



Lake Sonoma West Watershed Plan  
Technical Proposal  
Funding Opportunity No. R23AS00362

**Applicant:**

Ag Innovations Network (Ag Innovations)  
Genevieve Taylor  
[genevieve@aginnovations.org](mailto:genevieve@aginnovations.org)  
(707) 823-6111

**Project Manager:**

Juliana Birkhoff  
[juliana@aginnovations.org](mailto:juliana@aginnovations.org)  
(707) 823-6111

**Address:**

708 Gravenstein Hwy N #1015  
Sebastopol, CA 95472-2808  
[www.aginnovations.org](http://www.aginnovations.org)

## Table of Contents

<b>Executive Summary</b>	<b>3</b>
<b>Project Location</b>	<b>4</b>
<b>Applicant Category</b>	<b>4</b>
<b>Eligibility of Applicant</b>	<b>5</b>
<b>Project Description</b>	<b>5</b>
<b>Section E.1 Evaluation Criteria</b>	<b>8</b>
E.1.1. Evaluation Criterion A—Watershed Group Diversity and Geographic Scope	8
E.1.1.1. Sub-criterion No. A1. Watershed Group Diversity	8
E.1.1.2. Sub-criterion No. A2. Geographic Scope	10
E.1.2. Evaluation Criterion B— Developing Strategies to Address Critical Watershed Needs	11
E.1.2.1. Sub-criterion No. B1. Critical Watershed Needs or Issues	11
E.1.2.2. Sub-criterion No. B2. Project Benefits	12
E.1.3. Evaluation Criterion C—Readiness to Proceed	13
Exhibit B: Proposed Timeline	14
E.1.4. Evaluation Criterion D—Presidential and Department of the Interior Priorities	17
E.1.4.1. Climate Change	17
E.1.4.2. Benefits to Disadvantaged, Underserved, and Tribal Communities	17

## Executive Summary

Ag Innovations Network (Ag Innovations) is a 501 C (3) non profit organization, headquartered in Sebastopol, Sonoma County, California. Ag Innovations is pleased to submit this proposal to:

- establish a Lake Sonoma West Watershed Group, and
- develop a Lake Sonoma West Watershed plan.

## Location

The watershed planning area is in Sonoma County, CA, from just East of Lake Sonoma to around Miller Ridge near the Sonoma Coast. Important cities nearby include Cloverdale, Geyserville, Healdsburg, and Gualala. Lake Sonoma is the drinking water supply for over 600,000 users in the Counties of Sonoma and Marin.

## Partners

The project team comprises Ag Innovations, a 501 C (3) nonprofit based in Sonoma County; Conservation Biology Institute, a nonprofit that will support data coordination and visualization; Northern Sonoma County Fire Protection District, who will characterize the watershed's fire and vegetation management issues and potential projects and support landowner outreach as well as participate in the "technical advisory group" and "watershed group." Sonoma County Water Agency (Sonoma Water), the US Army Corps of Engineers and the Kashia Band of Pomo Indians will participate in the "technical advisory group" and "watershed group."

## Watershed Concerns

Like many California counties, extreme wildfire poses significant risks to water quality and the watershed. In recent sanitary sewer reports, sedimentation, dissolved organic carbon, metals, and nitrate risks were very high from catastrophic wildfire.<sup>1</sup> Watershed concerns include overstocked forest lands, meadow encroachment, degraded riparian corridors, and invasive species.

## How Projects Might Alleviate Concerns

Projects will protect watersheds and water supply from catastrophic wildfires by removing heavy fuel loads, monitoring water quality around recent burn areas, restoring healthy habitat, streams, and riparian corridors, and installing erosion control techniques to minimize sediments and heavy metal contamination.

## Length of Time

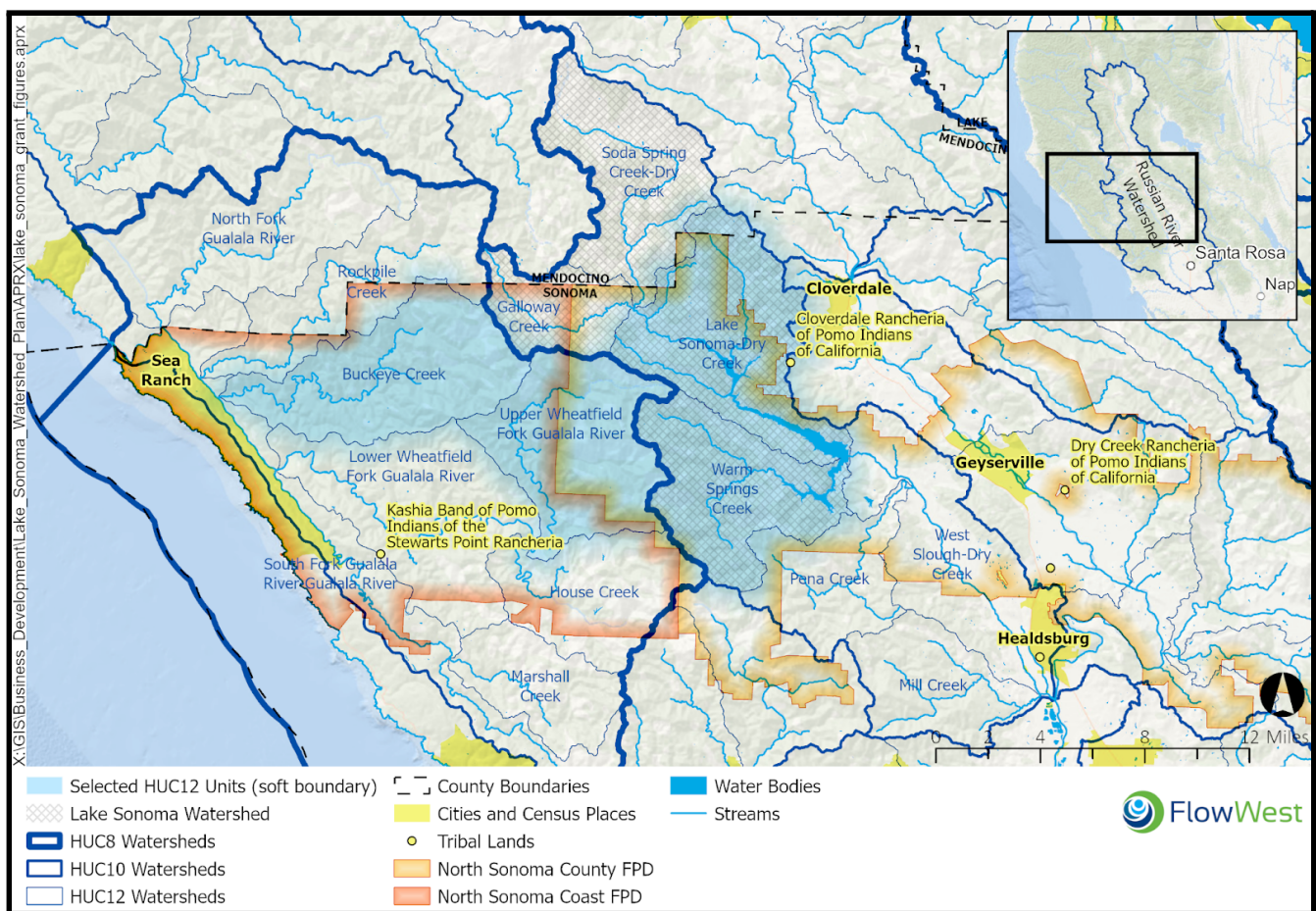
If funded, project activities will begin on January 1, 2025 and conclude by December 31, 2027.

