## Caring for Our Bays Litter Hotspots Report June 2019







### Acknowledgements and Foreword

The Caring for Our Bays (CFOB) program is administered through the Bellarine Catchment Network and funded through the Victorian State Government Port Phillip Bay Fund as well as through the sponsorship and support of land managers, authorities, businesses, community groups and the community.

The CFOB litter hotspots program was formed in 2017 with the establishment of 12 litter hotspot locations. This program has since expanded to include 3 additional sites. The project would not be possible without the support of our amazing, passionate CFOB volunteers. These people dedicate their time each month (or as often as possible) to audit sites, collect litter, enter data and participate in workshops and feedback meetings to ensure accurate data is recorded and reported.

Working in partnership, CFOB works to address the source of litter and reduce the amount entering the environment and the Bay. Results to date show that due to education, signage, infrastructure and targeted solutions, **13 of the 15 sites have seen an overall significant decrease in litter or consistently low counts**. Most locations still see peak litter during Summer and Easter holiday periods with increased visitor usage. Part of the next phase of CFOB we are developing signage in languages other than English to help address this issue. Cigarette butts are consistently the most abundant litter item at most sites and across the region.

This report showcases each hotspot site, the litter issues, identified litter source and outlines the actions undertaken and recommendations to mitigate these.









## Contents

1.	Summary	4
2.	Hovells Creek	5
3.	Cuthbertsons Creek	7
4.	Cowies Creek Seagull Paddock	9
5.	St Helens Pier	11
6.	Cunningham Pier	13
7.	Limeburners Boat Ramp	15
8.	Clifton Springs Boat Harbour	17
9.	Point Richards Boat Ramp	19
10.	Portarlington Pier	21
11.	St Leonards Pier	23
12.	Burnt Point	25
13.	Queenscliff Ferry	27
14.	Officeworks	29
15.	Wrathall Reserve	31
16.	Cowies Creek Peacock Avenue	33
17.	Contact details	35

## Summary



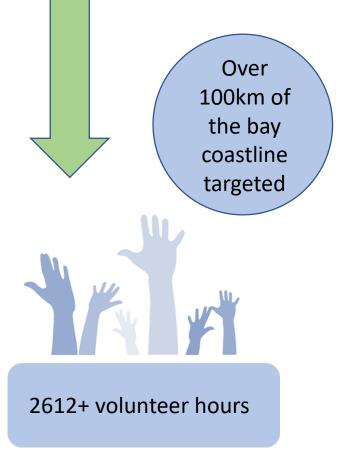
**38,355** items of litter recorded as part of the hotspot audits between October 2017 and June 2019.

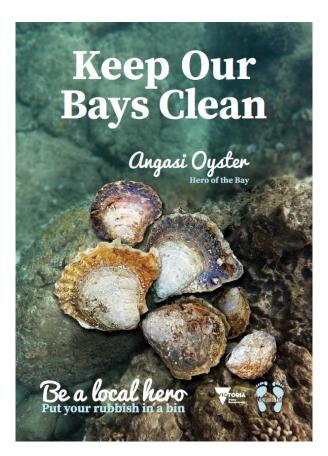


- 20288 cigarette butts
- 6596 plastic items
- 3709 recyclable bottles/cans

During 2018/2019 year over 10 large scale clean ups were lead by CFOB resulting in an additional collection of litter of over 15,000 items.

There has been a significant reduction in litter overall across the hotspot locations





# **Hovells Creek**

November 2017 – June 2019

Hovells Creek is situated in North Geelong and consists of 3 subsites; a carpark, a walking track and the rotunda. It has significant environmental value and is adjacent to a Ramsar site. A Department of Justice team has been monitoring this site on a monthly basis since November 2017 with the last monitoring being conducted in August 2018 when no litter was found at each of the 3 sites.

Data shows that this site has seen a overall decline in litter. With CFOB signage, increased education and activities in North Geelong as well as regular clean ups by the Department of Justice Community Service teams each month there has been a significant reduction of litter at this site.



