VMLY&R PARIS 2019, 642 016 778 RCS NANTERRE

OCEAN INITIATIVES 2019 ENVIRONMENTAL REPORT

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EDITORIAL

The Ocean Initiatives program forms part of a campaign to raise awareness on the issue of marine litter, which all too often ends up in the Ocean. The project was born out of and is driven by a strong determination to combat the scourge of marine litter which is suffocating our planet's lungs. Today, this determination is still as strong as ever and is reflected in the fact that The Ocean Initiatives are now celebrating their 25th birthday. 25 years ... ¼ of a century! 25 years of raising awareness, field action, passion and sharing. This longevity demonstrates, more than ever, your commitment to protect the ocean and aquatic environments, not only for us but for future generations.

Year after year, the Ocean Initiatives rally more and more people around a common cause. Following large-scale engagement in 2018, 2019 was a historic year for us with a 60% increase in the number of waste collection. 2,279 waste collection were organised in 54 countries. 83,417 people played a part in this success and this groundswell of action to protect the ocean.
Each year, we see record numbers of people getting involved. This shows that more and more of you are concerned about the challenges posed by marine litter. And also that, now more than ever, it is a highly topical issue.

Your commitment to the fight against litter enables us to take action! Thanks to the information you share with us, we are improving our knowledge about marine litter. This Europe-wide source of knowledge flags up local issues. Through this participatory science project, you play a leading role in the fight against this form of pollution which is afflicting the environment.

This data, along with all your feedback, is vital in helping us to alert politicians and businesses to the urgency of the situation. They enable us to speak on behalf of the ocean with policy-makers and to back up our arguments with figures and concrete examples of «this form of pollution and its impact on aquatic environments.
Therefore, thanks to your involvement on the field and your determination, the European institutions have adopted in 2020 a Directive to reduce 10 single-use plastic products at source. These 10 products are the 10 items of plastic waste most often found along European coastlines. You provided us with this information through The Ocean Initiatives. We hope that in the years to come, your work in identifying and quantifying waste will result in a significant reduction in the amount of these 10 types of waste, demonstrating that the measures taken are appropriate for the fight.

The ocean is where waste resulting from human activity accumulates: — to different degrees of visibility. 100% of pollution is caused by human beings. We are responsible for it, but we can also lead the way in bringing about a reduction in this pollution and in changing people's habits.

Because without you, none of this would be possible,
And because your commitment and motivation are such an inspiration to us,
We want to say a big THANK YOU! Thank you for working alongside us for the last 25 years!

The The Ocean Initiatives team

4.

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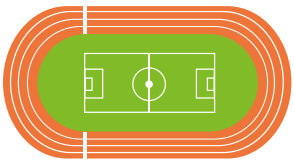
2019

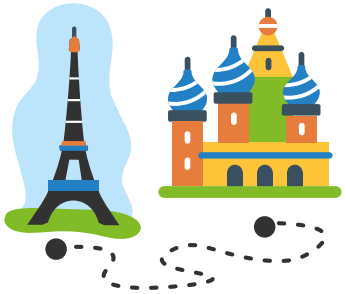
The Ocean Initiatives in 2019:

83 417
PARTICIPANTS



CAPACITY OF THE SYDNEY OLYMPIC STADIUM

2 760
KM OF LENGTH



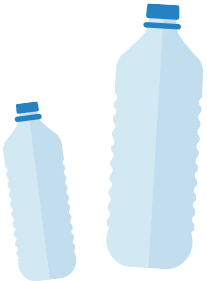
A PARIS-MOSCOW DISTANCE

140 565
KM COVERED BY PARTICIPANTS

3,5 TIME THE CIRCUMFERENCE OF THE EARTH

1 977 M^3
OF WASTE

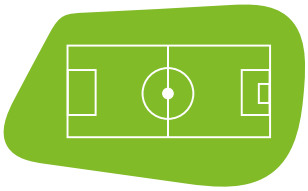
10 743
BATHTUBS FILLED WITH RUBBISH



111 461
PLASTIC BOTTLES

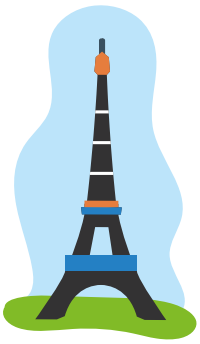
4 128
JUMPERS MADE WITH RECYCLED POLYESTER

88 327
COTTON-BUDS
PUT END-TO-END



60
ALIGNED
FOOTBALL
PITCHES

4 027 435
CIGARETTE BUTTS
PUT END-TO-END



400
TIMES THE
HEIGHT OF THE
EIFFEL TOWER

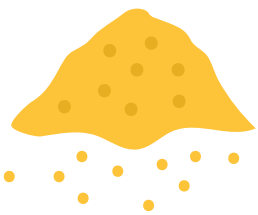
123 874
PLASTIC CUPS

THE HEIGHT OF
EVEREST

78 389
CANS (IF THE CANS
WERE SODA CANS)

537 075
SUGAR CUBES
CONSUMED

189 244
GLASS
BOTTLES

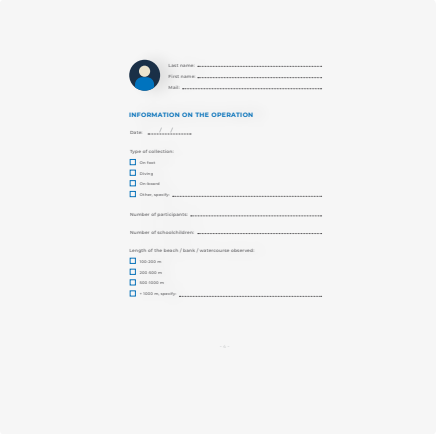


64
TONS
OF SAND

01
GENERAL REPORT

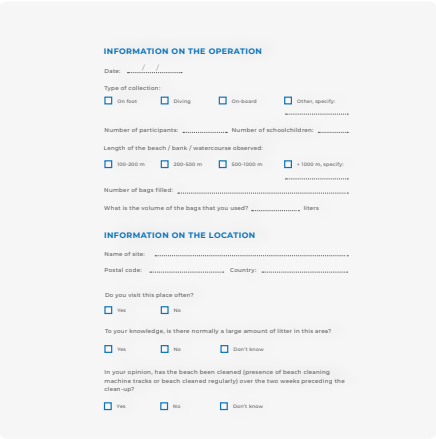
THREE TYPES OF REPORT FORMS IN 2019

In 2019, we gave the organizers the possibility to fill in several types of reports, after completion of their The Ocean Initiatives. They could base their choice on the time taken, their expertise, and their degree of engagement in participatory science.



SIMPLIFIED VERSION

The organizer fills in information about the action, but also information on the plastic bottles for beverage found during their operation. This data is used for Surfrider's "Reset Your Habits" campaign.



INTERMEDIARY VERSION

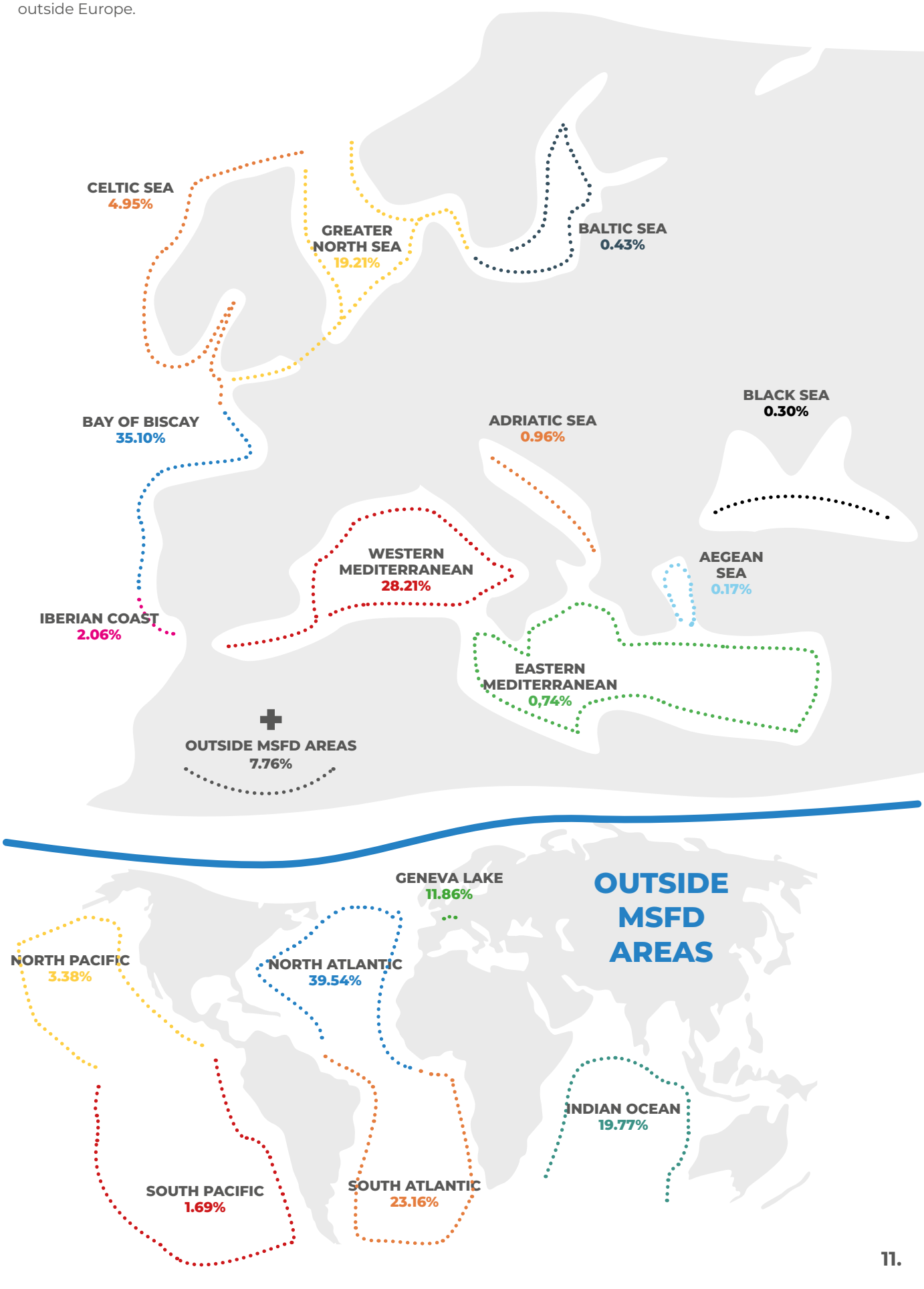
The organizer sends us general information about the action and the site chosen for the collection and quantifies 34 types of litter, broken down by material and use.

MARINE LITTER WATCH APP

Surfrider teamed up with the European Environment Agency to share data from the The Ocean Initiatives organized and enter them into a European data base. Thus giving the most engaged and motivated the opportunity to take part in a complete quantification action, in line with the standard European procedure, using the Marine Litter Watch application.

WHERE HAVE COLLECTIONS TAKEN PLACE ?

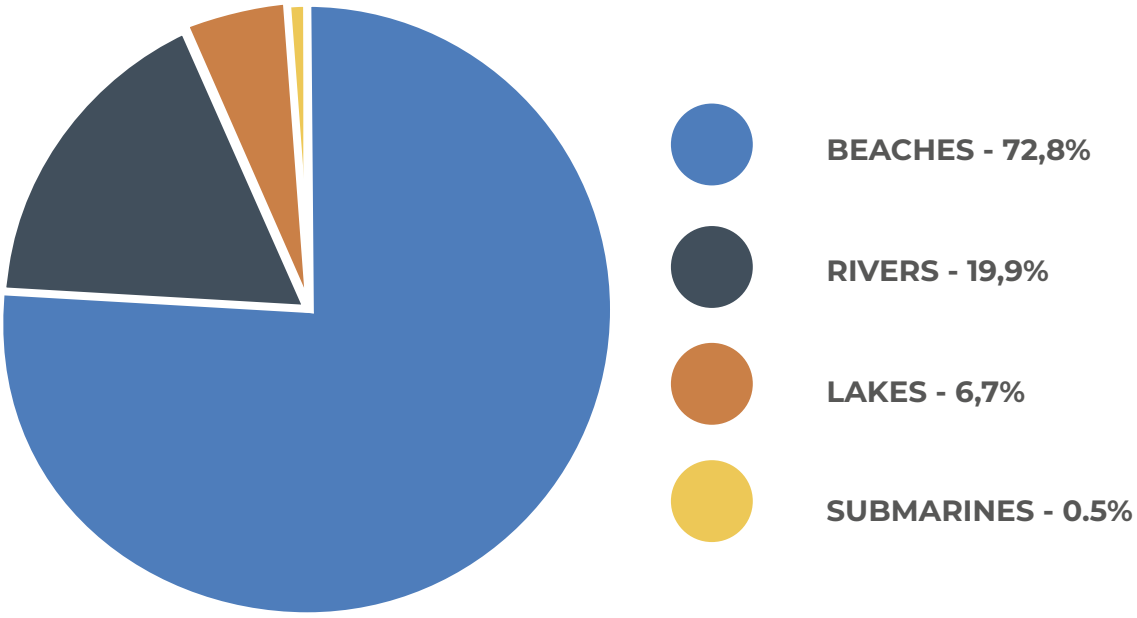
Two groups have been formed to present the areas where The Ocean Initiatives have taken place: the large marine spaces in Europe such as those defined by the Marine Strategy Framework Directive (MSFD) and the areas outside Europe.