---

<sup>1</sup> Sonoma County Water Agency Watershed Sanitary Survey, December 2018.

## Project Location

Once formed, the “watershed group” will focus on Sonoma County, California, specifically, the northern areas of HUC 10 Dry Creek (1801011005) and the Northern areas of Gualala watershed HUC 10 (1801010901). These areas include Lake Sonoma, the water source for Sonoma Water. This covers approximately 160 square miles and is bordered to the East by Cloverdale, Geyserville, and Healdsburg, with Kashia Band of Pomo Indians lands and small rural communities throughout. This is the ancestral territory of the Kashia Band of Pomo Indians, the Dry Creek Rancheria Band of Pomo Indians, and Cloverdale Rancheria of Pomo Indians. Lake Sonoma is the drinking water source for over 600,000 users, including the following cities: City of Cotati, City of Petaluma, City of Rohnert Park, City of Santa Rosa, City of Sonoma, The Town of Windsor, Marin Municipal Water District, North Marin Water District, Valley of the Moon Water District. This extends through the counties of Sonoma and Marin within Northern California.



## Applicant Category

The team is seeking funding to develop a new “watershed group” and create a watershed plan. Ag Innovations has been working with partners in the Lake Sonoma Watershed and the surrounding area since 2017, convening workshops, conducting interviews, and identifying watershed protection priorities. Our work has catalyzed and supported a number of efforts in the area. While these partners have solid working relationships, there are no watershed

groups or watershed specific plans, priorities, or projects. Grant funds will support convening and formalizing a watershed group and developing a watershed plan.

## Eligibility of Applicant

Founded in 2000, Ag Innovations convenes and manages collaboratives to understand complex problems and develop innovative solutions and momentum to implement those solutions. We focus on food systems and agriculture, watershed management, water quality and quantity, and forest management and fire protection. Ag Innovations is a 501 C (3) organization.

We have been working in partnership with the Kashia Band of Pomo Indians, the United States Army Corps of Engineers who manage the source water in the watershed, the Northern Sonoma County Fire Protection District, and the Sonoma Resource Conservation District. Our partnership includes Sonoma Water, a Sonoma County agency, since 2017. Since 2019, we have also partnered with Conservation Biology Institute, a 501 C (3) nonprofit. We will also procure a firm to be the technical writer for the plan (called “the Contractor” in this proposal), and have worked with a water resources engineering firm in the development of this application. This team will convene a new “watershed group” from our previous work, synthesize information from across our partners, and use that information to create a watershed management plan with strong support.

## Project Description

### Our Approach

Ag Innovation’s approach stresses collective action. Collective action depends on people understanding their common interests and visions, pooling resources to improve conditions, and coordinating activity to achieve common goals. Since 2018, we have been connecting people in the project area to develop trusting relationships, and understand common barriers to action. We will build on the trusted relationships with community, agency, and NGO leaders. Our project will also integrate information and improve shared planning and restoration tools. Funding from the Bureau of Reclamation will integrate parallel planning efforts as well as priorities developed in our previous work.

### Task A Watershed Group Development

Our first task will be to “map” the stakeholders in our project area. Since 2018, we have been keeping track of which county, state, and federal agencies are interested in and working in the area. We also have been maintaining lists of people and organizations working in the project area. Categorizing stakeholders into a visual representation of who is important, influential and their relationships helps us document roles and relationships. This is an important task to ensure that we do not miss anyone who may want to learn about the project, review projects or priorities, or serve on technical and watershed management groups. Stakeholder mapping ensures we have not missed underrepresented voices as well as people who could block project implementation or provide resources for projects.

