

Marine Debris of Kingston Harbour

quantity and quality

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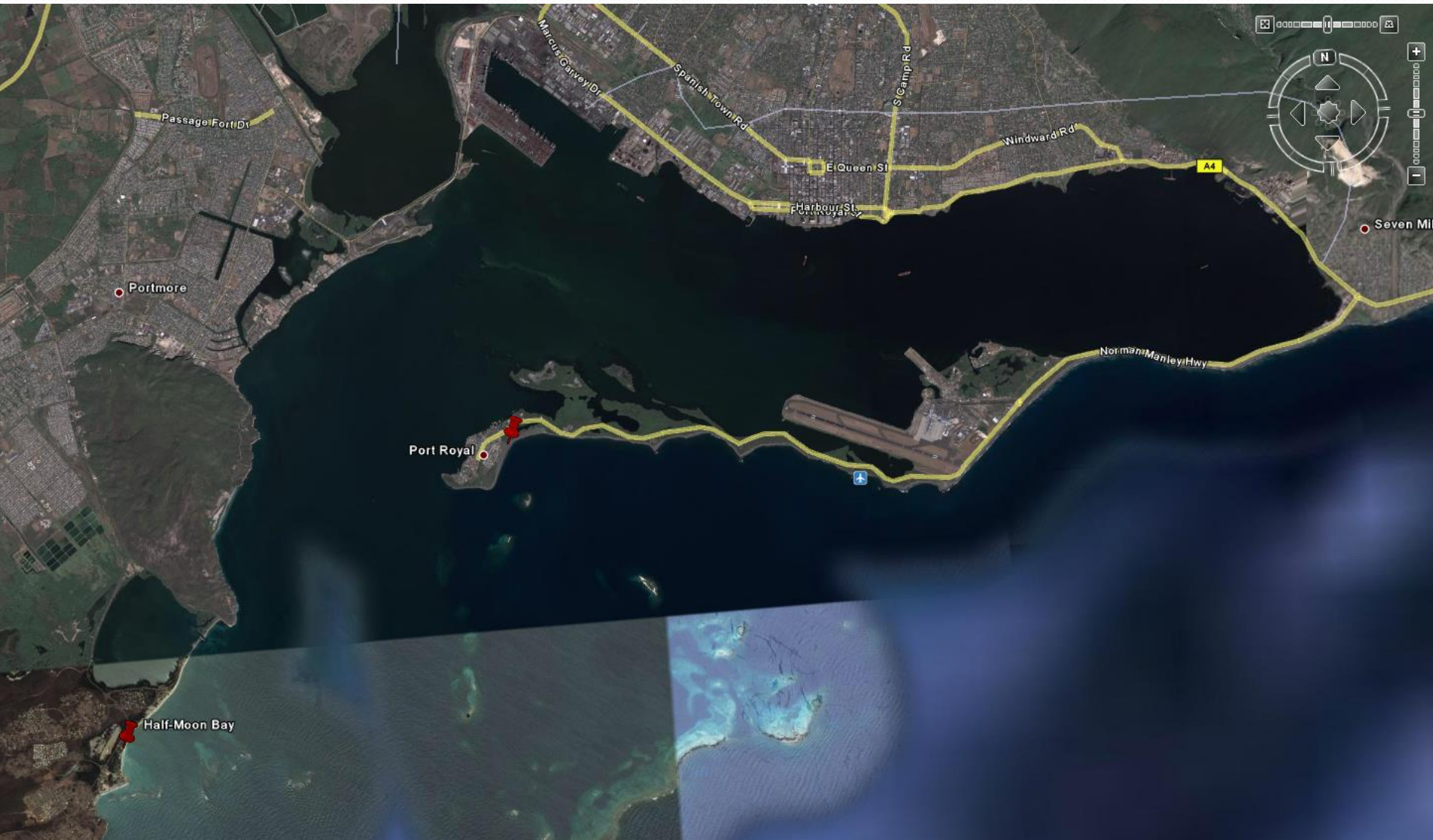


According to the United Nations Environment Programme,
“Marine litter is one of the most pervasive and solvable pollution problems plaguing the world’s ocean and waterways.”

