Proposal Full View

Applicant Information				
Organization Name*	Napa County			
Point Of Contact	**First Name:***	Steve	**Last Name:***	Lederer
	Email:*	steven.lederer@countyofnapa.org		
	Division Name:	Napa County Public Works	**Phone:***	(707) 2534351 Ext:
	Address Line 1:*	1195 Third Street	**Address Line 2:**	
	City:*	Napa	**State:***	California
	Zip:*	94559		
Point Of Contact Position Title*	Director			
Proposal Name*	Napa Valley Subbasin Groundwater Sustainability Plan and Monitoring Well Installation Project			
Proposal Objective*	The objective of this proposal is to secure necessary funds needed to produce a Groundwater Sustainability Plan (GSP) for the Napa Valley Subbasin. This GSP will provide detailed descriptions of groundwater, surface water, land subsidence, and other conditions related to groundwater resources in the Subbasin. The project will include development of a new tool, an integrated hydrologic flow model (IHM), that will be used to inform management actions. The objectives of the Napa Valley IHM Model include: 1) developing water budgets for the entire model area and key areas of interest, 2) simulate hydrologic responses to climate change and future land uses, 3) test the efficacy of projects and management actions to maintain sustainability including expanded use of recycled water, actions to increase groundwater recharge, and potential controls on groundwater use, 4) inform the public, stakeholders, and decision makers about anticipated future conditions, and 5) evaluate the groundwater monitoring network coverage and data gaps to refine data collection efforts. Data gaps have already been identified in two key areas: the northeast and the southern extent of the Napa Valley Subbasin. These two areas require new monitoring facilities that will be installed as a part of this project in order to provide crucial monitoring data related to surface water and groundwater interaction and for supporting the management of the Subbasin?s groundwater resources.			

Budget Information	
Other Contribution	$0.00
Local Contribution	$678,300.00
Federal Contribution	$0.00
Inkind Contribution	$0.00
Amount Requested*	$1,958,500.00
Total Proposal Cost*	$2,636,800.00

Geographic Information						
Latitude*	**DD(+/-):**	38	**MM:**	2	**SS:**	58
Longitude*	**DD(+/-):**	122	**MM:**	23	**SS:**	12
Longitude/Latitude Clarification	Center of Napa Valley Subbasin					
Location	The location information represents the center of the Napa Valley Subbasin for which this project pertains.					
County*	Napa					
Ground Water Basin	2-002.01 Napa-Sonoma Valley-Napa Valley					
Hydrologic Region	San Francisco Bay					
Watershed	San Pablo Bay (HUC8: 18050002)					

Legislative Information	
Assembly District*	4th Assembly District
Senate District*	3rd Senate District
US Congressional District*	District 5 (CA)

Project Information

Project Name: Napa Valley Subbasin Groundwater Sustainability Plan and Monitoring Well Installation Project	
Implementing Organization	County of Napa
Secondary Implementing Organization	
Proposed Start Date	5/18/2016
Proposed End Date	10/31/2022
Scope Of Work	The Napa Valley Subbasin Groundwater Sustainability Plan (GSP) document will be developed, including groundwater flow model development and monitoring network enhancement. The GSP will be submitted to DWR by January 31, 2022. There are two additional tasks associated with the GSP project: 1) integrated hydrologic flow model development, and 2) monitoring well installation to fill data gaps in the monitoring network.

Project Description	The GSP Development project encompasses the activities associated with the planning, development and preparation of a single GSP for the entire Napa Valley Subbasin, a DWR-designated medium priority subbasin. The GSP will be submitted by January 31, 2022 and will comply with and meet the requirements of the GSP Regulations. An integrated hydrologic flow model (IHM) will be constructed, groundwater conditions determined, water budget components estimated, and a safe yield value determined that will inform the formation of a sustainability goal for the subbasin that will be achieved and maintained within 20 years of Plan implementation. Measurable objectives will be developed for each sustainability indicator, such as water levels and land subsidence, and interim milestones will be set for every 5 years to keep on track with approaching sustainability. Minimum thresholds and undesirable results will be described. A monitoring network that will sufficiently and efficiently support the sustainability goal, measurable objectives, and minimum thresholds will represent the entire subbasin. GSP projects and/or management actions will be developed in cooperation with stakeholders to advance groundwater sustainability. These projects/management actions will be explored and expanded upon to determine feasibility and long-term benefits for the basin. Data gaps previously identified in the current monitoring network will be filled by installing new monitoring well sites at locations identified in the northeast and southern extents of the Subbasin.
Project Objective	The objective of this project is to prepare a single GSP for the entire Napa Valley Subbasin (Subbasin) to comply with the GSP regulations and to achieve and maintain sustainable groundwater conditions by 2040. It is imperative to maintain a safe and reliable groundwater supply for the well-being of the citizens and agriculture of the Subbasin. The IHM and new monitoring well locations will assist in the completion of this GSP document.

Project Benefits Information
No records found.

Budget Information	
Other Contribution	$0.00
Local Contribution	$678,300.00
Federal Contribution	$0.00
Inkind Contribution	$0.00
Amount Requested*	$1,958,500.00
Total Project Cost*	$2,636,800.00

Geographic Information						
Latitude*	**DD(+/-):**	38	**MM:**	24	**SS:**	58
Longitude*	**DD(+/-):**	122	**MM:**	23	**SS:**	12
Longitude/Latitude Clarification	Center of Napa Valley Subbasin					
Location	The location information represents the center of the Napa Valley Subbasin for which this project pertains.					
County*	Napa					
Ground Water Basin	2-002.01 Napa-Sonoma Valley-Napa Valley					
Hydrologic Region	San Francisco Bay					
Watershed	San Pablo Bay (HUC8: 18050002)					

Legislative Information	
Assembly District*	4th Assembly District
Senate District*	3rd Senate District
US Congressional District*	District 5 (CA)

Section : Questions

Q1. Project Description:

Provide a brief abstract of the proposal. This abstract must provide an overview of the proposal including the main issues and priorities addressed in the proposal. (25 words or less)*

The proposal includes a GSP for the Napa Valley Subbasin, development of an integrated hydrologic model, and monitoring well installation to fill data gaps.

Q2. Previous Funding:

Has the applicant received prior funding through the Proposition 1 SGWP Round 2 grant?*

a) ○ Yes
b) ◉ No

If so, how much funds did the applicant receive?

Q3. Project Representative:

Provide the name and details of the person responsible for signing and executing the grant agreement for the applicant. Persons that are subcontractors to be paid by the grant cannot be listed as the Project Representative. Other entities included in the GSA can be listed here.*

Steve Lederer, Steven.Lederer@countyofnapa.org, 707-253-4351, Napa County Public Works, 1195 Third Street, Napa, CA 94559

Q4. Project Manager:

Provide the name, title, and contact information of the Project Manager from the applicant agency or organization that will be the day-to-day contact on this application.*

Steve Lederer, Director, Steven.Lederer@countyofnapa.org, 707-253-4351, Napa County Public Works, 1195 Third Street, Napa, CA 94559

Q5. Eligibility:

Has the applicant met the requirements of DWR's CASGEM Program?*

a) (●) Yes
b) ( ) No

Q6.1. Eligibility:

Is the applicant an agricultural water supplier?*

a) ( ) Yes
b) (●) No

Q6.1.a Eligibility:

If yes, has the applicant submitted a complete Agricultural Water Management Plan (AWMP) to DWR?

a) ( ) Yes
b) (●) No

Q6.1.b Eligibility:

If yes, has the AWMP been verified as complete by DWR?

a) ( ) Yes
b) (●) No

Q6.1.c Eligibility:

If the AWMP has not been submitted, explain and provide the anticipated submittal date.

Not applicable.

Q7.1. Eligibility:

Is the applicant an urban water supplier?*

a) ( ) Yes
b) (●) No

Q7.1.a Eligibility:

If yes, has the applicant submitted a complete Urban Water Management Plan (UWMP) to DWR?

a) ( ) Yes
b) (●) No

Q7.1.b Eligibility:

If yes, has the UWMP been verified as complete by DWR?

a) ( ) Yes

b) ◉ No

Q7.1.c Eligibility:

If the UWMP has not been submitted, explain and provide the anticipated date for submittal.

Not applicable.

Q8.1 Eligibility:

Is the applicant a surface water diverter?*

a) ○ Yes
b) ◉ No

Q8.1.a Eligibility:

If yes, has the applicant submitted to the SWRCB their surface water diversion reports in compliance with requirements outlined in Part 5.1 (commencing with §5100) of Division 2 of the Water Code?

a) ○ Yes
b) ◉ No

Q8.1.b Eligibility:

If the reports have not been submitted, explain and provide the anticipated date for meeting the requirements.

Not applicable.

Q9. Eligibility:

Does the proposal include any of the following activities:

1.) The potential to adversely impact a wild and scenic river or any river afforded protection under the California or Federal Wild and Scenic Rivers Act
2.) Acquisition of land through eminent domain
3.) Design, construction, operation, mitigation, or maintenance of Delta conveyance facilities
4.) Acquisition of water except for projects that will provide fisheries or ecosystem benefits or improvements that are greater than required currently applicable environmental mitigation measures or compliance obligations
5.) Pay any share of the costs of remediation recovered from parties responsible for the contamination of a groundwater storage aquifer
6.) Projects or groundwater planning activities associated with adjudicated groundwater basins.

If yes, the project is not eligible for grant funding.*

a) ○ Yes (not eligible for grant funding)
b) ◉ No

Q10. Eligibility: Consistency with California SB 985– Stormwater Resource Planning Act:

To satisfy SB 985 requirements, stormwater and dry weather capture project must be listed in a SWRP that is consistent with the relevant code provisions enacted by SB 985 (Water Code §10562 (b)(7)) as determined by the SWRCB.

a) ☑ This Project is Consistent

Q11. DA Cost Share Waiver or Reduction:

Are you applying for cost share waiver or reduction as a DA? Fill out Attachment 6 – DAC, SDAC, and/or EDA, as appropriate.*

a) ○ Yes; See Attachment 6
b) ◉ No

Q12. Certification:

By submitting the application, the Project Director is certifying that:
a) The applicant is an eligible entity;
b) He/She is aware that any attachment exceeding the page limit listed in the attachment templates will not be reviewed;
c) He/She is aware that, once the proposal is submitted in GRanTS, any privacy rights and other confidentiality protections offered by law with respect to the application package and project location are waived; and
d) He/She has read and agrees to all of the Terms and Conditions of the grant agreement.*

a) ◉ Yes (Certified)

b) ○ No

Section : Climate Risk in Investments

Climate Risk in Investment

Q13: Does the organization have a strategic business plan?

a) ○ Yes
b) ○ No

If Yes, please submit a copy.

Q14: Has the organization conducted a climate change vulnerability assessment?

a) ○ Yes
b) ○ No

If Yes, please submit a copy.

Q15: Does the organization have a main contact person for climate change?

a) ○ Yes
b) ○ No

If Yes, to what position in the origination does that person report?

Q16: Has the organization considered the risk of climate change in its capital reserves and investments? (Open ended; one-three paragraphs, with specific examples, should suffice).

Section : Attachments

Attachment 1:Authorizing Documentation (e.g. resolution)

Upload Authorizing Documentation here. The Attachment is mandatory.*

Last Uploaded Attachments: Att1_SGM_AuthDoc_1of1.pdf

Attachment 2: Eligibility Applicant Documentation

Upload Eligibility Applicant Documentation here. The attachment is mandatory.*

Last Uploaded Attachments: Att2_SGM_EligDoc_1of1.pdf

Attachment 3: Work Plan

Upload Work Plan here. (Applicant MUST use supplied template) The attachment is mandatory.*

Last Uploaded Attachments: Att3_SGM_WrkPlan_1of1.pdf

Attachment 4: Budget

Upload Budget here. (Applicant MUST use supplied template) The attachment is mandatory.*

Last Uploaded Attachments: Att4_SGM_Budget_1of1.pdf

Attachment 5: Schedule

Upload Schedule here. (Applicant MUST use supplied template) The attachment is mandatory.*

Last Uploaded Attachments: Att5_SGM_Schedule_1of1.pdf

Attachment 6: SDAC, DAC, and/or EDA

Upload SDAC, DAC, and/or EDA (as applicable) here.

