I. Project Title and Purpose Statement

Empowering Community-Generated Solutions for Confronting Mercury Contamination of Fish in Mining-Impacted Water Bodies

This project will use environmental justice as a foundation to develop a community-generated portfolio of solutions for confronting the environmental and public health risks associated with consumption of mercury contaminated fish from water bodies in a region impacted by legacy gold mining operations. The goal is to increase local problem solving autonomy by actively engaging diverse resident stakeholders in reversing historic patterns of cultural and environmental discrimination. This will be achieved by educating traditionally underserved segments of the population (rural, low socio-economic status, tribal) and providing the affected community with a forum in which to articulate and execute their ideas for solutions to the issue. By requiring a collaborative approach to solution development, this project will ensure that strong relationships between community stakeholders form the basis for addressing the issue in the future.

The affected community of Grass Valley/Nevada City, California (zip codes 95945 and 95959 respectively) consists of two towns four miles apart, and functions as a single community.

This work directly relates to three EPA Environmental Justice Small Grants Program qualified environmental statutes: 1) Clean Water Act, Section 104(b)(3); 2) Solid Waste Disposal Act, Section 8001(a); and 3) Toxic Substances Control Act, section 10(a).

II. Environmental and Public Health Information about the Affected Community

Issues Addressed: This project seeks to address local environmental and public health issues that stem from mercury contaminated fish in water bodies of the Sierra Nevada. Within the affected community of Grass Valley/Nevada City, patterns of cultural and environmental discrimination began during the great California Gold Rush in the 1850s with the influx of miners, and continue in the present day. More than 13 million pounds of mercury were released into Sierra Nevada rivers during historic gold mining, and a century later this mercury persists in our rivers and lakes, and the fish caught from them. Today, residents, including tribal members, are unable to enjoy the full use-value of their environment because of the risk posed by consumption of mercury-contaminated fish.

Mercury is a highly regulated neurotoxin with well-documented health risks, in particular for sensitive populations that include women of child-bearing age and the young. Health effects of mercury on developing fetuses, babies, and children are of highest concern because exposure to mercury in-utero and early childhood can cause permanent neurological deficits, therefore state-issued fish consumption advisories for women under 45 and children under 18 are the most restrictive. Exposure risk stems from the consumption of mercury-contaminated fish in quantities that cause exceedance of the recommended Advisory Tissue Levels (ATLs), or no-consumption thresholds developed by the California Office of Environmental Health Hazard Assessment (OEHHA), the agency responsible for issuing fish consumption advisories in California. In addition to sensitive populations, groups at risk for exceedance of ATLs include tribal members and low income-populations that have traditionally relied on locally caught fish to satisfy cultural, subsistence, and economic needs.

In the affected community, OEHHA has issued a "Do Not Eat" advisory for high levels of mercury in bass that pertains to every lake or reservoir within an hour of the affected community. Additionally, all but seven lakes and reservoirs are covered by a "Do Not Eat" advisory for catfish or large brown trout. These recommendations are for sensitive populations and assume that all other angler groups are catching and consuming fish in quantities that do not cause exceedance of ATLs. Despite efforts by California's public health agencies to provide advisories, residents are catching and eating local fish that are high in mercury, and are largely unaware of the danger. In 2009-10, The Sierra Fund interviewed over 150 anglers at

popular fishing locations within easy driving distance of the affected community. Of the fishermen surveyed, 90% reported that they eat the fish that they catch, and of these, nearly half also feed the fish to other individuals in their household, including the sensitive populations of women and children.

Project Results: Confronting mercury contamination in the affected community and simultaneously addressing the entrenched environmental discrimination requires involving residents in the formation of solutions that are protective of their interests and health. Consequently, the results of the proposed project work to achieve three goals: 1) Increase quantity, diversity and commitment of stakeholder involvement; 2) Increase knowledge level of community members; and 3) Empower local autonomy and capacity building. Through coalition building, stakeholder organizations and partners will strengthen their commitment to the issue of mercury in fish tissue by collaborating on ways to involve the affected community and develop local solutions. Outreach and education efforts of this project will engender local knowledge and capacity, and result in solutions that take full inventory of the breadth of resources and interests in the affected community. Through public forums, this project will empower affected community members to formulate a Community Solutions Portfolio that will allow them to address mercury contamination of fish in a manner that is systematic and meaningful.