**429** audit items **19** audits Cleaned **Monthly** 

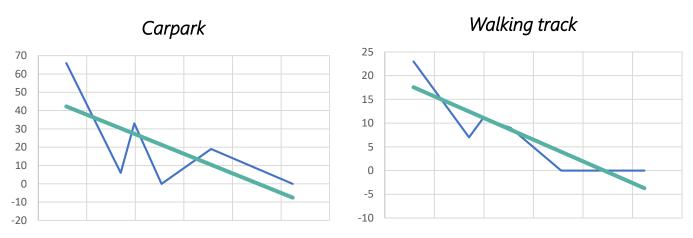




# Hovells Creek

The trendline for both the carpark and the walking track show significant signs of a decreasing litter trend. Spikes during the year are due to small clusters of cigarette butts, generally at the rotunda site.

This site was also included in a Pesticide Detectives program, with BCN undertaking soil samples, photo points and data records for the RMIT analysis.



#### **Monitoring & Recommendations**

CITY OF GREATER

GEELONG

- Reduce to bi-monthly monitoring
- Installation of butt bin at rotunda
- Approach Geelong Grammar to monitor this site



280 volunteer hours



## **Cuthbertsons Creek**

November 2017 – June 2019



The Cuthbertsons Creek litter hotspot site is adjacent to a KFC and McDonald's outlet, a skate park as well as the City of Greater Geelong fOrT youth centre. Both KFC and the fOrt have partnered with CFOB to implement actions to reduce litter in this area. CFOB signage has been installed the KFC drive thru to remind people to 'do the right thing' and link litter impacts to the waterway and bay. KFC have installed an additional bin and staff do daily clean ups in the carpark around the store. The fOrT start their afternoon with a clean up to ensure students using the site are responsible for keeping the grassed area in front of the building clean.



602 total items 17 audits Cleaned Monthly



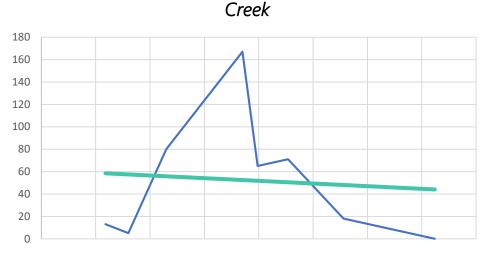


# Cuthbertsons Creek GEELONG

The trendline over time indicates a decrease in litter at this site. The significant peak occurred after the summer holiday period and as a result of a large count of small pieces of soft plastic.

Each year CFOB conducts a school environment day in conjunction with the fOrT to connect with students from North Geelong Secondary College.

This site continues to be challenging due to the high use and source of litter. McDonald's have been approached to undertaken action but at this stage have not assisted in mitigating litter at this site.



#### **Monitoring & Recommendations**

- Reduce to bi-monthly monitoring
- Continue environment day at the fOrT
- Approach McDonald's again





#### 175 volunteer hours



## Cowies Creek Seagull Paddock

November 2017 – June 2019

Cowies Creek – Seagull Paddock is situated in Corio surrounded by housing and industry. This site has some high-quality riparian vegetation as well as being home to a population of Growling Grass Frog. Seagull Paddock is an area used for recreation and picnicking and is also adjacent to a KFC outlet. This year has seen installation of signage in this second KFC store to showcase the impacts of litter on our waterways and bays and to remind people to put their rubbish in the bin. The Department of Justice undertake monthly clean up with Community Service crews at this site on behalf of the City of Greater Geelong.



**759** total items **15** litter audits Cleaned **Monthly** 





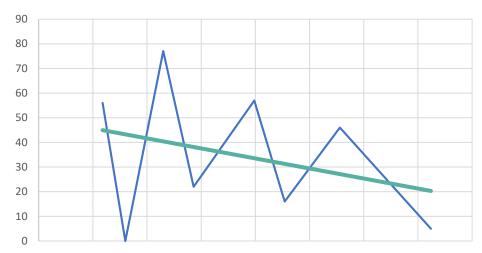


## Cowies Creek Seagull Paddock



Grass

Litter at the grass subsite has decreased overall, however spikes of litter at both sites can be observed during peak holiday periods (January and April).



