

The Faces of Sustainability series published by the Bay Area Alliance for Sustainable Communities highlights how residents of the San Francisco Bay Area are making their community a better place to live, protecting their natural environment, and conducting business in ways that promote quality of life for subsequent generations.



Napa County Vineyards

Gene Piscoia

Many years ago, citizens of Napa County faced a decision: should they allow their land to be developed, as was taking place throughout the San Francisco Bay Area, or should they use their natural assets to make world-class wine? In 1968, a coalition of farmers and environmentalists initiated the declaration of the nation's first agricultural preserve, designating the entire floor of the Napa Valley off limits to development. Thanks to subsequent citizen activism, the preserve is still in place, and agricultural zoning protection overall has since been expanded to approximately 480,000 acres, or 91% of the county – and is protected from any change through the year 2020 except as specifically approved by a vote of citizens. As a result, Napa County's population, which at 125,000 people is the smallest in the Bay Area, has grown 45 percent since 1970 without a significant loss of agricultural land, and its \$1.5 billion wine and tourism industry attracts visitors throughout the year.

Learning to live with a river

Napa County's agriculture depends upon rain, but too much

rain can bring floods. As a tidal river valley, flooding in Napa is a natural aspect of the seasonal cycle. Napa residents have suffered 27 floods in less than 150 years. For decades, the conventional fix has been to install concrete channels to direct the flow. Despite increasingly fortified flood controls, however, floods have cost residents more than \$540 million in property damage since 1960, according to *A Citizen's Guide to the Napa River Flood Protection Project*.

Now, the county is trading in conventional solutions for natural ones. After county voters rejected three proposals to expand the existing



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concrete-walled flood-control system, 27 government agencies and 25 nongovernmental organizations joined forces with the Army Corps of Engineers to create a new plan called the Napa River Flood Protection Project. In 1998, Napa voters approved the plan and an increase in sales taxes to help pay for the \$200 million project.

The plan is based on a vision intended to achieve three goals: protect the community from flooding; allow the river to nourish plant and animal life, and bring new vitality to neglected riverfront areas. The concrete channels will be removed, allowing the river to run wild for much of its 55 miles.

This “living river” approach to flood control – the first in the U.S. – involves reinstating flood zones, allowing the river to meander unconstrained; elevating or removing bridges; and creating 600 acres of tidal wetlands south of Napa – one of the largest creations of wetlands in the country.

Some residents and businesses in the river’s path will be given relocation assistance to move. Overall, however, the ten-year project is expected to significantly reduce property damage due to flooding. Planners anticipate that reviving the river will prove a boon to the surviving steelhead and salmon populations, as well as waterfowl and shorebirds – not to mention

fishermen and ornithologists. Considering that future floods occurring under the “control and constrain” system would cost the county an estimated \$1.6 billion over the next 100 years, the new plan – which is expected to save residents \$26 million a year in property damage, emergency services, and insurance costs – is viewed by planners throughout the U.S. as a model for a new way of river management, according to the Napa County Flood Control and Water Conservation district.

Sustainable winegrowing practices

Dedication of so much arable land in Napa to grapes has not been without environmental, social and economic challenges, such as soil and water pollution from modern farming methods and housing shortages for the migrant workers on whom winemakers depend. Many of the actions taken by winegrowers to address such challenges are thoughtfully addressed in Juliane Poirier Locke’s *Vineyards in the Watershed: Sustainable Winegrowing in Napa County*.

Some of Napa’s farmers are pioneering profitable agricultural methods that follow rather than transgress nature’s laws. Frog’s Leap was one of the first Napa vineyards to be certified organic. In an interview with Locke, owner John Williams noted that conventional wine-growing includes no place on the balance sheet for costs like worker illnesses caused by

“What we will be doing IN NAPA is radically different from anything we HAVE EVER DONE before. It’s going to totally change the way we do business.”

– Jason Fanselau, a spokesman for the Corps in Sacramento, in the *New York Times*.

Grazing ungulates aren’t the only animals controlling pests in Napa County: through a program called Habitat for Hooters, students at St. Helena High School have created a small company that sells owl boxes to farmers – increasing biodiversity by attracting nesting barn owls – an efficient predator capable of mitigating the gopher population.

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pesticides, wasted water, or compromised watersheds. “Even without calculating for hidden costs,” he said, “organic farming is still cheaper. That’s the irony.”

Sustainability at Frog’s Leap means more than just organic farming; it involves restoring the ecosystem on which the vineyard depends. Williams removed non-native plants, which attract vineyard pests, and planted willow trees to stabilize the eroding riverbank. Controlling sediment runoff should help the endangered steelhead trout make a comeback.

While only 19 of Napa’s 270 vineyards are certified organic, there are many other growers who are utilizing natural weed and pest control methods, reducing or eliminating irrigation, or planting cover crops between vines to boost plant growth and control erosion. Certified organic vineyards only apply pesticides that are approved for organic farming.