The proposed project's activities and results will use stakeholder interest categories (environment, health, economic, and social-political) to ensure that this project will increase diversity of involvement and generate well-rounded solutions. This process will equip all residents of Grass Valley/Nevada City with tangible, culturally and socially relevant tools that will help them avoid exposure to mercury in fish. The execution of future projects and activities from the Community Solutions Portfolio will reflect partnerships exemplifying the most efficient use of information and resources available to the community.

Affected Community: The affected community consists of two small towns (Grass Valley and Nevada City) located four miles from each other in the rural foothills of the Sierra Nevada – the heart of the Gold Country. It is accessible via two state highways (CA49/20) that link to Interstate 80. In California's entire mining region, this community was home to the largest mines, producing twice as much gold as any other county in California. Unfortunately, higher extraction rates mean that the affected community has experienced some of the highest levels of pollution, environmental devastation, and cultural destruction in the region. Grass Valley has 74 known abandoned mines within its city limits alone. In the local Wolf Creek watershed 337 abandoned mines have been identified. Lava Cap Mine, a Superfund site (for arsenic), is within the affected community as are a number of Brownfields sites (for arsenic, lead, petroleum products).

The burden of finding solutions to address mining impacts, including the mercury contamination of fish, has been disproportionately placed on the affected community. Historic patterns of environmental discrimination are perpetrated because ill-equipped locals, that never reaped financial benefit from the historic mines, are forced to live with the negative impacts of mining efforts. The population is underserved, with minimal revenue limiting what services local governments can provide. Furthermore, there has historically been limited interest by government entities (local, regional, state, and national level) to tackle the environmental and public health impacts associated with the Gold Rush. There are no examples of active local land use planning documents that directly address legacy and abandoned mine issues, even though there are hundreds of abandoned mines in the immediate surrounding area.

In Grass Valley/Nevada City, both inhabitants and social services tend to be dispersed. Grass Valley is considered a California Disadvantaged Community (DAC) by CA agency measures, defined as a community with an annual median household income (MHI) less than 80 percent of the statewide annual MHI. The population group most likely to experience poverty, female-led families with children under 5 years, also happens to be a sensitive population at risk for mercury exposure. The majority of community

members self-identify on the United States Census as non-Hispanic white (83%, 2010, Grass Valley). However, in the last twenty years there has been steady increase in the number of individuals identifying as Latino/Hispanic (6.6% increase 1990-2010).

Table 1: Demographic Data (2010 U.S. Census & American Community Survey)

Indicator	Grass Valley	Nevada City	California	Nation
Population	12,860	3,068	37,253,956	308,745,538
% Minority	17%	14.2%	42.4%	26.7%
Female in poverty with <5 year old child (2000 Census)	62.2%	*no data*	44.0%	46.4%
Persons over the age of 62	23.5%	12.4%	11.4%	13.0%
Persons under age 18	20.4%	16.9%	25.0%	24.0%

The community is home to two tribal groups whose culture was decimated during the Gold Rush. Prior to the Gold Rush, Nevada County's historic Tribe, the Nisenan, inhabited the geographic area of the affected community. The Nisenan were subject to disease and murder by the Gold Rush-era miners. The few who survived were relocated to land outside of Nevada City where, in the present day, they must balance the desire to continue traditional fish consumption practices with health risks posed by mercury.

Project Benefits: Through this project the affected community will benefit by receiving access to educational information about the environmental and public health issues stemming from mercury contamination of fish. Stakeholders will become inspired at the local level to develop their own collaborative solutions to the issue. Following the development of the Community Solutions Portfolio, members of the affected community will have a deepened understanding and commitment to the issue and will be sufficiently motivated and organized to bring their concerns to local and state leaders.

