

Caring for Our Bays Final Report July 2017 – June 2018





Acknowledgements

The Caring for Our Bays program is run in conjunction with various land managers and organisations in the Geelong and Bellarine area. Without their assistance, support and participation, this project would not have been as successful as it is.

All of our data is collected by litter audit volunteers. Their hard work, attention to detail and dedication has lead to an outstanding amount of litter being removed from our coasts. There would be no outcomes without their assistance.

This report highlights some of the major contributing litter at each litter hotspot and a case study of litter collected over time for one subsite per hotspot. Percentages of recyclables vs. no recyclables are inclusive of the whole hotspot site.













Stakeholders and partners



























Environment Protection Authority Victoria







































Protecting nature. Preserving life."











Contents

1.	Overall figures	. 4
2.	Hovells Creek	. 5
3.	Cuthbertsons Creek	. 7
4.	Cowies Creek	9
5.	St Helens Pier	11
6.	Cunningham Pier	13
7.	Limeburners Boat Ramp	14
8.	Clifton Springs Boat Harbour	16
9.	Point Richards Boat Ramp	18
10.	Portarlington Pier	20
11.	St Leonards Pier	22
12.	Burnt Point	24
13.	Queenscliff Ferry	25
14.	Barwon River	27
15.	Officeworks	29
16.	Wrathall Reserve	31
17.	Contact details	33

Overall figures

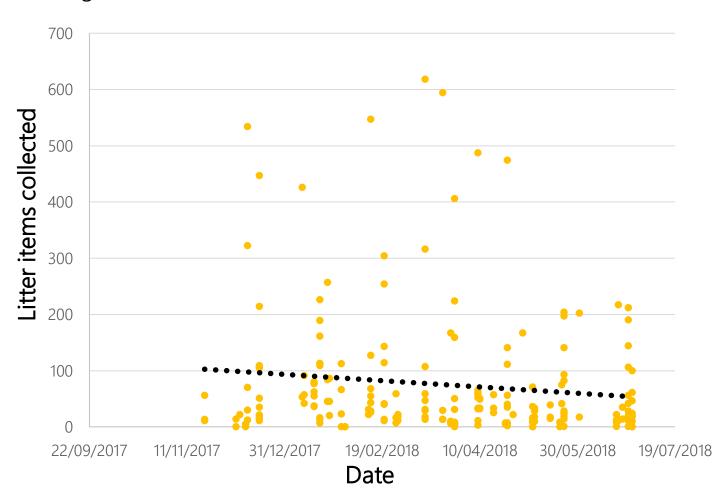
18,952 items of litter were collected between October 2017 and June 2018.



- 8144 cigarette butts
- 2367 fishing related
- 1019 non-recyclable plastics
- 941 other glass (shards)

A decrease in litter overall can be observed.

This is despite the peaks of litter between December and March which correlates to periods of increased visitation and usage.





