



Khaled bin Sultan  
Living Oceans  
Foundation

## STANDARDS

- **CCSS:** RI.6.8-8.8, RST.6-8.1, RST.6-8.8, RST.6-8.10, SL.6.1-8.1, SL.6.4-8.4, SL.6.5-8.5, WHST.6-8.8, WHST.6-8.9; RST.9-10.1, 2, 4, 5, 7, 8, 10; RST.11-12.1, 2, 4, 10; RI.9-12.8, SL.9.1-12.1, SL.9-12.4, SL.9-12.5, WHST.9-10.8, WHST.11-12.8, WHST.9-10.9, WHST.11-12.9
- **NGSS:** MS-LS2-3, MS-LS2-4, MS-LS2-5; HS-LS2-7, HS-LS-4.D, HS-ESS3-3, HS-ESS3.C, HS-ESS3.D, HS-ETS1.A-B, HS-ETS1-2, HS-ETS1-3
- **NGSS Practices:** 6, 7, 8
- **OLP:** (grades 6-8): 5.A.1, 5.A.3, 5.A.4, 5.A.6, 5.A.16, 5.A.21, 6.A.1-A.11, 6.B.1-B.4, 6.C.1-C.4, 6.D.1-6.D.21, 6.E.1-6.E.15; (grades 9-12) 6.A.1, 6.A.3-A.6, 6.B.1-B.6, 6.C.1-C.3, 6.D.1-D.19, 6.E.1-.14

## ONLINE CONTENTS

- [\*My Wish: Protect Our Oceans\*](#) Dr. Sylvia Earle discusses the rapid decline of the ocean and the need for more protection.
- [\*Corals and MPAs\*](#) Learn about Marine Protected Areas and how they can help protect coral reefs.

# CONSERVATION

This lesson is a part of the *Conservation* unit, which describes different actions that people can take to manage and conserve coral reefs. Below is a summary of what is included in the entire unit.

## UNIT CONTENTS

- A. [Background Information](#)
- Introduction
  - Mitigating Threats
  - Stakeholder Involvement
  - Education & Outreach
  - Monitoring
  - Enforcement
  - Restoration

B. Lessons

[Watch It! My Wish](#)

- A worksheet to accompany the [\*My Wish: Protect Our Oceans\*](#) video

[Watch It! Corals and MPAs](#)

- A worksheet to accompany [\*Our Living Oceans, Episode 5: Corals and MPAs\*](#) video.

[Lesson 1A: Explore a Hope Spot](#)

- An activity that explores an existing Hope Spot. Students learn about ecosystem disruptions and services, and the reasons that make this place special.

[Lesson 1B: Nominate a Hope Spot](#)

- An activity where students nominate a new Hope Spot that needs protection. Students present their proposed Hope Spot to their classmates who act as the “Hope Spot Council,” deciding if it should be approved.

[Lesson 1C: Advocate for MPA](#)

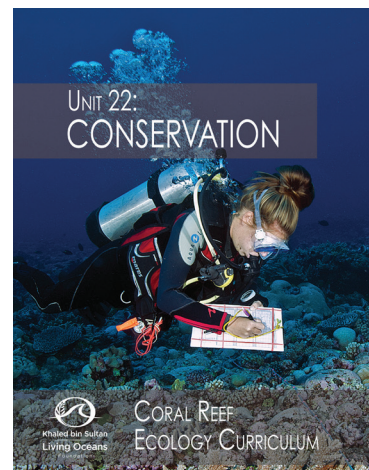
- Write a compelling letter that advocates for the creation of their proposed MPA to a stakeholder or group of stakeholders.

[Lesson 1D: Manage an MPA](#)

- An activity that creates a management plan for the three most important actions that are crucial to conserve their proposed MPA.

[Read It! Maori Conservation](#)

- A worksheet to accompany the [\*Traditional Māori Conservation Methods Help Protect Reefs in the Cook Islands\*](#) blog.



# LESSON 1A

# EXPLORE A HOPE SPOT

## BACKGROUND INFORMATION

Around the world, approximately 12% of land is protected. However, only about 6% of the ocean is currently protected in any way. In the United States, national parks serve to protect special places on land. In the same way we can safeguard the ocean. Perhaps the most recognized around the world is called a **marine protected area (MPA)**, sometimes called a **marine managed area (MMA)**, which is a defined area of the ocean with set rules that state what is, and what is not, allowed in the area. MPAs around the world vary greatly in size, level of protection, and how they are managed and enforced. Some MPAs focus on protecting an entire ecosystem, while others focus on the protection of individual species or preserving a cultural or historical site.

In an effort to create more protection for the ocean, Dr. Sylvia Earle launched Mission Blue and started a global conservation campaign called “**Hope Spots**,” which are special places that are scientifically identified as critical to the health of the ocean. Often these are areas in need of new protection, but they can also consist of existing MPAs that require additional action. Like MPAs, Hope Spots come in all different sizes and are nominated for different reasons. Here are a few reasons they are nominated:

- A special abundance or diversity of species, unusual or representative species, habitats, or ecosystems
- Particular populations of rare, threatened, or endemic species
- A site with potential to reverse damage from negative human impacts
- The presence of natural processes such as major migration corridors or spawning grounds
- Significant historical, cultural, or spiritual values
- Particular economic importance to the community

Dr. Earle’s goal is to safeguard 30% of the ocean by 2030. You don’t have to be a scientist or a government official to nominate a Hope Spot. Anyone can nominate a site that gives them “hope” for the future of our oceans, a place that preserves biodiversity and is essential for ocean health.

## A. EXPLORE A HOPE SPOT

**INSTRUCTIONS:** Research an established Hope Spot and answer the questions below. Information about Hope Spots can be found here: <https://mission-blue.org/hope-spots/>. If you use additional resources to research your Hope Spot, please make sure to list your resources under question #10.

1. What is the name of the Hope Spot? \_\_\_\_\_
2. Where is the Hope Spot located? \_\_\_\_\_  
\_\_\_\_\_
3. How large is this Hope Spot (estimated size)? \_\_\_\_\_  
\_\_\_\_\_
4. What ecosystem(s) are a part of the Hope Spot?

5. What are the current or potential threats to this Hope Spot? Explain.

6. List five ecosystem services that are provided by this Hope Spot.

7. What are the current protections for this Hope Spot (if any)?

8. What type of human activities take place in this Hope Spot?

9. Explain why this Hope Spot is special. For each question please list yes/no/unsure and explain the answers to each question.

Does the area	Yes	No	Not sure	Explain
Hold significant or representative populations of rare or endemic species				
Hold a wide diversity of species				
Hold a significant process or ecosystem here (e.g., phytoplankton bloom, reefs, kelp forests)				
Contain the site of significant event (breeding/spawning)				



Does the area	Yes	No	Not sure	Explain
On or part of a migration route				
Contains organisms that are threatened or endangered				
A site that contains economic/touristic appeal				
Potentially encouraging scientific research projects				
Significant historical, cultural or spiritual values				

10. What resources did you use while conducting this activity? Cite your resources here.