ATTACHMENT 1

AUTHORIZING DOCUMENTATION

Grant Proposal Title: **Napa Valley Subbasin Groundwater Sustainability Plan and Monitoring Well Installation Project**

Applicant: **Napa County**

The Sustainable Groundwater Management Grant Program Planning Grants Proposal Solicitation Package – Round 3 (September 2019) states Attachment 1 should include the following:

> *The applicant must provide a resolution adopted by the applicant's governing body designating an authorized representative to submit the application and execute an agreement with the State of California for a SGM Planning - Round 3 grant application. If an entity is acting on behalf of a GSA, then a resolution from the GSA is required authorizing the applicant entity to act in such role. Furthermore, a resolution is required by the entity acting as applicant stating authorization to work on behalf of the GSA. If the resolution cannot be signed prior to the application due date, please contact DWR, as indicated in the Foreword, to discuss the situation and explain this in Attachment 1, including an anticipated submittal date for the approved resolution. A Grant Agreement cannot be signed without an adopted resolution signed by the appropriate authorities.*

The applicant (Napa County) expects to have a resolution signed by the Board of Directors on December 10, 2019 and will forward the document immediately. The following (**Appendix 1 and 2**) are provided to satisfy the above requirement:

- **Appendix 1** is an email from the applicant (Napa County) to DWR explaining the situation and includes the anticipated approved resolution submittal date. This email correspondence provides confirmation that DWR has been notified about the anticipated approved resolution submittal date.
- **Appendix 2** is the Draft Resolution of Napa County in support of the Prop 68 proposal to be signed December 10, 2019.

Appendix 1

Letter from Applicant (Napa County) to DWR with Anticipated Submittal Date for the Approved Resolution and DWR's confirmation of notification of anticipated resolution approval.

From: List, Kelley@DWR <Kelley.List@water.ca.gov>
Sent: Thursday, November 14, 2019 7:14 AM
To: Lowe, Rone Patrick; Eusuff, Muzaffar@DWR; DWR SGWP
Cc: Barbara Dalgish; Vicki Kretsinger; Debbie Cannon; Reid Bryson; Sharp, Jeff
Subject: Re: Prop 68 Grant Application >>> Napa County Board Resolution

Thank you Patrick for alerting us to the draft resolution status. Please follow the directions we provided in our September 18th Applicant Workshop webinar for the attachment.

Thank you,

Kelley

Get Outlook for iOS

From: Lowe, Rone Patrick <Patrick.Lowe@countyofnapa.org>
Sent: Wednesday, November 13, 2019 4:24:55 PM
To: List, Kelley@DWR <Kelley.List@water.ca.gov>; Eusuff, Muzaffar@DWR <Muzaffar.Eusuff@water.ca.gov>; DWR SGWP <SGWP@water.ca.gov>
Cc: Barbara Dalgish <bdalgish@lsce.com>; Vicki Kretsinger <vkretsinger@lsce.com>; Debbie Cannon <dcannon@lsce.com>; Reid Bryson <rbryson@lsce.com>; Sharp, Jeff <Jeff.Sharp@countyofnapa.org>
Subject: RE: Prop 68 Grant Application >>> Napa County Board Resolution

Department of Water Resources

The County of Napa is acting as the lead agency for the Napa Valley Subbasin for the Prop 68 Sustainable Groundwater Plan (SGP) Grant. The County will provide a resolution, currently scheduled for the Board of Supervisors at their December 10, 2019 meeting, designating an authorized representative to submit the application and execute an agreement with the State of California for the Prop 68 SGP Grant. The resolution could not be signed prior to the grant application due to the late final decision notification (November 13, 2019) that the Napa Subbasin Alternative was not approved.

Sincerely,

Patrick Lowe

Patrick Lowe
Groundwater Sustainability Program
Natural Resources Conservation
Department of Public Works
Napa County

Appendix 2

Draft-- Resolution of Napa County in support of the Prop 68 proposal.

RESOLUTION NO. _____

RESOLUTION OF THE BOARD OF SUPERVISORS OF NAPA COUNTY, STATE OF CALIFORNIA, AUTHORIZING THE DIRECTOR OF PUBLIC WORKS TO SUBMIT A PROPOSAL TO THE CALIFORNIA DEPARTMENT OF WATER RESOURCES FOR FUNDING THROUGH THE SUSTAINABLE GROUNDWATER MANAGEMENT GRANT PROGRAM

WHEREAS, the California Department of Water Resources is administering the Sustainable Groundwater Management Grant Program, Planning Grants Proposal Solicitation – Round 3, specifically designed to support and fund groundwater planning and management efforts related to the development of Groundwater Sustainability Plans and formation of a Groundwater Sustainability Agency; and

WHEREAS, the Director of Public Works wishes to apply to the grant program to financially support the development of a Napa Valley Subbasin Groundwater Sustainability Plan and install monitoring wells; and

WHEREAS, submittal of a proposal to obtain grant funding requires a resolution from the Board of Supervisors specifying approval to apply for the grant, the County's intent to conduct the project pursuant to all grant conditions, and the designation of a grant contact person by title; and

WHEREAS, the proposed Groundwater Sustainability Plan and the monitoring wells will directly support the work of Napa County's Groundwater Program and will maintain Napa County's compliance with California's Sustainable Groundwater Management Act.

NOW, THEREFORE, BE IT RESOLVED by the Napa County Board of Supervisors, that application be made to the California Department of Water Resources to obtain a grant under the 2019 Sustainable Groundwater Management (SGM) Grant Program Planning Round 3 Grant pursuant to the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1) (Wat. Code, § 79700 et seq.) and/or the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018 (Proposition 68) (Pub. Resources Code, § 80000 et seq.), and to enter into an agreement to receive a grant for the Napa Valley Subbasin Groundwater Sustainability Plan and Monitoring Well Installation Project. The Director of Public Works of Napa County, or designee, is hereby authorized and directed to prepare the necessary data, conduct investigations, file such application, and execute a grant agreement with California Department of Water Resources.

[REMAINDER OF THIS PAGE LEFT BLANK INTENTIONALLY]

THE FOREGOING RESOLUTION WAS DULY AND REGULARLY ADOPTED by the Board of Supervisors of Napa County, State of California, at a regular meeting of the Board held on the 10th day of December, 2019, by the following vote:

AYES: SUPERVISORS

NOES: SUPERVISORS

ABSTAIN: SUPERVISORS

ABSENT: SUPERVISORS

NAPA COUNTY, a political subdivision of the
State of California

By: _____
RYAN GREGORY, Chair of the
Board of Supervisors

APPROVED AS TO FORM Office of County Counsel By: *Chris R.Y. Apallas* Date: 11/13/19	APPROVED BY THE NAPA COUNTY BOARD OF SUPERVISORS Date: Processed By: _____ Deputy Clerk of the Board	ATTEST: JOSE LUIS VALDEZ Clerk of the Board of Supervisors By: _____

CERTIFIED

NAPA COUNTY GROUNDWATER SUSTAINABILITY AGENCY RESOLUTION NO. 2020-01 (NCGSA)

RESOLUTION OF THE BOARD OF DIRECTORS OF THE NAPA COUNTY GROUNDWATER SUSTAINABILITY AGENCY AUTHORIZING THE NAPA COUNTY DIRECTOR OF PUBLIC WORKS TO SUBMIT A PROPOSAL TO THE CALIFORNIA DEPARTMENT OF WATER RESOURCES FOR FUNDING THROUGH THE SUSTAINABLE GROUNDWATER MANAGEMENT GRANT PROGRAM

WHEREAS, the California Department of Water Resources is administering the Sustainable Groundwater Management Grant Program, Planning Grants Proposal Solicitation – Round 3, specifically designed to support and fund groundwater planning and management efforts related to the development of Groundwater Sustainability Plans (GSP); and

WHEREAS, the Board of Supervisors of Napa County adopted Resolution 2019-152 on December 17, 2019 electing to form the Napa County Groundwater Sustainability Agency (NCGSA) to undertake sustainable groundwater management of the Napa Valley Subbasin; and

WHEREAS, the Board of Supervisors serves as the Board of Directors for the NCGSA which has those powers set forth in California Water Code section 10725 and following; and

WHEREAS, the Sustainable Groundwater Management Act of 2014 (SGMA) requires a Groundwater Sustainability Agency to submit a GSP by January 31, 2022; and

WHEREAS, the NCGSA wishes to apply to the grant program to financially support the development of a Napa Valley Subbasin Groundwater Sustainability Plan and install monitoring wells; and

WHEREAS, submittal of a proposal to obtain grant funding requires a resolution from the NCGSA Board of Directors specifying approval to apply for the grant, NCGSA's intent to conduct the project pursuant to all grant conditions, and the designation of a grant contact person by title; and

WHEREAS, the proposed Groundwater Sustainability Plan and the monitoring wells will directly support the work of NCGSA's Groundwater Program and will maintain NCGSA's compliance with California's SGMA.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Napa County Groundwater Sustainability Agency, that application be made to the California Department of Water Resources to obtain a grant under the 2019 Sustainable Groundwater Management (SGM) Grant Program Planning Round 3 Grant pursuant to the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1) (Wat. Code, § 79700 et seq.) and/or the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018 (Proposition 68) (Pub. Resources Code, § 80000 et seq.), and to enter into an agreement to receive a grant for the Napa Valley Subbasin Groundwater Sustainability Plan and Monitoring Well Installation Project. The Director of Public Works of Napa County, or designee, is hereby authorized and directed to prepare the necessary data, conduct investigations, file such application, and execute a grant agreement with California Department of Water Resources.

THE FOREGOING RESOLUTION WAS DULY AND REGULARLY ADOPTED by the Board of Directors of the Napa County Groundwater Sustainability Agency, State of California, at a regular meeting of the Board held on the 7th day of January, 2020, by the following vote:

AYES:	DIRECTORS	PEDROZA, WAGENKNECHT, GREGORY, RAMOS and DILLON
NOES:	DIRECTORS	NONE
ABSTAIN:	DIRECTORS	NONE
ABSENT:	DIRECTORS	NONE

NAPA COUNTY GROUNDWATER SUSTAINABILITY AGENCY

By: _____
DIANE DILLON, Chair of the Board of Directors

APPROVED AS TO FORM Office of Agency Counsel By: *Chris R.Y. Apallas* Date: December 27, 2019	APPROVED BY THE NAPA COUNTY GROUNDWATER SUSTAINABILITY AGENCY BOARD OF DIRECTORS Date: January 7, 2020 Processed By: _____ Deputy Clerk of the Board	ATTEST: JOSE LUIS VALDEZ Clerk of the Board of Directors By: _____

THE FOREGOING INSTRUMENT IS A CORRECT COPY OF THE ORIGINAL ON FILE IN THIS OFFICE
CLERK OF THE BOARD OF SUPERVISORS OF THE COUNTY OF NAPA STATE OF CALIFORNIA
ATTEST: _____ Deputy
DATE: 1/9/2020

ATTACHMENT 2

ELIGIBILITY DOCUMENTATION

Grant Proposal Title: **Napa Valley Subbasin Groundwater Sustainability Plan and Monitoring Well Installation Project**

Applicant: **Napa County**

The applicant must provide the following information, where applicable (note response in BLUE):

