Sonoma Valley Recycled Water



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Agenda

- Overview of the Water Agency
- Approaches to Maximizing Water Supply
- Existing Recycled Water Programs
- Recycled Water Feasibility Studies
- Water Recycling in Sonoma Valley
- Conclusion

Overview of the Sonoma County Water Agency

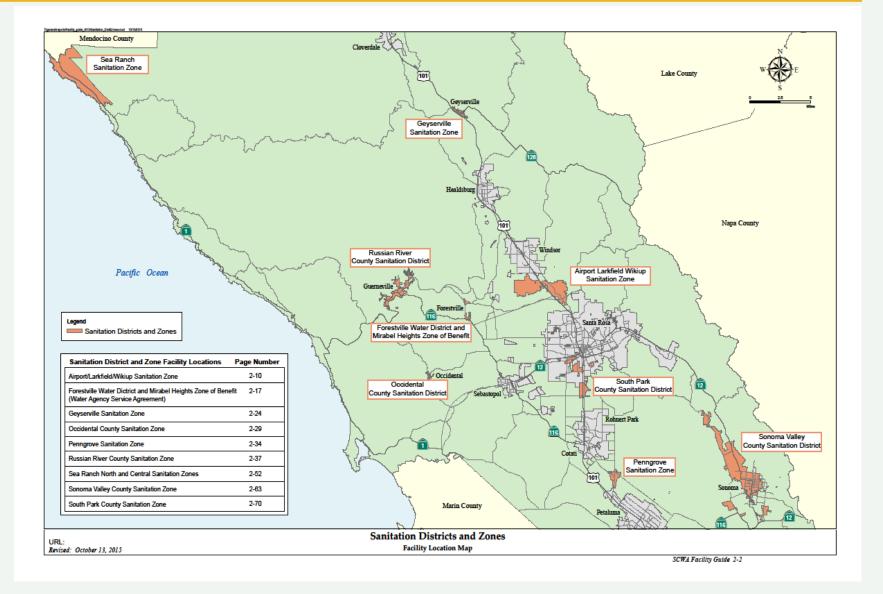
- 219 Employees
- Wholesale Drinking Water Producer for >600,000 People
- Wastewater Treatment Operation of 9 Sanitation Systems.
- Flood Control for Sonoma County

Approach to Water Supply Alternatives

Optimize 4 sources of water

- Maximize recycled water and water conservation
- Support evaluation of local supplies scientific and engineering studies (groundwater and recycled water)
- Pursue stakeholder collaboration and coordination - Pursue State and Federal funding
- Link recycle water use, potable water and groundwater offset
- Storm Water

