RANDWICK CITY COUNCIL

Illegal Dumping and Litter Management Plan 2023-2031

September 2023



Contents

Α	Acknowledgement of Country						
E	Executive summary						
1.	1. Introduction						
	1.1. Why this Illegal Dumping and Litter Management P needed						
	1.2.	. Purpose of th	ne Plan	8			
	1.3. Defining illegal dumping and litter						
	1.4. Why illegal dumping and litter is a problem						
	1.5.	. Scope		10			
2.	Ra	ndwick LG	A- Community profile and overvi	ew12			
	2.1.	. Location and	key features	12			
	2.2.	. Demographic	CS CS	13			
3.	Cu	rrent state	of play- Illegal dumping and litte	r 14			
	3.1.	. Hotspot loca	tions and trends	14			
		3.1.1	Illegal dumping	14			
		3.1.2	Litter	19			
	3.2	Items that ar	e littered and illegally dumped	22			
		3.2.1	Illegal dumping	22			
		3.2.2	Litter	22			
4.	Ро	licy framew	ork and strategic context	23			
-	4.1. Strategic and policy context						
		4.1.1	National	23			
		4.1.2	State	23			
		4.1.3	Regional	24			
		4.1.4	Randwick LGA	25			
	4.2.	4.2. Illegal dumping and litter management principles					
		4.2.1 framework	Illegal dumping and litter prevention 25				
		4.2.2	Waste Hierarchy	26			
		4.2.3	Circular Economy	27			
5.	De	velopment	of the Plan	29			
	5.1. Approach to engagement						
	5.2. Engagement outcomes						

		5.2.1. Engagen	nent participants	30
	5.3	Engagement fin	dings	30
		5.3.1	Awareness of illegal dumping and litter	31
		5.3.2 services	Current usage of illegal dumping and litt 32	ter
		5.3.3 problem in the	Is there an illegal dumping and litter Randwick LGA?	33
		5.3.4 and litter?	What factors contribute to illegal dumping 38	ng
		5.3.5 Commun	ity solutions	39
	5.4	Co-design wor	kshop session	40
	5.5	5 Introducing the challenges		
	5.6	Identifying solu	utions	42
		5.6.1	Brainstorming	42
		5.6.2	Personalising	42
		5.6.3	Present and Prioritise	43
		5.6.4	Calutiana matuk	43
		3.0.4	Solutions matrix	10
6.	Taı	gets and pri		44
6.				
6.	6.1.	gets and pri		44
6.	6.1.	rgets and pri Targets Priority areas	ority areas urea 1: Harnessing the power of education	44 44
6.	6.1.	Targets Priority areas 6.2.1. Priority a and communic 6.2.2. Priority a	ority areas urea 1: Harnessing the power of education	44 44 44 n 45
6.	6.1.	Targets Priority areas 6.2.1. Priority a and communic 6.2.2. Priority a community priority areas	ority areas area 1: Harnessing the power of education ation area 2: Tackling illegal dumping by building	44 44 44 n 45 ng 47
6.	6.1.	Targets Priority areas 6.2.1. Priority a and communic 6.2.2. Priority a community priority aright thing 6.2.4. Priority a	ority areas area 1: Harnessing the power of education ation area 2: Tackling illegal dumping by building the through beautification	44 44 44 45 10 47 49
6.	6.1.	Targets Priority areas 6.2.1. Priority a and communic 6.2.2. Priority a community priority aright thing 6.2.4. Priority a litter prevention	ority areas area 1: Harnessing the power of education ation area 2: Tackling illegal dumping by building the through beautification area 3: Supporting our community to do the area 4: Optimising our illegal dumping and	44 44 44 45 ng 47 he 49
	6.1.	Targets Priority areas 6.2.1. Priority a and communic 6.2.2. Priority a community prio 6.2.3. Priority a right thing 6.2.4. Priority a litter prevention 6.2.5. Priority a	ority areas area 1: Harnessing the power of education ation area 2: Tackling illegal dumping by building the through beautification area 3: Supporting our community to do the area 4: Optimising our illegal dumping and in infrastructure and services	44 44 44 45 19 47 49 50
7.	6.1. 6.2.	Targets Priority areas 6.2.1. Priority a and communic 6.2.2. Priority a community priority thing 6.2.4. Priority a right thing 6.2.5. Priority a litter prevention 6.2.5. Priority a enforcement	ority areas area 1: Harnessing the power of education ation area 2: Tackling illegal dumping by building the through beautification area 3: Supporting our community to do the area 4: Optimising our illegal dumping and in infrastructure and services area 5: Improving compliance through	44 44 44 45 ng 47 he 49 50
7.	6.1. 6.2. Act	Targets Priority areas 6.2.1. Priority a and communic 6.2.2. Priority a community priority a right thing 6.2.4. Priority a litter prevention 6.2.5. Priority a enforcement	ority areas area 1: Harnessing the power of education ation area 2: Tackling illegal dumping by building the through beautification area 3: Supporting our community to do the area 4: Optimising our illegal dumping and in infrastructure and services area 5: Improving compliance through	44 44 44 45 10 47 49 40 50 52
7.	6.1. 6.2. Act Rei 8.1.	Targets Priority areas 6.2.1. Priority a and communic 6.2.2. Priority a community priority a right thing 6.2.4. Priority a litter prevention 6.2.5. Priority a enforcement tion plan ferences/ Gla	ority areas area 1: Harnessing the power of education ation area 2: Tackling illegal dumping by building the through beautification area 3: Supporting our community to do the area 4: Optimising our illegal dumping and in infrastructure and services area 5: Improving compliance through	44 44 44 45 19 47 49 50 52 54

Acknowledgement of Country

Randwick City Council pays respect to the traditional owners of the land, the Bidjigal and Gadigal people, and we acknowledge the living and continuing culture of the traditional custodians of this Country. We recognise that the traditional owners have occupied and cared for this Country over countless generations, and we celebrate their ongoing contribution to the life of the area.

This report: has been prepared by GHD for Randwick City Council and may only be used and relied on by Randwick City Council for the purpose agreed between GHD and Randwick City Council as set out in section 1.2 of this report.

GHD otherwise disclaims responsibility to any person other than Randwick City Council arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

GHD has prepared this report on the basis of information provided by Randwick City Council and others who provided information to GHD (including Government authorities), which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

Accessibility of documents

If this report is required to be accessible in any other format, this can be provided by GHD upon request and at an additional cost if necessary.

Executive summary

Between 2016 and 2021 Randwick City Council (Council) saw a 17% increase in illegal dumping incidents and an 18% increase in the tonnages of illegal dumping collected, with more than 29,000 reported illegal dumping incidents reported in the LGA between July 2019 and October 2021.

