

KEEP OUR
SEA
PLASTIC
FREE

REDUCING **PLASTICS** IN CORONADO



EMERALD KEEPERS

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A NOTE FROM EMERALD KEEPERS

This white paper seeks to amplify the growing recognition of a need to remove plastics from our community to help ensure a cleaner present and future for Coronado. We hope this is the beginning of a shared dialogue in which we can advance understanding. We welcome and appreciate feedback and additional partners in this initiative.

Emerald Keepers is a group of volunteers leading a growing community-based effort to care for our coastal community, ensure Coronado's sustainability for generations to come, and serve as a model for other communities. Emerald Keepers' mission is to educate the community to develop and celebrate more sustainable practices and strive to be a model city for the health of our oceans, our beach community, and the world.

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BACKGROUND

Situated between the San Diego Bay and Pacific Ocean, Coronado is a community deeply linked to the ocean and environment. An estimated 2 million visitors come to Coronado each year to visit our beaches and enjoy the City's beauty.

The City of Coronado is dedicated to keeping these famous beaches clean and protecting the environment. As part of that mission, the City needs to commit to reducing plastic pollution that ends up on the streets, parks, beaches and landfills.

According to data, only nine percent of the 6.3 billion metric tons ever produced of plastic waste is recycled. Despite having robust waste management infrastructure to collect, transport, and process waste, the United States has contributed enormous amounts of plastic waste to the environment, including the ocean.

An estimated 5.25 trillion plastic particles weighing approximately 268,000 tons have been discarded into the oceans, making it the most common form of marine debris. If current production and waste management trends continue, roughly 12 billion metric tons of plastic waste will be in landfills or in the natural environment by 2050.

Some of the top items found are single-use plastic items, including beverage bottles, snack wrappers, straws, utensils, bottle caps, grocery bags and other plastic bags, lids, and cups and plates. This doesn't account for nano- and micro-plastics (NMP), marine debris that are less than five millimeters in length, which have implications for human and ecosystem health and are emerging public concerns.

Roughly two-thirds of all plastic ever produced remains in the environment today.

79% Plastics end up in landfills or environment

12% Plastics Are incinerated

9% Plastics are recycled

3% Plastic bags are recycled

Increasing numbers of studies have demonstrated the presence of NMP in drinking water, air, food, and beverages and even human and animal body systems.

As Coronado works to keep its ocean and bay clean, we need to do our part to help stop the increased production of plastics that come from fossil fuels.

In an effort to advance the conversation, this paper will put forth a framework outlining how Coronado can do its part to reduce plastic waste and keep one of our greatest resources - our ocean - clean. We hope doing so will allow our city to align more rapidly around these priorities and incorporate these considerations into how our community can implement change.

It is clear that it is time to make this part of Coronado's efforts to mitigate their impacts on our ocean and the City, enhance City services for residents, and implement stronger environmental protection programs.

SINGLE-USE PLASTICS A FOREVER PROBLEM

Unlike other waste, plastic never truly breaks down, instead remaining as litter or breaking down into smaller and smaller pieces known as nano- and microplastics. These microscopic fragments of plastics have been found globally in our food systems and even our own bodies. Plastics can function as a transport mechanism for persistent organic pollutants such as flame retardants, chlorinated organic compounds such as DDT, and chemicals

32X greater risk of animals dying from ingesting balloons than hard plastic

created as byproducts of petroleum combustion and industrial processes.

Over one million marine birds and animals die from plastic ingestion each year.

Single-use plastic, such as take out containers, straws, bottles, and packaging, are plastics meant to be used once and then become waste or litter. Once thought of as the height of convenience, the issues these materials have caused globally and locally have profound negative costs on our community, impacting the quality of life of the City's residents and the future of tourism.

While single-use plastics are recyclable, a very small percentage of single use plastic items are captured and recycled. And when they are recycled, it rarely happens more than once, because recycled plastic does not have the physical properties that make it a viable raw material for plastic bottles, bags, and packaging. Only 3 percent of all plastic bags are recycled.

Of the plastics No. 1 through No. 7, only

bottles and jugs made out of No. 1 or No. 2 plastics have a reasonable expectation of getting recycled once, if at all. All of the other types and forms of single use plastic items (clamshells, cups, plates, bags, utensils, etc.) are highly unlikely to be accepted or recycled even once.

Balloon releases, which have become popular in social media for gender reveals, are also a cause of ocean litter and can entangle wildlife. Balloons can often be mistaken for food, which can harm animals or even cause death. A 2019 study showed that ingested balloons are the highest-risk debris item; 32 times more likely to result in death than ingesting hard plastic. California, Connecticut, Florida, Tennessee, and Virginia have all passed laws prohibiting the release of balloons to protect the environment and wildlife.



THE COST OF PLASTIC

It is estimated that California communities spend \$428 million per year on average to remove plastic and other trash from streets and neighborhoods to prevent the litter from reaching water bodies. Cleanup in San Diego accounts for about \$14 million.

Single-use materials from food and beverages make up approximately 25% of the waste produced in California. Cups, straws, containers, condiments and other food-related items made with plastic and expanded polystyrene do not break down, litter our community, and cause harm to our local bay, ocean, and wildlife.

It is estimated that the total abundance of plastic debris in San Diego Bay is greater than 20.4 million (± 7.4 million) plastic pieces. San Diego County residents are estimated to use over 500 million single-use plastic bags each year. On average, only 3 percent of these bags are recycled.



