Welcome
The meeting will begin at 5:00 p.m.

OUR WATER FUTURE
Water Supply Alternatives Plan
srcity.org/OurWaterFuture

Community Workshop #2
January 25, 2023
OUR WATER FUTURE

Water Supply Alternatives Plan

Welcome

AGENDA

- Background Information
- Project Update
- Study Approach
- Questions & Answers
- Next Steps

Exploring Opportunities for Our Water Future
Our Water Future: Background

Colin Close
Senior Water Resources Planner
Santa Rosa Water
Santa Rosa

- 176,000 residents
- 6.3 billion gallons of water/year for urban uses (not agriculture)
- 3 water sources
- 23 Reservoirs
- 600 miles of drinking water pipe
- 600 miles of sanitary sewer pipe
- 7 billion gallons of water recycled and used regionally/year
Santa Rosa’s Water Sources
Normal Water Years (average rainfall)

9.48 billion gallons - Sonoma Water
0.75 billion gallons - City Wells
0.05 billion gallons - City Recycled Water
10.28 billion gallons (31,540 acre-feet)

Lake Sonoma
2020 Water Use in Santa Rosa
6.3 billion gallons (19,387 acre-feet)

WATER USE
- Residential: 68%
- Commercial, Institutional, Industrial, and CII Irrig: 24%
- Non-revenue: 8%

WATER SOURCES
- Sonoma Water: 93%
- City wells: 6%
- Recycled: 1%
Santa Rosa’s total water consumption has decreased.
2020 water use was 14% less than 1990 and 20% less than 2004.

Water consumption has decreased even as population increased.
In average rainfall years, water supply meets the needs of our growing community through 2045 and beyond.

What about years when there is a drought?

Lake Sonoma
Lake Sonoma Water Supply Storage

- 30-yr avg (1992-2021)
- Lowest 1992-2020
- 100,000 AF
- Recent Actual

Acre-Feet

Water Year 2019-20 Water Year 2020-21 Water Year 2021-22
Severe shortages (30% or greater) would occur if there was approximately one year or less of water supply in Lake Sonoma.
Water Supply Alternatives Plan

Purpose
Improve water supply reliability to address severe droughts and emergencies and prepare for climate change impacts.

Approach
Evaluate possible new water supply options and develop a plan for increasing resiliency.
Questions the Project Will Address

- How much new water supply is appropriate 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 help us meet the local water supply goals?
- What is the most reasonable path forward?
Project Overview

ENGAGE STAKEHOLDERS
• Get input from a wide range of stakeholders, including our community.

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.
Project Update

Jen Kidson

Project Water Resources Planner

Woodard & Curran
We are here! Beginning feasibility analysis.
## Project Work Update

| Water Team | • 2 working sessions.  
|            | • Input on goals, supply options, and criteria.  
|            | • Reached consensus on study proposal to move forward. |
| Community  | • 1\textsuperscript{st} community webinar (10/25). Input on goals, supply options, and criteria via poll questions and Q&A session during webinar. |
| Stakeholder Group | • 2 working sessions.  
|              | • Input on goals, supply options, and criteria through interactive exercises and homework. |
| Board of Public Utilities | • 1\textsuperscript{st} study session.  
|                     | • Input on study proposal. |
| Consultant Team | • Supported Water Team, Stakeholder Group, and Community meetings.  
|                  | • Prepared study proposal for Water Team and Stakeholder Group and incorporated input. |
Input Received to Date

**Input received from:**
- Water Team
- Stakeholder Group
- Community
- Board of Public Utilities

**Key themes from input:**
- Equity
- Cost-effectiveness of supply options
- Community impacts (e.g., level of conservation required, impacts on rates)
- Desire for greater independence and diversification
Water Supply Goal

Jen Kidson
Project Water Resources Planner
Woodard & Curran
Water Supply Resiliency Goal

Diversify and increase city supplies to reduce dependence on Sonoma Water, particularly during Sonoma Water supply shortages or disruption in delivery.

Meet 30% of city’s water demand with city supplies to mitigate impacts of Sonoma Water supply shortages.

What would this goal provide during....?

