



SUSTAINABILITY INITIATIVES 2019 HEMPEL WORLD CUP SERIES MIAMI

With over 1,000 athletes, coaches, support staff, officials, and race management staff, US Sailing recognizes that the Hempel World Cup Series Miami has a huge impact on the environment and the Coconut Grove area. This year, US Sailing committed to limiting the negative environmental impacts of the event while working to establish sustainable practices that can be maintained long after the regatta is over.

As such, US Sailing, in partnership with World Sailing, incorporated an environmental focus at the 2019 Hempel World Cup Series Miami. Regatta organizers followed the Sailors for the Sea Clean Regattas Program. They focused on reducing single use plastics, reducing paper use, and creating more educational opportunities leading up to the regatta and during the event.

This document reviews the initiatives and sustainable practices put into effect at the 2019 Hempel World Cup Series. The paper includes suggestions for future Miami Olympic Class Regattas. Many of these lessons are applicable to other US Sailing Championships.

KEY ACHIEVEMENTS

- **72% of sailors said that the sustainability efforts enhanced the event.**
- **When asked if all future regattas would like to see a focus on sustainability, 88% responded that they would.**
- Achieved GOLD CERTIFICATION of Clean Regatta Programs, as designated by Sailors for the Sea
- 100% elimination of all single-use plastics at the Opening Ceremony
- 100% elimination of single-use plastics in lunches given to race committee and jury, and other Regatta officials/staff
- 250 re-usable lunch totes distributed to race committee and jury, eliminating single use plastic bags
- Over 1,450 re-usable water bottles distributed to competitors, coaches, race committee, jury, and volunteers, educating and encouraging people not to purchase single use plastic bottles
- 13 electronic monitors used to display notices, results, and jury decisions, reducing the amount of paper used.
- 730 people joined the Miami World Cup Event App
- 2500 Nespresso pods recycled from coffee served at the Home of Sailing.
- 7 nonprofit conservation and STEM focused organizations exhibited at the Education Zone during the Regatta Festival.
- > 850 pounds of trash picked up by 100 volunteers at the Coastal Clean-up Coconut Grove

Basic Regatta Stats

- 618 sailors from 59 countries. 312 women sailors. 50.49% of participants were women.
- 108 race officials total. 40.74% of race officials were women. Approximately 49% of race officials were local.
- 203 coaches registered. Less than 5% of the coaches were women.
- 18 judges. 22% of jury members were women.
- 46 motorboats and 1 catamaran sailboat used for race committee and support boats.
- 105 races run, including the Medal Races.
- Local Wildlife Sightings: flock of parrots, iguanas, manatees, American crocodile, and dolphins

REDUCTION OF SINGLE-USE PLASTICS

INITIATIVES

1. Eliminated all single use plastics at the Opening Ceremony, by using real dinnerware, stainless cutlery, reusable glasses, bamboo stirrers and paper napkins made of recycled paper. No straws were available.
Note: Excellent cooperation from Coral Reef Yacht Club.
2. Eliminated all single use plastics in lunches for race committee and Jury members
 - a. Utilized re-usable lunch bags. RC, jury members, and Regatta staff were given reusable lunch bags to keep.
 - b. Sandwiches, chips, and cookies were packaged in paper products
 - c. Coconut Grove Sailing Club outsourced lunches from Subway. Subway arranged for all sandwiched and cookies to be in paper bags. Race organizers delivered bulk chips and paper bags, as Subway could not supply chips in paper bags.Note: Excellent cooperation from both lunch vendors, Prime Marina and Subway.
3. Race Committee and Jury members utilized re-usable water bottles instead of single use water bottles. Organizers arranged for all signal boats to have 5-gallon jugs of water with dolphin pump for RC and jury to refill their bottles.
4. Competitors and coaches were given re-usable water bottles. Filtered water was available in 3 places at Regatta Park: 1 water fountain near boat washing station (this was a permanent park water fountain); 1 water station near the ramp supplied by US Sailing; 1 water station with 8 spickets near on the lawn at Regatta Park, also supplied by US Sailing.
 - a. The organizers did not supply water to sailors on the water. Almost every sailor had a personal coach on the water who refilled the sailors' water bottles.
 - b. It was each sailor's and coach's responsibility to use a re-usable water bottle. It was not possible to patrol the boat park or the coach's actions regarding single use water bottles. From the recycling bins, we know that some sailors relied on single use water bottles for hydration.
 - c. The 8 spicket water filter contraption was purchased the week prior to the event was extremely useful and can be disassembled into a small box for shipping. Possibly a better solution than water monsters, although there is no cooling mechanism for the water.

