



Students for Zero Waste Week Presentation Notes

Brief notes & resources to help you present on Students for Zero Waste Week

SLIDE 1: Intro Slide

SLIDES 2-7: There is one global ocean system - visit National Ocean Service
<http://oceanservice.noaa.gov/facts/howmanyoceans.html>

The ocean covers 71 percent of the Earth's surface and contains 97 percent of the planet's water. More than 95 percent of the underwater world remains unexplored.

SLIDES 8 – 11: Thank You Ocean Report – “The ocean takes care of us. Let’s return the favor.” <https://sanctuaries.noaa.gov/education/tyo/>

“The ocean is a vital resource that provides food, water, commerce, recreation, medicine and even the air we breathe. Today, our ocean faces unprecedented threats from pollution, trash, declining fisheries and multiple impacts from climate change.”

For more information about the ocean, visit **National Ocean Service**, America’s coastal and ocean agency - <http://oceanservice.noaa.gov/about/>

SLIDES 12 – 17: National Marine Sanctuaries, <http://sanctuaries.noaa.gov/>
FAQs, <http://sanctuaries.noaa.gov/about/faqs/>
History, <http://sanctuaries.noaa.gov/about/history/>

The Office of National Marine Sanctuaries serves as the trustee for a network of underwater parks encompassing more than 629,000 square miles of marine and Great Lakes waters from Washington state to the Florida Keys, and from Lake Huron to American Samoa. The network includes a system of 18 national marine sanctuaries and Papahānaumokuākea and Rose Atoll marine national monuments.

SLIDE 18: NOAA - <http://www.noaa.gov/>
NOAA history - <http://www.history.noaa.gov/index.html>

The National Oceanic and Atmospheric Administration (NOAA) is a federal agency that is within the Department of Commerce. Similar to NASA, where NASA focuses on space and aeronautics, NOAA focuses on the ocean and atmosphere.

NOAA is concerned with the conditions of our ocean and atmosphere and informing people about the changing conditions around them. NOAA’s missions include:

- Science, Service, and Stewardship.
- To understand and predict changes in climate, weather, ocean, and coasts,
- To share that knowledge and information with others, and
- To conserve and manage coastal and marine ecosystems and resources.

NOAA's line offices include:

- National Weather Service
- National Marine Fisheries Service
- National Environmental Satellite Data, Information and Service
- National Ocean Service
- Office of Oceanic and Atmospheric Research
- Office of Program Planning and Integration

SLIDES 18-19: What will you find in a National Marine Sanctuary?

California National Marine Sanctuaries (an example of what you may find in a National Marine Sanctuary) - <http://sanctuaries.noaa.gov/about/westcoast.html>

Know Your Ocean:

<http://oceantoday.noaa.gov/knowyourocean/>
<http://www.whoi.edu/know-your-ocean/>



Earth is Blue: <http://sanctuaries.noaa.gov/earthisblue.html>

When you look at our planet from space, one thing is abundantly clear: *Earth Is Blue*. Our planet is an ocean planet, and whether you live near the coast or a thousand miles from it, the ocean is part of your life. From providing the food we eat to determining our weather, the ocean matters to each of us -- and the National Marine Sanctuary System protects this vital resource.

With that in mind, the photos and videos of Earth Is Blue bring these ocean treasures directly to smartphones and computers all over the world, where they can serve as a tangible reminder that no matter where you are, the ocean and Great Lakes are in your hands. We hope these images inspire you to help care for our ocean and to spread the word that Earth isn't green -- it's blue.

SLIDES 20 – 21: Introduction to Marine Debris

What is marine debris?

Our oceans are filled with items that do not belong there. Huge amounts of consumer plastics, metals, rubber, paper, textiles, derelict fishing gear, vessels, and other lost or discarded items enter the marine environment every day, making marine debris one of the most widespread pollution problems facing the world's oceans and waterways.

Marine debris is defined as any persistent solid material that is manufactured or processed and directly or indirectly, intentionally or unintentionally, disposed of or abandoned into the marine environment or the Great Lakes. It is a global problem, and it is an everyday problem. There is no part of the world left untouched by debris and its impacts. Marine debris is a threat to our environment, navigation safety, the economy, and human health.

