



Napa County Resource Conservation District
Annual Report 2019-2020





About Us

Napa County Resource Conservation District (Napa RCD) was established in 1945 as a special district of the State of California to help farmers and ranchers in Napa County tackle erosion and other problems on their land. A lot has changed in the past 75 years, and so have we. As natural resource issues change, we continue to evolve.

Today, we help our community achieve conservation goals by providing technical assistance, educational programs, monitoring programs, and funding sources on issues ranging from fisheries to forest health, soil management, water conservation and quality, and more.

We are governed by a locally-appointed Board of Directors. Our leaders are also your neighbors — they live in the district and understand what the local resource needs and concerns are, which helps steer Napa RCD in the right direction. Our team consists of conservation scientists and outreach and administrative professionals who are skilled at developing, implementing, and monitoring many types of projects. Our Napa RCD works at many scales — from the individual landowner to entire watersheds.



Our Mission

To support and empower everyone in Napa County to conserve, protect, and restore natural resources and sustainably manage working lands.

A Year of Innovation in the Face of Challenge

Only one year ago, many words and phrases that we now frequently use were completely foreign to us. Among these are “Shelter at Home,” “social distancing,” and “Zooming.” Then, in the midst of an “unprecedented public health challenge” came a catastrophic wildfire season which left nearly 40% of Napa County scorched. Put simply, 2020 has been a tough year. Through it all, community members tapped into their creativity, kindness, and resolve to support each other and the natural world. We’re immensely grateful to have worked with so many of you. This annual report is a celebration of some of the results of our partnerships.



Before you flip the page we wanted to take a moment to highlight our new strategic plan. It was created with the input of our Board of Directors and staff, and many different partners. The strategic plan lays out how we intend to play a small but important role in developing solutions that enhance the relationships between healthy ecosystems and thriving communities. We outline ways that we will help people take action on issues ranging from forest health to regenerative soil management, water security, fish habitat preservation, and more. We will provide education, technical guidance, environmental monitoring, and funding - all targeted to make taking action easier here and now.



All community members have a role in contributing their strengths and talents to make Napa County a model of sustainability in the face of climate change. And we want to empower everyone to get involved. Take a look at our website or drop by our office and find how you can make a difference with us.

Lucas Patzek
Executive Director

Jim Lincoln
President, Board of Directors



Framing the Next 5 Years

Just as all people need clean and abundant water, healthy soil, open spaces, and diverse wildlife and plants to thrive, our natural resources in turn depend on the strengths and contributions of all people. Napa RCD imagines and strives towards a vision of Napa County as a model of sustainability.

To help realize this vision, the Napa RCD recently laid out specific goals and actions in our new strategic plan. We invite you to delve into this plan to learn more about our full commitment to community and conservation, and explore how you can get involved.

Taking care of the land, water, soil, and wildlife of Napa County



Gathering and Analyzing Data Needed for Decision Making

Collecting information about the health of our watersheds and sharing it with community members to help them make sound stewardship decisions for working lands and natural resources.



Enhancing the Stewardship of Wild and Working Lands

Restoring rivers and streams, supporting native vegetation and wildlife habitat, and implementing state-of-the-art agricultural and rangeland practices as well as sustainable wildfire management projects.



Inspiring a Shared and Inclusive Culture of Conservation

Creating ongoing opportunities for all community members to learn from and inspire each other as we actively participate in stewarding our shared resources.