- d. Comment: Italian coach stated, “irrigation water” was being used for the drinking water and in previous years some of his sailors got “stomach disease.” While this is not correct, maybe we can do something next year to reassure sailors that there is no risk.
5. Tied country flags onto flag poles using Optimist Dinghy sail ties, thereby avoiding single use plastic zip ties. - Great exercise for CRYC sailors to contribute to the Regatta while learning to tie knots.
6. Banners: All banners printed from World Sailing were printed on recyclable PET material with water-based inks. In addition, 90% of the World Sailing banners did not include a year, location, or any event specific information; therefore, all banners can be re-used at future events.

Where single use plastics were not avoided / Tips for Future

1. Zip Ties were used to hang Regatta banners. In the future, this could be avoided by making sure that alternatives are readily available to staff hanging banners.
2. All US Sailing banners were made of vinyl and PVC-based materials. They were regatta specific; and therefore, not re-usable. In fact, almost all regatta banners were discarded since they were branded with the 30th Anniversary logo, year, and event name. In the future, if US Sailing is going to use single event use banners and promotional products, they need to print them on recyclable materials and dispose of them properly. Possible other solutions are to use screens to flash the logo and year, while keeping printed materials generic.
3. Food trucks were selling drinks in single use plastic bottles, and Bacardi was utilizing single use plastic cups at the festival. In the future, US Sailing and regatta organizers need to make it mandatory for all vendors to follow a “no single-use plastic policy.”
4. Other single use plastics came from take-out food containers, particularly from the Fresh Market down the street. Other plastics were from water bottles and/or Gatorade bottles. In the future, have more water stations. Also, provide coaches with easy alternatives to purchase bulk water from the regatta organizers for their coach boats. If a coach could easily purchase a 5-gallon jug with water pump, then they might use it.
5. The official Regatta water bottles and t-shirts were delivered from vendors in individually packaged single plastic bags. In the future, the person coordinating with suppliers needs to let them know ahead of time that the regatta has a “no single use plastic policy” and that the organizers prefer not to have items individual wrapped in plastic.

WASTE MANAGEMENT

INITIATIVES

1. Spread throughout Regatta Park and the Seminole boat ramp were a total of 25 waste stations. Each waste station had one recycling and one landfill bin. The recycling bin had pictures and words on the top of the bins noting what could and could not be recycled. Regatta organizers placed large signs on the bins stating, "NO FOOD." (*NOTE: We had 3 more recycling bins than we had landfill and these recycling were put near existing permanent landfill bins in the park.*)
2. Two individuals handed sorted these waste stations several times per day and every evening in order to ensure that recycling was not contaminated.
3. Waste bins were taken to a central location for pick-up by the City of Miami Waste. Five pick-ups occurred during the week.
4. 2500 aluminum Nespresso capsules were recycled at the Miami Beach Nespresso Recycling location. Nespresso separates the aluminum from the coffee grounds, recycling the aluminum and using the coffee grounds in compost.
5. All old/broken electronics from the Race Office were recycling through Best Buy's electronics recycling program, including a broken printer, old/out of date cell phones, and dead electronic wires used to charge trackers. Of the 3000ft of ethernet cable used for internet, 2900ft was recycled, and the rest was saved to reused next year.

TIPS FOR FUTURE / WASTE MANAGEMENT TROUBLE SPOTS

1. Almost all waste bins were contaminated. Contamination was due to the following:
 - In Miami, the recycling bins are blue, and waste stations are green. In most European countries, the bins are opposite in colors. So foreign sailors often mistakenly put the waste in the wrong bin by accident.
 - Many people were confused as to what was able to be recycled, even with the photos. For example, in Miami plastic bags and most plastic food containers are not recyclable. In Europe and other US cities these items are able to be recycled.
 - Many people actually did not care.

Solutions:

 - Staff each waste station with volunteers in peak hours.
 - Tape actual recycling items to the bins.
 - Have more Green Team members educating sailors and coaches during registration.
2. Communication with the City of Miami Waste Management to coordinate pick-ups was difficult in the beginning of the week and during the weekends. In the future, pre-schedule set pick-up times. OR have the city drop off large roll-on, roll-off dumpsters where volunteers dump the waste daily. Then the city picks up the large dumpsters at the end of the week. NOTE: all dumpsters will need to have a lock, particularly the recycling.

