

OUR WATER FUTURE

Water Supply Alternatives Plan

Subregional TAC

October 13, 2022

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Senior Water Resources Planner

Water Supply Alternatives Plan

Purpose

Enhance Santa Rosa's water supply resiliency and reliability to reduce risk of shortages due to emergencies and droughts.

Approach

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



Water Supply Portfolio

Normal Water Years (average rainfall)

29,100 AFY Sonoma Water

2,300 AFY City Wells (Farmers Ln)

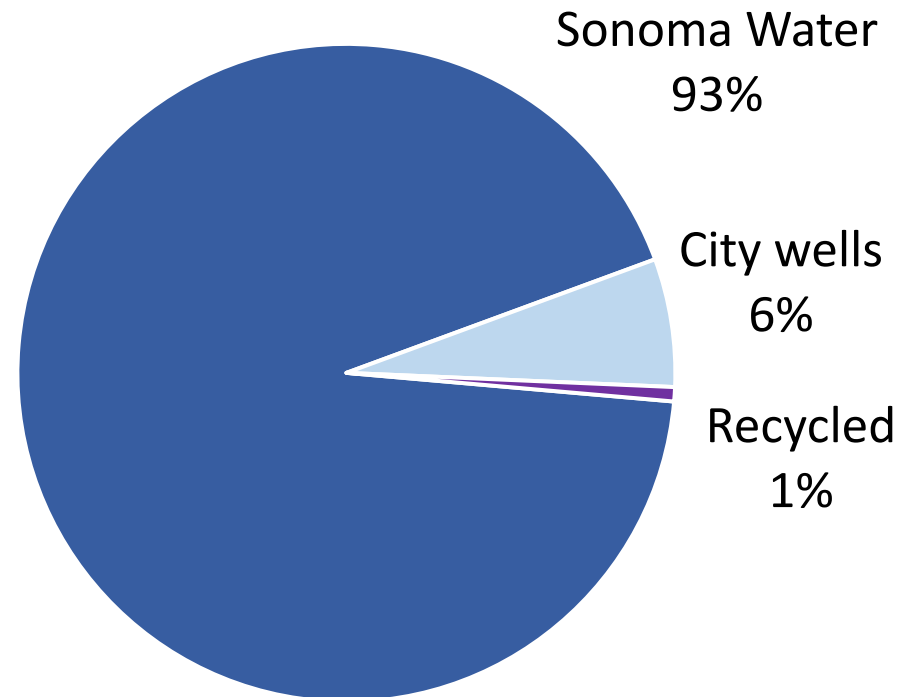
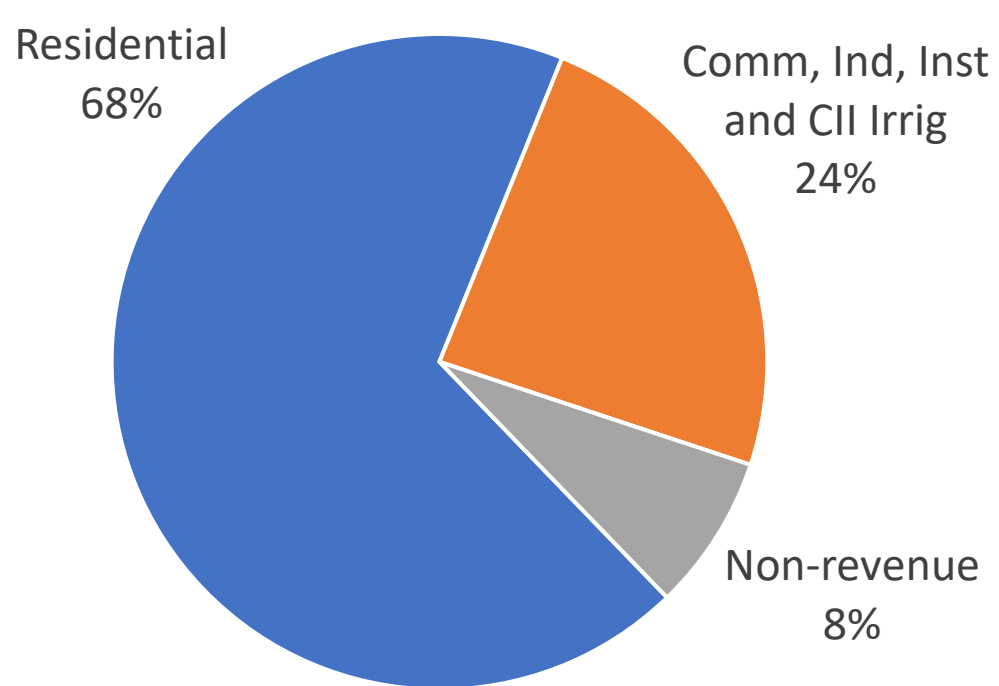
140 AFY Regional Recycled Water

31,540 AFY Total (10.3 billion gallons)