For more information, visit NapaRCD.org/strategic-plan

Snapshots of Success

Water Security

18



irrigation evaluations completed

6



growers participating in the irrigation toolkit service

788



people learning about waterwise landscaping

Forest Health

77



fire-impacted residents received site visits

\$531,000



raised for forestry & fire resiliency projects

18



residents received a visit to discuss their forest's health

Education

1,294



students in virtual and in-person classrooms

558



oaks planted by students and community members

5



programs converted to digital classrooms

Environmental Monitoring

162



storm drain outfalls monitored for water quality

1,457



fish were surveyed with the Rotary Screw Trap

14



rainfall gauges monitored throughout the county

Vineyard Water Quality

72



Water Quality & Habitat Plans completed

52.3 miles



of unpaved road surveyed for sediment delivery

5.8 sq. miles



area covered by Water Quality & Habitat plans

Improving Vineyard Water Use Efficiency

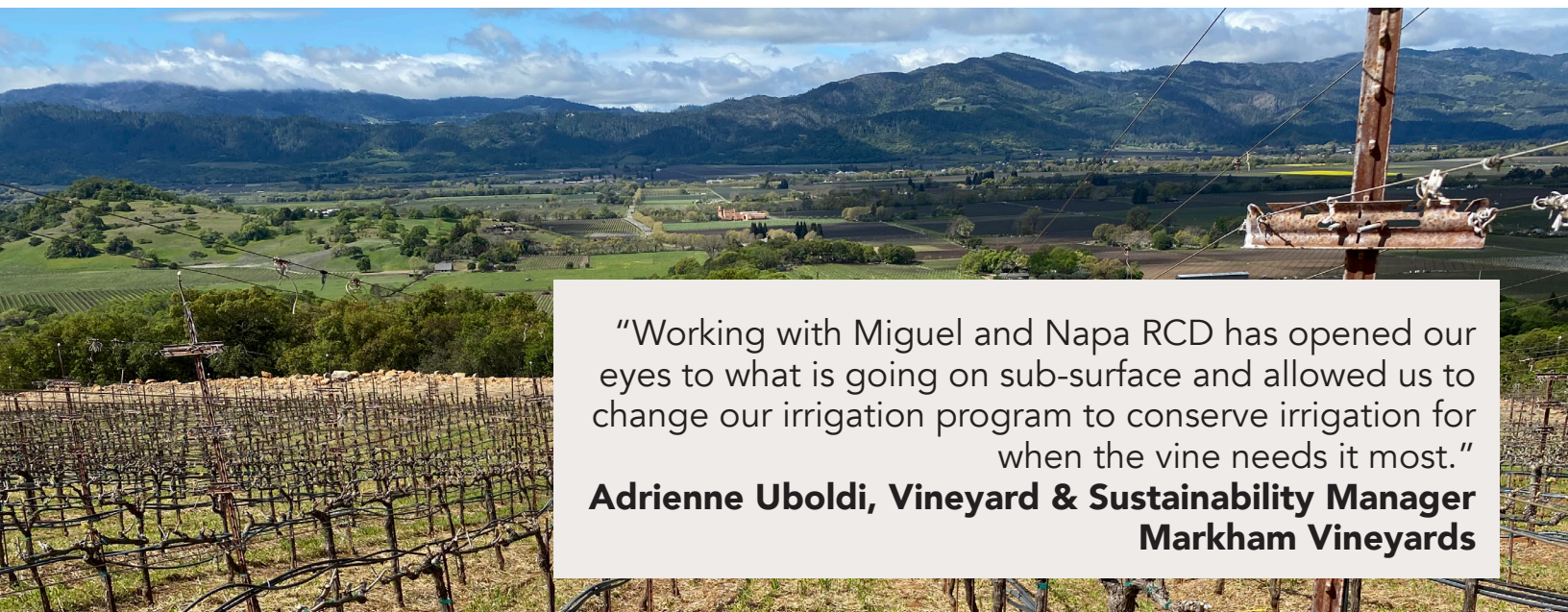
Adrienne Uboldi was brought on to the Markham Vineyards team to ensure that the company's green values were being reflected in the field.

One of Adrienne's primary goals as Vineyard Manager was to get a handle on water use. She wanted to ensure that every drop was being used wisely - for the sake of the local groundwater basin that supplies her vineyards, and the quality of the wine.

For help with all things irrigation, Adrienne contacted Miguel Garcia, Napa RCD's Sustainable Agriculture Program Manager.

Miguel and Adrienne enrolled Markham's Calistoga vineyard for Napa RCD's new irrigation toolkit service. The vineyard was showing too much vigor, and Adrienne suspected that overwatering was to blame. The toolkit service uses grant funds to help growers purchase, install, and understand data from real-time moisture monitoring equipment of their choice. On average, growers tend to use ~15% less water once they start monitoring moisture in the vineyard.

With Miguel's help, Adrienne quickly saw the decision-making power of the probe. She used the data to convince her crews to cut back on watering. This summer, by tracking the soil moisture data, they decided that they didn't need to irrigate at all! Inspired by the success of the program, Adrienne has been installing probes in all Markham vineyards in Napa County so that she may steward the precious resource of water more precisely moving forward.



“Working with Miguel and Napa RCD has opened our eyes to what is going on sub-surface and allowed us to change our irrigation program to conserve irrigation for when the vine needs it most.”

**Adrienne Uboldi, Vineyard & Sustainability Manager
Markham Vineyards**

Growing a Forest Health Program



Napa RCD launched its Forest Health Program following the 2017 Wine Country fires. At the time, this was the biggest wildfire disaster in Napa County history, and it brought into sharp relief the need for ecologically sound vegetation stewardship strategies to reduce fuels and enhance long-term forest health.

We hired a Forestry Program Manager to provide technical advice and planning services for individuals wanting to enhance the health of their forests and better prepare for fires. Getting access to state and federal financial assistance requires a Forest Management Plan (FMP). To develop these FMPs, we work closely with forest managers to describe current forest conditions and outline a plan of action to achieve specific goals. Practices like animal grazing, hand thinning, mechanical treatments, and even prescribed fire may be recommended to help reduce fire risk and improve habitat of overgrown forests.

With a completed FMP, some forest managers have what they need to implement their fuel reduction project. Others need financial assistance to be able to take action. In these cases, we work with a range of partners to seek grants and deploy cost-share programs to ensure that critical projects happen. We're also connecting neighbors to each other, to make sure everyone's individual action adds up to big gains for our whole county.