As a result, Council has identified the need for a fresh, effective and cost-efficient approach to manage illegal dumping and litter issues in the LGA.

This illegal dumping and litter management plan has been developed based on the findings of three key elements; desktop research, community engagement, and a co-design 'solutions' workshop with key stakeholders.

The plan aims to:

- Inform the community and stakeholders about the status of illegal dumping and litter in Randwick LGA
- Provide guidance and direction on how Council intends to respond to the current and emerging illegal dumping and litter issues.

Why is illegal dumping and littering (IDL) a problem?

According to the NSW EPA, illegal dumping and littering (IDL) can have several adverse impacts, including visual, health, environmental, economic, and resource. In the 2020/2021 financial year illegal dumping was found to cost Council around \$3 million.

About the community

The community within the Randwick LGA is diverse. According to the 2016 census, Randwick Council residents have a high mobility rate, with over 18.9% of residents living in a different address to one year ago. With the University of NSW nearby, a large proportion of residents are younger, living in group rental properties. The LGA is growing, with a large proportion of residents (65%), living in apartments with limited storage. There is also a combination of up market, beach front real estate, and large social housing estates. Each community group therefore has different needs to most effectively managing their bulky waste, requiring a tailored solution to illegal dumping and litter management.

Current state of play – illegal dumping

According to council data, recent increases in illegal dumping incidents during 2019/20 and 2020/21 did coincide extended periods of restrictions and lockdowns in Sydney associated with the NSW Government's response to the COVID-19 pandemic. It was also found that the highest number of illegal dumping incidents occurred in the first quarter of each year. This may be related to household 'seasonal cleaning' coinciding with holiday periods, and the commencement of the university academic year.

Geographical hot spot analysis of on call clean up data and illegal dumping reports showed similarities indicates there is not necessarily a gap in service provision in locations where illegal dumping has taken place, as residents in those areas have also booked on-call clean up services. Reported illegal dumping incidences were linked to locations with higher density residential zoning.

Analysis of items that were illegally dumped identified furniture and trees branches as the most common items, closely followed by appliances.

Current state of play – litter

Both littering incidences and the quantity of waste collected during street cleaning activities generally peaked during the summer months. This is the time of the year where residents and visitors are likely enjoying the LGA's wide array of beaches and parks.

The most common litter types identified were cigarette butts, drink containers, takeaway containers and plastics, takeaway food and beverage litter.

Development of the plan - engagement

To confirm and test the findings of the desktop review, Council engaged GHD to undertake community engagement. Engagement was used as an opportunity to feedback, perceptions and drivers behind illegal dumping and litter. These activities took place over a one-month period, and consisted of:

- A community survey (310 participants)
- Geographic mapping tool (211 pins, 68 contributors)
- 45-minute phone interviews (6 participants)
- Additional incoming calls and email submissions (7)

Findings from engagement activities were broken up into four key themes:

- Awareness of illegal dumping and litter
- Current usage of existing clean up services
- Community sentiment towards illegal dumping and litter
- What factors contribute to illegal dumping and litter

Community also provided feedback on solutions that could be adopted by Council to help resolve the illegal dumping and litter problem in the area. These included provision of additional bins, beautification, and communication and engagement.

Development of the plan – co-design workshop

Using feedback from community engagement, as well as the results from desktop research, a co-design workshopping session was delivered to key stakeholders, to collaboratively develop the solutions, that would inform the IDL management plan. The session utilized 'design thinking' to encourage participants to develop creative solutions to IDL in the LGA.

Solutions were tailored to three 'community personas' who reflect three of the key community members who live in the LGA, encouraging participants to consider solutions that work for a range of residents.

Targets and priority areas

This Illegal Dumping and Litter Management Plan 2022-2031 has been developed in the context of the wider regional, state and national policy framework. Five (5) priority areas have been identified to manage the issue of illegal dumping and litter in the Randwick LGA.

This report is subject to, and must be read in conjunction with, the limitations set out in Section 1.5 and the assumptions and qualifications contained throughout the report.

1. Introduction

1.1. Why this Illegal Dumping and Litter Management Plan is needed

In 2011 Randwick City Council (Council) developed an Illegal Dumping and Litter Management Plan (the Plan) (Randwick City Council, 2011) aimed at reducing illegal dumping and littering incidents in the Randwick local government area (LGA). The Plan identified education and enforcement actions for implementation and delivered reasonable outcomes.

However, between 2016 and 2021 there was a 17% increase in illegal dumping incidents and an 18% increase in the tonnages of illegal dumping collected. More than 29,000 reported illegal dumping incidents were reported in the LGA between July 2019 and October 2021.

As a result, Council has identified the need for a fresh, effective and cost-efficient approach to manage illegal dumping and litter issues in the LGA.

1.2. Purpose of the Plan

The purpose of this Illegal Dumping and Litter Management Plan is to:

- Inform the community and stakeholders about the current status of illegal dumping and litter in Randwick LGA
- Provide guidance and direction on how Council intends to respond to the current and emerging illegal dumping and litter issues.

This Illegal Dumping and Litter Management Plan was developed based on the process outlined in Figure 1.1 below.

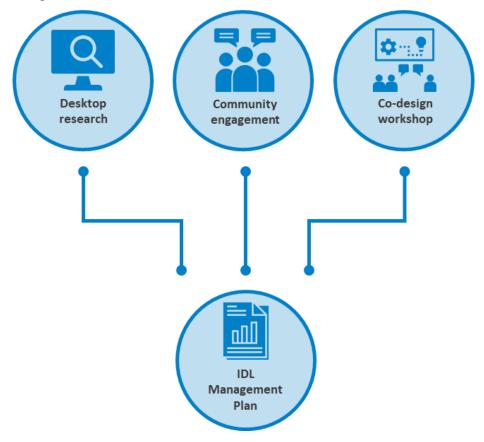


Figure 1.1 IDL Management Plan development process

1.3. Defining illegal dumping and litter

Illegal dumping and litter refers to tossing, tipping or depositing waste on land and in water, where it pollutes the environment and can harm human health. Illegal dumping and litter has a detrimental impact on our public places. This type of pollution in our environment also presents undesirable aesthetics and incurs associated clean-up costs to the community. The cumulative impacts influence social, environmental, and economic aspects in our residential and commercial areas.



Figure 1.2 Definitions of illegal dumping and litter

1.4. Why illegal dumping and litter is a problem

Illegal dumping and littering are visible signs of pollution and can cause harm to the environment and human health. Illegal dumping and littering has many consequences which may not be immediately obvious, as described in Figure 1.3.