THE HIDDEN COSTS OF SINGLE-USE PLASTICS

PLASTIC NEVER TRULY DEGRADES

Plastic breaks down into smaller and smaller pieces, polluting our environment and harming wildlife. In a sampling of fish from a creek that flows into San Diego Bay, nearly a quarter contain microplastics. Microplastics are even consumed by people. Studies show that adults eat a credit card worth of plastic each week.

90%

PLASTIC IN SEABIRDS

Nearly all shore birds have ingested plastic.

2030

PLASTIC PRODUCTION IS A MAJOR SOURCE OF GREENHOUSE GAS EMISSIONS

Plastic is anticipated to release more greenhouse gas emissions than coal plants by 2030.

\$428M

PLASTIC CLEAN-UP IS EXPENSIVE

California communities are estimated to spend \$428 million annually to clean up and control plastic pollution.

THE SOLUTION

Plastics end up on our roads, waterways, and in the ocean. Fortunately, adopting bans on single-use plastics has already proven to be effective in reducing plastic pollution.

In 2014, California became the first state to ban single-use plastic bags at grocery stores, convenience stores, and pharmacies. Since inception, Senate Bill (SB) 270 is estimated to have reduced plastic-bag usage by 192 million bags every week in California. Thicker plastic bags are still in use, because they were deemed reusable, but rarely are used more than once.

The City of San Diego has implemented a Single Use Plastic Reduction Ordinance, which became effective April 1, 2023. The ordinance prohibits the distribution and sale of most polystyrene foam containers. This includes food service ware such as bowls, plates, trays, cups, and other similar items. Single use plastic (and bio-plastic) straws and utensils may only be provided upon the request of the customer.

Emerald Keepers recommends implementing legislation to curb single-use plastics in Coronado through two proposed ordinances.

PROPOSED CHANGES

These regulations would:

- Improve the cleanliness of City public areas and beaches to increase quality of life for residents, businesses, and visitors.
- Protect wildlife by reducing harmful litter and marine debris.
- Conserve natural resources and reduce greenhouse gas emissions.
- Encourage the use of reusable goods and divert waste from landfills.

PROPOSED

CARRYOUT BAG REGULATIONS

Description:

Reduce the use of single-use carryout bags in the City.

As part of the City's commitment to sustainability, the City of Coronado should expand upon SB 270 with a city law that bans single-use plastic bags at all city retail shops and restaurants. Enforcement will be phased to allow the city and Emerald Keepers to provide outreach, education, and resources to support local businesses in the transition away from single-use bags.

Major Takeaways:

» Californians are becoming accustomed to single-use plastic reduction policies such as bag bans.

» Approximately 3% of all plastic bags are recycled. There is no curbside collection of plastic bags in Coronado.

PROPOSED

WASTE REDUCTION REGULATIONS

Description:

Banning the use, distribution, and sale of:

- Single-use plastics
- Polystyrene foam
- Single-use plastic beverage bottles
- Balloons

Additional requirements include:

- Disposable foodware* accessories upon request
- Disposable foodware standards
- Reusable foodware for dining on premises
- Disposable cup charge (10 cent minimum)

**Disposable foodware includes dinnerware, drinkware, utensils, and ramekins/containers.*

Major Takeaways:

- » Single-use item waste, including single-use plastics and polystyrene, have raised environmental and health concerns related to water pollution, the welfare of marine life, and human health.
- » In order to protect the health of the City of Coronado community and promote environmentally sustainable practices in the City, these regulations:
 - Reduce single-use waste
 - Reduce greenhouse gas emissions
 - Reduce the distribution of disposable single-use plastic
 - Reduce polystyrene use and litter in the City
 - Keep plastic waste from landfills; and reduce plastic litter threats to natural ecosystems and ocean wildlife

This ordinance is designed to reduce the use of single-use foodware including:



CUPS

PLASTIC BAGS



PLASTIC BEVERAGE BOTTLES

CLAMSHELL CONTAINERS



UTENSILS

LIDS & STRAWS



LOOKING FORWARD

The City of Coronado can create a more sustainable future by regulating the amount of unused and unwanted single-use and disposable products with high environmental impact, including single use plastic straws, utensils, containers, and other disposable items that go to the landfill each year when people take food to go.

The most straightforward and effective solution to pollution is to shift away from our reliance on single-use plastic products. If we produce less plastic in the first place, there will be less to clean up and break down into microplastics.

The regulation of these single-use plastics in Coronado offers an unprecedented opportunity to reduce plastic pollution, which is crucial to a city surrounded by water.

KEY TAKEAWAYS

- Require reusable foodware for dine-in meals
- Ban the worst materials: EPS foodware, PFAS in foodware and food packaging, commonly littered plastic items
- Make nonplastic accessories available only upon request: straws, utensils, condiments
- Encourage reusables through mandates and surcharges on beverage cups and food containers

HOW EMERALD KEEPERS WILL HELP FACILITATE THIS EFFORT

Emerald Keepers will conduct discussions and provide guidance on alternatives. Emerald Keepers implemented Emerald Green, Ocean Blue Restaurants in 2019 as a single-use plastic reduction and elimination pilot program. These businesses moved away from single-use and disposable products with high environmental impact, such as plastic straws, stirrers, cutlery, plastic bags and Styrofoam to-go containers, in order to protect our environment and keep our beaches and oceans clean.

Emerald Keepers will continue to produce educational materials and will work with the City to design signage or materials for businesses. Ongoing community education is important throughout implementation.