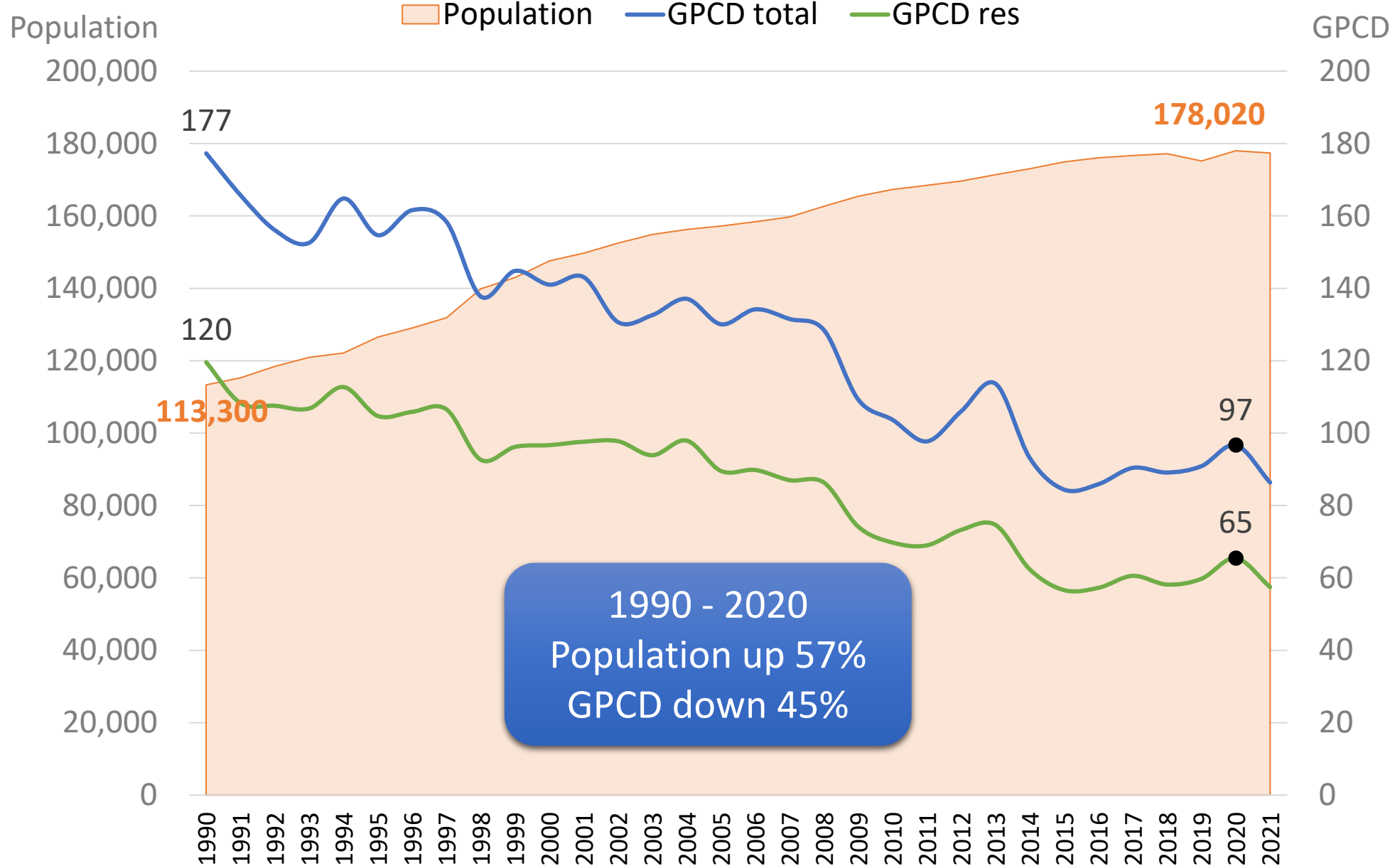


SANTA ROSA 2020

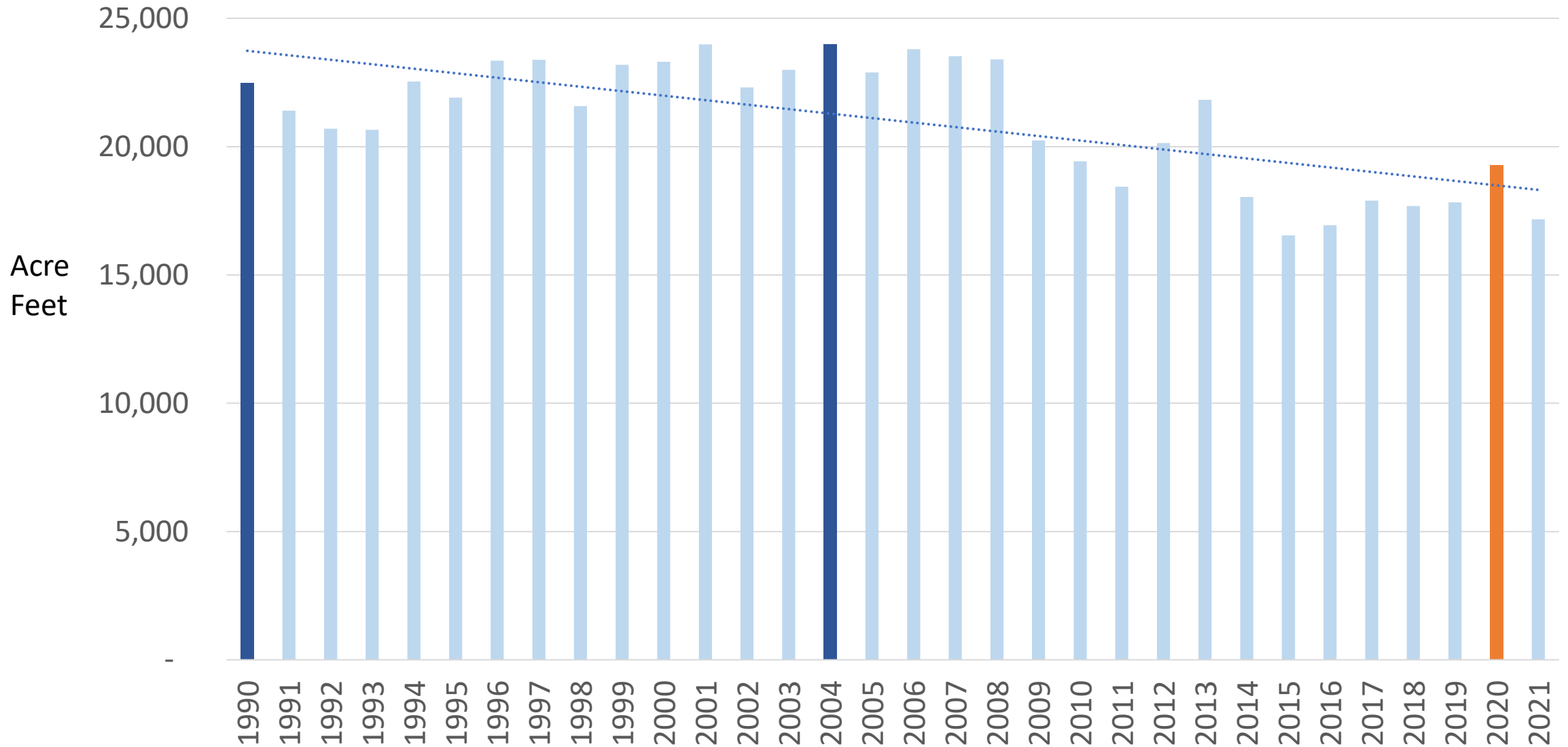