Map of Sanitation Facilities



Sonoma Valley CSD



Existing Recycled Water Programs







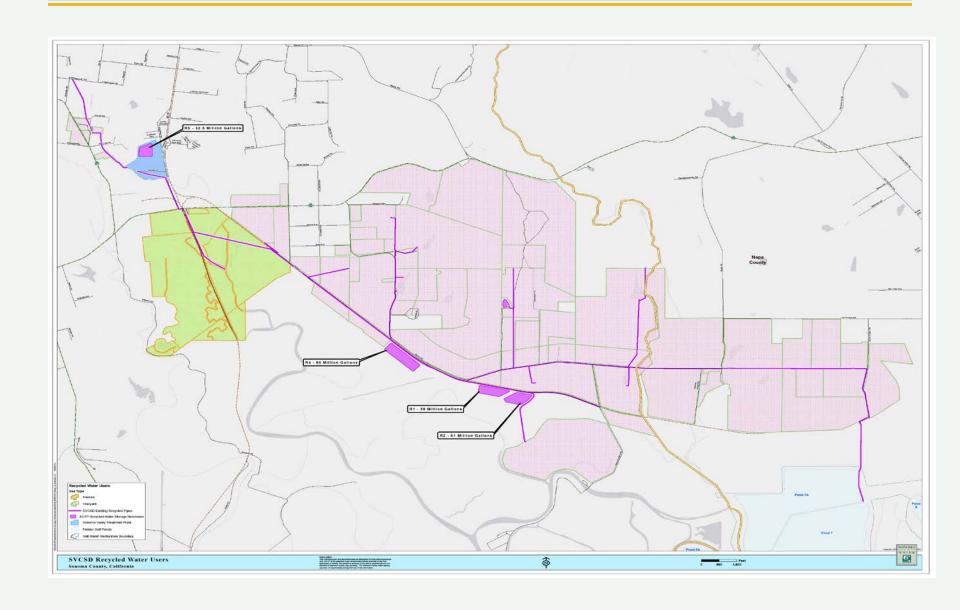


Management Units

- Management Units
- Study by Water Agency staff on Impacts of using recycled water for wetland management



Recycled Water Usage Area



Residential/Truck Fill Stations



Estación de Llenado Residencial de Agua Reciclada del Distrito de Saneamiento **Sonoma Valley County** Que Hace y No hacer con el agua reciclada

EL AGUA RECICLADA NO ES APTA PARA:

2. Cocinar o utilizar en la cocina

3. Bañarse o ducharse

Llenar las piscinas/albercas o spas
 Utilizar en los juguetes de agua para niños
 Conectarla al sistema de plomería de la casa

7. Conectarla a tuberías o los sistemas de riego subterráneo

8. Depositarla en el desagüe de la calle, en el drenaje de lluvia, o en el arroyo

NORMAS DE SALUD Y SEGURIDAD

1. No BEBA el agua reciclada o la utilice para la preparación de alimentos.

- 2. Aplique desinfectante de manos o lávese las manos con agua potable doméstica y jabón después de trabajar con el agua reciclada, especialmente antes de comer o fumar. Tome precauciones para evitar el contacto con comida durante
- El agua reciciada se puede utilizar para cultivar frutas y verduras, sin embargo, recuerde lavar las frutas y verduras con agua potable antes de comerlas o cocinarlas. Todas las herramientas (mangueras, etc.) y los contenedores de almacenamiento que entran en contacto con el agua reciclada solo deben ser utilizados para estar en contacto con el agua reciclada. Nadie debe jugar con el agua reciclada o utilizarla para bañarse. Evite que el agua reciclada rocíe
- fuentes de agua potable o las áreas donde se manejan alimentos. El agua reciclada sólo puede ser utilizada en la dirección indicada en el formulario de solicitud del cliente.
- 5. El agua reciclada no deberá ser almacena en el lugar.
- No sobre llene los recipientes o los camiones.
 Las mangueras y recipientes utilizados para la aplicación de agua reciciada deben ser inspeccionados antes de ser llenados para asegurarse de que están limpios y sin contaminantes, que están en condiciones para ser utilizados, y que no tienen ninguna fuga.