KEY DATA

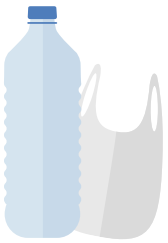
The numbers with an asterisk are based on a total of 739 report forms completed (337 simplified and 402 intermediary reports).

TYPES OF OPERATION



10 819*

Bags of litter collected by participants.



576,51 M3*

Total volume of litter collected.

27 054*

People reached, 27,9%* of them are schoolchildren.

925 KM*

of coastline length covered by participants.

TOTAL LITTER COLLECTED BY ORGANIZERS WHO HAVE COMPLETED THE QUANTIFICATION PROTOCOL

For several years, we have been asking the participants of the The Ocean Initiatives to take part in a citizen science action by filling in a complete report form, to improve knowledge of the state of European and world coastlines with regard to marine litter pollution. In order to do this, we asked them to answer questions on the location where their The Ocean Initiatives took place and to quantify **34 types of litter**, categorized according to materials and uses. This simplified quantification is based on the master list of the European harmonized protocol.

402 organizers, accompanied by 14 220 people, got involved in this exercise. The total number of items of litter collected is 704 840 which translates into a volume of 275,324 m³.

TOP 10 ITEMS

1.
CIGARETTE BUTTS

2.
PLASTIC PIECES 2.5-50 CM

3.
PLASTIC BAGS AND PIECES

4.
POLYSTYRENE PIECES 2.5-50 CM

5.
BOTTLE CAPS (PLASTIC)

6.
PLASTIC BOTTLES (DRINKS BOTTLES)

7.
FOOD CONTAINERS

8.
PIECES OF GLASS

9.
TANGLED NETS/CORDS

10.
CRISPS PACKETS, SWEET WRAPPERS

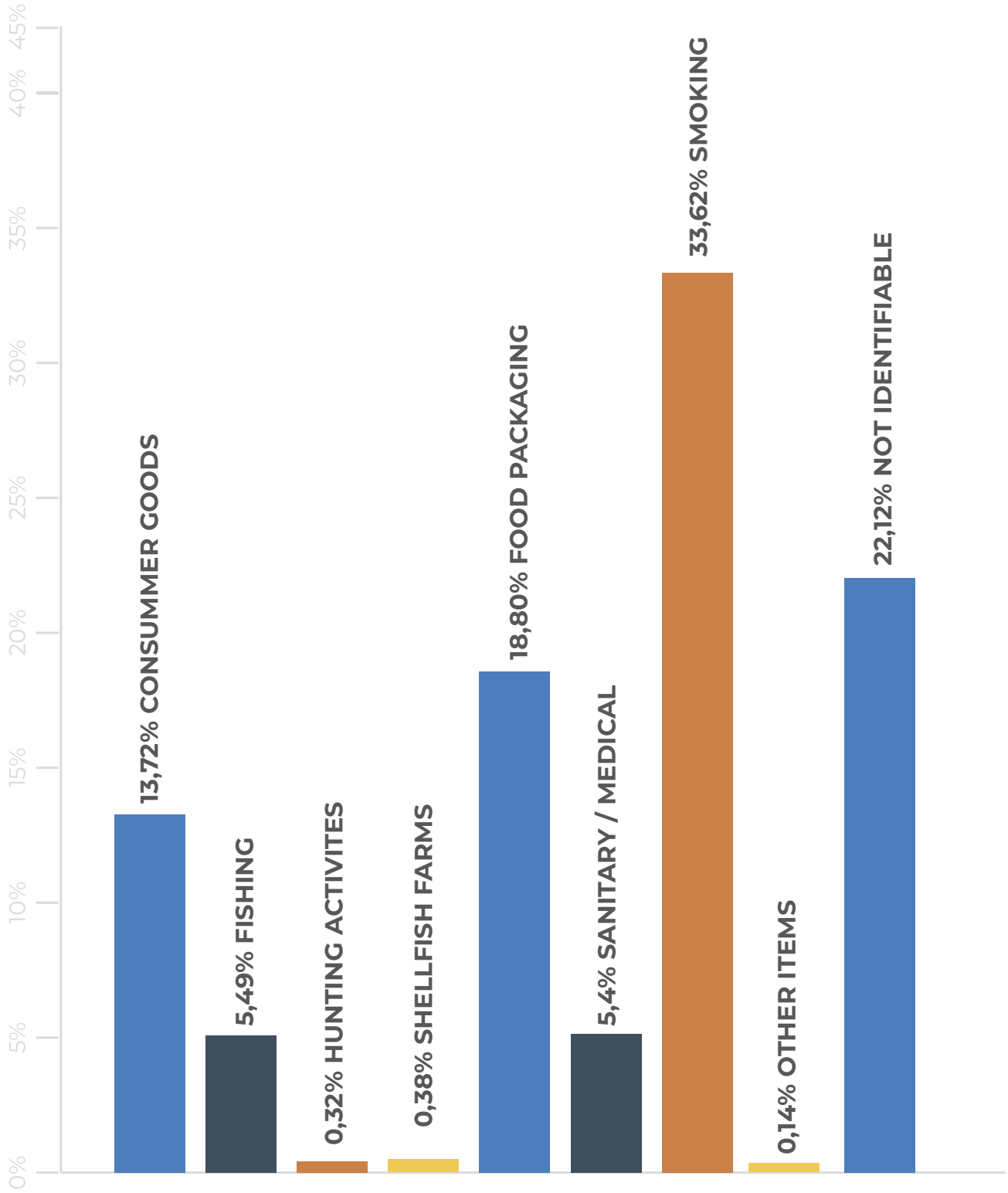
65%

of the waste collected were single-use

plastic products."Single-use plastic items" are products destined to be used only once (such as a plastic bag or a straw).

DISTRIBUTION OF MARINE LITTER BY USE

- **litter from common consumer goods** (e.g. plastic bags, toys, shoes and CLOTHESes),
- **litter from professional and amateur fishing** (e.g. cords and fishing lines),
- **litter from hunting activities** (shotgun cartridges),
- **litter from shellfish farms,**
- **packaging and food packaging litter** (e.g. food packaging, plastic cups and cutlery),
- **sanitary and medical litter** (e.g. medicine packaging, tampons and applicators),
- **litter from smoking habits** (e.g. cigarette packets and cigarette butts),
- **Other litter** (identifiable litter that does not fit into the categories, e.g. car parts or biomedia),
- **non-identifiable litter** (plastic and polystyrene pieces).



TOTAL OF COLLECTED ITEMS

Total number of items collected in 402 collections: 704 840 quantified items

PLASTIC

239 452 CIGARETTE BUTTS

5 822 BOTTLES ≤ 0.5 L

7 054 BOTTLES > 0.5 L

30 621 BOTTLE CAPS (PLASTIC)

3 973 OTHER BOTTLES OR CONTAINERS

23 987 FOOD CONTAINERS

51 610 PLASTIC BAGS AND PIECES

18 796 CRISPS PACKETS, SWEET WRAPPERS

14 742 LOLLIPOP STICKS

1 870 MEDICAL WASTE: PACKAGING CONTAINERS

16 175 SANITARY WASTE: COTTON SWAB

5 161 TAMPON APPLICATORS, SANITARY TOWELS

41 252 POLYSTYRENE PIECES 2.5-50 CM

97 750 PLASTIC PIECES 2.5-50 CM

7 313 PLASTIC CUPS

3 449 CUTLERY, TRAYS

12 153 STRAWS, STIR-STICKS

17 314 FISHING: CORDS, SMALL CORDS (DIAMETER < 1 CM)

3 877 FISHING: LINE (ANGLING)

19 720 FISHING: TANGLED NETS/CORDS

2 489 SHOTGUN CARTRIGES

1 038 TYRES, WHEELS

1 312 TOY AND PARTY POPPERS

1 545 LIGHTERS

710 BALLOONS INCL. VALVES

845 SHOES, SANDALS

2 854 SHELLFISH AQUACULTURE

1 645 BIOMEDIAS

GLASS

11 465 GLASS BOTTLES

19 732 PIECES OF GLASS

METAL

14 216 CANS

6 156 METAL PIECES

16 781 METAL CAPS

CLOTHES

3 991 CLOTHESING, OTHER TEXTILES

FOCUS ON MARINE ENVIRONMENT: BEACHES AND SEABED

TOP 10 ITEMS

1. CIGARETTE BUTTS

2. PLASTIC PIECES 2.5-50 CM

3. PLASTIC BAGS AND PIECES

4. POLYSTYRENE PIECES 2.5-50 CM

5 BOTTLE CAPS (PLASTIC)

6. FISHING: TANGLED NETS/CORDS

7. FISHING: CORDS, SMALL CORDS (DIAMETER < 1 CM)

8. PIECES OF GLASS

9. FOOD CONTAINERS

10. SANITARY WASTE: COTTON SWAB

« **79%** of the waste collected on beaches were single-use plastic products »

TOTAL OF COLLECTED ITEMS IN MARINE ENVIRONMENT

Total number of items collected in 304 operations: 536 746 quantified items.

PLASTIC

154 872 CIGARETTE BUTTS

4 018 BOTTLES ≤ 0.5 L

4 128 BOTTLES > 0.5 L

26 921 BOTTLE CAPS (PLASTIC)

3 082 OTHER BOTTLES OR CONTAINERS

14 464 FOOD CONTAINERS

45 938 PLASTIC BAGS AND PIECES

13 655 CRISPS PACKETS, SWEET WRAPPERS

14 240 LOLLIPOP STICKS

1 158 MEDICAL WASTE: PACKAGING CONTAINERS

15 716 SANITARY WASTE: COTTON SWAB

1 573 TAMPON APPLICATORS, SANITARY TOWELS

38 709 POLYSTYRENE PIECES 2.5-50 CM

82 865 PLASTIC PIECES 2.5-50 CM

5 522 PLASTIC CUPS

2 762 CUTLERY, TRAYS

10 665 STRAWS, STIR-STICKS

17 085 FISHING: CORDS, SMALL CORDS (DIAMETER < 1 CM)

3 817 FISHING: LINE (ANGLING)

19 538 FISHING: TANGLED NETS/CORDS

2 390 SHOTGUN CARTRIGES

576 TYRES, WHEELS

1 147 TOY AND PARTY POPPERS

1 198 LIGHTERS

414 BALLOONS INCL. VALVES

730 SHOES, SANDALS

2 825 SHELLFISH AQUACULTURE

1 644 BIOMEDIAS

GLASS

7 046 GLASS BOTTLES

17 031 PIECES OF GLASS

METAL

6 854 CANS

5 079 METAL PIECES

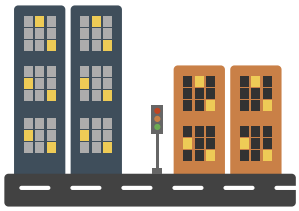
6 227 METAL CAPS

CLOTHES

2 857 CLOTHESING, OTHER TEXTILES

INFORMATION ON THE COLLECTION SITES (MARINE ENVIRONMENT)

We asked organizers to provide us with information about waste collection sites in the marine environment. The sites they chose may meet several features. The percentages are therefore for reference only.



85%

of beaches where the The Ocean Initiatives took place are located near a town.

86%

of beaches where the The Ocean Initiatives took place are highly frequented or in tourist areas.

43%

of the beaches are near a river or waterway that runs into the sea.

« **8 MILLIONS**
of tons of plastic waste are dumped in our oceans every year. »

FOCUS ON WATERCOURSES: RIVERS AND LAKES

TOP 10 ITEMS

1. CIGARETTE BUTTS

2. METAL CAPS

3. PLASTIC BOTTLES (DRINKS BOTTLES)

4. FOOD CONTAINERS

5. PLASTIC BAGS AND PIECES

6. CANS

7. BOTTLE CAPS

8. PIECES OF GLASS

9. PLASTIC CUPS

10. CRISPS PACKETS, SWEET WRAPPERS

TOTAL OF COLLECTED ITEMS IN RIVERS AND LAKES

Total number of items collected in 98 waste collections: 168 094.

