Napa Valley Subbasin
Groundwater Pumping Reduction Workplan

Napa County GSA TAG Meeting

Overview

1. GPR Implementation
2. Benefits of Certification Programs
3. Certification Program Presentations Today
    1. California Sustainable Winegrowing Alliance
    2. Napa Green
    3. Fish Friendly Farming
    4. SIP Certified

GROUNDWATER PUMPING REDUCTION WORKPLAN

Groundwater Pumping Reduction

Guiding Framework:

- Focus on voluntary actions that achieve groundwater benefits for the Subbasin
- Assess the costs and benefits of alternative actions and focus on those that are most cost-effective
- **Leverage existing programs and opportunities to generate value from a suite of voluntary actions**
- Include adaptive management to adjust the program as data and sustainability indicators evolve

Conservation Practices

- Cost, adoption, water saving potential, and economic analysis of alternatives
- Preliminary list of high-priority practices based on Workplan analysis
  - Metering
  - Recycled water
  - Benchmarking
  - Distribution uniformity
  - Plant water and soil moisture monitoring
  - Row orientation
  - WaterSense devices

Table 5-1. Decision Matrix for Adoption of Groundwater Practices

Practice	Estimated Annualized Cost per AF Conserved	Estimated Potential Water Savings (Basin-Wide)	Adoption Timeline	Overall Feasibility
Unit	$/AF	AFY	Years	Ranking
Water Practices for All Water Users				
Recycled Water	$362 - $720	200 - 300	Medium-Term	High
Benchmarking	$100 - $350	300 - 1,100	Medium-Term	High
Vineyard-Specific Water Practices (Established)				
Water Measurement[3]	$250 - $375	250 - 400	Medium-Term	High
Irrigation System Efficiency[2,3]	$2,800 - $9,200	75 - 250	Near-Term	Medium
Distribution Uniformity[1]	$175 - $450	500 - 2,100	Near-Term	High
Plant and Soil Moisture Monitoring[2,3]	$155 - $3,340	1,000 - 2,000	Near-Term	High
High Tech, Low Labor (TDR)	$350 - $1,450			
Medium Tech and Labor (Neutron Probe)	$740 - $3,340			
Low Tech, High Labor (Tensiometers)	$155 - $1,170			
Soil Management (Cover Crop)[3,4]	$5,000 - $18,000	50 - 550	Medium-Term	Low
Canopy Management	$3,500 - $5,000	200 - 300	Near-Term	Medium
Vineyard-Specific Water Practices (New Plantings)				
Row Orientation	No additional cost	200 - 325	Long-Term	High
Rootstock Selection	No additional cost	Data Gaps	Long-Term	Data Gaps
Winery-Specific Water Practices				
Water Metering	$150 - $250	5 - 15	Medium-Term	High
Waterless Barrel Sanitation	$1,900 - $2,800	100 - 165	Near-Term	Low
Processing Water Treatment and Reuse	Data Gaps	275 - 450	Long-Term	Medium
Municipal, Industrial, and Residential				
Water Metering	$950 - $2,500	100 - 130	Medium-Term	Low
WaterSense Devices[5]	$775 - $1,200	500 - 575	Near-Term	High

[1] Eligible for cost-share funding or other technical support through the Napa County RCD.
[2] Eligible for cost-share funding through the State Water Efficiency and Enhancement Program (SWEEP).
[3] Eligible for cost-share funding through the Environmental Quality Incentives Program Conservation Incentives Contracts (EQIP-CIC).
[4] Eligible for cost-share funding through the Healthy Soils Program (HSP).
[5] Eligible for financial assistance programs in select municipalities in Napa County.

Development & Implementation Timeline

Component/Activity	Q1 24	Q2 24	Q3 24	Q4 24	Q1 25	Q2 25
Component 1: Education and Outreach; Feasibility Analysis						
Educational Materials	D	I	I	I	I	I
Partnership Building	D	D	D	D	I	I
Messaging System	D	D	I	I	I	I
Feasibility Analysis	D	D	I	I	I	I
Component 2: Voluntary Adoption						
Incentivize Adoption	D	D	I	I	I	I
Benchmarking Pilot Program	D	D	D	D	I	I
Meter Data and Reporting Program	D	D	D	D	I	I
Component 3: Voluntary Certification						
Incentivize Certification	D	D	D	D	D	I

D = Development, I = Implementation

BENEFITS OF CERTIFICATION

Private Benefits of Certification

- Efficiency improvements
- Regulatory compliance (e.g., LandSmart, Fish Friendly Farming)
- Environmental, Social, and Governance (ESG) Standards
- Intrinsic value
- Marketing and value-add

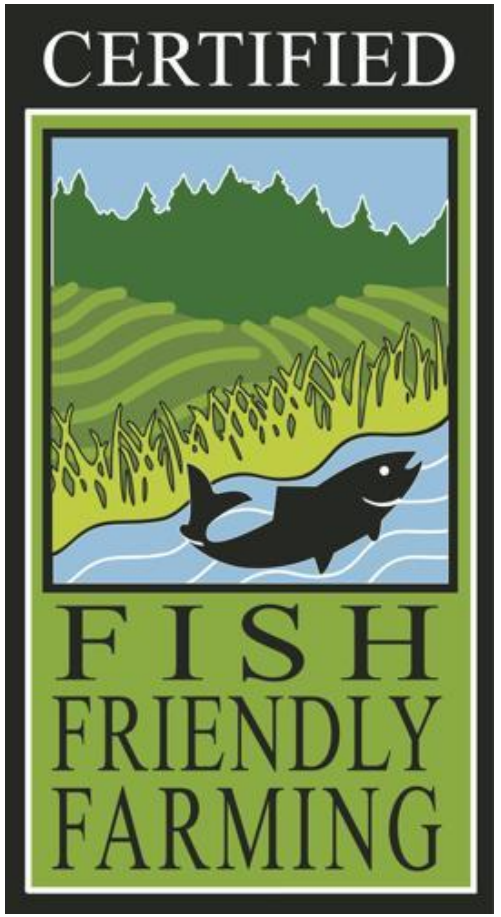
Public Benefits of Certification

Sustainable practice adoption leads to:

- Water quality improvements
- Water conservation
- Air quality improvements
- Soil health
- Ecosystem and habitat improvements

PRESENTATIONS FROM EXISTING CERTIFICATION PROGRAMS

Certification Program Presentations Today



NEXT STEPS

Next Steps

Hear from the certification programs today

Continue to implement the GPR Workplan !

- Certification
- Incentives
- Benchmarking
- Pilot Sites