

The background image shows a coastal cleanup site. In the foreground, several large yellow plastic bags filled with trash are scattered on a grassy area. In the middle ground, several people are standing, some looking at the bags. In the background, there is a body of water with sailboats and a forested shoreline under a cloudy sky.

# 2020 TRASH REPORT: International Coastal Cleanup Findings, September-October

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*Protecting & Preserving the Waters of Puget Sound*





## WHAT IS THE INTERNATIONAL COASTAL CLEANUP?

Ocean Conservancy's International Coastal Cleanup (ICC) in partnership with organizations and individuals around the globe is the largest volunteer project in service to our oceans. Volunteers remove trash from the world's beaches and waterways, document sources of debris and promote behavior changes to prevent marine litter in the first place.

Globally, over 800,000 volunteers participate in ICC annually and remove millions of pounds of debris.

At each cleanup, information on the amount and type of debris collected is recorded on detailed data cards or through the CleanSwell app. These data are compiled into a global report that shows trends in data accumulation and can inform specific solutions to protect our waterways. Visualizing cleanup data also helps educate the public about the pervasive problem of marine trash.

Puget Soundkeeper is the regional coordinator for cleanups that occur within the Puget Sound watershed. This report details the work of the many groups who participated in the Puget Sound Coastal Cleanup effort in the fall of 2020.

This year, the numbers are a bit different because of COVID-19, but volunteers still safely cleaned up hundreds of miles and thousands of pounds.

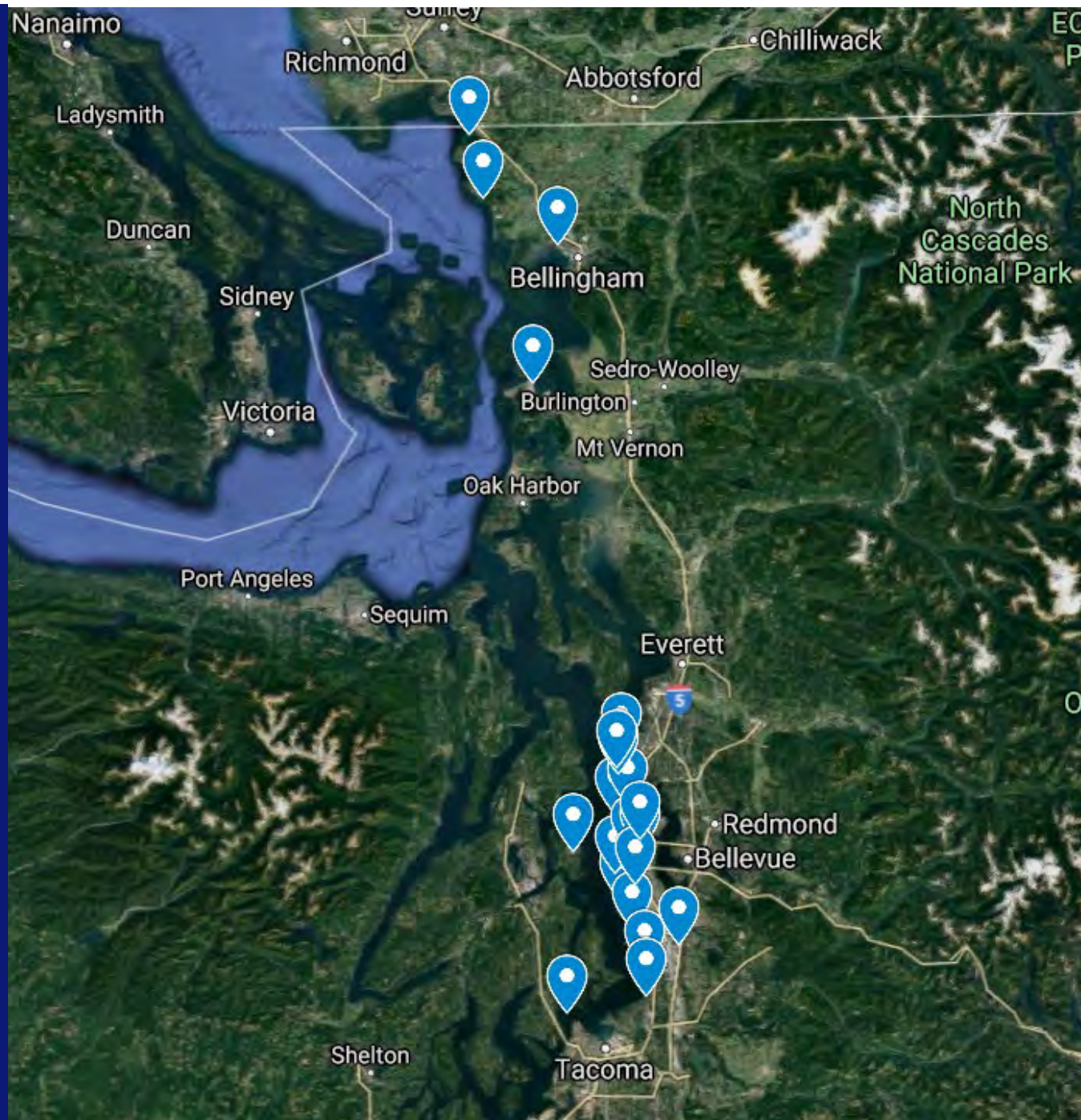
For help organizing a cleanup near you, please contact us:

Puget Soundkeeper  
psa@pugetsoundkeeper.org  
206-297-7002



# CLEANUP LOCATIONS

ALKI BEACH  
CARKEEK  
PARK  
LINCOLN PARK  
SAN JUAN  
ISLANDS  
SEAHURST  
POINT  
DEFIANCE  
REDONDO  
BEACH  
DES MOINES  
GOLDEN  
GARDENS  
SEMAIHMUO  
SPIT  
RICHMOND  
BEACH  
LAKE UNION  
BAINBRIDGE  
ISLAND  
SPRINGBROOK  
CREEK  
MYRTLE  
EDWARDS  
HA AH POOS  
DUWAMISH  
VILLAGE PARK  
(T107)  
BELLINGHAM  
POINT WELLS







## CLEANUPS BY THE NUMBERS



297 MILES  
CLEANED



3,008 LBS  
OF TRASH



372  
VOLUNTEERS



# CLEANUP HIGHLIGHTS: SAN JUAN ISLAND

BRUNSWICK  
Public Foundation



San Juan County includes 172 named islands and reefs. The islands are host to abundant biodiversity, stunning views, and a few well-known animal characters like resident orcas, harbor seals and porpoises. Visit a beach in August and you may see bioluminescent plankton light up the shoreline like fireflies.

This year, with funding from the FishAmerica Foundation and Brunswick, Puget Soundkeeper and Aquatic Research and Monitoring conducted cleanups on remote beaches in the San Juan Islands. Winter storms can break up docks and bring in marine debris to the shores of the islands.

This year 8 cleanups were conducted on the vessel, the Voyager. In total, 5,413 lbs was collected and during the months of September and October, 1,569 lbs was collected. Common marine debris that was found was rope, treated wood, Styrofoam filled tires and small pieces of Styrofoam and plastic.



## SEPTEMBER/OCTOBER



**1,569 LBS OF TRASH**



**12 HOURS**



**15 TIRES**

# MICROPLASTICS: A NOT SO MICRO PROBLEM

The durability of plastic is a double-edged sword. It works for as long as we need it, but remains long after we toss it in the trash can. That toothbrush you threw away seven years ago is still out there, as is that granola bar wrapper. In fact, every piece of plastic ever made is still in existence in some shape or form.

Each year, over 8 million metric tons of plastic waste enter the world's oceans. That's equal to one dump truck every minute. Unfortunately

for our oceans, plastic does not biodegrade. When exposed to the sun's rays and strong ocean currents, it breaks up into smaller and smaller pieces that persist in the marine environment for centuries.

Plastic fragments and fibers 5 millimeters in size and smaller are called microplastics, and they don't just come from the breakdown of larger debris. Research has found that car tires, latex paint, and fibers from synthetic clothing are all major contributors to microplastic pollution.

Plastics can contain harmful additives like phthalates

(used to make plastic more flexible) and PBDEs (flame retardants). Even more concerning, plastics can absorb toxic compounds already present in a polluted waterway, including DDTs, PCBs, nonylphenols (industrial detergents), heavy metals, pesticides, and pathogens. If an organism consumes contaminated plastic, these toxics may transfer to the organism's tissues.

Separate studies have found microplastics in fish, shellfish, salt, honey, beer, and even drinking

water. An international study completed in 2017 found that the U.S. had the highest microplastic contamination rate in our drinking water, detecting plastic fibers in 94 percent of tap water samples from sites including congressional buildings and the

U.S. Environmental Protection Agency headquarters.

We are just beginning to understand the magnitude of the microplastics problem. In the winter of 2018, Puget Soundkeeper and the University of Puget Sound coordinated the collection of water samples from 44 sites across Puget Sound, from the San Juan Islands to Olympia. Throughout the winter, volunteers took to local shorelines with sample jars and data sheets.

