

## Sonoma Water

Clean. Reliable. Essential. Every Day.

#### Sonoma Water Tank Maintenance Program

Scott Carter Water Agency Engineer IV





Sonoma Water owns and operates 18 water storage tanks that are critical component of the water transmission system

- Clean drinking water to approximately 600,000 residents in nine major cities and water districts within Sonoma and Marin counties:
- 128.8 million gallons of storage capacity
- Operational storage that keeps the water system operating during power outages, and provides equalization volume to meet peak demands





- Superior Tank was chosen by competitive RFP selection process
- \$8.2 million cost funded from the Water Transmission budget
- August 30, 2032 Agreement end date
  - Can be extended for up to 2 additional years
  - o Sonoma Water can cancel Agreement at any time without cause



## Purpose of Agreement

- Assess condition of the remaining 13 tanks
- Clean the tanks
- Provide routine maintenance and perform minor repairs
- Provide on-call support



## Phase 1 - Cleaning and Condition Assessment of 13 tanks

- Drain tank
- Erect scaffolding inside tank
- Chemical wash, clean, and rinse the entire tank interior
- Test coatings (interior and exterior tank surfaces)
- Magnetic flux leakage survey (tank interior floor)
- Structural Engineer inspect entire tank interior





## Phase 2 - Long-Term Maintenance all 18 tanks

#### Annual Visual Inspections:

- Inspect coatings (interior and exterior tank surfaces)
- Inspect tank structure and foundation
- Inspect and calibrate equipment (cathodic protection, liquid level indicators, etc.)
- Inspect the site perimeter
- Inspect condition of tank openings (vents, screens, etc.)
- Inspect safety items (ladders, platforms, railings, fall protection, etc.) Prepare report of work

#### Tank Cleaning/Inspections (approx. 5 years after Phase 1 work):

- Drain tank
- Pressure wash tank interior (floor based)
- Inspect tank interior and exterior from accessible areas
- Prepare report of work



# Phase 2 - Long-Term Maintenance all 18 tanks (continued)

#### Maintenance and Repairs (as needed):

- Replace routine maintenance items (screens, gaskets, etc.)
- Touch-up coating defects
- Regulatory and safety upgrades
- Minor repairs
- Prepare report of work

\*Maintenance and Repairs ideally coordinated to occur during the above noted Washout Cleaning/Inspection

#### **Emergency and Non-Critical Services** (as needed):

- Emergency services 24/7
- Non-critical services
- Prepare report of work



### Schedule

	Year 1		Year 2		Year 3		Year 4		Year 5	
Task Schedule	2022	2023	2023	2024	2024	2025	2025	2026	2026	2027
Annadel 1	Enhanced Washout Inspection		Visual Inspection		Visual Inspection		Visual Inspection		Visual Inspection	
Annadel 2	Visual Inspection		Visual Inspection		Visual Inspection		Enhanced Washout Inspection		Visual Inspection	
Cotati 1	None		None		Visual Inspection		Visual Inspection		Visual Inspection	
Cotati 2	Visual Inspection		Visual Inspection		Enhanced Washout Inspection		Visual Inspection		Visual Inspection	
Cotati 3	None		None		None		Visual Inspection		Visual Inspection	
Forestville 1	Visual Inspection		Visual Inspection		Visual Inspection		Visual Inspection		Washout Inspection	
Forestville 2	Visual Inspection		Visual Inspection		Visual Inspection		Visual Inspection		Washout Inspection	





Scott Carter Water Agency Engineer IV Scott.Carter@scwa.ca.gov