Dumping makes public places unsightly, which lowers community pride and attracts more dumping.



Litter makes places look unsightly and uncared for and attracts more litter.

Dumped waste can affect our health, especially if it contains chemicals or asbestos.



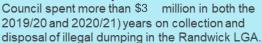
Things like broken glass and syringes can injure people. The presence of litter makes it more likely that more serious anti-social behaviour will occur, like graffiti and property damage.

Dumped waste can contaminate and degrade land, plant and animal habitats and pollute waterways. It can also pose a fire risk.



Litter damages natural environments, including wildlife on land and in our waterways

Dumping waste can lower land values and undermines legitimate recycling facilities. Cleanup is expensive. Over 1 in 10 local government areas in NSW spend \$500,000 or more on illegal dumping education, enforcement, clean-up and other activities each year.





A 2016 survey of NSW local councils, public and private land managers and community groups found that more than \$180 million is spent each year on managing litter.

Easily recycled resources, like whitegoods, tyres and green waste, are lost when dumped.



Easily recyclable resources, such as drink bottles, are lost when people litter.

Figure 1.3 Impacts of Illegal Dumping and Litter (NSW EPA, 2019)

1.5. Scope

Management of illegal dumping and litter is a shared responsibility between Council and the community, businesses, land managers, the NSW Environment Protection Authority (EPA) and other State Government agencies.

Within Council there are a number of departments involved, each with a specific focus and activities that contribute to overall illegal dumping and litter management. Core activities include provision of bulky household waste (clean up) collection and a comprehensive street and footpath cleaning program. This program includes collection of waste from street and park bins and manual and mechanical sweeping of footpaths and gutters, as well as regular waste collection from and cleaning of beaches.

Figure 1.4 provides a summary of these and other illegal dumping and litter management activities currently undertaken by Council that are within the scope of this plan. Kerbside collection services including household recyclables, organics and residuals collections and operation of the Randwick Recycling Centre (Matraville) are part of Council's *Waste Management Strategy 2017-2030* (Randwick City Council, 2017), and outside the scope of this plan.

IDL management activities



- Operation of Randwick Recycling Centre (Matraville):
 - Free household bulky waste drop off
 - Free household hazardous waste drop off
- Bulky waste collection (clean up):
 - One scheduled clean up and five on-call bulky waste clean ups per dwelling per year
 - Free Christmas tree collection after the festive season
- Community TEXT notifications when clean-up services are scheduled
- · Public place waste collection:
- Over 600 public waste and recycling bins
 - Increased number and frequency of collection in the summer months
 - Smart bins located in key littering locations (Coogee, La Perouse)
- Street and footpath cleaning/sweeping
- · Beach cleaning
- Regular participation in Clean up Australia Day
- Ad hoc collection of illegal dumping and litter in response to IDL incidents/service requests

IDL prevention activities



- Supporting EPA 'Household Chemical Clean-out' events twice per year
- Cigarette butt bins placed in Malabar beach and Randwick
- Participation in Return and Earn container deposit scheme
- Development of communication channel with communities:
 - Working with UNSW Student Housing and Housing NSW about illegal dumping and clean up procedures
 - Working with communities to organise education events and provide educational resources
- Participation in media campaigns (e.g. 'Hey Tosser!')

IDL enforcement activities



- RID programme
- Council staff patrol hotspot areas during busy periods

Figure 1.4 Illegal dumping and litter management activities undertaken by Council

2. Randwick LGA- Community profile and overview

2.1. Location and key features

Randwick LGA is located in the south-eastern suburbs of Sydney, within the Eastern Suburbs Statistical Area 4 (SA4). It is bounded by the Woollahra Municipal Council area and Waverley Council area to the north, coastal beaches, and the Tasman Sea in the east and Bayside Council and the City of Sydney in the west (Profile id., Randwick 2022).

The LGA contains the suburbs of Centennial Park (part), Chifley, Clovelly, Coogee, Kensington, Kingsford, La Perouse, Little Bay, Malabar, Maroubra, Matraville, Phillip Bay, Port Botany, Randwick, and South Coogee.

Figure 2.1 is from the Randwick Council webpage and shows the various community facilities available within the LGA. There are a number of council parks in Randwick including Centennial Parklands, Malabar Headland National Park and Heffron Park as well as beaches including Clovelly Beach, Gordons Bay, Coogee Beach, Maroubra Beach, Malabar Beach, Little Bay Beach and Yarra Bay Beach.

Major institutions such as the University of New South Wales – Sydney (UNSW) and the Prince of Wales Hospital are also located within the LGA.

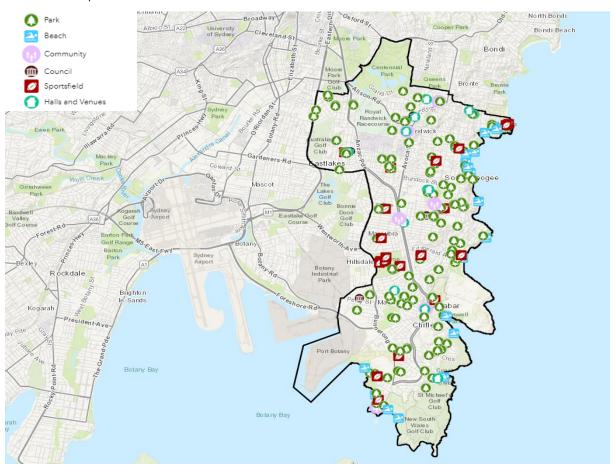


Figure 2.1 Map of Randwick LGA with community facilities

2.2. Demographics

Randwick LGA is characterised by inner city, built up coastal communities with major institutions such as UNSW and the Randwick hospitals precinct drawing a large population of young and diverse residents. On the outset, the LGA has a perceived level of advantage, however there are a number of suburbs that contain higher concentrations of public housing and lower income households such as Maroubra, Matraville and South Coogee. As well as this, suburbs such as Kensington and Kingsford have a high proportion of Chinese speaking residents who are predominantly attending a tertiary institution and have personal incomes below the LGA average.

At the time of the 2016 Census, 18.9 percent of the population in Randwick LGA lived at a different address one year ago indicating a higher level of mobility compared to the Greater Sydney average (11.7%). A mobile population may contribute to a lack of awareness around the availability of council services and information surrounding waste management, which can contribute to IDL.

In 2016, 46.9 percent of occupied private dwellings in Randwick LGA were rented, with 10 percent living in group households. The predominant form of housing was apartments/flats, comprising 55.8 percent of all dwellings. These household characteristics, being that of a high population of renters in units with minimal storage as well as a higher proportion of households not owning a car compared to greater Sydney, may contribute to IDL in Randwick LGA.

