



**Biobased
Materials
Help Clean Up
Florida
Beaches**



It's hard to run a beach clean-up program when the majority of your clean-up supplies are plastic.

H2Oceans Beach Clean-Up, or H2OBCU, is a beach cleaning service for the Largo Florida area. H2OBCU has been cleaning up beaches in and around Largo since 1999.

Sunny Mitchel, head of the clean-up program, started picking up plastic bottles on the beach when she was 11 years old. On a Sunday trip to the beach, she noticed the amount of plastic accumulating with no recycling bins nearby. So, she organized a group of her friends and their parents to return the following weekend and pick up the garbage. And she's been doing it ever since.

H2OBCU, now officially a non-profit with 23 members, organizes group clean-ups with high schools, universities, corporate, and private groups. The groups are provided with clean-up gear, gloves, trash bags, and a light lunch by H2OBCU.

The Challenges

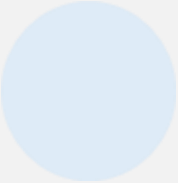
The groups from the universities are usually environmental science classes or eco-conscious student groups. They were not too happy to be picking up plastic and putting it into big black non-recyclable plastic bags.

Sunny heard one of the students saying that it was good to get the plastic off the beaches, but not in *these* kinds of bags.

"We were collecting all of this trash from the beach and ocean, but we were taking the trash to the recycling facility in non-recyclable, non-compostable bags," Sunny remembers. "The bags we were using were a huge part of the problem that we were trying to clean-up."

Summary

- The beach clean-up service H2Ocean Beach Clean Up was picking up plastics from the beach and placing it into non-recyclable, non-compostable plastic bags
- The disposable cutlery they used for group lunches was also non-recyclable plastic
- The disposal process was taking H2OBCU too long
- Natrl-Based Biotech provided compostable cutlery and recyclable heavy-duty trash liners
- H2OBCU was able to cut down on unloading time at the recycling facility, were able to compost the disposable cutlery, and acquired greater interest and donations for their cause



Even the lunches H2OBCU offered were causing some fallout. They used plastic cutlery, which they had to throw away and could not recycle.

Recycling Issues

H2OBCU was also feeling the stress of their trash bags at the recycling facility. After they spent a day collecting, separating, and rinsing off the recyclables, they had a two to three-hour drive to the nearest recycling facility.

When they arrived, they were told they could not bring in the loads because of the bags they were using. So, they had to move all of the bags out of their pick-up truck, empty them into the truck bed and drive the truck into the dumping area.

Sometimes, they had to do this several times a trip. Then it was another two to three-hour drive back to headquarters, where they had to then clean out the truck bed. This process was taking up considerable time for Sunny and her crew.

To add to that, people who lived near the H2OBCU headquarters started dropping off recyclables that they had collected for Sunny to take care of because they didn't know where else to take them. Eventually, Sunny had to borrow trucks to get everything to the recycling facility. It was costing a lot in time and gas for the trucks.

"We could never do two-day clean-ups back to back. That would cost us too much to get it all properly recycled," said Mark Fowler, Sunny's assistant.

H2OBCU was not able to expand their clean-ups along the west coast of Florida.


One day Mark attended a birthday party with his six-year old son and was introduced to a new product. The family had compostable cutlery, plates, and cups for the event. When Mark researched, he found a few brands of compostable products that they could use at H2OBCU.

Composting Issues

They had one of the university groups help them set up a compost station at headquarters. But none of the compostable cutlery they used was composting at all. After digging a little further Mark discovered that all of the brands he chose needed industrial level composting at the correct temperature. That was something he couldn't achieve with his "home-based" compost.

The Solution

Then Mark found Natrl-Based Biotech cutlery in another online search. He was reluctant to try another compostable product. But it guaranteed that it was "home compostable." That was something he had not seen before. Mark admitted, "With all of our attempts at composting the cutlery, we weren't sure if it was the products or us. It turns out, it was a little bit of both."



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Sunny Mitchel, H2OBCU

Natrl-Based Biotech Composting Assistance

Natrl-Based's website has tips on how to get the best results in your home-based compost. It walks you through what needs to be added to the compost to help break down the materials faster. There is a certain temperature that needs to be maintained, but it's nowhere near industrial compost temperature specifications.

After following the website instructions, H2OBCU had true compost in a few months. Since H2OBCU first started using the products, Natrl-Based has added the composting instructions to their packaging so their customers would know exactly what to do from the moment of purchase.

Along with compostable liners, Natrl-Based has a division that recycles plastics. They supplied H2OBCU with a line of heavy duty trash liners that are made from recycled water bottle materials. So, the bags are also able to be recycled.

The Results

The Natrl-Based cutlery works really well for the beach clean-up lunches. And the bags are easily accepted at the recycling facility. This allows H2OBCU to cut back on unloading time at the facility and have more time to arrange additional clean-ups. The groups are also happy that everything they are being provided with is either recyclable or made from biobased materials and is compostable.

The comments and references on social media by the organizations that work with them have increased their group requests by 35%. H2OBCU is now known as environmentally conscious for more than its beach clean-ups. And that has increased their donations by 45%. More and more companies want to join in to help clean-up local and far away beaches.

Excited by the increased interest, Sunny notes, "Thanks to our partnership with Natrl-Based Biotech, we have more volunteers and we're now able to expand the clean-up area further down the west coast. We're also planning some clean-ups on the east coast of Florida."

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Sunny Mitchel, H2OBCU



Natrl-Based Biotech produces biobased, compostable polymer resins made with wheat that is guaranteed to compost in a non-industrial compost within 3 months.

**The companies mentioned in this sample case study are fictitious.*