

# Plastic-free Paradise

Tackling marine  
plastic pollution  
in the hotel industry

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# Executive Summary

Plastic pollution poses a significant threat to our planet, with the hotel and tourism industry playing a crucial role in combating this global issue. The industry's extensive use of single-use plastic, coupled with its proximity to coastal areas, contributes to the vast amounts of plastic waste that end up in our oceans and beaches.

Marine plastic pollution not only harms the environment but also poses a growing threat to the tourism industry itself. Pristine beaches are an attraction for tourists, but the presence of plastic pollution compromises the appeal of these destinations and it impacts local authorities' ability to maintain clean beaches.

To shed light on the relationship between tourism and plastic pollution on the seafloor, expeditions were conducted in renowned tourist destinations, including Copacabana and Ipanema beaches in Rio de Janeiro, Cancun and Playa del Carmen in Mexico, Mallorca and Valencia in Spain, and the Florida Keys in the United States. All of these beaches are in close proximity to marine areas characterized by rich biodiversity.

By conducting the surveys, we evaluated the extent of plastic pollution near these popular tourism destinations and its consequences on marine ecosystems. Our research not only confirmed the presence of plastic pollution but also that the excessive use of plastics is directly impacting delicate underwater habitats and the species that live in them.

All areas surveyed were found to be polluted with plastic. Across all five expeditions, we found a total of 1,653 waste items, with 1,171 (70.8%) made from plastic. We calculated a concentration of plastic items ranging from 324 to 852 pieces of plastic/km<sup>2</sup> of seafloor surveyed. Most of the plastic appeared to be single-use, such as bags, food wrappers, packaging, cutlery and drinking containers - items typically used by tourism-related businesses. These results add urgency to the need for plastic-free coastal regions, restaurants, and tourist resorts, and for significant reductions in the production of single-use plastics.



Tourists walk on a beach in Spain next to plastic buried in the sand.

The dire state of our oceans becomes evident when we consider that an estimated 15 million tons of plastic enters the ocean every year. This has a devastating impact on marine life, with over 900 documented cases of species ingesting or becoming entangled in plastic. Furthermore, the consequences extend beyond wildlife, as plastic waste contaminates our food supply. Microplastics, which form as larger plastic items break down, attract and retain harmful chemical pollutants that infiltrate our food, water, and even the air we breathe.

To tackle the problem at its source, hotels must adopt best practices to minimize single-use plastic waste. Oceana's recommendations for the sector include providing refillable bottles and cups in guest rooms, promoting the use of reusable water bottles and coffee mugs, eliminating single-use items like straws and cutlery, and implementing refillable dispensers for toiletries. Proper recycling and disposal methods should also be emphasized for plastic waste that cannot be eliminated.

The onus is on hotels and the tourism industry to take proactive measures in reducing their plastic waste impact. By implementing these best practices, hotels can lead the way in preserving our oceans, inspiring guests to adopt sustainable habits, and protecting the fragile ecosystems that are essential to the tourism industry's success.

# Introduction

Much of our planet is swimming in discarded plastic and the global hotel and tourism industry has a key role to play in addressing the issue. Since most of the plastic used in the tourism industry is made to be thrown away, and with hotels often located directly at the seafront, the industry is responsible for large amounts of single-use plastic reaching beaches and the oceans.

At the same time, ocean plastic pollution is an increasing threat to the global tourism industry. According to recent estimates, coastal and marine tourism constitute approximately 50% of all global tourism.<sup>1</sup> Since holiday makers are sensitive to beaches being polluted with plastic and with many local authorities lacking the adequate infrastructure to keep up with plastic pollution, this tourism is heavily impacted as pristine areas are overwhelmed by plastic trash. To make matters worse, the plastic pollution collected on beaches barely hints at the magnitude of what lies hidden at the bottom of the sea. The bulk of the plastic pollution can be found below the surface. It is estimated that only 1% of plastics are in surface waters, 5% wash up on the beach and the remaining 94% ends up on the seafloor.<sup>2</sup> Plastic polluting the seafloor can be deadly to marine life and disrupts marine

ecosystems for decades, if not centuries, as it slowly degrades.

To better understand the problem of plastic on the seafloor and its relationship to coastal tourism, Oceana documented seafloor plastic with an underwater drone during five expeditions off the coast of some of the world's most famous beaches: the Copacabana and Ipanema beaches in Rio de Janeiro, Brazil; Cancun and Playa del Carmen in Mexico; the island of Mallorca and the Valencia seaside in Spain; and the Florida Keys in the United States. These beaches are also all located adjacent to marine areas that are highly biodiverse. Through these surveys, we assessed how much plastic pollution is on the seafloor close to these popular tourism destinations, and how it is impacting marine ecosystems.

Our research helped us confirm that plastic pollution is both present and is negatively impacting diverse marine ecosystems in popular tourist areas. Given these findings, at the end of this report we have provided best practice guidance to hotels on how the tourism sector can help tackle this problem by reducing its reliance on single-use plastic.



A coastal resort hotel in Key Biscayne, Florida.