19,387 Acre Feet (6.3 Billion Gallons)



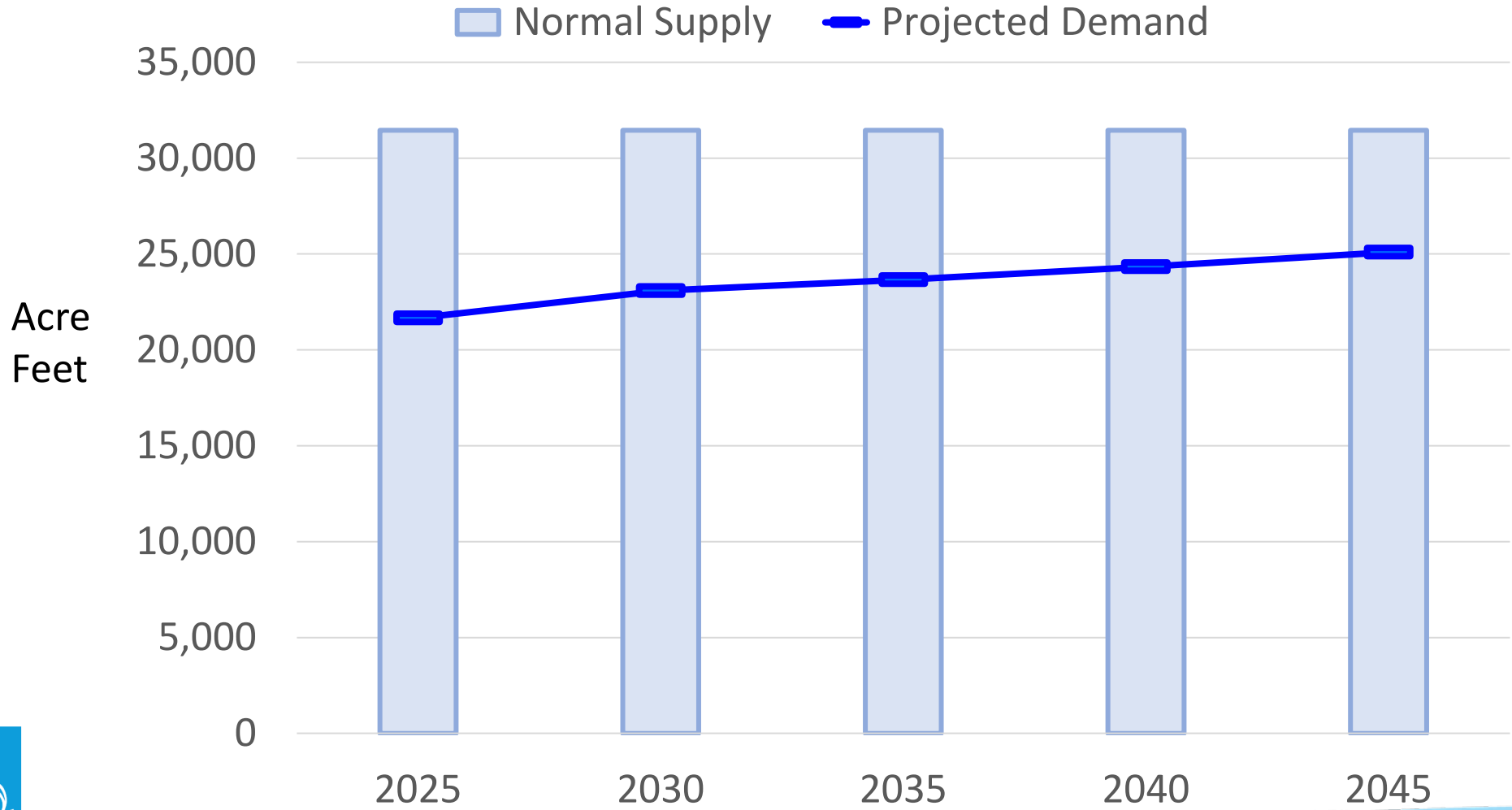
Santa Rosa has improved water use efficiency.



