonable and adaptive path forward?



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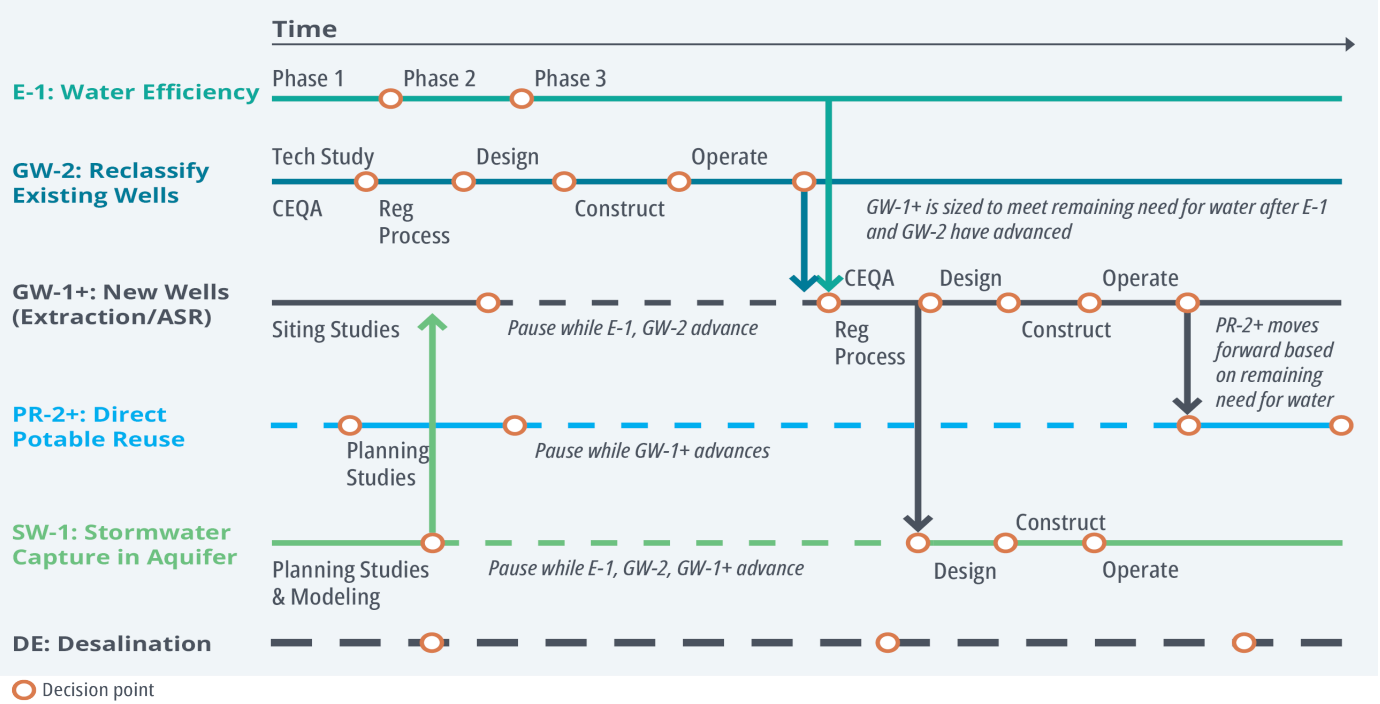
Portfolios of Options

Option	Description	Portfolio 1 Most Economical	Portfolio 2 Fastest	Portfolio 3 Most Water	Portfolio 4 Most Adaptive
GW-1	Add Extraction Wells (Up to 12)		✓	✓	✓
GW-2	Convert Emergency Wells to Production Wells	✓	✓	✓	✓
GW-3	Aquifer Storage & Recovery Wells				**Consider**
PR-2	Satellite Direct Potable Reuse			✓	**Consider**
PR-4	Regional Direct Potable Reuse at Laguna Treatment Plant				**Consider**
SW-1	Stormwater Storage in Aquifer			**Consider**	**Consider**
E-1	Efficiency Programs	✓	✓	✓	✓
	Desalination				**Consider**

Next Steps were identified for Portfolio 4

1. Identify funding
2. Plan for Phase 1 of E-1
3. Begin Hydrogeologic studies for GW-2 & determine CEQA pathway
4. Prepare siting study for GW-1+
5. Track DPR regulations and initiate planning studies for PR-2+
6. Conduct modeling and siting study for SW-1



RFP Process and Consultant Selection

RFP process

- Request For Proposals was advertised June 10, 2024
- 2 qualified proposals were received

Staff from multiple divisions reviewed the proposals

- Montrose Environmental, Inc. was the highest scoring proposal
- Responsive to city needs, proposal team has quality water resources experience and project references
- Not to exceed amount of $448,788

Recommendation

It is recommended by the Contract Review Subcommittee and Santa Rosa Water that the Board of Public Utilities, by motion, approve a Professional Services Agreement with Montrose Environmental Solutions to provide California Environmental Quality Act Compliance Technical Services for the Santa Rosa Water Supply Alternatives Plan in the amount not to exceed $448,788.

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