



Winery Wastewater Management Update

Napa Sanitation District
Board of Directors Meeting
October 21, 2020



Strategic Plan – Goal 3E

NapaSan staff will continue to receive winery waste on a limited basis through alternative methods, such as directly into the day storage tank or digester, to study the impacts to treatment. Successful methods will be evaluated for applicability at a larger scale, while including analysis regarding service costs and the economic market.



Options for Wineries

- In NapaSan's service area, customers can connect to sewer system and discharge either untreated or pre-treated wastewater
- Truck wastewater to NapaSan for disposal
- Truck wastewater to EBMUD for disposal
- Truck wastewater to Napa Recycling and Waste Services for disposal



Wastewater Strengths

Waste Stream	Average BOD
Domestic Waste	300 mg/L
Winery Waste	7,000 mg/L
FOG	15,000+ mg/L

Winery waste is strong enough to possibly overwhelm the aeration basins, but not as strong as FOG, which can be put in the digester to produce beneficial gas.



Truck to Day Tank

- Pilot program to test impacts/benefits of adding winery wastewater to NapaSan's day tank
- Pilot program transitioned to practice
 - 30,000 gal/wk (1.5m gal/yr)
 - \$0.05 per gal



Existing Haulers

	Winery A	Winery B
Within NapaSan sewer service area?	Yes	No
Volume (last 12 months)	73,000 gallons	455,000 gallons



Napa Recycling

- Napa Recycling is taking ~300,000 gal/month
 - 3.6 million gal/year
- \$0.05 per gallon



New Statistics

- 7 million gallons annually from NapaSan's service area
- 25 permitted hold/haul facilities
- 28,000 gallons per working day
- 4.3 trucks per working day



Discharge to NapaSan

- Pay capacity charges
- Pay SSC (cost of treatment)
- Sampling/testing costs
- pH adjustment system (local limits)



Case Study

- Small winery in corporate park in leased space
- 65,000 gallons process wastewater (annually)
- 10 trucks/year
- \$93k in capacity charges
- \$7k per year SSC



Future Steps

- Continue to monitor and evaluate winery waste volumes and coordinate with Napa Recycling.
- Evaluate in Spring 2021 as part of Strategic Plan.



Direction to Staff