

Napa WCC Grant – Abuelitos Foundation

Description of Organization

1. Type of organization or business

Abuelitos Foundation is a Delaware nonprofit corporation based in Napa, California. The Foundation is dedicated to restoring resilient ecosystems on working lands throughout Napa Valley.

2. Purpose for which the organization was formed

Abuelitos Foundation was formed to restore the ecological health and resilience of Napa Valley's working lands. Its work focuses on healthy watersheds as the foundation for abundant wildlife, productive agriculture, clean water, and resilient communities.

The Foundation uses process-based restoration, working with landowners, scientists, public agencies, and community organizations to restore the natural processes connecting water, soil, vegetation, wildlife, and people. Its activities include developing and implementing demonstration projects, coordinating volunteers and partner organizations, supporting ecological monitoring, and sharing findings through educational field days and community outreach.

The Foundation's flagship project is the Conn Creek Land Lab, a collaborative demonstration site in the Lake Hennessey subwatershed. The project restores incised ephemeral channels, improves watershed function, enhances wildlife habitat, and documents ecological outcomes that can inform similar restoration work throughout Napa Valley.

3. Tax-exempt status

Abuelitos Foundation is exempt from federal income tax under Section 501(c)(3) of the Internal Revenue Code and is classified as a private foundation under Section 509(a). Its federal Employer Identification Number is 88-0593452. Contributions are tax-deductible as permitted by law.

4. Date formed as a nonprofit

Abuelitos Foundation was incorporated on January 12, 2022.

5. Membership

Abuelitos Foundation has no members. Under its bylaws, all rights that would otherwise vest in members are vested in the Board of Directors. The Foundation therefore has no membership restrictions, membership enrollment, or membership fees. Community members participate through volunteer workdays, educational events, and project partnerships.

6. Board of Directors and contact person

- Tod Mostero, Founder and President
- Vichheka Hang, Vice President
- Ginna Beharry, Treasurer
- Erik Olson, Secretary
- Nick Carson, Director
- Mimi Casteel, Director

Primary contact:

Tod Mostero, Founder and President

Abuelitos Foundation

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Needs Assessment

Abuelitos Foundation is requesting **\$18,726** to support implementation of the Conn Creek Land Lab, our pilot process-based restoration project located in the upland watershed above Lake Hennessey in Napa County. Working in partnership with the vintners at Element 28, the Napa Resource Conservation District, neighboring landowners, and community volunteers, the project is designed to restore degraded ephemeral streams to improve watershed function, recover riparian habitat, and demonstrate practical restoration techniques that can be replicated throughout Napa Valley.

Problem Statement

Decades of historic land use as a former cattle ranch compacted soils, degraded native vegetation, and dried out the project site by changing the way water moves through it. Historic practices such as channel simplification, native vegetation removal, and overgrazing moved water off the landscape quickly and disrupted the slower hydrologic and ecological processes that these environments were adapted to. These degraded conditions have created a self-reinforcing cycle of drying, erosion, vegetation loss, and increasing instability that requires urgent attention.

Today, despite the change in land use, these scars are still visible along two ephemeral drainages that continue to dry the surrounding landscape. A degraded channel no longer performs the same ecological work of slowing water, storing moisture, building soil, supporting native vegetation, recharging shallow groundwater, or providing the seasonal wetness that native species rely on. Rather, these channels move stormwater rapidly downstream, preventing infiltration into surrounding soils. This causes sediment to be exported from the landscape, polluting the Lake Hennessey reservoir downstream. In turn, shallow groundwater recharge declines and causes native riparian vegetation to struggle. This cycle culminates in increasingly simplified and fragmented wildlife habitats that are vulnerable to extreme rainfall events, drought, chronic wildfire pressure, and increasing temperatures.

The Conn Creek Land Lab aims to address these challenges through a series of low-tech, process-based restoration strategies that have been incorporated into the project's habitat restoration and water quality permits approved by California Department of Fish & Wildlife, and San Francisco Bay Regional Waterboard respectively. Our methods are specifically designed to improve hydrologic function, reduce erosion, enhance riparian habitat, support groundwater recharge, and strengthen long-term watershed resilience, all while becoming increasingly self-sustaining over time.

Anticipated Results / Description of Methods

Funding from the Wildlife Conservation Commission would directly support three components of the project:

- Construction of detention structures and other low-tech habitat restoration features.
- Ecological monitoring to measure habitat recovery and guide adaptive management.
- Community field days that engage volunteers, neighboring landowners, and conservation practitioners in hands-on restoration while demonstrating practical approaches to improving wildlife habitat on working lands.

Habitat Restoration Treatments

The project restores degraded ephemeral stream channels using low-impact, nature-based restoration techniques that reduce erosion, slow runoff, promote groundwater recharge, stabilize stream channels, and support the recovery of native riparian vegetation **without the use of excavation, earthwork, or grading**. Approximately 70 restoration structures constructed from locally sourced rock, woody material, and brush will be installed across approximately 500 linear feet of degraded ephemeral channel. Over time, these treatments are expected to improve more than 2,000 linear feet of riparian corridor while increasing habitat complexity and improve conditions for birds, amphibians, pollinators, and other native wildlife while also protecting downstream water quality and strengthening the long-term resilience of the watershed.

The restoration approaches are illustrated in the attached technical drawings prepared by our partners at the Occidental Arts & Ecology Center and are consistent with the methods approved through our California Department of Fish and Wildlife Habitat Restoration and Enhancement Act application and Regional Water Quality Control Board restoration permits.

Community Field Days

Implementation will occur through a combination of staff leadership and community volunteer workdays involving neighboring landowners, students, conservation professionals, and local residents. These events will accomplish meaningful on-the-ground restoration while providing participants with practical experience implementing habitat restoration techniques that can be adapted to other properties throughout the Napa River watershed. In this way, the Conn Creek Land Lab serves both as an active

restoration project and as a demonstration site that builds local stewardship and encourages broader adoption of watershed restoration practices. This summer, these community-driven restoration events are taking place July 29-30th and August 28-30th.

Outside of the summer implementation window, we will be hosting several other types of community-oriented field days throughout the grant period. These include general tours with neighboring landowners and partners from the community, outdoor ecosystem monitoring education with classrooms from local universities, and process-based restoration workshops with practitioners and interested parties. The next field day of this kind will be our end of summer construction showcase and celebration on October 16th, where project volunteers, neighboring landowners, and community partners can see and tour the Land Lab once primed for the upcoming wet season.

Ecological Monitoring

Project success will be evaluated through a comprehensive monitoring program established prior to construction. Baseline data are already being collected and will be compared with post-construction conditions over a five-year monitoring period. Monitoring includes measurements of the following.

Monitoring Parameters and Expected Responses

Groundwater response *(12-20 feet deep monitoring wells)*

- Monitor seasonal groundwater elevation and recession.
- We expect higher groundwater levels during the dry-down period and a longer seasonal hydroperiod.

Sediment retention and surface elevation *(erosion pins and soil-retention rods)*

- Measure erosion and sediment deposition relative to fixed reference points.
- We have already measured net sediment accumulation upstream of the structures, gradual recovery of incised channel elevations, coverage of exposed roots, and reduced lateral drainage from adjacent soils.

Soil moisture and temperature *(moisture probes and temperature sensors)*

- Measure soil-water retention, peak soil temperature, and seasonal drying rates.
- We expect soil moisture to persist longer, with lower peak temperatures and less daily temperature fluctuation.

Precipitation

- Record rainfall amount, intensity, and timing to interpret groundwater, soil-moisture, runoff, and turbidity responses and compare results across years.

Vegetation recovery

- Monitor plant cover, species composition, recruitment, and bare-ground percentage.
- We expect increased native vegetation cover and diversity as soil moisture improves, temperatures moderate, and erosion declines.

