OUR WATER FUTURE

Water Supply Alternatives Plan

Subregional TAC
October 13, 2022

Presented by Colin Close
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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)

- Residential: 68%
- Comm, Ind, Inst and CII Irrig: 24%
- Non-revenue: 8%

Sonoma Water: 93%
City wells: 6%
Recycled: 1%
Santa Rosa has improved water use efficiency.

1990 - 2020
Population up 57%
GPCD down 45%
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.
Severe shortage (30% or greater) requires water rationing from existing customers and water offsets (net zero demand) from new development.

![Projected Demand vs Stage 5 Supply graph]

- **2.45 Billion Gallons** (7,529 acre-feet) 30% shortage

- **Projected Demand**
- **Stage 5 Supply**
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

![WATER SUPPLY GOAL](chart.png)

- New Sources
- Existing Wells
- Recycled
- Sonoma Water

Avg Years | Shortage Yrs
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

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| KEY DELIVERABLES  | 1. Supply Goals | 1. Feasibility study report | 1. Working draft Plan |
|                   | 2. Supply Options | 2. Synopsis of portfolios | 2. Admin draft Plan |
|                   | 3. Study criteria & methods | 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
- 1\textsuperscript{st} meeting: Oct 26\textsuperscript{th} 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](srcity.org/OurWaterFuture)
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