#### **Monitoring & Recommendations**

- Reduce to bi-monthly monitoring
- Continue to work with KFC North Geelong to undertake clean ups and action





#### 150 volunteer hours



# St Helens Pier

January 2018 – June 2019

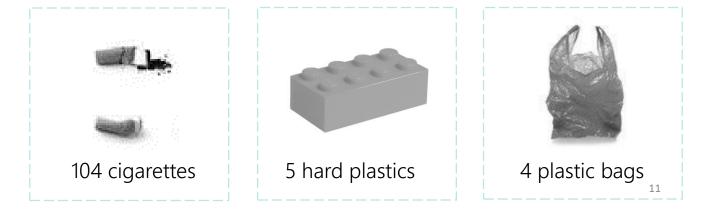
CARING FOR OUR BAYS

St Helens Pier has had consistently low amounts of litter at both subsites. There are two subsites: the pier and the carpark. This site used to be cleaned monthly by the Department of Justice Community Service teams. However due to small groups of local fisherman that use this site on a regular basis, they have started to do at least weekly clean ups. This has resulted in very low counts of litter being recorded during audits. As a result auditing was stopped at the site in July 2018.



**130** total items**9** litter auditsCleaned Weekly





# St Helens Pier



Both sites monitored showed very low counts of litter. The carpark subsite there was an overall decrease in litter, however, the Pier subsite experienced a spike in litter during June 2018 which comprised mainly of cigarette butts.



### Monitoring & Recommendations

- Quarterly monitoring to ensure litter counts are low
- Installation of butt bin at pier





# **Cunningham Pier**

December 2017 – June 2019

Cunningham Pier is privately owned by Costa Property Group, is located adjacent to the Geelong CBD region and host 100,000's of visitors each year. It has the potential to be a litter hotspot due to its location and high use as a recreational walk, grassed picnic area, platform to restaurants and also a local fishing spot. However, as this is a prominent centrepiece of Geelong it is cleaned on a regular basis by the City of Greater Geelong/ contractors. There is low levels of small litter, mostly cigarette butts that are missed during clean ups. Cunningham Pier has been monitored by a home school family during 2018



.....

CARING FOR OUR BAYS

LEAVE NOTHING BUT FOOTPRINTS

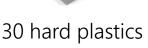
163 total items6 auditsCleaned Weekly

A butt bin was installed by CFOB in May 2019 in the most frequented fishing location next to a shelter in the hope that this will reduce the most common litter item in this location.





52 cigarettes





10 fishing

13

# **Cunningham Pier**









**Monitoring & Recommendations** 

- Reduce to quarterly monitoring
- Monitor butt bin use





# Limeburners Boat Ramp



November 2017 – June 2019

Limeburners Boat Ramp (Geelong Boat Ramp) is located adjacent to Eastern Beach in the centre of Geelong. It is a highly used space for boat access, and lookout parking location due to the view. It experiences high levels of 'hoon' behaviour as seen in circle work tyre marks and large amounts of fragmented rubber for tyres. The most abundant litter item is cigarette butts with high densities found in gutters and areas adjacent to the carpark. This site remains the worst litter hotspot site in our region with an average of 8 pieces of litter per square metre. Conservation Volunteers Australia clean this site each month on behalf of City of Greater Geelong.



10,456 total items27 litter auditsCleaned Monthly

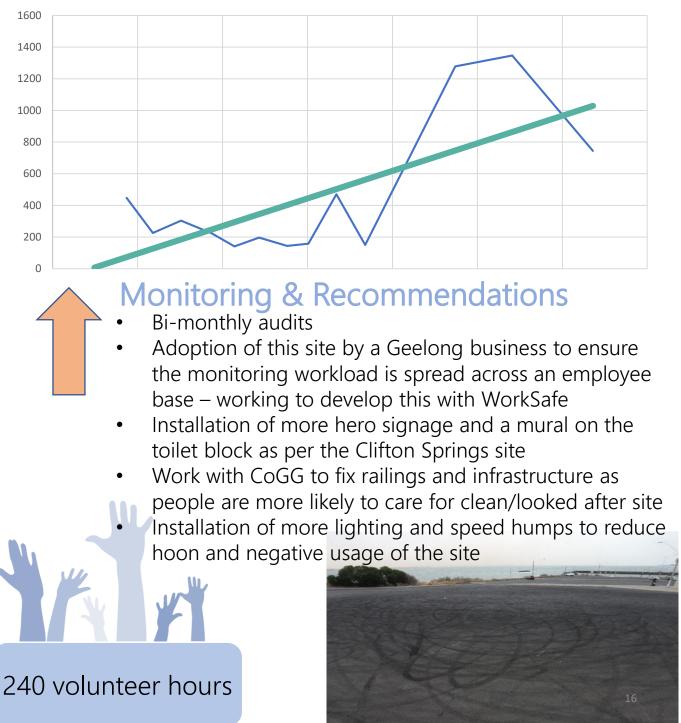




# Limeburners



Carpark 1 by far had the most litter at each audit. Due to the high volumes of litter each month this site is now the focus subsite being monitored each month as it a lengthy process to monitor just this 48 square metres. Volunteers started to focus on just Carpark 1 in early 2019. This site is showing an increase in litter as the trend with spikes over the holiday periods.