3. Next year, if we cannot record the amount of waste by weight, then maybe we can record it by volume, i.e. x number of bins with x gallon capacity.
4. There is no industrial composter in the State of Florida. The Green Team did meet with a local composter about composting the food waste. However, the composting company was going to charge a large fee to take the compost. In addition, they wanted to have their own team to sort through the compost for an additional fee.
5. The majority of waste on the ground from sailors consisted of bits of tape and scraps of lines. We, as organizers and leaders in sailing, need to create a campaign making sailor's aware of their bits of trash. Many sailors un-tape a ring ding and then drop the small 1-2-inch piece of tape on the ground, or on their boat which blows away. Many sailors cut the tips of their gloves off and left the plastic tips on the ground. Regatta organizers, with help from US Sailing and World Sailing could create a campaign similar to the "no straw" movement.
6. Some coaches requested nets so they could collect flotsam and jetsam while on the water. An idea for next year would be to have nets available to coaches and then a contest with a prize for the coach who collects the most trash.

PAPER REDUCTION

INITIATIVES

1. Online Official Notice Board Regatta
2. US Sailing Event App Utilization: This app sent notifications regarding fleet launches, posted notices, protest time limits, etc. The App also provided quick links back to everything on the "Official Notice Board". It was important that the App linked back to the "Official Notice Board" online, rather than duplicating the information. All official Regatta information was very accessible in multiple places.
3. Electronic Results/Notices Display: 13 electronic monitors were used to display results, notices, and jury decisions. Ten were located outside the Regatta Office, one at the jury office and 2 in the Home of Sailing. All wood used to mount the monitors was recycled and was saved to reuse in future years.
4. General Paper Reduction: All paper used in the Race Office was re-used from last year and was properly recycled afterwards. Approximately 2 reams of paper were used.

TIPS FOR FUTURE

1. This year each coach, race committee member, and jury member was given a printed set of sailing instructions. Next year, these should only be supplied on request. People should be directed to the app.
2. Create an electronic way to file protests.
3. Brainstorm different features for the app. For example, the app had a posting site. Some people were posting items for sale, etc. Maybe the App could have an official "site" for people selling items at the regatta and/or looking for boat transports, etc. This way the posting is kept more for the "Fans."

4. Create a “Fan” section for the app which shows the race course configuration, highlights sailors, etc.
5. Promote the use of the app to the general public. For example, did the Hempel guests know about the app?

CARBON EMISSIONS

1. This regatta did not gather much data on carbon emissions. There was no plan to offset the carbon emissions from the regatta. Known Information:
 - a. Approximately 40 containers of boats, team equipment, etc. were shipped from overseas to Miami.
 - b. The race organizers purchased approximately 1,100 gallons of gas for motorboats used by the Race Committee and Jury equating to 22,000lbs of CO₂e.
 - c. The total estimated # of motorboats on the water during the event is: 249 motorboats.
 - i. 46 motorboats and 1 catamaran sailboat were used for race committee and support boats. 48% of these motorboats were inflatable RIBS less than 6 meters in length and with low HP engines.
 - ii. 203 coachboats were registered for the regatta. (*NOTE: There were a total of 618 sailors.*) The majority of coachboats were inflatable RIBS with low HP engines.
2. The majority of carbon emissions most likely occurs from the personal travel/flights of competitors and coaches, an activity necessary to compete in different regattas. One idea for the US Sailing Team is to calculate the approximate carbon emissions of the team every 6 months to 1 year. (Maybe just choose the carbon emissions from flying.) Then the US Sailing Team can approach a sponsor / partner to offset these emissions. In exchange for offsetting the carbon emissions of the US Sailing Team, the partner would also make a donation to the team. It would be very interesting to track the carbon emissions of the team’s flights and not too difficult.
3. Many competitors commented on the fact that several race committee boats were powered by boats with multiple, high-horse powered engines. They were surprised that the regatta with a sustainability initiative would allow boats with large carbon footprints. In the future, the regatta organizers should try to recruit boats with smaller engines, or possibly use sailboats as finish and starting vessels. Maybe the regatta organizers could mandate a max HP for hospitality/official boats.
4. World Sailing should consider limiting the number of coach boats allowed per country/team, as they did at the 2018 Aarhus Combined World Championships. They may also want to consider having set coach boats for each course or consider changing the coaching regulations during regattas.