PLASTIC

84 580
CIGARETTE BUTTS

1 804
BOTTLES ≤ 0.5 L

2 926
BOTTLES > 0.5 L

3 700
BOTTLE CAPS (PLASTIC)

891
OTHER BOTTLES OR CONTAINERS

7 523
FOOD CONTAINERS

5 672
PLASTIC BAGS AND PIECES

5 141
CRISPS PACKETS, SWEET WRAPPERS

502
LOLLIPOP STICKS

712
MEDICAL WASTE: PACKAGING CONTAINERS

459
SANITARY WASTE: COTTON SWAB

3 588
TAMPON APPLICATORS, SANITARY TOWELS

2 543
POLYSTYRENE PIECES 2.5-50 CM

14 885
PLASTIC PIECES 2.5-50 CM

1 791
PLASTIC CUPS

687
CUTLERY, TRAYS

1 488
STRAWS, STIR-STICKS

229
FISHING: CORDS, SMALL CORDS (DIAMETER < 1 CM)

60
FISHING: LINE (ANGLING)

182
FISHING: TANGLED NETS/CORDS

99
SHOTGUN CARTRIGES

462
TYRES, WHEELS

165
TOY AND PARTY POPPERS

347
LIGHTERS

296
BALLOONS INCL. VALVES

115
SHOES, SANDALS

29
SHELLFISH AQUACULTURE

0
BIOMEDIAS

GLASS

4 419
GLASS BOTTLES

2 701
PIECES OF GLASS

METAL

7 362
CANS

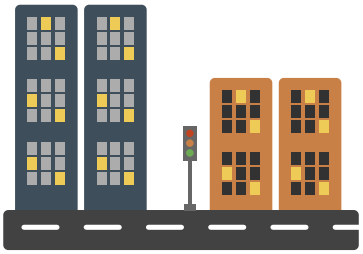
1 077
METAL PIECES

10 554
METAL CAPS

CLOTHES

1 134
CLOTHESING, OTHER TEXTILES

SOME NUMBERS

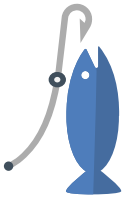


98%

of the river and lake banks examined by The Ocean Initiatives organizers where located near a town or a village upstream.

INFORMATION ON FRESH WATER SITES (ACTIVITIES)

These are the main activities carried out on the area where the The Ocean Initiatives took place, according to the organizers. Several types of activities can take place on the same area. The percentages are given for information purposes only.



50%

of sites are located near fishing areas.

12%

of sites are located near hunting areas

16%

are downstream from agricultural areas.

16%

are downstream from industrial areas.

33%

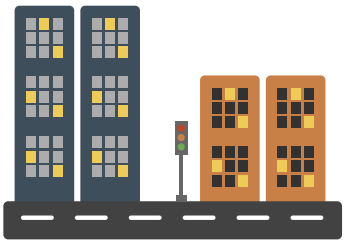
are in areas where water sports take place.

PERCEPTION OF THE ORIGIN OF THE LITTER

We asked participants to tell us what, according to them, is the origin of the litter found during their waste collections. Here are their answers:

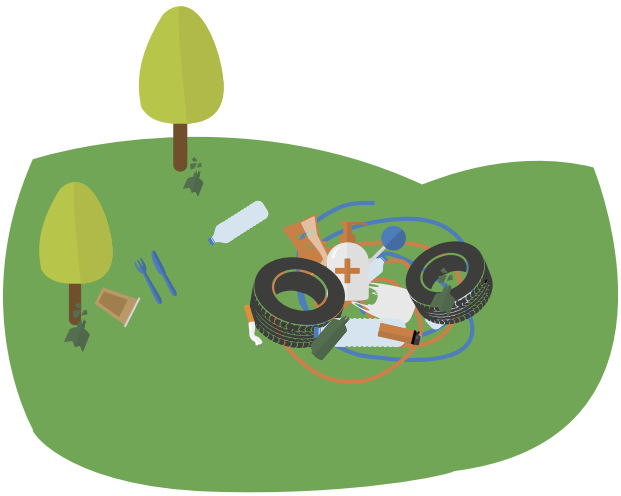
82%

For 82% of the organizers, the litter found was related to anti-social behavior: leaving litter behind after a picnic, sport activities, fast food near the river banks, etc.



48%

For 48% of the organizers, the litter recovered resulted from poor waste management in towns located upstream. It is thrown out in an urban area and moved by the wind or run-off water and wastewater networks.



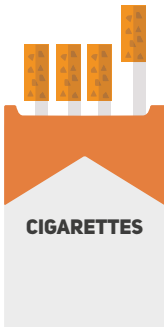
Several organizers informed us of an unauthorised dumping site on the river banks or near the site. Some organizers also flagged up the presence of former landfill sites that end up emptying their contents into the waterway.

OTHER ITEMS COLLECTED IN LARGE NUMBERS

48% of the organizers reported to have found large quantities of other item types during their quantification (items not included in the item list).

WET WIPES

Many people still dispose of these synthetic single-use products in the toilet which damages waste water system. The European "Single use plastic" Directive, adopted in early 2019, has set out several measures ranging from labelling on packaging to establishing extended producer responsibility to restrict pollution by wet wipes.

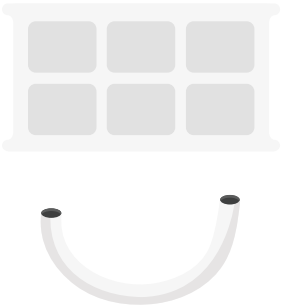


CIGARETTE PACKETS

In addition to cigarette butts, organizers picked up numerous other types of smoking-related litter such as cigarette packets or plastic wrappers. 92 cigarette packets were collected during a single waste collection on a beach near Brest (France).

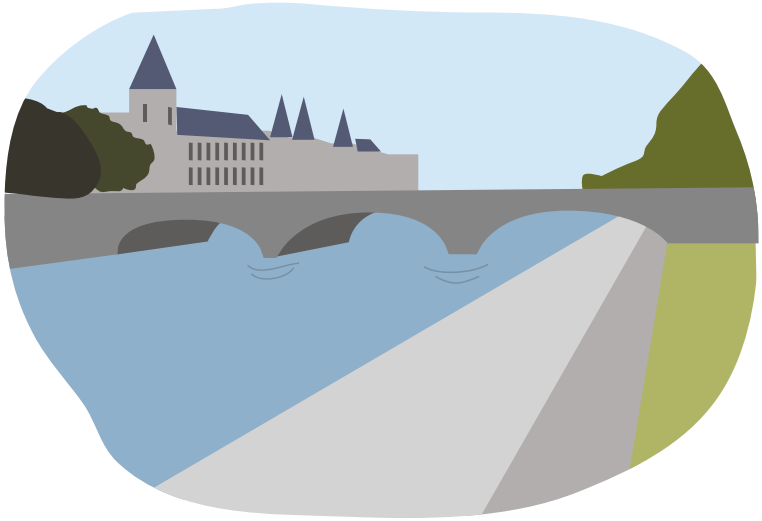
CORKS

Organizers collected countless corks during their operations. Over 82 corks were gathered during one waste collection in Nice (France).



CONSTRUCTION WASTE

Breeze blocks, pipes, rubble, sheaths, insulation; these are just some of of the waste items found by our organizers along all maritime coasts and which are often the result of public or private building work.



THE SEINE RIVERBANKS: THE CITIES' BIN

Several organizers stated that the Seine River and its banks were all too often used as a dumping ground. For example, organizers found: 3 fire extinguishers, 1 street lamp, 12 chairs, over 400 metro tickets, 3 car bumpers, 3 bumpers, 5 sheets of asbestos, etc. on the Seine riverbanks

AND ALSO...

225

pieces of fireworks on a beach in Calvados (France)

16

Batteries found on a beach in Valencia (Spain)

WEIRD FINDS

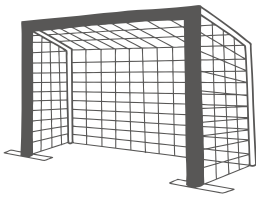
STREAMS AND OCEANS: THE LARGEST DUMP OF HUMAN ACTIVITY

More than 450 unusual objects were found and listed by participants during The Ocean Initiatives in 2019.

2 SKIS

12 AUDIO CASSETTES

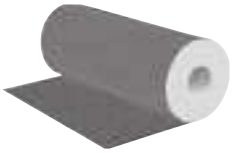
1 SET OF DEN-TURES



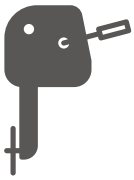
1 FOOTBALL GOAL

15 SHEETS OF ASBESTOS

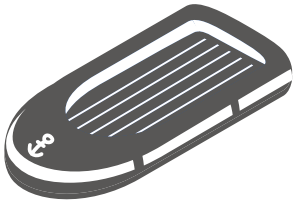
1 STREET SIGN



4 M² OF LINOLEUM



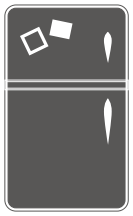
3 BOAT ENGINES



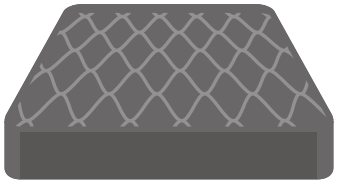
1 INFLATABLE LIFEBOAT

FROM THE HOUSE

2 TELEVISIONS



2 FRIDGES

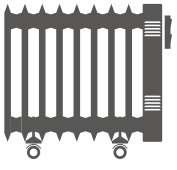


2 MATTRESSES

2 TOILETS

1 WASHBASIN

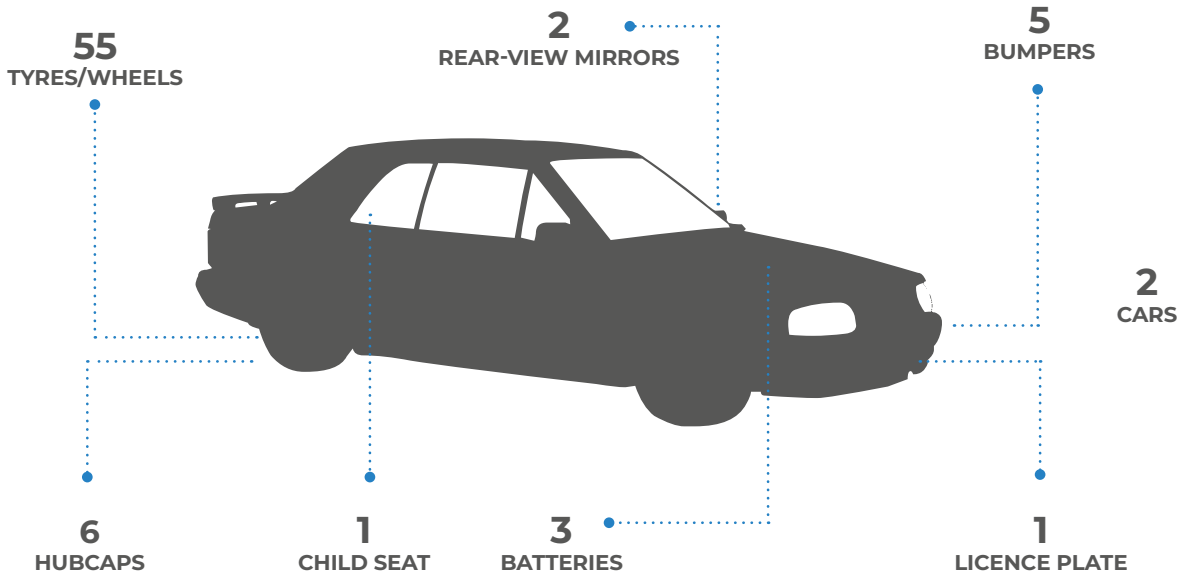
2 WASHING MACHINES



1 RADIATOR

1 SUITCASE

CARS DEPARTMENT:



NOT FORGETTING THE USUAL SUSPECTS

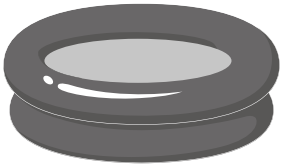
8 TRAFFIC SIGNS

3 FLIPPERS

250 BITS OF FIREWORKS

4 FIRE EXTINGUISHERS

6 SCOOTERS



2 BITS OF PLASTIC SWIMMING POOLS

25 TROLLEYS

8 BICYCLES

02
REPORT BY SEA AREAS

BAY OF BISCAY

FROM PENMARCH IN FRANCE TO ORTEGAL CAPE IN SPAIN.