A summary of key demographics that make up the Randwick LGA are outlined in Figure 2.2

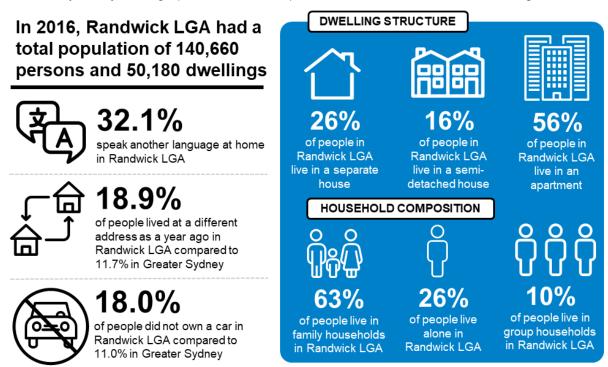


Figure 2.2 Randwick LGA demographics (2016 ABS Census)

3. Current state of play- Illegal dumping and litter

3.1. Hotspot locations and trends

To be able to plan for reduced illegal dumping and litter in the future, it is important to understand the trends and locations of repeated littering or illegal dumping, documented in this Plan as 'hotspots'. Details and data outlining the current state of play in the LGA is provided in this section.

3.1.1 Illegal dumping

Trends

In the 2020/21 financial year there were 14,334 incidences of illegal dumping reported and 1,494 tonnes of illegal dumping waste collected in the LGA.

Figure 3.1 illustrates how Illegal dumping incidences have increased in recent years. In the 2019/20 and 2020/21 financial years there was on average about 20 percent more incidences of illegal dumping reported compared to the average of the four years prior.

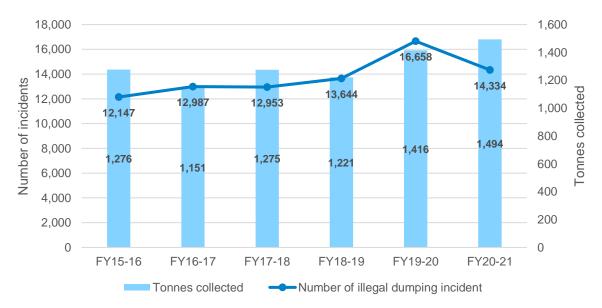


Figure 3.1 Number and tonnage of illegal dumping incidents from financial years 2015/16 to 2020/21 in Randwick LGA

It is noted that the recent increases in illegal dumping incidents during 2019/20 and 2020/21 did coincide extended periods of restrictions and lockdowns in Sydney associated with the NSW Government's response to the COVID-19 pandemic. This may have contributed to higher incidences and quantities of illegal dumping (as well as requests for clean-up services) seen during this time as a result of residents staying home more, undertaking more home improvement, maintenance and cleaning/clean out activities.

Illegal dumping patterns in the LGA vary throughout the year. Figure 3.2 shows the pattern of illegal dumping incidences for the 2019/20 and 2020/21 financial years. This indicates that the highest number of illegal dumping incidents occurred in the first quarter of each year. Most incidences of illegal dumping were reported in January and February, followed by March and October. This is fairly consistent with historic data from 2015 to 2017, in which the highest months for illegal dumping incidents were also early in the year (in particular, February and March).

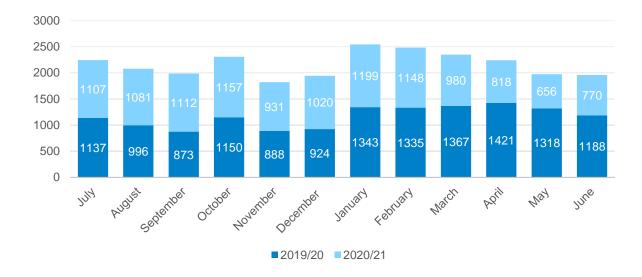


Figure 3.2 Illegal dumping removal incidents per month (financial years 2019/20 and 2020/21)

The higher frequency of incidences of illegal dumping in the first quarter of each year may be related to:

- A higher likelihood for households to undertake seasonal cleaning at the beginning of the year (coinciding with holiday periods)
- The commencement of the university academic year where a high volume of domestic as well as international students would be moving in and out of dwellings.

Hot spots

The incidences of illegal dumping recorded between June 2019 and October 2021 in the Randwick LGA are shown in Figure 3.3 Randwick and Maroubra had the highest incidences of illegal dumping during this period. Kingsford and Coogee also experienced relatively high numbers of incidences. Phillip Bay, La Perouse, Clovelly, Chifley, Little Bay, South Coogee, and Malabar had comparatively lower incidences of illegal dumping.

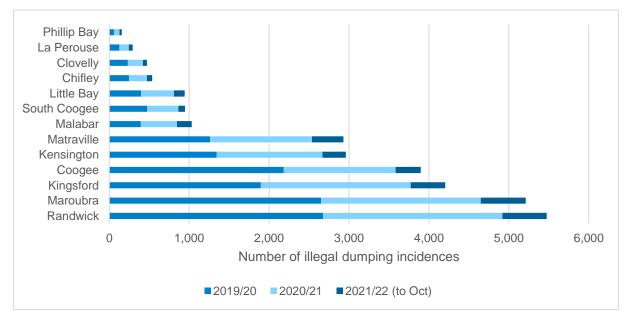


Figure 3.3 Suburb distribution of illegal dumping incidences recorded between June 2019 and October 2021

While Randwick and Maroubra had the highest number of incidences of illegal dumping, these areas are also the largest by population size and by numbers of dwellings. They also cover a larger geographical area.

Table 1 shows the intensity of illegal dumping incidences for each suburb. This shows that on a per dwelling and per square kilometre basis, Randwick and Maroubra are not actually experiencing disproportionately high numbers of incidences.

Coogee and Kingsford have the highest rate of incidences on a per square kilometre basis. La Perouse – Phillip Bay, Matraville, Kingsford and Coogee have the highest rates of incidences on a per person basis.

