MORRO BAY
NATIONAL ESTUARY PROGRAM

Morro Bay National Estuary Program
Community Project Application Cover Sheet

Project Title: Science Kits for Public Libraries

Applicant: County of San Luis Obispo Public Libraries

Address: 995 Palm Street, San Luis Obispo CA 93401

Contact Person(s): Margaret Kensinger-Klopfer

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Amount Requested (cannot exceed $5,000**):** $5,000

Total Estimated Project Cost: $9,000

Amount & Source of Other Funding (if relevant):

$4,000 from staff time, which will be in-kind match

Project Description Summary (Required; word limit 150.**):**

Understanding that not all children have access to high quality science educations, the Science Kits for Public Libraries program will allow the Morro Bay and San Luis Obispo public libraries to purchase 6-8 science kits and offer them as a lending service to their communities just like a book. Each science kit will contain books, movies, and a hands-on science activity to be completed by a child. These kits will provide hands on science activities and information that focus on topics that are relevant to the Morro Bay National Estuary. The kit topics could include birds, water usage, estuary ecosystems, climate change, erosion, water science, and invasive/endangered species. These kits would be available to check out for free with the use of a library card. All science activities consumables would be replaced by the owning library using award funds.

Check off the Comprehensive Conservation and Management Plan Priority Issue(s) addressed by the proposed project:

- [x] Sedimentation.
- [ ] Bacterial contamination.
- [ ] Elevated nutrient levels.
- [x] Toxic pollutants.
- [x] Scarce freshwater resources.
- [x] Preserving biodiversity.
- [ ] Environmentally balanced uses.

Briefly describe how your project addresses the priority issue(s) checked above. Limit 150 words.

This project addresses the priority issues of freshwater resources, preserving biodiversity, toxic pollutants and more through education and hands-on science activities focusing on these issues.

The proposed project must work to implement at least one of the Action Plans that address the Priority Issues listed above. The Action Plans are detailed beginning on page 23 of the Management Plan, which can be found at MBNEP.org.

In the space below, please list the relevant Action Plan(s) and briefly describe how they will be addressed by this project.

This program specifically addresses the general Education and Outreach Action Plan, or EO-1 of the action plan, as well as EO-4, which targets formal/school-based education. EO-4 is applicable here because we'll be marketing the kits, in part, to home-school students. The topics we could end up choosing could include:

- A kit which targets the protection of special habitats and species, or LP-1, which dovetails with the Priority issue of Biodiversity. This could possibly look at local birds, mammals, or the estuary biome.
- There could be a climate-change focused kit that focuses on CLIM-1 and/or CLIM-3. CLIM-1 focuses on general climate change information, while CLIM-3 focuses on information about animal and plant adaptations based on climate change. There is even a possibility of two different kits that focus on CLIM-3 specifically looking at local animal and plant adaptations.
- A kit based on water conservation would fall under FWR-5, which addresses water conservation.
- A kit that discussed watersheds and runoff could address action plans BMP-6 (reducing pet waste) or BMP-7 (supporting storm water best management practices).

Each of the science kits will provide the unique opportunity for local children and their parents to learn about issues that affect the Morro Bay National Estuary, and to also become familiar with scientific concepts and experiments in their own home. These kits will help kids truly educate themselves on different aspects of our local environment and become informed citizen scientists.

Action Plan Explanation Continued from Cover Sheet

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Full Project Description: Describe in some detail what you will accomplish with this project. Please address the following:

What steps are involved?

The County of San Luis Obispo Public Libraries will create 6-8 science kits to be shared by the Morro Bay and San Luis Obispo Libraries. These kits will focus on science topics relevant to the Morro Bay National Estuary's Action Plan, and will include books, movies, and science activities relevant to those topics.

This entire project addresses the general Education and Outreach Action Plan, or EO-1 of the action plan, as well as EO-4, which targets formal/school-based education. EO-4 is applicable here because we'll be marketing the kits, in part, to home-school students. The topics we could end up choosing could include:

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Materials for these kits will be selected and purchased by library staff and focus on children in grades K-6. The kits will be added to our checkout system and be available to the entire community at the San Luis Obispo and Morro Bay Library branches. Staff will check out the kits to families from the library and replace consumable items used in the hands-on science activities when they are returned.

Who will accomplish which tasks?

Youth Librarians, Rebecca and Kaela, would provide input on the science topics used in the kits. Margaret Kensinger-Klopfer, Youth Services Coordinating Librarian, will select and inventory all materials for the science kits. Bonnie Wolf-Moss, librarian, will purchase science kit materials and add them to the library catalog. Staff at the Morro Bay and San Luis Obispo Libraries will promote items to children, check them out, and then replace science activity items used. Any graphic design, such as promotional flyers, web faders, and social media graphics needed would be supplied by graphic design subcontractor Lauren Miller. Public Relations, including print media releases and promotions, as well as social media campaigns will be done by subcontractor Rebecca Juretic.

What partnering organizations will be involved?

We would promote these science kits through the general media, but especially to local schools, teachers, and homeschooling groups. We would hope to get input from the Morro Bay National Estuary and other local subject area experts on some of the contents and activities included in the kits. We would also like to promote these kits to local environmental groups.

What vendors will be used?

We would use Baker and Taylor and Amazon as our book and movie vendors. We would also use Plano as the vendor for our science kit boxes. Finally we would need vendors for our science activities, which would vary depending on availability of materials.