GENERAL DATA ON THE WHOLE SEA AREA

Extrapolation based on a total of 800 The Ocean Initiatives which took place in this sea area.

28 092*
People reached.

36 217*
Bags of litter collected by participants.

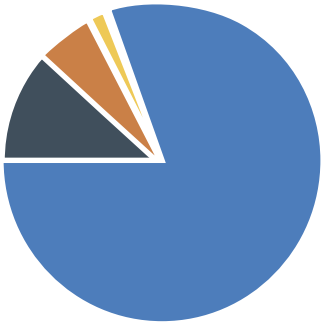
1 038 928 M*
1 039 km of coastline length covered by participants.

399,81 M³*
Total volume of litter collected.

DATA FROM QUANTIFICATION

235 quantification operations bringing together 8 433 persons took place in Spain (29 operations) and France (206 operations). **168 825 items were picked up and quantified over a distance of 320 160 meters. The total volume of collected litter is 106,9 m³.**

TYPES OF COLLECTION



- BEACHES - 74%
- LAKES - 8%
- RIVERS - 17%
- SUBMARINES - 1%

TOP 5 of collected items

PLASTIC PIECES 2.5-50 CM

CIGARETTE BUTTS

PLASTIC BAGS AND PIECES

FISHING: TANGLED NETS/ CORDS

FISHING: CORDS, SMALL CORDS (DIAMETER < 1 CM)

TOTAL OF COLLECTED ITEMS IN MARINE ENVIRONMENT AND WATERCOURSES

PLASTIC

31 625 CIGARETTE BUTTS

3 064 BOTTLES ≤ 0.5 L

3 463 BOTTLES > 0.5 L

8 396 BOTTLE CAPS (PLASTIC)

1 073 OTHER BOTTLES OR CONTAINERS

9 104 FOOD CONTAINERS

13 516 PLASTIC BAGS AND PIECES

5 033 CRISPS PACKETS, SWEET WRAPPERS

2 203 LOLLIPOP STICKS

581 MEDICAL WASTE: PACKAGING CONTAINERS

5 034 SANITARY WASTE: COTTON SWAB

469 TAMPON APPLICATORS, SANITARY TOWELS

8 116 POLYSTYRENE PIECES 2.5-50 CM

34 368 PLASTIC PIECES 2.5-50 CM

1 096 PLASTIC CUPS

432 CUTLERY, TRAYS

1 358 STRAWS, STIR-STICKS

10 878 FISHING: CORDS, SMALL CORDS (DIAMETER < 1 CM)

1 418 FISHING: LINE (ANGLING)

10 742 FISHING: TANGLED NETS/CORDS

1 450 SHOTGUN CARTRIGES

47 TYRES, WHEELS

328 TOY AND PARTY POPPERS

401 LIGHTERS

142 BALLOONS INCL. VALVES

266 SHOES, SANDALS

2 437 SHELLFISH AQUACULTURE

880 BIOMEDIAS

GLASS

1 928 GLASS BOTTLES

3 617 PIECES OF GLASS

METAL

1 701 CANS

871 METAL PIECES

2 271 METAL CAPS

CLOTHES

517 CLOTHESING, OTHER TEXTILES

TOTAL OF COLLECTED ITEMS IN MARINE ENVIRONMENT

493 items were picked up and quantified throughout 176 operations of citizen science (25 in Spain and 151 in France) carried out on the beaches and seabeds of this area, **over a distance of 199 110 meters. The total volume of collected litter was 8,66 m³.**

PLASTIC

14 022
CIGARETTE BUTTS

1 548
BOTTLES ≤ 0.5 L

2 090
BOTTLES > 0.5 L

7 951
BOTTLE CAPS (PLASTIC)

888
OTHER BOTTLES OR CONTAINERS

7 988
FOOD CONTAINERS

12 558
PLASTIC BAGS AND PIECES

4 328
CRISPS PACKETS, SWEET WRAPPERS

2 129
LOLLIPOP STICKS

463
MEDICAL WASTE: PACKAGING CONTAINERS

4 945
SANITARY WASTE: COTTON SWAB

455
TAMPON APPLICATORS, SANITARY TOWELS

7 083
POLYSTYRENE PIECES 2.5-50 CM

32 427
PLASTIC PIECES 2.5-50 CM

898
PLASTIC CUPS

349
CUTLERY, TRAYS

1 266
STRAWS, STIR-STICKS

10 812
FISHING: CORDS, SMALL CORDS (DIAMETER < 1 CM)

1 401
FISHING: LINE (ANGLING)

10 694
FISHING: TANGLED NETS/CORDS

1 439
SHOTGUN CARTRIGES

35
TYRES, WHEELS

267
TOY AND PARTY POPPERS

356
LIGHTERS

97
BALLOONS INCL. VALVES

233
SHOES, SANDALS

2 433
SHELLFISH AQUACULTURE

880
BIOMEDIAS

GLASS

996
GLASS BOTTLES

3 118
PIECES OF GLASS

METAL

644
CANS

777
METAL PIECES

551
METAL CAPS

CLOTHES

372
CLOTHESING, OTHER TEXTILES

FACTS AND FIGURES

16,89%
of waste collected on the beaches came from fishing (ropes, bits of net, lines, etc.)

2
Boat engines was retrieved during a collect in Spain

720
items of oyster-farming equipment were collected during a waste collection in Aytré (FRANCE)

10,33%
of the litter collected on the Bay of Biscay area were cigarette butts.

936
food containers were collected on the beach during one waste collection in Landes (France)

Regarding the beaches where the citizen science activities were undertaken:

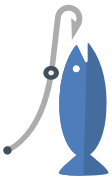
8,5%
of organizers stated that a festival (village festivity, fireworks display, etc.) or meteorological event (spring tide, storm) that occured before their operation may have affected the amount of litter they found.

61%
of beaches are located near a town.

TYPES OF ACTIVITIES

These are the main activities performed at the area where the Ocean Initiative took place, according to the organizers. At these sites, several types of activities can take place on the same grounds. The percentages are given for information purposes only.

64%
of beaches are nautical activity areas (swimming, kite surfing, surfing, sailing, paddle boarding, diving, etc.).



51%
of the sites are fishing areas.

16%
of beaches are located near shellfish aquaculture.

TOTAL OF COLLECTED ITEMS IN RIVERS AND LAKES

32 332 items were collected and quantified during 59 operations of citizen science (4 in Spain and 55 in France) performed on the banks of rivers and lakes banks, **over a distance of 143 450 meters. The total volume of collected litter is 32m³.**

PLASTIC

17 603
CIGARETTE BUTTS

1 516
BOTTLES ≤ 0.5 L

1 373
BOTTLES > 0.5 L

445
BOTTLE CAPS (PLASTIC)

185
OTHER BOTTLES OR CONTAINERS

1 116
FOOD CONTAINERS

958
PLASTIC BAGS AND PIECES

705
CRISPS PACKETS, SWEET WRAPPERS

74
LOLLIPOP STICKS

118
MEDICAL WASTE: PACKAGING CONTAINERS

89
SANITARY WASTE: COTTON SWAB

14
TAMPON APPLICATORS, SANITARY TOWELS

1 033
POLYSTYRENE PIECES 2.5-50 CM

1 941
PLASTIC PIECES 2.5-50 CM

198
PLASTIC CUPS

83
CUTLERY, TRAYS

92
STRAWS, STIR-STICKS

66
FISHING: CORDS, SMALL CORDS (DIAMETER < 1 CM)

17
FISHING: LINE (ANGLING)

48
FISHING: TANGLED NETS/CORDS

11
SHOTGUN CARTRIGES

12
TYRES, WHEELS

61
TOY AND PARTY POPPERS

45
LIGHTERS

45
BALLOONS INCL. VALVES

33
SHOES, SANDALS

4
SHELLFISH AQUACULTURE

0
BIOMEDIA

GLASS

932
GLASS BOTTLES

499
PIECES OF GLASS

METAL

1 057
CANS

94
METAL PIECES

1 720
METAL CAPS

CLOTHES

145
CLOTHESING, OTHER TEXTILES

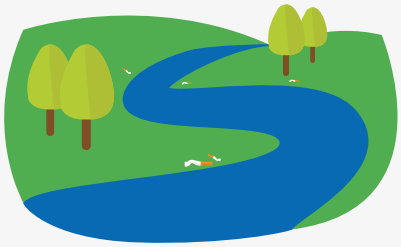
FACTS AND FIGURES

54%

of collected litter on river banks in the Bay of Biscay were cigarette butts.

100%

of all waste collections on watercourse banks reported cigarette butts.

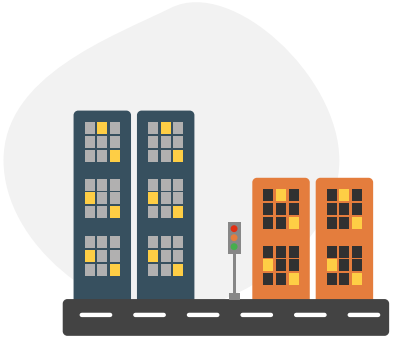


675

polystyrene pieces were found during one waste collection on 350m in Bours (France).

PERCEPTION OF THE ORIGIN OF THE LITTER

We asked participants to tell us, in their opinion, what is the origin of the litter found during their actions. Here are their answers:



100%

of rivers and lakes monitored by our organizers are situated next to a town.

90%

think that the litter came from daily irresponsible behaviour, leaving litter directly on the banks of watercourses (from fishing, parties, picnics or walks).

TESTIMONIAL

PAUL LE GALL – BIDART

PYRÉNÉES ATLANTIQUES, FRANCE, 4 JUIN 2019

«I was born on the coast and was rocked by the rhythm of the ocean, so I consider it important to make the adults of tomorrow aware of the consequences of our consumption pattern.

The opportunity presented itself when I was involved in organising a surfing trip for about a hundred engineering students. So the other organizers and I decided to set up this initiative.

We did it with the aim of raising their awareness and make them realize that everyone is now affected by our negligence towards the environment. But also, and more importantly, to show them that we can all take action at our own level.

The waste collection lasted 30 minutes, and in that time we filled a dozen binbags.

Among the rubbish we collected there was a bit of everything, but mainly microplastics, some cotton buds, pieces of fishing nets, polystyrene microfilm, etc.

As I don't live in Bidart, where we did the waste collection, I can't say if these types of waste are common on this beach. However, this is the type of waste you often find on the coast...

In addition, I'd like to thank you for sending the equipment we needed for the waste collection. Everything arrived on time, so it all went smoothly!»

GREATER NORTH SEA

UNITED KINGDOM, NORTHERN AREA OF FRANCE, BELGIUM, NETHERLANDS, DENMARK, WESTERN AREA OF GERMANY, NORWAY AND SWEDEN.

GENERAL DATA ON THE WHOLE NORTH SEA AREA

Extrapolation based on a total of 264 The Ocean Initiatives which took place in this sea area.

18 361
people reached.

8 360*
bags of litter collected by participants.

769 514 M*
of coastline covered by participants.

607,6 M³*
Total volume of litter collected.

DATA FROM QUANTIFICATION

77 quantification operations involving 3,228 people took place in France. **184 948 items (including 66 414 cigarette butts) were collected and quantified over a distance of 135 280 meters. The total volume of collected litter was 75,055 m³.**

TYPES OF COLLECTION

TOP 5 of collected items

CIGARETTE BUTTS

PLASTIC PIECES 2.5-50 CM

PLASTIC BAGS AND PIECES

POLYSTYRENE PIECES 2.5-50 CM

FOOD CONTAINERS

TOTAL OF COLLECTED ITEMS IN MARINE ENVIRONMENT AND WATERCOURSES

PLASTIC

66 414
CIGARETTE BUTTS

2 236
BOTTLES ≤ 0.5 L

2 761
BOTTLES > 0.5 L

6 824
BOTTLE CAPS (PLASTIC)

689
OTHER BOTTLES OR CONTAINERS

8 160
FOOD CONTAINERS

19 969
PLASTIC BAGS AND PIECES

4 913
CRISPS PACKETS, SWEET WRAPPERS

891
LOLLIPOP STICKS

398
MEDICAL WASTE: PACKAGING CONTAINERS

811
SANITARY WASTE: COTTON SWAB

123
TAMPON APPLICATORS, SANITARY TOWELS

11 254
POLYSTYRENE PIECES 2.5-50 CM

24 279
PLASTIC PIECES 2.5-50 CM

1 922
PLASTIC CUPS

1 100
CUTLERY, TRAYS

2 715
STRAWS, STIR-STICKS

1 913
FISHING: CORDS, SMALL CORDS (DIAMETER < 1 CM)

168
FISHING: LINE (ANGLING)

4 923
FISHING: TANGLED NETS/CORDS

360
SHOTGUN CARTRIGES

453
TYRES, WHEELS

236
TOY AND PARTY POPPERS

443
LIGHTERS

215
BALLOONS INCL. VALVES

127
SHOES, SANDALS

61
SHELLFISH AQUACULTURE

68
BIOMEDIAS

GLASS

2 965
GLASS BOTTLES

2 867
PIECES OF GLASS

METAL

6 146
CANS

1 647
METAL PIECES

6 449
METAL CAPS

CLOTHES

448
CLOTHESING, OTHER TEXTILES

TOTAL OF COLLECTED ITEMS IN MARINE ENVIRONMENT

957 bags filled with 95 754 items were collected and quantified throughout 38 operations of citizen science performed on the beaches and sea floor of this area, over a distance of 69 530 meters. The total volume of collected litter was 48,6 m³.

