



# Inspiring Marine Debris Prevention Through Education and Outreach

EPA Trash Free Waters Webinar

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# What is marine debris?

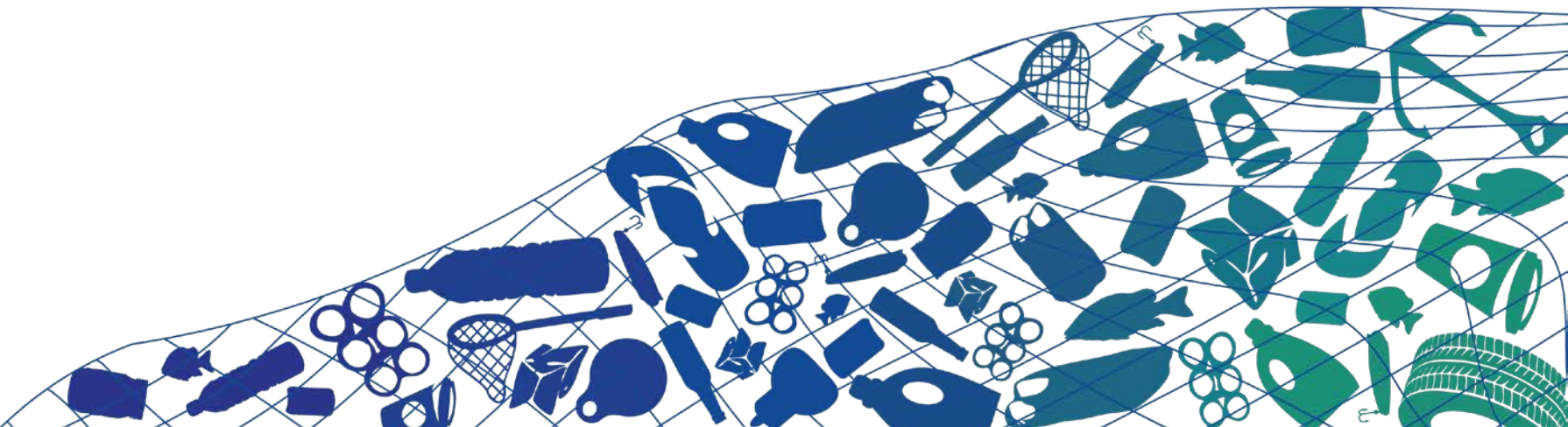
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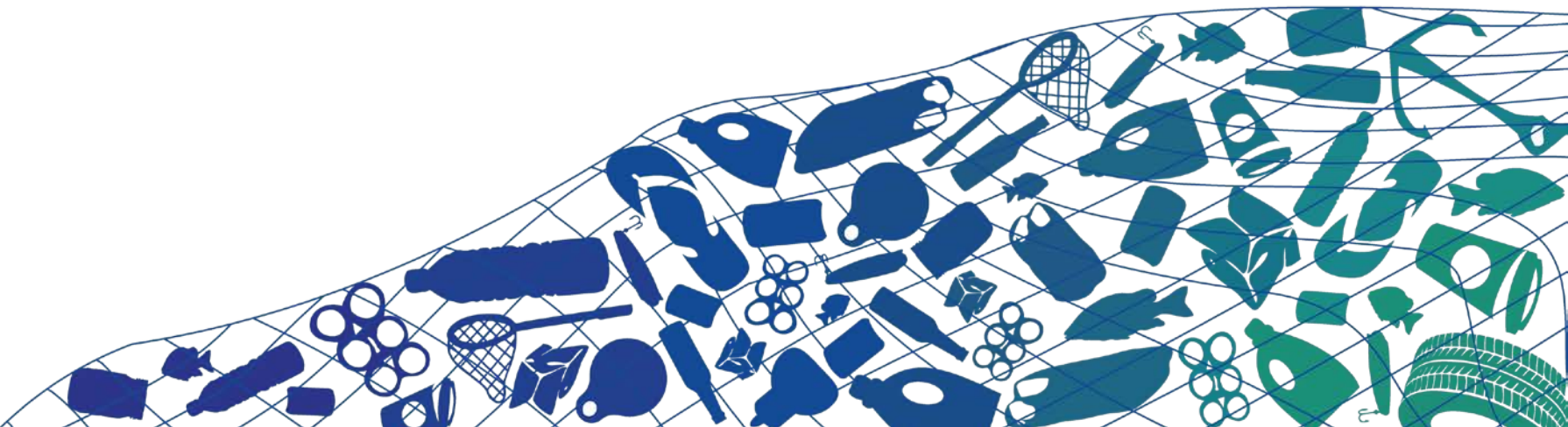
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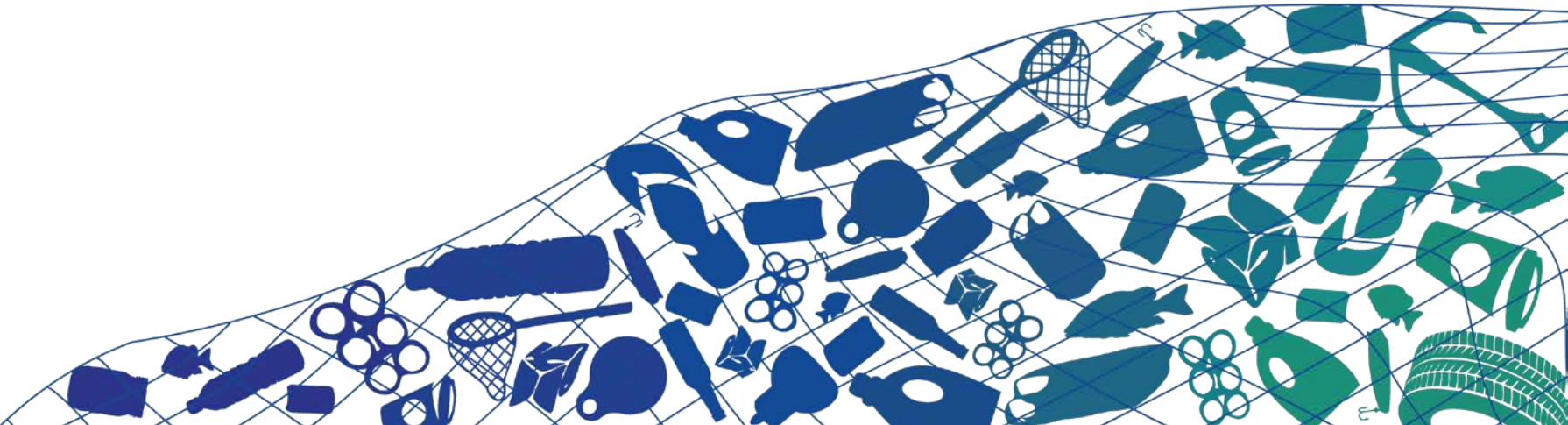


