



Board of Directors

Susan Boswell
Barry Christian
Liz Colby
Tosha Comendant
Anne Cottrell
Diane Dillon
Marita Dorenbecher
Geoff Ellsworth
David Graves
Jason Lauritsen
Kenneth Leary
Alfredo Pedroza
Bill Pramuk
Kimberly Richard
Scott Sedgley
Pamela Smithers
Donald Williams

Alternates

Mariam Aboudamous
Jeffrey Durham
Doris Gentry
Ryan Gregory
Mary Koberstein
Irais Lopez-Ortega
Brent Randol

Staff

Patrick Lowe,
Secretary
Natural Resources
Conservation Mgr.,
Public Works

Jeff Sharp,
Principal Planner,
Public Works

804 First Street,
Napa, CA
94559-2623

Tel: 707-259-8600

info@napawatersheds.org

AGENDA

REGULAR MEETING

Thursday, March 28, 2019, 3:00 p.m.

2751 Napa Valley Corporate Drive, South Campus, Building A
First Floor, Willow Conference Room, Napa CA 94558

--- Note Meeting Location/Map ---

1. **CALL TO ORDER AND ROLL CALL** (Chair) (2 min)
2. **APPROVAL OF ACTION MINUTES** – January 24, 2019 (Chair) (2 min)
3. **PUBLIC COMMENT** – In this time period, anyone may address the Council regarding any subject over which the Council has jurisdiction but which is not on today's posted agenda. In order to provide all interested parties an opportunity to speak, time limitations shall be at the discretion of the Chair. As required by Government Code, no action or discussion will be undertaken on any item raised during this Public Comment period (Chair)
4. **PRESENTATIONS AND DISCUSSION:**
 - a) Presentation on Napa County's Groundwater Sustainability Annual Report for Water Year 2018, Department of Water Resources (DWR) Basin Reprioritization, status of DWR review of the County's Basin Analysis Report (Alternative Groundwater Sustainability Plan), and other groundwater program activities, including community Education and Outreach (Staff/Vicki Kretsinger Grabert, Luhdorff & Scalmanini Consulting Engineers) (45 min)
 - b) Presentation on a Lake Hennessy and Milliken Reservoir Watershed Study conducted jointly by the City of Napa and the County (Phil Miller, Deputy Director, Napa County Public Works) (20 min)

(cont.)

5. **UPDATES AND REPORTS**

- a) Report on the status of Napa County's Water Quality and Tree Protection Ordinance; which would update the County's Conservation Regulations, regarding stream setbacks, tree preservation, buffers around municipal reservoirs and other measures to reduce erosion and conserve habitat (David Morrison, Director, Planning, Building and Environmental Services Department) (30 min)
- b) Update on 2019 Watershed Symposium planning, speakers, topics and activities scheduled for May 16th at Copia/CIA (Frances Knapczyk, Program Director, Napa RCD) (10 min)

6. **INFORMATIONAL ANNOUNCEMENTS:**

Exchange of informational announcements and events (Staff/Council/Public) (5-10 min)

7. **FUTURE AGENDA ITEMS:**

Discussion of possible items for future agendas (Staff/Council) (5 min)

8. **NEXT MEETING:**

Next scheduled meeting: **May 23, 2019 – 3:00 p.m.**
2751 Napa Valley Corporate Drive, South Campus, Building A
First Floor, Conference Room, Napa CA 94558

The Council is encouraged to attend the **2019 Watershed Symposium on May 16th**

Note: The Council's May meeting might be canceled to focus effort and attendance on the upcoming Symposium

9. **ADJOURNMENT (Chair)**

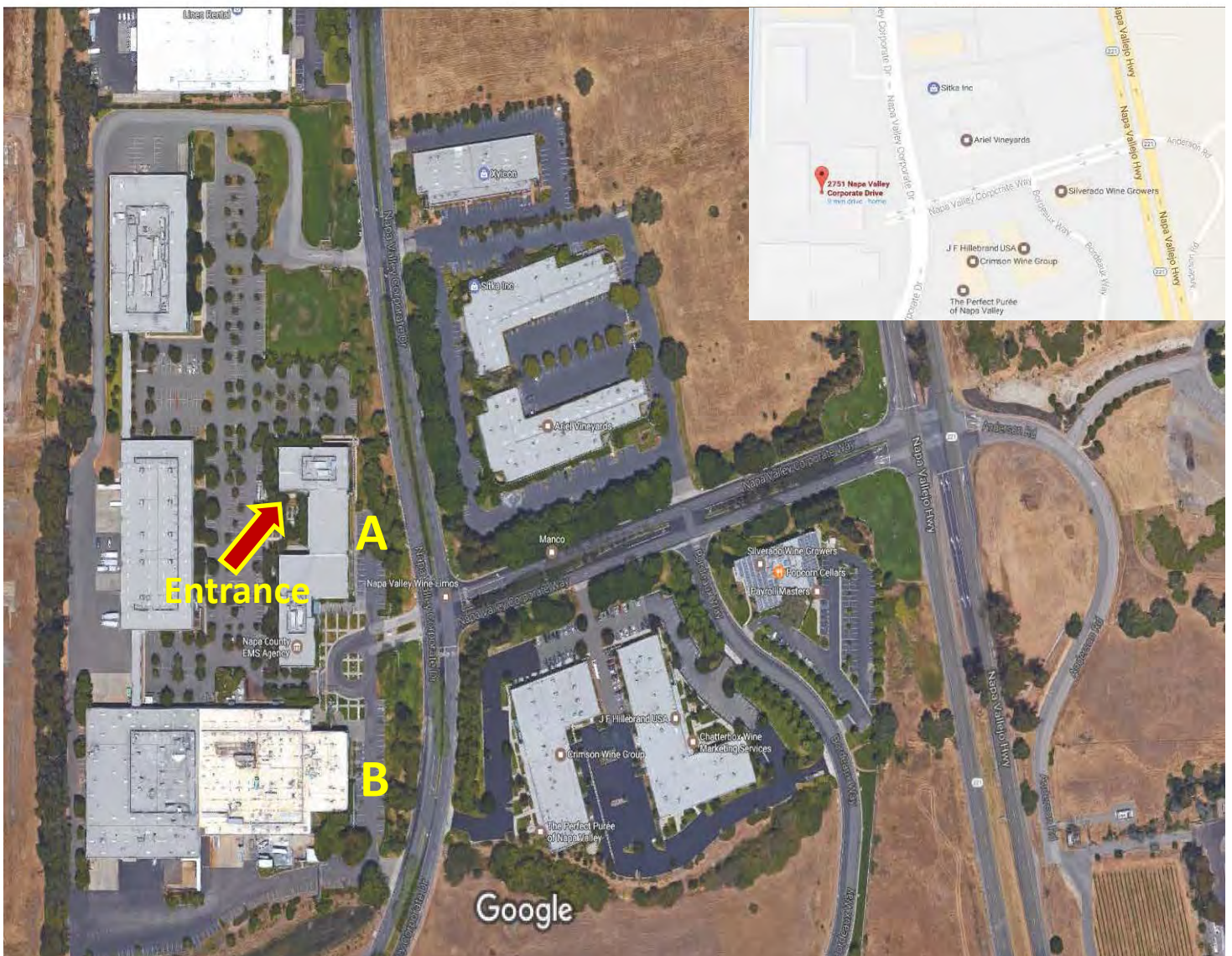
Note: If requested, the agenda and documents in the agenda packet shall be made available in appropriate alternative formats to persons with a disability. Please contact Jeff Sharp at 707-259-5936, 804 First St., Napa CA 94559-2623.