Hovells Creek

December 2017 – June 2018

Litter hotspot #1

Hovells Creek,

Geelong

- 1. Carpark
- 2. Rotunda
- 3. Walking Track









287 total items

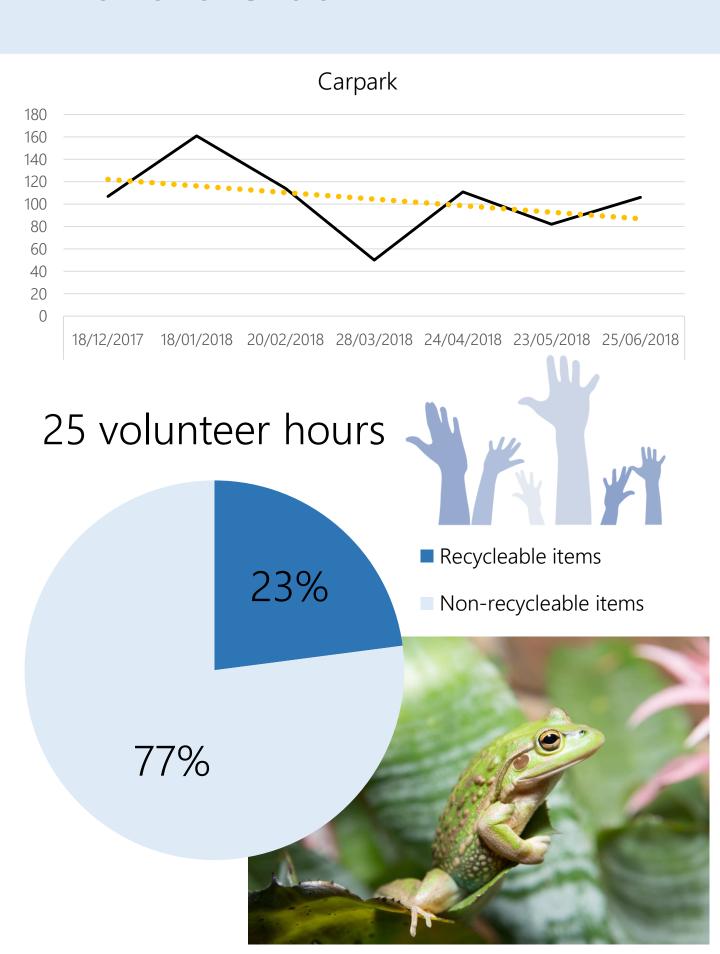
246 cigarettes

36 straws, bread ties

Subsite	Dec	Jan	Feb	Mar	Apr	May	Jun
Carpark	0	66	-	6	33	0	19
Rotunda	-	0	-	10	3	0	100
Walking Track	-	23	-	7	11	9	0
TOTAL	0	89	-	23	47	9	119

Hovells Creek is situated in North Geelong and consists of 3 subsites. The carpark has consistently higher litter compared to the other two sites. The increase of litter during June at the Rotunda is entirely from cigarette butts.

Hovells Creek





Cuthbertsons Creek

November 2017 – June 2018

Litter hotspot #2

Cuthbertsons

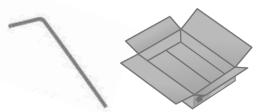
Creek, Geelong

- 1. Creek
- 2. KFC











583 total items 122 soft plastics 100 straws 97 cardboard 86 PET bottles

Subsite	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Creek	13	5	80	-	167	65	71	18
KFC	0	5	55	-	8	61	14	10
TOTAL	13	10	135	-	175	126	85	28

The Cuthbertsons Creek litter hotspot is adjacent to a KFC outlet in Geelong. The creek subsite has higher litter counts each month due to its capacity to collect debris from a variety of sources. The main litter types for each subsite includes food related soft plastics, straws, cardboard and plastic PET bottles which can all be related to the KFC outlet. KFC are working alongside the CFOB program to try and reduce litter.

Cuthbertsons Creek





Cowies Creek

November 2017 – June 2018

Litter hotspot #3
Cowies Creek,
Geelong

- 1. Grass
- 2. Carpark











479 total items

162 cigarettes

179 straws, bread ties

97 cardboard

Subsite	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Grass	56	0	77	22	-	57	16	46
Carpark	0	-	62	31	-	52	36	24
TOTAL	56	0	139	53	-	109	52	70

Cowies Creek is a popular picnic spot in Geelong. The majority of litter is made up of cigarette butts, straws/bread ties and cardboard food packaging. Litter at the grass subsite is decreasing overall, however sudden increases of litter at both sites can be observed during holiday periods (January and April).

