

Draft Technical Memorandum

Subject: Napa GPR Implementation: Preliminary Napa Certification Program Summary and Implementation Updates

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Date: June 13, 2024; rev June 25, 2024

Purpose and Background

The County of Napa GSA (NCGSA) has developed and is implementing the Water Conservation (WC) and Groundwater Pumping Reduction (GPR) Workplans. The GPR includes an implementation plan and anticipated timeline for the program to achieve measurable reductions in groundwater pumping in the NCGSA. The WC and GPR Workplans identify a suite of water conservation practices. GPR implementation anticipates a voluntary program that incentivizes growers and other water users/industries in the Subbasin to adopt and expand water conservation practices.

One opportunity identified in the GPR implementation plan for encouraging voluntary adoption of water conservation practices is certification programs. Certification programs require producers to meet specified standards to become certified. In exchange, certified businesses can meet regulatory standards, buyer specifications, label their product in a certain way, and have access to new markets. This can create additional value (higher price or cost savings) for some commodities. The GPR implementation plan will develop a certification program for water conservation practices that will help the NCGSA achieve sustainable groundwater conditions.

The NCGSA Technical Advisory Group (TAG) has received information and presentations regarding potential certification programs from NCGSA staff and consultants at multiple TAG meetings in 2022 and 2023. Representatives from the local certification programs presented at the April 2024 TAG meeting. This technical memorandum (TM) summarizes GPR implementation for the certification program component and summarizes existing programs.

GPR Implementation: Napa Certification Program(s) for Water Conservation

GPR implementation schedule calls for certification program development in Q2 and Q3 of 2024. The NCGSA staff and its consultants are currently developing a certification program outline that defines potential minimum standards/practices for certification and other desired program components such as auditing process, verification process, reporting, and data

management. The outcome of this phase of GPR implementation will be a concise water conservation certification program document that the NCGSA can consider and may use to guide certification program implementation.

Certification program participation will be voluntary. Implementation will include appropriate incentives to encourage voluntary certification. Incentives are being developed as part of a broader GPR implementation process. Certification program implementation is part of a broader outreach and education process for GPR implementation. It is not intended to be an additional regulatory burden and cost for participants. Certification program implementation will include education and outreach and may be phased in to develop support and encourage participation.

The outcome of the program development, incentives, and education and outreach process will be a certification program for water conservation measures that achieve measurable groundwater benefits in the Napa Valley Subbasin. The GPR implementation schedule specifies certification program implementation through Q2 of 2025. Certification program implementation *may include, but is not limited to*, one or more of the following:

1. A certification program specified by NCGSA to meet minimum requirements for water conservation practices. This would impose a substantial administrative burden on the NCGSA and would duplicate some of the efforts of other certification programs that already operate in the county.
2. An existing certification program endorsed by NCGSA that meets minimum requirements for water conservation practices. This would reduce the administrative burden on the NCGSA and would leverage an existing certification program that meets minimum requirements defined by NCGSA. It may also require an existing certification program to modify standards to meet NCGSA requirements.
3. Multiple existing certification program endorsed by NCGSA that meet minimum requirements for water conservation practices. This would reduce the administrative burden on the NCGSA and would leverage multiple existing certification programs that meets minimum requirements defined by NCGSA. It could also require existing certification programs to modify standards to meet NCGSA requirements.
4. NCGSA could partner with one or more local organizations to develop, expand, or refine existing education, training, outreach, and certification programs. For example, the Napa County RCD manages the LandSmart program that assists growers with resource management. This or similar programs could be expanded to meet NCGSA requirements for water conservation.

In summary, the GPR implementation plan specifies that NCGSA staff and its consultants will work with existing certification programs, or potentially a new program, to develop specific water conservation practices, standards, and a method for reporting and sharing data. Incentives will be developed to encourage voluntary participation. The goal is to develop or expand one or more certification programs to achieve and verify additional water conservation in the NCGSA.

Certification Programs for Wineries and Vineyards in Napa County

There are multiple certification programs currently in Napa County. These programs have different water conservation practices, standards, verification methods, data/reporting, and program costs. Due to the complexity of the programs, it is difficult to provide a clear and direct comparison across the programs. This TM provides a high-level comparison of the key elements of each certification program as they apply to the GPR implementation in Napa County. Selected program elements were combined into a summary matrix for comparison purposes.