We have most of the information we need to create a comprehensive stakeholder map for our project. However, we will reach out to our partners to ensure we have complete lists. Once we have mapped and analyzed our stakeholders, we will organize our newly forming

“watershed group.” We assume, from our previous work, that the “watershed group” will include representatives from:

- Local tribes including, the Kashia Band of Pomo Indians, Dry Creek Rancheria Band of Pomo Indians, and Cloverdale Rancheria of Pomo Indians,
- Agriculture, forest, and commercial interests,
- Several land owners and residents,
- Recreation interests,
- Local agencies including fire districts,
- County agencies, including Sonoma Water, and
- The United States Army Corps of Engineers

However, if awarded funds, we would spend the first months reaching out to project area organizations to ensure we have robust representation of different interests. Here is a description of the specific organizations and entities we have been working with in the watershed and their role in the proposed project.

- The Kashia Band of Pomo Indians, Dry Creek Rancheria Band of Pomo Indians, and Cloverdale Rancheria of Pomo Indians tribal members own land and manage water and watersheds in their tribal homelands. They are particularly interested in reducing the threats to their tribal homelands from catastrophic fire, drought, and heavy rainfall events.
- Sonoma County has some wineries, small timber operations, and grazing. However, this northern region of Sonoma County does not have large agricultural operations. Since these agricultural, forest, and commercial operations are small, landowners may not have access to capital or knowledge to manage their operations for fire, drought, and flood events. This project focuses on working with homeowner and road associations, Fire Safe Councils, and other resource management associations to learn how to work cooperatively to manage the watershed.
- Recreation interests focus their interests and concerns on Lake Sonoma. They want to ensure that the watershed is not threatened by catastrophic events such as fire or flooding.
- The Army Corps of Engineers is responsible for planning and management of the Lake Sonoma reservoir. They are also responsible for habitat restoration and protection.
- As described above our partners Northern Sonoma Fire District and Sonoma Water are concerned about the water quality and quantity threats and watershed health in their areas.

We expect to find other organizations and individuals during our stakeholder mapping process.

In our experience, watershed groups should be large enough to represent the range of interests, but small enough to work together productively and efficiently. We will seek to organize a watershed group with between 15 and 20 members. Although we have outlined the proposed watershed area, we assume the newly formed watershed group will adjust the boundaries to fit common needs.

Organizing the group will also include developing clear roles and responsibilities, as well as a structure and timeline for participation. The watershed group will be formally organized, with clear roles for leadership and participation. Ag Innovations is very experienced in developing groups with clear expectations, structures, and rules. We codify these organizational

requirements into a draft charter. Typically charters are reviewed by the newly forming watershed group as a draft before the first meeting and then ratified in the first meeting. We will also spend time, in the first meeting, ensuring that the team has clear communication protocols and ways to share information.

We will organize, facilitate, and document the outcomes of ten "watershed group" meetings. We anticipate 10 three-hour meetings to clarify the community vision, review concerns, develop goals and objectives, and turn priorities into objectives and projects. We will organize in person meetings, like many rural areas, the project area does not have reliable internet service. We anticipate "watershed group" meetings every quarter with enough time between meetings for the "technical advisory group" to develop information for the "watershed group" decisions.

"Watershed group" meetings will alternate between "technical advisory group" meetings. We expect quarterly meetings with the last meeting scheduled for the beginning of year three to ratify the final watershed plan. The "watershed group" will strive to reach consensus on project priorities, plans, and projects. However, if the group cannot reach consensus, we will document agreements and disagreements so the technical advisory group can provide technical or scientific advice to help make decisions.

#### Task B Watershed Restoration Planning

Watershed restoration planning will be developed by a "technical advisory group" including anyone who has information or planning responsibility for the watershed area. The contractor will collate information, analyze data, and write the watershed plan.

The Army Corps of Engineers is responsible for planning and management of the Lake Sonoma reservoir. They have water quantity and quality information as well as habitat information. The Conservation Biology Institute has information about wildlife and habitat, and developed risk prediction and planning tools for the area. The Northern Sonoma Fire District has information about vegetation, fire risks, and planned fuel treatments. Finally, Sonoma Water has information for protecting their drinking water supply. These partners will work together with the Contractor to develop the required technical information.

The "technical advisory group" will begin the watershed planning process by developing a list of watershed concerns and issues. This list will be refined and updated through the data gathering and analysis task, and will ultimately guide the watershed plan document. Once the key issue areas are identified, FlowWest will lead the process of collecting and reviewing relevant documents and data, and coordinate with the team to identify available technical resources. It is anticipated that these resources will include but are not limited to: existing planning documents, existing natural resources monitoring efforts and related data, scientific literature, and climate change projections for the watershed. Relevant data for the planning effort will be gathered and inventories with appropriate metadata; these data are anticipated to include: vegetation mapping, land use, species habitat mapping, water quality, hydrology, sediment discharge, among others. When data are necessary to document and track priority issues identified by the "watershed group", but are not available or under development, they will be documented in a data gaps summary to be included in the watershed plan. Addressing important data gaps may be a subsequent project for the "watershed group".

After technical resources have been gathered and documented, this information will be analyzed, visualized, and described. This work will be led by the Contractor and CBI, with ongoing feedback from the broader team. We will be looking for a Contractor who has extensive expertise in processing and analyzing geospatial and time series data to elucidate trends and relationships, and will work with CBI to visualize these findings in meaningful ways to the community. CBI will also update their [Sonoma County Wildfire Resilience Planner](#) tool to include findings from this data synthesis work for the watershed plan. Findings from the analysis and synthesis task will be integrated into descriptions of the watershed issues and concerns in the planning document.

The watershed plan document will present a summary of the issues in the watershed, and identify priorities for advancing restoration that meets the goals of the "watershed group". The issues and concerns identified in the preliminary technical task will be contextualized with the data and technical materials synthesized. The technical team will work iteratively with the "watershed group" to ensure complexities and nuances of their concerns are fully investigated and that additional data/information needs are tracked in the plan document. The technical team will also work with the group to generate a list of conceptual restoration project ideas that stem from the issues in the watershed and findings from the data analysis. The technical team will prepare a draft watershed plan and submit it to the group for one round of consolidated comments, work with the group to discuss their feedback, and then complete the final version of the watershed plan. The culmination of this document will be a list of recommended conceptual restoration concepts to be advanced by the group in subsequent phases of this effort.