**The durability of plastic is a double-edged sword. It works for as long as we need it, but remains long after we toss it in the trash can.**

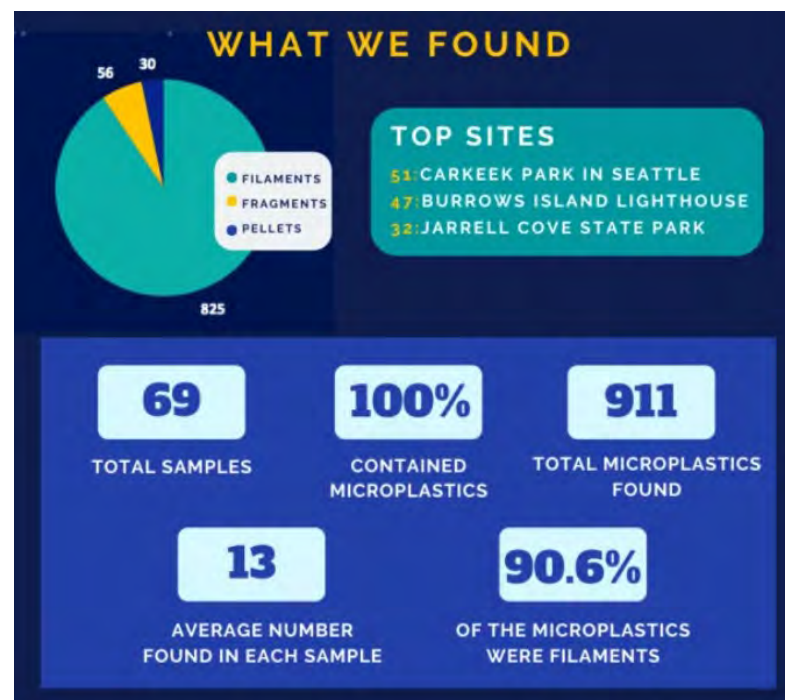




During the fall of 2019 and winter of 2020, volunteers analyzed these samples. 100% of the 69 samples contained microplastics with 90.6% of them being filaments. A total of 911 microplastics were found with an average of 13 in each sample.

Puget Soundkeeper seeks to document the extent of microplastic pollution in Puget Sound in order to educate the public on this microplastic issue and we are currently strategically planning to implement microplastic findings for future policy work.

We have a role to play in a plastic-free Salish Sea. The solution involves a commitment from all of us to reduce plastic consumption, strengthen scientific understanding of the effects of plastic to human health and the environment, and develop sound policy that engages individuals and governments and holds the plastic industry accountable.



### WHAT *are* MICROPLASTICS?

TINY PLASTIC PIECES ABOUT THE SIZE OF A SESAME SEED. MICROPLASTICS CAN BE FILAMENTS, FRAGMENTS OR PELLETS.

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**FILAMENTS**, ALSO CALLED PLASTIC FIBERS, COME FROM WASHING SYNTHETIC CLOTHING LIKE FLEECE, WHICH CAN ENTER OUR WATERWAYS THROUGH THE AIR.

**FRAGMENTS** ARE SMALL PIECES OF LARGER PLASTIC BROKEN DOWN OVER TIME.

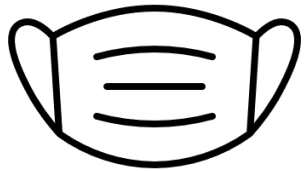
**PLASTIC PELLETS**, ALSO CALLED NURDLES, ARE USED IN THE MANUFACTURING OF LARGER PLASTIC OBJECTS.



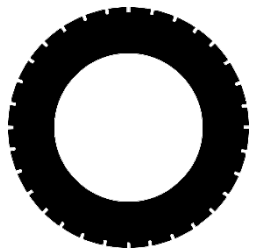
## ITEMS OF LOCAL CONCERN



CIGARETTES



MASKS



TIRES







## TOP ITEMS FOUND

○ ○  
○ ○ 2,970  
Small plastic  
pieces

☿  
☐ 2,533  
Cigarette butts

🍌 1,670  
Food  
wrappers



# CIGARETTE BUTTS

Cigarette butts are the number one item collected at International Coastal Cleanup events. In 2019, 5,716,331 cigarette butts were collected worldwide, a fraction of the trillions that pollute our waterways every year.

These small pieces of debris are deceptively toxic. The majority of filters are made from cellulose acetate, a plastic that does not biodegrade. In addition, they serve as a pathway for multiple toxic compounds to enter aquatic ecosystems. Nearly 7,000 chemicals are present in cigarette tobacco, including ammonia, arsenic, formaldehyde, lead, and tar.

These chemicals accumulate in cigarette filters which then leach into the water and have harmful effects on aquatic wildlife.







