

CA B-WET FY 21: San Francisco Bay Watershed		
Grant Recipient	Project Description	Funded Amount
Cotati-Rohnert Park Unified School District (Student & Teacher MWEE)	<p>Students Understanding Peoples, Environments and Resources (SUPER) — The Cotati-Rohnert Park School District (CRPUSD) and partners are proposing to design and implement the professional learning program, Students Understanding Peoples, Environments and Resources (SUPER), for 3rd, 4th, 5th grade teachers for the seven elementary schools of CRPUSD. The project is driven by this question: “How does the intersection of humans and the environment impact communities?” Through the three-year project, students, teachers, administrators, and local environmental education educators will experience and research answers to that question together through the implementation of Meaningful Watershed Educational Experiences (MWEEs) on the school sites, the local watershed community to the Pacific coast. Participating teachers from Year 1 will take on leadership roles in Years 2 and 3 in order to provide a sustainable professional learning structure beyond the life of the grant.</p> <p>The proposed project will provide targeted professional learning necessary to bring place-based environmental literacy education into student-centered, NGSS aligned classrooms. It will directly build upon the work from early partnerships with the Laguna de Santa Rosa and the Center for Environmental Inquiry. The proposal also targets the project-based learning partnership that the district has had with Sonoma State University School of Education. The project aligns with the district’s 5 year plan which targets building the capacity of multilingual students through contextualized and universally designed learning experiences. The intent is to get students outside multiple times to develop their academic language and communication skills.</p>	Requested Funding: \$286, 275

<p>Earth Team (Student MWEE)</p>	<p>“Aqua Team - Sustainable Youth Watershed Internships” — The Aqua Team Watershed Internships will continue for a third year with an immersive afterschool watershed education and stewardship program working directly with 56 underrepresented students, recruited as paid interns from four local Title 1 public high schools working with collaborating local creek groups and municipalities in the East Bay. Indirectly the program activities benefit 400 career academy/pathway students, eight teachers and the general public. The service-learning approach of the program will focus on watershed education, with multiple field research days and habitat restoration actions as well as community outreach/public component with presentation events. The project is leveraged by a four-year NSF award to Earth Team that promotes the use of GLOBE/NGSS science protocols to enhance informal STEM Learning and build capacity for engagement of diverse student populations in the environmental sciences, thus meeting COMPETES Act objectives. The program emphasizes ocean and climate literacy and focuses on hands-on learning and restoration activities in four local creeks adjacent to four participating high schools, documenting the impact of human activities on the health of watersheds and oceans and educating youth on climate change and the role of single-use plastic production on water pollution and greenhouse gases. Earth Team has implemented best practices in cultural relevancy in its program to adapt BWET to our interns, on average 80%+ youth of color and near 50% Hispanic/Latino: one of our most experienced BWET educators for all collaborating high schools is a native Spanish speaker born and residing in San Pablo. This greatly facilitates a learner-centered approach in the context of the local community and culture. The proximity of our BWET coaches to the culture and environmental perspective of the student population we serve increases student’s motivation and engagement, facilitating a better understanding on how the student’s daily actions, which are embedded in socio-cultural systems, have an impact on the natural systems.</p>	<p>Requested Funding: \$47,159</p>
<p>Golden Gate National Parks Conservancy (Student & Teacher MWEE)</p>	<p>“Project WISE: Resiliency Through COVID-19” — Keeping our vision of “Parks For All Forever” at our forefront now more than ever, the Golden Gate National Parks Conservancy’s hub of youth engagement, the Crissy Field Center, will focus on designing and implementing a meaningful response to the COVID-19 pandemic through our Project WISE program.</p> <p>Since 2001, Project WISE (Watersheds Inspiring Student Education) has provided San Francisco’s diverse high school youth with MWEEs across the iconic Golden Gate National Recreation Area (GGNRA). Working closely with our partners, we have traditionally provided Project WISE through various program offerings that connect both youth and educators to MWEEs by enabling immersive participation in educational, stewardship, and restoration activities combined with collaborative hands-on investigative projects presented in a final</p>	<p>Requested Funding: \$75,000</p>

	<p>Symposium to peers, park officials and the public.</p> <p>However, due to COVID-19, Project WISE will have to radically transform to still provide MWEEs to the youth who need it most. This grant will support our COVID-19 adaptation efforts to increase our staff’s capacity to delivery its programming digitally and “at-home”. This increased capacity will include the development and delivery of online, on-demand curriculum that consists of our MWEE-focused scientific knowledge and skill-building, student-led inquiry projects and science career exploration, that will ultimately allow Project WISE to reach additional students and teachers who would otherwise not be engaged. Our 2021-2022 capacity-building efforts will directly benefit 210 diverse high school youth from the San Francisco Unified School District and 6+ teachers. The average cost per student is \$357.14.</p>	
<p>Greater Farallones Association (Student MWEE)</p>	<p>“Engaging Coastal Communities in Kelp Forest Recovery” — The Greater Farallones Association will develop kelp-focused Meaningful Watershed Educational Experiences and deliver them to all high school science students of the Point Arena Schools District, a rural, geographically isolated area with limited access to inquiry-based environmental education. One of California’s largest ecological crises, bull kelp forest die-off along the northern coast has impacted communities along the Sonoma-Mendocino coastline. Through proven educational programs like Fishermen in the Classroom and LiMPETS, teachers and students will learn about their local intertidal habitats and kelp forests. In addition to two interactive classroom lessons and a data analysis activity, this project will connect students to kelp recovery through three unique field trips to the coast, involving them in intertidal monitoring, kelp canopy mapping, and kelp restoration.</p>	<p>Requested Funding: \$38,787</p>
<p>Napa County Resource Conservation District (RCD) (Student MWEE)</p>	<p>“LandSmart Youth Stewards - Salmon to Sanctuary” — Napa County Resource Conservation District (RCD) proposes continuation of the Youth Stewards: Salmon to Sanctuary (S2S) program with a tighter focus on meeting the needs of Napa County’s most strengths-driven schools during the COVID-19 pandemic. S2S will consist of a sustained virtual or hybrid MWEE serving 125 high school students and 3 - 5 teachers over multiple experiences.</p> <p>S2S is a module-based MWEE consisting of 4 sets of live virtual presentations, ongoing teacher coordination, virtual or physical field trips, and asynchronous assignments connecting Napa County students to West Coast National Marine Sanctuaries and locally-relevant environmental issues related to native salmonid declines and climate change adaptation. S2S students work with their teachers, RCD, and partners to focus on the question “How can salmon be restored to the Napa River Watershed?”</p> <p>In 2020-2021, S2S was adapted to meet urgent education needs during the COVID-19</p>	<p>Requested Funding: \$74,745</p>

	<p>pandemic. This continuation proposal focuses on equitable service to schools, teachers, and students who significantly benefit from environmental access, mentorship, and project-based learning. This will galvanize newly formed relationships with Napa County’s Juvenile Court, Community and Continuation high schools (JCCS) developed in the first 2 years of S2S. This proposal intends to increase service to JCCS and revise the program based upon audience need and evaluation feedback. Adaptations include social and emotional learning (SEL) routines, stipends for teachers, and adaptations for greater curricular flexibility and co-design.</p> <p>Total cost to NOAA B-WET per student and teacher is \$575</p>	
<p>Strategic Energy Innovations (SEI) (Teacher MWEE)</p>	<p>“SEI Discovering Watersheds through Experiential Learning” — Strategic Energy Innovations (SEI), a non-profit organization dedicated to building leaders who drive climate solutions, will utilize this funding to equip high school teachers within the San Francisco Bay-Delta watershed with the resources and skills needed to engage students in investigations of the human impacts on our climate, watersheds, and oceans, and to empower students with actionable tools and strategies to mitigate these effects. SEI will direct program recruitment efforts to teachers working in disadvantaged communities that have experienced disproportionate environmental impacts in order to provide more equitable access to outdoor learning opportunities and green STEM careers.</p> <p>SEI’s NGSS-aligned Watersheds and Public Water Systems (Watersheds) curriculum unit engages students in investigating the connections between climate change, watersheds, and marine ecosystems; exploring their local water systems through water quality testing and ArcGIS mapping; analyzing opportunities to reduce their personal and community carbon footprint; and engaging in watershed protection and restoration actions.</p> <p>Discovering Watersheds through Experiential Learning requests \$74,398 in Federal funds to serve at least 25 teachers at a cost of \$2,976 per teacher. Under this proposal SEI will provide 3 days of in-person, place-based training for high school teachers, targeting teams of life and earth science instructors to facilitate delivery of content to all students within a subject band. The training will focus on implementation of SEI’s classroom curriculum and on watershed field projects. SEI will also maintain a communication platform to help teachers exchange best practices, resources, and connections regarding the implementation of this material in their classes.</p>	<p>Requested Funding: \$74,398</p>