#### Carpark 1 (rocky verge of carpark)

## **Clifton Springs Boat Ramp**

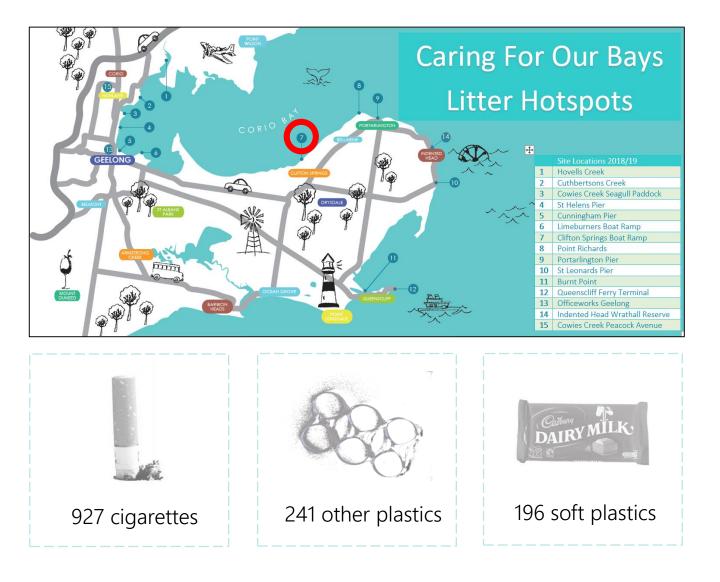
November 2017 – June 2019

Clifton Springs Boat Harbour is a highly used site with a dedicated team of litter volunteers. A large mural and information signage has been installed at this site to enhance the area and educate users.

Not unlike other litter hotspots, cigarette butts comprised the highest litter type. Soft plastics and fishing related litter including hooks, rope, line and bait bags and were the next highest litter type. A peak of litter during April 2019 can be attributed to the Easter holiday period that brings in increased visitation at Clifton Springs.



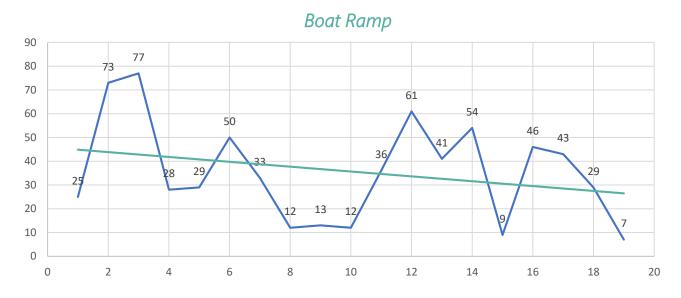
2153 total items 74 litter audits





## **Clifton Springs Boat Ramp**

This location showed an overall decrease in litter. The subsite 'Pier' and 'Boat Harbour' had significant decreases in litter, where as the 'Seat' and 'Beach' showed consistent litter. This may be due to the influx of litter from visitors and litter washing up on the shore.



#### Monitoring & Recommendations

- Reduce to quarterly monitoring
- More drain decals in surrounding areas leading to the bay to remind people that street litter = bay litter
- Continued education and signage campaigns



# **Point Richards**

December 2017 – June 2019

CARING FOR OUR BAYS

Point Richards Reserve is a coastal foreshore area comprised of a boat ramp, picnic tables, miniature railway and sailing club; so is a hub of activity. With high number using the site over the Summer months, an increase in litter recorded during these times increasing. The site has been upgraded and maintained by the Bellarine Bayside Committee of Management with CFOB signage along the entire foreshore in this region. The litter at this site is influenced by visitor usage as well as marine litter collecting on the beach areas. The increase of litter during May and June is most likely related to increased storm events.



