ATTACHMENT A

National Environmental Information Exchange Partnership Grant - Project Narrative
Fiscal Year 2023-2026

Habematolel Pomo of Upper Lake, Robinson Rancheria & Lake County Watershed Protection District Water Quality Data Exchange Program Phase II

1) Project Description

The Habematolel Pomo of Upper Lake (HPUL) is continuing to strengthen its partnership with Lake County Watershed Protection District (LCWPD). They will be adding an additional tribal partner, Robinson Rancheria Environmental Center (RREC), in meeting the long-term goal of the initial project of creating a user-friendly central database portal where Lake County and the Lake County Tribal Community can upload, manage, and view data from agencies/consortiums collecting data from aquatic systems within Lake County.

This project will build upon an existing framework (developed in Phase I) for digitizing aquatic and environmental data collection, improving data management schema, completing QAQC procedures, and uploading data into both public access state/federal databases (California Environmental Data Exchange Network [CEDEN]/Water Quality eXchange [WXQ]). In the Phase II portion of this project, project partners will develop new projects including California Endangered Species Act (CESA) listed fish species (Clear Lake Hitch) observation network, continuous stream monitoring, watershed health assessment, and work with a consultant to develop/implement a local data access portal, to improve adaptive collaborative management.

HPUL Environmental Protection Agency (HEPA) and its formal partners submit this application in support of Exchange Network (EN) Funding Area 1-3. Each agency will work towards the following at various levels whether it be collecting, analyzing, sharing, or submitting data:

- **Funding Area 1:** Increased Data Access and Innovative Business Processes.

Project opportunities: Open Data, Data Modernization, and Digital Transformation Projects including Geospatial Data – move data traditionally housed internally into publicly accessible platforms and making it easier to collect data needed for active management.

- **Funding Area 2.** Eliminate Paper Submittals and Expand E-Reporting

Project opportunities: WQX – mapping system to WQX schema, collaborating on collecting data, QAQC check reports and assessment service to improve data consistency.

- **Funding Area 3**. Augment the information management of EN partners

Project opportunities: 1) Individual Capacity Building – increasing participation in the EN through associated trainings, continue/improve/develop and implement geospatial tools and technologies for aquatic resource management.2) Collaborative Capacity Building – specifically by creating workflows that connect tribal data into state databases that previously do not include tribal data or crosswalk to federal databases. Provide participant and user info to CEDEN as they transition into an upgraded platform.

Both HEPA and RREC are responsible for natural resource management in their specific ancestral tribal lands and meeting local, state, and federal environmental regulations on trust/fee lands.

LCWPD is responsible for navigation, habitat management, lakebed management, stormwater protection and invasive species control and management of Clear Lake, and flood protection of her surrounding communities.

- HEPA & RREC: implement environmental projects that protect, conserve, and restore natural resources used for cultural, traditional, and religious and subsistence hunting/fishing practices.
  - Aquatic resource monitoring: streams, lakes, ponds, stormwater, biological communities
  - Provide outreach to tribal general membership and the neighboring community.
- LCWPD:
  - Aquatic resource quality and quantity monitoring: streams, lakes, ponds, stormwater, biological communities
  - Provide outreach to the public and share data

This project supports the goals and objectives of the **EPA's FY 2022-2026 Strategic Plan** and the achievement of associated environmental results, as described in **Table 1**.

Table 1. Supported EPA Strategic Goals and Objectives

Strategic Goal	Strategic Objective	Project Support Description:	Associated Environmental Output(s) and/or Outcome(s)
Goal 1: Tackle the Climate Crisis	Objective 1.2: Accelerate Resilience and Adaptation to Climate Change Impacts	Integrate climate adaptation into programming, policies, and operations. Collecting and analyzing data from surface waters, including vulnerable species, to monitor changes and potential implications of climate change impacts (drought, floods, and wildfire).	1. Monitoring of physiochemical water quality & water quantity data over time. 2. Add biological monitoring to data scheme; 3. Data sharing for the public, partners, researchers, & governments through data upload into public state/federal databases. Development of a local portal for easy access to local data. 4. Identify issues to implement adaptive co-management.
Goal 5: Ensure Clean and Safe Water for All Communities	Objective 5.1: Ensure Safe Drinking Water and Reliable Water Infrastructure Objective 5.2 Protect and Restore Waterbodies and Watersheds	Conduct monitoring and assessments of water resources. Collecting and analyzing data from surface and ground waters that provide drinking water and wildlife habitat. Spatially assess water quality issues to prioritize area for management and restoration.	1. Easily accessible data platform to provide water quality data from source water serving drinking water for most of Lake County, including 7 tribal nations. 2. Education/outreach/training opportunities for agencies to accurately monitor water quality and add data into local/state/federal data network exchange platforms. 3. Collaborative engagement & networking. 4. Create a robust useable dataset to share with decision makers to protect/restore waterbodies/watersheds for all.

2) Project Goals, Outputs, and Outcomes

This project proposes five project goals to successfully accomplish the proposed work. These project goals, their cost, associated outputs, output costs, and output schedule completion dates are provided below in **Table 2**. A rationale for how the listed output completion dates were selected and deemed appropriate is likewise provided. **Table 2** describes each project goal's anticipated outcome(s), supported business/administrative needs, and the EPA Strategic Plan goal and output it helps to address.

