

## Blue Flag USA Report Shadowing FEE Mexico in Cancun, Mexico

### Executive Summary

The Blue Flag Award program is an international program operated by the Foundation for Environmental Education (FEE). The Blue Flag program's main tenant is promoting sustainable development through environmental education at beaches, marinas, and tourism boats. The Blue Flag program has been in existence since 1987 and started operating internationally in 2001.

The Blue Flag program in Mexico is run by FEE Mexico. FEE Mexico established its Blue Flag program in 2012. The Blue Flag program started in 2012 with five beaches. Staff initially focused and developed the beach award before moving to tourism boat operators and marinas. In 2021, the Blue Flag Award was given to 60 beaches in Mexico. Beaches in Mexico participate in a year-round or 12-month Blue Flag season.

Four municipalities hosting eight Blue Flag sites are in and around Cancun in the Quintana Roo state of Mexico. Staff visited Playa Del Nino, Playa Delfines, Playa Las Perlas, Playa Norte, Playa Centro, and Playa Punta Esmeralda. Staff also went on a sailing trip operated by a tourism boat operator with the Blue Flag award.

### Conclusion Review

### Introduction to Cancun Beaches

#### Playa Del Nino

Playa del Nino is a fairly long but not wide sandy beach with some rocks in the water. It has predominantly calm water and includes buoys to protect those swimming in addition to the lifeguard stand. Visitors are mainly locals as the beach is in the downtown area of Cancun, specifically children. The municipality of Cancun has engaged with the local art community to provide murals at several sites which depict a relationship with the coastal environment. Playa del Ninos is bounded by the bathrooms on the right and a cement wall on the left.

Information Boards are the main focal points of any Blue Flag beach. Mexico has a standardized format of three panels. Information on Panel one includes beach profile and morphology information, safety, and swimming recommendations. On the main second panel, is the map and Blue Flag program information. Mexico has also included a COVID sticker with protocols for before you arrive and once you reach the beach. Finally, on the third panel information on the local environment and code of conduct are included. These signs are double sided with the same information on each side.

While beaches along the coast of Cancun are similar, they differ in the flora and fauna interacting with the sites. Each environmental panel depicts three species which can be found predominantly at the site as well as the environmental activities visitors can participate in. Playa del Nino's large youth population influenced the murals around the bathrooms. The artist used a cartoon style with lots of colors to represent the ocean is our home. You can see the metaphor represented as fish with doors and windows. The municipality of Cancun also utilizes small square signs along the beach to inform visitors of the code of conduct. These signs are in Spanish, English, and Mayan.

Water Quality lab certificates must be posted on the information board along with the most recent test result. These are taped to the board and updated monthly. Playa del Nino has one sampling site represented on the information board. Water quality is tested monthly.

Beach management at Playa del Nino is conducted by the many staff members who are at the site each day and overseen by a supervisor who reports to the Blue Flag principal in the municipality. Staff includes bathroom attendants, lifeguards, kiosk attendants, and facilities management personnel. FEE Mexico has created template stickers to further the brand at each site for the ease of waste management. There are stickers for recyclable waste, organic waste, and inorganic wastes. Bathrooms include stalls, changing areas, and showers. Cans for waste are typically included every 100 meters along a site.

The services at a Blue Flag beach set it apart from other beaches. All Blue Flag beaches have a kiosk to aid in brand awareness. The kiosk has a booklet of information about the Blue Flag process and staff can answer questions about the beach services, the local community, and more. During covid, many kiosks were outfitted with temperature scanners and hand sanitizer for those entering the beach. Staff is also trained to help people with limited abilities use the beach wheelchairs and keep people from using the spaces dedicated for limited accessibility use. The Palapas or built umbrellas found all around Cancun are free to use at the Blue Flag beaches. Playa del Nino also features a playground made of recycled materials.

Lifeguards wear the international yellow and red colors. They also have raised platforms to view the entire beach. They use the daily reports and visual observations to determine which flag to raise. On the day of our visit, there was a yellow flag indicating caution for an area which had exposed rocks and a green flag farther down the beach indicating a safer rock-free location. Lifeguards have a kit with them for minor emergencies and each site has a first aid stabilization area and emergency parking zone.

## Playa Delfines

Playa Delfines is the largest Blue Flag beach in length and width. It is well known as it hosts the iconic Cancun sign. It can see anywhere from 6000-7000 visitors a day. It is a multi-tiered beach with access from the main road through the Hotel Zone. This beach can see more wave and current action due to its positioning. This also means there are more sargassum deposits at this location. Many signs, vegetation, and buildings were damaged in Hurricane Maria. Signs were being reprinted on a PET material which would be stronger and more flexible in the wind. Playa Delfines is not bounded and utilizes signs posted permanently on the beach to indicate the end of the Blue Flag site.