Channel stability

- Track channel-bed elevation, bank erosion, incision, and headcut movement.
- We expect reduced erosion and incision, greater sediment retention, and increasing stability as vegetation establishes and root systems reinforce the soil.

Water quality (*turbidity sampling*)

- Measure turbidity during runoff events.
- We expect reduced peak turbidity and suspended-sediment transport as flow velocity decreases and sediment is retained within the project area.

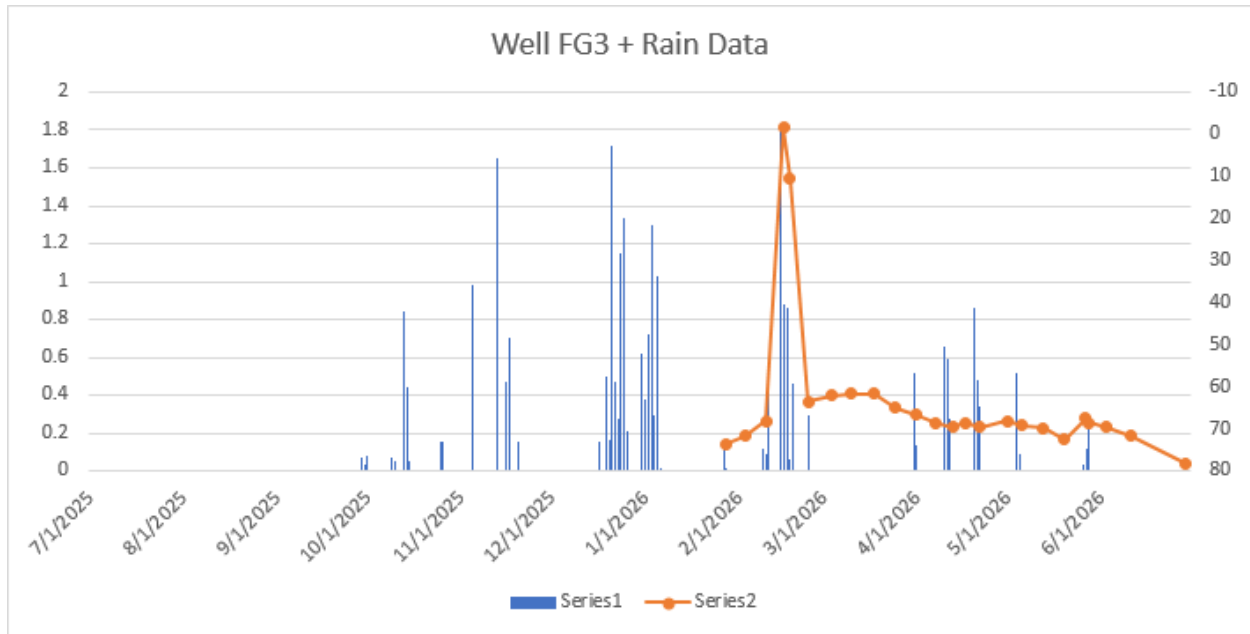
Wildlife observations

- Document species presence, abundance, and habitat use.
- We expect wildlife activity and species diversity to increase as vegetation structure, water availability, and habitat complexity recover.

Fixed-point photography and video

- Capture repeat images from permanently marked locations using consistent angles, scales, and seasonal timing.
- This record will document changes in vegetation, channel form, sediment deposition, erosion, and surface-water movement over time.

Our baseline results have supported what we and the landowners have observed over time, a system that is not able to retain the moisture it receives. Below is a graph of one of our groundwater monitoring wells along the untreated channel (water level in orange) overlaid upon the precipitation data from the 2025-2026 season. Surges in the water table after heavy rains quickly dissipate. The result is a dry riparian zone that is vulnerable to erosion, causes native vegetation to struggle, and degrades wildlife habitat.



In 2025, the first 17 restoration structures were constructed to demonstrate the erosion control capacity of our restoration approach. Within a single year, during which the site received 26.8 inches of rain, we saw sediment and biomass aggradation of up to 5 inches in depth behind some structures. All together, we estimate that these initial structures prevented more than 23 cubic feet of runoff downstream into Lake Hennessey during their first year with below-average rainfall.

Future results will guide adaptive management and provide measurable evidence of project effectiveness.

Day-to-day implementation and monitoring are coordinated by Abuelitos Foundation's Ecosystem Restoration Fellow, working closely with project partners including Element 28 and the Napa Resource Conservation District. This collaborative approach ensures consistent field observations, rigorous data collection, and long-term stewardship of the restoration site.

Project Timeline

Summer 2025: Created the Conn Creek Land Lab and installed the first 17 restoration structures.

Fall/Winter 2025-2026: Hired our inaugural Ecosystem Restoration Fellow. Began ecological monitoring of initial structures and baseline conditions. Started permitting pathways for project compliance.

Spring 2026: Continued ecological monitoring of initial structures and baseline conditions. Submitted permitting documentation. Kicked off Lake Hennessey Sub-watershed Stewardship Group alongside Napa RCD.

Summer 2026: Stage natural materials to prepare restoration sites and conduct community volunteer workdays to install restoration structures.

July 29-30 – First Volunteer Construction Workdays

August 28-30 – Second Volunteer Construction Workdays

Fall 2026: Complete remaining restoration treatments and native revegetation planting where appropriate. Continue ecological monitoring and documentation. Host educational field days for neighboring landowners, students, agencies, and restoration practitioners.

Fall 2026 - Winter 2027: Conduct storm-event monitoring, including sediment retention, groundwater response, channel stability, water quality, and wildlife observations. Evaluate hydrologic performance of installed restoration structures. Continue to host educational field days for neighboring landowners, students, agencies, and restoration practitioners.

Spring/Summer 2027: Assess vegetation establishment, habitat recovery, and structure performance. Compile first-year monitoring results and evaluate restoration outcomes.

2027-2030: Continue long-term monitoring, adaptive management, maintenance, and annual reporting consistent with the project's approved restoration permits and monitoring plan.

Permitting

Both required permitting pathways, CDFW's 1652 Habitat Restoration Enhancement Act and Waterboard's 401 Water Quality Certification, have been filed and approved. Both agencies, serving as lead agencies on the project, have also issued Notices of Exemption from CEQA.

In addition, we have filed a grading permit exemption application with Napa County.

Community Partner Organizations

- Element 28 Vineyard
- Napa County Resource Conservation District
- Napa County Groundwater Sustainability Agency
- Pacific Union College
- Occidental Arts & Ecology Center
- U.S. Geological Survey
- Natural Resources Conservation Service
- San Francisco Bay Regional Water Quality Control Board
- California Department of Fish and Wildlife
- Napa County Flood Control and Water Conservation District
- Napa Green
- Napa Valley Vintners
- Napa Communities Firewise Foundation

Clear Statement of Benefit Relative to Commission Goals

The Conn Creek Land Lab directly advances the purposes of the Napa County Wildlife Conservation Commission by restoring and enhancing wildlife habitat through watershed restoration activities consistent with California Fish and Game Code §13103(e), which authorizes expenditures for the "improvement of fish and wildlife habitat," including watershed improvements, earthwork, rock placement, vegetation management, and related habitat restoration activities.

The project also directly aligns with the Commission's selection priorities by:

- Providing measurable, long-term improvements to wildlife habitat and watershed function.
- Restoring native riparian habitat using practical, science-based restoration techniques.
- Leveraging matching financial support, volunteer labor, and in-kind contributions from Abuelitos Foundation, Element 28, and project partners.
- Establishing a publicly accessible demonstration site where landowners, students, agencies, and community members can observe and participate in habitat restoration on working lands, encouraging broader adoption of similar conservation practices throughout Napa County.

By combining habitat restoration, scientific monitoring, community engagement, and long-term stewardship, the Conn Creek Land Lab creates lasting ecological benefits that extend well beyond a single property and contribute to the protection and enhancement of wildlife habitat throughout the Napa River watershed.