Table 2. Goals, Outputs, and Outcomes (Project Workplan)

Goal:	Output Cost:	Output(s):	Completion Date
Goal 1: Project Administration and Equipment Purchase **Goal 1 Cost:** $97,905	$ 45,705	1.1: General project admin. (inter-task coordination, project partner meetings, reporting, task tracking)	September 30, 2026
	$ 4,200	1.2: Develop MOU between HEPA, RREC and LCWPD to describe roles and responsibilities to complete project	June 30, 2024
	$ 48,000	1.3: Purchase equipment and needed supplies to manage and complete project	June 30, 2026
Anticipated Outcome(s): Progress reports/annual reports, reimbursement claim packages, invoices, receipts, meeting notes, agendas, & Project MOU			
Admin./Business Need(s): All project partners have local/state/federal regulations to ensure environmental protection, conservation, or restoration. Build capacity through partnerships.			
EPA Strategic Goal & Objective:		Goal 5.0 and objective 5.1 and 5.2	
Goal 2: Data Discovery and collection **Goal 2 Cost:** $91,905	$ 43,635	2.1: Tribal and County Data Discovery collection continued projects from phase I	September 30, 2026
	$ 21,770	2.2: Establish new projects and data inclusion (biological, groundwater, watershed health assessment data)	December 31, 2025
	$ 26,500	2.3: Create or Update Data Management workflow protocols -- habitat/fisheries assessments & continuous in situ data of existing projects	June 30, 2026
Anticipated Outcome(s): surface and ground WQ data into public ENs, New project workflows (WQX data submission), Data Management protocols (updated)			
Admin./Business Need(s): Both tribes are required to submit data to WQX & will be collaborating with LCWPD on collected monitored data. LCWPD submits to CEDEN. Continuing work from Phase I established workflows to incorporate all new data. All have a responsibility to inform the public on WQ.			
EPA Strategic Goal & Objective:		Goal 5 and Objective 5.2	
Goal 3: Data QAQC and analysis **Goal 3 Cost:** $149,900	$ 17,900	3.1: Ensure QAQC of all data uploaded through process developed in phase I	September 30, 2026
	$ 132,000	3.2: Analysis of relevant data to inform management and decision makers	July 30, 2026
Anticipated Outcome(s): Final datasets uploaded into EN and databases, data trends, interpretation – analysis results to share with partners and public			
Admin./Business Need(s): This project proposal will allow all partners to monitor, collect, analyze, and share data that is integral to policy making in sustainable land use. All partners need to fill data gaps to prioritize restoration projects, create outreach material for all communities in the watershed.			
EPA Strategic Goal & Objective:		Goal 1 and Objective 1.2	
Goal 4: Develop, test, implement CLH Network & stream data collection process **Goal 4 Cost:** $54,094	$ 21,094	**4.1:** Develop test CLH specific observation network	December 31, 2025
	$ 11,000	**4.2** Develop & Test Stream assessment plans and collection tools	March 31, 2026
	$ 22,000	**4.3** Fully implement hitch and stream assessment for at least one year of project	November 30, 2026

Anticipated Outcome(s): CLH data collection strategy/procedures, stream collection strategy/ procedures, and 1 year data upload into relevant ENs. Include data into local portal for adaptive management utility.			
Admin./Business Need(s): The CLH is a CESA listed species, lives predominantly in Clear Lake but uses all accessible tributaries to spawn/rear. It is culturally and historically significant to all tribes in the area. The CLH has been in decline due to anthropogenic and climate stressors. By collecting WQ data and conducting stream habitat assessments partners will be able to inform decision makers on priority projects to improve habitat, flow requirements, and water quality standards.			
EPA Strategic Goal & Objective:		Goal 5, Objective 5.2	
Goal 5: Data Access Portal, Community Outreach and Training **Goal 5 Cost:** $99,900	$ 15,000	5.1 Community Outreach to demonstrate data tools and access	November 30, 2026
	$ 22,000	5.2 Training with partners to use developed tools, data schemes, and equipment from Phase I or II	June 30, 2026
	$ 55,000	5.3 Development and testing of Public Portal for local data with contractor from Phase I	September 30, 2026
	$7,900	5.4 Implement & validate Portal for local data needs	November 30, 2026
Anticipated Outcome(s): Updated MOU with contractor from Phase I, community outreach events flyers/notice, training event flyers/agendas, portal test results, portal website and validation results.			

Goal:	**Output Cost:**	**Output(s):**	**Completion Date**
Admin./Business Need(s): All partners have the responsibility to provide outreach in an effective way to the community to promote environmental stewardship by enhancing ecosystem resilience.			
Rationale for Selected Output Completion Dates: General tasks that extend through the project (I.e. administration, data collecting) were estimated to occur the near end of the project term. Tasks were assigned completion dates most appropriate to their use within the overall project. Example: outreach on data tools surrounding stream assessments cannot be completed until those tools are developed.			
a. Total Budget for (All) Goals:		$ 499,604	
Total Direct Costs:		$ 499,604	
Total Indirect Costs:		Not Applicable, partners will be waiving IDC.	
Total Project Budget:		$ 499,604	

3) Identifying Key Personnel and Associated Roles, Responsibilities, and Qualifications

Table 3. Applicable Key Contacts below explicitly identifies which personnel roles are applicable to project manager and formal partnerships. This table provides the full name, current job title, current organization, anticipated project roles/responsibilities, and other mandatory role-specific details for each applicable role.

