



NAME

# INTERNATIONAL TRASH TRAP NETWORK

**Ocean Conservancy** 

**University of Toronto Trash Team** 

# CONTENTS

This workbook was developed by the International Trash Trap Network. It contains three activities to learn about trash traps as part of the solution to plastic pollution.

### Activites In This Guide:



**How a trash trap, traps trash**: Understanding how trash traps work, the different types of trash traps and the waste items they capture and divert from the environment.



**Trash trap dive**: A guided waste characterization to observe the weight and types of waste captured by your local trash trap, including most common items.



**Science to solutions**: Understanding how trash traps can be used to inform upstream solutions through the collection of data and the collaboration of local stakeholders.

For more information about the International Trash Trap Network, including access to other online resources, visit our website: <u>trashtrapnetwork.org</u>

# ACTIVITY 1: HOW A TRASH TRAP TRAPS TRASH

### **MEET THE TRASH TRAPS!**

Trash traps are technologies designed to clean up plastics and other waste from the environment. Below are some of the trash traps that are used around the world. Each trap has an interesting fact about themselves to share with you!

### **STATIONARY SKIMMER**



I capture waste that floats on the surface of the water, including tiny pieces of plastic. I work best in calm waters where anthropogenic (humanmade) debris accumulates e.g., a harborfront marina (where boats are stored).

BOOM

I am a barrier that sits on the surface of the water, often across the channel of a river or stream. I capture floating trash that is moving with the water current. Sometimes I have a storage box to make trash collection easier.



### **STORMWATER FILTER**



I am positioned within storm drains, which are grates often located on the edge of streets or other paved areas such as car parks to drain rainwater into the sewer system.

DRONE

I am a trash eating robot that can be remote controlled. I can be used in calm coastal waters, in lakes, and on land in areas such as beaches. I collect trash that is floating on the water surface or that has washed onto shorelines.



#### VACUUM



Just like vacuums that can be used in your home, I am designed to vacuum up trash that has washed onto coastlines such as beaches. My mouth is at the end of a tube that can be directed to target and collect specific items.

#### **AIR BARRIER**

I am a barrier installed on the bottom of a marine or freshwater environment, for example a seabed or river bed. I am a large tube with holes. Air gets pumped into the tube and creates bubbles that lift any trash that has sunk to the bottom of the water up to the surface where it can be collected.



### MATCHING GAME

Look at the image of a watershed showing different environments and potential locations for trash traps. Cut out the images of the trash traps and place each one in the location you think is most suitable. Think about the location of the trap and the size of waste items it can collect to help guide your decisions.



# THIS WAY TO THE WATERSHED MAP





### **GUESS THE TOP WASTE ITEMS**

In the box below, list and/or draw the top five waste items you might expect to find in your local trash trap, with number one being the item you think will be the most common.

# ACTIVITY 2: TRASH TRAP DIVE

# ACTIVITY 3: SCIENCE TO SOLUTIONS

## WHO IS RESPONSIBLE FOR SOLUTIONS TO PLASTIC POLLUTION?

There can be many different examples of groups that can work together to create solutions for plastic pollution. Today we will focus on four main examples of groups involved with plastic pollution solutions: individuals, community, companies and government.



While these are 4 different groups, they will often interact with each other. The Group Interactions diagram below shows this relationship, with individuals as the common link between all 4 groups.



Individually or in small groups, select one of the top 5 items collected in your local trash trap, and consider how each of the four groups might interact to reduce pollution of that item. Write your answers in the table below.

Write your waste item here!

Group	What can they do to reduce pollution of?
Individuals	
Community	
Companies	
Government	

Do you think groups can have a stronger impact by working together or working on their own? Write your answer below. Through the International Trash Trap Network we hope to connect groups around the world to share knowledge as trash trapping efforts grow.

Join our **Facebook group** to stay connected with the network and to share your trash trapping experiences from data collection to education and outreach.

For any questions about the ITTN or the activities within this workbook, please contact us at **info@trashtrapnetwork.org** 

Visit trashtrapnetwork.org for more information

# JOIN THE CONVERSATION!



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