Morro Bay National Estuary Program Community Project Applications for Spring 2023 Summary of Projects, Review, and Staff Recommendations

We worked with One Cool Earth to develop a potential project for our Community Projects program. The partner submitted an application in March 2023. As with all projects with an education component, we sought review from folks in the education field to get a sense of the likelihood of success of the project. This project does not require the technical review that our more monitoring and restoration focused projects do. Based on this input, staff developed their recommendations on the project.

Typically the maximum funding amount for a project is \$10,000, and each year our available funding is \$15,000. For FY2022, the Estuary Program developed a project with Camp KEEP on watershed education that was approved for \$10,000 of funding. Unfortunately Camp KEEP was not able to enter into the contract and proceed with the project, and thus this \$10,000 of funding is now available to support other projects. Although our maximum funding amount is typically \$10,000 for a single project, because we had additional funding available from the Camp KEEP project we decided to allow a proposal for \$20,000. If the committees opt to fully fund this proposal at the requested \$20,000 level, this would utilize the unused \$10,000 from FY2022 and \$10,000 from our FY2024 funding for Community Projects.

Project: Baywood Elementary School Watershed Education Program

Applicant: One Cool Earth

Request: \$20,000

Matching Funding: \$11,000 Total Project Budget: \$31,000

Summary: For over 12 years, One Cool Earth (OCE), a local nonprofit, has created outdoor classrooms as watershed learning labs at public schools throughout San Luis Obispo County. They build, refurbish, and maintain outdoor classrooms at 28 school, including infrastructure related to food, water, soil, and waste. OCE also employs watershed educators to teach weekly lessons. The proposed project involves providing funding to support OCE programming at Baywood Elementary School to teach 215 lessons of 45 to 60 minutes in length. This equates to approximately 18 lessons for each of the 300 students at the school. The project also involves support for a Green Team on campus to lead campus sustainability projects. Overall, the program engages students to become stewards of the Morro Bay watershed.

The project has the following components:

- Project Management and Coordination: For this task, OCE staff recruit or reassign an existing educator to Baywood Elementary, provide educator training for their staff, and coordinate with teachers to schedule outdoor classroom lessons. The OCE educator is on site two days per week and works with at least three classes per day.
- Education & Outreach: For this task, OCE staff conduct teacher trainings to orient teachers to
 the program; provide six watershed-focused lessons per week throughout the 36 weeks of the
 school year (216 lessons total); recruit a class to serve as the school's Green Team to organize a
 project to increase stewardship; and host two community workdays that include parents,
 students, teachers, and community members. OCE will be conducting two field trips to the coast
 using money from other funding sources.

- Project Evaluation and Reporting: For this task, OCE staff will conduct evaluations including pre and post-tests of students via anonymous survey to assess knowledge, skills, and behaviors around watershed topics, evaluate their educators, and collect feedback from teachers and the principal. OCE will conduct reporting for the Community Project as part of this task.

The requested funding supports the cost of a Watershed Educator for the school for a year (\$16,000) and support staff time for training, review, and outdoor classroom maintenance (\$4,000).

The project is supported by a total of \$11,000 from other funding sources, including volunteer labor (\$1,000 from the community), gardening and lesson materials (\$1,000 from PTA), fieldtrip costs (\$1,000 from a NOAA Marine Debris Program Grant), and indirect costs like insurance, accounting, etc. (\$2,800 from SLO County).

Timeline: The project would likely go from August 2023 through July 2024 to allow time for summarizing and analyzing the evaluation information collected at the end of the school year.

Relevant CCMP Action Plans: CLIM-3 (Climate & Adaptation Education), EO-1 (Public Education and Outreach), EO-4 (Formal Education Programs). This program strongly supports three Action Plans from our Comprehensive Conservation & Management Plan. In particular, the following identified activities from Action Plans are addressed by the project:

- Outreach and education efforts to increase awareness of estuary and behavior changes,
- Expansion of community volunteer opportunities,
- Facilitation of specific behavior changes,
- Integration of climate change concepts and actions into educational programming,
- Increase in educators' understanding of estuary and watershed science concepts,
- Collaborative work with local schools and teachers, and
- Education field trips and other opportunities for students to learn outdoors and engage with the environment.

We asked OCE for more details on how their curriculum supports climate education and Action Plan CLIM-3. Their answer was as follows: One Cool Earth has integrated basic climate science as well as climate adaptation and mitigation methods into our 24-part lesson series. In particular, we teach the greenhouse effect in our Hoophouse Greenhouse lesson where students build mini greenhouses to understand how heat can be trapped, carbon sequestration and the carbon cycle in our Cool Carbon Sink lesson that focuses on growing native oak trees to trap carbon dioxide, Weather Science to understand the difference between climate and weather, \$1 Million Dollar Orange which teaches about life cycle analysis and the carbon emission involved in creating and transporting food and products. Moreover, our garden projects of growing food, composting, planting native gardens, saving water, and recycling taught in our lessons are climate adaptation and mitigation best practices, reducing greenhouse gas emissions and mitigating against the worst effects of climate change.

E&O Review: Reviewers felt the project was well-thought out with a high likelihood of success. OCE's reputation is positive within the community. There were only a few suggestions for the applicant:

A reviewer suggested that OCE find ways to build capacity at the school itself to keep the
program going if future funding is not available. This is addressed on page 4 of OCE's application
in the Capacity Building & Sustainability section. OCE works to provide training for teachers that

- could be utilized beyond the project term. OCE educators model the lessons for the teachers and offer prep and follow-up activities that integrate with the outdoor lessons. OCE acknowledges that the work needed to keep up the school garden and teach the curriculum is a large burden for schools, and so OCE pursues multiple partnerships and funding opportunities to support school site programming into the future.
- A reviewer recommended that OCE not spend time on creating curriculum, but rather using existing curriculum and adapting it to the geographic location or age group. OCE responded as follows: No funding for this grant will be used for curriculum development. We currently have a complete set of 24 lessons that are locally-relevant, culturally/linguistically appropriate and Next Generation Science Standards-based and targeted for elementary grade levels. Our curriculum was developed over the past 10 years, drawing upon local resources and expertise and adapting existing curriculum, especially using National Oceanic and Atmospheric Administration watershed curriculum and consulting with our local partners.

Partner Capacity Review: Estuary Program staff met with OCE staff to discuss the organization's capacity to manage the funding and successfully complete the project. As a 501(c)(3), OCE has extensive experience with applying for, receiving, and managing grant funding from public sources. They have the capacity to maintain financial records, manage staff, and conduct the invoicing and reporting required for the project. OCE has extensive experience in the watershed and beyond working with K-6 schools. Their garden program is well-established with demonstrated success. Their existing funding from the county, NOAA, volunteers, and Parent-Teacher Associations demonstrate their ability to win and manage outside funding. Thus, staff determined that OCE has the capacity to receive and successfully manage Community Project funding.

Staff Recommendation: Staff supports funding this project. We feel that the scope is reasonable and achievable given the budget and the project timeline. We think it is impactful as an expansion of watershed education in our area, with the potential to reach an entire elementary school. We recommend funding of \$20,000.