

Purpose

The National Marine Sanctuary Foundation (the Foundation) in collaboration with NOAA's Office of National Marine Sanctuaries (ONMS), funded by National Geographic Society, is recruiting for a curriculum developer to create seven educational lesson plans that focus on the seven Ocean Literacy Principles using national marine sanctuaries as the backdrop and incorporating Climate Literacy where appropriate.

National Geographic Society, ONMS and the Foundation all have similar commitments to equity and diversity for all students. This joint commitment will be emphasized throughout the entire process including during the creation of materials, the voices and perspectives used in the materials and during distribution and training to ensure these products meet the needs of a wide range of communities, especially those historically underserved.

The materials will enable educators to easily use the lesson that meets their curriculum requirements and inspires ocean and climate literacy. All parties will assess appropriate distribution methods for the materials as they see fit such as through websites, social media, web stories or including them in conference materials.

Overview

The Need

Products designed as part of this partnership will align with National Geographic strategic priorities on ocean education, and National Marine Sanctuary Foundation and ONMS ocean and climate literacy, and education strategies.

In detail, the seven lessons will:

1. Be created around the seven Ocean Literacy principles with one lesson (each lesson should take 2-4 classroom sessions to complete) focusing on each principle and incorporating Climate Literacy as appropriate.
2. Use national marine sanctuaries as the "location" of the lessons to showcase the breadth of diversity, exploration, and cultural assets found within sanctuary boundaries. When possible, the use of, or linking to, NGS resources, including Explorers, courses, videos, and inquiry-based learning using the NGS Geo-Inquiry process, if applicable will be included. ONMS or NOAA resources will also be included as appropriate.
3. Contain info on marine protected areas (MPAs) including what they are, benefits, examples of various ways they are managed including multi-use and occasionally no-take areas. Community examples may feature NGS Explorer-led projects which occur in national marine sanctuaries as identified by National Geographic staff.
4. Resources may include examples of all national marine sanctuaries, with a focus on examples from California and Hawai'i when possible. Targeted dissemination will

- occur throughout these states, in particular.
5. Use accepted best practices for science education, such as Next Generation Science Standards, Common Core Standards, and other standards as appropriate.
 6. Lessons and activities will use the ONMS lesson plan template and will indicate “supported by National Geographic Society” and include Foundation branding elements. Remain publicly accessible on ONMS websites at completion and have the option to be located on the Foundation and National Geographic websites, if they so choose.
 7. Each of the seven lessons will contain enough instructional material that it will take 2-4 classroom sessions (approximately 45 minutes each) to complete the lesson. These subparts should have clear expectations of what can be completed in each 45 minute segment.
 8. Be available for free in the public domain.
 9. Be Section 508 compliant by using best practices for accessibility, so the products are widely available and able to be hosted on the ONMS website.
 10. Be translated into Spanish.
 11. Be reviewed for content, messaging, and educational practices if desired by all parties before finalizing for publication.

Funding Availability and Matching

The funding available is up to \$46,625 for the curriculum development and workshops/webinar work.

However, an additional \$6,375 is available if the curriculum designer can also provide Spanish translations and copy-editing/formatting services. This would entail providing copy editing services and format English and Spanish-language lessons into standard format for lessons/activities.

Eligibility

Organizations and individuals are both eligible to apply. However, proposals should demonstrate similar types of past curriculum development and outreach efforts. Previous work that emphasizes ocean-related science and/or ocean literacy is recommended.

How to Apply

Submit the full proposal package using the Foundation’s Proposal Template ([Proposal Template link](#)) by November 2, 2022 to rfp@marinesanctuary.org. Please title the subject line “Curriculum Developer”. Determinations will be made by December 5, 2022 and applicants notified shortly thereafter.

Any questions should be submitted to rfp@marinesanctuary.org.

Period of Performance

This project is slated to start in early January 2023. Ideally, the curriculum development phase (outlined in task one) will concur during the Spring 2023 school semester. The educational materials distribution and promotion phase (outlined in task two) will concur during the Fall 2023 semester.

