

FIRST LEGO League Challenge 2005 -- Project

The Project

Our oceans are of vital importance to the health of the Earth, yet only 1% percent of these magnificent bodies of water has been studied. We have explored space more than our oceans.

Oceans provide us with many resources and activities from the fish we eat, oil drilled from the ocean floor, to extracts from seaweed used to make ice cream.

The oceans provide a wide, navigable highway for the shipping industry, and an underwater playground for activities like scuba diving.

Oceans fuel this planet's most vital ecological processes, like the water cycle, and the carbon-dioxide cycle. Living oceans absorb carbon dioxide and pump oxygen into our atmosphere, thereby sustaining the planet's diverse flora and fauna— yet we know very little about how we are impacting this important resource.

Project Overview

Choose an ocean activity you do or resource you use and trace its impact on our oceans' health, biodiversity, and productivity. Learn what the experts and other groups are doing in this area, and identify a challenge they are facing.

Create an innovative solution to help them improve the use of this resource or activity, while minimizing the negative impact on our oceans for present and future generations.

Finally, share what you have learned with others.

All three parts of your Project will be evaluated during the judging session at an Official FLL Tournament. Refer to your FLL Coaches' Handbook and Project Rubric for details.

Project Guidelines

Update 9/27/05 - Because there is interdependence between lakes and rivers and our oceans, teams may choose to either:

- Identify an issue occurring in our oceans or seas.
- Identify an issue related to a lake or river and explain how it directly impacts our oceans.

1: Choose an ocean activity you do or resource you use and trace its impact in terms of the oceans' health, biodiversity, and productivity.

- Identify challenges, opportunities, and/or new ideas for this ocean activity or resource.
- Identify experts working in this field. Contact them or read about their work to learn:
 - What fields of science are related to the topic you have chosen?
 - What challenges, opportunities, or new ideas are they exploring and why?
 - How is their work helping the oceans for present and future generations?

2: Create an innovative solution.

- Think of a creative way to help improve the use of this resource or activity while minimizing our negative impact on the ocean.
- Explain how this solution will help, why it is important and what might happen if this solution is not used.

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3: Present your solution and research findings.

- Create a presentation that's fun and informative.
- Share your solution with others in your school and/or community.

Getting Started!

Here are some ideas to help you get your Project started:

- Compile a list of questions to ask the experts and others who study the oceans.
- Read about or host a meeting with experts in oceanic studies and learn what they are working on and why.
- After brainstorming, select one idea to focus on.
- Write to your local/state/national government about your project and learn what they are doing to protect the oceans' resources.
- Learn more by contacting universities, museums, businesses, industries, groups and organizations that focus on the oceans.
- Use the Project Resources on this site to gather information.
- Create a flyer, website, brochure, skit, or short play about your Project for your school or community.
- Invite other FLL Teams and the public to view your Project presentation.