- **Is the applicant a GSA**, a member agency of a GSA, or a member agency of an approved Alternative to a GSP? Please explain. If the applicant is in the process of forming a GSA, the steps taken and the steps remaining to do so should be identified. No, the applicant is not currently a GSA, but plans to become a GSA prior to grant funds being awarded (before March 2020). The need to form a GSA was identified on November 13, 2019. County staff is meeting with the County Board of Supervisors in the coming weeks to discuss the steps and options to form a GSA. We expect a GSA will be formed on or before March 15, 2020.
- **Agricultural Water Management Compliance**: Not applicable to Napa County
- **CASGEM Basin Prioritization and Compliance**: The Napa Valley Subbasin is ranked as a High Priority Subbasin. Napa County is the Monitoring Entity for the Napa Valley Subbasin, with a current, updated CASGEM Plan. The County monitors and provides groundwater level data for 50 CASGEM and Voluntary reporting wells and is in compliance with CASGEM requirements.
- **Climate Change:** Development of the GSP and associated projects (monitoring of groundwater and surface water) will contribute to maintaining groundwater sustainability and preventing potential impacts to infrastructure due to climate change. This is not an implementation project and therefore will not have an impact on gas emissions or carbon sequestration.
- **Consistency with the Delta Plan:** Not applicable to the Napa Valley Subbasin.
- **Groundwater Management Compliance**: For over two decades, Napa County has acted to conserve and preserve groundwater resources and protect beneficial uses and users throughout the county, including the entirety of the Napa Valley Subbasin. Napa County implements a broad groundwater management program that has quantified sustainable yield (and safe yield, prior to SGMA) since 1990, established water use thresholds that guide land use and groundwater permitting activities since 1991, conducted regular monitoring and reporting on groundwater conditions and trends, and submitted the final documents of the report titled *Napa Valley Groundwater Sustainability – Basin Analysis Report for the Napa Valley Subbasin* (Alternative GSP) in December 2016. Although this Alternative GSP was not approved by DWR on 11/13/2019, the document provides an analysis of the basin and a valuable starting point for Groundwater Sustainability Plan development. Napa County created the Watershed Information & Conservation Council (WICC) in 2002, as a permanent advisory committee composed of a diverse stakeholder board, whose responsibilities include connecting community and science to improve watershed health. Through bimonthly public meetings and other outreach to community stakeholders, the WICC provides a venue for stakeholder engagement and a means for conveying stakeholder input to the County Board of Supervisors (BOS). The WICC regularly receives updates on groundwater conditions and, in 2016, provided one avenue for public review and comment on the draft Napa Valley Subbasin Alternative GSP. In addition to the WICC, the County Board of Supervisors also created the Groundwater Resources Advisory Committee (GRAC) in 2011, to advise the BOS on implementation of groundwater goals and action items identified in Napa County's General Plan. The GRAC assisted County staff and technical consultants with recommendations regarding groundwater, including data collection, monitoring, well pump test protocols, management objectives, and stakeholder engagement.
- **Open and Transparent Water Data:** Napa County understands and is willing to adhere to the protocols for data sharing, transparency, documentation, and quality control.

- **Public Utilities and Mutual Water Companies:** Not applicable to applicant
- **SWRP Compliance** (California SB 985): Not applicable, this is not a stormwater and dry weather runoff capture project.
- **Surface Water Diverter Compliance**: Not applicable to Napa County
- **Sustainable Water Use and Demand Reduction:** Napa County is not an urban water supplier.
- **Urban Water Management Compliance:** Napa County is not an urban water supplier. However, Napa County contains entities who have submitted Urban Water Management Plans (e.g. City Napa 2015 Urban Water Management Plan Update, which was accepted by DWR as addressing the requirements of the California Water Code on June 21, 2018
- **Water Metering Compliance:** Does not apply to this project (e.g., this project is not a: wastewater treatment project, water use efficiency project, drinking water treatment project, or for a permit for a new or expanded water supply").

ATTACHMENT 3

WORK PLAN

Grant Proposal Title: **Napa Valley Subbasin Groundwater Sustainability Plan and Monitoring Well Installation Project**

Applicant: **Napa County**

PROJECT JUSTIFICATION

A. Project Description

This first part of this section of the Work Plan, the Project Description, includes the following:

- A description of the proposed project, including goals, objectives, needs, and tools to be developed for the project.
- A map showing the geographic location of the project, including the Napa County Groundwater Sustainability Agency (GSA) boundary, Disadvantaged Areas (DA's), the Napa Valley Subbasin, and areas associated with Component 3.

The elements of the Napa Valley Subbasin Groundwater Sustainability Plan (GSP) and Monitoring Well Installation Project proposal that the Proposition 68 (Prop 68) Grant would fund include the components and categories listed below. These three components together will significantly support the analyses for and preparation of the Subbasin's GSP for the Napa Valley Subbasin (Subbasin) and enhance the overall groundwater sustainability for the Napa Valley region of the Napa-Sonoma Valley Groundwater Basin. Napa County is committed to continuing its role as a leader in groundwater resources management, consistent with actions taken for over two decades. Napa County was informed of the need to form a GSA on November 13, 2019, and on December 17, 2019 the Napa County Board of Supervisors (BOS) adopted a resolution forming the Napa County GSA. The Napa County GSA plans to complete a robust GSP that meets Sustainable Groundwater Management Act (SGMA) requirements and GSP regulations and provides an assessment of conditions for planning for future water demands, proactively addressing climate change, and implementing future projects and management actions to maintain sustainability. The Napa County GSA is committed to submitting this GSP to DWR by the January 31, 2022 deadline. The three components for this Napa Valley Subbasin GSP and Monitoring Well Installation Project are listed below:

Component 1: Grant Administration
- Category (a) Grant Administration

Component 2: GSP Development
- Category (a) Component Administration
- Category (b) Stakeholder Engagement and Outreach
- Category (c) GSP Development
  - Task 1 GSP Development
  - Task 2 Integrated Hydrologic Model Development
  - Task 3 Data Management System (DMS) with Online Visualization

Component 3: Monitoring Well Installation and Instrumentation
- Category (a) Component Administration
- Category (b) Land Purchase/Easement <"Not Applicable">
- Category (c) Planning/Design/Environmental
- Category (d) Implementation/Construction

Need for Prop 68 Grant Funding

A recent determination from DWR to not accept the Napa Valley Groundwater Sustainability Basin Analysis Report for the Napa Valley Subbasin (Alternative GSP), means that the Napa Valley Subbasin needs a GSP by January 31, 2022 since it is a high priority Subbasin. The Napa Valley Subbasin has operated within its sustainable yield and although the Basin Analysis Report provided evidence of this, a GSP is required to comply with SGMA. Several technical aspects of Component 2 included in the development of the GSP include: providing an assessment of groundwater conditions, providing measurable objectives and minimum thresholds, representative monitoring sites, the development of an

integrated hydrologic model to support water budget determinations and sustainable yield estimates, and development of a data management system (DMS) with online visualization capabilities.

The GSP document, including the Napa Valley Model (Integrated Hydrologic Model) and DMS with Online Visualization will be developed with ongoing opportunities for stakeholder input. Stakeholder input will require technical experts to provide documentation at stakeholder meetings, thereby providing an opportunity for the stakeholders to become more familiar with the technical pieces of the GSP, model development, and DMS. Stakeholder input will also provide the opportunity for developing the best representation of the hydrology and water uses under both current conditions and potential future scenarios. Component 3 addresses the need for new monitoring well locations to fill data gaps to support and characterize aquatic habitats and groundwater dependent stream ecosystems in the Napa Valley Subbasin. Four new monitoring well locations have been identified which are necessary for fulfilling the goals of the Napa Valley Subbasin's monitoring network, providing more spatially definitive monitoring to evaluate surface water/groundwater interaction to support aquatic habitats and groundwater dependent ecosystems, and achieving appropriate values for minimum thresholds and measurable objectives for specific targeted aquifers in certain areas of the Subbasin. The three components, including Component 1's administrative grant agreement work together as a whole to produce a substantial and robust GSP document supported by an analytical foundation that will represent the entire Subbasin and maintain sustainable groundwater resources for the residents and aquatic animals that call the Napa Valley Subbasin home.

Project Goal, Objectives, and Need

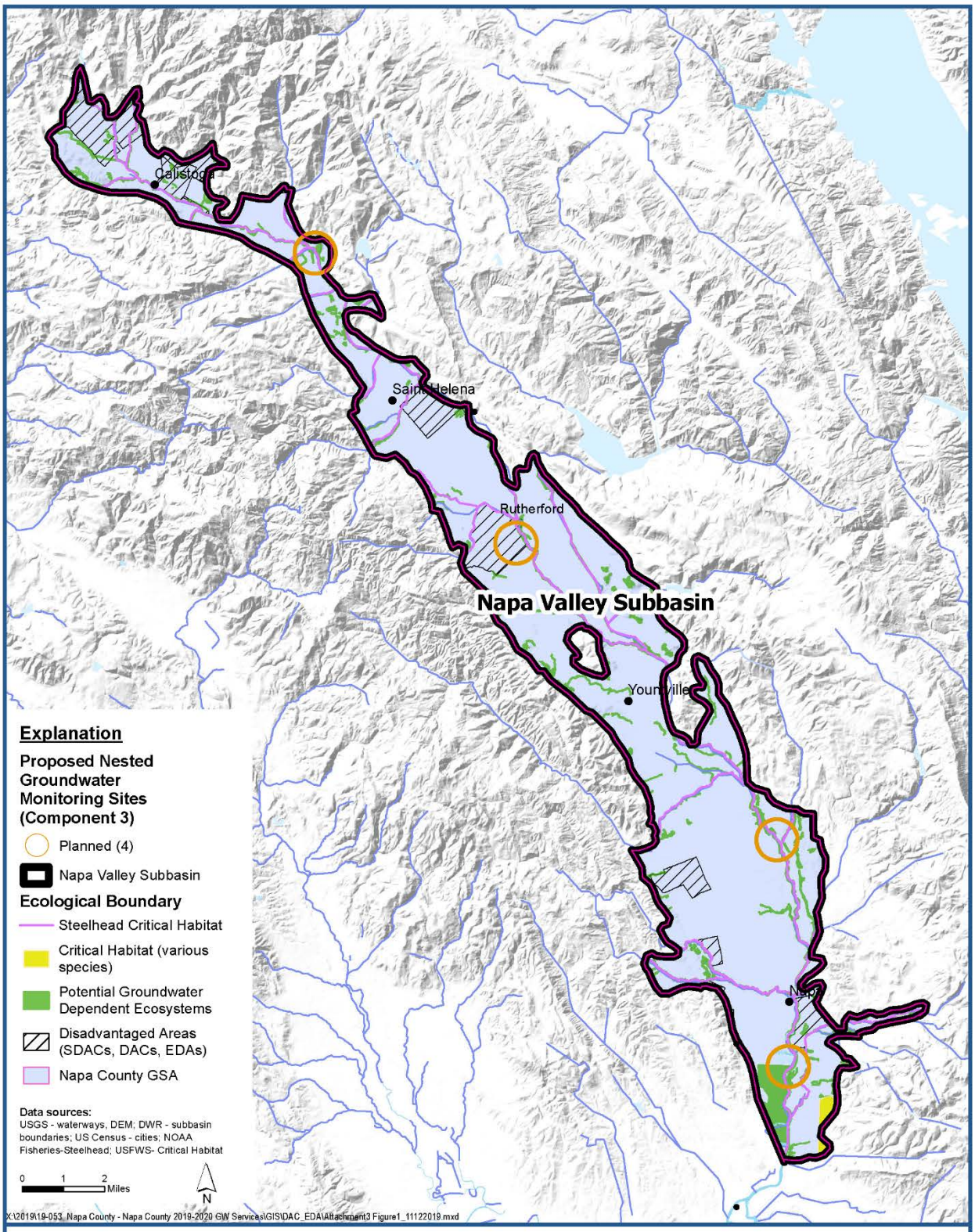
The goal of the three components for the Project involves completing a robust GSP for the Napa Valley Subbasin to comply with SGMA requirements and GSP regulations and to continue to maintain sustainable groundwater conditions. The objective of Component 1, Grant Administration, allows for the continued cooperation and communication of progress and reporting between the Napa County GSA and DWR. The objective of Component 2 involves the development of the actual GSP document, stakeholder engagement and outreach, an integrated hydrologic model for the Napa Valley Subbasin, and a DMS with online visualization. There is a strong need for the model to test future scenarios on the sustainability of the Subbasin (namely how climate change, changes in future land use, and other management actions may affect the groundwater resources and sustainability indicators). The objective of Component 3, Monitoring Well Installation and Instrumentation, addresses the need for an improved understanding of the relationship between aquifer units and surface water over the extent of the Subbasin. More detailed descriptions of these three components are provided in **Section D** below.

Implementing Agency: Napa County GSA

As of December 17, 2019, the Napa County GSA is the coordinating and implementing agency for each of the components and will solicit cooperation from entities within the Subbasin (e.g., Cities of Napa, St. Helena, Yountville, Calistoga, etc.). The Napa County GSA, as the coordinating and implementing agency, has committed itself to the needs of the proposed project in order to continue to promote sustainable groundwater management and comply with the requirements of SGMA for the Subbasin.