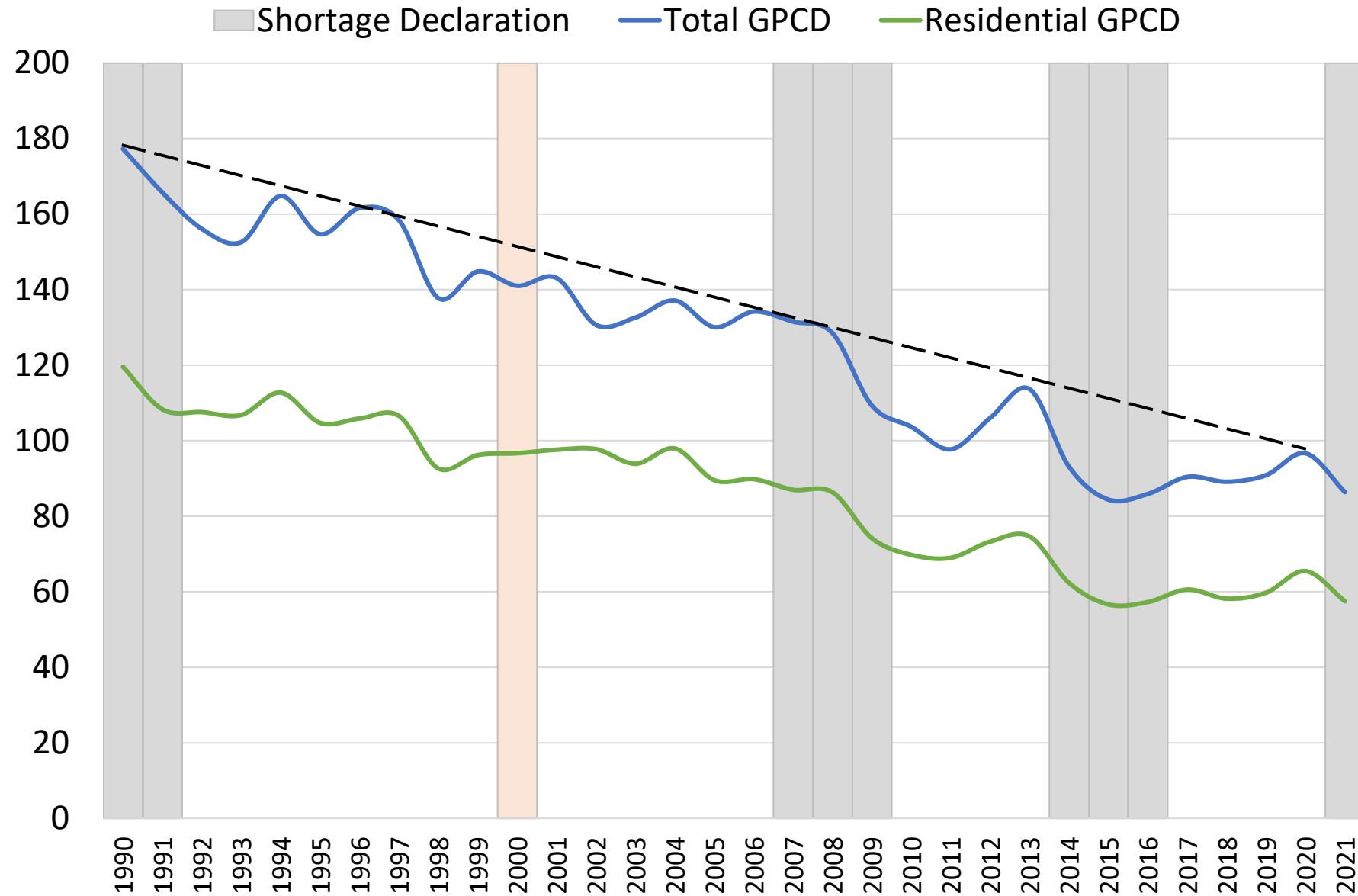
Santa Rosa total water consumption has decreased.
2020 use was 14% less than 1990 and 20% less than 2004.