# The Problem of Plastic in the Ocean

The oceans face a massive and growing threat from something we encounter every day: plastic. Peer-reviewed scientific studies have estimated that 15 million tons of plastic washes into the ocean every year.<sup>3</sup> This is roughly equivalent to dumping two garbage trucks full of plastic into the oceans every minute.

A recent review found that more than 900 species have ingested or become entangled in plastic, from zooplankton at the bottom of the ocean food web, to seabirds at the top.<sup>4</sup> Scientists found that more than half of all sea turtle species studied – 52% – have ingested plastic.<sup>5</sup> Sea turtles and other animals can mistake plastic bags for jellyfish or algae, their typical food. Research shows that sea turtles can even mistake the smell of plastic for food, often leading to a deadly outcome.<sup>6</sup> In a recent study, Oceana found evidence of nearly 1,800 animals from 40 different species swallowing or becoming entangled in plastic since 2009 in the U.S.<sup>7</sup> Of those, a staggering 88% were species listed as endangered or threatened with extinction under the U.S.' Endangered Species Act.

A research paper from 2018 published in the journal *Science* assessed the influence of plastic waste on disease risk in 124,000 reef-building corals from 159 reefs in the Asia Pacific region.<sup>8</sup> The authors found that the likelihood of disease increases from 4% to 89% when corals are in contact with plastic, and they estimated that 11.1 billion plastic items are entangled on coral reefs across the Asia-Pacific region. Seventeen percent of the coral species observed to be affected by marine plastic debris are listed as threatened or near threatened with extinction by the International Union for the Conservation of Nature.<sup>9</sup> While corals face many threats including increased sea-surface temperatures, and ocean acidification, plastics clearly play a contributory role in reducing the health of coral ecosystems. The threatened health of coral reefs

and diverse habitats globally has a direct impact on the tourism industry.



A plastic single-use cup on the seafloor in Key Biscayne, Florida.

Once plastic reaches the ocean, it breaks up into smaller and smaller pieces, ultimately becoming microplastics that attract and harbor harmful chemical pollutants.<sup>10</sup> When eaten by fish and shellfish, some of the contaminants attached to microplastics work their way into our food supply. Everything from salt to honey to beer has been found to contain microplastics.<sup>11</sup> Scientists are still studying how humans might be affected by the plastics that are making their way into our food, water, and air.<sup>12</sup>

Recycling is a false solution to the plastics crisis. According to a recent study, as of 2015 approximately 8.3 billion metric tons of plastic had been produced since the 1950s, and 6.3 billion metric tons has become waste.<sup>13</sup> Of this plastic waste, a mere 9% has been recycled. Twelve percent was incinerated and 79% accumulated in landfills, on the ground, or in the ocean.

To tackle the problem of marine plastic pollution, it is essential that we reduce the production and use of plastic and replace needless single-use plastic items with reusable alternatives. Where reusable items aren't feasible, plastic should be replaced with other, easily recyclable materials that have a low environmental impact.



# Single-use Plastic in Hotels

According to the United Nations' World Trade Organization, international tourist arrivals grew to 1.4 billion in 2018.<sup>14</sup> Such high numbers contribute significantly to the growing ocean plastic crisis.



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An Oceana diver holds a plastic hotel card found underwater in Mexico.

The Mediterranean, for example, is a typical tourist hotspot with hotels and other tourism related installations all along its beaches. It is also the most plastic-contaminated sea in the world. A marine litter study in the Mediterranean found

that 52% of the single-use plastics found on Mediterranean beaches come directly from coastal and beach tourism, while an additional 9% is from recreational fishing and boating.<sup>15</sup>

Another scientific study from 2020 found that up to 86% of the marine litter found on Mediterranean beaches is generated by tourism and the accumulation of garbage can be up to 4.7 times higher during the peak tourist season than at other times of year.<sup>16</sup> The most commonly found items on Mediterranean beaches include plastic cutlery, trays, straws, cigarette butts, plastic caps/lids, plastic drink bottles, shopping and other plastic bags, and plastic bottles.<sup>17</sup>

The COVID-19 pandemic also sparked a surge in plastic waste as usage of disposables such as masks and gloves rose. Improper disposal of these items has been an issue and we have documented items related to the pandemic on the seafloor.



© OCEANA / Enrique Talledo  
A plastic toothbrush found in the sand in front of coastal hotel resorts in Cancún, Mexico.

## The Economic Impact of Plastic Pollution

Plastic waste is a threat to marine species and ecosystems, but it also damages hotels and other tourism related businesses and local communities that are dependent on tourists.

Plastic waste results in high economic costs to coastal municipalities. These costs are from the cleaning of beaches and its wider implications for tourism and recreation, as pollution discourages tourists from visiting and from participating in sea-based activities. Scientists estimated that clean-up costs for the more than 50,000 kilometers of European Union coastline, for example, amounted between approximately €194 and €630 million (\$208 and \$675 million) in 2013.<sup>18</sup>

Global coral reef related tourism attracts foreign and domestic visitors in over 100 countries and territories.



Small toiletry items in plastic packaging in a hotel room in Rio de Janeiro, Brazil.