2439 total items50 litter audits

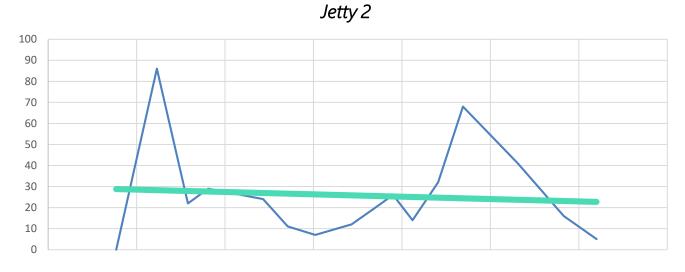




# **Point Richards**



A dedicated team of volunteers have recorded an overall decrease in litter with peaks attributed to high visitor use and marine debris deposits on beach subsites during winter storms.



## Monitoring & RecommendationsReduce monitoring to quarterly

- - Additional bins or frequency of emptying during peak Summer periods





# **Portarlington Pier**

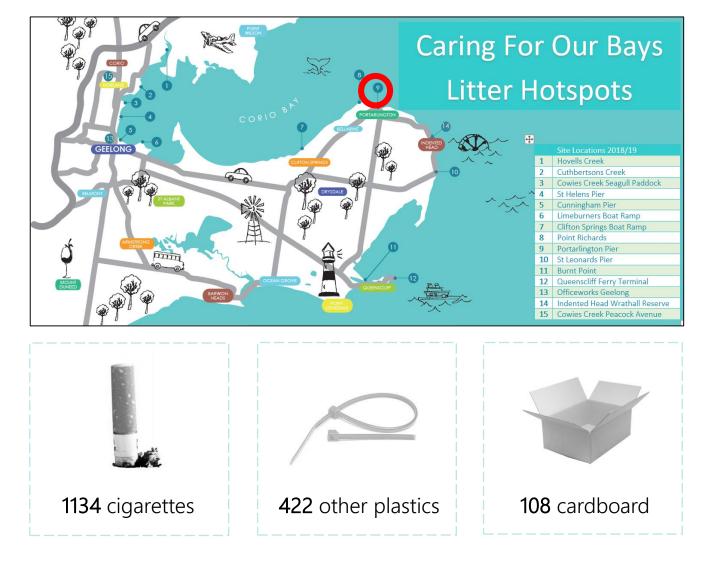
December 2017 – June 2019

Bellarine Bayside Committee of Management manage this foreshore area, however the pier is managed by Parks Victoria. It is a high use commercial pier with Port Phillip Ferries docking alongside commercial mussel boats and recreational vessels.

CFOB has also conducted a clean up and audit along this foreshore area with the BBCoM Nature Cadet group, the CVA Destination Conservation group and for the National Celtic Festival. This data has not been included in site assessment as they were one off clean up activities but resulted in 100's of litter items being removed from the vicinity. A butt bin was installed by CFOB at the pier in May 2019 in order to address this main litter source.



1919 total items 12 litter audits 2 subsites

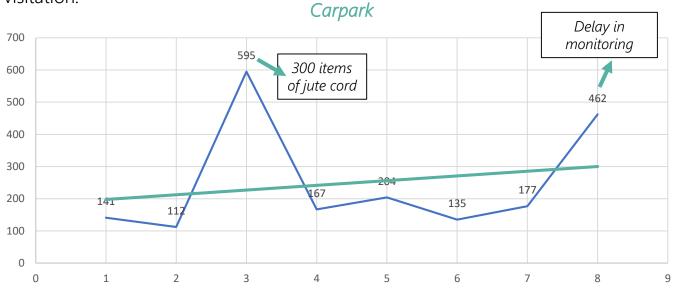




# **Portarlington Pier**



This site appears to be increasing due to two outliers. These are; a) 300 very small pieces of jute cord recorded in March 2018 due to the 2XU triathlon and b) A peak in February 2019 due to no collection for 4 months and increased Summer holiday visitation.