Background

International Coastal Cleanup (ICC) began in 1986 and has grown into a worldwide movement with more than 6 million volunteers in 127 countries. It is spearheaded by Ocean Conservancy and is the largest single-day volunteer event to protect the ocean and waterways. The event is hosted annually on the third Saturday in September and is an effort to keep the oceans free from trash and make it safer for people and animals.

Map



Debris Categories

Shoreline and Recreational Activities

This accounts for the majority of marine debris collected. This may be due to the fact that two-thirds of the country's population live in coastal cities and town. Land-based activities such as fast food consumption, sports and recreation, festivals, as well as litter washed from streets, parking lots and storm drains are the main contributors.

Ocean/Waterway Activities

The category includes debris which are a by-product of recreational fishing, boating and commercial fishing.

Smoking-Related Activities

Improper disposal of cigarette filters/butts, cigar tips and tobacco product packaging is common on both land and sea.

Dumping Activities

The legal and illegal dumping of building materials and large household items such as stoves and refrigerators result in debris along the coastline. Shipping activities may also contribute.

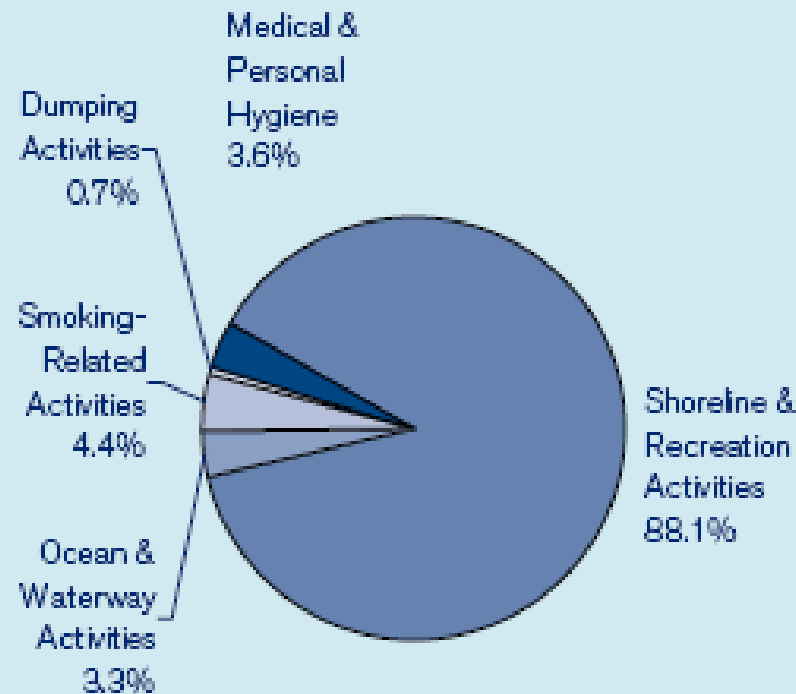
Medical/Personal Hygiene

This debris results from people improperly disposing of waste in toilets and city streets. The presence of this type of debris is also a sign of improper disposal of personal waste.

2005 cleanup data

Jamaica: Marine Debris

SOURCES OF DEBRIS

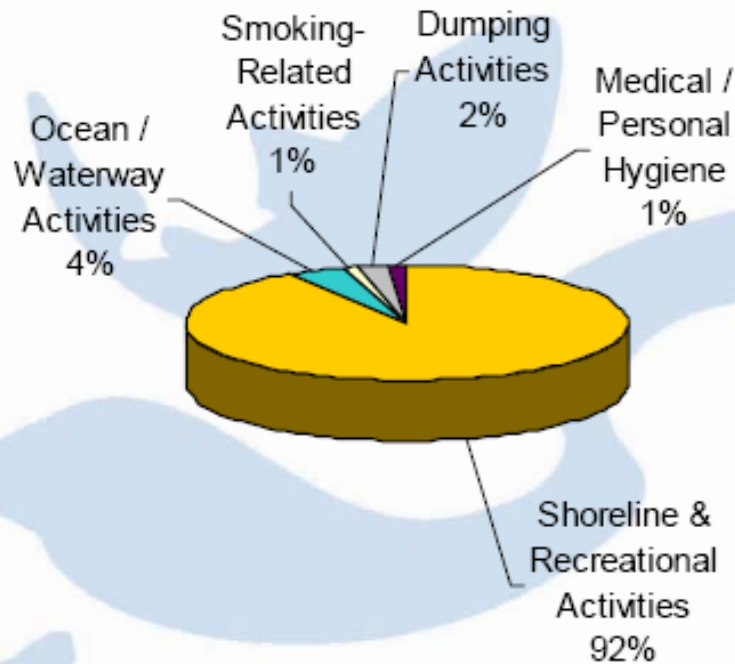


"TOP TEN" DEBRIS ITEMS

Debris Items	Amount	Percent Of Total
1. Cups, Plates And Utensils	3,737	14.7%
2. Plastic Beverage Bottles	3,697	14.6%
3. Food Wrappers	3,409	13.4%
4. Caps And Lids	3,387	13.3%
5. Bags	2,913	11.5%
6. Glass Beverage Bottles	1,690	6.7%
7. Beverage Cans	1,380	5.4%
8. Straws And Stirers	1,135	4.5%
9. Cigarettes	590	2.3%
10. Clothing	518	2.0%
Totals:	22,456	88.4%

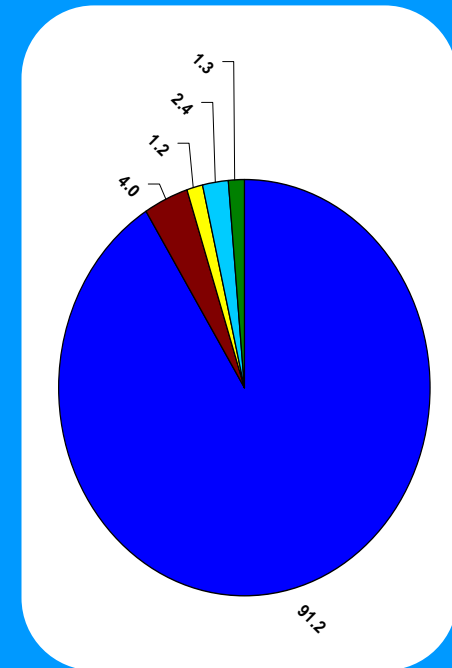
2007 cleanup data

2007 ICC: Jamaica
Sources of Debris



NEPA's 2007 cleanup

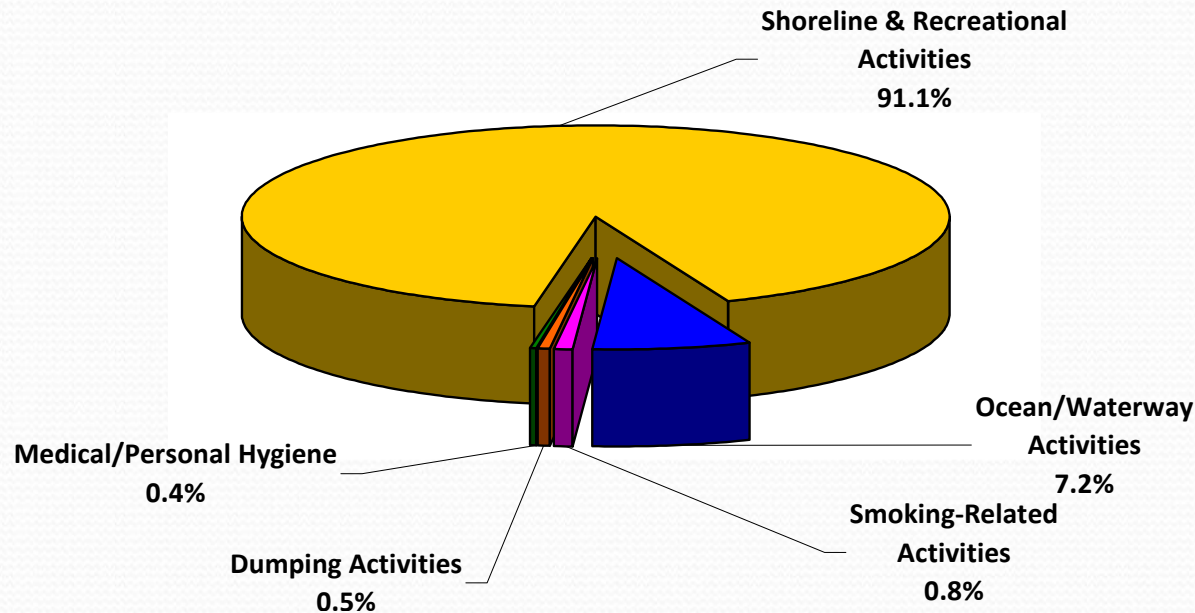
Source of Debris in 2007	Number	%
Shoreline & Recreational Activities	27,060	91.2
Ocean/Waterway Activities	1181	4.0
Smoking-Related Activities	344	1.2
Dumping Activities	701	2.4
Medical/Personal Hygiene	379	1.3
Totals	29,665	100.0



- Shoreline & Recreational Activities
- Ocean/Waterway Activities
- Smoking-Related Activities
- Dumping Activities
- Medical/Personal Hygiene

2008 cleanup data

NEPA's 2008 cleanup



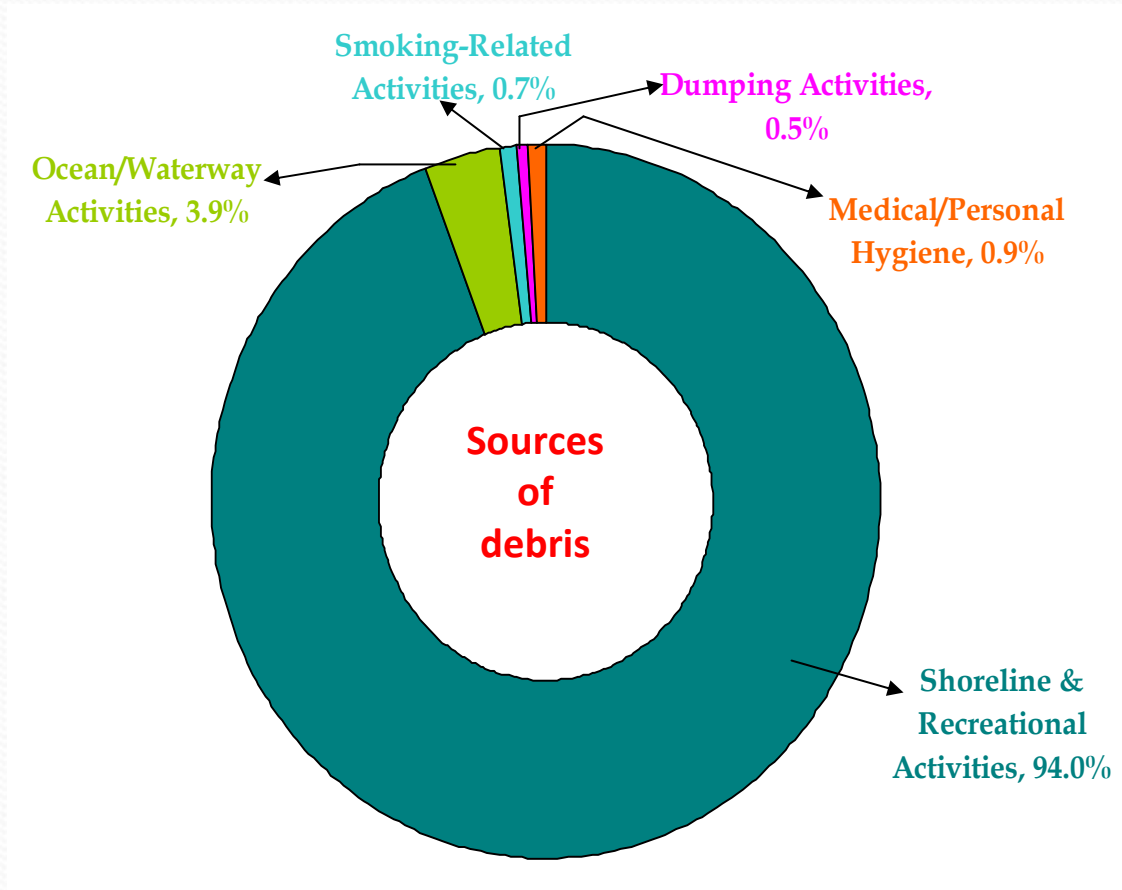
3412.2 kilograms of trash and debris from 1112.6 kilometers of shoreline. 91.1% of the debris removed was from shoreline and recreational activities inclusive of beach outings and picnics.

Land vs Underwater Clean-up		
	Land	Underwater
Shoreline and Recreational Activities	87.6%	3.5%
Ocean/Waterway Activities	7.2%	0.0%
Smoking-Related Activities	0.8%	0.0%
Dumping Activities	0.5%	0.0%
Medical/ Personal Hygiene	0.4%	0.0%
TOTALS	96.5%	3.5%

Top 10 for 2008

Debris Items	Number of Items	Percentage of Total
1. Beverage Bottles (Glass)	6,691	36.4%
2. Bags	2,547	13.9%
3. Caps/Lids	1,882	10.2%
4. Clothing/Shoes	1,786	9.7%
5. Beverage Bottles (Plastic) 2 liters or less	1,077	5.9%
6. Cups/Plates/Forks/Knives/Spoons	1,074	5.8%
7. Food Wrappers and Containers	669	3.6%
8. Oil/Lube Bottles	507	2.8%
9. Bleach/Cleaner Bottles	470	2.6%
10. Beverage Cans	463	2.5%
Total Top Ten	17,166	100.0%
Total All Debris Items	18,374	93.4%

NEPA 2009 cleanup data



1568.4 kg of trash and debris was bagged and recorded from the shorelines of Kingston and St. Catherine.

Top 10 - 2009

Debris Items	Number of Items	Percentage of Total
1. Beverage Bottles	6,297	30.0%
2. Caps/Lids	3,016	14.4%
3. Bags (Plastic)	2,830	13.5%
4. Cups/Plates/Forks/Knives/Spoons	2,400	11.4%
5. Food Wrappers and Containers	1,610	7.7%
6. Clothing/Shoes	1,330	6.3%
7. Bags (Paper)	1,322	6.3%
8. Beverage Bottles (Plastic) 2 liters or less	1,144	5.4%
9. Beverage Cans	544	2.6%
10. Straws/Stirrers	502	2.4%
Total Top Ten	20,995	100.0%
Total All Debris Items	22,766	92.2%

Summary of Data collected

		Half Moon Bay		Port Royal	
		recycables	non-recycables	recycables	non-recycables
2007	# of bags	120	40	15	210
	wgt	816	272	7	50
2008	# of bags	40	89	40	66
	wgt	1576		800	371
2009	# of bags	36	106	32	24
	wgt	324	931	176	137



Environmental data show that personal responsibility and human behavior are key

6.3% (clothing/shoes) were unrelated to shoreline and recreational activities.

It is very evident that the ways these items are being disposed of after eating and drinking needs to be curtailed.

These readily fall and can be contained if people take the effort to dispose of them properly.

More environmental education is still required to curb practices of the general public.

There is Hope

Decrease in the weight of debris recorded for 2009 compared to 2008.

This can be viewed in a positive light as it could mean that the wider population is more environmentally aware of the impact of their actions and decisions on the environment.