Meeting Location Map

The meeting room is located on the first floor in the southwest corner of Building A (see arrow)

2751 Napa Valley Corporate Drive, South Campus, Building A, First Floor, Conference Rooms, Napa CA 94558





-- ACTION MINUTES --

REGULAR MEETING

Thursday, January 24, 2019, 3:00 p.m.

**2751 Napa Valley Corporate Drive, South Campus, Building A
First Floor, Willow Conference Room, Napa CA 94558**

--- Note Meeting Location ---

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1. CALL TO ORDER AND ROLL CALL (Chair)

Welcome and introduction of Commissioner Anne Cottrell and Liz Colby to the Council
Members Present: Barry Christian, Liz Colby, Tosha Comendant, Anne Cottrell, Diane Dillon, David Graves, Alfredo Pedroza, Bill Pramuk, Kimberly Richard, Scott Sedgley, Pamela Smithers, Donald Williams

Members excused: Susan Boswell, Marita Dorenbecher, Geoff Ellsworth, Jason Lauritsen, Kenneth Leary

Members absent: None

Staff present: Patrick Lowe; Jeff Sharp

Mr. Sharp introduced Anne Cottrell, Liz Colby and Donald Williams.

2. APPROVAL OF ACTION MINUTES – December 12, 2018 Special Meeting (Chair) (2 min)

Approved

<i>SB</i>	<i>BC</i>	<i>LC</i>	<i>TC</i>	<i>AC</i>	<i>DD</i>	<i>MD</i>	<i>GE</i>	<i>DG</i>	<i>JL</i>	<i>KL</i>	<i>AP</i>	<i>BP</i>	<i>KR</i>	<i>SS</i>	<i>PS</i>	<i>DW</i>
<i>E</i>						<i>E</i>	<i>E</i>		<i>E</i>	<i>E</i>						

3. PUBLIC COMMENT – In this time period, anyone may address the Council regarding any subject over which the Council has jurisdiction but which is not on today's posted agenda. In order to provide all interested parties an opportunity to speak, time limitations shall be at the discretion of the Chair. As required by Government Code, no action or discussion will be undertaken on any item raised during this Public Comment period (Chair)

Chris Benz noted that the Board of Supervisors has made a watershed protection ordinance a priority for 2019 and announced a study session that is scheduled for January 29th at 9:00am and the opportunity for public comment. She requested that the Watershed Council give their input to the Supervisors and their support for maximizing watershed protections.

(cont.)

Jim Wilson (a coauthor on Measure C) mentioned that Napa Climate Now selected five climate champions in Napa County. He informed the WICC that he will be looking for signatures in support of a Climate Emergency Declaration. Mr. Wilson hopes that a Climate Emergency Resolution will be passed by leadership to take action to address GHG emissions. Mr. Wilson also stressed the need to protect our forests and to let them grow old.

Mike Hacket, a proponent of Measure C, states the objective of Measure C has not gone away. He feels that we need to continue to work towards enhancing protections for our watersheds. He noted that climate change is a crisis and we are not doing enough to address it. Mr. Hacket believes we can lead the way here in Napa. He provided the WICC with a position paper from the Growers, Vintners and landowners for Responsible Agriculture. Mr. Hacket stated that we need to protect our Ag Preserve by protecting our Ag Watershed. He continued to summarize the compromise points in the position paper.

Kelly Anderson, Linda Falls Alliance, spoke to bring attention to the forested canopies of Howell Mountain that supply drinking water to St. Helena and Napa. She reported that some new vineyards which were installed in the last year have sediment leaving their properties and ending up in Conn Creek. She continued saying that some older vineyards that are Fish Friendly and Napa Green certified are also producing sediment that is getting into the headwaters. She stated that there are two timber harvests pending in Angwin. In addition there has been clearing for PG&E power line protection. She said she hasn't seen County inspections occurring. In all, Ms. Anderson thinks mitigations are not working at this time. She believes we need to stop cutting down trees to plant vineyards.

Gary Margadant spoke about the minutes from the last meeting which referenced Petra Drive and the fact that Chris Malan was at the WICC meeting speaking about it. Mr. Margadant mentioned the Anthem Winery project in the Dry Creek area, noting the many water problems with the project. Mr. Margadant said the neighbors are concerned about their water. He mentioned that one property owner drilled 900' well and has to treat his water to remove boron. Mr. Margadant wonders, how groundwater is being adjudicated and how the process compares to actions that could be taken by a groundwater sustainability agency. Mr. Margadant asked the WICC to think about how we are adjudicating water now and how it would be adjudicated if we had a groundwater sustainability agency.

4. DISCUSSION AND ACTION:

- a) Election of Chair and Vice-Chair for 2019 (per Bylaws§ II.A.) (Council) (5 min)

David Graves offered to serve as Chair for 2019. Scott Sedgley nominated Mr. Graves to server as Chair. A second was provided and the Council approved.

SB	BC	LC	TC	AC	DD	MD	GE	DG	JL	KL	AP	BP	KR	SS	PS	DW
E						E	E		E	E						

David Graves nominated Tosha Comendant to serve as Vice-Chair for 2019. A second was provided and the Council approved.

SB	BC	LC	TC	AC	DD	MD	GE	DG	JL	KL	AP	BP	KR	SS	PS	DW
E						E	E		E	E						

- b) Discussion and adoption of 2019 Meeting Calendar (per Bylaws§ III.A.) (Council) (5 min)

Mr. Sharp presented the 2019 Meeting Calendar. To improve attendance during grape harvest, holiday months and January election transitions, Mr. Sharp suggested moving the meetings to the even months of the calendar. Mr. Lowe suggested bringing back an alternative calendar to the Council at a later date for consideration. Diane Dillon suggested reaching out to the City/Town elected officials to see what meeting schedule would work best to improve attendance. Mr. Lowe noted that January is often a difficult month as

the Cites and Town select their committee/council representatives at that time. Mr. Lowe noted that a bylaws change may help with the City/Town member selection and approval process, mentioning that staff will look into the idea and will bring it back to the Council for consideration. The Council moved and approved the 2019 Meeting Calendar as presented.

SB	BC	LC	TC	AC	DD	MD	GE	DG	JL	KL	AP	BP	KR	SS	PS	DW
E						E	E		E	E						

5. PRESENTATIONS AND DISCUSSION:

Note: Item 5b was heard first to facilitate the time constraints of Stephen McCord

- a) Presentation and discussion on the 2017-18 Napa River Fish Monitoring Report (Jonathan Koehler, Senior Biologist, Napa County Resource Conservation Dist.) (25 min)

Mr. Koehler started his presentation noting that it is the Resource Conservation District’s (RCD’s) 10th year monitoring fish in the Napa River. The RCD uses a rotary screw trap in the lower reach of the Napa River to monitor out migrating salmon. The trap targets the smolt phase in the fish’s life history. Monitoring results provide the RCD an indication of the health of the watershed. Focus of the monitoring is on both steelhead and Chinook smolt. The dataset covers 2009 through 2018. Through the monitoring, the RCD has found that steelhead persist in the river system even in very dry years. Mr. Koehler noted that it is difficult to predict population sizes with this data since they are only sampling 2/3 of the watershed. Mr. Koehler mentioned that the steelhead numbers are likely a small fraction of what they used to be. Mr. Koehler continued by summarizing the Chinook dataset, commenting that the species does not do well in a drought. 2013-2015 were years of drought and the RCD did not collect any Chinook in the screw trap those years. During the last three years, however, Chinook numbers have slightly grown. Mr. Koehler also summarized the RCD’s PIT fish tagging work. A PIT tag is an electronic tag that allows scientists to track a fish over space and time. The tag is placed into the fish. During the fishes trip up and down the river it passes an antenna/reader where it records the fish’s data, similar to a bridge toll/fast track. The system also documents the direction the fish is swimming. The PIT technology has documented returning spawning steelhead for the first time ever in the Napa River system. There are mostly native captures in the RST. There has been an increase in steelhead catch compared to the last few years. Chinook capture rates are about the same as last year. There have been a very high lamprey abundance in the system. Mr. Koehler concluded stating that there is more information about native fisheries on the WICC website, including past monitoring reports. The Council and public asked various questions of Mr. Koehler – volunteer use, carcass surveys, river marsh habitat use, Chinook as a species of special concern, stable but very low population of salmon – a fraction of what could be supported, Murphy creek flow issues related to RWQCB and DFG enforcement of dewatering, otter and beaver presence.

- b) Presentation and discussion on the Brownfields Coalition Assessment Project’s efforts underway prioritizing, assessing and planning cleanups of local abandon mine sites to improve environmental quality and public safety (Stephen McCord, McCord Environmental) (30 min)

Mr. McCord began his presentation by explaining what a “Brownfield” project is; in this case, an abandoned mining site that is impeding “good things from happening.” He noted that not many agencies want to deal with the cleanup of these sites because of the liability for anything that may go wrong. The Brownfields program allows cleanup of the sites with federal funding and provides liability protections and technical assistance. Participation is voluntary and site assessments are free. Because of the federal funding, the results are public, but not publicized. The program is for private lands, tribal or state/local land. Mr. McCord discussed the assessment process and identification of eligible properties. The assessments determine the cause and extent

of contamination, evaluate public health and environmental risks and set cleanup goals based on a reclamation plan. Mr. McCord said they have been conducting several site assessments in the region, developing cleanup plans, along with development of an area-wide planning document. Mr. McCord referenced a fact sheet developed for the program and area-wide plan that he would like input on. Mr. McCord provided a map of all the old mine sites known within Napa County. The sites have been identified and prioritized. He has contacted landowners and had limited response. Mr. McCord spoke about the primary challenges within Napa County. Landowner cooperation has been difficult given the past drought, flood and fires. On a positive note, Mr. McCord noted that there is a lot of potential funding, fires have cleared the way and encourage added funding sources, there is a broad interest in doing the cleanup work, there are capable agency staff and contractors, and there is a rich history associated with the area. Mr. McCord mentioned similar efforts in the region, including Phase II ESA for Winters WWTP, Cleanup Plan for Elgin Mine, cleanup Plan for Plymouth Mine, Phase II ESA and Cleanup Plan for St. John's Mine, and finalization of the area-wide Brownfields plan. The area-wide plan objectives include protections for public health and the environment, support the local economy, and reflect the community's vision. Mr. McCord is looking for input on regional priorities and implementation strategies. In particular, he is seeking feedback on the following topics: What is important in your community? How can we make sure the plan is useful to you? What are any upcoming projects/needs to incorporate? The Council and public asked various questions of Mr. McCord – outreach to connect with more Napa County landowners, improvements to Oak Hill Mine Road, other Brownfield sites – abandoned industrial and municipal sites, Etna Mine area, realtor outreach, and old quarries.

6. UPDATES AND REPORTS

- a) Report on Napa County State Water Project supplies, drought conditions and contingent planning, and local flood preparedness (Phil Miller, District Engineer, Napa County Flood and Water Conservation District) (15 min)

Phil Miller discussed the current precipitation levels and estimations for the near term. Napa County received a good amount of water in November and currently is at about average for rainfall. Mr. Miller noted that the snow pack is at 115% of average. The local reservoirs are nearly full or full, so local water supply looks good. Looking to the future, Mr. Miller said our winter is forecasted to be warmer than usual and we are expected to see a series of wet and dry cycles. Mr. Miller also mentioned that another “atmospheric river” is expected in beginning of February. Regional weather/climate models are leaning towards an above average rainfall for the year.

- b) Update on Napa County's Groundwater Sustainability Program (Staff) (15 min)

Patrick Lowe informed the Council that consultants are putting together the 2018 Annual Groundwater Monitoring Report for submittal to DWR by April 1st. The report will be presented to the Board of Supervisors on March 26th and then to the WICC on March 28th. Mr. Lowe said the Water Commission met last week and received a final report from the DWR on their groundwater basin reprioritizations. One basin under consideration was the Napa Valley Subbasin, which changed slightly, up 1.25 points, from a medium to a high priority ranking. The increased ranking was not based on documented impacts but rather the total number of wells in the subbasin. Mr. Lowe noted the County's Basin Analysis Report (BAR, Groundwater Sustainability Plan Alternative) is still under review by DWR. A response from DWR on the BAR is expected in April. Mr. Lowe mentioned that the other subbasin under review by DWR is the Napa-Sonoma Lowlands. There was a boundary adjustment request submitted by Sonoma County for that area. Because of that request, the subbasin will get re-reviewed by DWR around the end of February. DWR will have a comment period and then continue on with a final review and priority ranking based on the comments received. It is likely that the

priority ranking for the Napa-Sonoma Lowlands Subbasin will be finalized by June. The Council and public asked various questions of Mr. Lowe – management implications between a medium or high priority ranked basin, triggers for when a Groundwater Sustainability Agency and Groundwater Sustainability Plan is required, and the availability of the BAR online.

- c) Report on 2019 Watershed Symposium planning and discussion of possible Symposium session topics (Staff) (10 min)

Jeff Sharp and Frances Knapczyk provided the Council with an update on 2019 Watershed Symposium planning efforts. The date is set for May 16th at the CIA/Copia. Mr. Sharp asked the Council for their ideas on session topics and speakers. The Council suggested issues of sedimentation, bank erosion, incision and causes. Ms. Knapczyk added there is also interest in land use, watershed protections, groundwater, fire preparedness, water quality issues namely pesticides/rodenticides in the water, storm water runoff, climate change, the urban and ag interface and how to address those relationships, and addressing inclusiveness in watershed protection within the community. Ms. Knapczyk announced the return of the “whirlwind tour” to the symposium; a time where community organizations can promote their project/effort/activity in one-minute. It was suggested that other informational sessions be held during off-work hours so that more of the community could attend. The Council further suggested information on the topics of fish, habitat/wildlife corridor connectivity, and information on the benefits that restoration has had in the watershed. It was also mentioned that the price of \$50 many exclude some from attending, suggesting if a scholarships could be offered to those needing help with the cost.

7. INFORMATIONAL ANNOUNCEMENTS:

Exchange of informational announcements and events (Staff/Council/Public) (5-10 min)

Bill Pramuk announced a The Sudden Oak Death Blitz, a meeting on the effort will be April 26th – details on participating will be coming soon via the RCD.

Barry Christian announced The Open Space District Birthday Celebration on January 31st from 5:00pm-7:00pm.

8. FUTURE AGENDA ITEMS:

Discussion of possible items for future agendas (Staff/Council) (5 min)

- Napa County Sustainable Groundwater Annual Report – Water Year 2018
- Other items

9. NEXT MEETING:

Next scheduled meeting:

March 28, 2019 – 3:00 p.m.

2751 Napa Valley Corporate Drive, South Campus, Building A
First Floor, Conference Room, Napa CA 94558

10. ADJOURNMENT (Chair)

Note: If requested, the agenda and documents in the agenda packet shall be made available in appropriate alternative formats to persons with a disability. Please contact Jeff Sharp at 707-259-5936, 804 First St., Napa CA 94559-2623.



Voting Key

If not unanimous, votes will be tallied (N = No; A = Abstained, E = Excused) using the following Board Member abbreviations: SB = Susan Boswell; BC=Barry Christian; LC = Liz Colby; TC = Tosha Comendant; AC=Anne Cottrell; DD = Diane Dillon; MD = Marita Dorenbecher; GE = Geoff Ellsworth; DG=David Graves; JL = Jason Lauritsen; KL = Kenneth Leary; AP = Alfredo Pedroza; BP=Bill Pramuk; KR=Kimberly Richard; SS = Scott Sedgley; PS = Pamela Smithers; DW=Donald Williams; Alternates: MA = Mariam Aboundamous, JD = Jeffrey Durham, DG2 Doris Gentry, RG = Ryan Gregory, ILO = Irais Lopez-Ortega, BR=Brent Randol.

Example Key:

SB	BC	LC	TC	AC	DD	MD	GE	DG	JL	KL	AP	BP	KR	SS	PS	DW
	N				A			A							E	

REPORT SUMMARY:

NAPA COUNTY GROUNDWATER SUSTAINABILITY ANNUAL REPORT – WATER YEAR 2018

The 2018 Annual Report provides the latest information on efforts underway since 2008 by Napa County and others to implement groundwater management actions to better understand groundwater conditions, establish monitoring to track conditions, conduct education and outreach, and develop programs to assess and maintain groundwater sustainability. These efforts have included:

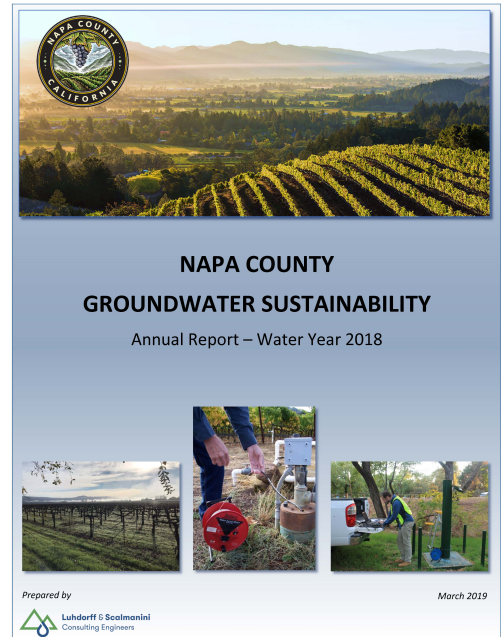
- Adoption of 2008 General Plan Goals & Policies
- New groundwater resources studies began in 2009
- Created Groundwater Resources Advisory Committee to lead implementation and outreach (2011-2014)
- Provide ongoing community outreach through the Watershed Information & Conservation Council

The Annual Report meets the reporting requirements of the Sustainable Groundwater Management Act (SGMA) for the Napa Valley Subbasin, which underlies much of the Napa Valley Floor. It provides:

- An update on groundwater conditions both in the Napa Valley Subbasin and in other areas across the county (see **Section 5**),
- An update on water use in the Napa Valley Subbasin (see **Section 6**),
- An update on the implementation of management actions presented in the 2016 Basin Analysis Report¹ and 2018 Basin Analysis Report Amendment² developed to maintain groundwater sustainability (see **Section 7**), and
- An update on planned near-term activities, consistent with Basin Analysis Report management recommendations, to maintain or improve groundwater conditions and ensure overall water resources sustainability in the Napa Valley Subbasin (see **Section 8**).

Key findings from the Annual Report include:

- Groundwater level trends in the alluvial aquifer system of the Napa Valley Subbasin are stable in most wells with long-term groundwater level records (see Sections 5.1.1 and 5.1.2).
- Many monitored wells experienced somewhat decreased groundwater levels in 2018 compared to 2017, consistent with dry water year conditions in 2018.
- In 19 of 20 representative monitoring wells, groundwater levels recorded in 2018 were above the minimum thresholds established as SGMA sustainability criteria (see Section 5.1.3). The County is reviewing conditions in the vicinity of one well that showed a fall level below the minimum threshold, including water use, the



¹ LSCE. 2016. *Napa Valley groundwater sustainability: a basin analysis report for the Napa Valley Subbasin*. <https://www.napawatersheds.org/sustainable-groundwater-management>

² LSCE. 2018. *Napa Valley groundwater sustainability Northeast Napa Management Area: an amendment to the 2016 basin analysis report for the Napa Valley Subbasin*, January 2018.

location and operation of nearby wells, and data from other monitored wells nearby that did not experience similar water level conditions in fall 2018.

- Overall, the depth to groundwater in the alluvial aquifer of the Subbasin remained relatively shallow, ranging between 5 and 41 feet in spring 2018.
- While agricultural land use, especially vineyards, have covered much of the Napa Valley Floor for decades, water requirements for agriculture in the Subbasin (predominantly vineyards) are significantly lower than agricultural commodities grown elsewhere in California.
- Due to the high recharge potential of the Subbasin in most years and relatively low water requirements for agriculture, the Subbasin remains full relative to its storage capacity.
- Cumulative changes in groundwater storage, the difference between annual inflows and outflows to the groundwater system, show a net increase of 4,388 acre-feet from water years 1988 to 2018 (see Section 5.1.4), reflecting long-term stability in groundwater supplies across the Subbasin.
- Groundwater extraction in the Subbasin in water year 2018 was 17,889 acre-feet (see Section 6.1.4). This volume is within the sustainable yield range of 17,000 to 20,000 acre-feet per year identified in the Basin Analysis Report (LSCE, 2016). **These and other findings on groundwater conditions and trends (see Section 5) demonstrate that the Napa Valley Subbasin has continued to be managed sustainably through 2018.**
- A total of 440 acre-feet of recycled water was used for agricultural irrigation.
- A new remote sensing analysis of groundwater use by Groundwater Dependent Ecosystems (GDEs) finds that evapotranspiration by GDEs during the dry season, when reliance on groundwater by GDEs is greatest, was between 3,632 acre-feet and 4,721 acre-feet. This analysis provides a numerical point of comparison that will be useful going forward, along with updated GDE mapping, to understand the distribution and health of GDEs over time.
- The majority of the Milliken-Sarco-Tulucay (MST) Subarea is not part of a groundwater basin as mapped by DWR, though it is a groundwater subarea for local planning purposes. Groundwater level declines observed as early as the 1960s-1970s have stabilized since about 2009 (see Section 5.2). Within the MST Subarea, groundwater level responses differ indicating that localized conditions, whether geologic or anthropogenic, are likely the primary influence on groundwater conditions.

SGMA sustainable groundwater management activities underway or completed in 2018 include:

- Providing tools and training to Napa County well owners to support monitoring and awareness of groundwater conditions in wells that they own.
- Development of datasets to support the expansion of the groundwater flow model developed for the Northeast Napa Management Area to the entire Napa Valley Subbasin.
- Updated mapping and evaluation of water use by Groundwater Dependent Ecosystems
- Developing best available water use data by incorporating data from DWR and the State Water Resources Control Board.
- Revised conditions of approval for discretionary projects so permittees are required to monitor project wells and record the volume of groundwater pumped.
- Ongoing coordination with other local and regional water management and planning programs.

For additional information: <https://www.napawatersheds.org/groundwater>



A Tradition of Stewardship
A Commitment to Service

Agenda Date: 3/19/2019
Agenda Placement: 9A
Set Time: 9:00 AM
Estimated Report Time: 1 hr

NAPA COUNTY BOARD OF SUPERVISORS Board Agenda Letter

TO: Board of Supervisors

FROM: Steven Lederer - Director of Public Works
Public Works

REPORT BY: Patrick Lowe, Natural Resources Conservation Mgr - 259-5937

SUBJECT: Napa County Groundwater Sustainability: Annual Report - Water Year 2018 and SGMA Update

RECOMMENDATION

Director of Public Works requests the following:

1. Accept the Napa County Groundwater Sustainability: Annual Report - Water Year 2018 and;
2. Authorize submittal of the report to the State Department of Water Resources (DWR).

EXECUTIVE SUMMARY

The Napa County Groundwater Sustainability: Annual Report - Water Year 2018 is the fifth Annual Report, with four previous Annual Reports prepared for the years 2014 through 2017. This is the second Annual Report prepared to also meet the annual reporting requirements of the Sustainable Groundwater Management Act (SGMA). This is a technical report and includes recommendations for the Board's review and acceptance.

The Sustainable Groundwater Management Act (SGMA) update, to be given by staff, will provide the latest information from the Department of Water Resources (DWR) regarding the status/actions for the Napa Valley Subbasin Basin Analysis Report/Alternative, local basin boundary adjustments and reprioritizations, and next steps.

This item supports the County's strategic goal to provide greater environmental protection for environmental resources, particularly agricultural land, forests, air and water (Goal 12) and strategic actions related to the adoption of the Alternative Groundwater Sustainability Plan (12G), and integration of water data, monitoring, and permitting programs between Planning Building and Environmental Services and Public Works (12H).

PROCEDURAL REQUIREMENTS

1. Receive staff report and presentation
2. Public Comment
3. Motion, second, discussion and direction to staff
4. Vote on the Items

FISCAL IMPACT

Is there a Fiscal Impact? No

ENVIRONMENTAL IMPACT

ENVIRONMENTAL DETERMINATION: The proposed action is not a project as defined by California Code of Regulations 15378 (State CEQA Guidelines) and therefore CEQA is not applicable.

BACKGROUND AND DISCUSSION

Introduction

The Napa County Groundwater Sustainability: Annual Report – Water Year 2018 (Report) presents an update on groundwater conditions and water use in the Napa Valley Subbasin, as required by Section 356.2 of the Groundwater Sustainability Plan (GSP) Regulations. As in the past, the Report extends beyond the requirements of the GSP regulations by also including an update on groundwater conditions elsewhere in the county (i.e., outside of the Napa Valley Subbasin). The Report also provides an update on implementation of management actions presented in the Napa Valley Groundwater Sustainability: 2016 Basin Analysis Report (2016 BAR) and the 2018 BAR Amendment - Northeast Napa Management Area: an Amendment to the 2016 Basin Analysis Report (2018 BAR Amendment). The 2016 BAR and the 2018 BAR Amendment were developed to maintain groundwater sustainability.

Since 2008, the County, along with the efforts of others, has been instrumental in implementing groundwater management actions to better understand groundwater conditions, establish monitoring to track conditions, conduct education and outreach, and develop programs to assess and maintain groundwater sustainability. These efforts included the adoption of Goals and Policies in Napa County's 2008 General Plan, commencing new studies of the county's groundwater resources in 2009, and creation of a Groundwater Resources Advisory Committee (GRAC; 2011 to 2014) to spearhead groundwater sustainability planning, management implementation, and community outreach.

A Napa County Groundwater Monitoring Plan was prepared in 2013 to formalize and augment groundwater monitoring efforts conducted as part of a Comprehensive Groundwater Monitoring Program. The Plan recommended annual reports on groundwater conditions and modifications to the countywide groundwater monitoring program as needed. To date, four prior Annual Reports have been prepared. This is the second Annual Report that was prepared to also meet the annual reporting requirements of the Sustainable Groundwater Management Act (SGMA). In December 2016, Napa County submitted the Napa Valley Groundwater Sustainability: 2016 Basin Analysis Report as an alternative to a Groundwater Sustainability Plan (GSP) in accordance with the GSP Regulations developed by the California Department of Water Resources (DWR). In March 2018, following completion of a Special Study (Northeast Napa Area: Special Groundwater Study), review of available data, and staff recommendation, the Board approved a Northeast Napa Groundwater Management Area and an amendment to the 2016 BAR. The 2018 BAR Amendment was the result of findings in the Special Study and recommendations that were presented to the Board of Supervisors on October 24, 2017 and to the Watershed Information and

Conservation Council (WICC) on January 25, 2018. The 2018 BAR Amendment provides supplemental information developed since the 2016 BAR, but does not change the findings of the 2016 BAR. In April 2018, in accordance with GSP regulations, the 2018 BAR Amendment and required annual reporting for Water Year 2017 was submitted to DWR.

Annual Report - Water Year 2018

Results from the County's groundwater monitoring show that groundwater level trends in the Napa Valley Subbasin are stable in the majority of wells with long-term groundwater level records. Groundwater levels show continued stable conditions in water year 2018. Water year 2018 was a Dry year (19.3 inches). Spring 2018 groundwater levels were generally somewhat lower compared to spring 2017, which conversely was a Very Wet year. Despite the reduced recharge potential in 2018 due to Dry year conditions, groundwater levels in fall 2018 remained comparable to levels in recent years. Groundwater levels in spring and fall 2018 were also generally above levels recorded in 2014, the most recent water year with a similar annual precipitation total.

Through February 2019, water year 2019 precipitation has already exceeded the entire water year 2018 total and is above the long-term median annual total for all water years since 1950. Total precipitation and groundwater monitoring results for water year for 2019 will reported in March 2020.

Groundwater level monitoring was conducted at a total of 108 sites across Napa County in 2018, including 61 wells within the Napa Valley Subbasin. The number and distribution of wells monitored in 2018 was generally consistent with monitoring conducted since 2014.

Groundwater levels recorded in 2018 were above the minimum thresholds established as sustainability criteria in 19 of 20 SGMA Representative Wells. The reduction of groundwater levels below the minimum threshold at one of the twenty SGMA Representative Wells in the fall of 2018 was most likely the result of a localized groundwater condition, possibly influenced by the Dry water year. Two other wells in the vicinity of this well did not experience similar groundwater level conditions in fall 2018. Subsequent monitoring has found that water levels at that one well have increased throughout the winter of 2018-2019, including an increase of 14 feet even before substantial rainfall occurred. These observations indicate that the fall 2018 groundwater measurement does not reflect a changed condition in the Napa Valley Subbasin. Nevertheless, in response to the fall 2018 groundwater level at this one site, the County is reviewing conditions in the vicinity of the well, including water use and the location and operation of nearby wells.

Within the primary aquifer system of the Napa Valley Subbasin, the volume of groundwater in storage decreased in spring 2018 (a dry year) relative to spring 2017 (a very wet year). The volume of groundwater in storage declined in 2018 by 9,300 acre-feet to a total of 210,000 acre-feet. From 1988 through 2018, the cumulative annual storage changes are a positive 4,400 acre-feet, reflecting a basin in balance and the absence of long-term depletions of groundwater storage within the Subbasin.

Groundwater pumping in water year 2018 was comparable to amounts in recent years dating back to 2004. Over the full 30-year period, annual storage changes in the aquifer system have fluctuated between positive and negative values, generally in accordance with varying amounts of precipitation (water year type). The fluctuation in cumulative changes in storage between positive and negative values indicate stable groundwater storage conditions and the absence of long-term chronic depletion. Groundwater pumping in the Napa Valley Subbasin in water year 2018 remained within the sustainable yield range of 17,000 to 20,000 acre-feet per year identified in the 2016 Basin Analysis Report. Together, the findings presented in this report regarding groundwater conditions at representative monitoring sites, changes in groundwater storage, and groundwater pumping demonstrate that the Napa Valley Subbasin has continued to be managed sustainably through 2018.

A new analysis was conducted as part of the 2018 Annual Report to account for water use by Groundwater Dependent Ecosystems (GDEs) and improve the understanding of GDE groundwater use relative to other users in

the Subbasin. Estimated groundwater use by GDEs in water year 2018 was between 3,630 acre-feet and 4,720 acre-feet during the months when groundwater would be the dominant source of available water. The result indicates that groundwater use by GDEs in water year 2018 was approximately 20% to 26% of the total groundwater pumping of 17,889 acre-feet by other uses and users in the Subbasin. The new analysis provides a numerical point of comparison that will be useful going forward, along with updated GDE mapping, to understand the distribution and health of GDEs over time.

Although designated as a groundwater subarea for local planning purposes, the majority of the Milliken-Sarco-Tulocay (MST) Subarea is not part of a groundwater basin as mapped by DWR. Groundwater level declines observed in the MST Subarea as early as the 1960s and 1970s have stabilized since about 2009. Groundwater level responses differ within the MST Subarea and even within the north, central, and southern sections of this subarea, indicating that localized conditions, whether geologic or anthropogenic in nature, might be the primary influence on groundwater conditions in the subarea. Some wells in the subarea have shown multi-year recovery from their lowest groundwater levels, those wells are scattered amongst other wells that remain steady relative to their lowest groundwater levels. Although there are signs of localized improvements, it is too early to confidently state that the overall MST Subarea condition is improving.

Recommendations and Request for Board Direction

Napa County's groundwater sustainability program efforts are proposed to be prioritized in the upcoming year to implement the recommendations of the Annual Report - Water Year 2018. See Chapter 8: Summary and Recommendations (p.92-97) for details on the following recommendations:

- | 8.1.1 Update the Napa County Groundwater Program Communication and Education Plan (SGMA Implementation Recommendation 5.1b and 5.2a)
- | 8.1.2 Data Gap Refinement (SGMA Implementation Recommendations 11, 13 and 14)
- | 8.1.3 Ongoing Water Quality Sampling (SGMA Implementation Recommendation 15)
- | 8.1.4 Improve Data Collection and Evaluation from Discretionary Permittees Required to Monitor Groundwater Conditions and Groundwater Use (SGMA Implementation Recommendations 16 and 25)
- | 8.1.5 Evaluate Strategic Recharge and Water Conservation Opportunities (SGMA Implementation Recommendation 8 and 19)
- | 8.1.6 Evaluate Distribution of Groundwater Dependent Ecosystems; Coordinate Evaluation with Guidance Developed by DWR, Nature Conservancy, California Native Plant Society or Others (SGMA Implementation Recommendations 11 and 20)
- | 8.1.7 Update the Napa County Groundwater Ordinance for the Northeast Napa Management Area (SGMA Implementation Recommendation 28)
- | 8.1.8 Continue to Implement Improvements to Napa County's Data Management System (SGMA Implementation Recommendation 1.1b)
- | 8.1.9 Develop Well Testing Standards (SGMA Implementation Recommendation 30)

Sustainable Groundwater Management Act Update

SGMA requires DWR to reprioritize groundwater basins throughout the state. In 2018 DWR reprioritized the Napa Valley Subbasin from a Medium to High priority. The increase in rank was based upon the relative importance of groundwater within the basin and is not a reflection of basin management or declining groundwater levels. The changed rank from Medium to High of the Napa Valley Subbasin does not affect the County's requirements under SGMA nor recommended management actions. DWR has proposed changing the ranking of the Napa-Sonoma Lowlands Subbasin (Carneros) from a Very Low priority to a Medium priority. If approved, a Medium ranking would require additional management action, including the creation of a Groundwater Sustainability Agency for the basin and the development of a Groundwater Sustainability Plan, and a significant cost impact could be expected. Comments and additional available data have been submitted to DWR along with a request that DWR reconsider its reprioritization of the basin, ranking it as a Low priority. Due to the recently approved boundary adjustments to align the basin with the county line, final DWR reprioritization of the Napa-Sonoma Lowlands

Subbasin will likely be announced in May 2019.

DWR has yet to complete its review of the Napa Valley Groundwater Sustainability: 2016 Basin Analysis Report (BAR) submitted in December 2016 as an alternative to a Groundwater Sustainability Plan (GSP). It is expected that DWR will provide the County with a response by summer 2019 (if not sooner). If DWR rejects the BAR, it would significantly impact the County's current Groundwater Program, requiring the creation a Groundwater Sustainability Agency for the Napa Valley Subbasin and subsequent development of a Groundwater Sustainability Plan.

Staff Recommendation

Discuss and provide direction to staff. Existing resources/budget are expected to address the above recommendations, and these costs will be included as a part of the Department's FY 2019-20 budget request. Grant opportunities are also being sought to support implementation priorities and supplement existing budgets where possible. Staff recommendation is to accept the Annual Report - Water Year 2018 and authorize its submittal to the State Department of Water Resources (DWR).

SUPPORTING DOCUMENTS

- A . Napa County Groundwater Sustainability Annual Report - Water Year 2018
- B . Report Summay - 2 pgs.
- C . PowerPoint Presentation (Added after initial agenda posting)

CEO Recommendation: Approve

Reviewed By: Leigh Sharp



A Tradition of Stewardship
A Commitment to Service

Agenda Date: 3/19/2019

Agenda Placement: 10B

NAPA COUNTY BOARD OF SUPERVISORS

Board Agenda Letter

TO: Board of Supervisors

FROM: Steven Lederer - Director of Public Works
Public Works

REPORT BY: Phillip Miller, Dep Dir PW-Flood Control & Water Resources - 707-259-8620

SUBJECT: Presentation and Acceptance of the Hennessey and Milliken Watersheds Study

RECOMMENDATION

Director of Public Works recommends the following:

1. Acceptance of the Hennessey and Milliken Watersheds Study conducted jointly by the City of Napa and the County; and
2. Direction to develop an agreement with the City of Napa to implement the Sampling and Analysis Plan recommended in the Study.

EXECUTIVE SUMMARY

The City and County have a shared interest in how changes in the Hennessey and Milliken watersheds might impact the related lake and reservoir. The City owns the two water bodies, and the watersheds are located in the unincorporated area of the County. A study of the watersheds has been completed that was cost shared equally.

On June 26, 2017 a Request for Qualifications/Proposals was published for the Hennessey and Milliken Watersheds Study (Study). On July 28, 2017 proposals were received from four firms. A review committee consisting of staff members representing the City of Napa Water Department and County Planning, Building and Environmental Services and County Public Works was formed to review the proposals. The committee unanimously recommended award of a contract to Systech Water Resources, Inc. On September 26, 2017 the Board awarded the contract to them.

The work is now complete and staff will provide a presentation on the Study results and request direction regarding next steps to implement the sampling and analysis plan recommended in the Study.

The Napa County Strategic Plan Item 12F under Vibrant and Sustainable Environment states "Propose to Cities

and Town to coordinate and develop a regional approach to municipal watershed studies and monitoring." Cooperating on evaluation the Lake Hennessey and the Milliken Reservoir watersheds advances this goal.

PROCEDURAL REQUIREMENTS

1. Staff reports.
2. Public comments.
3. Motion, second, discussion and vote on the item.

FISCAL IMPACT

Is there a Fiscal Impact? No

ENVIRONMENTAL IMPACT

ENVIRONMENTAL DETERMINATION: The proposed action is not a project as defined by 14 California Code of Regulations 15378 (State CEQA Guidelines) and therefore CEQA is not applicable.

BACKGROUND AND DISCUSSION

The City and County have a shared interest in how changes in the Hennessey and Milliken watersheds might impact the related lake and reservoir. The City owns the two water bodies, and the watersheds are located in the unincorporated area of the County. Whereas some jurisdictions own all or a majority of the land making up the watershed above their water supplies, the City of Napa does not, leading to the need for the City, County, and private property owners to cooperate in order to protect the City's water supply.

On June 20, 2017 the County and City both approved a Memorandum of Understanding (MOU) regarding a study of the watersheds that would be cost shared equally. The County took the lead in preparing the Request for Qualifications/Request for Proposals in coordination with the City. On June 26, 2017 a Request for Qualifications/Proposals was published for the Hennessey and Milliken Watersheds Study. On July 28, 2017 proposals were received from four firms. A review committee consisting of three staff members representing the City of Napa Water Department and County Planning, Building and Environmental Services and County Public Works was formed to review the proposals. The committee unanimously recommended award of a contract to Systech Water Resources, Inc.

On September 26, 2017 the Board approved a professional services agreement with Systech to develop a calibrated watershed model simulating hydrology and water quality, develop a water quality monitoring plan, and provide a tool which the City and County can use for watershed management on an ongoing basis. The model combines the physical characteristics of the watershed (topography, land use, soils, vegetation, stream locations etc.) with historical weather data (rainfall, wind etc.), known hydrology (stream flow and depth, lake elevations, diversions etc.) and available water quality data (total dissolved solids, pesticides, nitrogen, etc.) collected over time at various sampling points in the watersheds. The model was calibrated by comparing model simulations with known past events to verify accuracy. If the model accurately represents known events, presumably it can be relied upon to predict future events.

It should be noted that the model was developed based on existing and historical data. No new watercourse

mapping, water quantity, or water quality information was developed as a result of the study. The scope of the approved study was limited to developing the model and developing a water quality monitoring plan to support use of the model. The model will provide valuable long-term insights into watershed behavior, but it is not designed to address more immediate policy concerns.

Once sufficient data is available, the model will be able to predict flows into the reservoirs from the various creeks and water quality parameters for those flows. Example parameters include turbidity, total dissolved solids, suspended solids, temperature etc. These results can then be interpreted on their own or incorporated into separate models of the lakes themselves to predict lake behavior. The model can be used to evaluate various future scenarios by changing the initial parameters. If, for example, a new development is proposed in the watershed, the new land use characteristics (topography and vegetation) could be added to the model and the results compared to the no-project analysis. Another example would be to change the weather data to reflect various climate scenarios to estimate the impacts of climate change. However, the scope of the current effort does not include evaluation of alternative scenarios, just model calibration. Recommendations for further monitoring, in the form of a Sampling and Analysis Plan, is also included in the final study report (documents attached).

If the Board sees value in evaluating alternative scenarios for policy consideration, staff recommends continuing to develop the relationship with the City beyond this scope of work and in support of a broader effort to jointly implement the sampling and analysis plan recommended in the Hennessey and Milliken Watershed Study. That broader effort is not currently funded. Staff will return with a scope and cost estimate for the sampling and analysis plan after discussion with the City if the Board so directs.

SUPPORTING DOCUMENTS

- A . Hennessey and Milliken Watershed Study
- B . Sampling and Anaysis Plan

CEO Recommendation: Approve

Reviewed By: Leigh Sharp



SAVE *the*
DATE

5 • 16 • 2019

NAPA COUNTY WATERSHED SYMPOSIUM

TICKET AND RESERVATION
INFORMATION TO COME

Thursday, May 16, 2019, 8AM - 3PM,
CIA at Copia: 500 1st St., Napa, CA 94559