Table 3. Applicable Key Contacts

Personnel Role	Applicable (Y/N)	Name	Current Job Title	Organization
Project Manager	Y	Daniella Santana Cazares	HPUL Environmental Director	HEPA
Project Roles and Responsibilities: HEPA will coordinate with RREC & LCWPD to execute the tasks of the project proposal, coordinate regular project check-ins to be attended by representatives of all partners. HEPA will be the lead on project management, grant tracking/reporting of deliverables, scheduling, and funding. They will collaboratively develop protocols and monitoring strategies for new proposed habitat assessments and WQ specific to the needs of native fisheries conservation. HEPA will monitor/collect data specific to the tribe's strategic goals that align with the project proposal and EPA's strategic goals/objectives.				

Experience or Qualifications in Project and Financial Management: Daniella Santana has worked in the environmental field collecting and analyzing data for a little over 7 years. She holds a B.A in Environmental Science and Policy with a minor in Geography (CSU Long Beach) and an M.A. in Geography with a Computer Cartography & G.I.S certificate (CSU East Bay). As HPUL's Environmental Director she manages (3) EPA grants (GAP, CWA 106, and NEIEN) and (1) CDFW grant. Daniella will serve as the co-project manager for this project ensuring all outcomes/outputs are met and reported adequately.				
Programmatic Contact	N	NA	NA	NA
Rationale on Why Programmatic Involvement Is Not Applicable: Programmatic involvement is unnecessary for the proposed project. Open data sharing will eventually be housed on LCWPD website but will be cross walking data from already existing databases to provide user-friendly interface specific to the Clear Lake Basin. As the project develops this component may be applicable in future phases.				
Partnering Organization's Relation to the Lead Applicant: HPUL and RR are geographically neighbors and have similar ancestorial lands. HPUL has land allotments upstream of RR. Habitat assessments for restoration projects will affect WQ and natural resources for both tribes. HPUL and RR have partnered on several other grant projects focusing on fish monitoring and riparian habitat restoration.				
Formal Partner	Y	Luis Santana	Fisheries Biologist	RREC

Personnel Role	Applicable (Y/N)	Name	Current Job Title	Organization
Project Role(s)/ Responsibilit(ies): RREC will be responsible for monitoring and data collection. They will be expected to attend regular project check-ins, track hours for invoicing/grant reporting. They will coordinate with partners to order supplies. RREC will assist in the development of workflows, protocols, monitoring strategies for habitat assessments, and WQ specific to needs of native fisheries conservation.				
Partnering Organization's Relation to the Lead Applicant: Lead Applicant, HPUL, has partnered with the LCWPD to complete a NEIEN grant awarded in 2019, with the goal to digitize data collection and initiate development of workflows to discover and collect WQ data and upload data into both State and Federal public-accessible databases. HPUL and LCWPD have since partnered on several other grant projects focusing on fish monitoring and riparian habitat restoration.				
Formal Partner	Y	Angela De Palma-Dow	Program Coordinator	LCWPD
Project Role(s)/ Responsibilit(ies): LCWPD will coordinate with HPUL & RR to execute the tasks of the grant, identify data needs for inclusion into the project-developed portal, project outreach and trainings. Attend/coordinate monthly/quarterly check-ins with project consultant & partners. LCWPD will provide project coordination, management of county-derived and generated data discovery, compilation, and incorporation into the EN. LCWPD will work with partners to update any data management plans, QAQC protocols, and associated trainings that will guide/ inform this process. Together partners will coordinate equipment purchase, storage, maintenance, and calibration so that data collected is comparable, QA/QC'd, and in standardized format to be uploaded into the ENs. LCWPD will work with partners to test data workflows for any new project components. Finally, LCWPD will work with HPUL, RR, and consultant to develop public access portal for local data needs along with contributed outreach messaging/materials. LCWPD will track time spent on work outcomes and file appropriate paperwork with HPUL for invoicing.				

Table 4. Contractor/Individual Consultant/Vendor Key Contact(s) explicitly identifies that this project will utilize selected contractor at San Francisco Estuary Institute (SFEI). This proposed project was developed as Phase II, to build off initial work conducted during Phase I. During Phase I, a contract was selected through the competitive bid process using a RFP as required by HPUL contracting. The original bid description included language that alluded to future phases(current proposal), to ensure continuity of the project. HPUL will update contract agreements with SFEI to continue work established into Phase II.

Table 4. Contractor/Individual Consultant/Vendor Key Contact(s)

Personnel Role	Applicable(?)	Method of Acquisition
SFEI	Y	Competitive Bid (from previous awarded NEIEN grant), contract extension/update will be executed after determination of award
Method of Qualification Vetting:		Contractor was selected through an RFP and scoring process.
Roles and Responsibilities:		Consultant will continue to be responsible for providing technical support for data flow EPA's Virtual Node WQX and State-based CEDEN. Help onboard new projects by establishing the required templates needed for incorporating legacy and project-generated data. Assist in uploading data into EN. Will lead development, testing, and validation of a local data access portal that connects to state/federal virtual nodes. Consultants would work with formal partners to assure tasks/objectives are being met to progress project forward.