An academic study from 2017 estimates reef tourism to be worth \$35.8 billion globally every year, representing the total of within-country expenditure by international and domestic visitors that the authors believe can be attributed to the presence of coral reefs and biodiversity hotspots.<sup>19</sup>



A plastic single-use water bottle and other plastic garbage on Copacabana Beach in Rio de Janeiro, Brazil.



## The Plastic Footprint of Hotels

It is difficult to accurately estimate the total amount of plastic used by the global hotel sector, as the industry is vast and encompasses a wide range of establishments and operations. However, hotels are major sources of single-use plastic waste, with many establishments relying on a variety of plastic items for their daily operations.



Snack items wrapped in plastic in a hotel room in Brazil.

Some common types of single-use plastic items used by hotels and resorts include plastic straws, stirrers, and utensils; plastic cups and glasses; plastic water bottles; and plastic toiletry containers. These items are often used in large

quantities and are frequently discarded after a single use, contributing to the growing problem of plastic pollution in the world's oceans and waterways.



Bedding wrapped in plastic in a hotel room in Brazil.

In addition to these items, hotels and resorts may also use other types of single-use plastic products, such as plastic bags for carrying laundry or for packaging items for guests; plastic packaging for food and drinks; masks and gloves to protect guests from COVID-19 or other illnesses; and plastic sheets and liners for bedding and towels. These items may be used to help maintain cleanliness and hygiene at the establishment, but they can also contribute to plastic waste and pollution when they are discarded.



Single-use plastic beverage bottles in a mini-fridge in a hotel room in Rio de Janeiro, Brazil.



## Plastic Pledges and Initiatives

Some of the world's top hotel chains are showing goodwill and taking some measures to reduce plastic usage whilst other large hotel chains remain seemingly unconcerned. Many tourism industry players have taken 'plastic pledges' and committed to eliminating some plastic items e.g., replacing single-use shampoo bottles with refillable containers or banning plastic straws from their bars. Sadly, efforts remain largely focused on front-facing guest areas: bars, restaurants, and hotel rooms, whilst plastic used elsewhere such as for kitchen deliveries or in cleaning are not targeted by plastic reduction measures.



A flagpole from a hotel chain found underwater in Florida, U.S.

**Accor Hotels**, which owns over 40 brands and 5,000 properties including Ibis, Novotel, the Fairmont and Mondrian, announced in early 2020 the removal of single-use plastic from its 340,000 guest rooms by the end of 2022.<sup>20</sup>

**Marriott** said it expected to remove personal toiletries from most of its more than 1 million guest rooms by December 2020.<sup>21</sup> The chain, which also owns Ritz-Carlton and W Hotels, said it expects to reduce its plastic disposal by 30% annually.

**InterContinental Hotels Group (IHG)**, which also owns Kimpton Hotels and Crowne Plaza, is in the process of replacing individual plastic toiletries

with bulk-sized ones across its 843,000 rooms.<sup>22</sup> The transition was due to be completed in 2021.

**Hilton** which has more than 950,000 rooms globally, announced a transition from single-use to bulk toiletries by 2022, implemented a global ban on plastic straws, cocktail picks and stir sticks, and removed plastic water bottles from all meetings and events at managed hotels in Asia Pacific and Europe, Middle East and Africa.<sup>23</sup>

**Hyatt's** global chain of 900 hotels encompassing 220,000 rooms committed to bulk-sized toiletries and reducing single-use water bottles by June 2021.<sup>24</sup> The company owns more than 20 brands, including Park Hyatt, Thompson Hotels and the Andaz.

**Iberostar** is a Spanish-owned company with over 110 hotels primarily in Europe but also other parts of the world. In 2018, the company pledged that it would eliminate single-use plastics from all its hotel rooms by 2019.<sup>25</sup>

**EDITION Hotels**, which owns a collection of luxury hotels across the world, launched an initiative in 2019 – Stay Plastic Free – which is a call to action for the hospitality industry to reduce single-use plastic.<sup>26</sup> The hotel pledged to become 90% single-use plastic free by the end of 2019 and 100% single-use plastic free by the end of 2020.

**Travelyst** is a not-for-profit sustainable travel organization set up by Prince Harry, The Duke of Sussex. It joins together in collaboration some of the biggest travel brands including Amadeus, Booking.com, Expedia Group, Google, Skyscanner, Travelport, Trip.com Group, Tripadvisor and Visa, to create sustainability solutions for the travel industry. These brands are working together to create transparent reporting systems to help accommodation providers share sustainability credentials with customers – including on efforts to reduce plastic.<sup>27</sup>

# Seafloor Plastics Expeditions

To help fill gaps in knowledge about the relationship between tourism and single-use plastic pollution on the seafloor, in 2019 and 2020 Oceana conducted five expeditions in four countries: Brazil, Mexico, Spain and the U.S. These expeditions were carried out using underwater drones (apart from in the U.S., where SCUBA divers were exclusively used) within, or in proximity to important biodiverse marine areas off the coast of the following popular tourism destinations:

## BRAZIL

**Beaches around Rio de Janeiro, including Copacabana and Ipanema.** Just over three miles off the coast of Rio de Janeiro is its first no-take marine protected area, surrounding the Cagarras Islands. This area is highly biodiverse, and an important nursery and feeding ground to many species. It also faces significant threats from pollution, uncontrolled fishing and tourism. Rio's close-by iconic beaches of Ipanema and Copacabana are home to countless hotels, restaurants, shops, tour operators and other tourist businesses. Millions of tourists visit the area every year and plastic pollution from sewage systems and beach businesses is rampant.