Consistent but

with outliers

- Monitor bi-monthly
  - Continue to engage with 2XU triathlon to reduce specific litter items

**Monitoring & Recommendations** 

- CFOB sticker on older butt bin on pier (PV)
- Increase partnership with Port Phillip Ferries to escalate education and awareness





# St Leonards Pier

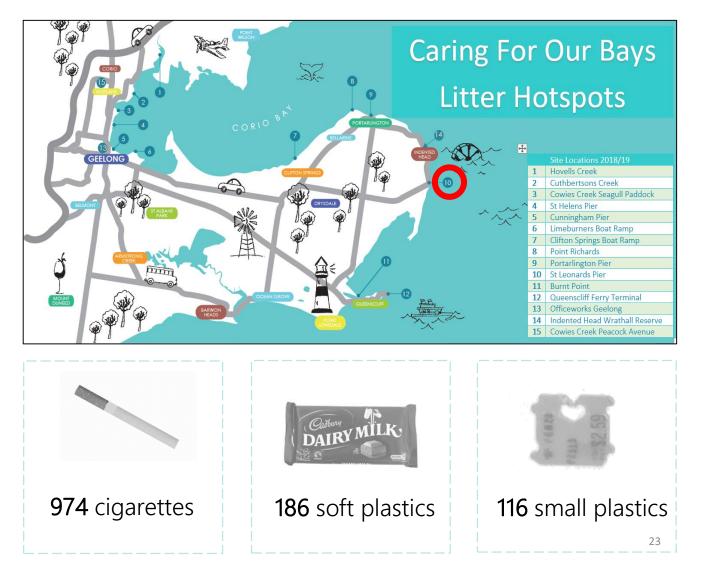
November 2017 – June 2019



The St Leonards litter hotspot is comprised of 3 subsites; carpark, beach and Harvey Park. This area is managed by BBCoM and CoGG with the pier managed by Parks Victoria. These subsites cover areas with different visitor usage.

The carpark/picnic table subsite had the most litter identified as cigarette butts. CFOB has installed a butt bin in between the picnic table areas next to the busy carpark. A clean up of the pier was also conducted by CFOB staff.

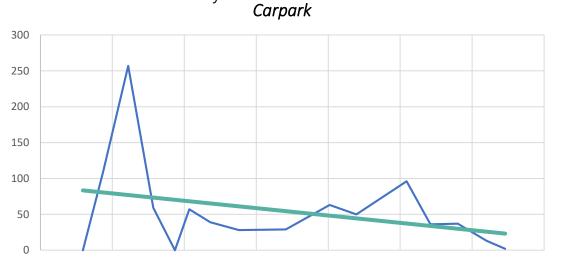
1833 audit items48 audits1 site clean ups



# St Leonards Pier



Overall we have seen a significant decrease in litter at this location, with cigarette butts the main litter source, particularly around the picnic tables and seating areas. Vegetation adjacent to the pier functions is a good litter trap, with consistently litter being found amongst these saltbush. There was an increase in litter during January 2018 and February 2019 which correlate to an increase in visitor usage at St Leonards for the summer holidays.



## **Monitoring & Recommendations**

- Reduce to quarterly monitoring
- Monitor use of butt bin







144 volunteer hours



## **Burnt Point**

November 2017 – June 2019

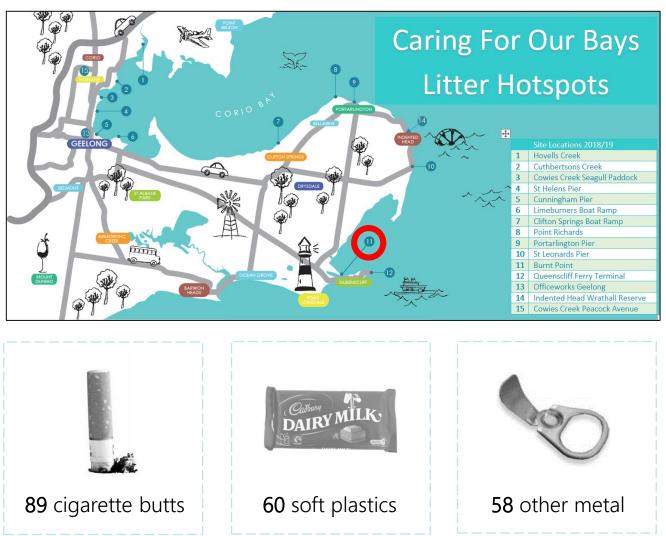
CARING FOR OUR BAYS

Burnt Point is an isolated stretch of salt marsh and beach found in Queenscliff on the shores of Swan Bay, a Ramsar site. The beach subsite had a higher proportion of litter present, with the path having very low recorded litter. This site is used by local fisherman and small piles of rubbish associated with fisherman use is the main source of litter. The site is managed by Parks Victoria and has bin and CFOB signage.