III. Organization's Historical Connection to the Affected Community

History: While the vast majority of organizations working on environmental health issues in the region are located in the downstream urban areas of the San Francisco Bay or Sacramento, The Sierra Fund is based in the rural community of Nevada City. Founded in 2001, The Sierra Fund's mission is to increase investment in the natural and human resources of the region, which is overwhelmingly underrepresented in proportion to the resources it provides to the State of California. A broad base of local supporters includes the owner of the local Urgent Care clinic, local tribal chairmen, and many other residents who are affected by owning or renting property in this area. In 2006, in response to the need voiced by local residents and scientists, The Sierra Fund began the "Reclaiming the Sierra" Initiative, to address the ongoing impacts of historic mining in the region.

Over the last eight years, the Reclaiming the Sierra Initiative has been overwhelmingly successful. A dedication to meaningful community outreach and involvement, coupled with key original research efforts have been the source of the program's extraordinary effectiveness to date. In 2008 The Sierra Fund released a report entitled *Mining's Toxic Legacy,* the culmination of two years of outreach to communities, scientists, tribes, agencies and many other stakeholders to identify what is known and what needs to be done to address the human health, environmental and cultural impacts of legacy mining. This report was the first comprehensive look at the long term effects of historic mining in California, and its impacts in subsequent years point to its timeliness and effectiveness including first-ever state hearings on mining impacts, two new departments in state agencies, and funding of critical research on health and scientific topics.

In 2010-2011 The Sierra Fund focused on original research efforts, conducting three studies to understand how residents may be exposed to legacy mining contaminants:

A. **Angler Survey** – The Sierra Fund interviewed anglers at local water bodies known to be contaminated by mercury, using a survey that was originally developed by UC Davis researchers. Results showed that many

anglers eat the fish, that no signs about existing fish consumption advisories are posted at any of the local water bodies, and that anglers' understanding of the dangers of eating mercury-contaminated fish is low.

B. **Recreational Trails Assessment** – The Sierra Fund sampled soil from recreational trails near abandoned mines on public lands and learned that some have potential for serious arsenic, lead and asbestos exposure problems.

C. **Environmental Health History (EHH) Survey** – With funding from the California Environmental Protection Agency EJSG program, The Sierra Fund worked with California State University and the Ampla Health network to survey more than 200 clients in waiting rooms of four area medical clinics about their environmental health exposures including mercury in fish. These results supported the findings of the Angler Survey.

Inclusion of Residents: As a follow up to these studies, The Sierra Fund developed outreach materials based on the needs identified, and launched a second phase of the outreach and organizing program, bringing this information to affected communities across the region. Since 2009, The Sierra Fund has worked to gather input and bring our information and recommendations to all 22 counties in the Sierra via public presentations, outreach to local tribes and government officials including county supervisors and public and environmental health officers. In 2013, The Sierra Fund conducted a public relations campaign to bring general information about ongoing impacts of legacy mines directly to residents and healthcare professionals in Grass Valley/Nevada City and three other targeted Sierra communities (activities funded by the EPA EJSG Program).

As a result of the feedback received from community members and healthcare professionals during the 2013 campaign, The Sierra Fund learned that among the multitude of mining impacts faced by our community today, residents felt that action on the issue of mercury in fish was most needed, and most achievable. Of the four communities targeted for outreach in 2013, Nevada City/Grass Valley was the most engaged with over 100 individuals from a wide range of backgrounds attending a two-hour informational meeting on the topic. Consequently, The Sierra Fund will work through the proposed project to focus and deepen the level of engagement achieved in previous outreach, by assisting our community in formulating specific solutions to the issue of mercury in fish. In tandem with the proposed project, The Sierra Fund is currently working with three local organizations to engage community volunteers in a one-day event to post fish consumption advisories at 13 local lakes and reservoirs. This effort will harness community engagement to execute a preliminary solution to the mercury in fish issue that was also identified during the last round of community outreach, and dovetail into the proposed project by generating engaged citizens in the community.

Sustaining Relationships: In addition to direct outreach, The Sierra Fund's bi-annual Reclaiming the Sierra conference provides a venue for education and involvement of the community. Begun in 2010 as a "community summit", the conference has seen over 500 attendees including area residents, leaders, business owners, tribal members and scientists. These conferences have included half- and full-day workshops for community members to learn how to protect their health from mercury in fish and arsenic, lead and asbestos in soils. Discussion periods following each workshop allowed participants to shape our program's strategy. The conference, occasional issue-specific summits, The Sierra Fund's Mining Toxins Working Group (composed of community, health, science and policy advisors), a bi-monthly e-newsletter, and continued in-person outreach are the main ways The Sierra Fund has and will continue to maintain relationships with the affected community.