4) Commitment to Reuse and Register Shared Tools and Services

HEPA, RREC, and LCWPD are committed to reusing existing tools developed and available for EN partner use. This project will reuse the products developed in Phase I, moving aquatic resource data into state CEDEN

EN and cross walk to federal WQX EN. Templates, query tools, Arc GIS/Survey 123, and data management procedures developed in Phase I will be reused as detailed below in **Table 5. Reused Components.**

Table 5. Reused Components

Name/Title	Type	Description
Data Management Procedures	Data Management Procedures of workflow SOP document	Data management procedures SOP will be followed to ensure data continuity and sustainability of the project. Data management protocols will be necessary as we add new biological assessments/protocols and a new formal partner.
Geospatial Workflow (Mobile Data Collection Tool)	ArcGIS Survey 123	Having access to Survey 123 in the field makes the workflow process more efficient and creates instantaneous spatial data. Data will be used to identify impacts that occur in tributaries of Clear Lake that impact the whole watershed and its community continuing to collect geospatial data will be integral to building climate resiliency.
CEDEN templates, query tools	Microsoft Excel Template specific to CEDEN data schema	SFEI has worked with HPUL and LCWPD to create CEDEN specific templates to data collected in the past and current data to efficiently upload data to the CEDEN database without error. It is appropriate for this project because it will add tribal data to the state database that will make it equivalent to County data.
Web Based Services	CEDEN & WQX Portals	All data collected has different requirements for submissions to portals. HPUL and RR are required through different funding opportunities to submit to WXQ, while LCWPD is required to submit to CEDEN. Having our data on the public web portals will be a great step in conducting outreach on the state of the waterways.

In accordance with the terms and conditions of the Exchange Network Grant Program, HPUL Environmental Protection Agency and its partners commits to register any new tools developed during the execution of this grant project at the time of grant close-out and commits to register any reuse of existing EN tools during the execution of this grant project at the time of grant close-out.

5) Technical Solutions and Data Availability

To accomplish the goals and outputs as outlined in this project, HEPA, RREC, and LCWPD will be working together to develop technical solutions and data availability (some tribal data may need to be reviewed by each tribes' administration on how it should be shared). All partners will have input on the development of a public portal created by the contractor.

- **Water Quality Surface & Groundwater Data**
  - **Description:** Collecting surface & ground WQ data is necessary for management of all water uses.
  - **Necessity and Appropriateness:** All data collected will be paired with necessary lab analysis to ensure safety for all users (recreation, habitat suitability, consumption, and cultural practices).
  - **Meeting Business/Administrative Needs:** All partners have a responsibility to inform the public about WQ. HEPA & RREC are both required to submit data to WQX. Both tribes will be collaborating with LCWPD on collected monitored data. LWPD must submit to CEDEN. Work will continue from Phase I established workflows to incorporate all newly developed data.
  - **Ability to Implement and Maintain:** All partners regularly monitor general water chemistry in different facets (stormwater, ambient lake, & stream monitoring, and monitoring fisheries conditions). All partners have handheld sondes to collect data with varying sensors. HEPA, is confident in their ability to implement and maintain this solution because they will coordinate and train together on data collection and QAQC procedures. Daniella Santana, Angela D Dow, Jordan Beaton, and Luis Santana all have educational and work experiences in WQ field collection and data analysis procedures. They are also project leads within their agencies and responsible for training technicians in WQ data collection procedures and meeting reporting requirements (state/federal statutes regarding water).
- **Clear Lake Hitch (CLH) Observation Network and Stream Habitat Assessments**
  - **Description:** Building off a historical observation network and adapting it to climate impacts on streams.

The CLH data will be expanded by pairing with other riparian biological assessments. Methods/protocols will be developed to best fit all Clear Lake tributaries.

- **Necessity and Appropriateness:** This solution is a necessary and appropriate choice for the proposed project because it will fill data gaps (currently there are only salmonid protocols) and share data to appropriate agencies that determine funding for restoration projects and meeting flow conditions in streams for critical life stages of the CLH.
- **Meeting Business/Administrative Needs:** The CLH is a CESA listed species. It is culturally and historically significant species to all tribes in the area. It lives predominantly in Clear Lake but uses all accessible tributaries to spawn/rear. The CLH population has been in decline for the past decade due to anthropogenic and climate factors. By collecting WQ data and conducting stream habitat assessments all partners will be able to fill data gaps of all life stages of the CLH to inform decision makers on priority projects to improve habitat, flow requirements, and WQ standards.
- **Ability to Implement and Maintain:** HEPA is confident in its ability to implement and maintain this solution. Luis Santana, Jordan Beaton, and Angela D. Dow all have work experience and degrees in fisheries management. They will be essential in the design of the protocols selected for creating a sustainable and meaningful observation network.