This site is now monitored by a home school family who also undertake clean ups at the site in addition to the audits.



612 total items 31 litter audits



## **Burnt Point**



Both subsites showed a consistent or decreasing trend of litter identified. For the beach subsite, a monitoring gap between September 2018 and February 2019 led to a large spike in litter which skewed the trend. This site, although isolated requires engagement with users to foster a greater appreciation of the site and encourage taking litter away with them when they leave.



# **Queenscliff Ferry**

November 2017 – June 2019

The Queenscliff Ferry terminal is a located in the Borough of Queenscliffe, experiencing high amounts of foot and car traffic. The three subsites are: staff parking bay, ticketing office garden and *Lomandra* garden on the edge of the carpark. All sites have been identified with high proportions of cigarette butts.

This site it now monitored by local volunteers each month, with litter being consistent across the site. It is a difficult site to improve due to the transient nature of most users, with wind blown litter playing a role. The ticket office staff now undertake regular clean ups around the office and their carpark as a result of the CFOB hotspot program, as well as a local hero who frequently undertakes clean ups.



2077 total items 35 litter audits



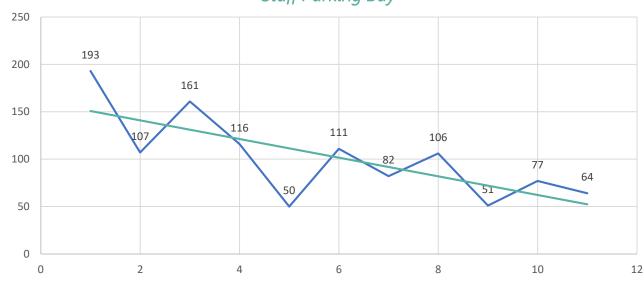




# **Queenscliff Ferry**



Two out of three subsites show a decrease in litter. The subsite 'Ticketing Building' shows consistent litter with a spike due to a gap between litter counts. The subsite 'Carpark 1 – Staff Parking Bay' is showing a significant trend of decreasing litter over time most likely due to Searoad Ferries staff and the local hero undertaking clean ups in this area. Two of the subsites are currently unable to be audited due to closed off sections for works. *Staff Parking Bay* 



#### Monitoring & Recommendations

- Reduce monitoring to quarterly
- Increase signage
- Increase partnership with Searoad Ferries to increase messaging onboard and around carparks



373 volunteer hours



## Officeworks

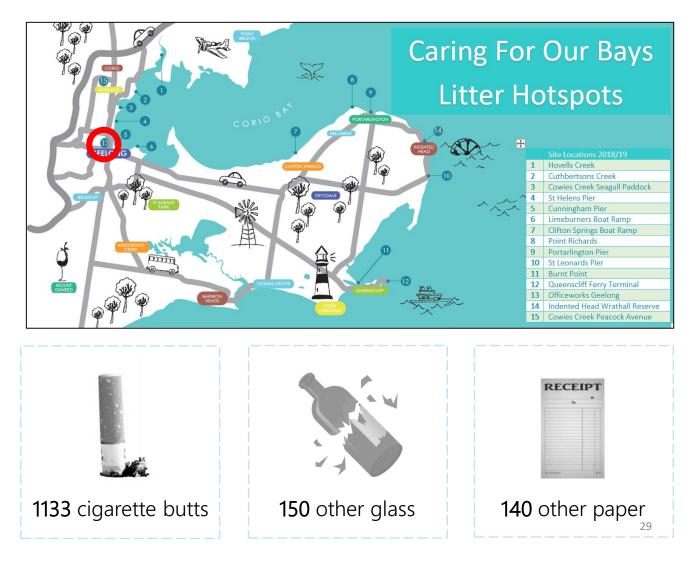
November 2017 – June 2019

Officeworks is monitored by volunteers on a monthly basis. The site consists of a gutter and walkway adjacent to the Officeworks carpark in Geelong CBD. Officeworks have partnered with CFOB to raise awareness of litter and impacts on the bay and also to raise funds for the program.