Table 1 Intensity of illegal dumping incidences by suburb (average for 2019/20 and 2020/21 financial years)

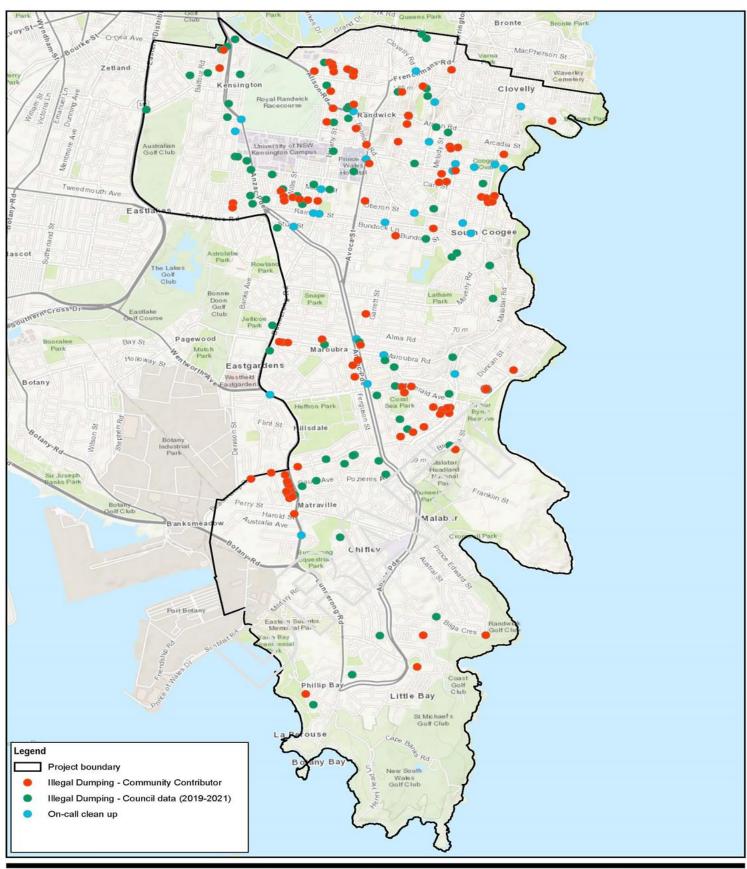
Suburb	Average frequency (incidences per week)	Average incidences per dwelling per year	Average incidences per person per year	Average incidences per km²
Chifley	5	0.4	0.07	0.2
Clovelly	4	0.2	0.04	0.3
Coogee	34	0.5	0.11	0.9
Kensington	26	0.5	0.08	0.5
Kingsford	36	0.6	0.11	0.9
La Perouse – Phillip Bay	4	1	0.15	0.1
Little Bay	8	0.4	0.08	0.2
Malabar	8	0.6	0.07	0.1
Maroubra	45	0.4	0.07	0.4
Matraville	24	0.7	0.12	0.3
Randwick	47	0.4	0.08	0.5
South Coogee	8	0.4	0.07	0.4
Average	21	0.5	0.1	0.4

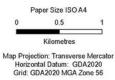
Illegal dumping data for the period June 2019 to October 2021 was aggregated into 'hotspot' locations and is shown in Figure 3.4. The map also includes on-call clean up hot spot data for the same period, as well as 'community contributor data', which was collected during the engagement undertaken by GHD during the period of April-May 2022.

The map indicates consistencies between all three datasets, showing illegal dumping being most prevalent in suburbs such as Randwick, Kingsford, Maroubra, and Matraville.

Interestingly, reported illegal dumping locations were similar to on call clean up collection locations. The similarities between these datasets indicates there is not necessarily a gap in service provision in locations where illegal dumping has taken place, as residents in those areas have also booked on-call clean up services.

To further understand the issue from a location perspective, the location data was overlayed with the most recent zoning information from the Local Environment Plan for Randwick City Council. The map in Figure 3.5 depicts the location data and zoning data. Using this information, we can clearly draw a connection between higher density residential properties, and instances of illegal dumping.







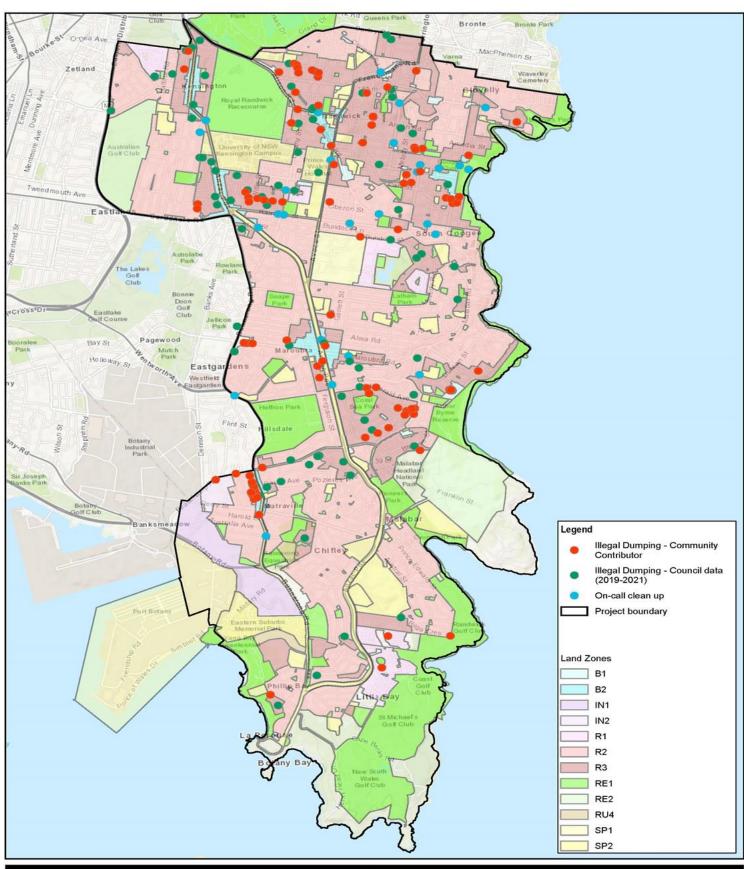


Randwick City Council Litter and Illegal Dumping Management Plan

Hotspot locations - litter and illegal dumping (Community contributions and Council data)

Project No. **12563755**Revision No. **A**Date **26/05/2022**

Figure 3.4









Randwick City Council Litter and Illegal Dumping Management Plan

Hotspot locations - litter and illegal dumping (Community contributions and Council data)

Project No. 12563755
Revision No. A
Date 31/05/2022

Figure 3.5

3.1.2 **Litter**

Trends

Between July 2019 and October 2021 there were 468 reported litter removal incidences. Litter removal incidence data was available for the period July 2019 to October 2021. A litter removal incidence refers to when a member of the public contacts Council with a request to remove litter.

Litter removal incidence patterns vary throughout the year. The pattern of monthly litter removal incidences based on aggregate (combined) data for the 2019/20 and 2020/21 financial years is shown on Figure 3.6. Figure 3.6 also shows the aggregate amount (total tonnes) of waste collected from street cleaning activities and from public litter bins for this period. No data was available on the quantity of litter waste collected.



