

GLOBAL CLIMATE *Pledge*

# OCEAN PROTECTION

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Project Ideas and Step-by-Step Instructions for Your Club

# Toolkit Outline

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and sign the pledge!

# UNDERSTANDING OCEAN PROTECTION

WHY YOU SHOULD CARE ABOUT THE IMPACT OF  
CLIMATE CHANGE ON OUR OCEANS

# UNDERSTANDING OCEAN PROTECTION

- **Importance of Our Oceans**
- **Human Impacts on the Ocean**
- **Climate Change and Our Oceans**

# OUR WORLD OCEAN

## provides

### THE AIR WE BREATHE



**>50%** The ocean produces over half of the world's oxygen and stores 50 times more carbon dioxide than our atmosphere.

### CLIMATE REGULATION

**70%** Covering 70% of the Earth's surface, the ocean transports heat from the equator to the poles, regulating our climate and weather patterns.



### TRANSPORTATION



**76%** Percent of all U.S. trade involving some form of marine transportation.

### RECREATION



From fishing to boating to kayaking and whale watching, the ocean provides us with so many unique activities.

### ECONOMY



**\$282 billion** Amount the U.S. ocean economy produces in goods and services. Ocean-dependent businesses employ almost 3 million people.

### FOOD

The ocean provides much more than just seafood. Ingredients from the sea are found in surprising foods such as peanut butter and soymilk.



### MEDICINE

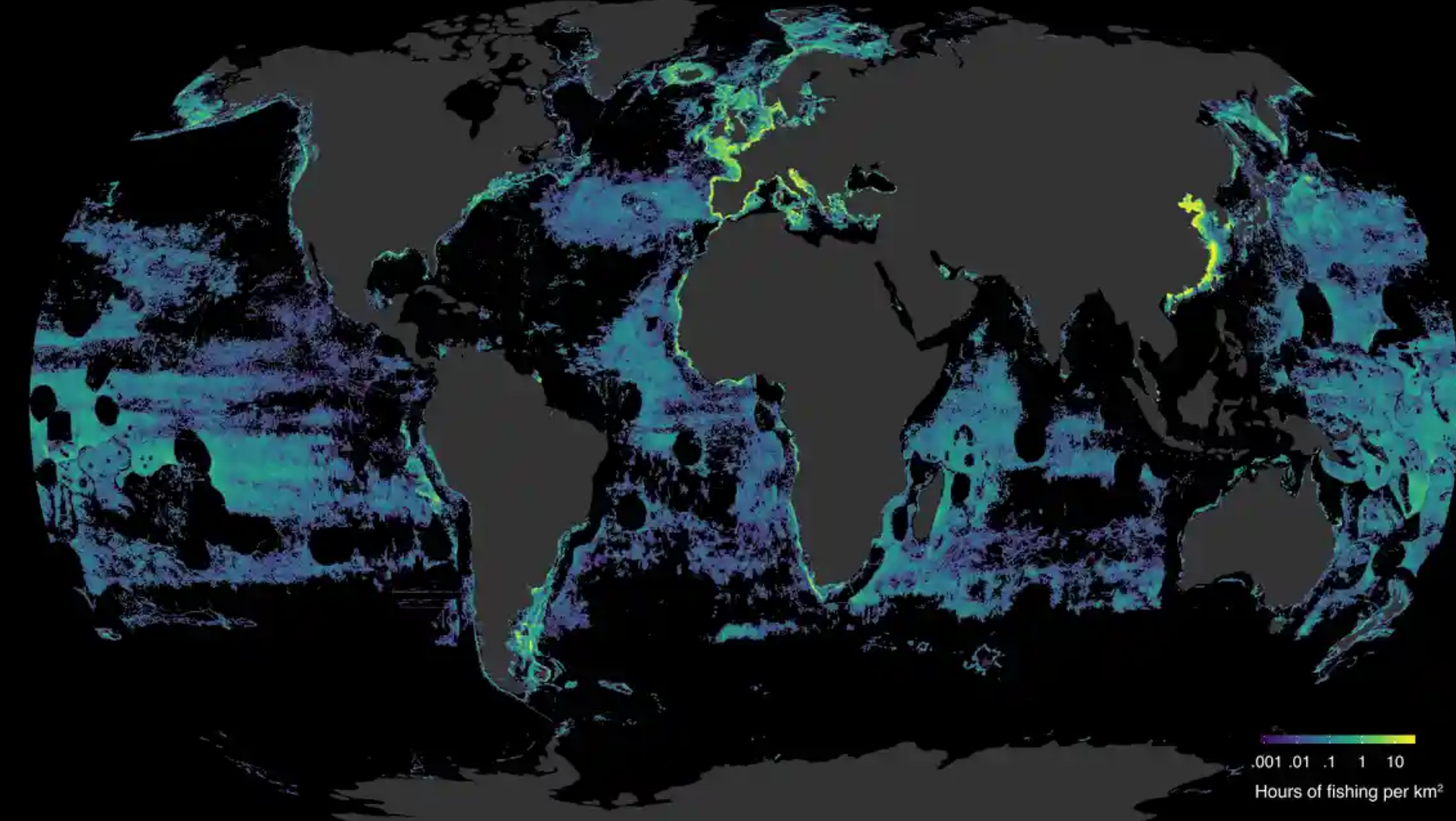
Many medicinal products come from the ocean, including ingredients that help fight cancer, arthritis, Alzheimer's disease, and heart disease.