## Section E.1 Evaluation Criteria

*The evaluation criteria portion should be addressed in the technical proposal section of the application. Applications should thoroughly address each criterion and any sub-criterion in the order presented below. Applications will be evaluated against the evaluation criteria listed below. If the work described in your application is a phase of a larger project, only discuss the benefits that will result directly from the work discussed in the project description and that is reflected in the budget, not the larger project.*

### E.1.1. Evaluation Criterion A—Watershed Group Diversity and Geographic Scope

#### E.1.1.1. Sub-criterion No. A1. Watershed Group Diversity

Ag Innovations follows best practices regarding stakeholder mapping and identification, as well as public and community involvement. This watershed is important to the local landowners, tribes, and agencies, and also has implications for 600,000 downstream users in Sonoma and Marin, including City of Cotati, City of Petaluma, City of Rohnert Park, City of Santa Rosa, City of Sonoma, The Town of Windsor, Marin Municipal Water District, North Marin Water District, Valley of the Moon Water District, located in the counties of Sonoma and Marin within Northern California.

Ag Innovations takes great care to research interests as part of the convening of the "watershed group", to create groups that reflect the full range of interests, and then to create charters and decision-making rules that support inclusion. The Watershed group, where



decisions about the watershed plan will be made, will include participants who own property, have management responsibility or interests in the watershed.

Specific stakeholders include:

**Local Landowners:** The project area has 722 privately owned parcels; in terms of acreage, 88% of the land is private, if the water area of Lake Sonoma is excluded<sup>2</sup>. Some lands include agricultural (grape growing and grazing), forest and commercial interests, while others own parcels for aesthetic, solitude, and recreational purposes. There are some second home owners in the area as well, and a number of homeowner associations (HOAs) and Road Associations. It will be important to represent the major roads (Rockpile Road, Skaggs Springs Road, Walbridge Road, and others) and HOAs as collective action depends on community organizations. Our intent is to organize the rural residents, who are responsible for watershed management, and to ensure diversity in terms of location throughout the watershed, type of land (forestry, oak woodland, chaparral, grasslands, etc.), type of land use (ag, forestry, natural lands) as well as gender, income and race.

**Local tribes:** This area is the ancestral territory of the Kashia Band of Pomo Indians, Dry Creek Rancheria - Band of Pomo Indians, and Cloverdale Rancheria of Pomo Indians. The Kashia Band has provided leadership and support since 2018 for discussing the issues in the watershed, about traditional fire management, wildlife and habitat protection, and other traditional practices. The Kashia Band provided a letter of support. Updates will be shared with tribal councils.

**Local Agencies:** There are several agencies who have direct management responsibilities and own land in this watershed. They include:

- The US Army Corps of Engineers (USACE): They manage approximately 16,000 acres around Lake Sonoma and its immediate surroundings, including camping and recreation along the shorelines.
- Sonoma County Water Agency (Sonoma Water): Sonoma Water manages the water in Lake Sonoma, represents the interests of downstream communities, and owns a small parcel of land.
- Northern Sonoma County Fire Protection District (Fire District): The Fire District covers all of the watershed we have identified in this project, along with the area to the East which also presents fire risks to the watershed. They are the “hands-on” local agency that has direct responsibility and relationships with the vast majority of landowners in the area. Specifically, Chief Marshall Turbeville is a local resident. He has a forestry and fire background, and also is a part of CAL FIRE, with many overlapping responsibilities and supportive resources.

We will create regular updates for local agencies to include in their regular newsletters, social media and websites.

---

<sup>2</sup> Data source: Sonoma County GIS Parcels Public Shapefile, data updated August 22, 2023. Assumptions: Sonoma County non-taxable (federal, state, county) parcels are classified as Public; all others are classified as Private.

**Invite, inform and include if desired:**

- County of Sonoma: There may be a need to coordinate with the County of Sonoma in a number of ways, whether it is to inform and update on a regular basis, request data and information, or coordinate with overlapping planning efforts. Specifically:
  - The County of Sonoma is the governing agency in the region. In past work, Permit Sonoma County has been involved, and will be invited to participate.
  - The Ag and Open Space District of Sonoma County, which has conservation easements in this region, will be invited to participate.
  - Permit Sonoma, which permits projects, may be involved during project concept development.
- Landowners and adjacent city residents: The "watershed group" by design will only include a representative subset of the watershed, and so we have included in the proposed project plan, regular informational email updates, educational events, and attending and presenting at community meetings and events to educate, gather information and input. The Fire District will also share updates to their constituency, which reaches the vast majority of landowners in the region.

**E.1.1.2. Sub-criterion No. A2. Geographic Scope**

This project is across two watersheds, in the Dry Creek Watershed which includes Lake Sonoma and then West in the Gualala Watershed. These two areas are linked in a number of ways: The area includes wildlife corridors, connected riparian corridors, and a few roads which connect the communities and the parcels in the watershed. The rural community identity is shared across the two watersheds, it is self-organized within this area due to agency jurisdictions, the history of the parcels and development, and road and homeowner associations. The issues are shared in this area, whereas the watershed issues and solutions are different outside of these areas. The specific boundaries of the project area will be refined with the community once the project begins.

The project will concentrate on building relationships between tribes and local landowners and residents. Outreach to both of these groups has been spotty and disparate in the past but this effort will support improved collaboration around resource management now and in the future. Our prior work in the watershed indicates willingness to work together. Currently there are not enough collaborative skills and organization to sustain collaborative action.