Figure 3.6 Aggregate litter collected from street cleaning and public litter bins and litter removal incidents per month (for 2019/20 and 2020/21 financial years combined)

Figure 3.6 indicates that waste collected throughout the year from public litter bins was generally highest during the summer months, and also higher during school and university holidays periods. The lowest quantity of public bin waste collected occurred during the cooler months of June and August.

Both littering incidences and the quantity of waste collected during street cleaning activities also generally peaked during the summer months. This is the time of the year where residents and visitors are likely enjoying the LGA's wide array of beaches and parks. A spike in littering incidences occurred in April 2020.

Hotspots

The top ten litter removal locations based on data from July 2019 to October 2021 are listed in Table 3.2 and are mapped on Figure 3.7. Table 3.2 also lists the characteristics of the hotspots (type of location) and indicates possible litter generators at each location.

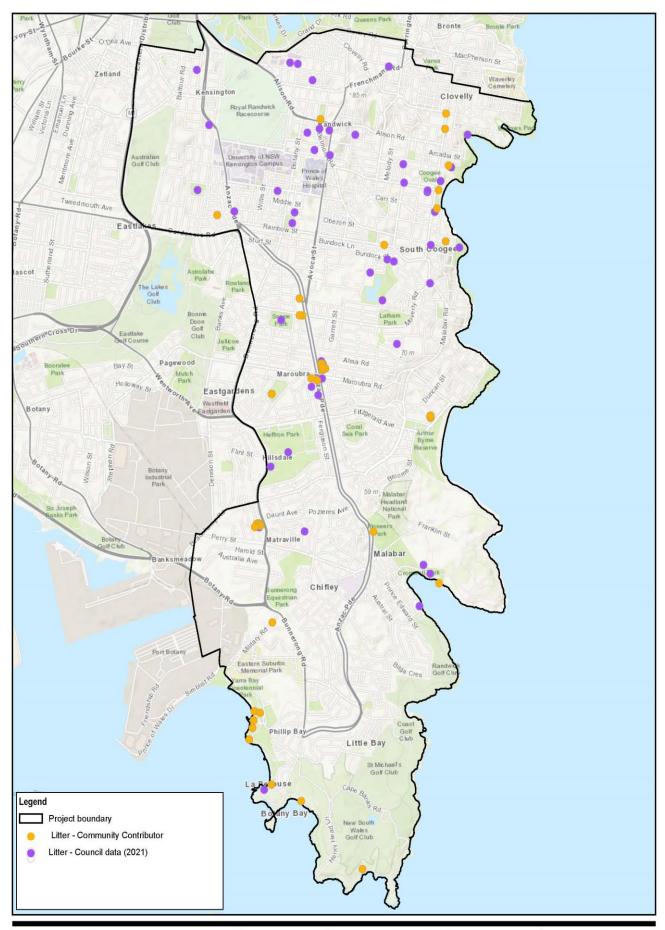
Randwick, Maroubra and Coogee had the highest number of litter removal incidences.

The root causes for littering are typically different to illegal dumping. Littering is more likely caused by visitors and be opportunistic whereas illegal dumping is more likely to be caused by misunderstanding or the deliberate intention to discard rubbish etc. by residents or businesses.

Spatial data associated with the quantities of street cleaning waste collected was not available.

Table 3.2 Litter removal hotspots between July 2019 – October 2021

Address	Rank	Type of locations	Possible generators
Coogee Bay Road, Coogee	#1	Shops / beach front	Visitors
Boyce Road, Maroubra	#2	Residential / commercial	Residents
Kurrawa Avenue, Coogee	#3	Recreation, beach	Visitors
Baird Avenue, Matraville	#4	Residential	Residents / visitors
King Street, Randwick	#4	Around UNSW	Residents / visitors
Vicar Street, Coogee	#4	Shops / close to beach	Visitors
Anzac Parade, Maroubra	#4	Shops / commercial	Shoppers living in this area
Argyle Crescent, Randwick	#4	Recreation / parks	Residents / visitors
Barwon Crescent, Matraville	#4	Parks	Residents / visitors
Fishermans Road, Malabar	#4	Car parks / boat ramp / beach	Boat ramp users / visitors





Map Projection: Transverse Mercator Horizontal Datum: GDA2020 Grid: GDA2020 MGA Zone 56



GHD

Randwick City Council Litter and Illegal Dumping Management Plan

Hotspot locations - litter and illegal dumping (Community contributions and Council data)

Project No. 12563755
Revision No. A
Date 26/05/2022

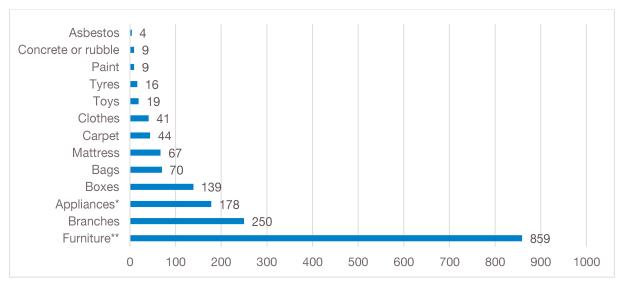
Figure 3.7

3.2 Items that are littered and illegally dumped

3.2.1 Illegal dumping

Some (but not all) service request records for illegal dumping incidences include information on the kinds of waste that is dumped. A keyword search of illegal dumping service requests was undertaken for the period July 2019 to October 2021 to help provide insight into the types of waste most commonly illegally dumped. Figure 3.8 presents a summary of the findings of the keyword search.

The keywords that were listed the most frequently were items of furniture, tree branches and appliances.



^{*} Includes appliances, stoves, TVs, fridges, washing machines, microwaves, vacuums

Figure 3.8 Illegal dumping service request- keyword search (Jul 19- Oct 21)

3.2.2 Litter

The Waste Management Strategy 2017-2030 (Randwick City Council, 2017) identified the common sources of littering in the LGA as food outlets, shopping centres, schools, public venues, and events. This litter primarily consists of:



This is supported by the *Beach Litter Awareness* campaign, carried out between January 2017 and April 2017, which indicated that the most common litter problems in the identified hotspots of Coogee and Maroubra beaches was picnickers walking away and leaving their litter behind or in the carpark. The most common litter types identified were cigarette butts, drink containers, takeaway containers and plastics, takeaway food and beverage litter.

Litter present in bushland and less accessible sections of recreational areas included human faeces and toilet paper (in bushland areas) and dog faeces (in coastal/bushland areas and parks).