PLASTIC

16 109
CIGARETTE BUTTS

414
BOTTLES ≤ 0.5 L

525
BOTTLES > 0.5 L

5 081
BOTTLE CAPS (PLASTIC)

393
OTHER BOTTLES OR CONTAINERS

3 579
FOOD CONTAINERS

16 929
PLASTIC BAGS AND PIECES

2 585
CRISPS PACKETS, SWEET WRAPPERS

573
LOLLIPOP STICKS

148
MEDICAL WASTE: PACKAGING CONTAINERS

506
SANITARY WASTE: COTTON SWAB

75
TAMPON APPLICATORS, SANITARY TOWELS

10 178
POLYSTYRENE PIECES 2.5-50 CM

20 926
PLASTIC PIECES 2.5-50 CM

852
PLASTIC CUPS

671
CUTLERY, TRAYS

1 677
STRAWS, STIR-STICKS

1 814
FISHING: CORDS, SMALL CORDS (DIAMETER < 1 CM)

134
FISHING: LINE (ANGLING)

4 859
FISHING: TANGLED NETS/CORDS

284
SHOTGUN CARTRIGES

436
TYRES, WHEELS

155
TOY AND PARTY POPPERS

187
LIGHTERS

69
BALLOONS INCL. VALVES

90
SHOES, SANDALS

59
SHELLFISH AQUACULTURE

68
BIOMEDIAS

GLASS

988
GLASS BOTTLES

1 982
PIECES OF GLASS

METAL

1 104
CANS

1 107
METAL PIECES

893
METAL CAPS

CLOTHES

304
CLOTHESING, OTHER TEXTILES

FACTS AND FIGURES

21,80%

Of the litter collected in this area was polystyrene pieces between 2,5 and 50 cm

81,50%

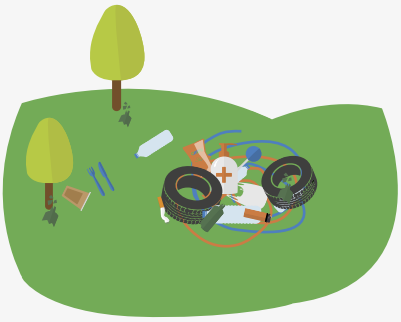
of the waste collection found polystyrene pieces between 2,5 and 50 cm

496

sweet wrappers/crisps packets were collected during a waste collection in Le Havre (France)

100%

of the beaches chosen by our organizers are near a major sailing area with significant shipping traffic.



50%

of the beaches where quantification took place are near a waterway or outlet running into the North Sea.

TYPES OF ACTIVITIES

These are the main activities performed in the area where the Ocean Initiative took place, according to the organizers. At these sites, several types of activities can take place on the same grounds.

63%

of beaches offer nautical activities such as: swimming, kite surfing, surfing, sailing, paddle boarding, diving, etc.

76%

of the beaches are near a touristic area

TOTAL OF COLLECTED ITEMS IN RIVERS AND LAKES

515 bags filled with 86 567 items were collected and quantified on the banks of rivers and lakes in this area, over a distance of 65 675 meters. The total volume of collected litter was 26,455 m³.

PLASTIC

50 305
CIGARETTE BUTTS

366
BOTTLES ≤ 0.5 L

1 065
BOTTLES > 0.5 L

1 743
BOTTLE CAPS (PLASTIC)

296
OTHER BOTTLES OR CONTAINERS

4 581
FOOD CONTAINERS

3 040
PLASTIC BAGS AND PIECES

2 328
CRISPS PACKETS, SWEET WRAPPERS

318
LOLLIPOP STICKS

250
MEDICAL WASTE: PACKAGING CONTAINERS

305
SANITARY WASTE: COTTON SWAB

48
TAMPON APPLICATORS, SANITARY TOWELS

1 076
POLYSTYRENE PIECES 2.5-50 CM

3 353
PLASTIC PIECES 2.5-50 CM

1 070
PLASTIC CUPS

429
CUTLERY, TRAYS

1 038
STRAWS, STIR-STICKS

99
FISHING: CORDS, SMALL CORDS (DIAMETER < 1 CM)

34
FISHING: LINE (ANGLING)

64
FISHING: TANGLED NETS/CORDS

76
SHOTGUN CARTRIGES

17
TYRES, WHEELS

81
TOY AND PARTY POPPERS

256
LIGHTERS

146
BALLOONS INCL. VALVES

37
SHOES, SANDALS

2
SHELLFISH AQUACULTURE

0
BIOMEDIA

GLASS

1 977
GLASS BOTTLES

885
PIECES OF GLASS

METAL

5 042
CANS

540
METAL PIECES

5 556
METAL CAPS

CLOTHES

144
CLOTHESING, OTHER TEXTILES

FACTS AND FIGURES

Here are some of the most frequently found items on the riverbanks of this area:

58,11%

CIGARETTE BUTTS

6,40%

METAL CAPS

5,20%

FOOD CONTAINERS

Some organizers conducted their operations on the banks of the Seine around Paris with a specific focus on several items such as cigarette butts and bottle caps, which may explain why they feature so prominently in the counts for the Channel and the North Sea.

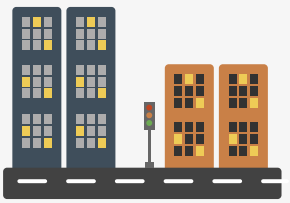
792

Sweet wrappers were found in Boulogne Billancourt (France) at less than 150 meter of the Seine Bank's

869

Metal caps were found on the banks of the Bassin de la Villette in Paris (France) during a collection

30% of organizers highlighted one-off or exceptional events that may have affected the amount of litter collected (flooding, rises in water level or parties near the riverbanks).



100%

of waste collections took place on a riverbank near a city (from Dunkerque to Charleville-Mézières, France).

34,4%

were held downstream from industrial areas.

48%

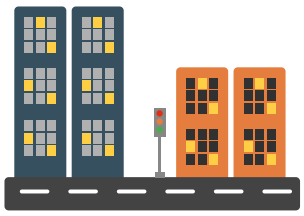
were nautical activities areas.

PERCEPTION OF THE ORIGIN OF THE LITTER

We asked participants to tell us, in their opinon, what is the origin of the litter found during their operations. Here are the answers:

74%

of organizers highlighted irresponsible personal behaviour (litter left by walkers, presence of a high school near the river causing increased student traffic and land use, fast foods and restaurants nearby causing excess of disposable waste), phenomena of high water levels and flooding which carry waste from towns and farmland into the water.



25%

mentioned the presence of a city upstream that could explain why we find waste in areas barely frequented or inhabited. An organizer informed us of overflowing bins on the location.

WESTERN MEDITERRANEAN

FRANCE, SPAIN, ITALY, MOROCCO, TUNISIA AND ALGERIA.

GENERAL DATA ON THE WHOLE SEA AREA

Extrapolation based on a total of 326 The Ocean Initiatives which took place in this sea area.

21 192*
People reached.

9 471*
Bags of litter collected by participants.

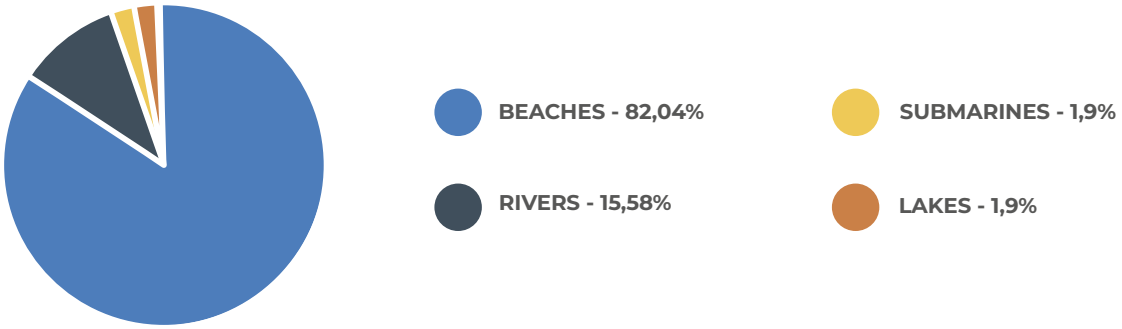
480 132 M*
of coastline covered by participants.

452,83 M³*
Total volume of litter collected.

DATA FROM QUANTIFICATION

167 quantifications involving 5 504 people took place in Spain (62 operations), France (100 operations), Italy (2 operations), Morocco (1operation) and Tunisia (1 operation). **301 570 items were collected and quantified over a distance of 123 600 meters. The total volume of collected litter is 116,155 m3.**

TYPES OF COLLECTION



TOP 5 of collected items

CIGARETTE BUTTS

PLASTIC PIECES 2.5-50 CM

PLASTIC BAGS AND PIECES

POLYSTYRENE PIECES 2.5-50 CM

PIECES OF GLASS

TOTAL OF COLLECTED ITEMS IN MARINE ENVIRONMENT AND WATERCOURSES

2 460 bags filled with 301 570 items were picked up and quantified over a distance of 123 600 meters. The total volume of collected litter was 116,115 m^3

PLASTIC

130 756 CIGARETTE BUTTS

3 012 BOTTLES ≤ 0.5 L

2 774 BOTTLES > 0.5 L

13 114 BOTTLE CAPS (PLASTIC)

1 667 OTHER BOTTLES OR CONTAINERS

5 388 FOOD CONTAINERS

13 054 PLASTIC BAGS AND PIECES

6 701 CRISPS PACKETS, SWEET WRAPPERS

11 304 LOLLIPOP STICKS

586 MEDICAL WASTE: PACKAGING CONTAINERS

11 080 SANITARY WASTE: COTTON SWAB

1 501 TAMPON APPLICATORS, SANITARY TOWELS

17 088 POLYSTYRENE PIECES 2.5-50 CM

34 280 PLASTIC PIECES 2.5-50 CM

3 380 PLASTIC CUPS

1 650 CUTLERY, TRAYS

7 078 STRAWS, STIR-STICKS

1 493 FISHING: CORDS, SMALL CORDS (DIAMETER < 1 CM)

962 FISHING: LINE (ANGLING)

2 065 FISHING: TANGLED NETS/CORDS

403 SHOTGUN CARTRIGES

499 TYRES, WHEELS

668 TOY AND PARTY POPPERS

636 LIGHTERS

247 BALLOONS INCL. VALVES

361 SHOES, SANDALS

125 SHELLFISH AQUACULTURE

0 BIOMEDIAS

GLASS

5 636 GLASS BOTTLES

7 251 PIECES OF GLASS

METAL

5 667 CANS

2 726 METAL PIECES

5 037 METAL CAPS

CLOTHES

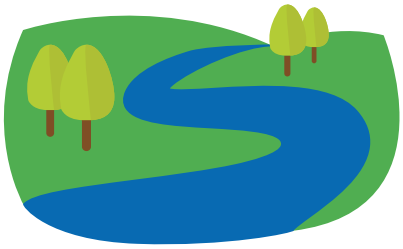
2 713 CLOTHESING, OTHER TEXTILES

FACTS AND FIGURES

230
shotgun cartriges were found in Rogliano (France) on the beach

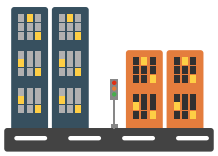
923
cotton swab were found in Melilla (Spain) during one waste collection

82
corks were found in Nice (France) in front of the beach



25%
of beaches where the Ocean Initiaves took place are near a river

75%
of beaches where the The Ocean Initiatives took place are highly frequented or are in tourist area

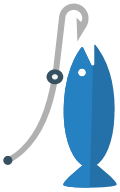


60%
of beaches where the quantification took place are located near a town.

TYPES OF ACTIVITIES

These are the main activities performed on the area where the The Ocean Initiatives took place, according to the organizers. Several types of activities can take place on the same area. The percentages are given for information purposes only.

