**Track 19**

 Our planet is in crisis. Record levels of pollution are disrupting the delicate and essential ecosystems on land and in the seas. Emissions from power stations produce greenhouse gases, which contribute to global warming and ultimately the long-term issue of climate change. A consequence of climate change is extreme weather, like cyclones and floods, which is becoming an increasingly common occurrence. To continue behaving as we are is not sustainable. We must stop polluting our natural world before the damage becomes irreversible, leaving all life on Earth facing extinction.

**Track 20**

1. Scientists say that more than 90% of all life on Earth is aquatic.

2. Oceanography, or oceanology, studies the physical and biological aspects of the ocean.

3. The word archipelago comes from the Greek words ‘arkhi-’ and ‘pelagos.’

4. Raja Ampat is an archipelago with extraordinary marine biodiversity.

5. Illegal poaching of animals continues to be a problem in protected areas.

6. The villagers have embraced sustainable tourism as a model for their future.

7. Humans have exploited marine resources for centuries.

8. Coral reefs are an indispensable, but also fragile marine habitat.

9. We all need to be guardians of the planet we live on.

10. Ecotourism conserves the environment and benefits the local people.

**Track 21**

As our fragile globe sprouts further cities and highways, and the global population continues its march toward 10 billion by 2050, it is easy to forget that more than two-thirds of the Earth's surface consists of a vast underwater realm of mountains, valleys, and plateaus that harbor a universe of life. Scientists estimate that more than 90 percent of all life on Earth is aquatic. Understandably, this world is invisible to most of us. But if out of sight means out of mind, then veteran oceanographer Sylvia Earle is here to remind us: “We need to save marine species as if our life depends on it, because it does,” she implores.

Perhaps nowhere else is this ocean call to action playing out with more passion than in an area of the western Pacific Ocean known as the Coral Triangle. The Triangle includes the waters of Indonesia, Malaysia, the Philippines, Papua New Guinea, Timor-Leste, and Solomon Islands. More than 75 per cent of the world's coral species are found here and thousands of species of reef fish find refuge in the coral gardens. Whales, dolphins, and sharks breed and migrate in these waters and six of the world's seven marine turtle species live here. In addition, more than 120 million people inhabit the area and depend on the coral reefs for food and income. The reefs also act as protection from storms.

In the Indonesian waters of the Coral Triangle is the aquatic galaxy of Raja Ampat, a remote ocean archipelago of forested islands that appear to float like green planets in a region of astonishing marine biodiversity. More than 1,500 fish species and 500 coral species thrive here. The variety of marine life is staggering. There are more kinds of fish and coral found here than there are bird species in the Amazon rain forest. Misool Eco Resort, a 17-bungalow adventure outpost constructed from recycled hardwood, is working to keep it that way. Built on a site formerly used by shark fin poachers, Misool demonstrates the power of sustainable tourism to save the seas. Since 2005, the resort has successfully protected 297,600 acres of vital marine habitat that was once the target of illegal fishing. Coral reefs had been dynamited and manta rays were harpooned.

Scientists have now recorded a 250 percent rebound in the fish population thriving amid healthy coral lagoons. Villagers who once exploited the reefs have now become marine guardians who understand the importance of protecting this unique natural environment. Flourishing ecotourism supports both conservation efforts and a brighter future for the local inhabitants of this spectacular water world.

**Track 22**

Restoring the Oceans to their Pristine State

By every measure, the scale of the Earth’s oceans is staggering. Oceans occupy more than 70% of the Earth’s surface and contain more than 320 million cubic miles of water. Over 1 million species of plants and animals live in the oceans, and scientists believe there may be as many as 9 million more species that we do not even know about. It is often said we know less about the oceans than we know about the Moon. These statistics inspire awe and, thinking about them, it is easy to get caught up in the wonder and beauty of our planet. However, equally jaw-dropping facts exist about marine pollution.

There are more than 5.25 trillion pieces of plastic in our oceans. Roughly 8 million tons more enter the sea each year, and this is just one of many different types of trash that threaten marine environments. Eventually, debris ends up in one of several “trash vortexes”, of which the Great Pacific Garbage Patch is the most famous. Occupying an area of more than 270,000 square miles, the gyre is constantly growing larger. Marine pollution leads to the death of millions of animals each year, and has also been linked to a variety of health problems that affect humans.

In 2011, Dutch teenager Boyan Slat got to thinking about these issues. While scuba diving in Greece, he realized that he was finding more plastic in the water than fish. He was alarmed, and began wondering what the solution could be. Many people told him that there was no solution. Slat decided to research the topic for a high school science project. He concluded that it would be possible to clean up the oceans, but that we were thinking about the problem the wrong way. Instead of chasing plastic pollution, we should wait for ocean currents to bring it to us. Then, we should catch it in specialized devices and remove it in bulk. Slat’s teachers were impressed, and he won an award for the project.

After Slat finished high school, he enrolled in an engineering degree. He decided to drop out of college and try to raise money for the technology he envisaged. Getting started was difficult, because no one wanted to sponsor him. Slat wrote hundreds of letters, but almost no one responded. At one point, Slat made a presentation at a local TEDx conference to promote the project. The following year he got a lucky break when a video of his talk went viral. He still doesn’t know what made people suddenly take an interest in him. All of a sudden, contributions started pouring in, as did offers from people who wanted to help.