## MEXICO

**Cancún and Playa del Carmen.** The reef sites around the city of Cancún on Mexico's Yucatán Peninsula are part of the Mesoamerican Barrier Reef System, the second largest reef in the world. This complex and highly biodiverse reef is home to hundreds of iconic species including sea turtles, manta rays, and nurse sharks – many of which are threatened or endangered. Cancún is one of Mexico's most popular beach destinations. South of Cancún is a coastal strip of land called Riviera Maya which includes the beach town of Playa del Carmen. Once a wetland with forests and mangroves, the area has now been developed into an internationally popular beach destination with problems of eroding

beaches, insufficient waste collection and water pollution.

## SPAIN

**Palmanova and Magaluf in Mallorca.** Mallorca is part of the Balearic Islands in the Mediterranean Sea, home to a great diversity of marine animals including hundreds of species of fish, crustaceans, invertebrates and marine birds. Mallorca is also a tourism hotspot and the second most populous island in Spain. Mainly due to tourism, Mallorca's beaches are full of single-use plastic waste during the tourist season and need to be cleaned every day.

**Beaches around Valencia.** The shoreline close to the port city of Valencia on Spain's southeastern coast is home to vital wetlands and a diverse range of endemic and migratory species. At the same time, the region of Valencia has one of the highest rates of plastic pollution in the Mediterranean Sea, with an estimated 12.9kg of plastic waste reaching every km of the coastline each day; and in Spain, it is the region with the highest annual rate of microplastic leakage.<sup>28</sup>

## UNITED STATES

**Key Biscayne and the Florida Keys.** Key Biscayne is at the northern end of the Florida Keys Reef Tract, the third largest barrier reef in the world and the most extensive living coral reef in the U.S. This reef lies a few miles seaward of the Florida Keys - a string of tropical islands stretching about 120 miles off the southern tip of the state of Florida. The area is part of a productive marine ecosystem that includes patch and bank reefs, seagrass meadows, soft and hard bottom communities, and coastal mangroves. This matrix of interconnected habitats supports one of the most biologically diverse assemblages of marine life in North America. The Florida Keys and its surrounding area is also one of the most popular tourist destinations in the U.S., attracting throngs of beachgoers and sportfishing enthusiasts from across the world.

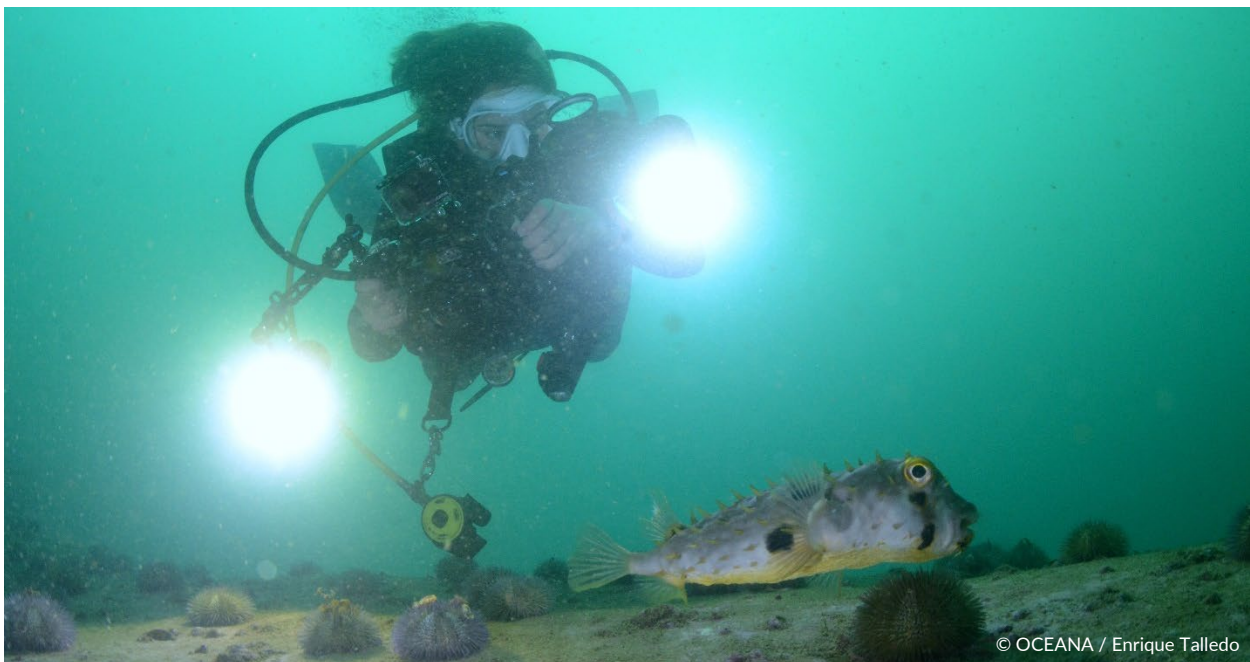


An Oceana diver enters the water to survey the waters off the coast of Rio de Janeiro, Brazil.