Map of Napa Valley Subbasin

The attached map (**Attachment 3: Figure 1**) illustrates the Napa Valley Subbasin's location in the San Francisco and Delta region, shows the GSA boundary, Disadvantaged Areas (DAs), and the area for the proposed monitoring well installation project.



Luhdorff & Scalmanini Consulting Engineers

Napa Valley Subbasin, GSA, Proposed Monitoring Locations, and DAs

Prop 68 Grant Application: Napa Valley Subbasin

Attachment 3
Figure 1

The second part of the Project Description section includes the following:

- Description of coordination efforts for the entire basin
- Description of collaboration between any GSA(s) surrounding the basin
- Explanation of how Prop 68 (Round 3) funds will be used and not be redundant to Prop 1 (Round 2) funds

Intra- and Interbasin Coordination and Examples of Collaborative Efforts

Although no other GSAs have formed in the Napa Valley Subbasin nor in the adjacent very low priority subbasin, the Napa County GSA has already established good working relationships with entities within the county and Napa Valley Subbasin, including the Cities of Napa, Calistoga, St. Helena, and Yountville, as well as other stakeholders. Through prior efforts undertaken by Napa County, the Napa County GSA has already spearheaded coordination and cooperation, committing to the preservation and sustainability of water resources with particular emphasis on groundwater.

For over two decades, Napa County has acted to conserve and preserve groundwater resources and protect beneficial uses and users throughout the county, including the entirety of the Napa Valley Subbasin. Napa County has implemented a broad groundwater management program that has quantified sustainable yield (and safe yield, prior to SGMA) since 1990, established water use thresholds that guide land use and groundwater permitting activities since 1991, conducted regular monitoring and reporting on groundwater conditions and trends, and submitted the final documents of the report titled Napa Valley Groundwater Sustainability – Basin Analysis Report for the Napa Valley Subbasin (Alternative GSP) in December 2016. Although the Alternative GSP was not accepted by DWR, it provided an extensive analysis of the basin and demonstrated the collaboration between Napa County and entities within the Subbasin.

In 2002, Napa County created the Watershed Information & Conservation Council (WICC), as a permanent advisory committee composed of a diverse stakeholder board, whose responsibilities include connecting community and science to improving watershed health. Through bimonthly public meetings and other outreach to community stakeholders, the WICC provides a venue for stakeholder engagement and a means for conveying stakeholder input to the County Board of Supervisors (BOS). The WICC regularly receives updates on groundwater conditions and, in 2016, provided one avenue for public review and comment on the draft Napa Valley Subbasin Alternative GSP.

In addition to the WICC, the County Board of Supervisors also created the Groundwater Resources Advisory Committee (GRAC), to advise the BOS on implementation of groundwater goals and action items identified in Napa County's General Plan. From 2011 through 2014, the GRAC assisted County staff and technical consultants with recommendations regarding groundwater, including data collection, monitoring, well pump test protocols, management objectives, and stakeholder engagement. The GRAC's work was completed in 2014, at which time the Board of Supervisors charged the WICC with groundwater oversight and information dissemination responsibilities.

In addition to the cooperation with entities within the Subbasin, Napa County has worked with neighboring subbasin authorities/GSAs through inter-basin coordination meetings and related water resource projects, mostly between Sonoma and Solano Counties and their newly formed GSAs. Another example of collaborative efforts includes the proposed Napa Valley Model (Component 2(c) Integrated Hydrologic Model), which will cover the entire Napa Valley Subbasin. It should also be noted that Napa County participates in the North Bay Water Reuse Authority to utilize the region's recycled water supply to offset groundwater pumping both within Napa County and across the North Bay.

Justification for Prop 68 Round 3 Grant Funding

The Napa County GSA has not applied for nor received any Prop 1 Sustainable Groundwater Management (SGM) grant funds. Component 1 represents grant administration specific to Prop 68, and includes: the final grant agreement, quarterly progress reports and invoices, and draft and final grant completion reports. These are new tasks that are not currently funded by any grant source.

Component 2 contains three different categories that are not covered by Prop 1 grant funds. Category (a) is Component Administration that includes monthly status updates and support to the Napa County GSA as needed for the draft and final Component Completion Reports. Category (b) is for Stakeholder Engagement and Outreach. As the Napa County GSA develops the GSP, there will be several occasions for soliciting stakeholder and public comments and input. The Napa County GSA is completing an updated Outreach Plan for the GSP that sets forth communication plans for Disadvantaged Areas, public engagement activities for the general public and other interested parties. This will be an update of the 2012 Communication and Education Plan to support local SGMA implementation. There are three tasks to Category (c) GSP Development, and none of them are supported by Prop 1 grant funds or any other grant funds (Napa County has not applied for nor received Prop 1 grant funds to complete the Alternative GSP that was submitted in December 2016). Category (c) Task 1 is the GSP Document and corresponds to the recognized SGMA requirements and GSP regulations for a GSP document to be submitted to DWR by January 31, 2022. Category (c) Task 2 is the development of the Integrated Hydrologic Model that is proposed to cover the entire Napa Valley Subbasin and will provide a robust tool that will inform management actions and advance the understanding and management of

interconnected groundwater and surface water resources in Napa Valley, consistent with the County's Groundwater Sustainability Goal. Development of datasets necessary for the model has already begun, and Prop 68 grant funds would be used to develop model design and framework, continued development of model input datasets, model execution, model calibration, development of future scenarios to simulate management actions, climate change, and future land use changes. Category (c) Task 2 will also fund the important task of continuous outreach and communication with stakeholders to achieve the best product possible. The last piece of Category (c), Task 3, is a DMS with online visualization that will provide a publicly accessible tool for viewing and learning about groundwater conditions in the Subbasin.

Component 3 consists of the installation of new monitoring facilities that will be placed in strategic locations to enhance the monitoring and understanding of aquatic habitats and groundwater dependent stream ecosystems. There are currently data gaps for monitoring in the Subbasin at four locations in the Subbasin (**Attachment 3: Figure 1**). Prop 68 grant funds are needed in order to design, implement, and construct new groundwater monitoring well facilities to address these data gaps and support aquatic habitats and groundwater dependent stream ecosystems. These new locations will be used to establish minimum thresholds and measurable objectives that support the sustainability goal for the Subbasin and to ensure that groundwater use does not negatively impact aquatic habitats or ecosystems that depend on groundwater.

Tracking and quantifying surface water-groundwater interactions, particularly the influence of groundwater conditions on streamflow depletion, is a challenging aspect for implementing SGMA in the Napa Valley Subbasin. Several important surface water bodies exist in the Subbasin, including the Napa River and perennial creeks. Spatial and vertical resolution are lacking in current monitoring networks in the Northeast Management Area, in areas of more concentrated groundwater use, and the southern extent of the Subbasin, resulting in data gaps and difficulty with characterizing groundwater conditions and avoiding undesirable depletions of interconnected surface water. The proposed groundwater-surface water (GW-SW) trend monitoring wells will fill data gaps in current monitoring networks and improve the characterization of shallow hydrogeologic conditions near important surface waters.

There are four locations identified as planned monitoring well sites, shown in **Attachment 3: Figure 1**. Napa County GSA will identify cooperating landowners for siting actual monitoring well locations, resulting in a total of eight new monitoring wells at four different site locations.

The proposed GW-SW trend monitoring wells described in this component are planned to meet long-term data collection needs related to tracking the degree of hydraulic connection between groundwater and surface water and any variability of vertical hydraulic gradients. Each monitoring well is proposed to be completed with two casings constructed within a single borehole, targeting relatively shallower (50 feet) and deeper (100 feet) aquifer materials. The monitoring well casings are planned to be at least 2-inches in diameter, to facilitate monitoring of groundwater levels and groundwater quality. These monitoring wells are planned to be constructed at locations that provide protection from flood flows and at distances up to 300 feet from the active channel pending site accessibility. New monitoring wells will be complemented by existing stream discharge and/or stage gauging sites located along the Napa River and its tributaries. Where site conditions and signal connectivity allow, monitoring wells are planned to be instrumented with telemetry devices and related equipment to enable remote data acquisition and improved integration with the Napa County GSA Data Management System.

There are several stream reaches identified as Critical Habitat for steelhead in the Central California Coast region (NOAA Fisheries, 2019) as seen in **Attachment 3: Figure 1**. In addition, there are many areas of Potential Groundwater Dependent Ecosystems in and around the Napa Valley Subbasin (**Attachment 3: Figure 1**). By filling data gaps related to groundwater-surface water interactions in these areas, it will be possible to maintain or improve surface water conditions and steelhead habitat in the Napa Valley Subbasin. Management actions developed from information gleaned from these new sites may include modifying land use and water management programs, procedures, and local agency policies based on the best available data obtained, potentially also including increased recycled water use.

The Napa River and its tributaries swell with stormflows during winter months, then subside during the dry season (typically May through October), when flow becomes intermittent in many reaches, sustained in places by baseflow fed by interconnected groundwater. Information from the proposed monitoring well sites will improve the understanding of the timing, duration, and magnitude of direct hydraulic connections between surface water and shallow groundwater in areas identified as data gaps.

B. Project Benefits

Project benefits are defined as expected measurable accomplishments of a project and are based on estimated measures of project annual accomplishments averaged over the period of the project's life. This section of the Work Plan describes the project benefits in the context of Disadvantaged Areas (DAs) and the Napa Valley Subbasin (Subbasin) as a whole. The projects associated with this proposal directly benefit DAs in the Subbasin through the development and

enhancement of the GSP, including outreach and communication directly to DAs and the general public, a new modeling tool, and improved monitoring to achieve the Subbasin's sustainability goals. DAs in the Subbasin are identified, including SDACs, all of whom will directly benefit from and be served by development of the GSP, information dissemination in accessible formats, integrated hydrologic model, an enhanced DMS, and monitoring well installation near and adjacent to DAs (Components 2 and 3 of this Project). A list of benefits is provided in this section, and letters of support are provided in **Attachment 3: Appendix 1** and further described in **Section E.** of this Work Plan.

There are several DAs in the Napa Valley Subbasin, covering approximately 16.1% of the Subbasin's area. A break-out of the different types of DAs is provided in **Attachment 3: Table 1** below:

Attachment 3: Table 1
Summary of Disadvantaged Areas, Napa Valley Subbasin

Area Description	Acres[1]	Percent of Subbasin	Cumulative Acres[1]	Cumulative Percent of Subbasin
Napa Valley Subbasin	40,297	100%	40,297	**100%**
Disadvantaged Communities[2]				
Census Block Groups				
SDAC	1,424	3.5%	1,424	3.5%
DAC	1,426	3.5%	2,850	7.1%
Census Tracts				
SDAC	122	0.3%	2,972	7.4%
DAC	322	0.8%	3,295	8.2%
Total Census Block Group and Tract SDACs			1,546	3.8%
Total Census Block Group and Tract DACs & SDACs			3,295	8.2%
Economically Distressed Areas[3]				
Census Blocks	165	0.4%	165	0.4%
Census Tracts	3,016	7.5%	3,181	7.9%
Total Census Blocks and Tracts EDA			3,181	7.9%
Total DACs, SDACs, and EDAs for All Census Geographies			**6,476**	**16.1%**

[1] Areas calculated using geographic projection NAD 1983 California Teale Albers. Acreage (and percent of Subbasin) is added cumulatively for each major category (Disadvantaged Communities and Economically Distressed Areas).

[2] DAC = Disadvantaged Community: $38,270 < median household income [MHI] < $51,026.

SDAC = Severely Disadvantaged Community: MHI < $38,270 (60% of statewide MHI).

[3] EDA=Economically Distressed Area: a municipality with a population of 20,000 persons or less, a rural county, or a reasonably isolated and divisible segment of a larger municipality where the segment of the population is 20,000 persons or less, with an annual median household income that is less than 85% of the Statewide median household income, and with one or more of the following conditions as determined by the department: (1) financial hardship, (2) Unemployment rate at least 2% higher than the Statewide average, or (3) low population density. (Water Code §79702(k)).