At several Robert Mondavi Winery locations, grower Mitchell Klug uses cows, Chinese weeder geese, goats, and sheep to control weeds. Klug said, “Mechanical cultivation is better than using herbicides to clean weeds but it still burns fossil fuels and compacts the soil.” Today, Klug uses animals in place of equipment whenever possible. The sheep flock costs \$20/acre to rent, about the same as using a tractor, and

the net weed control effect is as good as or better. But unlike tractors, which run on fossil fuels, the sheep leave nutrients in the soil while contributing a bucolic feeling in the vineyards. Said Klug, “Overall, the animals’ work has saved us the \$5,000-\$7,000 we used to spend each year for beautification and weed control. Plus it’s fun!”

These sustainable approaches to pest control may seem like throwback tactics – and they are. Winemakers have long made great vintages without compromising their own health or that of their workers. Modern chemical farming depends upon pesticides – persistent, poisonous compounds that stay in the ecosystem after use, eventually leaching into groundwater. These chemicals and the health effects they cause have proven to cost more than using natural farming methods that don’t create long-term risks.

Raising the stewardship bar

Around the county, additional efforts should further contribute to the restoration of nature. The Carneros Creek land stewardship group is one of many groups of neighbors who are organizing to monitor, restore and protect the health of an “adopted” nearby stream. Such stewardship groups play an important role in responsible use and allocation of water at the most local level – and provide an opportunity for vineyard

Another face of sustainability in Napa County are the fifteen children who will get new school supplies and a Christmas gift exchange after leading their affordable housing apartment complex to win a \$1,500 prize for the most effective recycling program, beating out 57 other complexes throughout the city of Napa. The children are paid to collect the recyclables, creating good habits and saving the complex money by reducing garbage pickup. The contest – sponsored by The City of Napa and Napa Garbage Service with a grant from California’s Department of Conservation, Division of Recycling invited proposals to improve and establish collection and recycling of bottles and cans at apartment complexes throughout the city of Napa.

owners and their neighbors to meet and discuss issues of common concern.

For vineyard owners who seek help in creating a responsible farming plan, The Napa County Resource Conservation District is introducing a new “green” certification program. Grape growers who enlist in the program will receive training, consultation and other resources that will help them be better stewards of their water resources.

Taking responsibility for farm worker housing

Winemaking is labor intensive. The California Institute for Rural Studies at UC Davis estimates that up to 6,000 workers, primarily Mexican migrants, come to Napa every year to pick grapes and prune vines. Because wages are minimal and workers try to send as much money as they can to families back home, they can only afford the cheapest living arrangements – and in Napa, inexpensive places to sleep are few and far between. In some cases, the workers crowd 12 to a motel room. In an article in the *Napa Valley Register*, Nathan Crabbe cites a study by UC Davis that estimates 500 others sleep in cars or by the side of the road.

Twenty-five years ago, there was no housing crisis in Napa – most farm workers found room and board at the vineyards where they worked. But as more land has

been devoted to vineyards, more seasonal workers have come to Napa every year, too. The success of the wine and tourism industries has made it increasingly expensive to offer housing on a seasonal basis. Currently there are only 177 legally licensed farm worker beds available in Napa County, according to *Rural Migration News*. With some farmworker camps closed to save money and others due to violations in housing codes, the burden of housing has been shifted to the community, with costs expressed in both real and perceived threats to safety, sanitation, and overall community well-being.

Some winery and vineyard owners have recognized that it is a worthwhile investment in productivity to provide safe, decent and affordable housing for their workers. *Vineyards* quotes Rueben Oropeza, Napa’s inspector for worker camps, “They get rewarded in good employees.” Yount Mill Vineyards, a 35-year-old family operation, offers room and board to its seasonal workers for \$6 a day – and for free during “down times,” when workers are waiting between crops.

Vineyard owners are increasingly seeking to take more responsibility for this cost of doing business and pressing for solutions. In 2001, vintners took the unusual step of asking to be taxed to fund more housing. In response, the California state assembly passed a

“If our WINE is indeed ‘bottled poetry,’ then those who WORK THE VINES are the poets. No other sector in California agriculture is rising to the CHALLENGE of farm worker housing like NAPA VALLEY.”

– Oscar Renteria, a vineyard and winery owner, in a letter to the editor of the *Napa*

bill creating a special tax district that would allow the county of Napa to tax a specific group of landowners – the grape growers. The renewable five-year program, approved in July 2002, will assess a tax on Napa vintners of \$7.66 per acre in grapes to add 300 beds. This tax won't end the farm worker housing crisis, but it's a step toward a solution.

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Sustainability Resources in Napa County

Refer to the following selected information resources to learn more about sustainability in Napa County.

Napa Sustainable Winegrowing Group
(707) 252-4188
www.nswg.org

Community Action Publications
(707) 829-2999
www.healthyworld.org

Napa Valley Vintners Association
(707) 963-3388
www.napavintners.com

Napa County Resource Conservation District (RCD) and the Natural Resources Conservation Service (NRCS)
(707) 252-4188
www.naparcd.org

Habitat for Hooters
(707) 224-3464

Napa Valley Community Housing
(707) 253-6140
www.nvch.org

Napa Valley Housing Authority
(707) 257-9543

Napa County Flood Control and Water Conservation District
(707) 259-8600
www.napaflooddistrict.org

Friends of the Napa River
(707) 254-8520
www.friendsofthenapariver.org

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the future

Bay Area Alliance for Sustainable Communities
www.bayareaalliance.org