- **Public Portal**
  - **Description:** An easy to use and understand public portal will be developed with input from all partners. It will centrally locate data collected by partners that have been submitted into CEDEN /WQX, provide upload- download options to better inform the public on conditions of waterways.
  - **Necessity and Appropriateness:** This solution is a necessary and appropriate choice for the proposed project as most of the public in Lake County receives its drinking water from Clear Lake followed by groundwater. In addition, lakes, reservoirs, and tributaries are used for cultural practices and recreational activities.
  - **Meeting Business/Administrative Needs:** All partners have the responsibility to provide outreach and education in an effective way to the community to promote environmental stewardship. Partners are looking to enhance ecosystem resilience and well-being of all.
  - **Ability to Implement and Maintain:** HEPA is confident in its ability to implement and maintain this solution because previously selected contractor SFEI has countless experience in developing public portals (established as SFEI since 1993). They are one of California's premier aquatic and ecosystem science institutes. In Phase I of the project we worked with Christina Grosso, Adam Wong, and Michael Weaver to develop tools/crosswalks for CEDEN data inputs for HEPA and LCWPD.

The knowledge, technology, and appropriate data outputs developed during the proposed project will enhance data sharing and availability for immediate stakeholders, by building individual capacity within their programs and collaborative capacity by building relationships in informing agency procedures. Additionally, this project will enhance data sharing and availability for organizations across the EN by creating a standard process that can be replicated by different agency partnerships and having a central public portal.

6) Project Alignment with the E-Enterprise Digital Strategy (EEDS)

The technical solutions as detailed in **Section Five: Technical Understanding** align with the three principles of the EEDS.

1st Principle: Build with an Information-Centric Approach: Technical data for Water Quality Surface & Groundwater Data, CLH Observation Network, Stream Habitat Assessments, and the Public Portal will allow for data to be easily used or reviewed by centralizing different information types (maps, media, or documents).

2nd Principle: Adopt Shared Platforms:

CLH Observation Network & Stream Habitat Assessments will be developed between all partners to reduce cost, streamline development of field collection procedures, apply consistent standards, and ensure consistency to have information (in real time) available to improve water quality and water availability in critical life stage of the CLH. Once implemented these protocols can be applied County wide, be easily replicated and inform appropriate agencies that have management/enforcement authorities.

3rd Principle: Adopt Customer-Centric Approaches:

The Public Portal will achieve the EEDS principle of being "customer centric" by allowing how we present date and share raw data. This will allow for future project development and informing the public and decision makers using newly available data.

The technical solutions of this project reflect the EEDS's API-first approach by setting the building blocks for opening data and content efficiently and effectively. It will develop process in governance as tribes are sovereign nations and the County is a public agency. Culturally sensitive data will need to be protected within each individual tribe.

This project's goals and outputs will enhance data sharing and availability specifically in the context of the first EEDs principle (Build with an Information-Centric Approach) or an API-first approach by providing relevant data to a larger scale community in a respectful meaningful way. With the goal of informing all on environmental stewardship and climate resiliency.

ATTACHMENT B

Habematolel Pomo of Upper Lake, Robinson Rancheria & County of Lake Watershed Protection District Water Quality Data Exchange Program Phase II

Personnel: $195,549.00
Project management will be a coordinated effort between HEPA Daniella Santana and LCWPD Angela D. Dow (meetings, check-ins, trainings, and general project logistics, reporting). Support for coordination of meeting project goals and deliverables will be conducted by LCWPD Jordan Beaton and RREC Luis Santana. Accounting support will be conducted by LCWPD Jacqueline Storrs. Protocols and methods for data collection will be a collaborative effort between Daniella Santana, Luis Santana, Angela D. Dow, and Jordan Beaton. Data collection/data discovery will be conducted by all HEPA staff, all RREC staff, and LCWPD project coordinators and field staff. Data entry and analysis will be conducted by LCWPD Data analyst.

Staff Position (Project Role)	Staff Name (If Known)	Annual Salary	% of Time	Annual Cost	Period of Performance (Years)	3-Year Personnel Cost
HPUL EPA Director, (Project Co-Manager)	Daniella Santana Cazares	$68,640.00	15%	$10,296.00	3	$30,888.00
HPUL Environmental Technician, (Project Coordinator)	TBD	$52,000.00	10%	$5,200.00	3	$15,600.00
HPUL Environmental Technician, (Project field staff)	TBD	$39,520.00	10%	$3,952.00	3	$11,856.00
LCWPD Program Coordinator, (Project Co-Manager)	Angela D. Dow	$79,887.00	8%	$6,391.00	3	$19,173.00
LCWPD Project Coordinator, (Project Coordinator)	Jordan Beaton	$71592.00	10%	$7,159.00	3	$21,478.00
LCWPD Field Technician, (Project field staff)	TBD	$64347.00	12%	$7,772.00	3	$23,165.00
LCWPD Data Entry / Analyst,(Project Data Analyst)	TBD	$23,265.00	30%	$6,980.00	3	$27,918.00
LCWRD Fiscal Officer, (Project Accountant)	Jacqueline Storrs	$54,570.00	3%	$1,637.00	3	$4,911.00

Robinson Fisheries Biologist,(Project field staff)	Luis-Alberto Santana	$64,480.00	13%	$8,382.00	3	$25,147.00
Robinson Field Technician, (Project Field staff)	TBD	$39,520.00	13%	$5,138.00	3	$15,413.00
Total Personnel Costs						**$195,549.00**

