Napa County Agreement No. 200194B

City of Napa Agreement No. C2019-369

AMENDMENT No. 2

MEMORANDUM OF UNDERSTANDING FOR WATER QUALITY MONITORING OF THE HENNESSEY AND MILLIKEN WATERSHEDS

This Amendment No. 2 (this "Amendment") to Napa County Agreement No. 200194B and City of Napa Agreement No. C2019-369, Memorandum of Understanding for water quality monitoring of the Hennessey and Milliken Watersheds (the "MOU") is effective on the date last signed by and between the City of Napa, a California charter city ("CITY"), and Napa County, a political subdivision of the State of California ("COUNTY"). CITY and COUNTY may be identified as "a Party," or collectively, as "the Parties". The Parties each constitute a public agency as defined in California Government Code Section 6500. Capitalized terms used but not defined herein shall have the meaning ascribed to such terms in the MOU.

RECITALS

WHEREAS, residents of the COUNTY live in the Hennessey and Milliken Watersheds (collectively "Watersheds"); and

WHEREAS, the CITY provides municipal water service to over 80,000 residents, including the entirety of the CITY, as well as portions of the incorporated County; and the CITY obtains water supply to serve its municipal water service customers from the surface water flows across the Watersheds located in the unincorporated area of the COUNTY, which are captured in CITY reservoirs at Lake Hennessey and Milliken Lake; and

WHEREAS, the CITY and COUNTY share the vision of protecting water quality within the Watersheds, especially those that contribute to drinking water sources throughout Napa County; and

WHEREAS, the Parties entered into the MOU on November 19, 2019; and

WHEREAS, Amendment No. 1 to the MOU was executed by the Parties on November 8, 2022 to amend the term and scope of work, and make other revisions; and

WHEREAS, the Parties now wish to amend the MOU to update the pricing of laboratory analytical services and extend the term to June 30, 2026.

NOW, THEREFORE, CITY and COUNTY agree as follows:

1. Section 1 is amended to read in full as follows:

1. TERM; TERMINATION FOR CAUSE. This MOU shall commence on November 19, 2019 and shall terminate on June 30, 2026 unless extended by an amendment to this MOU in accordance with Section 17. This MOU may be terminated by: (1) mutual agreement of the Parties; (2) by the non-defaulting Party in the event the defaulting Party fails to cure a breach under Sections 2 or 3 of this MOU within thirty (30) days of receiving written notice, or (3) in accordance with Section 10 of this MOU.

2. Section 3(c) INVOICING AND PAYMENT, Maximum Contribution is amended in full as follows:

(c) Maximum Contribution. The combined maximum not to exceed costs incurred for the scope of work set forth in Exhibit A-2, excluding the labor required to conduct the sampling pursuant to Section 2(c), shall not exceed $500,000 per fiscal year ($250,000 per Party). The COUNTY Director of Planning Building and Environmental Services and CITY Public Utilities Director shall review incurred and anticipated costs under this MOU on a quarterly basis. If during one of these reviews it is anticipated that the costs to complete the Scope of Work in Exhibit A-2 may exceed the maximum amount set forth in this subsection, CITY and COUNTY agree to consider an amendment to this MOU.

3. All references to Exhibit "A" and "A-1" in the MOU and Amendment No. 1 shall mean Exhibit "A-2", attached to this Amendment and incorporated herein by reference.

4. Except as provided in paragraphs 1-3 above, the terms and provisions of the MOU together with Amendment No. 1 shall remain in full force and effect.

IN WITNESS WHEREOF, this Amendment No. 2 to the MOU was executed by the parties hereto as of the last date of execution below.

CITY OF NAPA, a California charter city:

_____
(Signature)

Joy Eldredge, Utilities Director
(Type name and title)

NAPA COUNTY, a political subdivision of the State of California**:**

_____
(Signature)

Anne Cottrell, Chair of the Board
(Type name and title)

ATTEST:

_____
(Signature)

Neha Hoskins, Clerk of the Board
(Type name and title)

COUNTERSIGNED:

APPROVED BY THE BOARD:

(Signature)	(Date)
Erika Leahy, City Auditor (Type name and title)	(Deputy Clerk of the Board)
APPROVED AS TO FORM:	**APPROVED AS TO FORM:**
(Signature)	*Chris R.Y. Apallas*, Deputy (Signature)
Chris Diaz, Interim City Attorney	November 6, 2025

EXHIBIT "A-2"

PROPOSED SCOPE OF WORK:

The following generally describes the scope of work that may be performed by the Parties to implement the Hydrology and Water Quality Monitoring Plan recommendations using their own labor and agreed upon consultants, contractors and laboratories retained by one or both Parties.