^{**} Includes furniture, cabinets, bed/bed frames, tables, chairs, lounges, bean bags, drawers, bookshelves, sofas

4. Policy framework and strategic context

4.1. Strategic and policy context

This section provides background information on the policy context that governs and influences the illegal dumping and litter guidelines in the Randwick LGA.

4.1.1 National

The national strategic and policy framework for illegal dumping and litter includes:

- National Waste Policy 2018 (Commonwealth of Australia, 2018)
- 2019 National Waste Policy Action Plan (Commonwealth of Australia, 2019)
- National product stewardship schemes

The *National Waste Policy 2018* recognises the important role of local government in providing household waste and recycling services including maintaining litter infrastructure and managing compliance and enforcement of illegal dumping and littering.

The 2019 National Waste Policy Action Plan includes actions to reduce and clean up plastic litter and improve waste data collection and information sharing to better inform and reduce the risks of illegal dumping.

National product stewardship schemes (including the *National Television and Computer Recycling Scheme*, *Mattress Recycling and Collection Scheme* and *Battery Recycling Scheme*) are designed to ensure there is shared responsibility for end-of-life products.

4.1.2 State

The NSW strategic and policy framework for illegal dumping and litter includes:

- NSW Waste and Sustainable Materials Strategy 2041: Stage 1 2021-2027 (Department of Planning, Industry and Environment, 2021a)
- New South Wales Plastics Action Plan (Department of Planning, Industry and Environment, 2021b)
- NSW Litter Prevention Strategy 2022-30 (NSW EPA, 2022a)
- NSW Illegal Dumping Strategy 2022-27 (NSW EPA, 2022b)
- Single use plastic item bans
- Return and Earn container deposit scheme
- NSW EPA "Own it and Act it" framework document

The NSW Waste and Sustainable Materials Strategy 2041 – Stage 1 2021-2027 and NSW Plastics Action Plan were released in 2021 and include specific targets relating to illegal dumping and litter to:

- Reduce litter by 60% by 2030
- Reduce plastic litter by 30%, including targeting cigarette butt litter

The NSW Litter Prevention Strategy 2022-30 provides the framework for prioritising funding and actions to reduce litter in NSW across seven elements:

- APPROACH 1: Source control
- APPROACH 2: Diversion to a circular economy
- APPROACH 3: Education, awareness and engagement
- APPROACH 4: Regulation and enforcement
- APPROACH 5: Infrastructure and clean-up

- APPROACH 6: Targeted programs to stop litter dispersal
- APPROACH 7: Monitoring, evaluation and research

The NSW Illegal Dumping Strategy 2022-27 was updated in 2022 to guide targeted action towards the NSW Waste and Sustainable Materials Strategy 2041. It identifies the following approaches to combating illegal dumping:

- APPROACH 1: Moving towards a circular economy
- APPROACH 2: Collaboration and capacity building
- APPROACH 3: Services, infrastructure and clean-up
- APPROACH 4: Behaviour change, awareness and engagement
- APPROACH 5: Regulation, enforcement and legislative reform
- APPROACH 6: Growing our evidence through research, monitoring and evaluation

The NSW container deposit scheme 'Return and Earn' is the largest litter reduction scheme introduced in NSW. It commenced in December 2017 to tackle drink container litter and provides mechanisms for 10 cent refunds for the return of eligible drink containers.

The NSW Litter Prevention Grants program has been highly success in reducing litter in NSW. The 'Own it Act it' framework seeks to ensure future dependence on NSW EPA grant funding is avoided in order to ensure long-term, sustainable litter prevention outcomes for NSW. The framework provides guidance on developing a litter prevention strategy.

4.1.3 Regional

Council is a member of the Southern Sydney Regional Organisation of Councils (SSROC). The existing strategic policy framework for illegal dumping and litter in SSROC is outlined in the SSROC Regional Waste Avoidance and Resource Recovery Strategy 2017-2021 (SSROC, 2018).

Theme 4: Reducing Illegal Dumping aims to reduce the incidence of illegal dumping. Objectives are to work with key stakeholders to reduce illegal dumping to:

- Increase the visual amenity of neighbourhoods
- Minimise the potential for human and environmental harm
- Better manage the problem and evaluate approaches for effectiveness
- Promote responsible citizenship to dispose of unwanted items correctly.

Theme 4 response includes the following:

- Collecting and using data on illegal dumping incidents to inform remedial actions
- Investigating the causes of illegal dumping and how to prevent it
- Ensuring regional collaborations are effective and progressing
- Implementing strategies at regional hot spots
- Promoting the correct use of council clean up services (including use of approved facilities by renovators and developers).

Theme 5: Litter Prevention aims to reduce incidences of littering at specific regional hotspots and to increase diversion of public place waste. Objectives are to work with key stakeholders to prevent littering to:

- Increase the visual amenity of neighbourhoods
- Uphold liveable spaces in which to play, shop, commute and work and enjoy
- Promote responsible citizenship.

Theme 5 response includes the following:

Collecting and using data on littering incidents and behaviours to inform actions

- Help councils improve internal litter management
- Help councils address litter at regional hotspots.

4.1.4 Randwick LGA

Council's existing strategic and policy framework for illegal dumping and litter includes:

- Illegal Dumping and Litter Management Plan (KMH Environmental, 2011)
- Randwick City Council Waste Management Strategy 2017-2030 (Randwick City Council, 2017).

The previous *Illegal Dumping and Litter Management Plan* was developed to assist in managing the incidence of illegal dumping through the LGA.

The Randwick City Council Waste Management Strategy 2017-2030 sets out Council's strategies, targets and roadmaps to achieve the targets that were set out in the now superseded NSW Waste Avoidance and Resource Recovery (WARR) 2014-21 Strategy (NSW EPA, 2014).

The "Clean City and streetscapes" focus area in the strategy has the following priorities:

- Reduce illegal dumping
- Keep beaches, parks and reserves clean.

The following actions are prioritised:

- Continue illegal dumping prevention programs
- Review and improve services in line with community needs and expectations.

In relation to illegal dumping, Council aims to:

- In the short term (1 5 years)
 - Investigate opportunities for establishment of a communal waste and recycling storage system
 - Investigate potential underground waste collection systems for new developments
 - Develop and implement illegal dumping prevention programs
- In the medium term (5 10 years), continue illegal dumping prevention programs
- In the long term (10 15 years), implement improved collection systems.

4.2. Illegal dumping and litter management principles

The key principles that underpin this Illegal Dumping Management and Litter Plan are the illegal dumping and litter prevention framework, the waste hierarchy and circular economy. The litter prevention framework recognises the importance of a multi-faceted approach to managing illegal dumping and litter. It recognises that there is no one solution and a number or priority areas are required to be addressed concurrently.