Scope of Work

Desired Tasks

Task 1: Develop the education materials design

The curriculum developer in collaboration with National Marine Sanctuary Foundation and ONMS will:

1. Create lessons/activities for middle school students that align with the Next Generation Science Standards, Ocean Literacy Principles, Climate Literacy Principles, and other standards mentioned in Section 2.b below. Lessons should include information on conservation and stewardship of our ocean and Great Lakes, and climate solutions and actions as appropriate.
2. The final lesson plan format will use the ONMS lesson plan template and make reference to National Geographic contributions by including “Supported by National Geographic Society.” The review process for the lessons will follow the steps laid out below in the “Lesson Review Process” section.
3. All lessons should include messaging on the overall connectivity of the National Marine Sanctuary System and priorities from National Geographic.
 - a. Lessons will align with National Geographic Priorities such as:
 - When possible the use of, or linking to, NGS resources, including Explorers, courses, videos, and inquiry based learning using the NGS Geo-Inquiry process, if applicable will be included. ONMS or NOAA resources will also be included as appropriate.
 - i. Contain info on MPAs including what they are, benefits, examples of various ways they are managed including multi-use and occasionally no-take areas. Community examples may feature NGS Explorer-led projects which occur in sanctuaries as identified by National Geographic staff.
 - ii. Resources may include examples of all national marine sanctuaries, with a focus on examples from California and Hawai’i when sites in those states can serve as a case study example of the lesson. Targeted dissemination will occur throughout these states, in particular.
 - b. Lessons will align with ONMS priorities such as:
 - i. Enhance public awareness and appreciation of national marine sanctuaries.
 - ii. Discuss sanctuaries as a system of underwater parks that are protected places.
 - iii. Teach that national marine sanctuaries help protect the ocean and

- Great Lakes.
- iv. Relay that national marine sanctuaries are designated for their conservation, recreational, ecological, historical, scientific, cultural, archaeological, educational, and aesthetic qualities.
 - v. Share that national marine sanctuaries protect a vast diversity of ecosystems, habitats, wildlife, and cultural and historic resources.
 - vi. Make connections that sanctuaries are part of a larger global network of marine protected areas.
- c. Each of the seven lessons will focus on one of the following [Ocean Literacy Principles and Fundamental Concepts](#), as listed below :
- 1. [Ocean Literacy Principle #1](#): The Earth has one big ocean with many features.
 - 2. [Ocean Literacy Principle #2](#): The ocean and life in the ocean shape the features of Earth.
 - 3. [Ocean Literacy Principle #3](#): The ocean is a major influence on weather and climate.
 - 4. [Ocean Literacy Principle #4](#): The ocean made the Earth habitable.
 - 5. [Ocean Literacy Principle #5](#): The ocean supports a great diversity of life and ecosystems.
 - 6. [Ocean Literacy Principle #6](#): The ocean and humans are inextricably interconnected.
 - 7. [Ocean Literacy Principle #7](#): The ocean is largely unexplored.
- All lessons need to refer back to the scope and sequence for Middle School aged lessons found on the Ocean Literacy Principles webpage.
- d. As appropriate the lessons will also consider the most connected climate literacy principles including these concepts which can be found at <https://www.climate.gov/teaching/climate> and sanctuary specific climate talking points and case studies which will be provided by ONMS. Climate principles that may be considered include:
- 1) Climate Literacy Principle #2: Climate is regulated by complex interactions among components of the Earth system including fundamental concept 2b.
 - 2) Climate Literacy Principle #3: Life on Earth depends on, is shaped by, and affects climate including fundamental concept 3a.
 - 3) Climate Literacy Principle #6: Human activities are impacting the climate system. including fundamental concept 6d.
 - 4) Climate Literacy Principle #7: Climate change will have consequences for the Earth system and human lives including fundamental concepts 7a, and 7d.
- e. Lessons should include best practices in lesson plan development, including addressing different learning styles, meeting the needs of students of all

- backgrounds, including assessment strategies, etc.
- f. Once materials are finalized, all content will be copy-edited and formatted. Use of a copy-editing service is permitted and will be managed by the curriculum developer and can be a billable charge to the budget.
 - g. Once finalized, all lessons will be translated into Spanish. Use of a translation service or company is allowed and will be managed by the curriculum developer. The curriculum developer will be responsible for formatting the Spanish version or using a copy-editing/formatting service.