The map above (**Attachment 3: Figure 1)** shows the locations of the DAs, which are scattered throughout the Subbasin: areas in the north and central Subbasin, and in the south on the outskirts of the City of Napa. This grant will help fund the development of the GSP, which will continue to ensure sustainable groundwater resources for the following beneficial users of groundwater in the Subbasin: DAs, rural residential users, agricultural water users, municipal water users, ecological/wildlife reserves, ecosystems/habitats/groundwater dependent ecosystems, and other stakeholders in the Subbasin. An important subset of DAs are Severely Disadvantaged Community (SDACs) that cover about 3.8% of the Subbasin (**Attachment 3: Figure 1)** and include areas near and within the Cities of Calistoga and St. Helena. Numerous entities will specifically benefit from the Prop 68-funded GSP, model, and monitoring well installation. The WICC and the Napa County Resource Conservation District have provided written support for the project, a description of which can be found in **Attachment 3, Section E. Project Support** (See also **Attachment 3: Table 2**).

The goal of the three components for the Project combine together to complete a robust GSP document for submittal to DWR that complies with the SGMA regulations and maintains sustainable groundwater conditions for the Subbasin. This work involves a large amount of cooperation and communication between municipal entities and other beneficial water users in the Subbasin. Many of the benefits are qualitative in nature and not necessarily quantitative. The list of benefits for this Project includes:

- Continued ongoing outreach and communication between the Napa County GSA and Napa Valley Subbasin stakeholders during the development of the GSP document and integrated hydrologic model that will help ensure that there is a sense of ownership and responsibility by water users in the Subbasin to achieve and maintain sustainability. Technical support during outreach and communication will provide clear science-based information and ensure that technical information during GSP development is accurately and appropriately communicated to the stakeholders and the general public.
- Development of the integrated hydrologic model will help identify projects and management actions that have the potential to yield significant additional water supplies and/or reduce undesirable resulting that may affect Aquatic Habitats, Groundwater Dependent Ecosystems (GDE), Disadvantaged Areas (DAC/SDAC/EDC), and associated rural domestic well users.
- Access to groundwater level and quality assessments developed for the GSP will help inform decisions made by groundwater users about the timing and quantities of pumping to avoid undesirable results. The DMS with online visualization will directly benefit any computer-user by providing access to charts, tables, and graphics that help the user understand groundwater conditions in the Subbasin.
    - Groundwater level hydrographs that show short-term, long-term, and seasonal trends.
    - Groundwater quality time-series graphs and maps show short and long-term trends
    - Groundwater/Surface Water Interaction monitoring well data provides visualization of the relationship between groundwater-fed streams in particular areas (with proposed new monitoring well facilities in Component 3)
- Component 3 will result in monitoring wells to improve the understanding of groundwater-surface water interactions in sensitive areas. The wells will serve as additional representative monitoring sites and will also be used to establish measurable objectives and minimum thresholds that will benefit water users and stakeholders by promoting sustainability and the avoidance of undesirable results. Monitoring data will be available for ongoing evaluation of natural and human-influenced factors related to groundwater conditions and any changes to surface water and groundwater connectivity for aquatic habitats and groundwater dependent ecosystems.

C. Technical Expertise

The “Technical Need” to complete this Project, particularly the GSP and Monitoring Well Installation, is described in this section, along with a description of the experience, knowledge, and skills provided by the Napa County GSA (the Applicant) and the consultants hired by the Napa County GSA. This section describes the different roles and responsibilities of the team that will work with the Napa County GSA to successfully complete the three components of this Project. The Napa County GSA and its consultants have already completed and submitted an Alternative to a GSP in December 2016, demonstrating the technical expertise associated with the requirements of SGMA and the requirements of developing a comprehensive Alternative. Letters of support from the WICC and the Napa County Resource Conservation District in the Subbasin are provided in **Section E** and **Attachment 3: Appendix 1**. The Napa Valley Subbasin is a high priority Subbasin, and the Napa County GSA hereby provides assurance that the completed GSP will be submitted to DWR for review by the required due date (Jan 31, 2022).

Technical Need

Many aspects of this Project are technical in nature. With the exception of administrative elements of each component, the remainder of the work in the Proposal is all technical. This technical work will involve the development of the GSP document, the Integrated Hydrologic Model (Napa Valley Model), the Data Management System with online visualization, and installation of new monitoring wells, all of which includes providing technical expertise for public meetings and stakeholder engagement and outreach. In order to successfully communicate with stakeholders all of the complex groundwater aspects of the Subbasin, technical expertise is needed to provide readily understandable handouts/explanations (Component 2 (b)). The Napa County GSA has an established role as a resource for groundwater information through the WICC meetings and WICC website (https://www.napawatersheds.org/groundwater). There is a

significant component of technical expertise needed in Component 2 (c), especially to complete the Napa Valley Integrated Hydrologic Model. In addition, there is significant technical expertise needed to identify appropriate monitoring well locations and well specifications to promote the health of aquatic habitats and groundwater dependent ecosystems for Component 3.

Napa County's Demonstrated Capabilities and Large-Scale Planning

Napa County has demonstrated a history of technical expertise within the Napa Valley Subbasin. In the past Napa County has received and managed numerous federal and state grants, including DWR grants, and has demonstrated the capacity and ability to fulfill grant requirements. Napa County has funded and supported the development of multiple groundwater studies in the county, including numerous technical memoranda and groundwater conditions reports. Napa County also has experience with completing large-scale planning documents successfully, including a water resources assessment in support of the 2005 County General Plan update, annual monitoring reports, and a CASGEM monitoring plan. The outcome of those efforts resulted in an improved network of local monitoring wells within the Subbasin. A list of some of the technical reports prepared, funded, managed, or otherwise facilitated by Napa County is provided in the footnote below[1].

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[1] **Some successfully completed Technical Documents demonstrating Napa County's capabilities for groundwater resources are listed here:**

1. Faye, R.E. 1973. *Ground-water hydrology of northern Napa Valley California*. Water Resources Investigations 13-73, US Geological Survey, Menlo Park, CA, 64 p. [Napa County performed groundwater data collection and provided funding for this study.]
2. James M. Montgomery Consulting Engineers. 1991. *Water Resource Study for the Napa County Region*. Prepared for Napa County Flood Control and Water Conservation District. January 1991. 148 p. [Napa County funded this study.]
3. County of Napa. 2005. *Napa County Baseline Data Report, Chapter 16 Groundwater Hydrology.* Version 1. November 30, 2005 [Napa County authored and funded consultant support for this study.]
4. DHI. 2006a. *Final baseline data report (BDR) technical appendix – water quantity and water quality report*, Napa County, California. October 2006. [Napa County funded the study.]
5. Napa County. 2008. *Napa County general plan update*. (Amended June 23, 2009 and subsequently). [Napa County authored and funded this general plan update]
6. Luhdorff and Scalmanini, Consulting Engineers (LSCE). 2010a. Task 1, Napa County data management system. Technical Memorandum prepared for Napa County. [Napa County funded the Technical Memorandum and development of the related Data Management System.]
7. LSCE. 2011. *Napa County Groundwater Conditions and Groundwater Monitoring Recommendations*, prepared for Napa County Department of Public Works February 2011. [Napa County funded this study]
8. LSCE and MBK Engineers (LSCE and MBK). 2013. Updated Hydrogeologic Conceptualization and Characterization of Conditions. Prepared for Napa County. [Napa County funded this study.]
9. LSCE. 2013. *Napa County Groundwater Monitoring Plan, 2013*. Prepared for Napa County. [Napa County co-authored, facilitated stakeholder engagement, and funded this plan.]
10. LSCE. 2013b. *Approach for evaluating the potential effects of groundwater pumping in surface water flows and recommended well siting and construction criteria*. Technical Memorandum prepared for Napa County. October 2013. [Napa County funded this study.]
11. Napa County Groundwater Resources Advisory Committee. 2013. Communication and education plan. [Napa County authored this plan.]
12. LSCE. 2014. *Napa County California statewide groundwater elevation monitoring (CASGEM) network plan*. Originally prepared September 2011. Updated August 2014. Prepared for Napa County. [Napa County co-authored and funded this study.]
13. LSCE. 2016. Napa Valley groundwater sustainability: a basin analysis report for the Napa Valley Subbasin. Prepared for Napa County. [Napa County funded and co-authored this study and plan.]
14. LSCE. 2017. Northeast Napa area: special groundwater study, September 2017. [Napa County funded this study.]
15. LSCE. 2018b. Napa County groundwater sustainability: annual report – water year 2017. February 2018. [Napa County funded this report.]
16. 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. [Napa County funded and co-authored this study and plan amendment.]
17. LSCE. 2019. Napa County groundwater sustainability: annual report – water year 2018. March 2018. [Napa County funded this report.]

Experience, Knowledge, and Skills
The Napa County GSA, as the lead agency for GSP development, has contracted with technical consultants to assist with the development of the GSP. Luhdorff & Scalmanini, Consulting Engineers (LSCE), Woodland, CA, will assist with technical aspects of GSP development. LSCE is led by Ms. Vicki Kretsinger Grabert who is an established leader in statewide groundwater policy and invited by DWR to be a member of the Practitioner Advisory Panel since 2015 that provided input to DWR on the development of the GSP regulations and the implementation of SGMA. In 2017, she provided input on the Berkeley Law/US Water paper on navigating Groundwater and Surface Water Interactions Under the Sustainable Groundwater Management Act. In 2018, she reviewed and contributed to the Berkeley Law/UC Water paper Recharge Net Metering to Enhance Groundwater Sustainability. In 2019, she reviewed and contributed to the Stanford Water in the West report, A Guide to Water Quality Requirements under the Sustainable Groundwater Management Act. She is also a member of the Flood-MAR (Managed Aquifer Recharge) Groundwater Committee. There are numerous California-certified Professional Geologists (PG), Professional Engineers, and Professional Hydrogeologists at LSCE. All tasks that are under the GSP Development component will be performed by a certified PG or under the direct supervision of a PG; Nick Watterson, PG will be the overall Technical Project Manager with support from Reid Bryson and Barb Dalgish, PG, Scott Lewis, PG, Charlie Jenkins, PG, Ken Utley, PG, and Debra Cannon, PG.

Examples of the professional capabilities of LSCE staff working on the Napa Valley Subbasin GSP include: preparation of hydrologic conceptual models overseen by Nick Watterson, PG and Debra Cannon, PG (e.g., Chowchilla/Madera Subbasins, Westside Subbasin, Solano Subbasin, and Victor Valley Wastewater Reclamation Facilities); water budget and modeling by Barb Dalgish, PG (e.g., Chowchilla/Madera Subbasins and Napa Alternative), monitoring well installation Scott Lewis, PG and Charlie Jenkins, PG (e.g., Chowchilla/Madera Subbasins, Napa Alternative and Westside Subbasin, and previously involved in monitoring well installation for Napa County). Examples of timely GSP completions by LSCE include: the Napa Alternative submitted (December 16, 2016) ahead of deadline; draft GSPs have been completed for Chowchilla/Madera and Westside Subbasins and are on target to be submitted by January 31, 2020; and three draft GSPs for GSAs in two subbasins with multiple GSPs (Delta-Mendota Subbasin and Kern Subbasin) and are on target to be submitted by January 31, 2020.

In addition to LSCE's technical expertise, other consultants working on the GSP effort, and implementing work potentially funded by Prop 68 grant funds, include:

- One-Water Hydrologic, LLC assisting in development of the Integrated Hydrologic Model;
- MIG, Inc. assisting in outreach and stakeholder communications and possibly website construction;
- Napa County Resource Conservation District (RCD) assisting in field identification of Groundwater Dependent Ecosystems; and
- Other technical experts as determined during the project (e.g., relational database developers).

Dr. Randy Hanson with One-Water Hydrologic is providing his expertise for the use of integrated hydrologic models and other analysis tools related to hydrology and climate change/variability including using the recent USGS public-domain modeling platform "One-Water Hydrologic Flow Model". This MODFLOW-based integrated hydrologic flow model platform is designed for the analysis of a broad range of conjunctive use issues using a physically-based supply and demand framework. Dr. Hanson was a lead MODFLOW developer as a U.S. Geological Survey research hydrologist for over 38 years and will provide his modeling skills to assist in the development of the Napa Valley Model (Integrated Hydrologic Model. MIG, Inc. has proven their prowess in developing useful websites for outreach work. They build the WICC website, providing information to the public on the projects and aspects of Napa's watersheds. The Napa County RCD will provide data and information to help improve the understanding of local watersheds and the habitat and species that depend upon them.

