# Santa Rosa Water 2022 Infrastructure Report Card

Board of Public Utilities March 16, 2023

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### Overview

- Purpose
- Categories
- Process
- Criteria
- Report Card
- Recommendations to Raise the Grade













## We are stewards of infrastructure with the responsibility of protecting:

- Public health
- The environment
- Economic livelihood



### **SERVING OUR COMMUNITY**

Santa Rosa Water protects public health and the environment by providing a safe and reliable water supply, wastewater collection and treatment, beneficial reuse of recycled water and biosolids, and storm water management.

By providing these critical water, sewer, and storm water services to households, businesses, schools, hospitals, and others, Santa Rosa Water is achieving its overarching mission.

For more information about Santa Rosa Water, please visit srcity.org/water.

### REPORT CARD GRADING

For the 2022 Water Infrastructure Report, the local and regional water systems were graded following the on the American Society of Civil Engineers (ASCE) infrastructure report card grading criteria. ASCE assigns letter grades based on Capacity, Condition, Funding, Operability, and Resilience. 'Capacity' is a system's ability to meet current and future demands, 'Condition' refers to an asset's general condition and reliability. 'Funding' refers to how adequately financial investment is able to address the operations, maintenance, and replacement of assets. 'Operability' is the ease with which a system can be maintained proactively and sustainably. Resilience is a system's ability to resist and recover from natural disasters and other impactful events. Grades for each of these criteria were combined, resulting in a single, overall grade for each of Santa Rosa's three water systems. See Appendix A for more details about the ASCE grading system.

### **OUR MISSION**

Protecting public health
by sustaining our water resources,
infrastructure, and the
environment

To accomplish our mission, we provide essential services that significantly benefit our community.

- Supply manage and plan long term water supply
- Distribution deliver high quality water to Santa Rosa
- Treatment collect and treat wastewater
- Reuse beneficially reuse recycled water and biosolids

OUR FUTURE IN EVERY DROP

# Infrastructure Report Card Purpose

High level assessment to inform public and guide decision makers

- Drinking Water System
- Wastewater System (Local Sewer)
- Regional Water Reuse System

2022 Santa Rosa Water Infrastructure Report 1





## Drinking Water Infrastructure

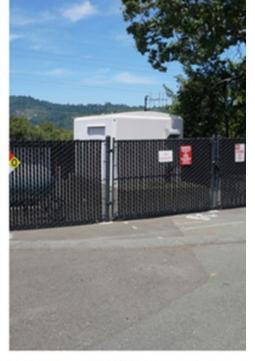






- 53,100 services
- 627 miles of pipe
- 20 pump stations
- 6,500 fire hydrants
- 29,300 valves
- 51,500 meters
- 22 reservoirs









# Wastewater Infrastructure (Local Sewer)

- 49,000 services
- 600 miles of main
- 12,300 manholes
- 17 pump stations











## Regional Water Reuse Infrastructure

- Treatment facilities
- Recycled water distribution system:
  - Geysers pipeline
  - Agriculture reclamation system
  - Seasonal storage ponds
- Biosolids facilities



## Infrastructure Report Card Process

- Interviews
- Document and data review
- Financial analysis



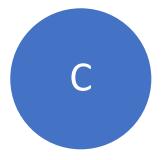
### **GRADING SYSTEM**



**EXCEPTIONAL** FIT FOR FUTURE



**GOOD**ADEQUATE
FOR NOW



MEDIOCRE REQUIRES ATTENTION



**POOR** AT RISK



FAILING/CRITICAL
UNIFT FOR
PUPROSE



## ASCE AMERICAN SOCIETY Criteria

| Capacity             | Does the infrastructure meet current and future demands?  |  |  |
|----------------------|---|--|--|
| Condition            | What is the existing and near-future physical condition?  |  |  |
| Funding level        | How does funding compare to needed improvements?  |  |  |
| Ops & Maint.         | Ability to operate & maintain in compliance?  |  |  |
| <b>Public Safety</b> | Public's safety jeopardized? Potential consequences of failure?   |  |  |
| Resilience           | Ability to prevent or protect against multi-hazard threat, events? Ability to quickly recover and reconstitute critical services? |  |  |
| Innovation           | Techniques, materials, technologies being implemented?  |  |  |



### Santa Rosa Water Infrastructure Grades

| System         | 2022 Grade | 2017 Grade |
|----------------|------------|------------|
| WATER          | В          | В          |
| WASTEWATER     | C+         | B-         |
| REGIONAL REUSE | D+         | C-         |



## How the Grades Match Up

| SYSTEM         | AMERICA<br>2021 | CALIFORNIA<br>2019 | SR WATER<br>2022 |
|----------------|-----------------|--------------------|------------------|
| WATER          | C-              | С                  | В                |
| WASTEWATER     | D+              | C+                 | C+               |
| REGIONAL REUSE | -               | -                  | D+               |



# Recommendations to Raise the Grade: Water System – Grade B

Continuing fire flow improvements

 Replace pipe segments that cross the Rodgers Creek fault with an earthquake resistant design and materials



# Recommendations to Raise the Grade: Wastewater System – Grade C+

Hardening pump stations located in wildland urban interface areas

Continuing to rehabilitate aging trunk lines

 Replace trunk and collection pipeline segments that cross the Rodgers Creek fault with an earthquake resistant design and materials



# Recommendations to Raise the Grade: Regional Reuse System – Grade D+

• Increase capital improvement program staffing levels to implement projects

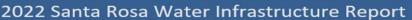
 Increase capital improvement funding levels to meet current and anticipated needs











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