Playa Delfines has different species listed on the information board. Here you can see much more flora than at Playa del Nino. Though much was lost during the hurricane. You can also see Iguanas on the beach sunbathing. As one of the widest locations in Cancun, Playa Delfines is the location for the community's turtle nest coral. All nests are relocated to this location with the date, species, and number of eggs. The number of nests went up dramatically during the pandemic. Staff is split into two 12 hour shifts to watch and report turtle nests to the environmental agency who handles the renesting.

Playa Delfines has three water testing sites which are monitored once a month. This site receives more sargassum and staff is on hand to rake excessive accumulations.

Waste receptacles are more spread out and frequent at this location due to the number of visitors. Bathrooms are located in the middle of the beach near the main access points and limited ability access ramps. Staff are located near the bathrooms to remind visitors not to use soaps or shampoos in the showers, help in the bathrooms, and keep water use down.

Lifeguards are present at the beach and a first aid station is located near the emergency parking spot at the top of the beach. Free Palapas are provided as well as a limited access area for wheelchair users and their families. There are several small playground areas.

## Playa Centro

Playa Centro is an iconic tropical beach with white sand and clear turquoise water. It is located on Isla Mujeres and can only be reached by boat or ferry. It is a medium length and wide beach with very little height change. Access to the beach is from the sidewalk and the beach has no physical boundary but uses signs. Here restaurants and businesses are built onto the beach.

Playa Centro as an urban beach has little flora except palm trees. It is home to several bird species displayed on the information board.

Water quality is tested once a month from one location.

## Playa Norte

Playa Norte is similar in profile to Playa Centro. It is a long strip of beach with several restaurants and beach clubs hosting umbrellas and lounge chairs leading up to the main wider area. To get around Isla Mujeres visitors can walk, ride bikes, take a taxi, or rent a golf cart. Because access is limited to the island by ferry or private boat there is a high concentration of visitors in this area due to the clubs and restaurants offering food.

All Blue Flag beach criteria are met within the boundary. This includes an information board at the main access point, water quality testing, and beach activities. Waste containers are located inside and outside the beach. There is a lifeguard stand at the main beach access.

### Playa Las Perlas

Las Perlas is a small urban beach located in the hotel zone of Cancun. This beach experiences a medium to large amount of seagrass and sargassum collection. It is bounded by a marina on one side and small strip of beach on the other. The profile is a low-grade slope with no dunes and little accompanying current.

Las Perlas utilizes several different signs to inform visitors of information. There is the primary information board, a board informing visitors of special activities related to Blue Crab spawning, and signs at the showers reminding users to limit water consumption.

Water quality is tested at one point once a month.

Waste management follows other beaches in the municipality. Additionally, seagrass and sargassum waste is dried at this location. Drying the grass allows the sand to be saved and returned to the beach while the grass is taken to a processing plant to be recycled into other products. Bathrooms are available for limited ability users and attendants are available if any help is needed in using showers. An area which is wheelchair accessible is located on the left of the beach. Palapas are available as well as a workout area. Urban beaches are often closed at night and staff watch for people who may be entering drunk, disoriented, or not belonging at the beach. When services are not available 24 hours, the times must be posted on the information board.

There is a lifeguard on duty and a buoy system to protect swimmers from the marina. This beach does not experience a lot of tides. The main concern is children, but the buoys are set at a waist height to limit injury or threat.

## Introduction to Playa Carmen Beaches

### Playa Punta Esmeralda

Playa Punta Esmeralda is located an hour outside of Cancun in Playa Carmen. It is a flat beach surrounded by mangroves. It has dense vegetation, issues with sargassum, and a natural freshwater cenote. The beach and cenote make it a popular place to visit for both locals, visitors to riviera resorts, and those visiting Cancun.

Punta Esmeralda has the largest information board and kiosk located at the entrance to the beach. Information covers the cenote and the mangroves. They use signs and rope to keep visitors off the areas of dune they are trying to recover. This location also has an educational activity hut where they put on activities for visitors. During a normal season an activity can span hundreds of children or the 5-10 visitors that will stop to hear more from staff. This location dries the sargassum then removes the sand and uses it to naturally build back dune barriers to prevent overwash and flooding from the mangroves which impacts the beach water quality. Punta Esmeralda is bounded on either side by open beach and uses signs to mark the boundaries.

Water quality is tested at two locations. One in the marine beach where the highest concentration of bathers is and one in the freshwater cenote. This is done once a month and the previous month's report is dropped off when the tester comes to the beach. The test information includes all the lab certifications, the type of test used to derive the results, which certificates apply to those tests, and the results.

Sargassum is such a large issue staff is on hand all day to remove the large quantities. This site has 28 staff for the removal of sargassum by hand. This includes coastal raking, staff removing the natural waste to the drying area, and staff replacing dried sargassum to the areas for renourishment. Sargassum is left on the sand and is used to limit the erosion on the curved side of the beach. Due to the mangroves being so close to the beach, wildlife is present and signs are spread around the beach reminding visitors to not feed animals and what wildlife they may encounter.