EDUCATION / COMMUNITY ENGAGEMENT

INITIATIVES

1. Public Discussion: Ocean advocate and skipper Emily Penn presented "Navigating Our Way Towards a Plastic-Free Ocean" on Saturday, January 12th at the Coral Reef Yacht Club. This event, open to the public, was sponsored by US Sailing in partnership with 11th Hour Racing and Coral Reef Yacht Club. Approximately 35 people attended this engaging talk.
2. Coastal Clean -up: On Sunday, January 13th, US Sailing Partnered with VolunteerClean-Up.org to host a Coastal Clean-up of Coconut Grove mangroves and parks. Approximately 100 individuals collected over 850 pounds of trash from the mangroves lining Kennedy Park and Prime Point Marina. While the sailors and volunteers dragged a few large objects from the water, a significant portion of the trash collected was made up of microplastics, including fragments of plastic, straws, and bottle caps.
3. Education Zone at the Regatta Festival - During the Regatta Festival on Feb. 2nd and 3rd (2 days), six regional organizations (listed below) conducted live engagements through mini-exhibits and interactive displays. These organizations focused on environmental / conservation topics, as well as STEM activities. The Coconut Grove Sailing Club junior sailors and the Coral Reef Yacht Club junior sailors both came to the Education zone and went through the circuit of activities. Other local children also visited the booths.
 - a. US Sailing REACH Activities
 - b. Miami Waterkeepers
 - c. Surfrider Foundation Miami Chapter
 - d. Rescue a Reef, University of Miami
 - e. Canes on Canes Climate Change, University of Miami
 - f. Women's Club of Coconut Grove
 - g. TropicSport, (Reef safe sunscreen)
4. Sign-Up Genius: US Sailing utilized sign-up genius to recruit volunteers and engage the local community. Volunteers signed up to assist with the Race Office, drive motorboats, and help with the Green Team. Twenty-three volunteers from the community signed up to help. The majority of people signed up to assist with the race office. The Sign-Up genius was sent out to those who had signed up for the Coastal Clean-Up, a select group of community leaders, including city officials, and a large neighborhood group through the Nextdoor website.
5. Educational Banners: World Sailing created and paid for the following three large educational banners which were posted at the competitor tent: Sustainability Tips for Sailors; Sustainability Steps for Support Boats; and Information on the new re-usable bibs made of recycled ocean plastics. NOTE: The "Sustainability Steps for Support Boats" was a new infographic created by the Miami regatta green team with input from World Sailing's Coaches Commission.
6. Website: The website incorporated information on sustainability tips for coaches and sailors.

TIPS FOR FUTURE

1. In order to involve the community in more of the public activities, the race organizers need to start planning six to nine months prior. Dates for the Emily Penn discussion and the clean-up were decided only about two weeks prior to the actual events. With more planning, the notice could have been sent to many more people and organizations. In addition, with early planning regatta organizers may have been able to publicize the event with school groups. NOTE: Many students need volunteer hours to graduate and this event would be a great way to get the hours.
2. Make the clean-up an annual event occurring on the same weekend every year, so that people and groups can make plans. Start publicizing the clean-up far in advance. Continue to partner with VolunteerCleanup.org.
3. Education Zone: Re-think the Education Zone and its purpose.
 - a. What is the purpose of the Education Zone?
 - b. If the goal is to expose youth to STEM activities and environmental concepts, then it might make sense to have the Education Zone take place during the week, when school children can have planned visits. If it makes more sense to keep it only on the weekend, then contact city youth groups (YMCA, community centers, etc.) months in advance to plan set-times for visits. Many of these groups will need months of advance planning to coordinate transportation, field trip waivers, etc.
 - c. Recruit more organizations which have high profile interactive exhibits. There was an opportunity for the Frost Science Museum to bring one of their outreach projects, but they were going to charge a fee. However, paying a small fee to the Frost Science Museum for a very cool, fun activity might create more draw for the entire festival, plus the Frost Science museum has multiple channels for publicizing the event.
 - d. Publicize the Education Zone EARLY and create partnerships early – nine months ahead of time minimum. Focus on person-to-person meetings with high profile organizations who add value not only to the attendees, but also to the regatta.
 - e. Recruit a high-profile speaker with broad community appeal (such as Emily Penn), to be at the regatta. In between videos of racing, the speaker can say a few words. A high-profile sailor speaking about an interesting topic may draw in more people.
4. The Sign-up Genius was a good way to recruit volunteers and engage the local community. If sent out earlier and to a deeper list of people, including more community groups, then the opportunity to recruit more volunteers increases.
 - a. By involving community members as volunteers, the regatta organizers expose more locals to the regatta activities.
 - b. More specific descriptions of what volunteers would be doing should be included on the sign-up genius. A few times volunteers came and there was not much for them to do. A more thought out plan for volunteer use needs to be created.