Oceans provide a plethora of services that maintain ecosystem function and flow. This graphic from NOAA lists ten ways in which the ocean is of vital importance. Beyond the benefits listed here, oceans also contain upwards of 80% of the planet's biodiversity and acts as the world's largest carbon sink, meaning they contribute greatly to absorbing carbon that would otherwise linger in the atmosphere.

Only 13% of the world's oceans remain completely untouched.

The image on the right, from Global Fishing Watch, reveals that over 50% of the world's oceans are now subject to industrial fishing and related pollution.



There are currently 150 million tons of plastic in the ocean with 8 million more added each year. In addition, human activities are creating increasingly acidic environments and the number of uninhabitable aquatic areas has quadrupled since 1950.

## CLIMATE CHANGE

Human activities and climate change have had detrimental impacts on the global oceans. Rising sea levels have created massive marine habitat destruction. Rising sea temperatures also influence global weather patterns leading to increased frequency and severity of storms and related coastal destruction. For these reasons, protection of our oceans is critical for future maintenance of the ecosystem flow.



# 6 PROJECT IDEAS

- **Sponsor a Beach Clean Up**
- **Adopt a Highway**
- **Engage in Water Monitoring**
- **Organize a Recycling Drive or Giveaway**
- **Educational Outreach**
- **Encourage Individual Change and Sign the Pledge!**



# Sponsor a community beach clean up

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## Why?

In addition to the obvious benefit of removing pollution from the environment that might otherwise end up in the oceans, beach clean ups provide countless other benefits including environmental and climate change education.

Exposing participants to the amount and type of pollution that exists in abundance on beaches has been shown to impact individual changes in terms of managing waste. Data collection at beach clean up events also aides in stopping pollution at the source.

# STEP BY STEP ORGANIZATION

## VISIT AND DESIGNATE YOUR CLEAN UP SITE

Determine where you want to hold your beach clean up and have the coordinator visit the site prior to the day.

## PLAN AND CONTACT SUPPORT

Gather supplies based on what areas you will be cleaning. Partnering with local organizations for donation of supplies is a common tactic.

## RAISE COMMUNITY AWARENESS

Advertise on social media, contact an email list, and have members recruit family and friends.

## DATA COLLECTION

Make sure all volunteers record the trash picked up. You can report this on multiple platforms, including the app Ocean Swell.

# OTHER SUCCESSFUL ROTARY CLUBS



## GHANA, 2019

Four Rotary clubs in Ghana partnered with a Rotaract Club to host their 4th successful beach clean up at Sakumono Beach.



## SAN DIEGO, 2017

The Rotary club of San Diego hosted a beach clean up at Marine Street Beach. They engaged the community through outreach on social media platforms.



## MAUI, 2021

In April, eight Rotary clubs across Maui partnered to host several clean ups at 6 beaches. The project had several organization partners and was run in order to "protect vulnerable ecosystems."

# Adopt a Highway (or a beach)

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## Why?

Adopting a highway is different in every region of the world. However, the benefits remain very similar.

The official adopt-a-highway program in the US reports that the program allowed for the removal of 4.5 million tons of trash across 22 states. Adopting a highway is an easy way to conserve watershed health by eliminating pollution (especially plastics) from eventually entering a waterways.