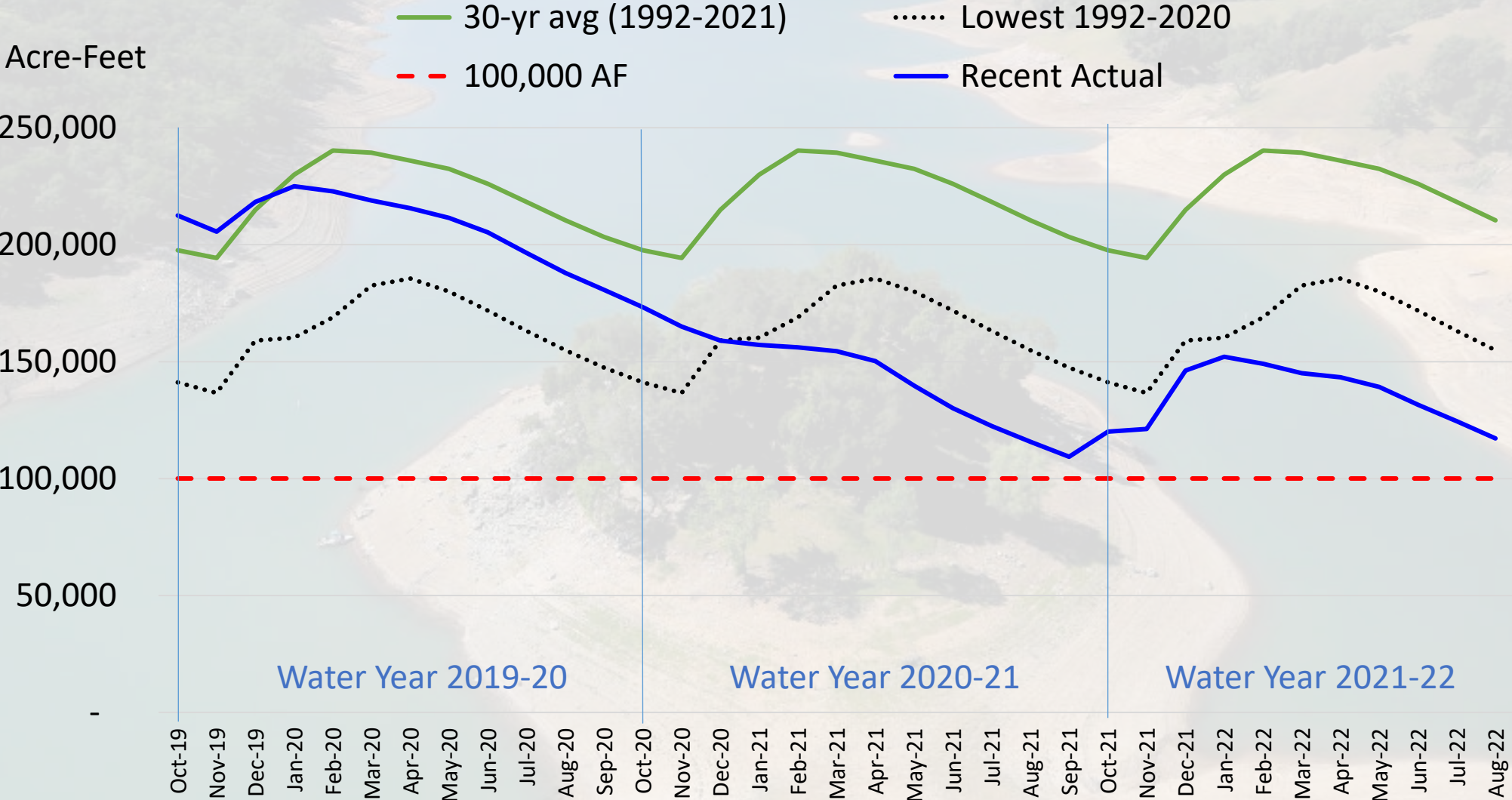
Water supply in average rainfall years meets Projected Demand through 2045.