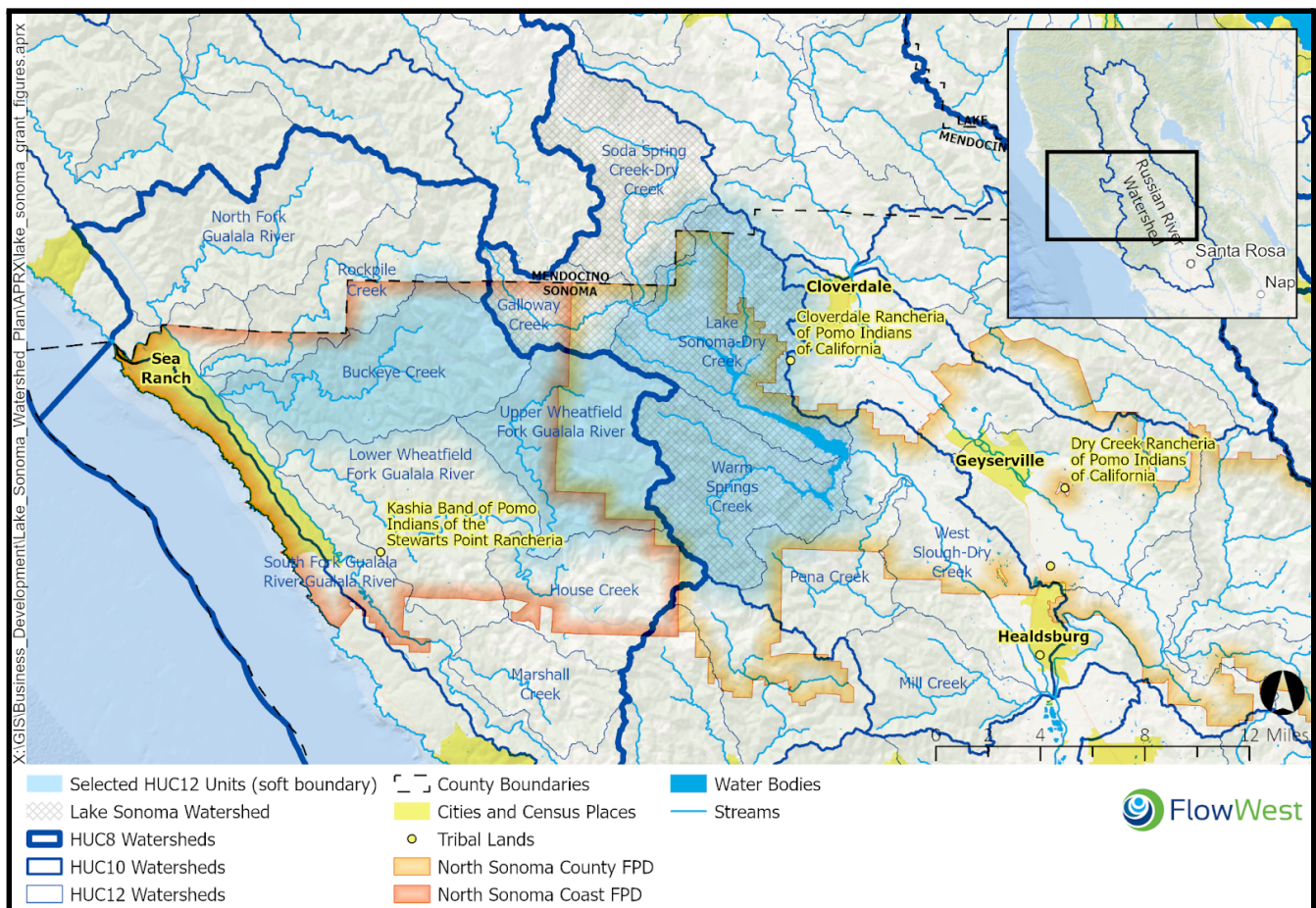


Exhibit A: Map of proposed watershed planning area

## E.1.2. Evaluation Criterion B— Developing Strategies to Address Critical Watershed Needs

### E.1.2.1. Sub-criterion No. B1. Critical Watershed Needs or Issues

Like many California counties, extreme wildfire poses significant risks to water quality and the watershed. In recent Sonoma Water sanitary sewer reports, sedimentation, dissolved organic carbon, metals, and nitrate risks were very high from catastrophic wildfire.<sup>3</sup> Watershed concerns include overstocked forest lands, meadow encroachment, degraded riparian corridors, and invasive species. During years of drought, which California has a steady pattern of drought and these concerns can rapidly increase in severity, turning into fuel for mega fires.

Over 23 wildfires have occurred in the watershed, with more recent wildfires having catastrophic water quality and watershed impacts. The project area is mapped by CALFIRE as a very high severity zone. Eighty percent of the land is privately owned across hundreds of parcels. This land ownership pattern creates barriers to state or county agency work and makes the area especially well-suited to benefit from collaborations between neighbors. We have been working with residents, as well as County, State, and Federal land managers to understand barriers, provide education, planning tools, and access to resources to conduct management.

<sup>3</sup> Sonoma County Water Agency Watershed Sanitary Survey, December 2018.

Flooding may also be an issue, but we will have to explore that with support from grant funds. We also know that there is interest from the tribes in wildlife conservation, habitat restoration, and wildlife corridors.

#### E.1.2.2. Sub-criterion No. B2. Project Benefits

Ag Innovations previous work in this region has holistically considered its nature as a watershed. However, due to the overriding risk of fire, our work has been more focused on fire resiliency in recent years. This has been appropriate given the impact that megafires—such as the Tubbs Fire in 2017, and subsequent fires—have had on the community. Focusing on the region from a watershed perspective enables the community to take a more holistic and integrated approach that addresses the array of issues in the area, and applies that thinking to the concerns of the region. Below are a list of specific benefits to the listed areas of concern:

**Wildfire:** A watershed plan would 1) create an integrated and holistic plan for vegetation management that landowners, tribes and agencies could align on, enabling better project design and implementation; 2) would inform emergency planning that hopefully would limit impacts to the watershed during a fire, and 3) would reduce risks that a megafire could pose to water quality, including sedimentation, dissolved organic carbon, metals, and nitrate risks.