## STEP-BY-STEP

Adopting a highway or beach varies in processes between states. In order to adopt a highway, use the following steps:

- 1) Contact your adopt-a-highway coordinator. Most often this information can be found on the Department of Transportation website for your state.
- 2) Review the processes for safety and conditions for eligibility.
- 3) Complete an application as per the instructions of your coordinator or DOT.



# OTHER SUCCESSFUL ROTARY CLUBS



## PLANO WEST, TX

The Rotary club of Plano West in Texas adopted a highway. They host frequent clean up events for community members.



## GREATER SPRINGFIELD, AUS

The Rotary clubs of Greater Springfield in Australia started their adopt a highway program on Augusta Parkway in support of the Keep Australia Beautiful initiative.



## ELMIRA, NY

The Rotary club of Elmira also frequently cleans up a highway to eliminate litter/pollution from the environment.

# Engage in Water Monitoring

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## Why?

Water monitoring is critical for maintaining the cleanliness and health of water sources. This provides a variety of benefits including habitat preservation. Water monitoring can also help alleviate public health concerns by ensuring the conservation of clean drinking water.

Monitoring waterways also opens the door for organizing clean ups and addressing environmental concerns in your area that had previously gone unnoticed.

## STEP-BY-STEP

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Water monitoring programs are often set up in partnership with local governments or waste management facilities. A beginning step to facilitating a program would be contacting your local agencies to determine how to best aid them in their goal of maintaining clean and healthy water ways.

You can also take a citizen science approach. Many organizations provide water monitoring testing. For example, the Virginia Aquarium runs water quality tests for volunteers or organizations that are interested in monitoring and maintaining local waterways. All results are recorded on an interactive map in order to help the Virginia Department of Environmental Quality track water quality across the state.





# OTHER SUCCESSFUL ROTARY CLUBS



## WATERVILLE, OHIO

A Rotary club in Ohio collected water quality data through mobile phones along with Bowling Green State University and other organizations.



## AMECA, MEXICO

River clean ups of the Ameca river took place after Rotary clubs decided to address sewage and pollution in the Ameca River. The project became the Cleaning Rivers of the World initiative.

# Organize a Recycling Drive or Reusable Giveaway

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## Why?

Tackling plastic pollution is critical in furthering the protection of our oceans and waterways. Plastics in aquatic habitats create both physical and chemical hazards for wildlife and human populations.

Reducing the amount of plastic that comes from land-based sources helps reduce the danger posed by pollution in waterways.

A recycling drive, combined with a reusable giveaway, is a fun and interactive way to achieve this goal (and to make a little money for your club too).

# STEP BY STEP ORGANIZATION

## DETERMINE A COLLECTION PLACE AND ITEMS YOU WILL BE TAKING

Determine a time and place for your drive, confirm volunteers, and make a definitive list of recyclable items you will be collecting. Electronic recycling is an easy way to make some money as well.

## DETERMINE YOUR SYSTEM

Designate a specific drop off and sorting area. You will need to sort recyclables based on your county's recycling policies.

## PICK YOUR REUSABLE GIVEAWAY ITEM

Consider handing out reusable mugs, water bottles, or bags for each person who contributes.

## AS ALWAYS, PUBLICIZE AND COLLECT DATA

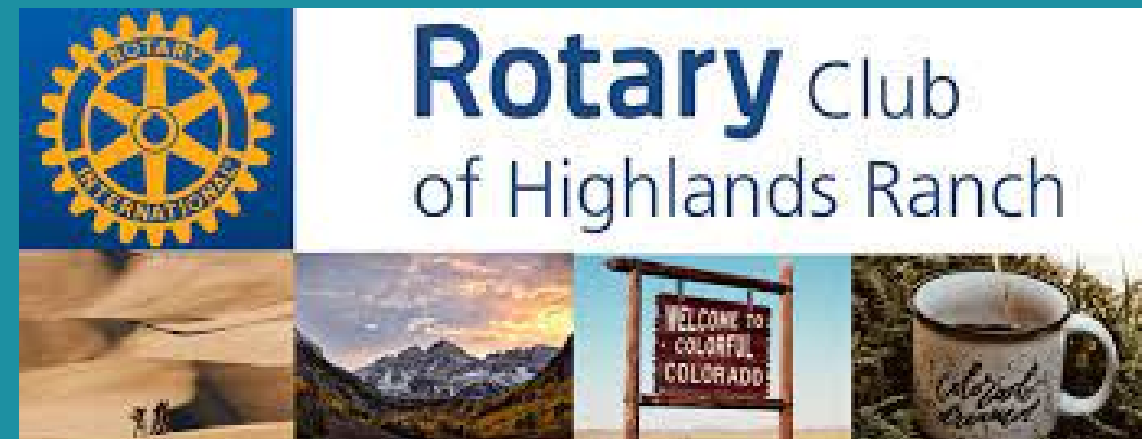
Publicize the event at community centers, on social media, or elsewhere. Also make sure to collect data to determine the true positive impact of your club on the environment.