80%
of beaches are nautical activities areas (swimming, kite surfing, sailing, paddle boarding, diving, etc.).



56%
of the beaches are close to professional and amateur fishing areas.

TOTAL OF COLLECTED ITEMS IN MARINE ENVIRONMENT

256 486 items were collected and quantified throughout 139 operations of citizen science performed on the beaches and sea floor of this area, over a distance of 98 100 meters. The total volume of collected litter was 99,345 m³.

PLASTIC

111 945 CIGARETTE BUTTS

2 304 BOTTLES ≤ 0.5 L

1 841 BOTTLES > 0.5 L

11 938 BOTTLE CAPS (PLASTIC)

1 512 OTHER BOTTLES OR CONTAINERS

3 628 FOOD CONTAINERS

11 493 PLASTIC BAGS AND PIECES

5 277 CRISPS PACKETS, SWEET WRAPPERS

11 223 LOLLIPOP STICKS

384 MEDICAL WASTE: PACKAGING CONTAINERS

11 015 SANITARY WASTE: COTTON SWAB

995 TAMPON APPLICATORS, SANITARY TOWELS

16 892 POLYSTYRENE PIECES 2.5-50 CM

25 094 PLASTIC PIECES 2.5-50 CM

2 932 PLASTIC CUPS

1 527 CUTLERY, TRAYS

6 785 STRAWS, STIR-STICKS

1 474 FISHING: CORDS, SMALL CORDS (DIAMETER < 1 CM)

954 FISHING: LINE (ANGLING)

2 011 FISHING: TANGLED NETS/CORDS

391 SHOTGUN CARTRIGES

66 TYRES, WHEELS

646 TOY AND PARTY POPPERS

597 LIGHTERS

151 BALLOONS INCL. VALVES

319 SHOES, SANDALS

112 SHELLFISH AQUACULTURE

668 BIOMEDIAS

GLASS

4 280 GLASS BOTTLES

6 335 PIECES OF GLASS

METAL

4 611 CANS

2 343 METAL PIECES

2 866 METAL CAPS

CLOTHES

1 877 CLOTHESING, OTHER TEXTILES

FACTS AND FIGURES

43,75%

Of the litter collected in this area were cigarette butts.

76,97%

lollipop sticks were found on 76.97% of waste collections.

100%

of beaches where the The Ocean Initiatives took place are highly frequented or are in tourist areas.

380

straws were found in a single waste collection on a beach in Barcelone (Spain).

TOTAL OF COLLECTED ITEMS IN RIVERS AND LAKES

45 084 items were collected and quantified on the banks of rivers and lakes in this area, over a distance of 25 500 meters. The total volume of collected litter was 16,810 m³.

PLASTIC

18 811 CIGARETTE BUTTS

708 BOTTLES ≤ 0.5 L

933 BOTTLES > 0.5 L

1 176 BOTTLE CAPS (PLASTIC)

155 OTHER BOTTLES OR CONTAINERS

1 760 FOOD CONTAINERS

1 561 PLASTIC BAGS AND PIECES

1 424 CRISPS PACKETS, SWEET WRAPPERS

81 LOLLIPOP STICKS

202 MEDICAL WASTE: PACKAGING CONTAINERS

65 SANITARY WASTE: COTTON SWAB

506 TAMPON APPLICATORS, SANITARY TOWELS

196 POLYSTYRENE PIECES 2.5-50 CM

9 186 PLASTIC PIECES 2.5-50 CM

448 PLASTIC CUPS

123 CUTLERY, TRAYS

293 STRAWS, STIR-STICKS

19 FISHING: CORDS, SMALL CORDS (DIAMETER < 1 CM)

8 FISHING: LINE (ANGLING)

54 FISHING: TANGLED NETS/CORDS

12 SHOTGUN CARTRIGES

433 TYRES, WHEELS

22 TOY AND PARTY POPPERS

39 LIGHTERS

96 BALLOONS INCL. VALVES

42 SHOES, SANDALS

13 SHELLFISH AQUACULTURE

0 BIOMEDIAS

GLASS

1 356 GLASS BOTTLES

916 PIECES OF GLASS

METAL

1 056 CANS

383 METAL PIECES

2 171 METAL CAPS

CLOTHES

836 CLOTHESING, OTHER TEXTILES

FACTS AND FIGURES

Here are some of the most frequently found items on the riverbanks in this area:

41,72%

Cigarette butts represent 41,72% of the total waste found in rivers and lakes on the western coast of the Mediterranean.

20,37%

of the litter collected were plastic pieces between 2,5 and 50 cm.

60%

of organizers highlighted unusual objects were found during Ocean Initiatives in this area.

TESTIMONIAL

NICOLAS COSTA – CAP OCEANS ASSOCIATION
MEDITERRANEAN SEA

«I got interested in protecting the marine environment when I had a personal experience of pollution in the Mediterranean.
During the summer of 2013, I took part in a non-stop relay swim between Corsica and mainland France.
When it was my turn to swim, I saw some small white particles below me and, naively, I asked the skipper of the boat that was accompanying us if it was plankton.
His answer sent shivers down my spine - I was actually swimming among plastic particles!!!
I had a better look around me and realised just how polluted the Mediterranean was.

When I got back home, I decided to set up an organisation, CAP Océans and, because I'm an open water swimmer, to join in the fight against the pollution of the oceans.
I organise regular waste collection sessions on beaches, along rivers and in town (cigarette butts).
I also organise prevention activities during events or in schools.
I chose to work with Surfrider because it's the only NGO that provides volunteers with all the equipment they need to carry out waste collection activities.

The records of the waste collections are extremely important and provide benchmarks and information on the actions undertaken from year to year.
So, for example, I could identify an increase in pollution due to cigarette butts during the summer months. We organised a beach waste collection at the beginning of June and we collected 6,000 cigarette butts. During a second waste collection on the same beach at the beginning of October, we picked up more than 30,000 cigarette butts...

I'm proud to be a Surfrider volunteer through The Ocean Initiatives.»

CELTIC SEA

IRELAND, GREAT BRITAIN, FRANCE.

GENERAL DATA ON THE WHOLE SEA AREA

Extrapolation based on a total of 113 The Ocean Initiatives which took place in this sea area.

3 138*

People reached.

3 905*

Bags of litter collected by participants.

115 301 M*

Of coastline covered by participants.

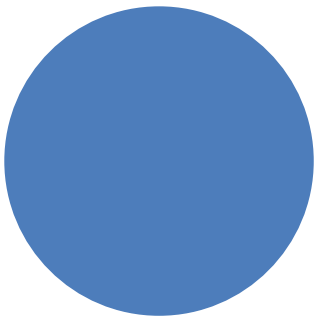
36,78 M³*

Total volume of litter collected.

DATA FROM QUANTIFICATION

27 quantification operations involving 622 persons took place in France. 28 832 items were collected and quantified over a distance of 27 550 meters. The total volume of collected litter is 8,7 m³.

TYPES OF COLLECTION



BEACHES - 100%

TOP 5 of collected items

CIGARETTE BUTTS

PIECES OF GLASS

PLASTIC PIECES 2.5-50 CM

POLYSTYRENE PIECES 2.5-50 CM

FISHING: TANGLED NETS/ CORDS

TOTAL OF COLLECTED ITEMS IN MARINE ENVIRONMENT

202 bags filled with 28 832 items were collected and quantified throughout 27 operations of citizen science performed on the beaches of this area, over a distance of 27 550 meters. The total volume of collected litter was 8,7 m³.

PLASTIC

6 603 CIGARETTE BUTTS

129 BOTTLES ≤ 0.5 L

94 BOTTLES > 0.5 L

724 BOTTLE CAPS (PLASTIC)

22 OTHER BOTTLES OR CONTAINERS

107 FOOD CONTAINERS

933 PLASTIC BAGS AND PIECES

640 CRISPS PACKETS, SWEET WRAPPERS

221 LOLLIPOP STICKS

232 MEDICAL WASTE: PACKAGING CONTAINERS

74 SANITARY WASTE: COTTON SWAB

19 TAMPON APPLICATORS, SANITARY TOWELS

2 793 POLYSTYRENE PIECES 2.5-50 CM

3 051 PLASTIC PIECES 2.5-50 CM

92 PLASTIC CUPS

23 CUTLERY, TRAYS

123 STRAWS, STIR-STICKS

2 277 FISHING: CORDS, SMALL CORDS (DIAMETER < 1 CM)

1 263 FISHING: LINE (ANGLING)

1 567 FISHING: TANGLED NETS/CORDS

70 SHOTGUN CARTRIGES

17 TYRES, WHEELS

17 TOY AND PARTY POPPERS

36 LIGHTERS

17 BALLOONS INCL. VALVES

38 SHOES, SANDALS

79 SHELLFISH AQUACULTURE

0 BIOMEDIAS

GLASS

535 GLASS BOTTLES

5 505 PIECES OF GLASS

METAL

191 CANS

626 METAL PIECES

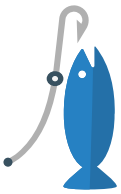
533 METAL CAPS

CLOTHES

181 CLOTHESING, OTHER TEXTILES

FACTS AND FIGURES

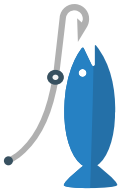
22,01%
of the litter collected were cigarette butts.



17,03%
of collected litter are linked to fishing activities.

TYPES OF ACTIVITIES

These are the main activities carried out in the area where the The Ocean Initiatives took place, according to the The Ocean Initiatives organizers. Several types of activities can take place in the same area. The percentages are given for information purposes only.



62%
of beaches are fishing areas (professional and amateur).

62%
of beaches are nautical activity areas (swimming, kite surfing, surfing, sailing, paddle boarding, diving, etc.).

48%
of the beaches are near a port area.

ITIWIT

IBERIAN COAST

GENERAL DATA ON THE WHOLE SEA AREA

Extrapolation based on a total of 47 The Ocean Initiatives which took place in this sea area.

2 517*
People reached.

2 175*
Bags of litter collected by participants.

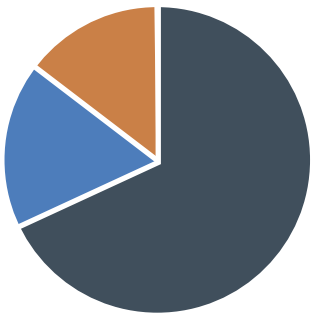
28 535 M*
of coastline length covered by participants.

48,5 M³*
Total volume of litter collected.

DATA FROM QUANTIFICATION

7 quantification operations bringing together 375 people took place in Portugal (4) and Spain (3). **6 850 items were collected and quantified over a distance of 7 250 meters. The total volume of collected litter is 7,225 m³.**

TYPES OF COLLECTION



- BEACHES - 71,4%
- RIVERS - 14,3%
- LAKES - 14,3%

TOP 5 of collected items

ALL TYPE OF BOTTLES (DRINK)

FISHING: CORDS, SMALL CORDS (DIAMETER < 1 CM)

CIGARETTE BUTTS

SANITARY WASTE: TAMPONS, APPLICATORS, SANITARY TOWELS

PLASTIC BAGS AND PIECES

TOTAL OF COLLECTED ITEMS IN MARINE ENVIRONMENT

3 760 items were collected and quantified throughout 5 operations of citizen science performed on the beaches of this area, over a distance of 6 750 meters. The total volume of collected litter was 9,161 m³.

PLASTIC

282 CIGARETTE BUTTS

161 BOTTLES ≤ 0.5 L

277 BOTTLES > 0.5 L

201 BOTTLE CAPS (PLASTIC)

41 OTHER BOTTLES OR CONTAINERS

99 FOOD CONTAINERS

261 PLASTIC BAGS AND PIECES

19 CRISPS PACKETS, SWEET WRAPPERS

71 LOLLIPOP STICKS

0 MEDICAL WASTE: PACKAGING CONTAINERS

295 SANITARY WASTE: COTTON SWAB

16 TAMPON APPLICATORS, SANITARY TOWELS

213 POLYSTYRENE PIECES 2.5-50 CM

246 PLASTIC PIECES 2.5-50 CM

66 PLASTIC CUPS

12 CUTLERY, TRAYS

204 STRAWS, STIR-STICKS

526 FISHING: CORDS, SMALL CORDS (DIAMETER < 1 CM)

24 FISHING: LINE (ANGLING)

251 FISHING: TANGLED NETS/CORDS

6 SHOTGUN CARTRIGES

3 TYRES, WHEELS

18 TOY AND PARTY POPPERS

10 LIGHTERS

8 BALLOONS INCL. VALVES

17 SHOES, SANDALS

141 SHELLFISH AQUACULTURE

0 BIOMEDIAS

GLASS

26 GLASS BOTTLES

27 PIECES OF GLASS

METAL

28 CANS

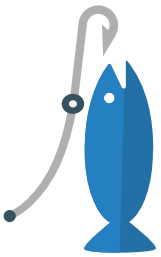
5 METAL PIECES

154 METAL CAPS

CLOTHES

52 CLOTHESING, OTHER TEXTILES

FACTS AND FIGURES

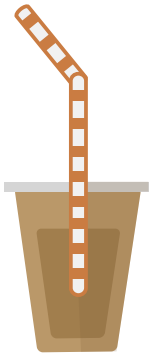


21,40%

Fishing wastes accounted for 21,4% of the litter collected on the beaches on this coastline.