Task 2: Educational materials distribution and promotion

The curriculum developer will create a plan to promote and distribute the seven lessons in both English and Spanish. This plan should include:

1. Leading at least two virtual teacher trainings on the materials for at least one hour each with an emphasis on California and Hawaii audiences, if possible. The developer should plan to promote the training, especially to schools who serve underserved communities, and the developer will oversee all aspects of conducting the webinar including an evaluation of the training.
2. Additionally conduct an one hour webinar on the ONMS Distance Learning Webinar Series.
3. Promotion of the materials through educational listservs, such as the National Marine Educators Association listserv, Scuttlebutt, and other educational channels.
4. The creation of media such as web articles and social media posts that could be used by National Geographic, ONMS, and the Foundation to promote the partnership and materials as identified as necessary by all three parties.
5. There will be a concerted effort for the curriculum developer to reach schools who serve underserved communities in their distribution.

Lesson Review Process

To ensure all parties review the materials and the lessons meet the organizations' criteria, the following steps will be taken for review:

1. The curriculum developer will share the first draft of all materials in Microsoft Word or Google Docs format with ONMS staff and National Geographic staff for educational content review, if desired.
2. Once ONMS and National Geographic staff review and provide comments and suggested edits, they will send the materials back to the curriculum developer to incorporate educational content edits.
3. Once the educational content edits are incorporated, the curriculum developer will oversee copy-edits and formatting of the documents through either (1) a copy editing/formatting service or (2) internal Foundation staff. Note both method 1 and 2 of copy-editing and formatting is a billable charge against this budget.
4. When copy edits are complete, the lesson plan drafts will be shared with ONMS, Foundation, and National Geographic staff for the option of a final review, with mutually agreeable review times for all parties.
5. Once all parties sign off on the lesson plans, the curriculum developer will format

the final versions to ensure accessibility to be compliant with Section 508 standards and ONMS standards.

6. ONMS will review final accessible versions to ensure all the materials meet accessibility standards and work with the curriculum developer to correct any issues.

Project Deliverables

All parties will receive:

1. Section 508 compliant lessons in the ONMS Microsoft Word lesson plan template of the seven education materials in English and Spanish, which focus on each of the seven Ocean Literacy principles and Climate Literacy principles as appropriate, and use national marine sanctuaries as the backdrop of the lessons to all parties.
2. 508 compliant PDF files of the seven education materials in English and Spanish.
3. 508 compliant design templates for any physical resources required in lesson activities (i.e., activity cards, art materials, student worksheets) in English and Spanish.
4. PowerPoint/Google slides to be used for teacher training in the future.
5. Write a web story in ONMS writing style.

All deliverables must be written in AP style and follow additional ONMS writing guidelines. ONMS writing guidelines will be provided.

Adoption Plan

Both National Geographic, ONMS and the Foundation have the option to host the education materials on their respective websites, although those sites may be launched on varying schedules. All three partners have the ability to broadcast the resource to their national network of educators and other partners; showcase the materials on the web, social media, and through other educational outlets such as listservs or conferences, providing reference to all parties involved in the creation of the materials.

All parties will do due diligence to keep the other parties updated on the reach of these materials and any major use of them beyond their website and social media distribution.

Review Process

Evaluation Criteria

All proposals will be graded against the following criteria:

- Demonstrating past experience in writing curriculum, especially curriculum related to marine science, ocean literacy, and/or ocean connection
 - Worth a maximum of 50 points out of 100 points.
- Having a realistic and competitive budget
 - Worth a maximum of 20 points out of 100 points

- Demonstrating past experience in networking and leading teacher workshops or Training of Trainer workshops
 - Worth a maximum of 20 points out of 100 points
- The ability to conduct translation work for the curriculum (from English to Spanish)
 - Worth a maximum of 10 points out of 100 points.

Application Logistics

Useful Resources

- The link to the proposal template can be found here: [Link to template](#)
- NOAA's Website on National Marine Sanctuaries: <https://sanctuaries.noaa.gov/>
- NOAA's Website on National Marine Sanctuaries education: <https://sanctuaries.noaa.gov/education/>
- Ocean Literacy Principles: [Ocean Literacy Principles and Fundamental Concepts](#)
- Climate Literacy Principles: <https://www.climate.gov/teaching/climate>
- The National Marine Sanctuary Foundation website: <https://marinesanctuary.org/>