**Overstocked forest lands, meadow encroachment, riparian corridors, and invasive species:** This will enable the group to identify meadows that are encroached or forests that are overstocked, and to identify projects that would support them in managing those lands in a way that is beneficial for the watershed. Likewise, riparian corridors are often choked by invasive species, are hard to access, and there is a lack of understanding and capacity to work with streamways and riparian corridors effectively.

Landowners may not always know what a healthy landscape is or be able to identify invasive species, due to a lack of history in the area, or a lack of knowledge. Likewise, they may not have the resources to design or implement projects to remedy these issues; we have heard many times of the challenges surrounding these interventions. While there are many legacy landowners who have been there for multiple generations, there are likewise landowners who have moved to the area much more recently. Grant funds will enable the use of science, data and tools, resources, and community and tribal expertise to be shared, and will identify the gaps for being able to work effectively on those issues so that they can be addressed collectively in the future.

**Wildlife Corridors, Conservation and Habitat Improvement:** Sonoma County is a biodiversity hotspot. These lands provide habitat for a wide range of species. However, understanding about wildlife, what a healthy landscape is for them, and how landowners can work together to support them is unknown. The Kashia Band of Pomo Indians has already expressed a strong interest in working with others to support wildlife corridors in the region, an interest that could be supported in this project.

**Drought and Deluge (floods):** Sonoma County is prone to both drought and floods, and depending on their timing, intensity, and contextual events they can have more and less impact on the area. The challenge is that these issues aren't widely known or understood.

This project is an opportunity to understand the unknowns, and identify gaps, barriers and opportunities in addressing them, and projects that would support action in the future.

**Cultural Resource Management:** Tribal cultural resources in the area are a high priority for the tribes, and given the nature of the watershed, many are located on private lands. An effort like this enables relationship building, shared understanding, and agreements about managing those cultural resources.

#### E.1.3. Evaluation Criterion C—Readiness to Proceed

On the next pages is Exhibit B, a proposed timeline that shares tasks, subtasks, roles and timeline, indicating a readiness to proceed on the project.

(Intentionally left blank)



EXHIBIT B: Preliminary Project Schedule: Lake Sonoma West Watershed Plan (January 1 2025 - December 31 2027)													
		Year 1				Year 2				Year 3			
Activities	Roles	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
<b>TASK 2: Outreach and Engagement</b>													
Develop outreach and engagement plan	Lead: AIN	X											
Develop outreach and engagement messages	Lead: AIN	X											
In person public information and outreach campaign activities	Lead: AIN Supports: Fire District, other partners	X	X	X	X	X	X	X	X	X	X	X	X
Virtual public information and outreach campaign activities (eblasts, social media, etc.)	Lead: AIN Supports: Fire District, other partners	X	X	X	X	X	X	X	X	X	X	X	X
<b>Total</b>													
<b>TASK B: Develop Watershed Restoration Plan</b>		<b>Contractor will lead tasks listed here. Ag Innovations (AIN) will facilitate. Conservation Biology Institute (CBI) and Northern Sonoma County Fire Protection District (Fire District) will support.</b>											
<b>Task 3: Technical Advisory Group</b>													
Contractor presents to Watershed Group	Lead: Contractor												
Facilitate and lead TAG Group Meetings	Lead: Contractor Facilitates: AIN		X	X	X	X	X	X	X	X	X	X	
Draft list of concerns and issues	Lead: Contractor Supports: Fire District, CBI		X										
Identify current plans	Lead: Contractor Supports: Fire District, CBI		X										
Gather existing data	Lead: Contractor Supports: Fire District, CBI		X	X									
Create data inventory	Lead: Contractor Supports: Fire District, CBI			X									
Identify data gaps	Lead: Contractor Supports: Fire District, CBI				X								
Analyze data	Lead: Contractor Supports: Fire District, CBI				X	X	X						





## E.1.4. Evaluation Criterion D—Presidential and Department of the Interior Priorities

### E.1.4.1. Climate Change

Climate change alters the quantity, quality, timing and distribution of water. The climate influences vegetation types, streamflow magnitude and timing, and water temperatures. The Lake Sonoma Watershed has experienced worsening floods, wildfires, and droughts from climate change and those changes are expected to get worse. Watershed restoration can reverse past damages as well as prepare watersheds for changing climates.

For example, Sonoma County has experienced different storm and rainfall events influenced by climate change. Stronger storms generate higher peak flows. Sudden deluges create flash floods. Where a creek or stream may have rarely overflowed its banks, under climate change this is much more likely. These storm events concentrate now in the fall, winter, and spring, leaving much less water in the system in the summer. Less water may mean higher water temperatures and fragmented water systems.

Some watershed projects for climate change could include slowing water down, preventing erosion from fire areas, and spreading water out to hold water in the system longer. Further, flashy floods and drought may affect road systems. Some watershed projects may focus on improving roads in the area that could be affected by fire or flooding.

The White House Council on Environmental Quality's interactive Climate and Economic Justice Screening Tool provides a preliminary assessment of the climate change impacts projected for the communities in this watershed. For Census Tract 06097154202, which includes most of the area around the northern half of Lake Sonoma, expected agriculture loss rate is in the 99th percentile, meaning the economic loss to agricultural value resulting from natural hazards each year is predicted to be extremely high for this community. Projected wildfire risk in this tract is also very high—in the 92nd percentile. In the southern portion of the watershed area (Census Tract 06097154304), severe risks are identified for wildfire (75th percentile) and flood risk (84th percentile). The expected building loss rate is estimated in the 91st percentile for this tract, meaning severe economic loss to building value resulting from natural hazards each year.