Learn more about marine debris through NOAA's Marine Debris Program:
<https://marinedebris.noaa.gov/>

What is Marine Debris?

<https://marinedebris.noaa.gov/discover-marine-debris/what-marine-debris>

Where Does Marine Debris Come From?

<https://marinedebris.noaa.gov/discover-marine-debris/where-does-marine-debris-come>

SLIDE 22: What are Garbage Patches?

<https://marinedebris.noaa.gov/discover-marine-debris/garbage-patches>

Garbage patches are large areas of the ocean where litter, fishing gear, and other debris - known as marine debris - collects. They are formed by rotating ocean currents called "gyres." You can think of them as big whirlpools that pull objects in. The gyres pull debris into one location, often the gyre's center, forming "patches." The debris in these patches is found throughout the water column due to density differences between the items. Many people say that these patches float on the surface of the ocean, like an island of trash. However, in reality, these patches are similar to pepper flakes floating in the soup, some on the surface, some in the middle, and some on the bottom.

SLIDES 23 - 25: Microplastics

What are microplastics?

<https://marinedebris.noaa.gov/what-marine-debris/microplastics>

Our ocean and Great Lakes are polluted with a wide variety of marine debris, ranging from large fishing nets and abandoned vessels, down to the smallest plastic particles that can't be seen with the naked eye. These microplastics are found throughout the ocean and Great Lakes, and are small enough to be eaten by wildlife.

SLIDE 26 - 27: How Plastic Harms Marine Ecosystems

Why is marine debris a problem?

<https://marinedebris.noaa.gov/discover-marine-debris/why-marine-debris-problem>

Marine debris can cause a lot of problems for people, ecosystems, and our economy. It especially impacts wildlife.

SLIDES 28-30: What can you do to help?

NOAA Marine Debris Program: How to Help

<https://marinedebris.noaa.gov/discover-marine-debris/how-help>

There is no "one-size-fits-all" solution to marine debris, and communities around the country are affected by marine debris in different ways. Beach-side Floridian communities may be concerned with abandoned vessels, while in coastal communities throughout the Northeast, lost fishing gear may be more prevalent. If you live inland, trash in the ocean and Great Lakes may not be directly visible, but your community may still have a role in creating the waste that becomes marine debris. Finding solutions that work for your community makes the fight against marine debris more effective. By working together as a community, we can have a larger impact.

SLIDES 31 – 38: Zero Waste

What we do on land has a direct impact on our local watersheds and ocean. What can you do on land to better protect marine environments?

What is the definition of Zero Waste?

<https://zwia.org/zero-waste-definition/>

“Zero Waste: The conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning and with no discharges to land, water, or air that threaten the environment or human health.”

What can we do about marine debris?

<https://oceanservice.noaa.gov/education/tutorial-coastal/marine-debris/md07.html#:~:text=Refuse%20single%2Duse%20plastics%20by,or%20buying%20items%20in%20bulk.>

How else can we prevent marine debris?

<https://oceanservice.noaa.gov/education/tutorial-coastal/marine-debris/md07-sub-01.html>

SLIDE 39: YOU have the power to make a change...

Students for Zero Waste Week is an excellent time to inspire your students to make a difference in the overall health of the ocean. Melati and Isabel’s story is just ONE example of how students can make a difference in their community. Inspire your students to be the next example!

For more information on Melati and Isabel’s story, check out their webpage:

<http://www.byebyeplasticbags.org/>

SLIDE 40: Go Green. Think Blue.

Visit the *Students for Zero Waste Week* website:

https://sanctuaries.noaa.gov/education/ocean_guardian/zero-waste-week/

Students are inviting their local communities to "Go Green and Think Blue" by joining them in the annual **Students for Zero Waste Week** campaign. During this campaign, students focus on reducing land-based waste in order to protect the health of local marine environments. These young leaders are raising awareness of how single-use plastic and other types of litter affect the health of local watersheds, national marine sanctuaries, and the ocean. In addition, some schools are looking at ways to reduce their energy use on campus with hopes of raising awareness of how the burning of fossil fuels also impacts the health of the ocean.



We look forward to seeing what your students have in store for Zero Waste Week!
Go green, think blue!