- **Drought**: Reduce impact of droughts by providing up to 30% of demand with city supplies (about 7,500 acre-feet per year in 2045)
- **Natural Disasters** (shorter-term disruption): Provide about half of normal indoor water use (about 9 million gallons per day).
- **Peak Day Demand**: Provide 30% of peak month average day demand for potable water (9 million gallons per day in 2045)
Rationale for Goal

- Specific enough to support meaningful feasibility analysis.
- Increases city supply resiliency and reduces demand on Sonoma Water.
- Would mitigate interruptions in Sonoma Water service.
- Considers both annual and daily demands.
- Could be achieved over time with a mix of supplies.
- Percentage-based goal allows flexibility.
- Integrates input from Water Team, Community, and Stakeholder Group.
Questions & Answers

• Zoom participants – click “Raise Hand”

• Phone participants – Press *9
Water Supply Options

Jen Kidson
Project Water Resources Planner
Woodard & Curran
Supply Options for Study

**Study will include**

- Description of source
- Potential supply
  - Acre-feet per year (AFY)
  - Million gallons per day (MGD)
- Limiting factors for supply
- Proposed/likely location
- Components to be constructed
- Considerations (e.g., permitting)
Water Supply Options for Study

Initial List of Options to Undergo Screening Analysis

**Groundwater**
- Add groundwater extraction wells
- Convert emergency wells to production
- Add Aquifer Storage and Recovery wells
- Regional groundwater extraction wells
- Regional Aquifer Storage and Recovery

**Nonpotable Recycled**
- Expand nonpotable recycled water service

**Desalination**
- Brackish desalination (likely Regional)
- Ocean desalination (Santa Rosa or Regional)

**Surface/Stormwater**
- Capture excess winter flows from creek(s), Laguna de Santa Rosa, Sonoma Water/Russian River, other
  - Inject and store in aquifer for later potable use
  - Store in enlarged Lake Ralphine (or alt) and construct treatment plant for later potable use

**Purified Recycled Water**
- Produce at Laguna Treatment Plant (LTP) for direct use
- Produce at a satellite site for direct use
- Produce at LTP or satellite for indirect use
  - Inject into groundwater via ASR wells
  - Add to Lake Ralphine or alternate
  - Add to Russian River, Lake Sonoma, or alt.
- Regional purified recycled water

**Efficiency Programs to Reduce Demand**
- Add aggressive incentives for efficiency programs to reduce demand (continue existing programs)
Rationale for Supply Options

- Diverse options.
- City and Regional projects.
- Includes expanded efficiency incentives.
- Integrates input from Water Team, Community, and Stakeholder Group.
Questions & Answers

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• Phone participants – Press *9
PUBLIC COMMENT
Evaluation Criteria

Jen Kidson
Project Water Resources Planner
Woodard & Curran
Evaluation Criteria

- Cost effectiveness
- Scalability
- Resiliency
- Equity
- Environmental performance
- Legal, permitting, and regulatory
- City control and interagency coordination
- Multi-benefit
Rationale for Criteria

- Captures key considerations that differentiate projects.
- Consolidates criteria where appropriate.
- Removes criteria that would pose a fatal flaw if not met.
- Removes criteria that did not need to stand alone (e.g., different types of costs).
- Integrates input from Water Team, Community, and Stakeholder Group.
Questions & Answers

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- Phone participants – Press *9
Study Methodology

Jen Kidson
Project Water Resources Planner
Woodard & Curran
Study Methodology

- Initial List of Supply Options
- Screening Analysis
- Short List of Supply Options
- Detailed Analysis

- Cost-effectiveness
- Scalability (volume)

Score each option using complete list of criteria and criteria weights

Clearly document why options were removed from list
## Study Methodology

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Next Steps

Jen Kidson
Project Water Resources Planner
Woodard & Curran
## Project Timeline and Milestones

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Community Meetings

• To educate the community and invite their questions, comments, and suggestions
• Four meetings (Oct 26, Jan 25, & May, Aug)
• Live Spanish interpretation
• 3rd meeting: May via Zoom
  • Stay tuned for dates!

More information & registration link srcity.org/OurWaterFuture
Questions & Answers

• Zoom participants – click “Raise Hand”

• Phone participants – Press *9
Additional Opportunities for Input

Colin Close
Senior Water Resources Planner
Santa Rosa Water
Public Input

Meetings

Community Meetings (Zoom)
• May & Aug 2023 – stay tuned!

Board of Public Utilities (Hybrid)
• July, Sep, & Oct 2023 – stay tuned!

City Council (Hybrid)
• Sep & Oct 2023 – stay tuned!

Written comments

Email
• WaterResources@ssrcity.org

Postal Service
• Santa Rosa Water
  Attn: Colin Close
  69 Stony Circle
  Santa Rosa, CA 95401
Thank you!

OUR WATER FUTURE
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