The site has two storm water drains with CFOB drain decals remining people that what goes down the drain ends up in the bay. Initiatives to address source have been installation of a ticket bin which has seen a 90% decrease in parking ticket litter. Two butt bins were also installed by CFOB in May 2019 to address customer and staff butt litter.



**2164** total items **13** litter audits

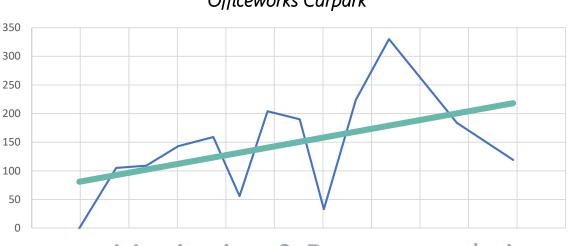




# Officeworks



This subsite shows an increase in litter since 2017 to 2019. The peaks of litter items occur in May 2018 and September 2019 which may be as a result of water flushing litter from the carpark into drain collection grates. Most litter as this site is captured within storm drains as a result of localised flooding and wind and may not reflect the actions of patrons in the targeted area.



#### Officeworks Carpark

#### **Monitoring & Recommendations**

- Bi-monthly monitoring
- Increased partnership outcomes with Officeworks including staff taking on the monitoring of this site and a corporate staff education day on the bay
- Monitor butt bin usage.





# **Indented Head**

December 2017 – June 2019

This site is located at Wrathall Reserve in Indented Head. It is highly visited site during Summer by both locals and people staying in adjacent caravan parks. The land manager is Bellarine Bayside Committee of Management who regularly clean and maintain the site. 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 area had the highest amount of litter; consistent with people using these facilities. Clean ups were also conducted as part of CFOB Summer holiday activities.



1747 total items37 litter audits2 clean ups



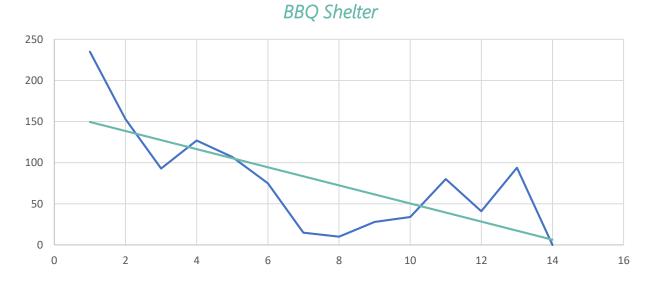




# **Indented Head**



All three subsites at this location show a decrease in litter over time. In the latest count, no litter was found at all. Periods of high visitation and tourism may be an ongoing issue without further education and cultural engagement.



#### Monitoring & Recommendations

- Monitor quarterly
- Work in partnership with Bellarine Bayside to increase education and awareness during holiday periods, at caravan parks and at the reserve.
- Signage in languages other than English may be beneficial
- Installation of butt bin





# Cowies Creek Peacock Avenue

November 2019 – June 2019

Cowies Creek – Peacock Avenue is a newly establish hotspot site which is located at the end of Peacock Avenue in Norlane. The street leading to this site hosts Northern Bay College as well as the Norlane West Scout Group. This site has some high-quality riparian vegetation as well as being home to a population of Growling Grass Frog. The scout group hotspot monitoring was established, along with a water quality monitoring through the CCMA River Detectives program. Joeys, Cubs and Scouts audit, clean up and undertake water quality once per term.



.....

CARING FOR OUR BAYS

LEAVE NOTHING BUT FOOTPRINTS

100L of litter2 litter audits2 clean ups2 water quality



CFOB has supported the establishment of a Friends of Cowies Creek group, working with CoGG, Diversitat, Geelong Landcare Network and community. This group is working to raise the profile of Cowies Creek and address the potential impacts of the proposed Western Development Area.



## Cowies Creek Peacock Avenue







#### **Monitoring & Recommendations**

- Continue to monitor quarterly
- Continue to build partnerships with groups in the Cowies Creek area



#### CORANGAMITE CATCHMENT MANAGEMENT AUTHORITY



180 volunteer hours





For more information or to join the litter champions in Caring For Our Bays please contact:

Angeline Poole Coastal Program Leader Bellarine Catchment Network

M: 0478 777 306

E: <u>angie@bcn.org.au</u>

W: http://www.environmentbellarine.org.au