## Methodology

In carrying out our research in these locations, we used a sampling-based surveying approach that entailed applying a grid of small hexagons to the overall area, then dividing the area geographically based on the different types of seafloors. Finally, the squares or hexagons were randomly selected to survey with an underwater drone.

Additionally, we carried out SCUBA dives to take still images and videos in higher resolution. This method allowed our science team to obtain the data needed to estimate the amount of plastic pollution on the seafloor. In addition, we were able to identify some of the impacts that the plastic is having on habitats and marine species in these biodiverse marine areas which are also popular tourism destinations.



An Oceana diver observes a pufferfish off the coast of Rio de Janeiro, Brazil.



## Amounts and Types of Plastic Found

All areas surveyed by Oceana were found to be polluted with plastic. Across all five expeditions carried out in the four countries, we found a total of 1,653 waste items, with 1,171 (70.8%) made from plastic (Figure 1). We calculated a concentration of plastic items in the seafloor areas surveyed ranging from 324 to 852 pieces of plastic/km<sup>2</sup> of seafloor surveyed, with the areas adjacent to Cancún, Mexico and Rio de Janeiro, Brazil having the lowest and highest concentrations of plastic, respectively.

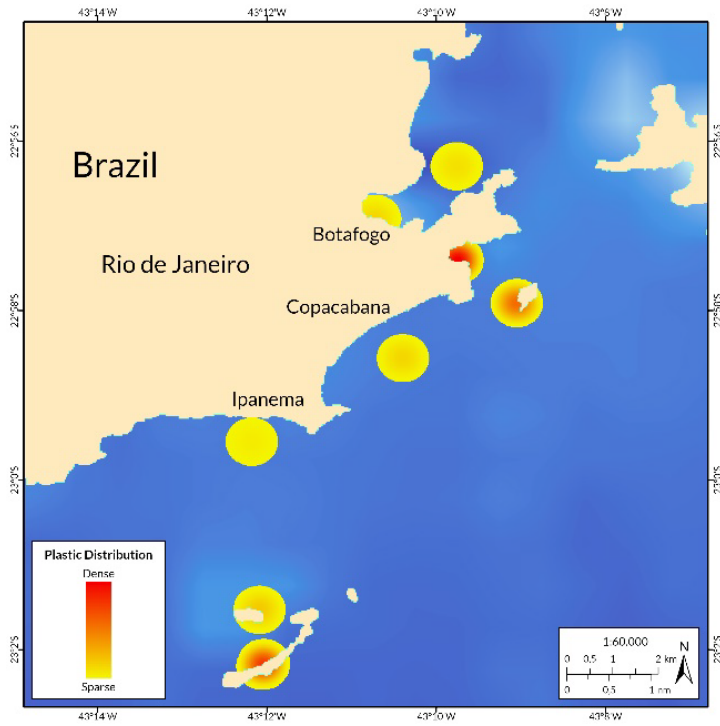
Almost all the plastic documented appeared to be single-use plastic - mostly plastic film (67.2%), including bags, food wrappers, or other forms of

plastic packaging. The next most documented plastic item was “other plastic items” (12.3%), indicating that marine plastic waste comes in many different forms, and once exposed to the environment can be difficult to identify. Plastic bottles (5.6%) and fishing lines (3.1%) were also prevalent in the surveys across all countries. A detailed overview of the plastic items recorded is given in Table 1.

The vast majority of the plastics we found were from land-based sources and many are used in hotels, restaurants, and other tourism-related activities, including plastic bags, packaging, bottles and tableware.

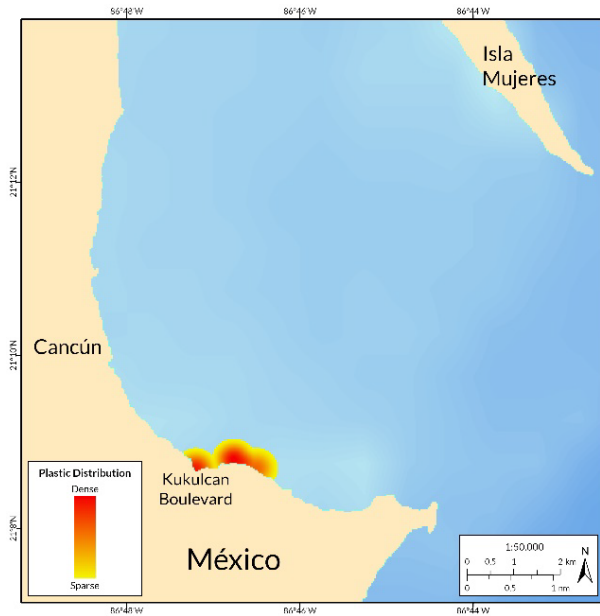
**Figure 1. Number and percentage of plastic waste and non-plastic waste items found in all seafloor survey areas.**