Timely GSP Completion
The Napa County GSA together with its team of consultants will assume the lead role in completing the three components associated with this Project. LSCE has already worked on numerous SGMA-related projects, across the state of California (including but not limited to the Chowchilla Subbasin GSP, the Madera Subbasin GSP, Westside Subbasin GSP, GSP's within the Delta Mendota Subbasin, and the GSP Alternative for Napa County). LSCE's expertise in SGMA-related projects includes technical peer review services, Basin Boundary Modification (BBM) application preparation, GSA formation applications, DMS development, and GSP preparation. LSCE has also developed hydrogeologic conceptual models and constructed multiple numerical flow and solute transport models to support groundwater resources management including for GSPs. LSCE is also providing engineering services in the design and installation of GSP

monitoring networks and analysis of projects and management actions to achieve and maintain sustainability (examples include Westside Subbasin, Madera Subbasin, Chowchilla Subbasin, and Napa Valley Subbasin). Napa County has also been diligent with submitting two annual reports related to the SGMA requirements for the Napa Valley Subbasin Alternative GSP.

Stakeholders and beneficial users represented by the WICC have provided a letter of support for Napa County to pursue this work **(Attachment 3: Appendix 1**). Support from the member entities on the WICC Board ensure cooperation and confidence that will yield a robust, scientifically defensible, and effective GSP for the Napa Valley Subbasin that will be submitted on time by January 31, 2022 to DWR and will ensure groundwater sustainability for future water users in the Napa Valley Subbasin. The resolution supporting this grant proposal affirms the intent of the Napa County GSA to develop the proposal to support the development a GSP that satisfies the GSP regulations. The resolution was adopted on January 7, 2020.

PROJECT DETAILS
D. Scope of Work and Deliverables

a. Scope of Work

Project Description: The Scope of Work includes new work that support the overarching sustainability goal of the GSP for the Napa Valley Subbasin. The resulting GSP will incorporate appropriate Best Management Practices (BMPs) as developed by DWR that will result in a more complete understanding of the groundwater subbasin to support long-term sustainable groundwater management. The Project also includes installing dual-completion monitoring wells at up to four monitoring sites to fill data gaps and to optimize the existing monitoring network in relation to development of the GSP. The Work Plan includes three Components, which are consistent with the Budget (Attachment 4) and the Schedule (Attachment 5):

Component 1: Grant Administration

Component 2: GSP Development

Component 3: Monitoring Well Installation and Instrumentation

Component 1: Grant Administration

Category (a): Grant Administration

Prepare reports detailing work completed during reporting period as outlined in Exhibit F, “Report Formats and Requirements” of this Agreement. Progress Reports will include sufficient information for the DWR Project Manager to understand and review backup documentation submitted with invoices. Quarterly invoices will accompany the Progress Reports and will be submitted to the DWR Project Manager for review to receive reimbursement of Eligible Project Costs. Collect and organize backup documentation by component and prepare a summary Excel spreadsheet to document the backup information organized by component.

Prepare Draft Grant Completion Report and submit to DWR Project Manager for comment and review no later than 90 days after work completion. Prepare a Final Completion Report addressing the Project Manager’s comments. The report shall be prepared and presented in accordance with the provisions of Exhibit F, “Report Formats and Requirements.” The Final Grant Completion Report will be available to groundwater users, stakeholders, and the general public via Napa County’s website (https://www.countyofnapa.org/) and the project website.

Component 2: GSP Development

Category (a): Component Administration

Component Administration that includes monthly status updates and support to the Napa County GSA as needed for the draft and final Component Completion Reports. The final Component Completion Report will be available to groundwater users, stakeholders, and the general public via Napa County’s website (https://www.countyofnapa.org/).

Category (b): Stakeholder Engagement and Outreach

This outreach component recognizes the need for outreach and communications planned to occur between January 2020 and January 2022. This will include multiple opportunities for collaboration and cooperation between local entities within the Subbasin as well as educational and informational meetings with the public and stakeholders that are interested in learning about the GSP process and progress. A GSP Outreach Plan will be developed that will more fully describe the

integration of GSP activities including how public communication of GSP development activities will occur as well as planning a schedule of public engagement activities. Public engagement activities will be planned on various levels including Napa County staff and Board, stakeholders, or the public. This category also includes development of the technical component of meeting materials such as agendas, presentation materials, handouts, and other visually compelling materials to convey complex technical concepts in an easily understandable way. This category will also include the development of a Napa County-sponsored website with GSP-related information that will post updates and information for meetings (e.g. agendas, handouts, etc.).

Category (c): GSP Development

GSP Development includes development of the actual GSP document, development of the Napa Valley Model, an Integrated Hydrologic Model, and development of a Data Management System with Online Visualization.

Component 2 (c) Task 1 consists of the development of the GSP document. There are several chapters required by SGMA to be included in the GSP document. Component 2 (c) Task 1 will develop the content and produce the document for all of these chapters. The work required for the GSP is outlined below:

GSP Chapter	Brief Description of Scope of Work
Chapter 1. Introduction	• A public-friendly narrative that provides details on the background of the Napa Valley Subbasin, description of the purpose of the GSP and the sustainability goal for the Subbasin. • A description of beneficial uses and public participation • Agency information including contact information, management structure, authority, plan implementation cost estimate, and a description of the initial notification.
Chapter 2. Plan Area	• Summary of jurisdictional areas and other features including a Plan Area Map, a Jurisdictional Boundary Map, and a written description. • Water resources monitoring and management programs identification and description within the Subbasin. • Land use elements or topic categories of applicable General Plans including a summary of land use or general plans governing the Subbasin, description of how the GSP implementation may affect water supply in the future, description of well permitting, land use implementation plans outside the Subbasin that may affect the sustainability of the Subbasin, and several maps (including a series of land use maps and planned land use maps, land use outside of the Subbasin, and a map showing the well density of the Subbasin). • Additional GSP elements including conjunctive use programs, descriptions of actions related to saline water intrusion, wellhead protection, migration of contaminated groundwater, well construction/abandonment/destruction programs, replenishment of groundwater extractions, underground storage, impacts on groundwater dependent ecosystems, etc. • Notice and communication describing the notification and description of beneficial uses and users of groundwater and other interested parties, public meetings, comments and responses on the GSP, the decision-making process of the Napa County GSA, and a description of collaborative meetings and the method the GSA uses to inform the public about progress of implementation of the Plan.
Chapter 3. Basin Setting	• Geologic setting including Subbasin topography, soil, and surface water features (including a map), surficial geology and structural setting of the Subbasin (including a map with surficial geology, cross section locations, and at least two geologic cross section figures). • Hydrogeologic Conceptual Model (HCM) including: o Basin Boundaries o Principal Aquifers and Aquitards o Soil Characteristics and Recharge Areas o Data Gaps in the HCM • Monitoring network and program including descriptions of the monitoring network and program for the GSP, objectives, assessment and recommendations for improvement, monitoring protocols, and a map showing the GSP monitoring network • Groundwater and surface water conditions including descriptions, maps, hydrographs, and figures of historic and current aspects of the following: o Groundwater Elevations o Groundwater Storage o Seawater Intrusion Conditions o Groundwater Quality Conditions o Land Subsidence o Interconnected Surface Water

	o Groundwater Dependent Ecosystems o Surface Water Conditions
Chapter 4. Historical, Current, and Projected Water Supply	• Land uses and population trends will be summarized including tables and figures of land use and population. • Water supplies and utilization by sector provides a description and tabular presentation of historic, current, and projected water demands, supplies, and use by sector, as well as surface water availability and reliability for deliveries • Basin-wide summary of the water use in the Napa Valley Subbasin
Chapter 5. Water Budget	• Base period selection methodology and description. • Summary of water year 2015 hydrologic conditions • Projected hydrology using 50 years of historical precipitation, evapotranspiration, and streamflow information as the baseline condition for estimating future hydrology will be used to determine projected water supply and demand. • Water budget framework will be discussed including a list of water budget analysis components (inflows and outflows). • Watershed model summary will be provided. • Integrated hydrologic flow model (IHM) will be summarized from work in the next task associated with Component 2 Category (c) of this Prop 68 Project. • The Subbasin water budget will be described and quantification of water budget results provided. • Groundwater level change in storage analysis will be provided including a figure that shows the groundwater level change-based change in storage, cumulative groundwater level change in storage, and the simulated change in storage from the IHM. • Sensitivity analysis on the watershed and IHM models. • Description and quantification of the sustainable yield for the Subbasin. • Additional analyses and individual water budgets for management areas.
Chapter 6. Subbasin Sustainability Goal	• Statement of the sustainability goal and description. • Sustainability indicators and undesirable results defined and determined throughout the Subbasin. • Representative monitoring sites established, described, and vetted. • Minimum thresholds and measurable objectives for sustainability indicators will be described and determined including a table that shows the representative monitoring sites and their minimum thresholds and measurable objectives for sustainability indicators. • The Northeast Napa Management Area has been defined and described according to GSP regulations (January 2018).
Chapter 7. Monitoring Data Management and Reporting	• Groundwater data management description and overview. • Data Management System (DMS) description. • Data use and data disclosure (confidentiality) description. • Data submittals and reporting overview.
Chapter 8. Sustainable Groundwater Management: Projects and Management Actions	• Goals, policies, and ordinances in and out of the Subbasin. • Education and collaboration description. • Other groundwater management strategies including Projects and Management Actions and Cost Feasibility. • Ongoing evaluation of groundwater management efforts. • Description of applicable Best Management Practices (BMPs).
Chapter 9. Plan Implementation	• Summary of findings for each major section of the GSP. • Summary of recommendations for aspects of the GSP. • Summarize plans and formats for creating and submitting annual reports. • Summarize and provide details on how periodic evaluations of the GSP implementation will be made.
Chapter 10. References	• A list of references will be provided and a digital compilation of relevant references will also be made.

Component 2 (c) Task 2 consists of development of the Napa Valley Model, an Integrated Hydrologic Model for the entire Napa Valley Subbasin.

Development of a numerical groundwater flow model will be used to determine the water budget and sustainable yield for the Subbasin. This new modeling tool will be used to implement recommendations included in the 2016 Basin Analysis Report (Alternative), based in part on stakeholder comments and the Napa County GSA's desire to develop a more robust

and integrated tool to inform management actions. Utilizing open-source software developed by the U.S. Geological Survey, a mathematical groundwater flow model for the Napa Valley Subbasin will be produced. The new model will serve as a tool to advance the understanding and management of interconnected groundwater and surface water resources in Napa Valley. The public-domain model platform selected for the Integrated Hydrologic Model (IHM) is the One-Water Hydrologic Model (OWHM).

The following list outlines the major components of the model development described in more detail below:

- Develop model design and framework
- Develop model input datasets
- Execute model
- Model calibration
- Develop scenarios (including future land use changes, climate change, range of potential management actions)
- Outreach and Communication

The model domain and structure framework will be developed to ensure an appropriate discretization horizontally, vertically, and temporally. Model input datasets will be developed including three-dimensional representations of the subsurface materials, aquifer properties, groundwater level datasets (e.g. contours over specific time periods), groundwater well locations (depth and coordinates), surface water features, surface water flow/stage datasets (e.g. time-series of river flow and stage data), precipitation, evapotranspiration, surface water deliveries (locations and amounts), land use and crop type coverages, water demands (agricultural, native vegetation, domestic, industrial, municipal), boundary conditions (e.g. mountain runoff and streams entering the Subbasin), etc. The model will utilize water balance subregions to estimate groundwater pumping to satisfy water demand after surface water deliveries and precipitation are accounted for. The model will solve the groundwater flow equation and provide biweekly water budgets that simulate groundwater conditions such as streamflow depletion or contribution, groundwater level declines or increases, groundwater storage depletion or accretion, the seawater interface, and land subsidence. The model will be calibrated based on observed monitoring well water level data and other results that gage the behavior and appropriateness of the model's solutions. Future scenarios will be developed to observe the potential changes in groundwater and surface water conditions associated with climate change, changes in land use, and a range of potential management actions or projects (such as enhanced recharge, increased recycled water projects, etc.).