# OTHER SUCCESSFUL ROTARY CLUBS



## WESTBOROUGH, MA

The Rotary clubs of Westborough organized a successful recycling drive where community members could drop off plastics. They ran multiple drives and collected over 1100 lbs (~500 kgs) of film plastic.



## HIGHLANDS RANCH, CO

The Rotary club of Highland Ranch sponsored a community recycling event. The event accepted electronics and paint recycling for a small fee.



## HUDSON-LITCHFIELD, NH

The Hudson Litchfield Rotary club sponsored a recycling drive/fundraiser at a local high school. This drive had the added goal of educating high school students on environmental issues and solutions.

# Educational Outreach

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## Why?

Ocean and water preservation will require continued attention for years to come in order to reverse the damage already done and mitigate the perpetuation of further pollution. Passion for protecting our environment starts with education and outreach to the youth of the community.

Rotary clubs can partner with local organizations to facilitate outreach programs and educational events for the community surrounding environmental health. Additionally, through social media and community communications, Rotary clubs can promote other events and actions that members can do.

## STEP-BY-STEP

1) Through partnering with ocean or water protection agencies, Rotary clubs can organize and provide educational outreach. For example, the Virginia Aquarium operates a variety of conservation programs in Virginia Beach that are open to public participation. Rotary clubs can partner with organizations like this to facilitate and promote these events that increase youth interest in taking an active role in environmental protection.

2) Rotary clubs can also promote other educational events taking place in their community. Each Rotary club can produce newsletters with environmental sections providing updates on events, addressing the specific considerations of their area, or encouraging simple actions that people can take to be more environmentally friendly.



# Encourage Climate Smart Choices for Members

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## Why?

Protecting our waterways is a collective effort that starts with each one of us making the best choices with the environment in mind. NOAA estimates that 8 million metric tons of plastic entered the ocean in 2010. Much of the pollution came in the form of single-use plastic items that we use almost every day (water bottles, takeout containers, food packaging, plastic bags ,etc.)

Making conscious decisions to change habits to be more environmentally friendly has the potential to create real impact on reducing pollution and protecting our water.

# INDIVIDUAL CHANGES

## GO REUSABLE

Eliminate single-use plastic from your life. Instead, replace your water bottles with metal ones and use reusable tote bags when going shopping instead of using plastic bags.

## REDUCE WATER USAGE

Reducing water usage conserves the precious resource that is becoming increasingly scarce as droughts increase in frequency.

## ENGAGE IN CITIZEN SCIENCE

Through observing and contributing data related to the water quality of local water ways, citizens can help maintain safe water sources for all.

## DECREASE MEAT/SEAFOOD CONSUMPTION

The animal agriculture and seafood industries both contribute to pollution and habitat/population destruction in significant ways. Reducing consumption of meats and seafood helps offset the harms caused by these industries.



# Sign the Global Climate Pledge!

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## Why?

All of the actions on the previous page and more are included in the Global Climate Pledge. By signing the individual pledge, club members can choose which actions they will take to address climate change and protect our waterways.

To encourage your members, set a goal! Have 50% of your members sign the Global Climate Pledge.

See the next page for detailed instructions about signing the pledge.



# Take the Pledge

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## Sign the Pledge

1. Visit [www.GlobalClimatePledge.com](http://www.GlobalClimatePledge.com) to sign the pledge - it only takes a few minutes!
2. The pledge allows you to choose which sustainable actions you would like to incorporate into your life.

## Share the Pledge

1. Share the pledge with family members, friends, or other community organizations. Sharing is easy and can be done through social media, email, or text.
2. A pledge may be an individual commitment, but encouraging others to join you establishes a larger community of people who support each other and can make a bigger difference.

GLOBAL  
CLIMATE  
*Pledge*

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