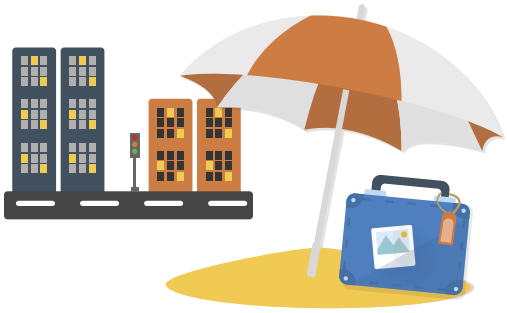
53,20%

of collected wastes are single-use items.



100%

Plastic cup and straw were found on 100% of the beaches of the Iberian coast where collections were made during the Ocean Iniatives.



100%

of beaches where the The Ocean Initiatives took place are highly frequented or are in tourist areas.

28,50%

of organizers found a significant amount of pre-production plastic pellets during their waste collection.

TOTAL OF COLLECTED ITEMS IN RIVERS AND LAKES

24 bags filled with 1 024 items were collected and quantified throughout 2 citizen science activities performed on the river banks of this area, over a distance of 500 meters. The total volume of collected litter was 3,6 m³.

PLASTIC

59 CIGARETTE BUTTS

101 BOTTLES ≤ 0.5 L

102 BOTTLES > 0.5 L

13 BOTTLE CAPS (PLASTIC)

5 OTHER BOTTLES OR CONTAINERS

16 FOOD CONTAINERS

63 PLASTIC BAGS AND PIECES

103 CRISPS PACKETS, SWEET WRAPPERS

0 LOLLIPOP STICKS

1 MEDICAL WASTE: PACKAGING CONTAINERS

0 SANITARY WASTE: COTTON SWAB

319 TAMPON APPLICATORS, SANITARY TOWELS

16 POLYSTYRENE PIECES 2.5-50 CM

5 PLASTIC PIECES 2.5-50 CM

20 PLASTIC CUPS

0 CUTLERY, TRAYS

0 STRAWS, STIR-STICKS

15 FISHING: CORDS, SMALL CORDS (DIAMETER < 1 CM)

1 FISHING: LINE (ANGLING)

16 FISHING: TANGLED NETS/CORDS

0 SHOTGUN CARTRIGES

0 TYRES, WHEELS

1 TOY AND PARTY POPPERS

1 LIGHTERS

5 BALLOONS INCL. VALVES

2 SHOES, SANDALS

10 SHELLFISH AQUACULTURE

0 BIOMEDIAS

GLASS

12 GLASS BOTTLES

26 PIECES OF GLASS

METAL

67 CANS

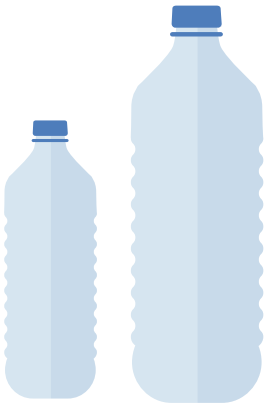
0 METAL PIECES

39 METAL CAPS

CLOTHES

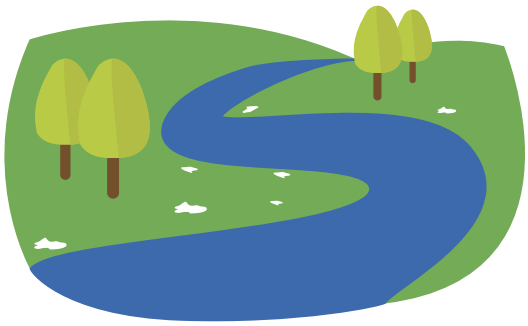
6 CLOTHESING, OTHER TEXTILES

FACTS AND FIGURES



100%

Plastic bottles (drinks bottles) were found during each collection in this area.



3 000

sanitary towels were collected on a river bank during one The Ocean Initiatives.

OTHER COASTAL AREAS

We're presenting results from citizen science projects on the coastline in this report. That means we need a minimum number of completed report documents to have data representing coastline pollution. Organizers were involved in counts throughout Europe (Black sea, North Atlantic, etc.) but we don't have enough data to present them separately. That's why we've decided to let organizers speak for themselves so they can share their work and experience of pollution.

NORTH ATLANTIC

TESTIMONIAL

SYLVIE LANDRY, RIMOUSKI,
QUEBEC, CANADA. April 23, 2019

«We are well aware of the environmental issue. When the snow melts, we find loads of waste along Avenue Père Nouvel (Rimouski, Quebec, CANADA) and, most of the time, this waste is carried along by the stream to the sea, which is 2 km away.

We do waste collections with my nephews, who are also aware of the cause. This will be the 4th year that we've done a waste collection in spring.

During our waste collections , we've found coffee cups, waste from fast-food restaurants, cigarette packets, cigarette butts and beer cans, plastic bottles, etc.

This type of waste is common along the coast. More education is needed and more bins.

As we do our work along an avenue where there is a lot of traffic, we make sure the children wear yellow vests to make them more visible.
Passers-by encourage them and that increases their motivation to take part in the initiative.»

BLACK SEA

TESTIMONIAL

ANNE MÄUSBACHER « BEACH CLEANER »

NUREMBERG GERMANY

«In 2015, while on holiday on a Mediterranean island, I was surprised by the amount of waste in the water and on the beaches (cigarette butts, plastic cups, bottles, picnic waste, balls and even fishing tackle.) I wondered where it could all have come from and began to pick it up.

A few years later, in Nuremberg (Germany), I decided to launch my «beach cleaner» initiative as a way of taking action against this pollution. I've often been asked what the aim of the initiative is. Based as we are in Nuremberg, in Germany, we're not near the ocean and many people have asked me, «We don't live on the ocean edge, so why protect it when it's so far away?» I wanted to change this perception and make people aware that the ocean is suffocating because of waste produced and discarded on land. Rivers and streams carry the waste straight to the ocean.

During the the Ocean Initiatives that we've organised, we've found lots of cigarette butts, plastic bags and polystyrene cups and food packaging.

During one waste collection we found something quite unusual — a set of dentures. It was very odd but it gave us all a good laugh.»

03
BIOMEDIAS

SEWAGE FILTER MEDIA AND POLLUTION OF THE AQUATIC ENVIRONMENT

Since 2008, Surfrider has noted a growing presence of plastic «wheels» called sewage filter medias, biomedia or biocarriers, on beaches and on the banks of waterways firstly in France and then in Europe. These biomedia (or bacteriological biofilm carriers) are used as a medium for bacteria during the biological wastewater treatment phase in collective and industrial water treatment plants.

The proliferation of these plastic objects in the sea and on the coasts, is adding to the pollution caused by marine litter. In order to fight against this specific source of plastic pollution, Surfrider carried out investigations aimed at improving our understanding of the process, identifying the manufacturers and the users and tracing up the source of the waste.

Over the course of the 2019 The Ocean Initiatives campaign, 1,644 biomedias were found during 89 waste collections operations along beaches, lakes and rivers (all areas and shapes combined). Biomedia were found in 22.1% of operations. More than 53% of the biomedia picked up by our organizers were found on beaches in the Bay of Biscay. 40.6% were found along the coastline of the Western Mediterranean sea.

SEA AREAS / MODEL	1	2	3	4	5	6	7	8	9	10
NORTH ATLANTIC										
BAY OF BISCAY	13	7	135	10	168	33	30	128	308	23
IBERIAN COAST	1					2				11
CELTIC SEA			5		4		2		1	
GREATER NORTH SEA		2		5	17		36			1
WESTERN MEDITERRANEAN	3	10	4	1	162	37	7			218
TOTAL	17	19	144	16	351	72	75	128	309	253

NUMBER OF BIOMEDIA PICKED UP EACH THOUSAND METERS PER SEA AREA

A total of 89 collections report the presence of biomedia over a linear length of 7 765 km. Participants collected on average the presence of 21 biomedias over 1 000 m.

TYPES OF BIOMEDIAS / SEA AREAS

24 different biomedia models were found on the Bay of Biscay coastline during the 2019 The Ocean Initiatives project. Unsurprisingly, models 5, 8 and 9 were the most common on this coastline. We suspect that two accidents which occurred in 2009 and 2010 in an industrial treatment plant (paper mills) in Northern Spain are the reason why these two biomedia models had polluted the Bay of Biscay beaches. To our knowledge, it's the most significant pollution we've found in terms of time and quantity on the entire Atlantic coastline.

Models 10 and 13 were mostly collected on the shores of the Mediterranean, and in smaller numbers, on the beaches of the Bay of Biscay.

11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
				1										
3	6	2		3	2				1	2	3		2	1
						1								
		6							1					
1	6	112			2	4	1	8	2	5	9	1		75
4	12	120	0	4	4	5	1	8	4	7	12	1	2	76

Mid-March 2018, a municipal water treatment plant in the Salerno area near Naples (Italy) was affected by a series of technical issues leading to the release of thousands of biomedias (Biochip, model 13 above) in a river running into the Tyrrhenian Sea (Mediterranean). The biomedia spread widely on the Ligurian coast and as far as the French coastline. This model was found during the 2019 The Ocean Initiatives operations in the Mediterranean Sea in Italy but also in Corsican maritime protected areas (France).

In February 2019, a new case of biomedias pollution (model 20) was reported in Cornwall (England) at Poldhu Cove. Thousands of biomedias have been found on Cornish beaches and costaline during 2019.
Thanks to the Ocean Initiatives organizers we were alerted of 2 other major pollution sites: one in Vinjaford (Norway) and the other one in the lake of Serre Ponçon (France). Both are related to an old incident, but we only heard about it in 2019.
A new biomedia model has been found on beaches in the North of France and was reported by our volunteers.

After each incident reported, we began an investigation procedure and we try to gather information through our social networks and through the Ocean Initiatives organizers in order to identify the wastewater treatment plant responsible for the spillage of biomedia.

Surfrider continues to closely monitor this form of pollution along with all other forms past and future.

REPORT ON THE POLLUTION OF BEACHES AND WATERCOURSES BY PLASTIC

Many recent reports indicate the presence of pollution by biomedia across Europe. These reports were made through The Ocean Initiatives as well as by citizens concerned about the health of their beaches and waterways. Thanks to all these reports, we have been able to carry out a full investigation enabling us to compile valuable information on biomedia and to trace up the sources of a part of this pollution. In order to prevent it, we have shared the results of our research with professionals from the water sector.

This study allowed us to constitute an overview of the global operation of water treatment systems and specific processes relating to biocarriers. Additionally, we studied the use of biomedia and the main forms of pollution observed in order to understand their origins. Using these observed cases of malfunctions within the system and thanks to the collaboration of industry professionals, we have been able to produce guidelines aimed at reducing the emission of biocarriers into the environment.

By publishing this report, we hope not only to share our observations with politicians and environment professionals to help improve practices and mitigate pollution risks, but also to share it with the The Ocean Initiatives observers who enabled us to gather this precious information to understand this pollution.

In order to engage with the new institutions and in particular with the new elected Members of the European Parliament, SFE decided to launch an artistic campaign to bring their attention to this specific issue.

To do so, SFE designed and commissioned the production of snow globes filled with biomedias to be sent or handed out when possible to key decision makers in Europe. SFE used those snow globes as a gift from the ocean to raise awareness about this pollution and challenge them to be «ocean leaders» and enforce strong regulations to end this type of pollution.

After each incident was reported, we began an investigation procedure and we try to gather information through our social networks and through the Ocean Initiatives organizers in order to identify the wastewater treatment plant responsible for the spillage of biomedia.

Surfrider continues to closely monitor this form of pollution along with all other forms, past and future.

But this battle isn't over and pollutionis still happening. So if you've seen biomedia pollution, don't forget to let us know through the The Ocean Initiatives provisional report page or using this form.

Every case we resolve brings us one step closer to ending pollution!