Public meetings and stakeholder/focus group meetings will provide a platform to exchange information about model datasets and progress. Water budgets with biweekly time steps for the entire model area and for key areas of interest (e.g. Northeast Napa Management Area defined in Component 2 (c) Task 1) will be developed with input from participants in these meetings to accurately reflect historical and current hydrologic conditions. Hydrologic responses to climate change and future land uses will be tested in future model scenarios with the support of input from stakeholders. The efficacy of potential projects or management actions will be tested, including expanded use of recycled water, actions to increase groundwater recharge, and potential controls on groundwater use based on communication and outreach conducted to develop the model scenarios tested. The public, stakeholders, and decision-makers will be informed about anticipated future conditions based on simulation results. The groundwater monitoring network coverage will be evaluated in light of the model results and uncertainties to identify data gaps for refined data collection efforts.

Component 2 (c) Task 3 consists of development of a Data Management System (DMS) with capabilities that serve the project needs, GSP objective/milestone monitoring and tracking, the assessment of measurable sustainability thresholds, private well owner needs, and the needs of the public. A more robust DMS with online visualization will provide graphs, maps, and tables to be shared with a broad spectrum of the public, including DAC's and other interested entities/stakeholders. This improved DMS will include a web-based user interface with accessible built-in GIS maps that allow the user to locate data points and access water level and water quality time-series data and maps. The DMS will have the capability to link with the IHM (Napa Valley Model) for model input or output datasets.

Component 3: Monitoring Well Installation and Instrumentation

Component 3 provides for the construction, development, and instrumentation of four dual-completion groundwater monitoring wells in areas of the Subbasin to fill data gaps in existing monitoring networks and improve the characterization of shallow hydrogeologic conditions, particularly for shallow aquifer zones near important surface water aquatic habitats and groundwater dependent ecosystems (GDEs). These new sites are anticipated to become SGMA representative sites for the Subbasin for purposes of tracking measurable objectives and minimum thresholds to be established for the Subbasin.

Category (a): Component Administration

Component Administration that includes invoice review, monthly status updates, and support to the Napa County GSA as needed for the draft and final Component Completion Reports. The Final Grant Completion Report will be available to groundwater users, stakeholders, and the general public via the Napa County website (https://www.countyofnapa.org/).

Category (b): Land Purchase/Easement <"Not applicable">

Category (c): Planning/Design/Environmental

1 Project Management

Project administration, product QA/QC, and communications associated with monitoring well installation and instrumentation. This includes preparation of a Monitoring Plan that incorporates Post-Performance Monitoring Report requirements.

2 Well Siting and Permitting

Identification of potential well sites (four locations), procurement of permissions, permitting (e.g., Napa County), preparation of exhibits (e.g. as-built diagrams), field reconnaissance of sites.

3 Bidding Services

Develop and prepare specifications (e.g., maps and drawings), bid sheets, pre-bid communications, begin the contracting process, and bid award recommendation

Category (d): Implementation/Construction

1 Drilling of monitoring wells

Drilling of four double completion wells, see **Attachment 3: Figure 1** for locations.

2. Inspection

Inspection oversight of drilling, construction, and development for the new monitoring wells.

3. Groundwater Sampling and Analysis

Baseline groundwater level and quality sampling for the newly installed monitoring wells. Water quality constituents include: Title 22 general minerals (e.g., major cations and anions); Title 22 dissolved metals, including (but not limited to): arsenic, chromium VI, iron, and manganese.

4. Equipping

Purchase and installation of 8 pressure transducers in the wells and record groundwater levels, electrical conductivity, and temperature. Purchase and install telemetry equipment, where feasible based on signal connectivity at monitoring well sites, to enable remote data acquisition and improved integration with the Data Management System.

5. Reports

Prepare final installation and instrumentation reports for the newly constructed monitoring wells including the submittal of Well Completion Reports with DWR.

b. Project Deliverables

This section provides itemized lists of project deliverables for assessing progress and accomplishments. These include quarterly progress and final reports for each component, as well as specific products produced throughout the completion of each component.

Component 1 Grant Administration - Project Deliverables (3/1/2020 to 10/31/2022) (0% complete):

- Final Grant Agreement and Amendment(s) (if necessary)
- Quarterly Invoices with required backup documentation
- Quarterly Progress Reports
- Draft and Final Grant Completion Reports

Component 2 GSP Development – Project Deliverables (5/18/2016 to 4/30/2022) (40% complete):

Category (a): Component Administration

- Monthly invoices and status updates to Napa County

- Support to Napa County for Draft and Final Component Completion Reports

Category (b): Stakeholder Engagement and Outreach

- Meeting handouts and/or Presentation materials for Public meetings, Planned Napa County GSA meetings, Inter basin coordination meetings, and relevant WICC meetings
- Meeting summaries included as attachments in the Quarterly Progress Report

Category (c): GSP Development

- Task 1. GSP Development
  - Final Napa Valley Subbasin GSP
- Task 2 Integrated Hydrologic Model Development
  - Report: Napa Valley Model, an Integrated Hydrologic Model
  - Addendum to GSP
- Task 3 DMS with Online visualization
  - Diagram (wireframe) of database relationships and data service connections
  - Public launch of the DMS

Component 3 Monitoring Well Installation and Instrumentation (3/1/2020 to 10/31/2022) (0% complete):

Category (a) Component Administration

- Monthly invoices and status updates to Napa County
- Support to Napa County for Draft and Final Component Completion Reports

Category (b): Land Purchase/Easement—<Not applicable>

Category (c): Planning/Design/Environmental

- Environmental Information Form
- Design drawings, plans, and specifications
- Bid and award documents
- Required documentation for CEQA compliance
- Copies of required permits (Napa County drilling permit)
- Monitoring Plan, as described in Exhibit J of Grant Agreement Template
- Access agreements to support well identification and evaluation

Category (d): Implementation/Construction

- Notice of Completion and DWR Certification of Project Completion Form
- Photographic documentation as an attachment to the Draft and Final Component Completion Reports
- As-Built/Record Drawings as an attachment to the Draft and Final Component Completion Reports
- Final geodetic survey information as an attachment to the Draft and Final Component Completion Reports
- Well Completion Reports to be filed with DWR
- Water quality sampling results

MISCELLANEOUS
E. Project Support

The timing of receipt of DWR's notification of Napa Valley Subbasin's Alternative not being accepted (11/13/2019) was not conducive to requesting or receiving a large number of letters of support in time for this Prop 68 grant proposal (due 11/15/2019). However, Napa County was able to request and receive project support from the WICC, with representatives from every municipality in Napa County along with numerous entities/stakeholders in the Napa Valley Subbasin (see letter of support from WICC is provided in **Attachment 3: Appendix 1** and WICC roster). An additional letter of support was provided by the Napa County Resource Conservation District, which has a broad representation of the agricultural and rural land managers on its Board of Directors (**Attachment 3: Appendix 1). Attachment 3: Table 2** provides a list of entities contacted for letters of support and includes the status of receipt of letters and whether the entity represents Disadvantaged Areas. The Napa County GSA is the only GSA within the Napa Valley Subbasin. No GSAs have formed within the adjacent very low priority Napa-Sonoma Lowlands Subbasin.

Due to the timing of receipt of DWR's rejection of the Alternative, other entities inside and outside the Subbasin have not yet been contacted or given a chance to provide letters of support prior to submittal of this proposal. **Attachment 3: Table 2** provides a working list of entities contacted or planned to be contacted for letters of support. Individual entities within the Subbasin are planned to be contacted for support for the GSP and this proposal.

Outreach to Disadvantaged Areas has been initiated and to date includes support for a series of public meetings in the Subbasin, an initial DAC/SDAC/EDC community assessment, was undertaken in support of the Alternative GSP. Funding is requested in this Prop 68 grant to support public and other meetings and additional outreach to target DAs.

Attachment 3: Appendix 1 contains all of the letters of support or communications logs/outreach contacts planned for other beneficial water user entities in and around the Subbasin. The letters of support indicate existing cooperation and communication, which will continue throughout the Project and long afterwards during GSP implementation.

Attachment 3: Table 2
Letters of Support for Napa Valley Subbasin GSP

Entities including Beneficial users of groundwater: disadvantaged areas (DAs), agricultural water users, municipal water users, wildlife refuges, or other stakeholders	DA Representative	Contacted	Plan to Contact	Received Letter of Support
Entities In Napa Valley Subbasin				
Napa County	Applicant			
WICC	X	X		X
Napa County Resource Conservation District (RCD)	X	X		X
City of Napa	X		X	
Town of Yountville			X	
City of St. Helena	X		X	
City of Calistoga	X		X	
Napa Sanitation District			X	
Total	**5**	**2**	**5**	**2**

Attachment 3: Appendix 1

Letters of Support and Outreach Tally

Letters of Support Summary (letters follow)

Entities including Beneficial users of groundwater: disadvantaged areas (DAs), agricultural water users, municipal water users, wildlife refuges, or other stakeholders	DA Representative	Contacted	Plan to Contact	Received Letter of Support
Entities In Napa Valley Subbasin				
Napa County	Applicant			
WICC	X	X		X
Napa County Resource Conservation District (RCD)	X	X		X
City of Napa	X		X	
City of Yountville			X	
City of St. Helena	X		X	
City of Calistoga	X		X	
Napa Sanitation District			X	
Total	**5**	**2**	**5**	**2**

WICC
Watershed Information & Conservation Council
of Napa County

804 First Street,
Napa, CA
94559-2623

Tel: 707-259-8600

info@napawatersheds.org

November 13, 2019

Department of Water Resources
Sustainable Groundwater Management Program
Planning Grants Proposal Solicitation – Round 3

Subject: Support for the Napa Valley Subbasin Groundwater Sustainability Plan and Monitoring Well Installation Project

To Whom It May Concern:

On behalf of the Watershed Information and Conservation Council (WICC) of Napa County, we offer our support for Napa County's Planning Grant Proposal for the Napa Valley Subbasin Groundwater Sustainability Plan and Monitoring Well Installation Project. This project is well aligned with the mission of the WICC to improve the health and function of watersheds in Napa County.

The WICC of Napa County guides and supports the community in its efforts to maintain and improve the health of Napa County's watersheds. Serving as a Council with broad community representation, the WICC works to be a part of the solution to watershed issues. The WICC supports and promotes the activities of watershed groups and organizations working within Napa County and strives to facilitate cooperation among them. The Council serves as an advisory committee to the Board of Supervisors, assisting in their decision-making process and serving as a conduit for citizen input by gathering, analyzing and providing recommendations related to the stewardship and management of watershed resources countywide.

The Napa Valley Subbasin Groundwater Sustainability Plan and Monitoring Well Installation Project will help to ensure the sustainability of groundwater resources within the Napa River watershed for both human and environmental use. We believe this project supports our mission and we are strongly supportive of Napa County's on-going efforts towards groundwater sustainability and the protection of natural resources in the Napa Valley Groundwater Subbasin.

We appreciate the opportunity to offer our support for the Project.

Sincerely,

David Graves,
Chair, WICC

Napa County Resource Conservation District
1303 Jefferson St., Ste. 500B
Napa, California 94559
Phone: (707) 252-4189
www.NapaRCD.org

Department of Water Resources
Sustainable Groundwater Management Program
Planning Grants Proposal Solicitation – Round 3

November 13, 2019

Subject: Support for the Napa Valley Subbasin Groundwater Sustainability Plan and Monitoring Well Installation Project

To Whom It May Concern:

On behalf of the Napa County Resource Conservation District (Napa RCD), we offer our support for Napa County's Planning Grant Proposal for the Napa Valley Subbasin Groundwater Sustainability Plan and Monitoring Well Installation Project. This Project is well-aligned with the mission of the Napa County Watershed Information & Conservation Council (WICC), of which Napa RCD is a member, to improve the health and function of our watersheds.