WWW.SONOMACOUNTYWATER.ORG



Historical Recycled Water Usage

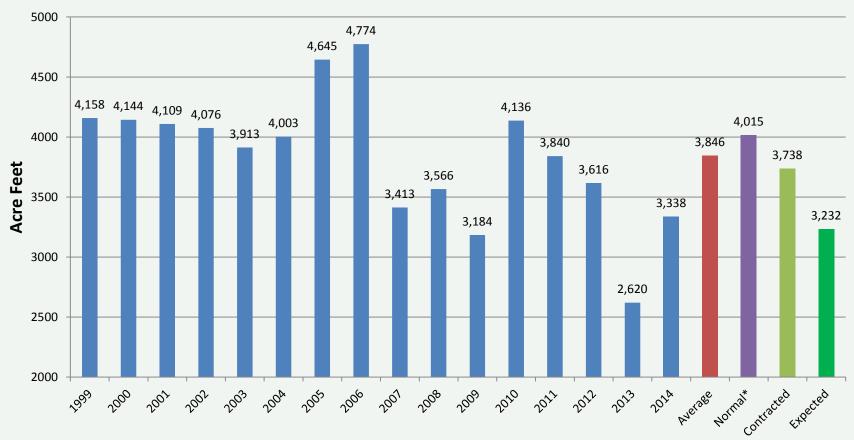
Historical usage (acre feet) Irrigation/Full (May 1 - Oct 31) Off-Season (Nov Season Contract Termination 1 - Apr 30) Date (AF) Contract (AF) 2008 2009 2010 2011 2012 2013 2014 Average 300 20.56 18.15 79.10 8.59 138.82 165.93 Jan-2026 251.96 97.59 May-2022 267 63 239.11 85.61 174.76 149.24 179.29 249.52 310.43 198.28 200 208.46 243.75 148.99 166.58 222.75 304.65 198.26 213.35 Apr-2018 200 N/A Sep-2017 169 147.87 181.38 140.17 49.87 186.19 185.86 191.94 154.75 N/A 100 135.38 188.59 120.00 147.99 100 30.58 25.08 22.27 Jan-2019 25.67 28.32 10.57 21.91 13.76 N/A 50 62 Oct-2024 60 139.24 111.97 105.97 52.42 101.55 167.98 124.31 114.78 0 50 Dec-2014 46.03 12.71 42.25 52.82 33.44 37.45 45 Sep-2027 11.02 16.26 7.57 8.04 10.88 8.33 5.84 9.71 35 103.36 Apr-2018 85.97 66.56 82.39 69.05 76.14 139.06 204.37 Jan-2026 35 50 72.77 58.64 33.25 31.27 61.85 58.99 32.12 49.84 22 Apr-2018 14.13 23.35 17.60 11.66 18.02 22.09 16.06 17.56 10 N/A 55.3 73.75 135.86 104.80 6 N/A Apr-2018 1.85 0.34 1.06 0.18 5.19 6.89 4.09 2.80 Jul-2017 0.000.340.32 0.00 0.00 10.15 4.59 2.57 N/A N/A 0.56 0.56 N/A N/A 1700 167.94 387.13 606.32 18.7 106.9 98.76 98.76 2.70 6.26 1.00 3.32 1197.22 1631.95 1627.91 Total 1627 2110.9 992.34 862.99 812.34 590.73 1262.48