Cowies Creek





St Helens Pier

December 2017 - June 2018

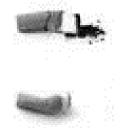
Litter hotspot #4

St Helens Pier, Geelong

- 1. Pier
- 2. Carpark



##







81 total items

104 cigarettes

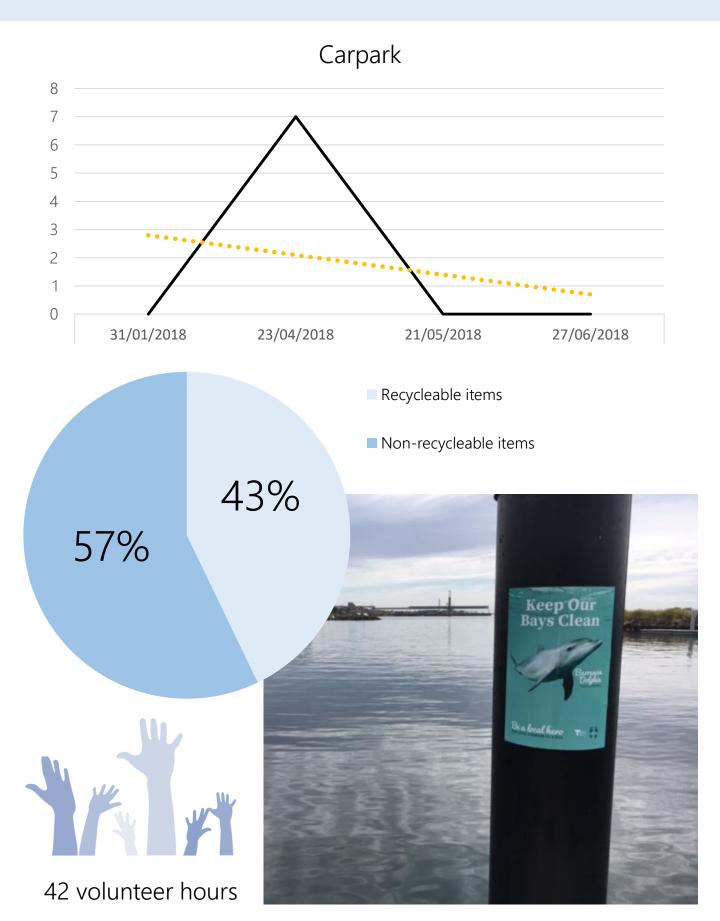
5 hard plastics

4 plastic bags

Subsite	Dec	Jan	Feb	Mar	Apr	May	June
Pier	0	0	-	-	5	8	61
Carpark	0	0	-	-	7	0	0
TOTAL	0	0	-	-	12	8	61

St Helens Pier has consistently low amounts of litter at both subsites. The increase in litter at the pier subsite is comprised solely by cigarette butts. This may be a result of one group of people.

St Helens Pier





Cunningham Pier

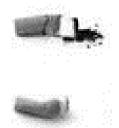
October 2017 – December 2018

Litter hotspot #5
Cunningham Pier,
Geelong

- 1. Pier
- 2. Carpark











63 total items

34 cigarettes

9 glass soft drink

6 fishing

Subsite	Oct	Nov	Dec
Pier	27	-	12
Carpark	24	-	0
TOTAL	51	-	12

Cunningham Pier is in the centre of Geelong and is a hotspot that has the potential to reflect city litter sources. Data could not be collected from December onwards. However the 2 months of data present indicate a decrease in litter at both subsites.



Limeburners Boat Ramp

December 2017 – June 2018

Litter hotspot #6
Limeburners Boat
Ramp, Geelong

- 1. Carpark 1
- 2. Carpark 2



##







3217 total items

3089 cigarettes

164 cardboard

111 other metal

Subsite	Dec	Jan	Feb	Mar	Apr	May	June
Carpark 1	447	226	304	224	141	197	144
Carpark 2	214	189	254	406	474	141	212
TOTAL	661	415	558	630	615	338	356

This litter hotspot is one of the highest sources of litter. The majority of this litter is comprised of cigarette butts. This location is a popular spot for the consumption of meals leading to smoking in vehicles. Increases in litter can be identified during December and March-April around periods of school holidays and Easter. The two subsites are also subject to the accumulation of litter as a result of wind so may also reflect a higher amount of litter than is actually littered.

Limeburners Boat Ramp





Clifton Springs Boat Harbour

December 2017 – June 2018

Litter hotspot #7 Clifton Springs Boat Harbour, Clifton Springs

- 1. Beach
- 2. Pier
- 3. Boat Ramp
- 4. Seat









371 cigarettes



94 fishing

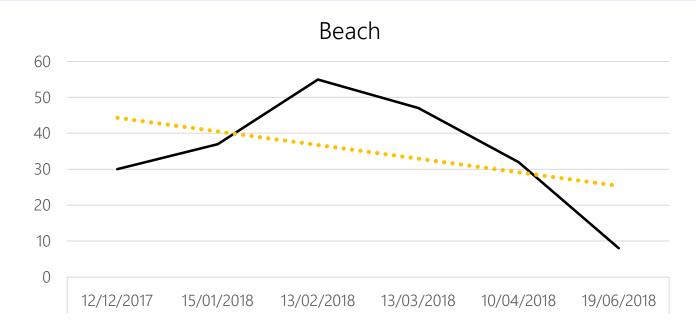


88 soft plastics

Subsite	Dec	Jan	Feb	Mar	Apr	May	June
Beach	30	37	55	47	32	10	8
Pier	12	36	28	18	49	18	1
Boat Ramp	70	77	28	29	50	33	12
Seating	-	-	-	0	33	28	22
TOTAL	112	150	111	94	164	89	43

Not unlike other litter hotspots, cigarette butts comprised the highest litter type. Fishing related litter including hooks, rope, line and bait bags and were the next highest litter type. A peak of litter during April can be attributed to the Easter holiday period that brings in increased visitation at Clifton Springs.

Clifton Springs Boat Harbour





21 volunteer hours





Point Richards

December 2017 – June 2018

Litter hotspot #8

Point Richards,

Portarlington

- 1. Jetty 1
- 2. Jetty 2
- 3. Picnic Shelter
- 4. Boat Ramp



##







688 total items

258 soft plastics

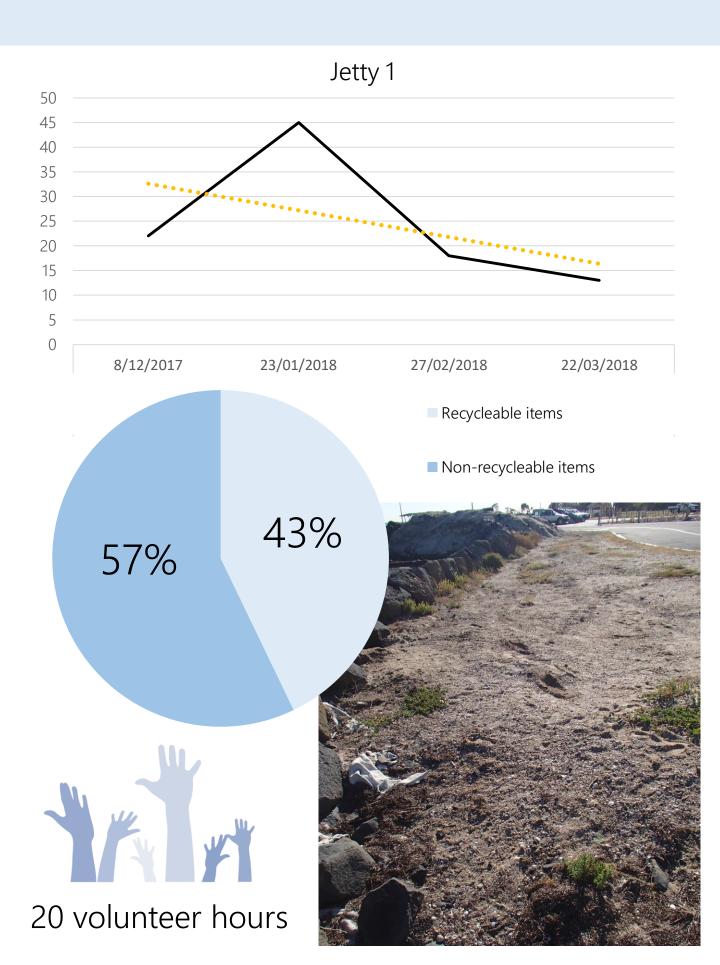
195 other plastics

150 cigarettes

Site	Dec	Jan	Feb	Mar	Apr	May	June
Jetty 1	22	45	18	13	-	-	-
Jetty 2	0	86	22	29	-	24	11
Picnic Shelter	0	20	11	13	22	28	14
Boat Ramp	-	-	-	-	0	93	217
TOTAL	22	151	51	55	22	145	242

The majority of litter collected at this litter hotspot was from soft plastic food packaging. The 'other plastics' includes items such as cable ties, six pack rings and small fragments of soft plastic. Litter increased during January due to increased visitation at Portarlington. The increase of litter during May and June is most likely related to increased storm events.

Point Richards





Portarlington Pier

January 2017 – June 2018

Litter hotspot #9

Portarlington Pier,

Portarlington

- 1. Carpark
- 2. Rock wall



HH

1092 total items



576 cigarettes

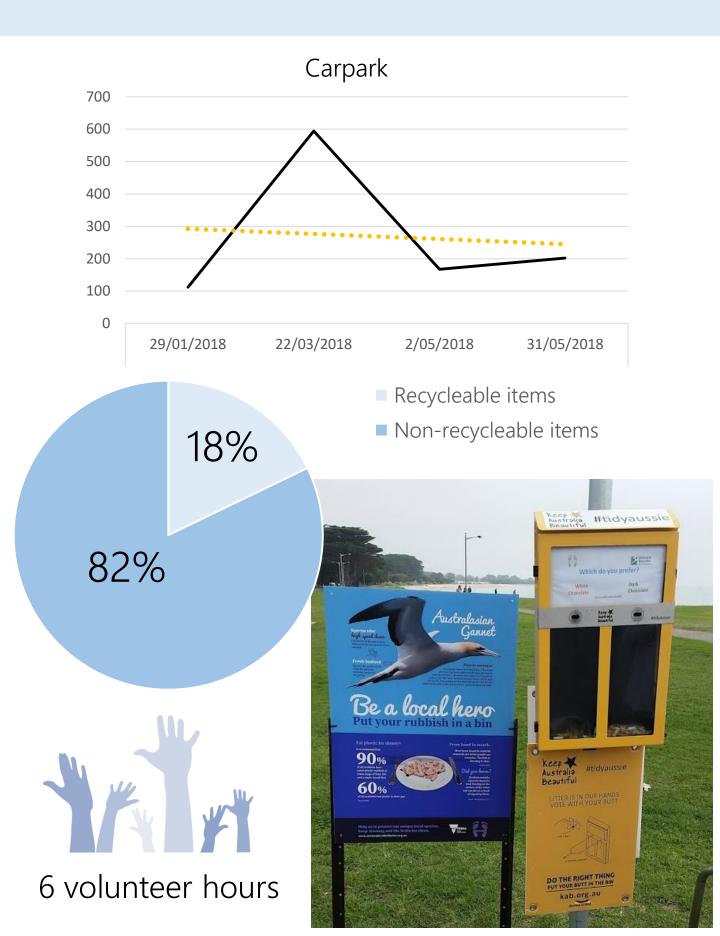


358 other plastics

Subsite	Jan	Feb	Mar	Apr	May	June
Carpark	112	-	594	-	167	202
Rock wall	-	-	-	-	0	17
TOTAL	112	-	594	-	167	219

Due to renovations to the Portarlington Pier and Rock wall, limited litter audits were conducted at this hotspot. These data have illustrated how cigarette butts are the most frequent litter item at this site. The increased amount of litter during March is a result of the 2XU triathlon being conducted during March.

Portarlington Pier





St Leonards Pier

December 2017 – June 2018

Litter hotspot #10

St Leonards Pier,

St Leonards

- 1. Beach
- 2. Carpark
- 3. Park





915 total items



565 cigarettes

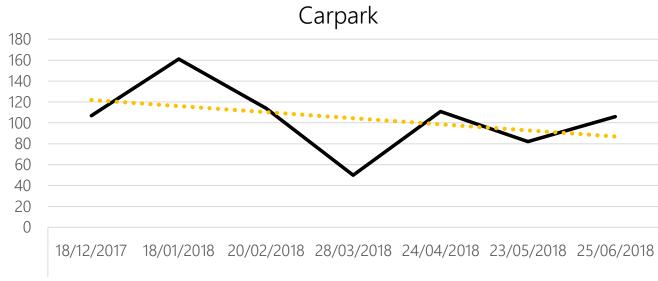


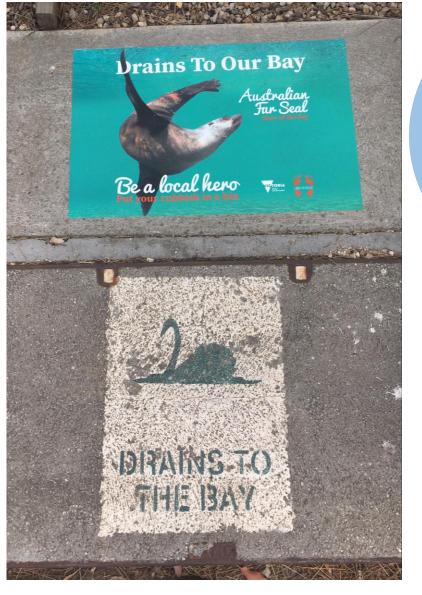
101 straws, bread ties

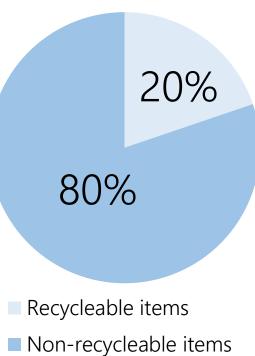
Subsite	Dec	Jan	Feb	Mar	Apr	May	June
Beach	51	84	7	8	25	15	12
Carpark	109	257	59	0	57	39	28
Park	35	45	16	7	33	17	11
TOTAL	195	386	82	15	115	71	51

The St Leonards litter hotspot is comprised of 3 subsites covering areas with different visitor usage. The carpark subsite had the most litter identified as was mainly due to cigarette butts. There was an increase in litter during January which correlates to an increase in visitor usage at St Leonards for the summer holidays.

St Leonards Pier









21 volunteer hours



Burnt Point

December 2017 – June 2018

Litter hotspot #11

Burnt Point,

Queenscliff

- 1. Track
- 2. Beach





125 total items



50 other metal



37 cigarette butts

Subsite	Dec	Jan	Feb	Mar	Apr	May	June
Track	11	7	13	5	2	1	1
Beach	15	14	11	4	7	14	20
TOTAL	26	21	24	9	9	15	21

Burnt Point is an isolated stretch of salt marsh and beach found in Queenscliff. The beach subsite had a higher proportion of litter present, however is more likely to be subject to litter being deposited due to high tides. Increases in litter during December – February can be attributed to an increase in visitor usage during the school holidays.



Queenscliff Ferry

December 2017 – June 2018

Litter hotspot #12

Queenscliff Ferry,

Queenscliff

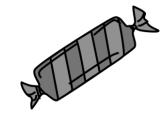
- 1. Staff carpark
- Ticketing building
- 3. Vegetation











1231 total items

711 cigarettes

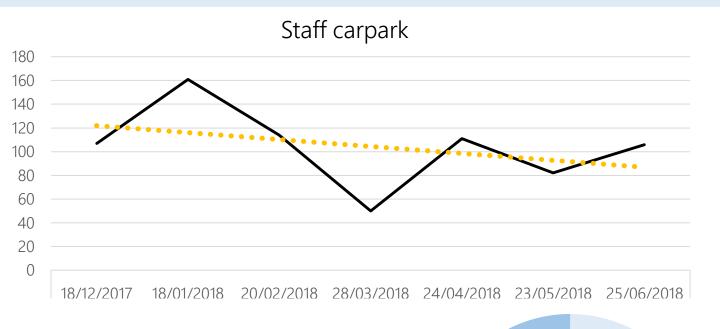
151 cardboard

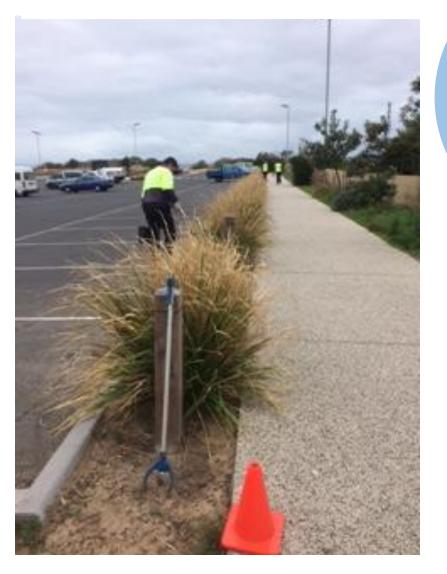
143 soft plastic

Subsite	Dec	Jan	Feb	Mar	Apr	May	June
Staff carpark	107	161	114	50	111	82	106
Ticketing building	17	16	40	31	40	24	42
Vegetation	21	113	41	15	35	19	56
TOTAL	145	290	195	186	186	125	204

The Queenscliff Ferry terminal is a location with high amounts of foot and car traffic. The three subsites identified indicate that cigarette butts are the highest contributor to litter. Increases in litter during January can be linked to Christmas and New Years Eve celebrations.

Queenscliff Ferry





23%

77%

- Recycleable items
- Non-recycleable items



105 volunteer hours



Barwon River

December 2017 – April 2018

Litter hotspot #13

Barwon River,

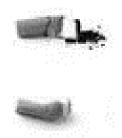
Barwon Heads

- 1. Carpark
- 2. Walkway
- 3. River











3434 total items

2159 fishing

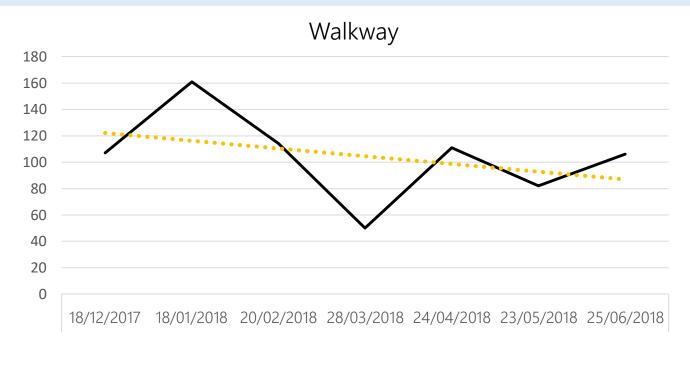
812 cigarettes

550 broken glass

Subsite	Dec	Jan	Feb	Mar	Apr
Carpark	322	426	547	618	487
Walkway	534	53	68	31	32
River	-	-	-	316	-
TOTAL	856	479	615	965	519

This litter hotspot was added due to concerns with the amount of litter surrounding and within Barwon River. From the data presented, high amounts of fishing related litter and cigarette butts were observed at this site. High amounts of litter were present at each subsite during each month.

Barwon River







Officeworks Geelong

December 2017 – June 2018

Litter hotspot #16

Officeworks,

Geelong

1. Carpark











966 total items

634 cigarettes

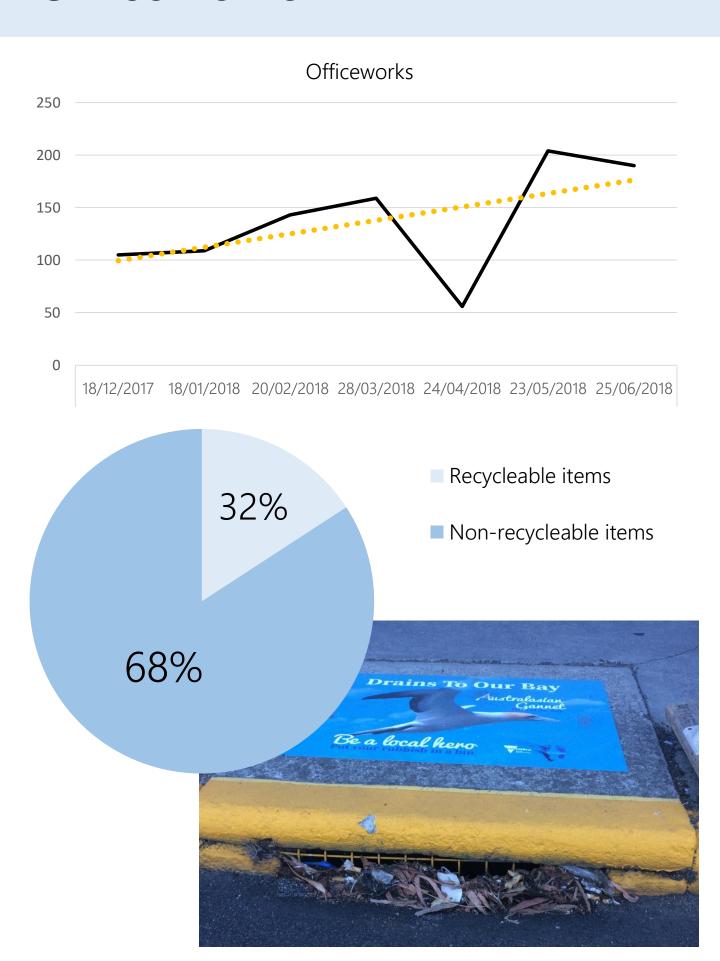
142 broken glass

91 other paper

Subsite	Dec	Jan	Feb	Mar	Apr	May	June
Staff carpark	105	109	143	159	56	204	190
TOTAL	105	109	143	159	56	204	190

The litter hotspot site at Officeworks Geelong gives a good representation of the sources of litter within the city of Greater Geelong. The majority of litter was comprised of cigarette butts and broken glass. The litter audit site receives high amounts of litter due to it being alongside a gutter that collects litter from other areas of the carpark and no decrease in litter was observed. The installation of 'Butt Bins' would be the next course of management action to reduce litter.

Officeworks





Wrathall Reserve

January 2017 - June 2018

Litter hotspot #13

Wrathall Reserve, Indented Head

- 1. BBQ Shelter
- 2. Toilet Block
- 3. Boat Ramp











730 total items

572 cigarettes

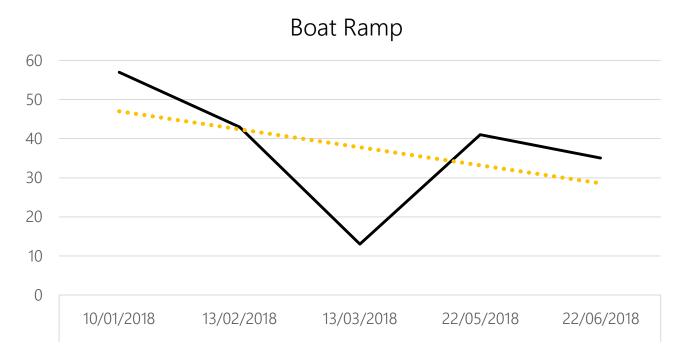
109 other glass

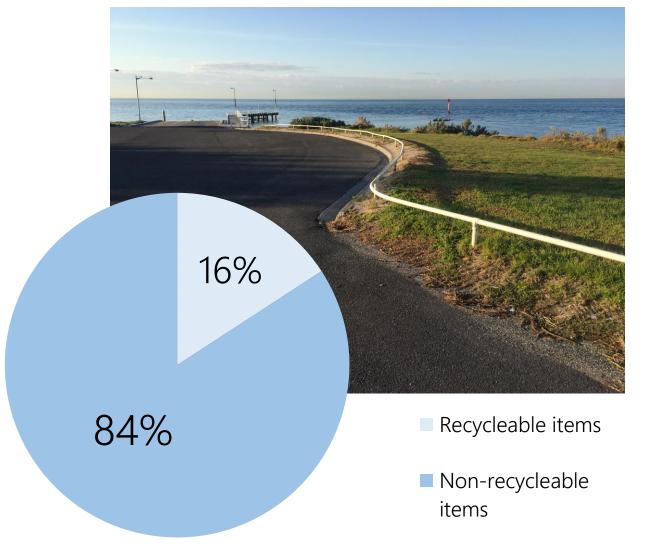
91 other metal

Subsite	Jan	Feb	Mar	Apr	May	June
BBQ	91	127	107	-	75	14
Toilet	42	26	59	-	-	-
Boat Ramp	57	43	13	-	41	35
TOTAL	190	196	179	-	116	49

The majority of litter collected was made up of cigarette butts. Smalls shards of glass lead to high amounts of 'other glass'. Foil fragments, can ring pulls and wire fragments comprised the 'other metal' category. The BBQ had the highest amount of collected litter during nearly every month consistent with smokers and eaters. High litter was identified during all months and so may be a result of local residents behaviour.

Wrathall Reserve







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