The Napa RCD supports the community in its efforts to improve the health of our watersheds. Established in 1945, the Napa RCD helps the community take care of the water, soil, air and wildlife of Napa County. RCD connects people to one another and to their watersheds through many avenues, including workshops and lectures, landowner consults on erosion prevention, irrigation and habitat projects, volunteer clean-ups, and watershed fieldtrips for students and others. The Napa RCD also monitors Napa River fish populations, and is working to develop a streamflow monitoring program in collaboration with WICC, and makes all findings available to the public, researchers, and agencies to support better decision-making.

The Napa Groundwater Sustainability Valley Subbasin Plan and Monitoring Well Installation Project will help to ensure the sustainability of groundwater resources within the Napa River watershed. We believe this project supports our mission and we are strongly supportive of Napa County's on-going efforts towards groundwater sustainability and the protection of natural resources in the Napa Valley Groundwater Subbasin.

We appreciate the opportunity to offer our support for the Project.

Sincerely,

Lucas Patzek, Ph.D.
District Manager
(707) 690-3119
lucas@naparcd.org

ATTACHMENT 4

GRANT PROPOSAL SUMMARY BUDGET – TEMPLATES

As described in Attachment 3's Work Plan, there are three (3) components for this Project. Tables 5B and 6B are used to accommodate the budgets for each of these multiple components. The three components are: 1) Grant Agreement Administration, 2) GSP Development, and 3) Monitoring Well Installation and Instrumentation. These three components provide a total cost of $2,636,800, for which the Applicant is requesting $1,958,500 from Prop 68 grant funds. Local cost share provided by Napa County is at a cost share rate of 25%. **Table 5B** below presents the summarized budget and the cost share for the proposal.

More detailed information about the budget is provided for each component in the series of 6B tables and accompanying text. The information in the series of 6B tables corresponds to the description of tasks provided in the Scope of Work section of the Work Plan (**Attachment 3**).

Table 5B – Grant Proposal Summary Budget (Multiple Components)

Grant Proposal Title: **Napa Valley Subbasin Groundwater Sustainability Plan and Monitoring Well Installation Project**

Applicant: **Napa County**

Grant Proposal serves a need of a DA?: X Yes ☐ No

Local Cost Share requested: X 25% ☐ 15% ☐ 10% ☐ 0%

Budget Categories	(a) Requested Grant Amount	(b) Local Cost Share: Non-State Fund Source[1]	(c) Total Cost	(d) % Local Cost Share (Col (b)/ Col (c))[1]
Component 1 Grant Agreement Administration	$100,000	$0	$100,000	0.00%
Component 2: GSP Development	$1,622,400	$678,300	$2,300,700	29.48%
Component 3: Monitoring Well Installation and Instrumentation	$236,100	$0	$236,100	0.00%
Grand Total	**$1,958,500**	**$678,300**	**$2,636,800**	**25.72%**

1. *Required match is 25% of total project cost.*

ATTACHMENT 4

PROPOSAL/COMPONENT DETAILED BUDGET

There are three tables (using the 6B table template) provided in this attachment that show the breakdown of costs for the three components associated with this proposal. The first component's budget table is provided below, which shows the cost of Component 1's Grant Agreement Administration. This cost is estimated based on determining the cost of preparing reports detailing work completed during the reporting period, Progress Reports, Quarterly Invoices, a compilation of backup documentation for each task, a Draft Grant Completion Report, and a Final Grant Completion Report.

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Table 6B – Proposal/Component Detailed Budget (Multiple Components)

Grant Proposal Title: **Napa Valley Subbasin Groundwater Sustainability Plan and Monitoring Well Installation Project**

Applicant: **Napa County** _____

Component Title: **Component 1: Grant Agreement Administration** _____

Budget Categories	(a) Requested Grant Amount	(b) Local Cost Share: Non-State Fund Source	(c) Total Cost
(a) Grant Agreement Administration	***$100,000***	***$0***	***$100,000***
Grand Total	***$100,000***	***$0***	***$100,000***

ATTACHMENT 4

PROPOSAL/COMPONENT DETAILED BUDGET

The next component's budget (Component 2: GSP Development) is provided in table 6B below. This table details the estimated cost associated with each of the pieces necessary to complete this component. The breakdown of costs for this component shows the local cost share portion of this proposal in Component 2(b)'s details. Component 2 is divided into three major categories: (a) Component Administration, (b) Stakeholder Engagement and Outreach, and (c) GSP Development. The Component Administration is necessary to conform with the requirements set forth in Exhibit F, "Report Formats and Requirements" of this Agreement. The Stakeholder Engagement and Outreach category recognizes the need for outreach and communications, focusing on preparation and presentation of technical documents and attendance by technical staff, held for interested parties within and outside the Subbasin.

The last budget category, 2(c) GSP Development is subdivided into three main pieces. These are associated with GSP development for the Subbasin, with Task 1 preparing a complete GSP. Tasks 2 and 3 address the cost of the integrated hydrologic model development, as well as the development of a more robust DMS with online visualization that would promote engagement with the public and stakeholders.

Table 6B – Proposal/Component Detailed Budget (Multiple Components)

Grant Proposal Title: **Napa Valley Subbasin Groundwater Sustainability Plan and Monitoring Well Installation Project**

Applicant: **Napa County**

Component Title: **Component 2: GSP Development**

Budget Categories	(a) Requested Grant Amount	(b) Local Cost Share: Non-State Fund Source	(c) Total Cost
2(a) Component Administration	**$60,000**	***$0***	***$60,000***
2(b) Stakeholder Engagement & Outreach	**$268,000**	**$190,900**	***$458,900***
2(c) GSP Development	**$1,294,400**	**$487,400**	***$1,781,800***
Task 1. GSP Development	$609,400	$393,400	$1,002,800
Task 2. Integrated Hydrologic Model Development	$500,000	$79,000	$579,000
Task 3 DMS with Online Visualization	$185,000	$15,000	$200,000
Grand Total	***$1,622,400***	***$678,300***	***$2,300,700***

ATTACHMENT 4

PROPOSAL/COMPONENT DETAILED BUDGET

The next component's budget (Component 3: Monitoring Well Installation) covers the cost of installing and instrumenting new monitoring wells to improve the monitoring network needed to secure sustainability in the Subbasin by filling in data gaps where insufficient monitoring exists. Monitoring wells will be installed on property that does not require land purchase or easement. Therefore, this component's cost is divided into three main pieces: administration, planning/design/environmental, and implementation/construction. The bulk of the cost for this component lies in the actual drilling (installation) of the monitoring wells.

Table 6B – Proposal/Component Detailed Budget (Multiple Components)

Grant Proposal Title: **Napa Valley Subbasin Groundwater Sustainability Plan and Monitoring Well Installation Project**

Applicant: **Napa County**

Component Title: **Component 3: Monitoring Well Installation and Instrumentation**

Budget Categories	(a) Requested Grant Amount	(b) Local Cost Share: Non-State Fund Source	(c) Total Cost
3(a) Component Administration	**$20,000**	**$0**	**$20,000**
3(b) Land Purchase/Easement <"Not Applicable">	**$0**	**$0**	***$0***
3(c) Planning/Design/Environmental	**$30,000**	**$0**	**$30,000**
3(d) Implementation/Construction	**$186,100**	**$0**	**$186,100**
Grand Total	***$236,100***	***$0***	***$236,100***

ATTACHMENT 5

SCHEDULE

The project schedule for each component is provided in Table 7b. The components, budget categories, and tasks correspond to descriptions in **Attachment 3**'s Work Plan and the budget in **Attachment 4**.

Component 1: Grant Administration will begin as soon as grant funds are awarded (anticipated to be March 2020) and will end at the conclusion of the grant-funded project (October 2022). Milestones for Component 1 include quarterly progress reports and invoices delivered each quarter for the duration of the grant-funded project. Additional milestones include development and submittal of the backup documentation spreadsheet as well as the draft and final Grant Completion Report, anticipated to be submitted by October 2022.

Component 2, the GSP Development component, will be completed by January 31, 2022. Administrative components (2(a)) of the Groundwater Sustainability Plan (GSP) include milestones for quarterly progress reports, invoices, backup documentation, and the draft/final Component Completion Report. Quarterly progress reports and invoices will be submitted for the duration of the component (date the grant agreement is signed to January 2022). Milestones for the Stakeholder Engagement and Outreach component (2(b)) will correspond to the scheduling of each proposed. These meetings will occur throughout the duration of Component 2, with an emphasis on technical support and documentation for stakeholders and the public within and outside the Napa Subbasin. In addition, this component covers costs of GSA coordination.

The Component 2(c) GSP Development tasks are divided into three parts: Task 1) GSP Development; Task 2) Groundwater Model Development; and Task 3) Data Management System (DMS) with Online Visualization. More details on each of the tree tasks can be found in the Work Plan in **Attachment 3**. The Component 2(c) Task 1 GSP Development proposed for funding by Prop 68 occurs from May 2016 until the GSP is due by January 31, 2022. The Task 2 Integrated Hydrologic Model Development will be completed by June 2021. The Task 3 DMS with Online Visualization is dependent, in part, upon completion of the data collection and compilation feature of the GSP Development task, including the Description of the Basin Setting, and also on completion of the Integrated Hydrologic Model Development, for which a database containing information and data including well construction, measurements of: water levels, water quality, subsidence, climate, and surface water flow/stage, as well as simulated measurements from model output will be constructed.. The DMS with Online Visualization is anticipated to be completed at the time of submittal of the Final GSP in January 2022.

Component 3, Monitoring Well Installation and Instrumentation, will begin in March 2020 (after signing the Prop 68 agreement), near the conclusion of the GSP task of developing monitoring networks, whose work will provide insight into potential areas in need of monitoring facilities. The entire Component 3 will be completed at the latest by October 31, 2022 though it is anticipated the work will occur much faster. The administration category of this component will last the duration of the component, with milestones for quarterly progress reports, invoices, backup documentation, and the Draft/Final Component Completion Report. There is no component category for land purchase or easement for the monitoring well installation. The planning/design/environmental portion of Component 3 is expected to begin in March 2020 and end on September 30, 2022. Milestones for the planning/design/environmental portion of Component 3 include project management that extends to the end of the project (September 2022), acquiring appropriate permissions, permitting (from Napa County by September 2020), producing the specifications for the bidding process, and providing a bid award recommendation (December 2020). The Implementation/Construction aspect of Component 3 is dependent upon completion of the well siting, well permission, well permitting, and bidding services, and is anticipated to begin in December 2020 and wrap up no later than September 2022. Drilling, inspection, sampling, and equipping the new monitoring wells will be completed no later than September 2022. Milestones for the implementation/construction aspect of Component 3 include submittal of final monitoring well installation and instrumentation reports (e.g., photographic documentation, As-built/Record Drawings, final geodetic survey information, water quality sampling results), Notice of Completion and DWR Certification of Project Completion Form, and submittal of Well Completion Reports to Department of Water Resources.

ATTACHMENT 5

SCHEDULE

Table 7b – Grant Proposal Schedule (Multiple Components)

Grant Proposal Title: **Napa Valley Subbasin Groundwater Sustainability Plan and Monitoring Well Installation Project**

Applicant: **Napa County** _____

Categories	Start Date	End Date
Component 1: Grant Agreement Administration	***3/1/2020***	***10/31/2022***
(a) Grant Agreement Administration	**3/1/2020**	**10/31/2022**
Component 2: GSP Development	***5/18/2016***	***4/30/2022***
(a) Component Administration	***3/1/2020***	***4/30/2022***
(b) Stakeholder Engagement / Outreach	***5/18/2016***	***1/31/2022***
(c) GSP Development	**5/18/2016**	**1/31/2022**
Task 1. GSP Development	5/18/2016	1/31/2022
Task 2. Integrated Hydrologic Model Development	7/1/2017	6/30/2021
Task 3. DMS with Online Visualization	7/1/2017	1/31/2022
Component 3: Monitoring Well Installation and Instrumentation	***3/1/2020***	***10/31/2022***
(a) Component Administration	3/1/2020	10/31/2022
(b) Land Purchase / Easement <"(Not Applicable">	Not Applicable	Not Applicable
(c) Planning / Design / Environmental	**3/1/2020**	**9/30/2022**
(d) Implementation / Construction	**12/1/2020**	**9/30/2022**