Expected outcomes from this MOU include the following:

- Establish new or enhance existing water quality monitoring sites within the Hennessey and Milliken watersheds.
- Measure water quality parameters in the field, collect water samples, and perform laboratory analyses that meet US EPA and California Environmental Laboratory Accreditation Program (CA-ELAP) certification standards at an agreed upon frequency using said sites.
- Develop an appropriate database and repository to organize and store collected data. Perform preliminary data analyses.
- Perform appropriate public outreach to landowners, stakeholders, and the community.
- Incorporate water quality data into WARMF model.
- Complete training sessions for City and County staff to run WARMF model, input data, and run scenarios.

Specific tasks are presented as follows:

Task 1: Watershed Monitoring Site Development

The Hydrology and Water Quality Monitoring Plan ("Plan") identified existing locations where watershed monitoring is being performed. It also recommended a number of new sites be developed. The Parties have previously agreed on a program of monitoring sites to be sampled consistent with the Plan that can be utilized to collect the water quality data described in Task 2. Parties agree to continue sampling at these established monitoring sites unless the necessity to revise monitoring sites presents itself at which time revisions to monitoring sites will be made upon mutual agreement of the Parties. Such development may include, but is not limited to, securing legal and physical access, purchase and placement of monitoring equipment, and construction of site improvements. Any changes in the number or location of monitoring sites shall be subject to the contracting and appropriation limits described in the Agreement and approved by both the COUNTY Director of Planning, Building and Environmental Services and CITY Utilities Director. All work performed by City and County staff at 50/50 effort.

Task 2 – Data Collection and Laboratory Analyses

The Plan recommended monitoring a number of water quality constituents at various frequencies for routine and storm related events. The Parties have jointly agreed on the initial parameters, frequency, and

locations for such monitoring. Over the term of this MOU, the Parties may agree to change the parameters, frequency, and locations of monitoring in response to the results of prior monitoring and analyses. The parameters include analyses that are performed in the field and others that will require use of a laboratory. Laboratory work performed in-house by CITY's laboratory or by a mutually agreed upon outside laboratory retained by CITY will be reimbursed by COUNTY for half of the costs of direct labor, materials, equipment, supplies, and services in accordance with Section 2 of this MOU. The City and County will each contribute the labor for field sampling.

Monitoring parameters include those listed in the table below. Any changes in the number or range of sampling constituents shall be subject to the contracting and appropriation limits described in the Agreement and approved by both the COUNTY Director of Planning, Building and Environmental Services and CITY Utilities Director.

Budget for water quality analyses are based on the parameters and costs as defined in Table 1.

Table 1 Cost of CA-ELAP Certified Laboratory Analyses as of June 2025

Description	Turn Around Time (TAT)	Quantity	Per Unit	Total Cost
625.1 Semivolatiles	Standard	1@	$ 541.80	$ 541.80
Ammonia as Nitrogen (NH3-N)	Standard	1@	$ 52.20	$ 52.20
Calcium, Total, ICPMS-CM	Standard	1@	$ 41.40	$ 41.40
Carbonaceous Biochemical Oxygen Demand	Standard	1@	$ 83.70	$ 83.70
Chloride, by Ion Chromatography	Standard	1@	$ 56.70	$ 56.70
Digestion for ICP-MS	Standard	1@	$ 32.40	$ 32.40
Dissolved Organic Carbon(DOC)	Standard	1@	$ 95.40	$ 95.40
EPA547-Glyphosate	Standard	1@	$ 218.00	$ 218.00
Electrical Conductance	Standard	1@	$ 41.40	$ 41.10
Hardness, Titration	Standard	1@	$ 45.90	$ 45.90
Lab Filtration for DOC	Standard	1@	$ 36.00	$ 36.00
Lab Filtration for Nutrients Analysis	Standard	1@	$ 36.00	$ 36.00
Nitrate + Nitrite as N (NO3+NO2-N)	Standard	1@	$ 56.70	$ 56.70
Nitrogen, Total Kjeldahl (TKN)	Standard	1@	$ 82.80	$ 82.80
OC Pesticides & PCBs by 625.1	Standard	1@	$ 229.50	$ 229.50
OC Pesticides by 625.1 Extended	Standard	1@	$ 229.50	$ 229.50
Phosphate as P, Ortho	Standard	1@	$ 49.50	$ 49.50
Solid, Volatile & Suspended (VSS & TSS)	Standard	1@	$ 101.70	$ 101.70
Soluble Kjeldahl Nitrogen	Standard	1@	$ 82.80	$ 82.80
Sulfate, Total	Standard	1@	$ 56.70	$ 56.70
Total Alkalinity	Standard	1@	$ 45.90	$ 45.90