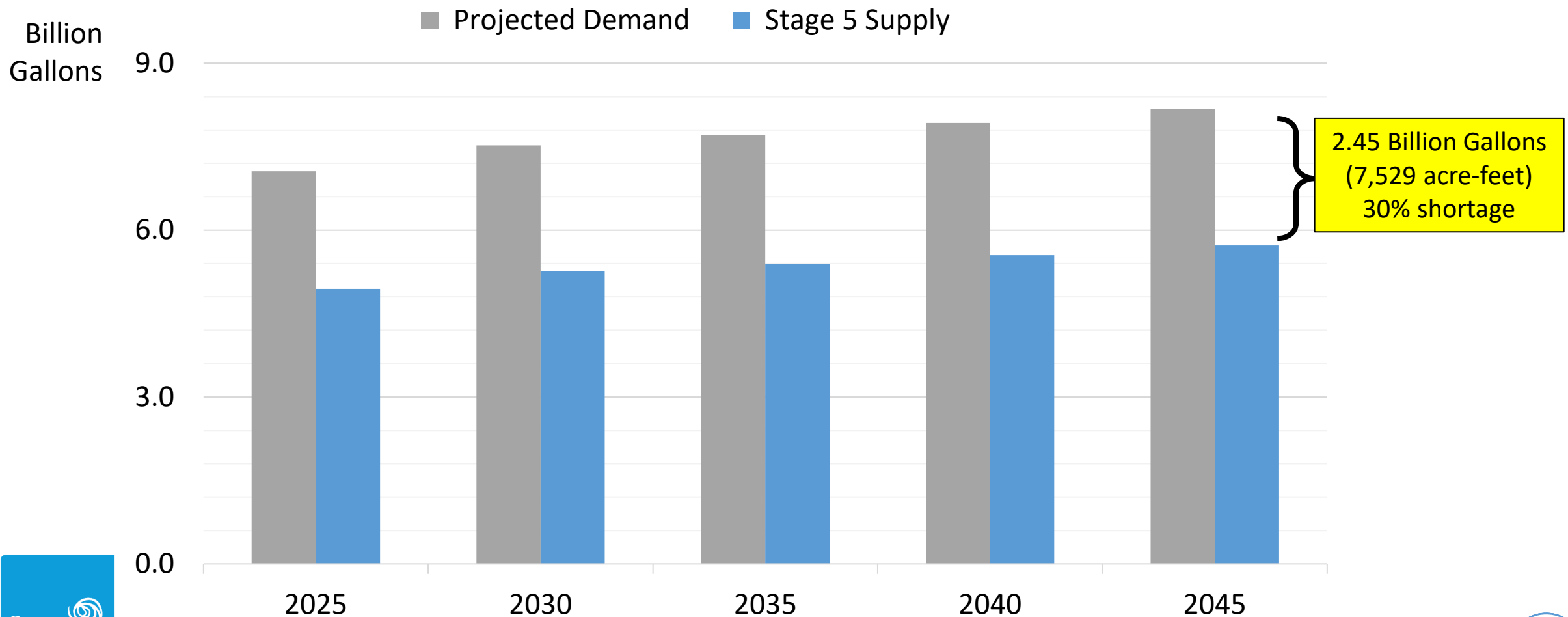
Demand hardening is here.



Lake Sonoma Water Supply Storage



Severe shortage (30% or greater) requires water rationing from existing customers and water offsets (net zero demand) from new development.



Existing Local Supply Capacity

Potable wells for drinking water

Recycled water for urban landscapes

Current capacity (five-year averages)

- 1,382 acre-feet per year (AFY)
 - 7.8% of average annual demand
- 2.75 million gallons per day (MGD)
 - 12.5% of average peak day



Initial Goals

Analysis needed to establish feasible goals for annual (AFY) and peak day production (MGD).

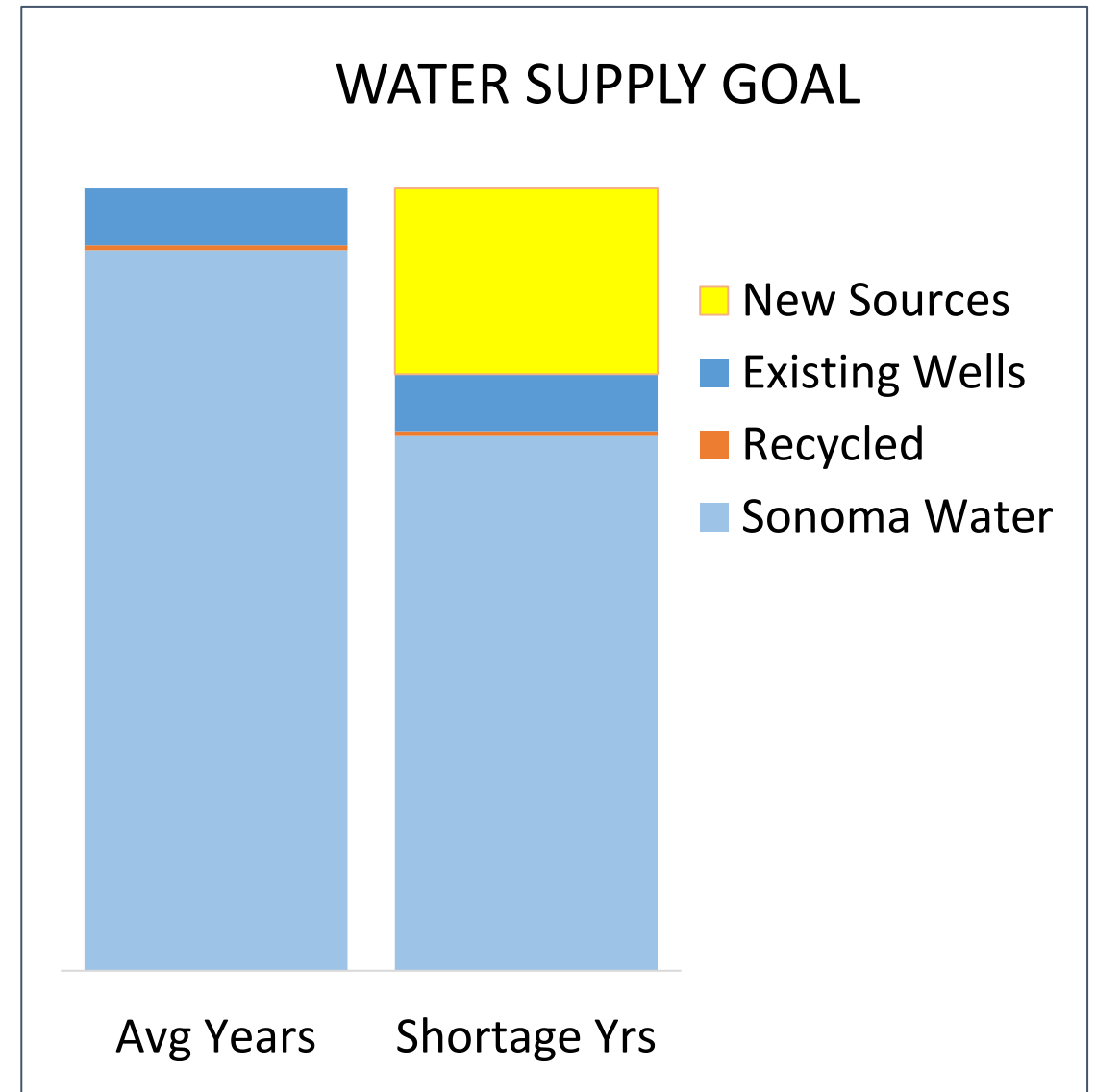
Key drivers:

- Reduce risk of 30% or greater shortages.
- Increase ability to meet peak demand locally.

Initial Goals to be refined with input:

Achieve capacity to locally produce:

- 30% (7,500 AFY) of 2045 annual demand
- 40% (13 MGD) of 2045 average peak day





Existing Water Plans

- Urban Water Management Plan
- Water Shortage Contingency Plan
- Groundwater Master Plan
- Incremental Recycled Water Program Master Plan
- Santa Rosa Plain Groundwater Sustainability Plan
- Sonoma Water Resiliency Study

Water Supply Alternatives Plan Requested Scope of Work

ENGAGE STAKEHOLDERS

- Hold working sessions with Water Team, Stakeholder Group, public, and BPU.

SET OBJECTIVES

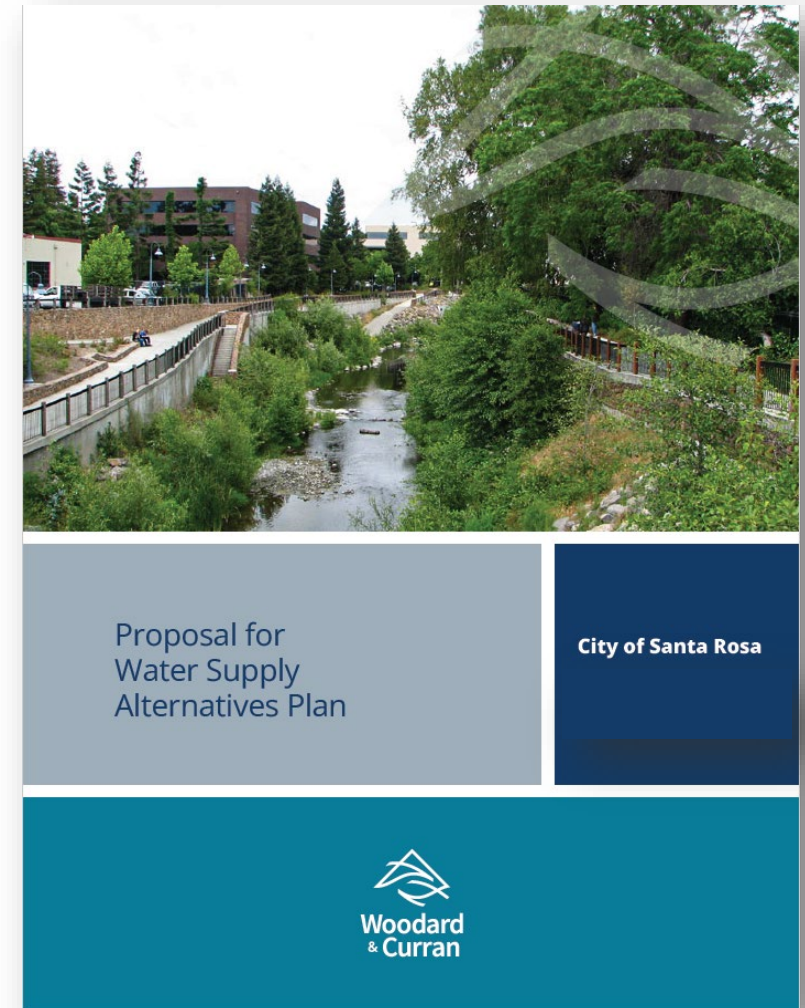
- Set water supply goals, identify potential water supply options, establish criteria and study methods.

STUDY SUPPLY OPTIONS

- Study feasibility of potential water supply options.
- Develop and assess portfolios of feasible options.

DEVELOP A PLAN

- Develop long-term plan for achieving supply goals.





Potential Sources

Aquifer Storage
& Recovery

Desalination

Groundwater

Potable
reuse

Projects
with local
agencies

Stormwater

Surface
water

Other?

Timeline

May-Aug 2022

- Solicited proposals, selected firm, and awarded contract.

Sep 2022- Dec 2022

- Launch project. Hold working sessions to refine water supply goals, list of supply options, and study methods.