Certification Program Summary Matrix

A separate program summary matrix was developed for vineyard certification and winery certification. The purpose of the matrix is to summarize: (i) water conservation practices, (ii) all certification and auditing costs, (iii) other practices that are certified in addition to water conservation, and (iv) other program elements/notes that are relevant for GPR implementation.

The following categories and elements were included in the certification program summary matrices that are specific to winery and vineyard certification:

- **Vineyard or Winery Certification**
 - **Offered.** Does the program offer vineyard or winery certification?
- **Program Costs**
 - **Up-front costs.** These are the up-front costs to become certified by the program.
 - **Annual costs.** These are annual costs for renewal or other ongoing costs.
 - **Additional costs.** Any additional program costs for certification and verification.
 - **Third-party audit costs.** Costs paid to a third-party or for direct auditing, which may be annual or periodic.
- **Water Conservation Practices**
 - **GPR/WC specified water conservation practices.** A summary of specific water conservation practices and whether each certification program includes these practices as part of its existing standards.
- **Verification Process**
 - **Third-party verification.** Does the program rely on a third-party to verify compliance?
 - **Report metered water use.** Does the program require water measurement (meters) and does it require certified entities to report water use?
 - **Verification frequency.** How often does the program require audits/verification?
 - **Other notes.** Additional notes and context that help the reader understand the differences between the different programs.

- **Napa County Presence**
 - **Acres certified.** Number of acres certified in Napa County.
 - **Vineyards certified.** Number of vineyards certified in Napa County.
- **Other Program Certifications**
 - **Other practices.** This section lists other practices that are certified by the program. Most programs include other practices (e.g., climate or air quality) that they certify for in addition to water conservation practices. This section provides an overview of the broader scope of each program.
- **Other Program Considerations**
 - **Educational tools/events.** Does the program provide education and outreach as part of the certification process?
 - **Process for program updates.** How and when does the program update its certification practices and standards?

A draft of the certification matrix was developed and sent to representatives from each of the certification programs to review and provide feedback on how the program is represented. NCGSA staff and consultants continue to work with the certification programs to build partnerships and support GPR implementation.

Napa County Certification Program Summary

Four certification programs were included in the summary matrix. There are other programs, such as Napa County RCD LandSmart, that offer certification services in Napa County. However, the four programs included in the summary matrix represent the most prominent programs in Napa County currently used by vineyards and wineries. The four programs include:

- **Napa Green (NG).** A local program with 90 Napa Green Certified wineries and 70 growers certified or in the process of becoming certified, representing over 7,200 vineyard acres in Napa County.
- **California Sustainable Winegrowing Alliance (CSWA).** A program that operates statewide and has approximately 44 wineries and 260 vineyards on 15,500 acres certified in Napa County. Some CSWA certified wineries are also certified by other programs.
- **SIP Certified (SIP).** A program focused on vineyards and wineries on the Central Coast of California but with some small additional certifications in other parts of California, Oregon, and Michigan.
- **Fish Friendly Farming (FFF).** A vineyard/agricultural program that serves over 39,600 acres of vineyards in 10 California counties, supporting regulatory compliance with water quality regulations and other environmental improvements including water conservation and efficiency.

The Vineyard Certification Matrix and Winery Certification Matrix are attached as figures 1 and 2 to this report.

The comparison matrix shows that programs are similar in the water conservation practices that they cover. However, programs differ in what practices are required. For example, Napa Green requires entities to select from its menu of water conservation practices, so a specific vineyard may not implement every water conservation practice listed. Similarly, CSWA uses a tiering system (i.e., categories 1-4) to rate practices along a scale, with requirements for continual improvement. A CSWA certified vineyard may not currently include a water conservation practice but is working towards including that practice in the future.

Costs vary by program. Most programs, with the exception of CSWA, have an initial cost for the application and certification process. Fees are typically per acre (vineyard) or per gallon of wine produced (winery). All programs have an annual cost for continued certification that varies by winery or vineyard size. These are generally between \$500 and \$3,000. A third-party audit is required at different intervals, between 1 and 3 years, with reported costs between \$500 and \$2,000 depending on the size of the operation.

Every program certifies other practices in addition to water conservation. This includes practices such as pest management, fertilizer, soil health, social equity, ecosystem, fire, air quality, and climate. In short, certification programs offer their members a wide scope of certified practices in addition to water conservation. These additional practices are developed, in part, to meet consumer expectations and buyer specifications. Since the programs differ in the practices certified the costs for certification are not directly comparable.

All programs have a presence in Napa County. Fish Friendly Farming has the most certified area of vineyards because it provides regulatory compliance for the regional water board irrigated lands regulatory program. Napa Green and CSWA have around 7,200 and 15,500 acres certified, respectively. SIP certified has a smaller presence in Napa County but has certified over 46,000 acres in California, Oregon, and Michigan. Similarly, CWSA and Fish Friendly Farming have a broader certification program in California with over 200,000 acres certified each.

The winery and vineyard certification matrices were developed to provide a quick summary comparison of selected existing programs in Napa County. The NCGSA staff and its consultants will be working to develop and implement the certification program and similar elements of the GPR workplan.

Summary and Next Steps for GPR Implementation

For a certification program to be successful and support GPR implementation it must result in the adoption of new water conservation practices (and expansion of existing practices that are widely adopted), verification of water conservation, and demonstrate progress towards reducing groundwater pumping.

The existing certification programs have different standards, practices, water conservation, and verification/audit methods. As described in this TM, NCGSA staff and its consultants will be developing a certification program document that outlines the minimum requirements to support GPR implementation. This will include a concurrent evaluation of incentives to encourage participation as well as outreach and engagement for certification programs and GPR program implementation.

The NCGSA staff and its consultants will be working on the following elements:

1. Certification program document (through Q3 2024)
2. Certification program incentives (as part of broader GPR and GSP implementation incentives through Q2 2025)
3. Certification program education, outreach, and partnership/rollout (through Q2 2025)

The Napa County TAG and GSA Board will continue to be provided with periodic updates on program development to provide feedback and direction on program development. NCGSA staff and its consultants will continue to engage substantial stakeholder and public input and direct outreach to support program development. Any program, incentives, or other implementation elements would be subject to TAG and ultimately Board approval through the defined public process.

[Matrices are included in fig. 1 and fig. 2 on subsequent pages]

Figure 1. Vineyard Certification Matrix

| | California Sustainable Winegrowing Alliance | Fish Friendly Farming | Napa Green | SIP Certified |
|-------------------------------------|--|--|---|---|
| Vineyard Certification? | Yes | Yes | Yes | Yes |
| Costs | | | | |
| Certification Cost (Up Front) | 0 | 95% of vineyards in Napa have already paid | \$800-\$1,200 | \$500/\$1,000 |
| Certification Cost (Annual) | \$250-\$2,500 | 0 | \$450-\$3,100 | \$5-\$20/acre |
| Additional Costs | \$250 for vineyard management companies | \$2.00 per vineyard acre for direct access to the FFF data base for managers to see their required actions and timelines | 0 | 0 |
| Third-Party Audit | \$650-\$2,000+, depending on size | \$500 every 5 years | \$500-\$2,000+ every 3 years, depending on size | \$100 - \$2,000+ annually, depending on size and Cycle type |
| Water Conservation Practices | | | | |
| Distribution Uniformity Testing | Yes | Yes | Yes | Yes |
| Metering | Yes (category 3) | Yes | Yes | Yes |
| Soil Moisture Monitoring | Yes | Yes | Yes | Yes |
| Plant Moisture Monitoring | Yes | Yes | Yes | Yes |
| Erosion Control | Yes | Yes | Yes | Yes |
| Water Source Documenting | No (auditors check data collection methods, and site specific efforts are made to minimize negative impacts on watershed issues) | Yes | Yes | Yes (wells are mentioned several times; when a well isn't used, source water is identified so backflow prevention can be implemented) |
| Low-Volume Irrigation (e.g., drip) | Yes | Yes | Yes (baseline) | Yes |
| Water Conservation for Replanting | No | Yes | Yes | No |
| Cover Cropping | Yes | Yes | Yes | Yes |
| Verification Process | | | | |
| Third Party Verification? | Yes | Yes | Yes | Yes |
| Report Metered Water Use? | Yes | Surface water diversions are reported to the State Water Board | Yes | Yes |
| Verification Frequency | Annual | 5 years | Annual | Annual |
| Other Notes | Must rank category 2 for 85% of 148 practices; 60 required practices; main costs from annual audit | Certified by National Marine Fisheries Service and County Agricultural Commissioner; annual online audits | Interim annual desk audits; third-party audit every 3 years | Third-party desk audit annually; Third-party onsite visit every 3 years |
| Napa County Presence | | | | |
| Acres Certified | 15,500 | 40,000 (100k including roads, creeks, etc.) | 6,000 (14,000 acres including properties) | |
| Vineyards Certified | 260 | 1,100 | 62 | |
| California Presence | | | | |
| Acres Certified | 204,000 | 224,000 | 6,000 | 46,000+ (CA, OR, MI) |
| Vineyards Certified | 2,247 | 2,000 | 62 | 400+ |
| Other Program Certifications | | | | |
| Pest Management | Yes | Yes | Yes | Yes |
| Applied Nitrogen | Yes | Yes | Yes | Yes |
| Social Equity | Yes | Yes | Yes | Yes |
| Forest/Fire Management | No (not required, but provide resources for fire preparedness and practices to help with fire prevention) | No (in process of developing separate Fire Risk Reduction certification in cooperation with CAL FIRE) | Yes | No |
| Ecosystem Management | Yes | Yes | Yes | Yes |
| Air Quality and Climate Protection | Yes | No (separate Climate Adaptation certification) | Yes | Yes |
| Other Program Considerations | | | | |
| Educational Tools/Events | Yes | Yes | Yes | Yes |
| Process for Program Updates | Annually reviewed | Scientific review | Bi-annual update; Updates more frequently as needed | Annual Review; 5-year Peer Review |

Figure 2. Winery Certification Matrix

| | California Sustainable Winegrowing Alliance | Fish Friendly Farming | Napa Green | SIP Certified |
|-------------------------------------|---|-----------------------|--|---|
| Winery Certification? | Yes | No | Yes | Yes |
| Costs | | | | |
| Certification Cost (Up Front) | 0 | NA | 0 | \$500/\$1,000 |
| Certification Cost (Annual) | \$300-\$5,000 | NA | \$550-\$3,850 | \$0.002-\$0.03/gallon; 25% discount if combined with Vineyard certification |
| Additional Costs | \$100 discount for certifying both winery and vineyard | NA | Integrated resource audit year 1, 6, 12,... \$1,350-\$2,250; abbreviated resource audit year 3, 9, 15,... \$750-\$1,500 | 0 |
| Third-Party Audit | \$650-\$2,000+ per year, depending on size | | \$500-\$2,000+ every 3 years, depending on size | \$100 - \$2,000+ annually, depending on size and Cycle type |
| Water Conservation Practices | | | | |
| Waste Water Management | Yes | NA | Yes | Yes |
| Metering | Yes (category 3) | NA | Yes | Yes |
| Sanitation | Yes | NA | Yes | Yes |
| Landscaping | Yes | NA | Yes | Yes |
| Process Water Reuse | Yes | NA | Yes | Yes |
| Water Timing (off-peak hours) | Yes | NA | Yes | Yes |
| Verification Process | | | | |
| Third Party Verification? | Yes | NA | Yes | Yes |
| Report Metered Water Use? | Yes | NA | Yes | Yes |
| Verification Frequency | Annual | NA | Annual | Annual |
| Other Notes | Annual self-assessment; 4 categories; must rank category 2 for 85% of 108 requirements; 41 required practices; main costs from annual audit | NA | Annual desk audit; third-party audit every 3 years; Winery Irrigation Resource Assessment is an "Upfront Cost" because it is required to be certified. | Third-party desk audit annually; Third-party onsite visit every 3 years |
| Napa County Presence | | | | |
| Wineries Certified | 44 | NA | 90 | |
| California Presence | | | | |
| Wineries Certified | 171 | NA | 90 | 5 (CA & MI) |
| Other Program Certifications | | | | |
| Energy or Greenhouse Gas Reporting | Yes | NA | Yes | Yes |
| Social Equity | Yes | NA | Yes | Yes |
| Labor/Employee Practices | Yes | NA | Yes | Yes |
| Sustainable Purchasing | Yes | NA | Yes | Yes |
| Air Quality and Climate Protection | Yes | NA | Yes | Yes |
| Other Program Considerations | | | | |
| Educational Tools/Events | Yes | NA | Yes | Yes |
| Process for Program Updates | Annually reviewed; regulatory compliance | NA | Annually reviewed | Annual Review; 5-year Peer Review |