This site is remote but offers bike racks for visitors. Bathrooms were specifically constructed by recycled materials to comply with criteria. All walkways are wheelchair accessible and staff who is trained to help limited ability individuals have shirts with this designation. Cigarette butts were identified as a problem. Containers were put in but people did not know what they were. Little cigarettes were added to the top to be eye catching. Staff still noticed visitors were lazy and would not use the containers. Kiosk staff recommended using plastic bottles collected in the recycling bins at each palapa as an ash tray. This has worked very well.

Punta Esmeralda has a lifeguard and open first aid station. There is a reserved parking area inside the beach for emergency personnel and handicap vehicles. They have 3 kinds of beach wheelchairs available, palapas, and picnic benches with umbrellas close to the water.

## Operational Experiences

### Introduction to Tourism Boat Operator Awards

#### Cancun Sailing

Cancun sailing is the first tourism boat operator in Mexico to receive the Blue Flag award. They currently have 29 boats awarded and are looking to add at least 5 more next year. Boats have

their own sets of criteria but still must offer education, manage waste, and protect the environment they interact with in their tours. During a normal year, visitors are 33% European, 33% Mexican, and 33% United States visitors. During the pandemic it was 50% Mexican and 50% United States visitors. In addition to the Blue Flag award, Cancun Sailing has committed to reducing human trafficking by participating in the Code.

Each tour is different and can include anywhere from 15 people on a small vessel to 100 people on a larger vessel. Most of the boats awarded with the Blue Flag can accommodate 30 people. The trips include security briefings, information about the most common flora and fauna, and staff is briefed on local cultural sites.

Our tour started with covid safety protocols and a tour of the offices and recycling areas. There are spaces for government mandated separation and for any harmful substances like oils from the boats. They have worked to contain and connect their bilge pumps to the community pipes so that black water is disposed of properly rather than dumped in the water.

The check in area has a small shop and restaurant. You can find blue flag information here and staff can talk to you about the program. If your tour involves scuba, snorkeling, and swimming staff is trained to ask that you use biodegradable sunscreen and put it on before you board so it has time to absorb before you enter the water. Staff aboard boats also keeps an eye out for reapplication. Boats are now equipped with reusable glasses rather than single use plastic cups. Each boat has a sticker similar to an information board.

Cancun sailing also participated in educational campaigns about behaviors visitors could take to benefit the ecosystem. These flyers included water saving measures, electricity use reductions, and more. They assigned sea life mascots to each and asked visitors to submit and vote on names for the mascots.

The process for tour boat operators is different from beaches in several ways. However, this was a great first experience in seeing how the Blue Flag award can cross the land ocean boundary. Boat experiences allow you to interact directly with the ocean aspects of conservation rather than learning from the land. It is also incredibly heartening to see a local private business and staff so dedicated to preserving the ecosystem that provides them income.

## Operator Training

Beach managers participate in 2-4 webinars in the beginning of the candidacy process. Training continues on a one-on-one basis after. Mexico has found it is harder to track criteria if it is only asked for once a year. Therefore, they have created a series of forms to gather information throughout the year. As many of Mexico's beaches operate their Blue Flag programs year-round, asking for materials once a year did not provide enough depth nor engagement. Virtual binders include environmental education activity reports, minutes from Blue Flag committee meetings, Beach Litter Measurement reports, a benefits survey, and Water Sampling Calendar with results.

Mexico requires, above the international standards, one education activity a month, since the program operates all year. A calendar of activities planned for the year is included by the managers. Forms for education activities include all questions from the application and requires photos to be attached. The information provided allows operators to remember in more depth the activities and gives the national operator content for their media.

Any time the committee satisfying criterion 12 has a meeting with items related to the Blue Flag operations minutes related to this discussion would be submitted. This verifies there is a committee, they are aware of and support the Blue Flag program principles.

Benefit surveys are split into two types. First, those done by site staff with the public and second, questions to managers about the benefits they are seeing from running the program. Responses show growth between years, collect public opinion, and provide content for national operator media. FEE Mexico provides the questions to ask the public to provide continuity between sites.

## Beach Litter Measurement System

The Beach Litter Measurement System (BLMS) is a grading system for how clean a beach is at a given point. This tool is looking for waste not natural debris. The process is outlined in Appendix F in the explanatory document. Below is a simplified set of steps based on the Mexican model.

1. Lay out and secure the rope grid.
2. Pick 20 squares.
3. Sift the surface sand around with your hand. This is just a cursory search of the top 5 cm of the area.
4. Remove any large debris or obvious microplastics.
5. Sift through sand down to about 20 cm.
6. Remove any large debris or obvious microplastics.
7. Take a picture of waste found.
8. Record the materials found in the measurement form. Submit to monthly binder folder.

This system does not need to be done every day. It should be used to create a baseline, identify areas of improvement, and then track progress.