Total Dissolved Solids (TDS)	Standard	1@	$ 62.10	$ 62.10
Total Organic Carbon (TOC)	Standard	1@	$ 95.40	$ 95.40
Total Phosphorus as P	Standard	1@	$ 70.20	$ 70.20
Total Phosphorus as P, Dissolved	Standard	1@	$ 70.20	$ 70.20
Turbidity	Standard	1@	$ 41.40	$ 41.40
			Total:	**$ 2,555.30**
Additional Analysis at 2 Locations				
Chlorophyll	Standard	1@	$ 180.90	$ 180.90
Total Coliform and *E. coli*	Standard	1@	$ 72.90	$ 72.90
			Total:	**$ 253.80**
Additional Analysis at 6 Locations				
PFAS by EPA 537.1	Standard	2@	$ 386.00	$ 524.00
			Total:	**$ 3,144.00**

There are currently 27 identified sampling sites in the two watersheds. A mid-winter storm results in all 27 sites flowing and available to be monitored. During the early and late season sampling events, available sites range from 10-15 sites. In 2024/2025, for example, a total of 144 samples were analyzed (114 in the Hennessey watershed and 30 in Milliken watershed) from November through June. The current budget supports ongoing monitoring at this level. The budgeted cost of sampling and analysis is $470,000.

Task 3: Database Development and Analyses

The Parties will jointly decide on location to store and secure collected water quality information. The watershed model developed as part of the Study may be used for trial analysis of collected information. A shapefile of analytical data entered into the WARMF model will be created such that it can be viewed on County and City GIS platforms. The use of GIS is recognized as beneficial to facilitate spatial understanding of data similarities and anomalies.

Task 4 – Public and Stakeholder Outreach

The Parties shall jointly participate in reaching out to the public, landowners, and other stakeholders. The Parties shall jointly agree on information to be released. All work performed by City and County staff at 50/50 effort.

Optional Task 5 – Update to WARMF Model and staff training

Task 5, if needed, is a professional services contract executed between County of Napa PBES and Systech Water Resources. The efforts will be managed jointly and 50% of costs reimbursed by City of Napa. The

County Contract with Systech Water Resources includes scope of work to Update the WARMF Database and hold a training workshop at an estimated cost of $30,000, for technical support associated with use of the WARMF model. The Parties shall jointly coordinate staff representatives of County and City to attend a hands-on workshop by Systech Water Resources to learn how to install and open the model, view model inputs and outputs, update the model, create scenarios and run the WARMF model. The base model shall be write-protected by year so as to ensure integrity of model parameters and held by the hired party, Systech Water Resources.

SCHEDULE

It is anticipated that sampling, data collection, and analysis may continue for decades. It is also anticipated that 5-10 years of data must be available for the model to be sufficiently calibrated and reliable and for any interpretation of the data to be reflective of water quality trends or conditions.

BUDGET

Tasks 1, 3, and 4 are performed by City and County staff. Task 2 and Task 5 require budget expenditures for implementation.

Table 2 Budget Expenditures for Tasks 1-5

Description	Total Budget Expenditures
Task 1:Watershed Monitoring Site Development 50% each City/County staff labor	$0
Task 2: Data Collection and Laboratory Analyses	$470,000
Task 3: Database Development and Analyses 50% each City/County staff labor	$0
Task 4: Public and Stakeholder Outreach 50% each City/County staff labor	$0
Optional Task 5: Update to WARMF Model and Staff Training	$30,000
TOTAL:	**$500,000**
City of Napa 50% contribution	$250,000
County of Napa 50% contribution	$250,000