Jan-Jun 2023

- Study potential water supplies and study criteria & methods.
- Develop portfolios (mixes) of options to achieve goals.
- Hold working sessions and refine as needed.

Jul-Oct

- Draft plan. Hold working sessions. Finalize plan.

Timeline

MEETINGS	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	
Water Team	WT		WT					WT	WT	WT				
Stakeholder Group		SG	SG					SG		SG				
Community	Com			Com				Com			Com			
BPU			BPU						BPU			BPU	BPU	
Council												CC	CC	
KEY DELIVERABLES	1. Supply Goals 2. Supply Options 3. Study criteria & methods			1. Feasibility study report 2. Synopsis of portfolios						1. Working draft Plan 2. Admin draft Plan 3. Final Plan				

Water Team

Subject matter expertise

Five working sessions

Review of draft documents

- Director of Water
- Deputy Directors & Staff
 - ✓ Engineering Services
 - ✓ Environmental Services
 - ✓ Local Operations
 - ✓ Regional Operations
 - ✓ Water Resources



Community Meetings

- To educate the community and invite their questions, comments, and suggestions
- Four meetings (Oct, Jan, May, Aug)
- Live Spanish interpretation
- 1st meeting: Oct 26th from 5-7 p.m., via Zoom
 - Background info, project purpose & approach, draft water supply goals, proposed supply options to be studied, and criteria for studying the options.



More information & registration link
srcity.org/OurWaterFuture



OUR FUTURE IN EVERY DROP



**Exploring
Opportunities for
Our Water Future**

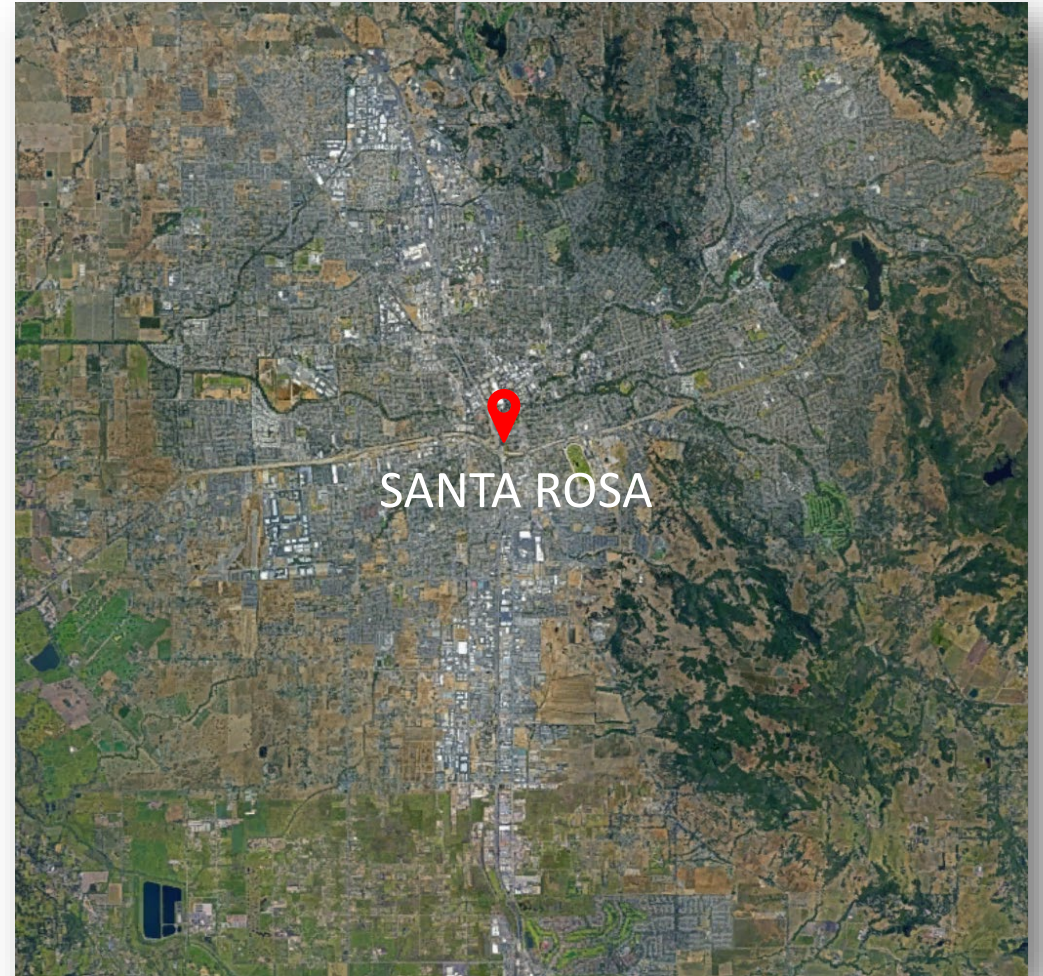
Stakeholder Group

Seeking representative from Sub TAC

- Attend 4 meetings (Nov, Dec, May, Jul)
- Review/comment on draft reports, plans

Also inviting representatives from

- Recycled water users
- Environmental & climate organizations
- Business & economic organizations
- Community organizations
- Local resource agencies



QUESTIONS