Combine Total

3737.9

Historical Recycled Water Production

SVTP Annual Effluent vs Recycled Water Contracts



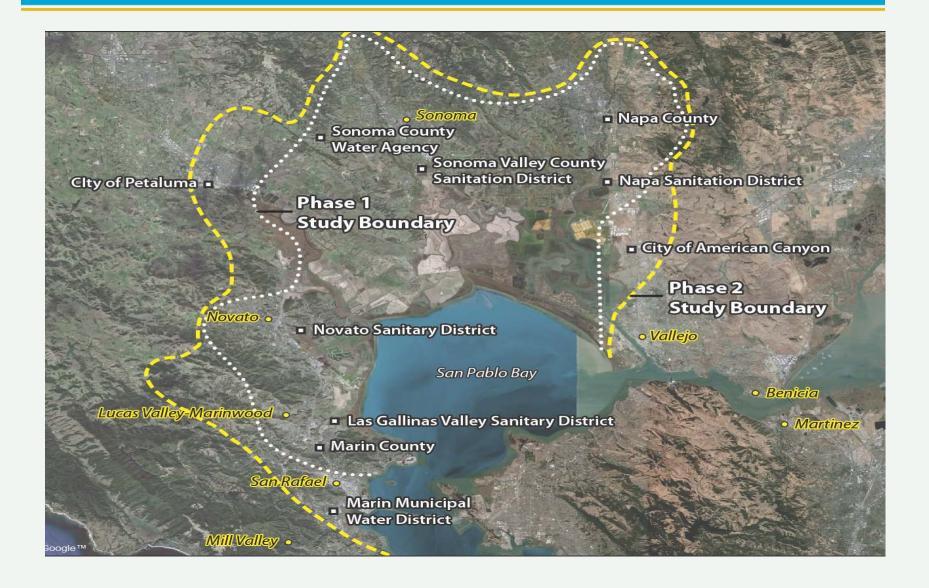
SVTP Calendar Year Effluent

^{* =} Average effluent for normal rainfall years (outlying low flow

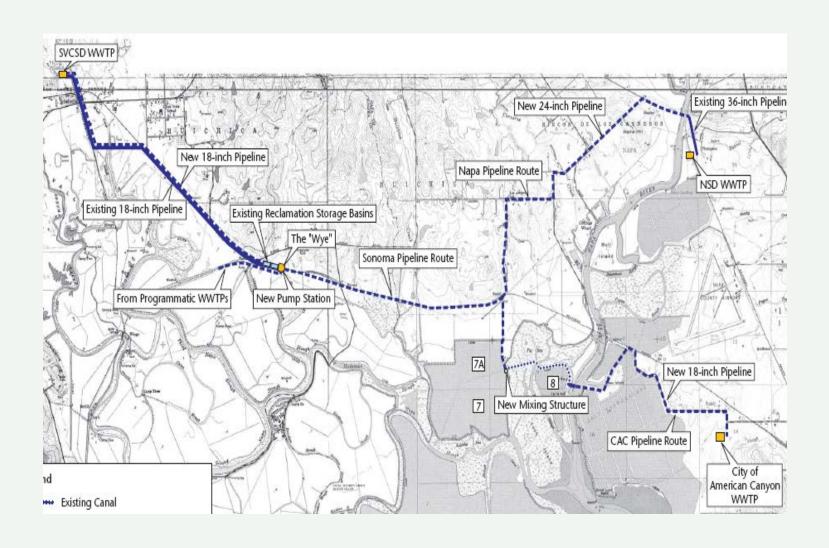
Recycled Water Programs

- Sonoma Valley Recycled Water Project (SVRWP)
- North Bay Water Reuse Program (NBWRP)

North Bay Water Reuse Program



Origin of North Bay Water Reuse Program



NBWRA Achievements to Date

- NBWRA 11 years and counting
- Storage: 100 AF
- New tertiary treatment: 6.5 mgd
- 3,800 AFY for irrigation
- Up to 1,700 AFY for restoration





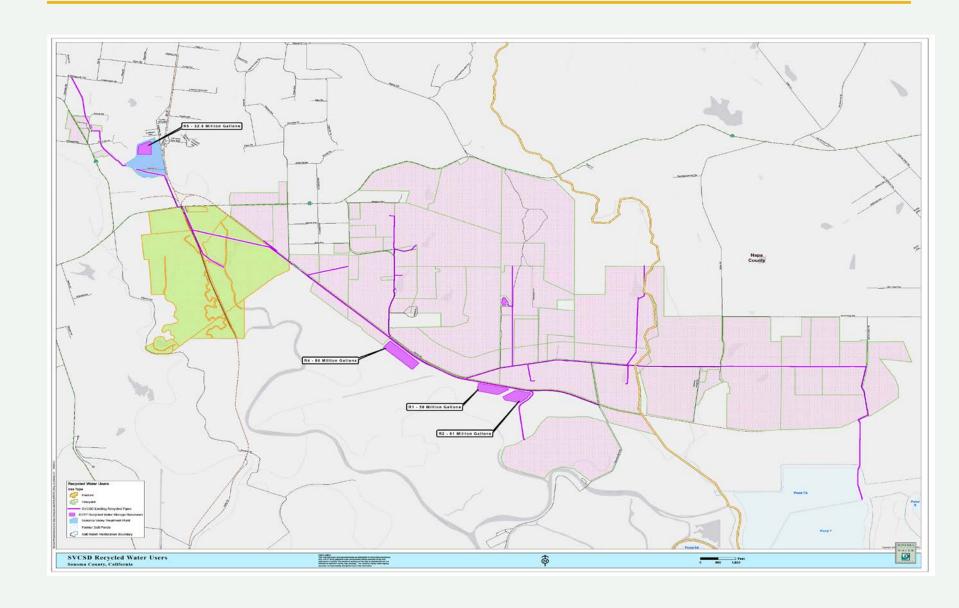
- American Recovery and Reinvestment Act - \$7 million
- Title XVI Funding \$13 million through WaterSMART grant
- Prop 84 Bay Area IRWMP
 Funding
 - over \$6 million
- Local cost share

