

Land Uses & Water Pollution

Presentation Script

Slide 1, How do we use land? & what makes our water dirty?: Today we are going to talk about how we use up the land, and what makes our water dirty. Can you think of any ways before we get started? Write them down to tell your teacher later!

Slide 2, Why?: First, we need to ask ourselves “Why?”. Why should we keep our water resources clean? Why is it important?

Slide 3, Which one looks better?: Look at the photos. Would you swim in the water that you see in the first picture? Which one looks better? We want to keep our water clean because no one wants to swim in dirty water.

Slide 4, Would you swim here?: What about these photos? Would you go swimming here?

Slide 5, Home: The ocean, as well as inland blue holes (which effect our groundwater) is where many, many animals live. It is their home, just like how we live in a house. Would you want to live in a house full of garbage? No! If we pollute these water resources, we are not only harming the animals that live there, but also ourselves, because most of our freshwater comes from groundwater.

Slide 6, Food chain: Pollution affects all organisms, including humans! If the small fish ingest (eat) pollutants such as garbage or toxic substances like paint, and the bigger fish eat the small fish, then the bigger fish are also contaminated. If we fish for these bigger fish, then we may put ourselves at risk of eating contaminated fish! The arrows in this photo explain what we call a “food chain”, showing that we are all connected based on what we eat. Do you see that all the marine animals in this picture have ingested plastic.

Slide 7, Building: Let's talk about building. You may be thinking, "How would building affect water pollution?". Since we live on an island, a lot of our building sites are right next to the water, which can cause problems. What type of buildings create a lot of pollutants?

Slide 8, Types of buildings: These three types of buildings are major contributors to water pollution in The Bahamas. You may be wondering, how can Farms be harmful? Well, some farmers use toxic fertilizers that run-off into inland blue holes, oceans and even seeps into our groundwater resources.

Most of our Hotels and Resorts in The Bahamas are located directly on the beach or water. These resorts take a long time to be built, and before it becomes a beautiful resort, it is a construction site. Having a construction site so close to the water releases a lot of fossil fuels used to power cranes and power tools. These fossil fuels contribute to air pollution which falls back into the water through precipitation. Also, some hotels may dispose of their sewage too close to the water or in the water, which directly pollutes our ocean. When there are many tourists and other people at the resort or at the beach, some of them may even leave their garbage around the resort, which can eventually end up in our freshwater resources.

Finally, one of the biggest contributors to pollution are our power plants. These big power plants are built for us to have electricity, and burn huge amounts of fossil fuels that are released into the atmosphere. Power plants also store large amounts of oil. Sometimes, oil spills happen, which causes the oil to leak into the ground and straight into our groundwater. This is bad for our freshwater resources.

Slide 9, Sources of water pollution: In this diagram, we can see all the sources of water pollution and how they end up in large bodies of water such as our ocean. Some sources that we see are septic tanks, runoff from farms and more.

Slide 10, Let's help!: Now, let's talk about ways we can help keep our water resources clean!

Slide 11, The 5 R's: Let's talk about the FIVE R's: Reduce, Reuse, Repurpose, Refuse and Recycle. Instead of using the 3 R's, (Reduce,

Reuse, recycle), we have added 2 more R's. Following these 5 R's are ways that you and I can stop water pollution!

Slide 12, Reduce: We can reduce our use of single-use plastics by making changes such as using reusable bags and water bottles that we can use over and over again. The more people to make this change, the less plastic will end up in landfills and water resources.

Slide 13, Reuse: We can reuse items by crafting them into a new use. Such as using plastic bottles to make a pencil case, or glass jars for storage or even a soap dispenser! You can even make all of these yourself!

Slide 14, Repurpose: Repurpose items to make them last longer, such as plastic jugs, old shoes or old tires. Look at all the ways they have been repurposed in this photo!

Slide 15, Refuse: Refuse plastic items if offered them, such as plastic straws, plastic bags or plastic packaging. You can also refuse items that are made on certain farms or power plants that are improperly disposing of their waste. For example, choose natural farm products that don't use a lot of chemicals or pesticides in their farming.

Slide 16, Recycle: Although we do not have recycling here on Abaco, recycling has a big role in reducing mass plastic production. The process of recycling allows plastic and glass to get a new life, and look brand new, instead of having another individual bottle or other object made from scratch. We can also implement recycling to our power source by using renewable resources as a main source of electricity.

Slide 17, Refuse: Refuse! You can choose to refuse single-use plastics such as plastic straws, cups, and many more. Bring your own cups when going out so you don't have to use a plastic or styrofoam cup. Skip the straw or bring your own metal or bamboo straw!

Slide 18, What else can we do?: There are ways to continue building without it being as harmful to our water resources. This is called Sustainable building, meaning it is preserving our water resources so future generations will not be affected by our actions during building. Managing our waste disposal including sewage and household garbage can help with water pollution.

Slide 19, Being Efficient: There are many ways to implement sustainable building in new developments. The three main factors are choice of materials, energy efficiency, and water efficiency. Being mindful of the materials used in the construction and interior design of a building plays a big part of sustainability in building.

It is important to include energy efficiency, so that the building is not dependent on city power plants for electricity. Other forms of renewable energy include solar energy and hydroelectricity.

Using the same idea as energy efficiency for water is also important. Being cautious with the use of water and even harvesting rainwater can save millions of gallons of water from being wasted.