Increasing Community Capacity: The efforts described above have increased the community's capacity to understand the problems associated with living and working in close proximity to large mines that have never been cleaned up. Doctors and local officials are now aware of the issues. However, it is time to take the next step and build our community's capacity to take action on these problems, as proposed below.

IV. Project Description

Results: This project seeks to engage the affected community in a carefully planned collaborative effort to identify solutions that address the environmental and public health risks associated with mercury-

contaminated fish in local water bodies, and to codify these solutions into a portfolio of options for the community. Involving affected community members in the development of solutions from the start represents a ground-up policy formation process that seeks to avoid replicating the top-down power structure that resulted in the incidence of environmental and cultural discrimination during the Gold Rush.

The primary output of the project will be a Community Solutions Portfolio that will supply the affected community with a road map for protecting their health and environment on their own terms. Establishing a portfolio of ideas through collaborative effort represents an equal-access approach to the decision-making process that will make it more likely that traditionally silent segments of the affected community's population are heard. The openness of the solution development process puts the affected community in the position to advocate for community wide directives that unite stakeholders in the most effective use of partnership bonds and resources. Outcomes will include the increased commitment of diverse stakeholders to the overall issue and also to specific solutions contained in the portfolio, increased community understanding of the pertinent environmental and public health issues associated with mercury in fish, and emergent problem solving autonomy within the affected community that represents an initial step toward addressing the environmental justice issue embedded in the incidence of mercury in fish.

Project Activities: The project will consist of four mutually reinforcing components: 1) Conduct Stakeholder Involvement Campaign, 2) Produce Community Resources Directory, 3) Create Community Forum, and 4) Build Community Solutions Portfolio. Four stakeholder interest categories (environment, health, economic, and social-political) will be used to provide structure to the project components.

Appx. Dates:	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16
Component 1. Stakeholder Involvement Campaign												
Component 2. Produce Community Resources Directory												
Component 3. Create Community Forum												
Component 4. Build Community Solutions Portfolio												
Component 5. Administer Project												

Note: Darker months in the timeline indicate main activities in the task, lighter months indicate ongoing maintenance/tracking activities.

Use of categories to sort stakeholders increases the likelihood of diverse representation from the affected community. While increasing the overall number of stakeholders is also a goal, number of stakeholders is a measure of level of involvement, and does not necessarily translate into diversity of represented interests. The Sierra Fund will safe-guard against homogeneity of involved interests by seeking out stakeholders and solutions that fall into under-represented categories. Sorting community generated solutions by category ensures that there are multiple approaches to addressing the problem that have the support of the affected community. A clear understanding of stakeholders and stakeholder resources within the affected community engenders the formation of partnerships that address solutions through the most efficient use of available resources.

Component 1: Conduct Stakeholder Involvement Campaign:

1-A: Compile Key Contacts: The Sierra Fund's Outreach Coordinator will review contact information for existing partners and stakeholders and sort them using the four interest categories (environment, health, economic, and social-political). The Outreach Coordinator will identify under-represented stakeholders and work to fill gaps in the list to establish broad, community-based support for addressing the issue. The Project Manager and the Outreach Coordinator will meet one-on-one or in small groups with individuals that serve as the key contacts for relevant stakeholders within the community. The Sierra Fund will complete a scoping evaluation as part of each meeting that will include information on interest categories the stakeholder affiliates with, topics believed to be a priority, and additional information or trainings they have to offer or would like to receive. The success of the stakeholder involvement campaign will be measured using the initial categorized list of key contacts as the baseline against which the final key contacts list is

compared. Emphasis will be on reaching out to stakeholders in all categories and on securing 15 key contacts in each of the four categories and a total of 45 key contacts (understanding that some will self-identify with multiple categories). The result of this task will be a list of stakeholders including a point of contact at each. *Deliverables: List of 45 key contacts in 4 EJ categories, 45 completed scoping evaluations.*

