CA B-WET FY 20: Santa Barbara Channel Bay Watershed		
Grant Recipient	**Project Description**	**Funded Amount**
Explore Ecology (Student & Teacher MWEE)	**"Flows to the Ocean Project" —** The Flows to the Ocean Project is a comprehensive, hands-on watershed study designed for 5th graders from Santa Barbara County. Twenty teachers and five hundred students will participate in two in-class lessons, a minimum of 5 beach or campus clean ups, and immersive field experiences designed to expose and educate students on current watershed issues. Students will become empowered to motivate their school community to take action and lead a campus clean-up at their school. In addition, EE will invite twenty teachers to participate in a Santa Barbara Watershed Education Training (SBWET) professional development series collaborating with local watershed education experts. In the event of continued school closures and the implementation of the distance learning model due to the novel coronavirus COVID-19 (COVID), students participating in the Flows to the Ocean Project will attend lessons through an online learning platform and conduct individual trash clean ups in their neighborhood.	Requested Funding: $70,980
Oxnard School District (OSD) (Teacher MWEE)	**"The Islands Around Us" —** Oxnard School District (OSD) will partner with Channel Islands National Park (CINP), Channel Islands National Marine Sanctuary (CINMS), California State University Channel Islands (CSUCI), US Fish and Wildlife Service (USFWS), and Oxnard Union High School District (OUHSD) to create and implement a professional development program for up to 100 teachers in grades 2–8, including a. cohort of at least 4–5 high school science teachers from OUHSD. The professional development program aims to improve science education in OSD and OUHSD by providing teachers with place-based knowledge and pedagogical opportunities that, through an exploration of CINMS and CINP, focus on local environmental science phenomena in the Santa Barbara Channel Watershed and Oxnard Watershed. There will be an emphasis on human impacts to these environments and connections to the California Next Generation Science Standards (NGSS) and the Environmental Principles and Concepts (EP&Cs). The professional developments will take place at CINP, CINMS, and in OSD and will be delivered by OSD and OUHSD staff and our community partners. The professional developments will include: (1) Single and multi-day field experiences to CINP and CINMS to learn about these systems and associated current environmental issues and research, and to engage in MWEEs. (2) Place-based environmental research and education at the CSUCI Santa Rosa Island Research Station (SRIRS) located within CINP. (3) Single-day experiences in OSD native plant gardens to teach environmental background knowledge and provide	Requested Funding: $68,448

	teaching strategies for outdoor learning. (4) An educator Summer Collaboration Workshop, where teachers will integrate their learning into their grade-level curricula and incorporate local environmental phenomena, MWEEs, and other related activities into lesson plans. Pending success in Year 1, we will seek subsequent funding opportunities to our participant base and communicate the learning from year 1 to a broader audience. The Islands Around Us program will invest approximately $855 per teacher, for up to 80 teachers (5 high school teachers + 38 elementary school teachers + 38 middle school teachers) serving approximately 7000 students a year (with the potential to reach many more students), and with opportunities for teachers to engage in 2 to 56 hours of professional development.	
Ventura Unified School District (VUSD) (Student & Teacher MWEE)	**"Ventura River Action Network (V-RAN)" —** The overarching goal of this project proposal is to create a long-lasting interdisciplinary, tiered and place-and-project based environmental education program for VUSD science teachers and their students that builds stewardship for the Ventura River Watershed and the Santa Barbara Channel, including CINMS. V-RAN builds upon the EECCOA Program (previously funded by CA NOAA BWET), and the support of an experienced network of research professionals working to remove the Matilija dam. V-RAN will successfully increase environmental, climate, energy, and ocean literacy for middle and high school students over 3 years period, particularly youth socio-economically unprivileged. V-RAN will adopt the EECCOA curriculum to VUSD learning objectives supported by place-based MWEEs, youth citizen science, and action-oriented project-based learning. The teachers will be able to select, adopt and use as most appropriate lessons for their students' grade-level. The result will be students' understanding of how natural systems such as the hydrosphere, atmosphere and biosphere interact and proceed through cycles that humans depend upon, benefit from, and can alter. V-RAN will illustrate with local relevant examples such as the impacts of the Matilija dam on the Ventura River Watershed, the region's wildfires, drought, ocean acidification, and plastic pollution through in-class or virtual instruction, youths' participation in field research, habitat restoration, and students designs of solutions to reduce their school or home environmental footprint.	Requested Funding: $299,842