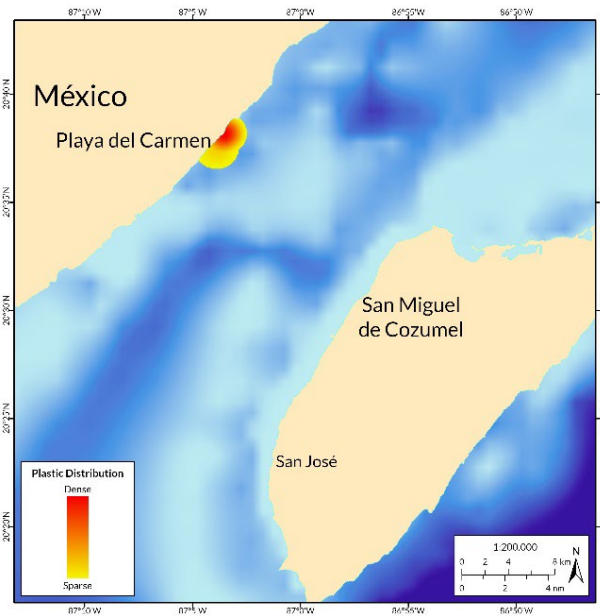


**Map 1: Plastic distribution and density on the seafloor in survey areas close to:**  
 a) Rio de Janeiro, Brazil;  
 b) Cancún, Mexico;  
 c) Playa del Carmen, Mexico;  
 d) Palmanova and Magaluf (Mallorca), Spain;  
 e) the Valencian coast, Spain;  
 f) Key Biscayne and the Florida Keys, U.S.

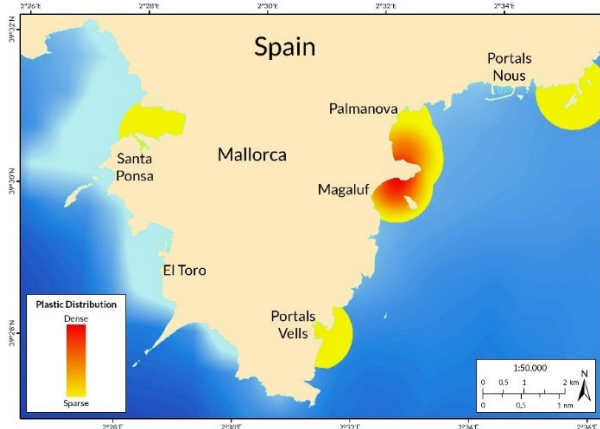
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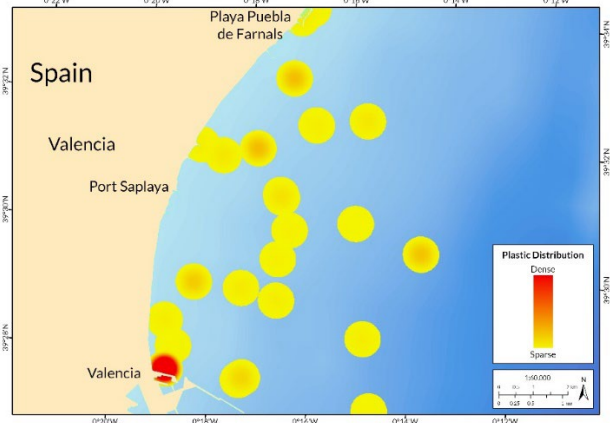
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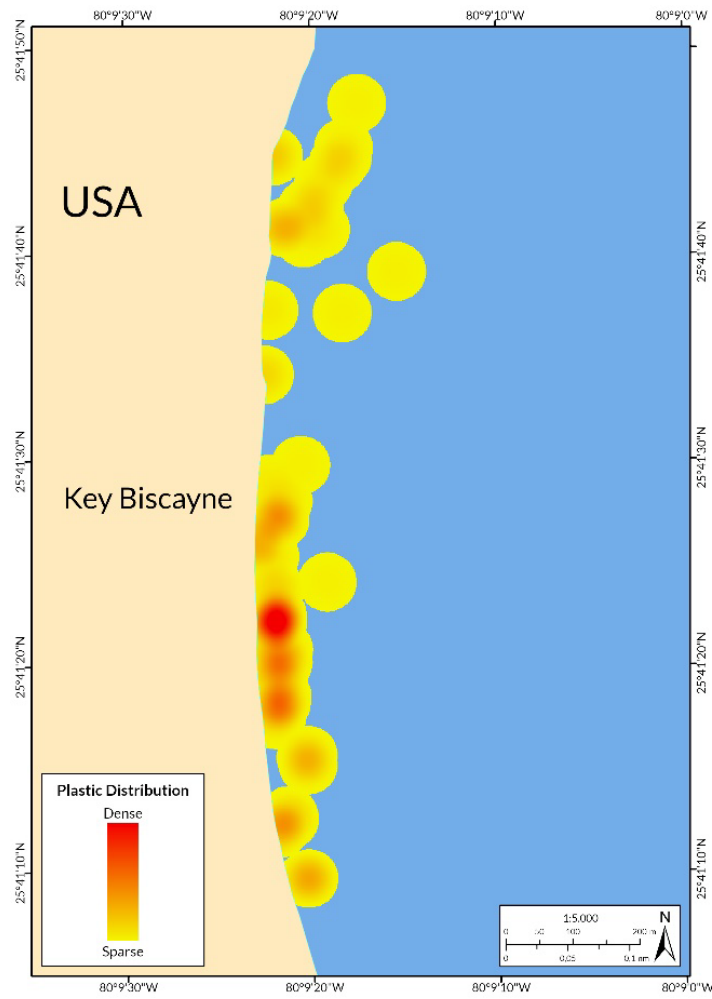
c)



d)



e)



f)