Napa-Sonoma Salt Marsh Project

- Create a mix of habitats to serve a range of species.
- I. Restore tidal marsh to benefit atrisk and aquatic species
- II. Manage ponds for shorebirds and waterfowl
- Other Project
 Opportunities
- I. Beneficial Use of Recycled Water
- II. Recreational Opportunities

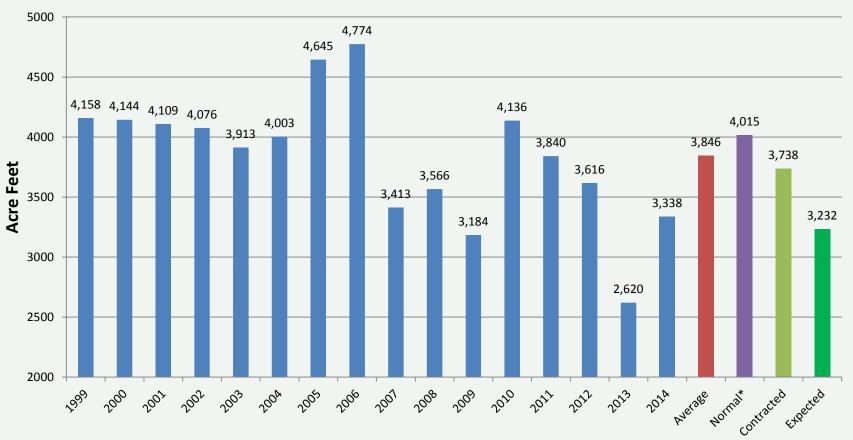


Recycled Water Usage Area



Recycled Water Runoff and Storage Study

SVTP Annual Effluent vs Recycled Water Contracts



SVTP Calendar Year Effluent

^{* =} Average effluent for normal rainfall years (outlying low flow

Ground Water Management Plan

Sonoma Valley Groundwater Management Plan (Released in 2007)

Link:

http://www.scwa.ca.gov/svgroundwater/

Contact Information:

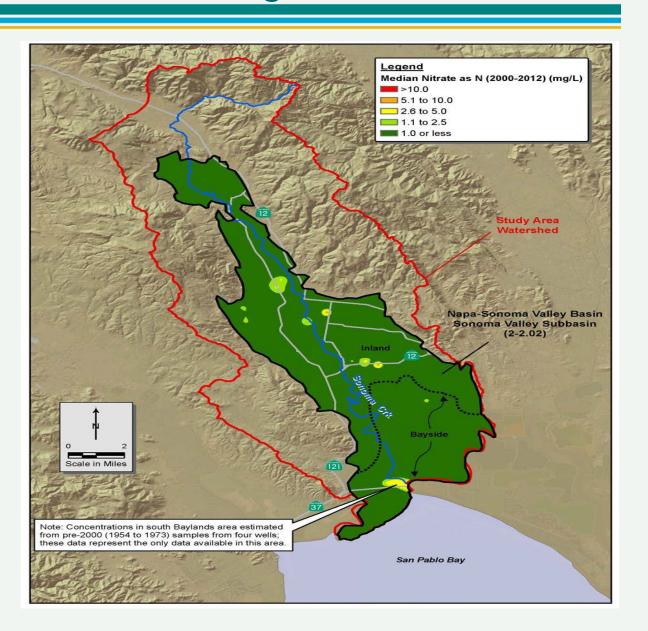
Marcus Trotta Sonoma County Water Agency mtrotta@scwa.ca.gov (707) 547-1978



Salt and Nutrient Management Plan

Sonoma Valley Salt and Nutrient Management Plan

http://www.scwa.ca.gov/ SNMP/



Future Activities

- Recycled Water Workshop (1997)
- Sustainable Groundwater Management Act (SGMA)

Recycled Water: In Sonoma Valley





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