### E.1.4.2. Benefits to Disadvantaged, Underserved, and Tribal Communities

This project area covers the ancestral territory of the Kashia Band of Pomo Indians, the Dry Creek Rancheria Band of Pomo Indians, and the Cloverdale Rancheria of Pomo Indians. The Kashia Band has a reservation which may be included in the watershed area, to be determined upon award of the grant, and the Dry Creek Rancheria has a reservation that will not be a part of the project. The Cloverdale Rancheria of Pomo Indians does not have a tribal reservation.

**Description of Tribal Benefits:** The Kashia Band of Pomo Indians has a strong interest in a healthy watershed to benefit fire resiliency for their community as well as wildlife, including wildlife corridors. They have an interest in proactive and collaborative watershed planning, as well as an interest in minimizing the impact of mega-fires. Past fires have threatened their community, both in regards to natural and cultural resource sites and also due to a lack of egress and ingress on the small number of roads in the area. While a watershed plan may not address all of those concerns directly, a collaborative approach and the opportunity to work

with neighboring communities on these issues in a more holistic manner builds the relationships needed for effectively dealing with emergencies as well as protecting the resources they care for.

In the past, the Dry Creek Rancheria Band of Pomo Indians and the Cloverdale Rancheria of Pomo Indians of Pomo Indians have identified an interest in planning or projects that would affect natural or cultural resources in their ancestral territory. This project is an opportunity to include those interests in a watershed group and plan. The budget includes a stipend per person per meeting for tribal and community representatives, as they indicate is needed.

The proposed project will directly support Reclamation's commitment to enhancing direct management of natural resources by Tribes. The project will include several Tribal Nations within the "watershed group": Kashia Band of Pomo Indians, Dry Creek Rancheria Band of Pomo Indians, and Cloverdale Rancheria of Pomo Indians. These Tribal Nations will provide input on the watershed planning process and guide restoration activities in the watershed for years to come through their participation in the project.

**Disadvantaged and Underserved Community Benefits:**

Lake Sonoma is a key surface water supply in the region, providing water to several cities, municipalities, and water districts. The service area for the Lake Sonoma water supply includes the Cities of Santa Rosa and Sonoma, both of which include disadvantaged communities. Within the DAC Census Tracts of the City of Santa Rosa (06097152802, 06097152903, 06097153104, 06097151900, 06097153103, and 06097151402) these communities are particularly vulnerable to underground storage tanks and releases (percentiles range from 62nd-97th), which pose threats to groundwater supply and heighten the importance of maintaining a healthy water supply from surface water sources in the region like Lake Sonoma. These Census tracts, as well as the DAC tract in the City of Sonoma (06097150305) are also at heightened risk for climate change impacts such as wildfires, flood, and increased frequency of natural hazards.



## *Kashia Band of Pomo Indians of the Stewarts Point Rancheria*

November 30, 2023

To Whom It May Concern:

We are pleased to support Ag Innovations' proposal for the Bureau of Reclamation WaterSMART Cooperative Watershed focused on the Lake Sonoma Watershed in Sonoma County. This area is in the ancestral territory of the Kashia Band of Pomo Indians, alongside the Cloverdale Rancheria tribe and the Dry Creek Rancheria tribe.

We have been working with Ag Innovations since 2018 when they began to organize the Lake Sonoma watershed around fire resiliency efforts.

This project is across two watersheds, in the Dry Creek Watershed which includes Lake Sonoma and then West in the Gualala watershed. These two areas are important because they include potential wildlife corridors, connected riparian corridors, and they are linked by only a few roads, to connect the communities and the parcels that are in the watershed. Notably, this watershed is mostly owned by private landowners, and needs in-depth outreach and relationship building for it to be successful.

Ag Innovations will be focused on convening a watershed group that is inclusive and represents the many interests in the watershed, as well as creating a watershed plan that will help this group prioritize its interests and seek multi-benefit solutions that will support a healthy watershed, healthy wildlife, and wildlife habitat, as well as water and fire resilience.

The Kashia Tribe is interested in the health of this watershed, in the connectivity of wildlife across the landscape, and in managing the cultural resources in our ancestral territory.

This will benefit us because we are planning on participating in meetings, reviewing documents, coordinating this planning process with other planning efforts, and participating in decision-making.

We hope that you will award this grant to Ag Innovations.

Respectfully,

A handwritten signature in black ink, appearing to read "Reno K. Franklin", written over a horizontal line.

Reno K. Franklin  
Tribal Chairman

November 30, 2023

To Whom It May Concern:

The Sonoma Resource Conservation District (Sonoma RCD) is pleased to support Ag Innovations' proposal for the Bureau of Reclamation WaterSMART Cooperative Watershed focused on the Lake Sonoma Watershed Area in Sonoma County.

Sonoma RCD serves landowners and land managers throughout this area. It is an area that includes some agricultural interests (grape growing and rangeland) but is mainly characterized by forests, grasslands, oak woodlands, and ridges with sharp ravines and riparian corridors. Watershed issues in this region are fundamentally intertwined with vegetation management and fire resiliency. Private landowners are open to working together once they see the need, but there is a strong need for education, relationship building, and collective action to maintain a healthy watershed and healthy landscape. This project will focus across two watersheds, in the Dry Creek Watershed which includes Lake Sonoma and then West into the Gualala River watershed, which is where landowners are self-organized around roads and homeowners' associations, and aware of the need for collective action.

Sonoma RCD has worked with Ag Innovations since 2014, when they co-founded the Sonoma County Food System Alliance, which organized the local community around local food, food security, land use, and other issues. We have seen the impact that their facilitative, community-oriented approach can take in fostering and maintaining collective action. As a nonprofit focused on facilitating a systems approach around water and watersheds, food and ag, and fire and forests, they are uniquely positioned to support watershed planning in this region.