- c. Note: Not having been to the regatta when it was held out of Regatta Park, I was really not sure where volunteers would be needed. Going forward, I think that there could be more volunteers on the set-up days and take-down days. I would have each department think through where volunteers might be needed. Having done the Green Team. I would try to recruit more people to volunteer at the end of the day for the following jobs: 1) General clean-up of grounds; 2) putting away tents; 3) coiling hoses; 4) pulling trash cans to side for pick-up; 5) placing one volunteer at CGSC to assist with trash duty there; tracking water meters, which I think should be put on all hoses next year on the set-up days; 6) possible table every evening next to where people turn in their tackers or next to the ramp, which shows EXACTLY what can and cannot go into the recycling bins.
5. Bring in city officials to give out the awards at the regatta.
6. Create more educational infographics which can be re-used every year and/or donated to local organizations. The Infographics provided by World Sailing could easily be printed on recycled cardboard and displayed at the Regatta Office area.

OTHER ACTIONS

INITIATIVES:

1. Wetsuit Drive: Sailors donated twelve wetsuits and three sets of wetsuit booties to SugaMats, a California company making yoga mats out of recycled wetsuits. This was a new initiative, sponsored by World Sailing. World Sailing purchased yoga mats to give out as prizes to those who donated wetsuits. The sailors who heard about the wetsuit drive were quite interested and were extremely receptive to the concept. Due to lack of communication from Sugamats, there was some doubt whether they would take the wetsuits, so the notice to sailors was put out quite late. Again, earlier organization and more publicity would have probably generated greater interest and more donations. In addition, there was a last-minute effort to partner with the local kiteboarding shop to collect old wetsuits, which again, needed to be in place much earlier. All in all, the wetsuit drive was a successful experiment and should continue in the future.
2. Bow stickers: The regatta decided to test biodegradable bow stickers made of sugar cane on three of the fleets. The advantage of these stickers is that they are biodegradable if they fall into the oceans. These stickers did not stay attached to the boats. As a result, the three classes trialing the stickers did not use bow numbers during the regatta. More research needs to go into biodegradable bow stickers.
3. Fuel Spill Pads: Regatta organizers tried to purchase fuel spill pads at a discounted rate to give to all coaches and RC boats. In the end, the fuel spill pads were expensive, and the discounted ones could only be purchased by a municipality. In the future, try to get a sponsor to donate fuel spill pads or negotiate a purchase at a discounted rate. Does US Sailing have connections with West Marine or Boat US, or one of these larger companies?
4. T-shirts for Competitors, volunteers and Green Team: Try to partner and purchase shirts from a company who follows sustainability practices in their company. Ideally, all shirts would be purchased from a supplier who makes products out of recycled plastic or recycled fishing nets, or post-industrial recycled cotton. One potential partner is [Evolution Generation \(EGEN\)](#).

5. Wood use: The TV's were mounted on made from Oriented Strand Boards (OSB). OSB material is made out of large wood shavings glued together with resins and wax. OSB does not need old growth trees to be produced, and generally contains less formaldehyde than plywood. Several 2x3 wood pieces were used but were saved to be re-used next year.

OTHER LESSONS LEARNED / FUTURE THOUGHTS

1. Create stronger, lasting local partnerships for Education Zone, regatta festival, and regatta in general. Meeting with potential key partners in person is important.
2. Start earlier on all publicity. Create a nine or minimum six-month publicity plan for the regatta. Possibly hire a local agency to assist.
3. Maintain contact with local composting company, in hopes of enlisting their support at the festival in the future.
4. This year's regatta missed the mark on one of their goals: "Empower the local sailing clubs to incorporate environmental initiatives into their clubs through education." The Green team did work with CRYC to audit some of their club activities, and two local sailing youth programs attended the Education Zone. However, the Green Team did not have a great plan to educate all of the clubs in the region. Looking back on this goal, there should have been direct communication with more of the club managers and sailing directors. Also, I am not sure that this goal makes sense for future events, as the regatta could have more impact on the local community as a whole.
5. Create a formal plan of recording wildlife, especially manatees, including timings and locations. This information could be relayed to coaches during the week to make them more conscious of their RIB speed and driving near the boat ramp and in the harbor.

POST EVENT SURVEY

A post event survey included some questions on sustainability, as well as various supportive comments the overall statistics summarized below:

