



NAPA GREEN

HERBICIDE-FREE FREQUENTLY ASKED QUESTIONS

QUESTIONS ANSWERED:

1. How/why did Napa Green make the decision to require phaseout? Why can some growers apply for a variance?
2. Why start with Roundup?
3. Is there media and consumer demand to prohibit Roundup?
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5. Why not ban Roundup tomorrow? Why is there a two-year phaseout?
6. Why the subsequent focus on all synthetic herbicides?
7. What is the impact of Roundup and other herbicides on soil health?
8. The use of Roundup by the wine industry is so small compared to industrial ag (corn, soy, wheat). Why is it important for Napa Green to take this step?
9. Is organic leadership enough? How is organic different from Napa Green?
10. Is there a market-edge or price premium for wines certified sustainable or made with organic grapes?
11. What is Regenerative Agriculture?

1. **How/why did Napa Green make the decision to require phaseout? Why can some growers apply for a variance?**

- The new Napa Green Vineyard certification launched in 2021 with a Gold Level option, providing added recognition for vineyards that were organic and/or herbicide-free and “bee kind” (no neonicotinoid use). All Napa Green Vineyard members had to meet restrictions on the use of Roundup and other core industry herbicides.
- In the course of biennial updates, edits and additions to both the Vineyard and Winery certification programs, Napa Green reconvened its Pesticide Working Group, which held three meetings in 2023. Environmental and health concerns about the use of Roundup and other synthetic herbicides have continued to grow over the past three years. The Committee reached majority consensus that as Napa Green and its members continue to evolve as leaders it is time to focus on first phasing out the use of Roundup, and subsequently the use of all synthetic herbicides.
- The Pesticide Working Group also reached majority consensus that select vineyards should have the opportunity to apply for a variance. Farm conditions that may warrant a variance include >5% slope, rocky soils, and narrow vines rows that can make the use of weed management equipment and tools infeasible, necessitating intensive labor that may be cost-prohibitive. Requests for variances will be considered by a peer review committee.
- Variances will be granted on a limited basis. Herbicide phaseout is not an option for all old blocks. Napa Green will work with these growers to ensure that when these vineyards are redeveloped they will be designed for herbicide-free management.
- This critical program update and leadership decision was unanimously approved by Napa Green’s Board of Directors.

2. **Why start with Roundup?**

- Roundup is the most prolifically used herbicide in the world. According to the EPA, roughly 280 million pounds of Roundup are applied to agricultural land in the U.S. each year, and that does not account for residential or commercial use.
- The International Agency for Research on Cancer (IARC) has classified Glyphosate, the active ingredient in Roundup, as “probably carcinogenic to humans.”
- Bioaccumulation of Glyphosate is occurring in our environment, our foods, and our bodies, with unknown risks.
- Long-term, repeat exposure to Roundup has been tied to development of Non-Hodgkin’s Lymphoma.
- The proliferation of the use of Roundup has been linked to precipitous decline in invertebrate populations - the Monarch butterfly (due to destruction of milkweed habitat) and honeybee populations have both been directly affected.

3. **Is there media and consumer demand to prohibit Roundup?**

- Yes. Roundup has dramatically risen in public awareness and concern due to IARC's carcinogen finding, lawsuits against Bayer (the manufacturer of Roundup), tests showing Glyphosate residues in food and beverages (including organic food products), and concerns about Monarch butterfly and honeybee decline.
- Regionally, we've seen increased concern about wine industry Roundup use with the release of the documentary, "Children of the Vine."
- More than 45 cities and counties in California have banned the use of Roundup on city/county-owned property and/or school campuses. More than 30 countries have implemented some form of ban on the use of Roundup (typically with exceptions for agriculture).
- One of the most common questions that Napa Green and our members receive is whether we allow the use of Roundup. While we feel that there should not be a myopic focus on this one herbicide, there is clearly a PR and market benefit to being Roundup- and synthetic herbicide-free. As one example, Bonterra says they have been able to achieve up to a 50% price premium for their wines made with certified Regenerative Organic (ROC) grapes.

4. **How will Napa Green help members phaseout Roundup and synthetic herbicides?**

Napa Green has developed a Weed Management Toolkit that includes:

- Case studies from herbicide-free and organic growers, including "By the Numbers" vineyard management costs per acre, and specific in-row and undervine weed management costs where available.
- A growing list of tools and technologies being used for weed management
- Resources such as scientific studies, articles, videos and other vetted topical content

In 2023, Napa Green and three champion partners raised \$60,000 in matching funds for industry implementation of sustainability & climate action practices. Beginning in January 2024, grower members will be able to apply for funds to support herbicide phaseout.

In the first quarter of 2024, Napa Green is organizing and hosting at least two hands-on and training workshops:

- Weed Management: Equipment, Tools & Grazing
- The Economics of Organic

Napa Green has funds available to support soil testing and analysis (\$300 per member). The Napa Green vineyard team is available to support applications for CDFA Healthy Soils grants, and our Vineyard Program Manager is a qualified Technical Assistance Provider.

5. **Why not ban Roundup tomorrow? Why is there a two-year phaseout?**

- If we want to lose 20 lbs we can't do it overnight. It may take 6-12 months, and that only requires changing our individual behavior. This requires systems change, change in both natural and human systems.
- Transitioning away from herbicide use requires new training, tools and technology, and adaptation to property-specific challenges.
- Shifting from a system of trying to control nature, versus working in concert with nature, is a paradigm shift that doesn't happen overnight.