When wildfires occur, Napa RCD and the Napa field office of USDA-NRCS, has become the go-to resource for anyone wanting help with their burned land. Our expertise in forest health, erosion, water quality, and community education makes us uniquely prepared to meet this need.



"We've done several projects on our property with Napa RCD staff to support biodiversity. Now, we are building a forest health and wildfire resilience plan. They always provide intelligence, experience, and integrity."
Amy Garden, Local Resident

Inspiring the Next Generation

Emily Read, a teacher at Camille Creek Community School, has always wanted better for her students. The school strives to empower the most disenfranchised youth in the County through restorative relationships, targeted instruction, and inspiring opportunities for growth.

"I'm not going to teach them from a traditional textbook, which doesn't relate to students' lives. Authentic engagement and relevance are the most important things to my students."

Since 2014, Napa RCD staff have partnered with Napa County Flood Control District to empower Camille Creek students to restore and protect their school's namesake, which passes through their campus. Each year, students pull on boots and gloves, grab shovels, and meet with environmental professionals to talk about career pathways. They practice inquiry and observation skills, and engage with a variety of environmental concepts. The movement, mentorship, and feelings of success that come with each stewardship day have had a huge impact on Emily's students.

It's not just students at Camille Creek Community School who benefit from environmental, outdoor education. Research is showing that environmental education has a positive and sustained impact on students' lives. Environmental education leads to increased student participation, motivation to learn, character development, maturity, and ability to collaborate with others.

This year, Camille Creek students have been working virtually with Napa RCD to study native salmon restoration - and how it relates to their own lives. One student was so inspired that he turned his fishing trips into an extra credit study project.



"Napa RCD staff came in and made the science real, approachable, and relatable - which has been so freeing."
**Emily Read, Teacher
Camille Creek Community School**

Measuring Impacts of Stream Restoration

Napa RCD works with a range of public and private partners to measure, document, and communicate the responses of streams to restoration. Our post-project monitoring of the recent removal of the Upper York Creek Dam in St. Helena is a great example.

The earthen dam was built in 1900 and acquired by the City of St. Helena for municipal use in the 1930s. By 1992 it was filled with sediment and out-of-service, which is when a project to remove the dam was first proposed. In 2003, Napa RCD identified 1.6 miles of steelhead habitat above the dam that was inaccessible to migrating fish. In the following years, the City collaborated with various partners to design a project to remove the dam and restore habitat. The project included the installation of log structures designed to trap sediment and restore the downstream streambed, as well as restoration of native vegetation in the former reservoir area. The work was completed in 2020.



The City was required to develop a Geomorphic and Restoration Monitoring and Adaptive Management Plan (GMAMP) to assess and offset the environmental effects of the dam removal work, and we supported the City with GMAMP development starting in 2018. Napa RCD also assisted with permit coordination and design review.

Recently, Napa RCD has initiated collection of baseline data and over the next year we will monitor water quality during storms, survey the upstream channel for spawning steelhead, and oversee vegetation monitoring. Monitoring activities will continue for 10 years to capture long-term trends. These activities will provide critical information about how well the project restored fish passage and habitat connectivity, reduced the potential for future downstream degradation, and restored native riparian forest.

Napa RCD is excited to continue supporting our watersheds through monitoring and assessment of stream restoration.

"The removal of the Upper York Creek Dam was a complex task requiring the collaboration of many players. We are pleased to work with Napa RCD on this project; they have extensive knowledge of the watershed and a history of assessment and monitoring."

Erica Ahmann Smithies
Director of Public Works
City of St. Helena



LandSmart Plans Benefit Growers and the Watershed

LandSmart Water Quality and Habitat Improvement Plans describe the natural and agricultural resources of a property, document farming and other land practices, and identify opportunities to improve stewardship.

Since 2017, Napa RCD has been developing LandSmart Plans for vineyard properties to help growers in the Napa River watershed comply with the Regional Water Board's water quality control permit. The permit sets standards for sediment discharge and storm runoff from vineyards and unpaved roads. Most



growers were required to have a verified farm plan describing their property and how they plan to meet the new standards by July 2020.

To meet that deadline, Napa RCD completed over 70 LandSmart Plans last year! Many vineyard managers appreciated the chance to receive technical assistance on cover crops, soil health, road design, invasive species, fish, and pollinator habitat.

And plans lead to action. We've already helped almost a dozen growers achieve goals identified in their LandSmart Plans, such as adopting perennial cover crops and reducing tillage, or building new drainage structures in their roads.

"Napa RCD has been invaluable in helping us put together our LandSmart Plan. They are an excellent local resource dedicated to preserving our soil and healthy waterways."

Lisa Togni, Philip Togni Vineyard

"Napa RCD has provided a great service to our growers as they strive to comply with the new sediment permit from the Regional Water Board. Everyone trusts them to come up with a good way to monitor the health of the River moving forward."

**Ryan Klobas, Executive Director
Napa County Farm Bureau**







1303 Jefferson St., Suite 500B, Napa, CA 94559
NapaRCD.org 707-690-3110

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Andrew Lincoln
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