**Table 1. Plastic waste items found in seafloor survey areas (expressed as percentages of all plastic waste items found at each site).**

Item	Percentage of plastic waste items				
	Brazil	Mexico	Spain	US	All areas
Other plastic film	64.82	37.82	46.06	16.54	42.87
Bags (plastic film)	4.74	10.92	26.61	29.53	20.92
Other plastic items	11.46	7.56	12.66	14.57	12.30
Bottles	3.56	21.01	2.75	6.69	5.64
Food wrappers (plastic film)	3.16		3.85	4.72	3.50
Fishing lines	8.30	7.56	0.73	0.79	3.07
Cups and cup lids	1.98	7.56	0.73	8.27	3.33
Clothing (gloves, shoes etc.)			0.73	3.54	1.11
Toys and party poppers				5.12	1.11
Healthcare items		0.84	1.83		0.94
Baskets		2.52		2.76	0.85
Ropes/strapping bands	1.19	4.20			0.68
Other fishing related			0.55	1.18	0.51
Boxes	0.40		0.55	0.39	0.43
Buoys				1.97	0.43
Fishing nets	0.40		0.37	0.39	0.34
Large plastic items			0.18	0.39	0.17
Plastic caps/lids chemicals, detergents (non-food)				1.57	0.34
Plates			0.73		0.34
Forks			0.55		0.26
Tubes			0.55		0.26
Beverage container			0.18		0.09
Balls				0.39	0.09
Bottle caps, lids and pull tabs (food/drink)				0.39	0.09
Fishing traps			0.18		0.09
Straws and stirrers				0.39	0.09
Unspecified bottles and containers (drums)				0.39	0.09
Tobacco pouches/plastic cigarette box packaging			0.18		0.09
<b>TOTAL NUMBER ALL PLASTIC ITEMS</b>	<b>253</b>	<b>119</b>	<b>545</b>	<b>254</b>	<b>1,171</b>

## Impacts of Plastic on Marine Habitats and Species

Oceana's seafloor surveys confirmed the presence of plastic waste within diverse marine ecosystems adjacent to popular tourism destinations in all four countries where our expeditions were carried out. Furthermore, during these surveys, we observed some of the impacts that this plastic waste is having on marine habitats and species and identified possible threats.

The seafloor areas we surveyed across all expeditions were characterized by a range of different habitat types with both soft and rocky bottoms. We documented plastic resting on, covering or entangled on many of these seafloor habitats, including corals, seagrass meadows, and in algal forests. Natural structures such as those that make up these habitats act as obstacles to the circulation of sea currents and accumulate plastic waste transported by the sea. Plastic can easily get caught on the complex structure of sea fans, sponges, bryozoans, and algae, and during our expeditions we observed that these species were generally heavily impacted by plastic.



A gorgonian and brittle star entangled in plastic in Spain.

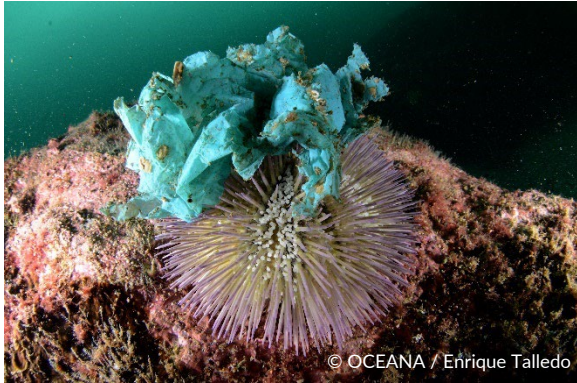
In Brazil and Spain (off the Valencian coast), one such habitat that we found to be visibly affected by plastic were sea fan (gorgonian) forests. In line with our observations, a recent study has shown that these forests' capacity to retain sediment also increases the concentration of plastics.<sup>29</sup> Studies on the impacts of plastics on sea fans in other parts of the Mediterranean have detected abrasions, an increase in epibionts (species that live on their surface), and increased mortality. Plastic contamination is also considered to lead to the local disappearance of gorgonian forests.<sup>30</sup>

Since green algal meadows have a sediment retention rate similar to sea fans, they also retain plastic waste at a high rate.<sup>31</sup> In Brazil, Mexico, and Spain, we found areas covered by green algae polluted with plastic. In the Mediterranean Sea, we also found that on coralligenous bottoms, plastics were a common occurrence, as well as other items related to fishing that had become hooked onto the reefs.<sup>32</sup> Coralligenous reef ecosystems are widely distributed in the area and support a great diversity of species. In Mexico, Spain, and the U.S., seagrass meadows were found to be heavily impacted by plastic. Plastic covering all of these habitat types may interfere with spawning and feeding, and inhibit photosynthetic activity.