Fringe: $53,980.00

Staff Position	Staff Name	3-Year Personnel Cost	Fringe Benefit Rate	3-Year Fringe Cost
HPUL EPA Director, (Project Co-Manager)	Daniella Santana Cazares	$30,888.00	28%	$8,649.00
HPUL Environmental Technician, (Project Coordinator)	TBD	$15,600.00	28%	$4,368.00
HPUL Environmental Technician, (Project field staff)	TBD	$11,856.00	28%	$3,320.00
LCWPD Program Coordinator, (Project Co-Manager)	Angela D. Dow	$19,173.00	27%	$5,368.00
LCWPD Project Coordinator,(Project Coordinator)	Jordan Beaton	$21,478.00	27%	$5,799.00
LCWPD Field Technician, (Project field staff)	TBD	$23,165.00	27%	$6,255.00
LCWPD Data Entry / Analyst,(Project Data Analyst)	TBD	$27,918.00	27%	$7,538.00
LCWRD Fiscal Officer, (Project Accountant)	Jacqueline Storrs	$4,911.00	27%	$1,326.00
Robinson Fisheries Biologist,(Project field staff)	Luis-Alberto Santana	$25,147.00	28%	$7,041.00

Robinson Field Technician, (Project Field staff)	TBD	$15,413.00	28%	$4,316.00
Total Fringe Costs				**$53,980.00**

Travel: No travel costs will be charged for this project.

Equipment: $47,000.00
Equipment will provide integral watershed wide data, pairing water quality data with water quantity data to identify priority areas of concern.

Item Name/Description	Quantity	Price Per Unit	Equipment Cost
Multiparameter probes will be used for sampling in waterways. Partners are looking to update current probes to collect standardized comparable data.	1	$ 12,000.00	$12,000.00
Handheld water quality meter & accessories for sampling in waterways. Partners are looking to update current meters in a more efficient/safe process so they can collect standardized data and be comparable. Can be deployed in wadable streams or off vessels.	1	$ 5,000.00	$ 5,000.00
LCWPD Stationary Flow Meters and power used to monitor streams. Flow meters will be essential in assessing critical riparian habitat.	2	$ 15,000.00	$ 30,000.00
Total Equipment Costs			**$47000.00**

Supplies: $27,075.00
Supply orders will be coordinated to be standardized. All three partners will have equipment to produce the same data within their jurisdiction. Supplies are needed to conduct monitoring and water quality data collection. Supplies are essential for creating usable data for project reporting.

Supply Category	Item/Description	Quantity	Price Per Unit	Supply Cost
Testing Supplies	Reagents, Probe replacement accessories. To ensure accurate usable data is being collected all monitoring equipment must be calibrated regularly. Depending on conditions in streams/lakes and monitoring frequency they may require more or less calibration.	7	$500.00	$3,500.00
Monitoring Supplies	Waders, used to WQ sample and conduct stream assessment safely throughout year due to seasonality of water ways.	2	$ 250.00	$500.00
Monitoring Supplies	Wader Boots, used to WQ sample and conduct stream assessment safely throughout year due to seasonality of water ways.	2	$125.00	$250.00
Monitoring Supplies	Wetsuit, used to conduct stream assessment and fisheries conditions.	3	$200.00	$600.00

Monitoring Supplies	Wetsuit booties, used to conduct stream assessment and fisheries conditions safely throughout the year due to seasonality of water ways.	3	$75.00	$225.00
Monitoring Supplies	Snorkel set (REI Aqualung), Wetsuit, used to conduct stream assessment and fisheries conditions safely throughout year due to seasonality of water ways.	3	$175.00	$525.00
Monitoring Supplies	Inflatable Life vests, used to WQ sample and conduct stream assessment safely throughout year due to seasonality of water ways.	5	$100.00	$500.00
Monitoring Supplies	Measuring Open Reel, will be used to delineate transects for all sampling and ground truth maps.	1	$75.00	$75.00
Monitoring Supplies	Gravelometer, will be used to type stream sediment for habitat assessments.	3	$ 100.00	$300.00
Monitoring Supplies	Underwater camera & accessories used to create outreach and training material.	1	$ 500.00	$ 500.00

Supply Category	Item/Description	Quantity	Price Per Unit	Supply Cost
Monitoring Supplies	RR Reagents, Probe replacement accessories. To ensure accurate usable data is being collected all monitoring equipment must be calibrated regularly.	7	$ 500.00.00	$3,500.00
Monitoring Supplies	LCWPD 104 GW Level Meter	1	$ 1,600.00	$1,600.00
Testing Supplies	LCWPD Reagents, Probe replacement accessories. To ensure accurate usable data is being collected all monitoring equipment must be calibrated regularly.	10	$ 500.00	$5,000.00
Other *Please Explain	LCWPD Gear / PPE to sample. Will be used for WQ sample and conduct stream assessment safely throughout year due to seasonality of water ways.	10	$ 500.00	$5,000.00

Computing Device	LCWPD Field Laptop. Will be used for mobile data collection, upload/download capability and mobile meetings/training.	2	$ 2,500.00	$5,000.00
Total Supply Costs				$**27,075.00**

Contractual: $175,000.00
Contractual costs will be shared among formal partners. Contractor services with San Francisco Estuary Institute will be shared equally among formal partners. Laboratory analysis will be split 60% (LCWPD), 20% (HEPA), 20% (RREC), County has more sampling sites and events that will be contributing to the completed data sets.