1-B: Public Outreach Campaign: The Sierra Fund will conduct a public relations campaign to improve public involvement by empowering the people who may be affected by mercury contaminated fish to come together to discuss solutions at two Forums (see Component 3). The Sierra Fund will create and distribute press releases and opinion editorials, tailoring them to reach identified populations of interest including anglers, tribes, water agencies and landowners, public health professionals, local elected officials, women of child-bearing age, and families with young children. Project partners and key contacts will assist The Sierra Fund to publicize the community forum process through their networks. Special care will be taken to reach tribal members with culturally appropriate materials, as directed by the tribal councils, and to facilitate involvement of tribal leaders and members in this project's community forums. *Deliverables: 4 press releases (one pre and one post per community forum), 2 opinion editorials.*

Component 2: Produce Community Resources Directory: The list of key contacts and the information provided in the scoping evaluations that result from Component 1 will be compiled into a Community Resources Directory. The directory will consist of contact information for local stakeholders sorted by interest category and information on resources stakeholders have to contribute, if any were noted in their scoping evaluation. The Directory will be available throughout the project and an integral part of Component 4. *Deliverables: directory of 45 key contacts from stakeholder groups, made available to the affected community.*

Component 3: Create Community Forum: The Sierra Fund will convene two widely publicized Community Forums in the affected community to bring together stakeholders to discuss the environmental and public health problems associated with legacy mining and mercury-contaminated fish, and to identify what needs to be done to reduce exposure. The effectiveness of the community forums will be monitored by reporting on the number of individuals attending, the self-reported interest category of the individuals (environment, health, economic, and social-political), amount of materials distributed, new contacts made (contact information collected), and brief written evaluation by participants delineating how much they learned and what they planned to do with the information. The Outreach Coordinator will be the lead on this project component, with support from the Project Manager (The Sierra Fund's CEO), Communications Director, and AmeriCorps Outreach Coordinator.

3-A: Community Forum #1: The first community forum will occur approximately four months into the one-year project period. It will focus on education and outreach, and will use the information gleaned from the scoping evaluations completed by key contacts, research conducted previously by The Sierra Fund, and current regulatory criteria to create a platform for community dialogue. Access to information on mercury contamination of fish in mining-impacted water bodies and on legacy mining impacts in general will give members of the affected community the tools to begin formulating solutions to the mercury problem. Solutions that are developed at the first forum will be categorized during the meeting using the four interest categories so that stakeholders can verify that there is consensus on community understanding of stakeholder interests and resources. Effectiveness of the forum will be monitored by the administration of short evaluations at the end of the Forum. *Deliverables: Sign in sheet with 50 attendees (number of individuals attending, the self-reported stakeholder interest category of the individual), educational materials (amount distributed), list of new contacts (contact information collected), 25 brief written evaluation by attendees, solutions list for Community Solutions Portfolio (by interest category).*

3-B: Community Forum #2: The second community forum will occur approximately eight months into the one year term. It will focus on discussing and refining the list of activities and projects to be included in the

Community Solutions Portfolio. In addition to creating a prioritized portfolio of solutions endorsed by the community, an objective of the second community forum is crafting an accompanying community statement aimed at decision makers. *Deliverables: Sign in sheet with 50 attendees (number of individuals attending, the self-reported stakeholder interest category of the individual), educational materials (amount distributed), list of new contacts (contact information collected), 25 brief written evaluations by attendees, final solutions list for Community Portfolio (by interest category), Community Statement.*

Component 4: Build Community Solutions Portfolio: The solutions generated at the two community forums (Component 3) will be examined and compiled. Solutions will be sorted according to interest category and care will be taken to eliminate redundant solutions. Solutions will be ranked based on the preferences of the affected community voiced at the forums.