Provide sufficient detail for application reviewers to fully understand how you will accomplish your goals and create a successful project.

Our goal for the science kits will be to purchase all materials and have them at the libraries within the first seven months of the program. Library staff would designate time to verify that books, movies, and educational materials

are available for the science kits, in the area of the selected topics. All materials purchased will be youth friendly, engaging, and up-to-date. The library staff would then work with local experts on biodiversity, watershed, and animals to help develop the hands-on science activities for the kits. We hope to especially involve the Morro Bay National Estuary Program, and other local experts, to develop the content and activities for these kits since they will focus on specifically local science topics that fall within the Morro Bay Estuary's action plan and area of expertise. The library will then promote the science kits to local youth through the school system, the media, and the library with the help of our graphic designer and public relations subcontractors. We would expect the kits to be borrowed at least six times each within a year of being available to the public to be considered successful.

Community Engagement:
Describe how members or groups of the community will be involved to implement the proposed project.

The local community will be involved in the project by borrowing the science kits and trying out the activities within the Estuary watershed. The idea of this project is that the community will become more engaged in important Estuary issues if they understand the science behind the issues, and are able to engage even at the youngest ages. We hope to create a community of engaged and informed citizen scientists that can comprehend their local environment and know how to make positive changes through scientific understanding.

Audience:
If your project has an education and outreach component, please describe the following:
Who is the target audience of the project?

The target audience of this project is students in grades K-6 in the San Luis Coastal Unified School District area. However, these science kits would be available to any person interested in them and would not be limited by school district attended.

How you will reach them (who will be educated, participate in an event, etc.)?

These kits would be promoted through the County of San Luis Obispo Public Libraries online newsletter, social media, and through the general media. The kits would be available to borrow at any time the participating libraries are open.

How many people will be reached?
The science kits would reach approximately 40 families, 160 people, within their first year.

Benefits
Tell us specifically how this project will improve the health of the estuary and its watershed.

The goal of this project is to start educating our community about scientific concepts relevant to the estuary starting at the youngest age. By moving the scientific process into a DIY model that children and families can do on their own time we hope that they will have an ongoing, hands-on, engagement in the scientific knowledge that is needed to preserve and protect the estuary and its watershed. We hope that by engaging students in local science issues, we will increase awareness about their impact on their local environment, will get them to consider their own place in their community as scientists, and that we will keep them engaged in issues of conservation for their whole lives. We hope that these kits will take some of the intimidation out of science, the scientific process, and conservation on a local level, making the concept of conservation and environmental impact easy to understand.

Project Budget

Show the estimated total project cost. If applicable, break down your budget into categories such as personnel costs, materials, printing, subcontractors, and travel. Attach quotes/bids from subcontractors including those from printers, graphic artists, etc.

Total Project Costs: $9,000
Science Kits, including books, movies, science activity, labels, laminated contents list, and physical kit: $600/each x 6= $3,600
Printing Costs for promotional materials for local schools, homeschooling groups, at the Morro Bay Estuary education center, and at the library: $500
Graphic Design subcontractor Lauren Miller: 5 hours of graphic design at $20=$100
Public Relations subcontractor Rebecca Juretic: 5 hours of PR at $40/hour = $200
Replacement costs for consumable science activities: $600
Staff time (in-kind match): $4,000

List any other funding sources that will be used to complete the project, including in-kind and volunteer contributions.
In-Kind staff hours for the project: 60-80 total hours for 5 staff, to total about $4,000 (The hourly rate will vary by different staff members, but will average about $60/hour including total staff compensation)

Evaluation: Describe how you will determine whether or not the project has been successful. For example, the number of students that will participate in the program, the number of publications distributed, etc.

The project will be successful if each of the science kits is borrowed six times in the first year, times six kits, for a total of 36 science kits borrowed in one year.

Schedule:
Describe the project schedule assuming funds are awarded in this application cycle. Include and describe the key milestones, their expected dates, and estimated date of completion.

June: Money for the grant is awarded and grant spending account established.
July-September: All materials for science kits are designed and purchased.
October-December: Science kits are added to the Morro Bay and San Luis Obispo Libraries
January 2019: Kits begin to be lent from the libraries, Graphic Design for promotions is complete, PR done on social and traditional media, information about the kits are sent to schools.
January-June 2019: All items are replaced for science activities as they are consumed.
June 2019: Initial measurement of kit usage is reported back to the Morro Bay National Estuary Program.
January 2020: Second report given to Morro Bay National Estuary Program on continuing kit usage and use of consumables for the science activities.

Qualifications
Provide information that illustrates your ability to successfully complete the proposed project.

Describe your ability to perform the work, including the staff or other resources that will be used for implementation of the project.

The County of San Luis Obispo Public libraries is committed to providing quality resources and activities for our local students. We have an accomplished group of staff and subcontractors that are able to select, purchase, provide and promote resources to our local student population. All staff that would be involved in promoting or maintaining these science kits have been included in the development of this grant and have enthusiastically endorsed their Library's involvement. We would also be sure to take the time to work with local experts to develop quality science activities that combine education with the action plan.

List past experiences that may be relevant.

We have already established a popular group of science kits at the San Luis Obispo Library, which include hands on activities. There are currently seven (7) science kits that are only located in San Luis Obispo and include the following topics: electricity, food chains, earth science, food, dinosaurs, pets, and garden science. These have consumable science activities, and are typically borrowed once a month.

If other agencies or organizations are participating, list them and describe their roles.

N/A