We have seen the Ag Innovations' approach also be supportive when applied to fire and forests, when in 2018 they began to organize the Lake Sonoma watershed around fire resiliency efforts. They have brought together the community many times during that time, and it has led to a number of successful grant applications, community based organizations, and has supported the Sonoma RCD's efforts to build relationship, provide education, and remind the local community that we are an important resource to the local community in their land management efforts.

In this grant, Ag Innovations will be focused on convening a watershed group that is inclusive and represents the many interests in the watershed, as well as creating a watershed plan that will help this group prioritize its interests and seek multi-benefit solutions that will support a healthy watershed, healthy wildlife and wildlife habitat, as well as water and fire resilience.

We plan to support this effort by participating in meetings as needed, by providing data and information upon request, by using this as an opportunity to educate and coordinate between our planning efforts we are involved in.

Collaboration of the community towards a watershed plan and identifying goals and projects will help bring important work to these watersheds. We are excited by the prospect of Ag Innovations tackling this project and bringing the community together and hope they get awarded by the grant.

Sincerely,

A handwritten signature in blue ink, appearing to read "Aaron Fairbrook". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Aaron Fairbrook  
Interim Executive Director  
Sonoma Resource Conservation District



DEPARTMENT OF THE ARMY  
SAN FRANCISCO DISTRICT  
450 GOLDEN GATE AVE  
4TH FLOOR, SUITE 0134  
SAN FRANCISCO, CA 94102-3406

December 5, 2023

SUBJECT: Support to Ag Innovations for Bureau of Reclamation WaterSMART Cooperative Watershed grant for the Lake Sonoma Watershed

Mr. Grant Davis  
General Manager  
Sonoma Water  
404 Aviation Boulevard Santa  
Rosa, CA 95403

Dear Mr. Davis:

The U.S. Army Corps of Engineers San Francisco District has for years collaborated with multiple agencies and focus groups on the protection of the Lake Sonoma watershed. Collaborative efforts include fire fuels reduction projects, fire resiliency, prevention of aquatic invasive species infestation, and overall watershed management. Federal lands managed by the U.S. Army Corps of Engineers and within the Lake Sonoma watershed, include infrastructure such as the lake, dam, and hatcheries, as well as riparian areas, wildlife corridors and habitat, supporting listed and endangered species.

Ag Innovations has been working in the Lake Sonoma watershed since 2018, organizing around fire resiliency efforts. Ag Innovations will be focused on convening a watershed group that is inclusive and represents the many interests in the watershed, and creating a watershed plan that will help this group prioritize its interests and seek multi-benefit solutions that will support a healthy watershed, healthy wildlife and wildlife habitat, and water and fire resilience.

This project crosses two watersheds, the Dry Creek Watershed which includes Lake Sonoma and then West in the Gualala watershed. These two areas are important because they include communities who are already self-organized around collective action on resource management. Notably, this watershed is the ancestral territory for several tribes, is currently mostly owned by private landowners, and needs in depth outreach and relationship building for it to be successful.

We plan to support this effort by participating in meetings as needed, providing applicable data and information, using this as an opportunity to educate and coordinate between our management plan and guidance, and other processes, and by offering the Visitors Center as a meeting place if needed.

Sincerely,

Nicholas Malasavage  
Chief, Operations and Readiness Division



FP-304-42

December 4, 2023

To Whom It May Concern:

The Sonoma County Water Agency (Sonoma Water) is pleased to support Ag Innovations' proposal for the Bureau of Reclamation WaterSMART Cooperative Watershed focused on the Lake Sonoma Watershed and Gualala River Watershed areas of Sonoma County.

Sonoma Water's mission is to provide reliable water supply, wastewater management, and flood protection — essential services for a thriving community and a healthy environment. As the regional water wholesaler for over 600,000 people and the local sponsor for Lake Sonoma reservoir, we rely on Lake Sonoma to meet downstream water demands from agricultural, commercial, and residential individual water uses and other public water systems and to maintain minimum instream flow requirements for beneficial uses, including recreation and fish habitat. Since the catastrophic fire storms of 2017, we are particularly concerned about the risk of post-wildfire sedimentation into our reservoir, which could lead to a loss of storage capacity and possible water quality impacts. We have been working with Ag Innovations since 2018, when we first partnered with them to engage landowners within the Lake Sonoma watershed on fire resiliency efforts under the Better Together Resilient Communities grant. They have brought together the community many times since that first effort, seeding a number of successful grant applications among partners who first connected through that facilitated process.

This project proposal would work across two watersheds: the Dry Creek Watershed which includes Lake Sonoma; and the Gualala Watershed. Despite being hydrologically distinct, these two areas are linked in their cultural character and their dependence on a thin road network; they hold critical aquatic species and potential wildlife corridors; and they have shared challenges related to rural emergency response and land management. This area, including our source watershed, is almost entirely privately owned, and thus a robust watershed plan will require targeted and strategic engagement of the local community and an equitable process that ensures the resulting plan is driven by community values and priorities.

We plan to support this effort by participating in the technical and working groups, by providing data and information upon request, and by reviewing draft technical documents for comment. We see this as an important opportunity to collaborate with landowners and other watershed partners, engage key technical questions pertaining to wildfire risk, reservoir sedimentation, and aquatic habitat restoration, and develop a holistic plan for a critical watershed.

We hope that you will award this grant to Ag Innovations because their strong facilitation capacity makes them uniquely suited to building collaborative solutions to the thorny challenges present in the Lake Sonoma watershed.

Sincerely,

A handwritten signature in blue ink, appearing to read "Grant Davis".

Grant Davis

kt T:\Pinks\2023 Pinks\12-04-23\Ag Innovations\_BOR LOS.docx