4A: Produce Community Solutions Portfolio Document: This document will be important in making the results of this project available to other Sierra communities and local and state agencies. The Outreach Coordinator and Communications Director will draft a document that includes the community statement (from Component 3-B), project procedures, the list of community-generated solutions, the Community Resources Directory (Component 2), lessons learned, and outcomes. The draft will be circulated to stakeholder key contacts and finalized with their input. The final report will be printed and distributed to project stakeholder contacts as well as posted online. *Deliverables: List of community solutions sorted by category, ranked, and linked to relevant stakeholder(s) where possible, Community Solutions Portfolio, distribution list.*

4B: Present Community Solutions Portfolio: Upon completion of the final Community Solutions Portfolio, The Sierra Fund will work to present the Portfolio, along with other research results on mercury in fish, to appropriate local and/or state bodies that convene publically, such as the Nevada County Board of Supervisors, Nevada City and Grass Valley City Councils, and the Nevada Irrigation District Board. In addition, The Sierra Fund will contact stakeholders that were linked to specific solutions by the affected community and make presenting to these groups a priority. *Deliverables: Agendas from meetings of state or local officials where the Community Solutions Portfolio was presented, notes from stakeholder meetings where the Community Solutions Portfolio was presented.*

Component 5: Administer Project: The Sierra Fund staff, under Project Manager and CEO Elizabeth "Izzy" Martin, will ensure that the project is tightly managed to meet its goals and objectives in a timely manner. Once the grant is awarded, a Quality Assurance Project Plan for use with data already collected will be developed. The Sierra Fund's Financial Manager will create a managed fund for the project, track invoices and other expenses, and produce financial reports. The CEO will review and sign the assistance agreement with EPA. Key project staff will travel to Washington, DC for the required EPA training. Bi-weekly project team meetings will be held to track progress of grant activities. Required EPA grant progress reports (semi-annual), quarterly meetings with the EPA Regional Project Officer, and Draft and Final Technical Reports will be coordinated by the PM. *Deliverables: QAPP, grant progress reports, notes from quarterly meetings with EPA officer, grant draft and final technical report.*

<u>Environmental Statutes:</u> These project activities work to address the following Environmental Statutes:

Clean Water Act, Section 104(b) (3): The proposed activities will foster public understanding of the mercury problem in the Sierra, and offer resources that will empower the community to protect their human health by demanding solutions that address the cleanup of mercury at the source of the problem.

Toxic Substances Control Act, Section 10(a): The Sierra Nevada is home to many abandoned mine operations on public and private land that need to be assessed and cleaned up under the standards of this statute. This project will increase public education and engagement in our community on the effects of toxic substances left over from historic gold mining.

Solid Waste Disposal Act, Section 8001(a): It is common to recover liquid elemental mercury from local water ways in the course of small scale suction dredge mining operations. This project will raise awareness with both residents and county officials of the hazards of this metal, and why it needs proper disposal.

Partnerships: Executing this project will maintain existing partnerships, while collaborative generation of the Community Solutions Portfolio will create the opportunity for numerous additional partnerships among the diverse stakeholders within the affected community. The Solutions Portfolio is an ideal vehicle for securing and sustaining partnership relationships because it acts as a framework, allowing all organizations and individuals within the affected community to direct their inputs toward future projects that meaningfully contribute to solving the mercury problem through methods endorsed by residents. A portfolio of solutions further represents efficiency by eliminating risk of future research duplicity by local organizations.

The following organizations and agencies are in support of The Sierra Fund's efforts to empower the affected community to address legacy mercury pollution. They have a vested interest in participating in and supporting work, consistent with their own objectives, while benefitting the affected community they serve.

California Department of Public Health (DPH) and **California Office of Environmental Health Hazard Assessment (OEHHA),** the state agencies responsible for developing and releasing fish consumption advisories, have been partners in The Sierra Fund's work to address legacy mercury contamination since 2006, providing staff and expert advice to strategy meetings and documents. Most recently, three staff from each agency participated in designing a poster covering the new state-issued fish consumption advisory for Sierra anglers. For the proposed project, DPH and OEHHA's roles will be to consult with The Sierra Fund on the effectiveness of solutions developed in the Community Solutions Portfolio.

California State University (CSU) Chico's Nursing Program has been a partner in The Sierra Fund's mining initiative since 2006, conducting surveys of regional clinics in 2006 and again in 2009 including the referenced Environmental Health survey. For the proposed project, CSU nursing department Professor Becky Damazo, RN will provide training for the Outreach Coordinator on details of the Environmental Health survey, attend presentations as appropriate, and review the Community Solutions Portfolio.