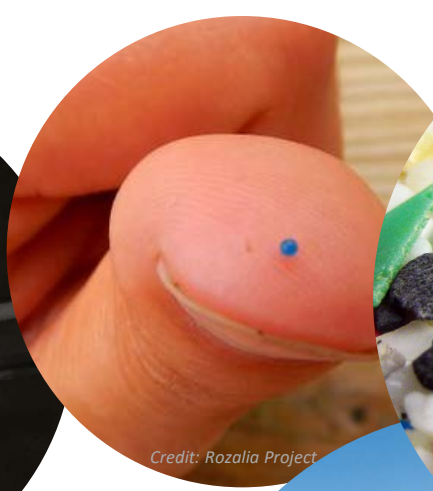


# What is marine debris?

*one of the biggest pollution problems facing our ocean and waterways today*

**“any solid, man-made material in the ocean and Great Lakes”**





Credit: Rozalia Project

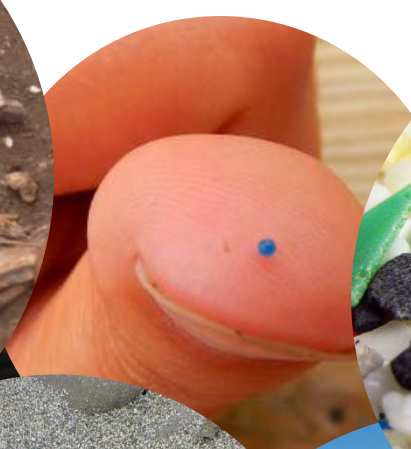


Credit: Ocean Conservancy



Credit: Coral Bay Community Council





Credit: Olympic Coast National Marine Sanctuary



Credit: Ocean Conservancy



Community Council





Olympic Coast National  
Marine Sanctuary





# What's the big deal?

- Danger to wildlife
  - Ingestion
  - Entanglement
- Harmful to habitats
- Hazardous to navigation
- Threat to the economy
- Risk to human health

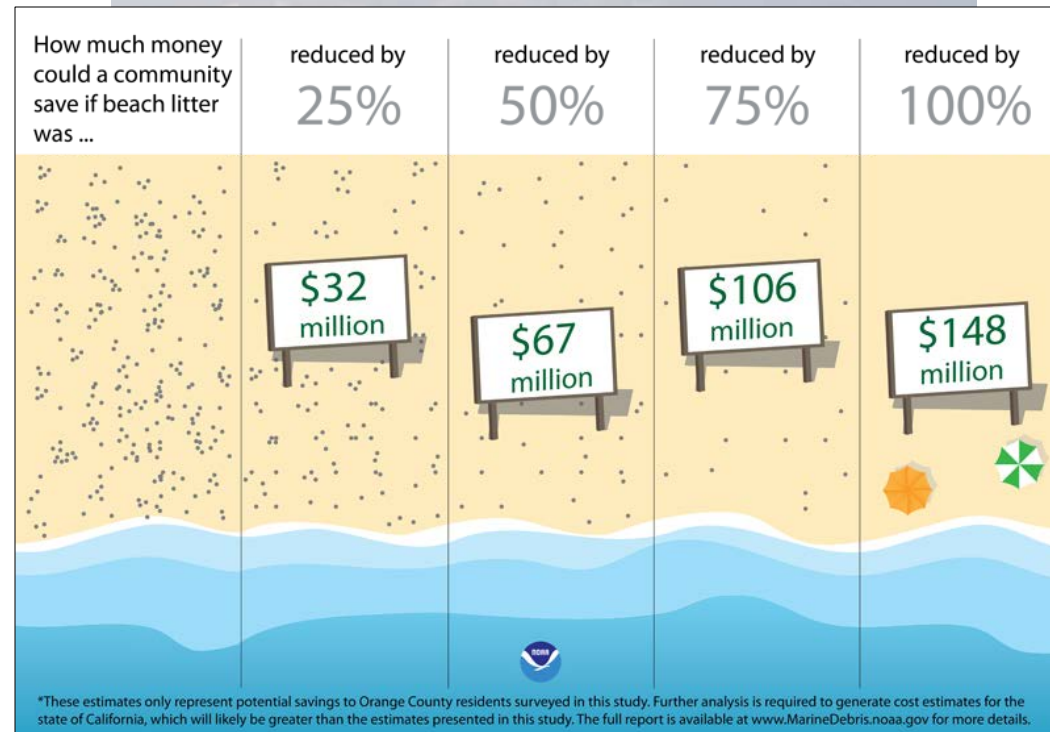


Photo Credit: Heal the Bay



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# Where does it come from?

land-based sources



ocean-based sources





# Where does it come from?



All marine debris comes from people.