Contract/Individual Consultant/Vendor Title	Hours	Hourly Rate	Contract Purpose	Procurement Method	Contractual Cost
Contractor – San Francisco Estuary Institute (SFEI)	500	$150	Contractor will continue to be responsible for providing technical support for data flow EPA's Virtual Node WQX and State-based CEDEN. Help onboard new projects by establishing the required templates needed for incorporating legacy and project-generated data. Assist in uploading data into EN. Will lead	Contractor was selected through an RFP (competitive bid) and scoring process. If awarded contracts will be updated to reflect 2023 NEIN award roles and responsibilities.	$75000.00

Contract/Individual Consultant/Vendor Title	Hours	Hourly Rate	Contract Purpose	Procurement Method	Contractual Cost
			development, testing, and validation of a local data access portal that connects to state/federal virtual nodes. Consultants would work with formal partners to assure tasks/objectives are being met to progress project forward.		
Contractor-Analytical Alpha Labs	2000	$50.00	Accredited lab analysis. analyze collected data (goal 2, 3 4), chemical analysis through state-accredited laboratory (Goal 3) and for analytical and statistical support to interpret collected data (Goal 3), determine trends to implement adaptive management by partners and others (Goal 3 & 5).	Non-competitive procurement	$100,000.0 0
Non-Competitive Procurement Rationale:	Analytical Alpha Labs is the closest state accredited lab to all project partners. All partners have existing contracts with the local lab (Alpha Labs) through various projects, samples are invoiced based on analysis type ($100,000).				
Total Contractual Costs					**$175,000.00**

Other: $1,000.00

Category	Item	Quantity	Price Per Unit	Other Cost
Meeting Facilities	Office Supplies (Printer ink, pens, field notebooks, write in the rain paper,..etc). Will be used for preparation of project check-ins/meetings/trainings, data collection, data analysis, and all reporting.	25	$20.00	$500.00
Subaward	LCWPD Office Supplies (Printer ink, pens, field notebooks,..etc). Will be used for preparation of project check-ins/meetings/trainings, data collection, data analysis, and all reporting.	25	$20.00	$500.00
Total Other Costs				**$1000.00**

Optional Exchange Network Budget Calculating Tool

Users Guide: This tool is intended to help calculate the project budget and correctly categorize costs. You can use the numbers generated by this sheet to input costs per budget category in the Budget Narratve Atachment Form, the SF424-A Form, and Project Narrative, Section 7 'Overview of Project Budget'. It is not intended to be used in place of any of these documents.

Highlighted cells are areas where you may enter information as needed. Additional rows are included for your convenience. All numbers entered are automatically rounded to the nearest whole dollar amount as required by the Exchange Network grant program.

This tool will not allow you to delete rows. To hide unnecessary rows or to add rows, please follow the instructions below.
-To hide rows: Select unnecessary rows then right click the selection and choose 'Hide' which is the last of the listed options. To unhide previously hidden rows, select the whole sheet and right click to choose 'Unhide' from the menu options.
-To add rows: Click a row number above where you would like to insert the new row, copy the row as you normally would (right click to 'Copy' or use 'Ctrl+C'), then right click the selected row number and choose the 'insert copied cells' option.

A Note on Errors: This tool is designed to automatically round all amounts and calculate totals. Cells that do not require user input are locked to avoid formula errors. If one does occur, please refer to the common error code explanations below.
#VALUE!' indicates that needed information is missing or has been entered incorrectly. If you get this error please check that you have selected a budget option in cell E113.
#REF' indicates that a cell can no longer be referenced to complete the formula. If you get this error, please check that you have not deleted any columns or rows. Also check that you have inserted any new rows using the 'insert copied cells' opton detailed above.
Improper Percentages: If a number is entered and the percent displays incorrectly, try entering the number as a decimal. (15.8% = .158)

Feel free to contact the Exchange Network Grants Team at engrantprogram@epa.gov with any issues or questions regarding this form.

#1. Personnel Costs

Staff Position (Project Role)	**Staff Name** (If Known)	**Annual Salary**	**Percentage of Time**	**Annual Cost**	**Period of Performance (Years)**	**3-Year Personnel Cost**
HPUL EPA Director , (Project Co-Manager)	Daniella Santan	$ 68,640	15%	$ 10,296	3	$30,888
HPUL Environmental Technician, (Project Coordinator)	TBD	$ 52,000	10%	$ 5,200	3	$15,600
HPUL Environmental Technician, (Project Field Staff)	TBD	$ 39,520	10%	$ 3,952	3	$11,856
LCWPD Program Coordinator, (Project Co-Manager)	Angela D. Dow	$ 79,887	8%	$ 6,391	3	$19,173
LCWPD Project Coordinator, (Project Coordinator)	Jordan Beaton	$ 71,592	10%	$ 7,159	3	$21,478
LCWPD Field Technician, (Project Field Staff)	many	$ 64,347	12%	$ 7,722	3	$23,165
LCWPD Data Entry / Analyst, (Project Data Analyst)	TBD	$ 23,265	30%	$ 6,980	4	$27,918
LCWRD Fiscal Officer, (Project Accountant)	Jacqueline Storrs	$ 54,570	3%	$ 1,637	3	$4,911
Robinson Fisheries Biologist, (Project Field staff)	Luis-Alberto Santana	$ 64,480	13%	$ 8,382	3	$25,147
Robinson Field Technician, (Project Field staff)	TBD	$ 39,520	13%	$ 5,138	3	$15,413
Total Personnel Costs				**$** -		**$195,549**
				$ -		