City of Nevada City and **City of Grass Valley:** Historically, Nevada City and Grass Valley were home to numerous productive mines. Nevada City's Hirschman's Pond Park in particular is the site of a historic hydraulic mine, and a popular present-day recreation site within easy walking distance from downtown. For the proposed project, each City's roles include considering allowing The Sierra Fund to make a formal presentation to the City Council about recommendations from the community for solutions.

Foothill Nisenan of the Nevada City Rancheria: As Nevada County's historic Tribe, the Nisenan witnessed the onset of the Gold Rush, the statehood of California and the creation of Nevada County. The Tribe is proud to share its pre and post contact history with its community. As part of this project, tribal leaders will meet with TSF to receive current information about mercury in fish, and share insights on their priorities for addressing the lasting impacts of mining in our community.

Nevada County Public Health Department was a main partner in The Sierra Fund's EPA-funded outreach to clinics and the community in 2013, including hosting two trainings for local health professionals, and co-sponsoring a Community Meeting. For the proposed project, Nevada County Public Health Department's role will be to consult with The Sierra Fund as a stakeholder key contact, attend Community Forums as appropriate, and review the Community Solutions Portfolio.

Nevada Irrigation District (NID) is the main water agency serving the Grass Valley/Nevada City community, and owns the largest nearby fishing locations including Scotts Flat, Combie and Rollins Reservoirs. The Sierra Fund has an established relationship with NID board members and staff, and has

met with them about posting the new state-issued fish advisory sign at their reservoirs. For this project, NID's roles include meeting with The Sierra Fund staff as a key contact, attending community forums as appropriate, and considering a presentation of project results to their Board.

South Yuba River Citizens League (SYRCL) is the leading voice for the protection and restoration of Nevada City's Yuba River Watershed. Founded in 1983 through a rural, grassroots campaign, SYRCL has developed into a vibrant community organization with over 3,500 members and volunteers based in Nevada City, CA. For this project, SYRCL will assist in publicizing the community forums, consult on the viability of proposed potential solutions, and help publicize the Community Solutions Portfolio.

Tsi-Akim Maidu: Our community includes members and leadership of the Tsi Akim Maidu of the Taylorsville Rancheria which is based in Plumas County. The Tsi-Akim were involved with The Sierra Fund as part of the "Mercury in our Water, our Fish and our People" Tribal Convergence in 2006. As part of this project, local tribal leaders will meet with The Sierra Fund to receive current information about mercury in fish, and share insights on their priorities for addressing the lasting impacts of mining in our community.

Wolf Creek Community Alliance (WCCA) is a volunteer-run non-profit dedicated to protecting and restoring the Wolf Creek watershed, which runs through Grass Valley. For this project, WCCA will assist in publicizing the community forums, consult on the viability of proposed potential solutions, and help publicize the Community Solutions Portfolio at project completion.

US Forest Service, Tahoe National Forest (TNF) is the landowner of the majority of the smaller, publically accessible water bodies where community members fish. The Sierra Fund has an established relationship with Tahoe National Forest staff from years of working on abandoned mines issues in the area. For this project, TNF's roles include meeting with The Sierra Fund staff as part of project activities and consideration of posting of fish consumption advisories at water bodies under their jurisdiction.

Maintaining Partnerships: Throughout this project, The Sierra Fund Outreach Coordinator will use phone, email and in-person contact to keep project partners involved and up to date. After the project period, partnerships established will be maintained through The Sierra Fund's successful and established means described above including bi-weekly e-newsletter, Working Group of advisors, and bi-annual conference.

V. Organizational Capacity and Programmatic Capability

The Sierra Fund has demonstrated capacity to meet reporting requirements of EPA grants. The Sierra Fund is a previous recipient of EPA funds through the EJ Small Grants program (EPA grant, #00T89001, project officer Deirdre Nurre) and successfully met all deadlines. In addition to this federal grant, The Sierra Fund has extensive experience managing state grants of various sizes.

- The Sierra Fund was fiscal sponsor and managing organization for the Deer Creek Tribute Trail project in Nevada City, which included partner coordination, involvement of residents, and bridge construction, and which was successfully completed in late 2014.
- For the last eight years The Sierra Fund has conducted a regional outreach initiative to raise public awareness about the long-term effects of Gold Rush mining activities, which has reached more than 5,000 individuals in all 22 counties of the rural Sierra Nevada region.
- The Sierra Fund is fiscal sponsor and administrator of a $5.5 million grant from the CA Department of Water Resources that includes funds for a dozen organizations to conduct water quality improvement projects in the eight-county CABY region.

The Sierra Fund has the required infrastructure in place that is needed to implement the proposed project. The Sierra Fund has several managed funds, a bookkeeping system (Quickbooks Professional) and protocols for easily setting up a managed fund dedicated to this project, to track invoices, billing and

expenses. The Sierra Fund has appropriate contractor and staff management procedures, travel policies, and the workspace and technology to provide staff with the tools necessary to successfully administrate the proposed project.

VI. Qualifications of the Project Manager (PM)

The Sierra Fund's Chief Executive Officer Elizabeth "Izzy" Martin will be the Project Manager for all activities under this grant. Martin is a community organizer and environmental advocate with over thirty years of experience working in rural communities to promote economic and environmental justice. She has worked with a wide diversity of constituencies, from farm workers to small farmers and rural environmentalists. Martin was the founding Executive Director of the California Agrarian Action Project in 1980 (renamed the Community Alliance with Family Farmers in 1990). She developed the highly successful California Institute for Rural Studies program to work with pesticide poison victims and to support organic farmers, and helped to draft and pass several pieces of landmark legislation protecting rural communities from pesticides and promoting sustainable agriculture. Martin worked in administration and project development for the California Rural Legal Assistance Foundation for five years.

Martin has lived, worked and held leadership positions in this community for over 20 years. She served two terms on the Nevada County Planning Commission during the 1990's. Later, while serving on the Nevada County Board of Supervisors (1999-2003), she led the fight in the state legislature to put the South Yuba River into the state's wild and scenic river program. In 2004 Martin led the successful advocacy effort to persuade the California State legislature to establish the Sierra Nevada Conservancy. Martin became CEO of The Sierra Fund in 2004. Since that time she has helped to develop more than $80 million in State funds for conservation in the Sierra, as well as building a significant and strong foundation for The Sierra Fund.

VII. Past Performance in Reporting on Outputs and Outcomes

The most relevant grants received in the past three years include:

1. **US EPA Environmental Justice Small Grants Program** Grant #00T89001, $24,951, "Gold Country Circuit Rider: Reaching out to Community Members and Leaders to Prevent Exposure to Legacy Mining Toxins in California's Sierra Nevada"- contact Deirdre Nurre, (415) 947-4290
2. **The California Wellness Foundation** Grant #2013-122, $160,000 (2-yr), "Environmental Health and Mining Toxins: Taking Action to Prevent Exposure" contact: Earl Lui, (415) 908-3000
3. **Clarence E. Heller Charitable Foundation**, $50,000, "Protecting People from Mining's Toxic Legacy – 2015" - contact Bruce A. Hirsch, (415) 989-9839
4. **California Department of Water Resources** Grant #4600010591, $5,543,032 (3-yr); "CABY Headwaters Resilience and Adaptability Program" - contact Cory Saltsman, (916) 651-9665
5. **California Resources Agency** Grant #R54024-0, $739,111 (3-yr), "Deer Creek Tribute Trail & Restoration Project: Upstream Trail Sections" - contact Penny Harding, (916) 651-7590

Project outputs and outcomes were documented in the course of progress reports for all of the above listed grants. Reporting terms varied from quarterly to annually and included interim reports as well as final reports. The EPA EJSG grant listed above is most pertinent in regards to the proposed project. For that grant, The Sierra Fund used sign-in sheets for community events and presentations, collected and analyzed surveys of project participants, and tracked media coverage of the events and the issue. Interim and final reports included both quantitative and qualitative reporting, with outputs and outcomes organized by task, and correlated to the performance measures identified in the project proposal.

VIII. Quality Assurance Project Plan (QAPP) Information

Since contact information of project participants will be collected, we will submit a Quality Assurance Project Plan in accordance with EPA requirements prior to the start of the project.