6. **Why the subsequent focus on all synthetic herbicides?**

- There is a lack of public awareness that there is a suite of herbicides being used for agriculture, in part to try to address the increasing weed resistance to Roundup.
- Here in Napa County the Pesticide Use Reports show a significant decline in the amount of Roundup application, but simultaneously show a rise in the use of alternatives such as Lifeline.
- In some cases, growers turn to 2-3 other herbicides to try to match the effectiveness of Roundup.
- These lesser-known herbicides often have equal or greater environmental and human health risks. For example, alternatives like Shark and Inspire Super persist in the environment, are harmful if inhaled or absorbed through skin, tied to dermal cancer risk, and toxic to fish and other organisms.
- Eliminating the use of Roundup alone is not a silver bullet.

7. **What is the impact of Roundup and other herbicides on soil health?**

- Diversity increases resilience. Roundup and synthetic herbicides reduce diversity.
- Roundup and other synthetic chemical applications undermine and damage microbial and fungal networks, the underground "brain" that services the vines. This is tied to declines in soil organic matter and soil fertility.
- The diversity of our soil types is part of what makes the Napa Valley uniquely suited to viticulture, and is intimately tied to the concept of "terroir" – that winegrapes are an expression of place. If growers aren't farming for soil health they are undermining terroir.

8. **The use of Roundup by the wine industry is so small compared to industrial ag (corn, soy, wheat). Why is it important for Napa Green to take this step?**

- Viticulture is at the peak of the agricultural pyramid – we make, arguably, the premier agricultural product. Our leadership sets a standard that gets noticed, generates news, and influences all of agriculture.
- If not here, where? If not now, when? The Napa Valley is a celebrated global wine industry leader. This industry is a canary in the coal mine for the climate crisis. The onus is on us to show the same leadership in sustainability and climate action, and that includes chemical use.
- Viticulture is by far the largest agricultural footprint in Napa County. This matters to our vineyard stewards and our community.
- If we are proactive rather than reactive, we will gain new champions, build consumer loyalty, and get ahead of the curve of rapidly shifting regulatory and market demands.

9. **Is organic leadership enough? How is organic different from Napa Green?**

- Growing organic grapes (i.e. not using synthetic pesticides) is just one relatively small piece of a whole-systems approach to sustainable winegrowing. You can be organic and not be caring for your workers, overusing fuel, water, and electricity, have heavy bottles and high greenhouse gas emissions.
- Organic certification focuses on the farm. In terms of environmental stewardship, there are no standards related to production or distribution, which on average accounts for 40-60% of the wine industry's emissions.
- Napa Green takes a whole-systems, soil to bottle approach. Our rigorous certification standards encompass their “Six Pillars of Sustainable Winegrowing Leadership”:
 - Water Efficiency & Savings
 - Energy Efficiency & Savings
 - Waste Prevention & Supply Chain
 - Proactive Farming, Soil Health & Biodiversity
 - Social Justice, Diversity & Inclusion
 - *All under the umbrella of Climate Action & Regenerative Agriculture*

10. **Is there a market-edge or price premium for wines certified sustainable or made with organic grapes?**

- The NYU Stern Center for Sustainable Business releases an annual “Sustainable Market Share Index” based on a review of >70,000 CPG (consumer packaged goods) SKUs across 36 categories. The 2022 report showed products marketed as sustainable grew ~2x faster than conventional counterparts, with a 5-YR CAGR of 9.4% vs. 5% for non-sustainable. Sustainability-marketed branded products had a price premium of 27.6%.

- In 2020, Wine Opinions released the results of a wine trade survey (425 participants). 73% said they'd seen a steady increase in the demand for sustainably produced products, and 76% said they believe demand will continue to grow over the next 5-10 years. 71% said "All things being equal, I would purchase or support a wine that is sustainably produced over one that is not."
- There are grounded retail examples from Wente, Jackson Family and Bonterra where their wines were featured as sustainable and/or there was a sustainability communications campaign and they achieved significant sales growth (~20%) and/or price premium.
- In 2016, researchers at UCLA published a study that reviewed the scores for >74,000 California wines and found that on average "eco-certified" wines (namely Made With Organic Grapes and Biodynamic) scored an average of 4.1 points higher. In 2021, they repeated the study for 128,000 French wines, and found that organic and Biodynamic scored an average of 6.2 points higher.

11. **What is Regenerative Agriculture?**

Regenerative Agriculture has seven principles, all deeply rooted in soil

health: Context-specific

2. Limit Disturbance
3. Armor the Soil
4. Living Roots
5. Build Biodiversity
6. Phaseout Chemical Inputs
7. Integrate Animals

Through regenerative agriculture farmers and growers can build:

- Soil Organic Matter (SOM) and soil health
- Water infiltration and retention
- Biodiversity
- Resilience to drought, high heat and other impacts of climate change
- Resilience to disease and pest pressure
- Carbon storage/sequestration in the soil
- Higher quality grapes that demand a price premium

Regenerative agriculture is a win, win, win approach for farmers to enhance soil health, reduce risk and build resilience, and play a proactive role in drawing down emissions and exemplifying climate action leadership.