More information:
https://surfrider.eu/en/our-missions/marine-litter/biomedia-70164.html
https://www.youtube.com/watch?time_continue=110&v=fHoHjpkiy10&feature=emb_logo

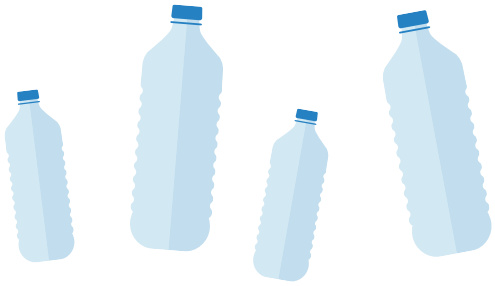
04
FOCUS ON PLASTIC BOTTLES

PLASTIC BOTTLES, IN THE TOP 10

Plastic bottles and their caps are part of the top ten items most often found on beaches and in rivers. They are single-use plastic items which, used every day and mainly outdoors, are often found in the environment, where they become real predators for aquatic animals and plants. However, alternatives exist and would help reduce this pollution at its source.

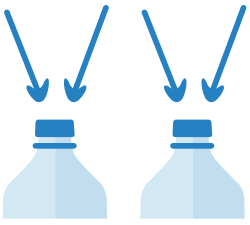
As part of the program to fight against single-use plastic marine litter, Surfrider has developed the «Reset your habits: reusable bottles can make the difference» campaign. The global objective aims at reducing the use of plastic bottles, that are polluting the coastline and marine environment. Reset Your Habits is calling for a wide-sweeping change in behaviour within society, urging us to modify our consumption and production patterns to limit their impact on the environment. This involves replacing single-use plastic bottles with reusable ones, among other sustainable alternatives.

To improve our understanding of consumer habits as well as the pollution of aquatic environments by this everyday object, we asked organizers of The Ocean Initiatives to count the number of plastic bottles found on beaches, in lakes, rivers and on the seabed. This helped us highlight the reality of the pollution as well as drawing attention of manufacturers and public authorities to the faults in the system (from production to end of life).



4,1%

Plastic drinks bottles (all sizes) represent 4,1% of litter collected during the 2019 The Ocean Initiatives campaign.

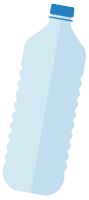


4,2%

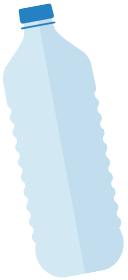
Plastic bottle caps account for 4.2% of the litter found during the 2019 The Ocean Initiatives operations.

29 814

bottles of all sizes were collected during 398 waste collections across the world.



15 737
BOTTLES
of 50 cl or less.

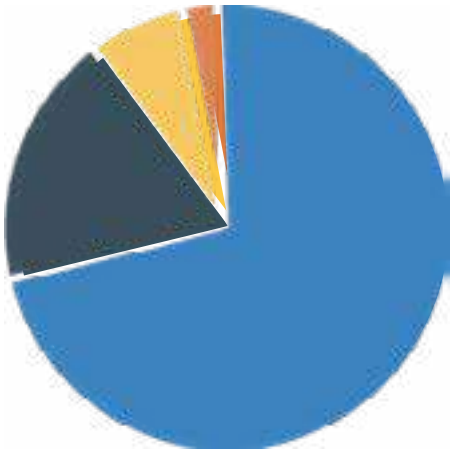


14 595
BOTTLES
of 50 cl and more.

Around 111 461 bottles are estimated to have been collected by organizers*

*By extrapolating to the number of total waste collection operations in 2019.

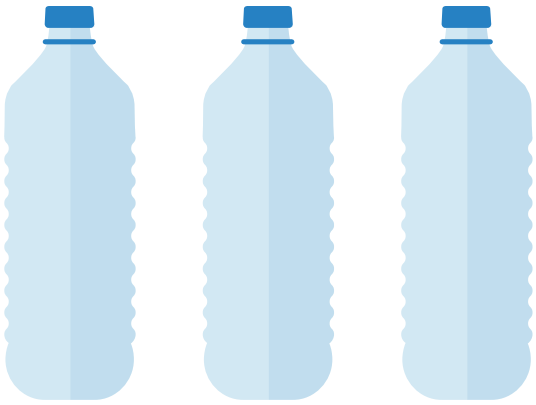
AVERAGE NUMBER OF BOTTLES COLLECTED PER COUNTRY (EUROPE AND OVERSEAS REGIONS)



- **BEACHES - 72,8%**
- **RIVERS - 19,8%**
- **LAKES - 6,7%**
- **SUBMARINES - 0.5%**

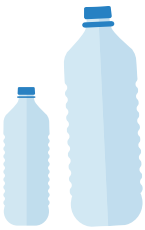
80,37%

bottles of 50 cl or less were collected in 80,37% of The Ocean Initiatives.



75,5%

bottles of more of 50 cl were collected in 75,5% of The Ocean Initiatives.



25,23%

Plastic drinks bottles (all sizes) represent 25.23% of litter collected in the North Atlantic area.

570

Bottles were found in a single waste collection in Sevran (France) on the banks of the Seine.

1 973

Bottles were found in 10 waste collections in Reunion island. An average of 197 bottles per collection.

7 749

Bottles were found in a single waste collection in Ghana. (2 518 of 50 cl or less and 5 231 of more than 50 cl).

1 502

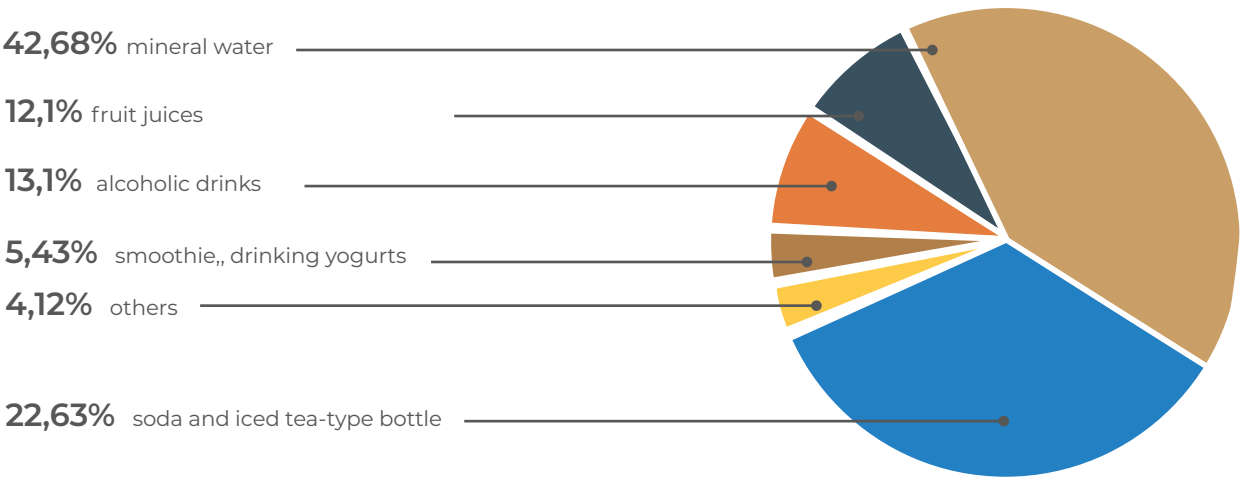
Bottles were found in a single waste collection in Congo over 150 meters.

167

Bottles were found in a single waste collection in Genoa (Italy) over 350 meters.

TYPES OF PLASTIC BOTTLES

476 organizers identified the types of drink bottles (from all countries).



% OF PLASTIC DRINK BOTTLES COMPARED TO THE TOTAL OF LITTER PER SEA AREA

BEST PRACTICES GUIDE FOR PLASTIC BOTTLE-FREE CITIES

Citizens, industrialists and politicians, we all have a role to play in eradicating these plastic bottles from our environment, by refusing to use this single-use packaging, by rethinking its design, its method of production, consumption and its end of life.

Cities home to high populations are among the main sources of litter. Cities exemplify «local action» as regards ecological transition and, as such, are key players in fighting pollution.
That's why Surfrider Foundation Europe has put together a good practices guide for public authorities with 20 initiatives to reduce this form of pollution at the source by working throughout its life cycle to limit the production and consumption of plastic bottles, promote reusable and sustainable alternatives and improve plastic bottles' eco design and end-of-life. This guide also includes solutions for improved awareness and education among citizens so they can play an active role in this transition.

Cities, communities and states can use it to get inspiration, adapt and implement these good practices to make their commitment to the war against plastic pollution a reality. Paris and Barcelona are already committed to the cause.

A EUROPEAN PLASTIC BOTTLE CLEAN-UP OBJECTIVE

Following its plastic strategy, an action plan to review how we use plastic and react to the pollution it generates, **the European Union adopted a Directive to reduce the negative effects of certain plastic items on the planet.**

This European legislation intends to ban/reduce the consumption of single-use plastic products including plastic bottles, as well as manufacture eco-friendly designs and improve the labelling and collection of these items.

It requires Member States to achieve a rate of 90% plastic bottle collection by 2029 and the adoption of certain eco-design measures such as a 25% recycled plastic content in bottles and their attached caps launched on the market for 2025.

Through its Europe-wide monitoring, petitioning and coalition work, Surfrider has been part of recognising plastic bottles as the most common form of litter found on beaches and as a disposable plastic product that requires measures to be taken to stop them flooding the environment. The NGO will now monitor the effective and ambitious implementation of these European measures nationwide.

6'00"
5'60"
5'00"
4'60"
4'00"
3'60"
3'00"
2'60"
2'00"
1'60"
1'00"
SUSPECT N°1
The Plastic Bottle

05
FOCUS ON MERMAID TEARS

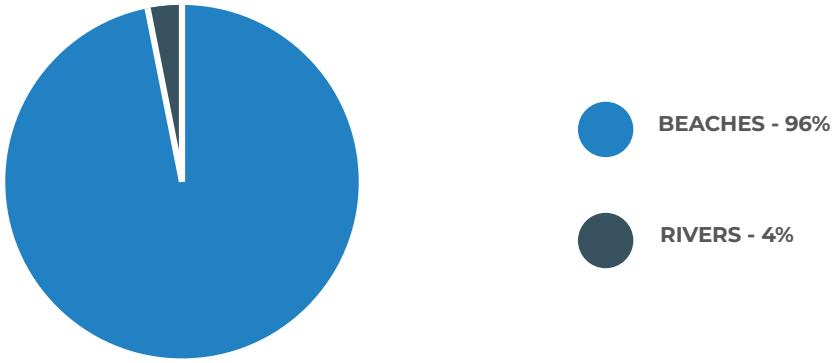
Since 2018's the Ocean Initiatives, we've been asking organizers and participants to keep their eyes peeled during waste collections and help us monitor pollution from pre-production plastic pellets in sediment.

Pre-production plastic pellets, or mermaid tears, are small plastic beads, cylinders or pellets the size of a lentil. They are made and used in industry to make all our plastic products. Millions are lost every year and end up in the waterways and marine environment where they can easily mix into the sediment.

The results of observations will be sent to specialist associations who have been reporting to public bodies on a regular basis for years. We want to warn decision-makers about this little-known form of microplastic pollution as there are currently no regulations for businesses producing, processing and transporting pre-production plastic pellets, and therefore no way to restrict their emission in the marine environment.

This year, 17% of The Ocean Initiatives organizers found mermaid tears during their waste collections .

WHERE PRE-PRODUCTION PLASTIC PELLETS WERE FOUND



30%

Pre-production plastic pellets were retrieved in 30% of waste collections on the Bay of Biscay coastline and 18% on the western Mediterranean.
Please note: one organizer found an astronomical amount of these pre-production plastic pellets around a saltwater lake in Vieux Boucau (France).

46%

of organizers found a significant amount of pre-production plastic pellets at the top of beaches: 1 000 pellets or more per square meters (sign of a long-standing accumulation related to strong tides).

19%

of organizers observed large amounts of pre-production plastic pellets in sea debris: 100 pellets per linear meters (sign of regular influx).

Pre-production plastic pellets can come in several colours. Knowing the colour of these microplastics can go into a body of evidence to identify long-standing pollution or a regular influx.

COLOURS OF THE MERMAID TEARS FOUND

37
TRANSPARENT

49
White

7
BLACK

6
RED

OTHER (DETAILS BELOW)

4
BLUE

3
ORANGE

4
GREEN

3
YELLOW

1
MULTICOLOR

OCEAN INITIATIVES

The Ocean Initiatives is a program aimed at reducing marine litter at the source. Through local operations around rivers, lakes, oceans and sea beds, Surfrider's main objective is to support a societal change. The data collected during the The Ocean Initiatives enable situational analyses, leading to an adaptation of the European regulatory framework.

www.oceaninitiatives.org