A single-use plastic glove in seagrass in the waters of Key Biscayne, Florida.

In areas dominated by sandy or muddy bottoms, species that live in the sediments create galleries or burrows, and plastic finds its way into the small gaps and elevations that are features of these structures. In Spain off the Valencian coast, the burrows of small fish like gobies and angular crabs were observed to be particularly affected by plastic in this way.



A plastic bag entangled on a sea urchin off the coast of Rio de Janeiro, Brazil.

Plastic produces many highly varied negative impacts on marine species, ranging from effects on health (including asphyxiation, ingestion, dissolution of toxic chemicals, and physical damage) to behavioral changes in animals.<sup>33</sup> During our surveys in all countries, wildlife, including several threatened and protected species, were observed in plastic-polluted areas, at risk of ingesting plastic fragments. Various species of flora and fauna including bryozoans, corals and algae, were found growing on plastic, or entangled in plastic debris. Some species (e.g.,

sea urchins in Brazil and Spain) were observed using plastics instead of organic materials to cover themselves for protection, and others (e.g., red algae and oysters in Spain) were seen settled on moving plastic pieces that can be transported outside their habitat.



A fish swims next to plastic film entangled in other sea life off the coast of Rio de Janeiro, Brazil.

Overall, the findings from our expeditions demonstrate that the excessive use of plastics is directly impacting delicate underwater habitats and the species that live in them. These results add urgency to the need for plastic-free coastal regions, restaurants, and tourist resorts, and for significant reductions in the production of single-use plastics.



A manatee visits the waters of Key Biscayne, Florida.



# Best Practices for Reducing Single-use Plastic in Hotels

In Oceana’s expeditions to document plastic on the seafloor, we observed plastic pollution impacting habitats and species in important biodiverse marine areas close to popular tourism destinations. Most of the plastic documented appeared to be single-use plastic, such as bags, food wrappers, packaging, cutlery and drinking containers. Many of the items found are typically used by hotels, restaurants, and other tourism-related businesses located close to the beach.

Coastal hotels are, of course, not solely responsible for the plastic pollution crisis currently facing our oceans and coastal ecosystems. They can, however, have an outsized role in helping to address this problem. Hotels can eliminate single-use plastics throughout their entire operations and influence their competitors to do the same. Indirectly, they can inspire and influence their guests to use less plastic while on vacation and to retain these habits after returning home.



A single-use plastic bottle on the beach in front of hotel resorts in Cancún, Mexico.

To tackle its plastic pollution problem, Oceana calls on hotels, and other businesses in the tourism sector to:

**Use refillable bottles and cups in guest rooms.** Replace single-use plastic water bottles and single-use plastic cups with refillable glass water bottles and glass cups. In locations where tap water is not safe for drinking, provide guests with a water fountain or filling station with

filtered water in their rooms or accessible elsewhere in the hotel.

**Encourage the use of reusable water bottles and coffee mugs.** In correspondence prior to their arrival, encourage guests to bring their own reusable water bottles and coffee mugs. Serve hot drinks in reusable cups and provide water fountains or filling stations to make it easy for guests to refill their water bottles.

**Serve beverages in reusable cups or glasses, or where available in refillable bottles.** When selling beverages in refillable bottles, advise guests to not throw the bottle in the garbage in case they are not familiar with refillable bottle systems.

**Eliminate single-use straws, stirrers, and cutlery.** Replace single-use items with reusable items made from bamboo, glass, or metal.

**Use refillable dispensers in guest rooms for soap, shampoo, and shower gel.** Replace individual-sized toiletries in plastic containers with larger dispensers that can be refilled by cleaning staff.

**Eliminate single-use plastic bags.** Don't line garbage bins in guest rooms with plastic bags. Provide reusable laundry bags and in shops, make reusable bags available for purchase or provide paper bags. Provide slippers only on demand or in a reusable bag.

**Avoid selling snacks, or other items wrapped in single-use plastic.** In shops and cafes, avoid selling snacks and other items wrapped in single-use plastic. Sell fruit, ice-cream in cones, and other snacks from bulk food containers (dispensed into reusable bowls or cups). Source all merchandise from responsible suppliers that limit use of single-use plastic packaging.

**Eliminate sauce sachets and other pre-portioned food items packaged in plastic.** Provide sauces in dispensers, or bottles, and other foods in open jars, bowls, or pre-portioned without plastic.



A plastic sachet of sauce on the beach in Mexico.

**Use bulk cleaning supplies.** Eliminate the use of cleaning supplies packaged in household-sized plastic bottles and instead provide cleaning staff with reusable bottles that can be filled with cleaning products from a larger container.

**Eliminate single-use plastic wrap or bags in hotel kitchens.** Replace single-use plastic wrap with beeswax wrap or other reusable alternatives. Single-use plastic bags can be replaced with reusable containers.

**Recycle and properly dispose of all plastic waste that can't be eliminated.** Ensure that sufficient garbage and recycling bins are located on beaches where possible/allowed, and at bars and restaurants located close to beaches

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