In 2013 Slat officially founded The Ocean Cleanup. Together with a team of experienced oceanographers and researchers, his first step was to develop a series of designs for the plastic-catching devices he imagined. He also had to analyze wind, wave and ocean currents to figure out where the plastic could be most efficiently collected. These steps took several years. People criticized the project because progress was slow, but in response, Slat pointed out that nothing like this had ever been attempted before.

Over the next few years, Slat was able to raise more than $31 million for the project. In 2015, he finalized the model for the clean-up devices, each of which is 100 times bigger than anything else that has ever been installed offshore. The next step will be to trial the technology, with the goal of beginning a large-scale clean-up in 2020. Slat has a lot of work ahead of him, but his vision has already changed the way we think about marine pollution. If his technology is successful, restoring the oceans’ majesty may well be within our grasp.

**Track 23**

1. If I hadn't visited Brazil, I would never have understood the size of the Amazon.

2. If we had known you were free, you could've come on the trip with us.

3. I promise you. It'll be some of the most amazing coral you have ever seen.

4. If the ecosystem hadn't been protected, this species would've already disappeared.

5. If the open ocean belonged to a particular country, it might've been protected.

6. I'm not sure what happened. They must've got lost somewhere.

7. We should've said something when we realized they'd broken the rules.

8. If we'd understood the environmental impact, we wouldn't have gone.

**Track 24**

Jason deCaires Taylor, An Underwater Museum, Teeming with Life

In 2009, I moved to Mexico and started by casting local fisherman. This grew to a small community, to almost an entire movement of people in defense of the sea. And then finally, to an underwater museum, with over 500 living sculptures. Gardening, it seems, is not just for greenhouses. We've since scaled up the designs: ‘Ocean Atlas’, in the Bahamas, rising sixteen feet up to the surface and weighing over 40 tons, to now currently in Lanzarote, where I'm making an underwater botanical garden, the first of its kind in the Atlantic Ocean.

**Track 25**

Statement 1.

My community has pledged to reduce water consumption. Let me explain how our plan is going to work. First, we’re going to organize a public awareness campaign. Then, we’re going to give people incentives to save water. For example, households will win awards if they keep their consumption below a certain level.

Statement 2.

Mr. Mayor, can you promise that the beaches will be clean by this summer? I’m a local business owner, and the more trash there is on the beach, the fewer people will come. I’m very worried, because so far the number of visitors is down compared to last year.

Statement 3.

I didn’t realize the importance of conserving energy until I read up about climate change. Do you know how fast the ice caps are melting? I had no idea until I did some research. When I explained what I had learned to my family, we made a promise to use less electricity.

**Track 26**

1.

**A:** I think we should donate money to one of those organizations that helps endangered animals.

**B:** Great idea. Let’s do it.

2.

**A:** I’ve been thinking about that documentary we watched last night. I

had no idea how much trash gets thrown away.

**B:** Me neither. Beginning today, I’m going to start doing more recycling.

3.

**A:** I’ve been looking into it and it doesn’t look like buying a solar panel is very expensive.

**B:** Apparently, they’re not very difficult to install. I’ll help you as soon as I have time.

4.

**A:** Instead of going on a road trip this summer, why don’t we go hiking?

**B:** OK. I’ll research some options this evening and we can talk about it again this weekend.

**Track 27**

In the first photo, I can see a group of three people walking along a clean beach. I think they have been participating in a beach clean-up because they are carrying bags of trash and they are wearing matching t-shirts. In the third photo, I can see a girl, probably a student, who is giving a presentation. Maybe she is trying to raise awareness about a cause or is trying to encourage people to do something to help the environment. In my opinion, both of these activities are important ways to make a difference. I think all people should do something to help their communities. However, the specific activities people choose should be things that are a good fit for their interests and personalities.

**Track 28**

We know that aquaculture, or fish farming, has been practiced for centuries in areas of the world as far apart as Asia and the Amazon. That doesn’t mean it’s a good thing. It’s worth noting that older systems were not as destructive as the current methods of fish farming. Today, it is a dangerous practice and governments need to do more to control it.

First of all, fish farms are bad for the environment. The processes used in fish farming can contaminate and pollute the water. And they do other damage to the natural surroundings where they are placed. I don’t just mean that they are ugly to look at, though that’s true too, I mean they actually harm the ecosystem. Underwater habitats are being destroyed to accommodate these fish farms and that is unacceptable.

Secondly, as a source of income for local communities, fish farms can be unpredictable because various things can go wrong. Extreme weather can ruin entire farms, for example. In addition, fish in captivity are susceptible to diseases, which can spread quickly throughout the entire population of the fish farm. This can be devastating for small communities relying on aquaculture as their sole source of income. It also bears mentioning that fish farms have a seriously negative impact on the livelihood of locals who earn their living as traditional fishermen.

Finally, great concerns have been expressed about the disadvantages of farmed fish for human consumption. The problem is that these fish are regularly treated with antibiotics and other chemicals to prevent sickness within the crowded farms. Such chemicals could affect the health of people who then eat those fish.

I’m not suggesting that fish farming be banned, but it should be far more tightly regulated.