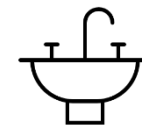
## MOST UNUSUAL FINDS

TOY MERMAID

SINK

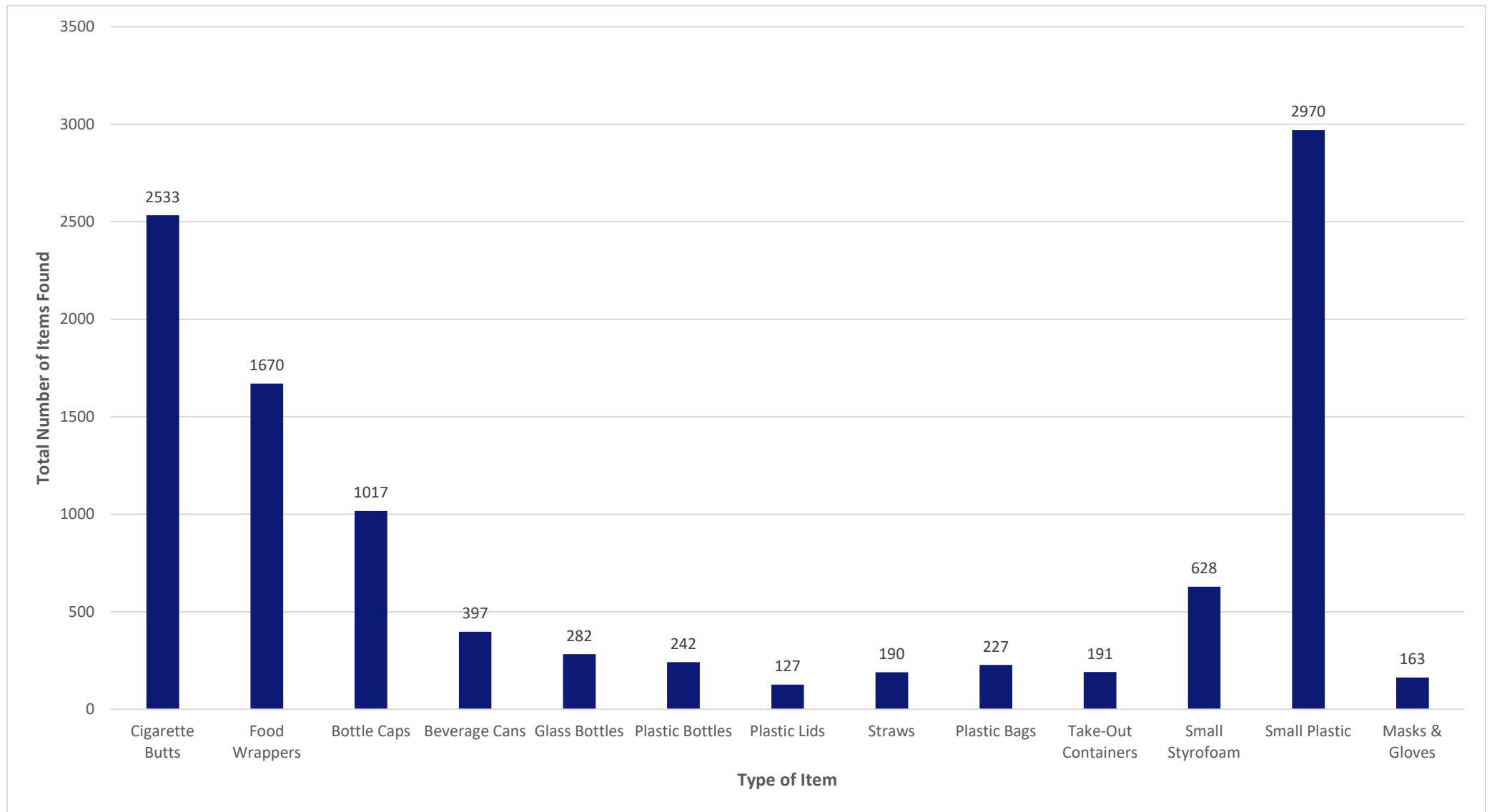
CANE

TOY ORCA





## 2020 DATA





# THANK YOU TO OUR PARTNERS!

## KING COUNTY

DTG  
Eagle Scouts  
Expedia  
Habitat for Humanity  
Lost Urban Creeks  
Rena Ware International  
Seattle Surfrider  
Seattle Zero Waste  
SR3  
Starbucks

## KITSAP COUNTY

Bainbridge Island  
Cleanup

## SAN JUAN COUNTY

Aquatic Research and Monitoring

## SNOHOMISH COUNTY

Sno-King Marine Mammal Response

## WHATCOM COUNTY

North Sound Baykeeper

## CLALLAM COUNTY

Washington Coastsavers

Thank you to another Regional Coordinator,  
Washington CoastSavers! Check out their website  
(<https://www.coastsavers.org/>) to see what they  
collected at International Coastal Cleanup this year

Washington  
**CoastSavers**





**GARYmanuel**



## IMAGE CREDITS

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