#2. Fringe Benefits

Staff Position	**Staff Name**	**3-Year Personnel Cost**	**Fringe Benefit Rate**	**3-Year Fringe Cost**
HPUL EPA Director , (Project Co-Manager)	Daniella Santana Cazares	$30,888	28.00%	$8,649
HPUL Environmental Technician, (Project Coordinator)	TBD	$15,600	28.00%	$4,368
HPUL Environmental Technician, (Project Field Staff)	TBD	$11,856	28.00%	$3,320
LCWPD Program Coordinator, (Project Co-Manager)	Angela D. Dow	$19,173	28.00%	$5,368
LCWPD Project Coordinator, (Project Coordinator)	Jordan Beaton	$21,478	27.00%	$5,799
LCWPD Field Technician, (Project Field Staff)	many	$23,165	27.00%	$6,255
LCWPD Data Entry / Analyst	TBD	$27,918	27.00%	$7,538
LCWRD Fiscal Officer, (Project Accountant)	Jacqueline Storrs	$4,911	27.00%	$1,326
Robinson Fisheries Biologist, (Project Field staff)	Luis-Alberto Santana	$25,147	28.00%	$7,041
Robinson Field Technician, (Project Field staff)	TBD	$15,413	28.00%	$4,316
Total Fringe Costs				**$53,980**

#3. Travel (Not applicable)

#4. Equipment NOTE: Price per Unit should = $5,000 or more, a per unit costing less than $5,000 should be categorized under 'Supplies' (#5, below)

Item	**Quantity**	**Price per Unit**	**Total Cost**
Multiparameter probes	1	$ 12,000	$ 12,000
handheld water quality meter & accessories	1	$ 5,000	$ 5,000
LCWPD Stationary Flow Meters and power unit	2	$ 15,000	$ 30,000
Total Equipment Cost			**$ 47,000**

#5. Supplies *NOTE:* Price/Unit should be LESS THAN $5,000

Supply Category	**Item**	**Quantity**	**Price per Unit**	**Total Cost**
Testing Supplies	Reagents, Probe replacement accessories	7	$ 500	$ 3,500
Monitoring Supplies	Waders	2	$ 250	$ 500
Monitoring Supplies	Wader Boots	2	$ 125	$ 250

Monitoring Supplies	Wetsuit	3	$	200	$ 600
Monitoring Supplies	Wetsuit booties	3	$	75	$ 225
Monitoring Supplies	Snorkel set (REI Aqualung)	3	$	175	$ 525
Monitoring Supplies	Inflatable Life vests	5	$	100	$ 500
Monitoring Supplies	Measuring Open Reel	1	$	75	$ 75
Monitoring Supplies	Gravelometer	3	$	100	$ 300
Monitoring Supplies	Underwater camera & accessories	1	$	500	$ 500
Monitoring Supplies	RR Reagents, Probe replacement accessories	7	$	500	$ 3,500
Monitoring Supplies	LCWPD 104 GW Level Meter	1	$	1,600	$ 1,600
Testing Supplies	LCWPD Reagents, Probe replacement accessori	10	$	500	$ 5,000
Other *Please Explain	LCWPD Gear / PPE to sample	10	$	500	$ 5,000
Computing Device	LCWPD Field Laptop	2	$	2,500	$ 5,000
Total Supplies Cost					**$ 27,075**

#6. Contractual

*NOTE: $84.48 is the max hourly rate for an individual consultant. *For contract types that are single source, an explanation is required in the Budget Narrative**

Item	Hours	Hourly Rate	Procurement Method	Total Cost
Contractor	500	$ 150	Competative Proposals	$ 75,000
Contractor	2000	$ 50	Other *Please Explain	$ 100,000
Total Contractual Cost				$ 175,000

#7. Other

Category	Item	Quantity	Price per Unit	Total Cost
Participant Support Costs	Office Supplies (Printer ink, pens, field noteboo	25	$ 20	$500
Subaward	LCWPD Office Supplies (Printer ink, pens, field n	25	$ 20	$500
Contractor			$ -	
Total 'Other' Cost				$1,000

#8. Indirect Costs

NOTE: Rate must be valid until at least 9/30/2023. Tribal applicants may also charge indirect costs using their draft rate as submitted to the Department of Interior (DOI).

Effective Period	IDC Rate	Description of Base*	Base Amount**	Total Indirect Costs
10/01/2023 - 9/30/2026		Total Direct Costs excluding subawards	$ 499,604	$ -
*Description is not needed in this tool but must be included in Budget Narrative			*Add costs included in base using the formula =sum('blue row totals in Column G')	

Total Budget	**$ 499,604**
Partnership Assistance Agreement	**$500,000**
Remaining Balance Against Funding Threshold	**$396.00**