# NOAA Marine Debris Program

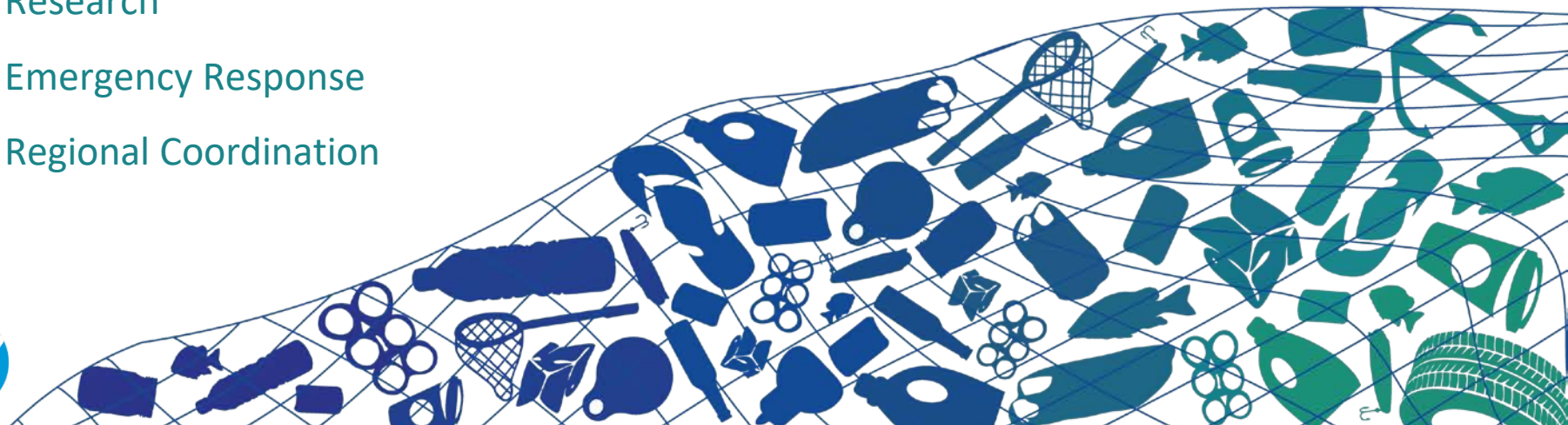
Federal lead to address marine debris, authorized by Congress in 2006

**Vision:** the global ocean and its coasts free from the impacts of marine debris

**Mission:** to investigate and prevent the adverse impacts of marine debris

## 5 Program Pillars:

- Prevention
- Removal
- Research
- Emergency Response
- Regional Coordination



# NOAA Marine Debris Program

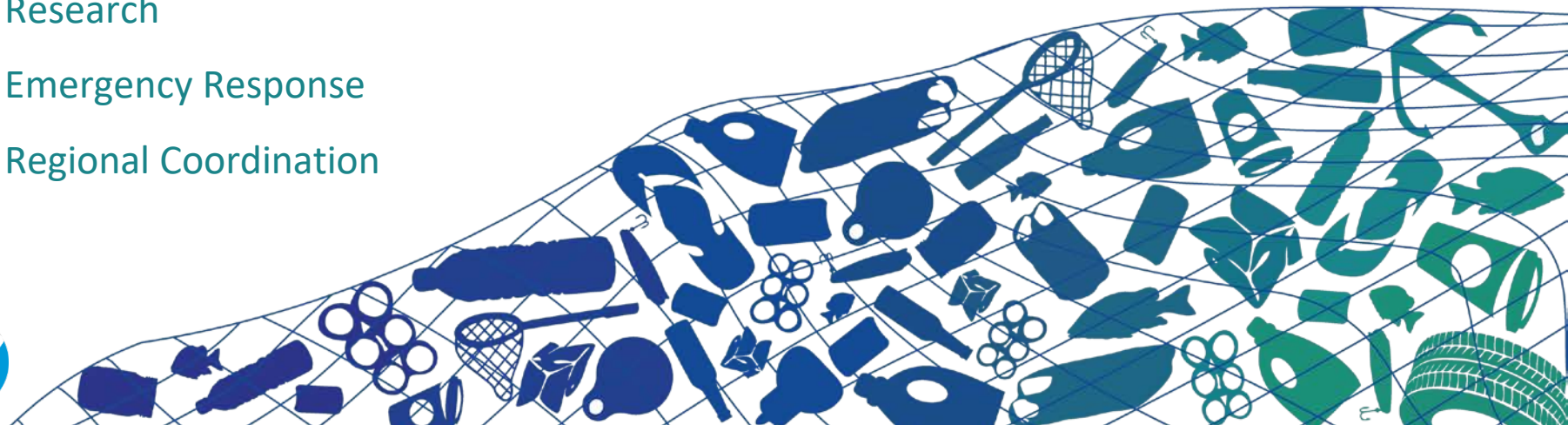
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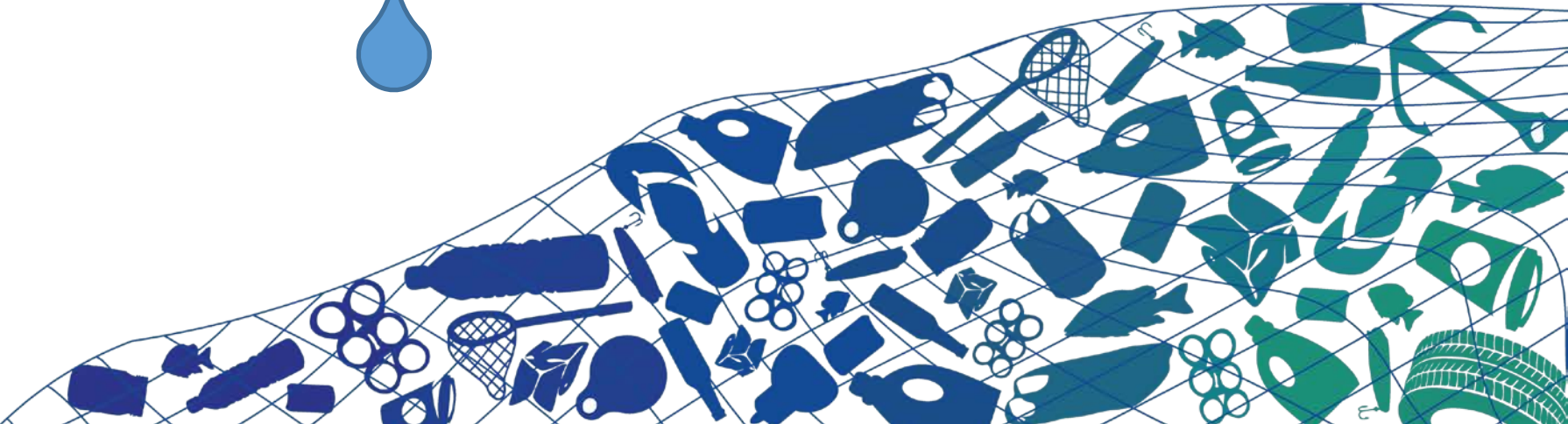
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## 5 Program Pillars:

- Prevention
- Removal
- Research
- Emergency Response
- Regional Coordination



# Prevention *is the ultimate solution*







# It can be difficult to talk about.



Photo Credit: Heal the Bay







Credit: NOAA permit #PH035317



Credit: Blow Witherington, Florida Fish and Wildlife Conservation Commission

Credit: Northwest Straits Foundation





Credit: SOLVE





# Messaging

- Keep it positive
- All comes down to *people*
- Global problem, local solutions
- Make it relatable
- *Everyone* can help







# Messaging

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The image is a vertical composition of two photographs. The left half shows a wide, light-colored pebbly beach leading to a clear turquoise ocean under a deep blue sky with wispy clouds. A lone figure is walking on the beach in the distance. The right half shows a calm body of water, possibly a wetland or marsh, with tall green reeds in the foreground and a dense line of green trees in the background. The water reflects the sky and the surrounding greenery. A white rectangular box with a black border is centered over the top half of the image, containing the text 'Bottom line: Hope.' in a teal, sans-serif font.

Bottom line:  
Hope.





# Behavior Change

- Inspire & empower people to take action
- Actions can be big or small
  - Reducing, Reusing, Recycling, Refusing
  - Joining cleanups
  - Actively spreading the word
- More than just informed
- Measurements





# Salinas River to the Sea Litter Program

- One Cool Earth
- Focus: *Reducing school waste*
- Students heavily involved
- School Waste Reduction Program:
  - Marine debris education
  - Lead students trained for peer mentoring
  - Campus-wide waste audit
  - Reaching 7,500 students during the 2016-2017 school year
  - Expansion of program







# Towards Creating a Social Norm

- Sea Education Association
- Focus: *Reducing single-use plastic debris*
- Student-designed program targeting behavior change:
  - Marine debris education in current program
  - Students create campaign to reduce single-use plastics
  - Community outreach and cleanups
  - Toolkit for students to take home





# Marine Debris Prevention through Art

- Washed Ashore
- Focus: *Raising awareness, getting students involved*
- Washed Ashore Project:
  - Marine debris art sculptures
  - Teacher trainings
  - Integrated Arts Marine Debris Curriculum







# Resources

- Curricula
  - Washed Ashore
  - An Educator's Guide to Marine Debris
- Outreach materials
  - Activity book
  - Posters
  - Bookmarks
- Other media
  - Videos
    - Trash Talk
    - Webinar for Educators
  - Photos & graphics
  - Songs
  - Other visuals



plastic bag → looks like → jellyfish

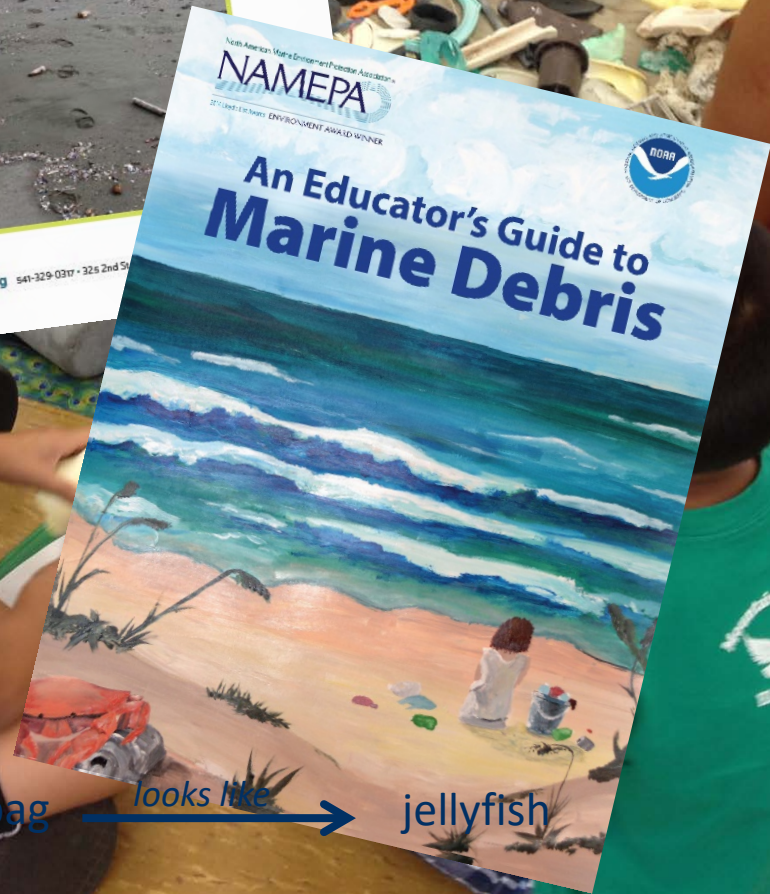
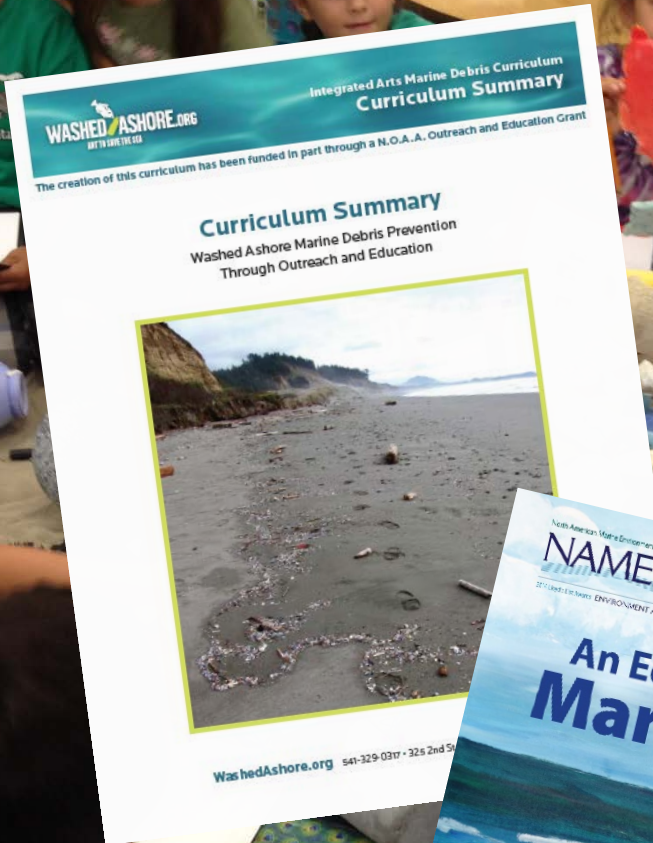
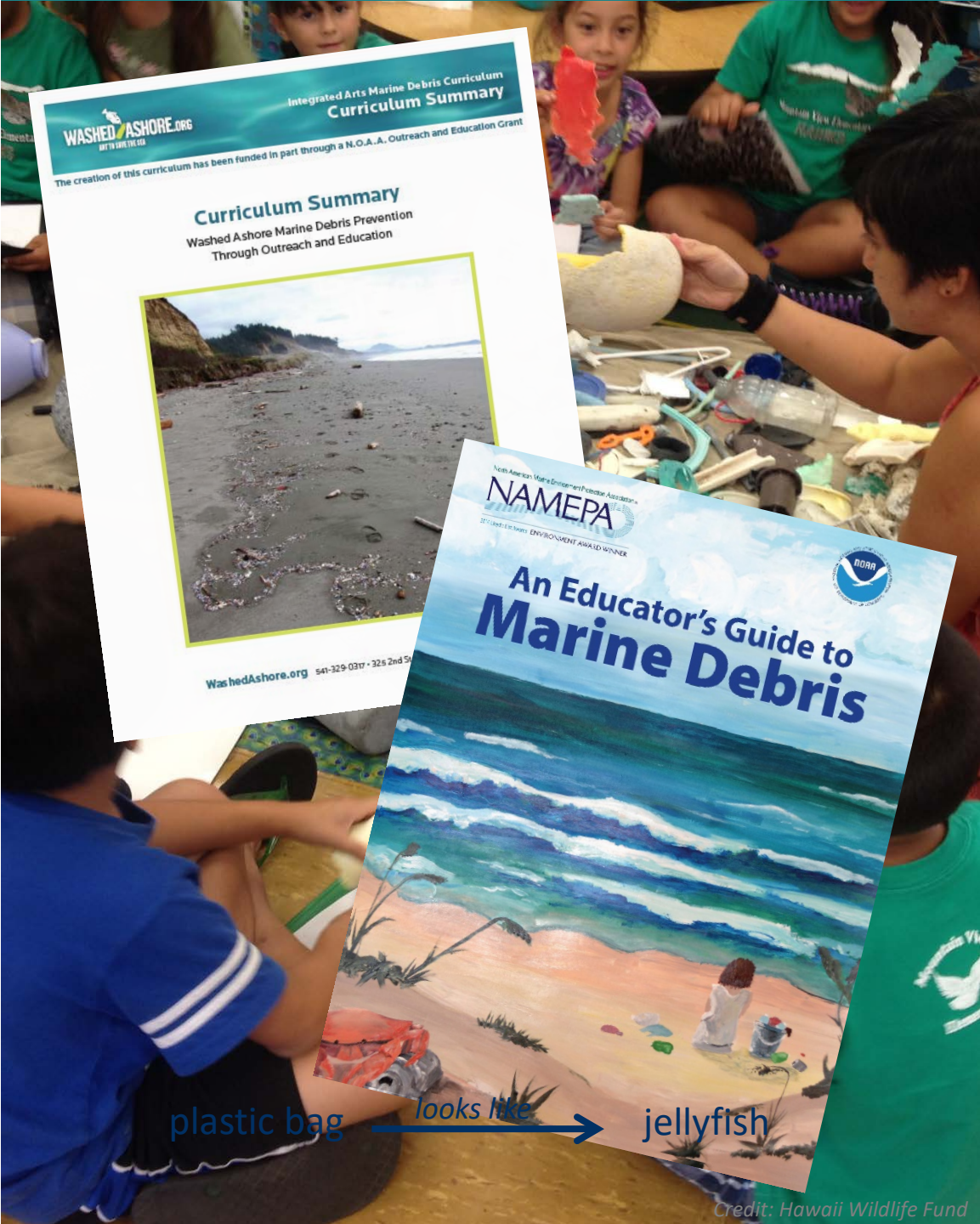






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**UNDERSTANDING MARINE DEBRIS**  
GAMES & ACTIVITIES FOR KIDS OF ALL AGES

NOAA

**WHAT IS MARINE DEBRIS?**

plastic bag

jellyfish

**DID YOU KNOW...**  
Marine life can become entangled and killed in ghost nets, plastic bands, and other types of debris?

Worldwide, more than 200 species are impacted by ghost nets like this.

www.marinedebris.gov





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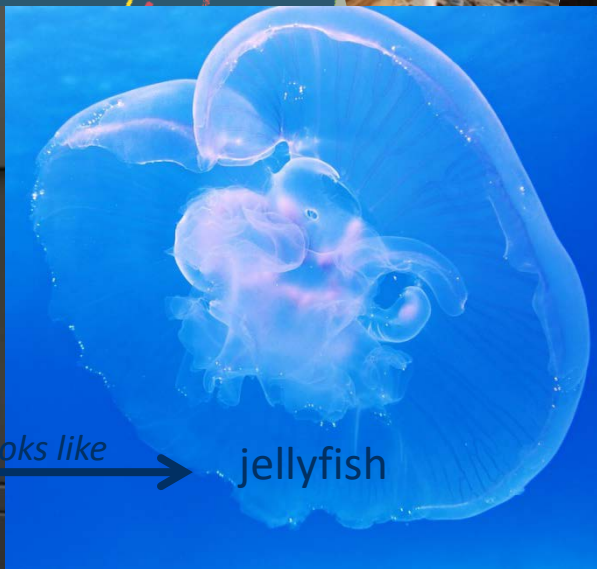


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**TRASH TALK Webinar**







# Activities

- Understanding the topic
  - Plastic is a deadly meal
  - Watershed model
  - Rubber band entanglement
- Making connections
  - Washed Ashore: What Goes Around Comes Around
  - Category brainstorm
  - Monitoring
    - Marine Debris Monitoring Toolkit for Educators





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## Marine Debris Solutions

### Team 1

- ~~cleanups~~
- ~~recycle~~
- storm drain covers

### Team 2

- ~~robot cleaner~~
- ~~cleanups~~
- bucket of lava

### Team 3

- outreach day at school
- ~~recycle~~
- ~~robot cleaner~~

### Team 4

- ~~cleanups~~
- ~~recycle~~
- refuse straws



# Marine Debris Toolkit

*for educators*

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Credit: Hawaii Wildlife Fund

We're still learning, too!







# 6<sup>th</sup> International Marine Debris Conference

- March 12 – 16, 2018 in San Diego, California
- Visit the 6IMDC website or email [info@6IMDC.org](mailto:info@6IMDC.org) for more information
- Call for abstracts coming soon



<https://InternationalMarineDebrisConference.org>





<https://MarineDebris.noaa.gov>

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