4.2.1 Illegal dumping and litter prevention framework

The plan to reduce illegal dumping and litter will be achieved through a combination of providing support to the community, education and awareness, infrastructure and services, regulation and enforcement and monitoring and evaluation. Figure 4.1 illustrates the elements that will comprise a successful illegal dumping and litter reduction outcome.

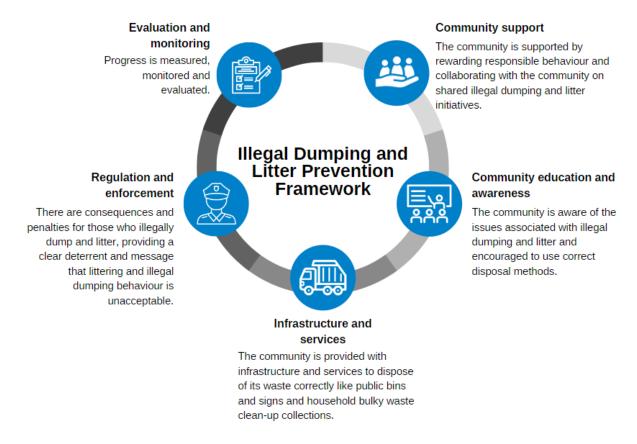


Figure 4.1 Illegal dumping and litter prevention framework

4.2.2 Waste Hierarchy

The waste hierarchy (see Figure 4.2) establishes a preferential order of waste management priorities for the efficient use of resources. The waste hierarchy is, in order of priority:

- Avoidance, including action to reduce the amount of waste generated by households, industry and all levels of government.
- 2. **Resource recovery**, including re-use, recycling, reprocessing and energy recovery, consistent with the most efficient use of the recovered resources.
- 3. **Disposal**, including management of all disposal options in the most environmentally responsible manner.

The waste hierarchy underpins the objectives of the *Waste Avoidance and Resource Recovery Act 2001* (NSW).

The waste hierarchy prioritises avoidance and resource recovery, but also recognises the importance of disposal being undertaken in an environmental responsible manner. A core objective of any Illegal Dumping and Litter Management Plan is to ensure waste does not end up as litter or illegally dumped material but is instead managed in a way that minimises environmental harm. Where possible, the plan should also consider actions to avoid and encourage the recovery and/or reuse materials.

Reuse waste Recycle waste Recover waste Treat waste Dispose of waste Least preferable

Figure 4.2 Waste Hierarchy (NSW EPA, 2014)

4.2.3 Circular Economy

A circular economy is an economic system aimed at minimising waste and promoting the continual re-use of resources. The circular economy aims to keep products, equipment, and infrastructure in use for longer, thus improving the productivity of these resources. In a circular economy, waste materials and energy should become input for other processes (see Figure 4.3). This approach contrasts with the traditional linear economy, which has a 'take, make, dispose' model of production (Department of Planning, Industry and Environment, 2021).

A circular economy retains the value of materials in the economy for as long as possible, reducing the unsustainable depletion of natural resources and impacts on the environment.

The circular economy is based on three key principles:

- 1. Design out waste and pollution
- 2. Keep products and materials in use
- 3. Regenerate natural systems.

The NSW Government's NSW Circular Economy Policy Statement: Too Good to Waste (NSW EPA, 2019) was released in February 2019, building on NSW's strong track record in waste avoidance and resource recovery. The NSW Circular Policy Statement provided a basis for NSW's updated new waste strategy – the NSW Waste and Sustainable Materials Strategy 2041 (Department of Planning, Industry and Environment, 2021). This strategy recognises that NSW is committed to making the transition to a circular economy over the next 20 years. Applying the circular economy principles to waste management in Australia requires changes to product design, production, use and re-use, recycling, and disposal.

One of the key circular economy principles is reuse. Appropriate opportunities to reduce the amount of waste ending up as illegal dumped material should also be addressed in any Illegal

Dumping and Litter Management Plan. This includes finding ways to keep resources within the economy.

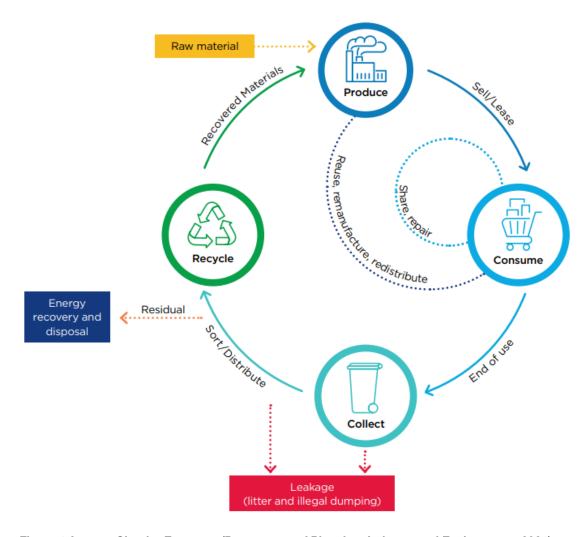


Figure 4.3 Circular Economy (Department of Planning, Industry and Environment, 2021)

5. Development of the Plan

This section provides a summary of the engagement undertaken to understand community feedback, perceptions and drivers behind illegal dumping and litter. The feedback from community engagement and the insights from the co-deign stakeholder workshop were used to inform the Priority Areas (Section 6) and the Action Plan (Section 7).

5.1. Approach to engagement

GHD undertook community and stakeholder engagement activities over a four-week period between Tuesday 5 April 2022 and Tuesday 3 May 2022 to support the results of the desktop review. The objectives for engagement activities were to:

- Understand level of awareness of the Randwick LGA community in relation to illegal dumping and litter services offered by Council
- Confirm how current services are used by the Randwick LGA community
- Determine community sentiment towards illegal dumping and litter in the LGA, and understand key hotspot areas
- Understand what factors contribute to the issue of illegal dumping and litter from a community perspective and seek feedback on potential solutions.

Feedback from engagement activities were used alongside the findings from desktop research to inform the development of key 'challenges' and 'community personas', which will be used as key tool to guide the co-design workshopping process (Section 5.4).

5.2. Engagement outcomes

A summary of engagement undertaken, and the number of participants is highlighted in Figure 5.1.



Figure 5.1 Engagement outcomes

5.2.1. Engagement participants

Engagement activities were publicised using Randwick Council's 'Your Say Randwick' page. Subscribers to Your Say Randwick, as well as Council's email distribution list received notification during the community engagement period for this project.

Interview participants were selected based on advice from Randwick Council. A summary of survey participants in relation to demographic statistics in the Randwick LGA are outlined in the figure below.

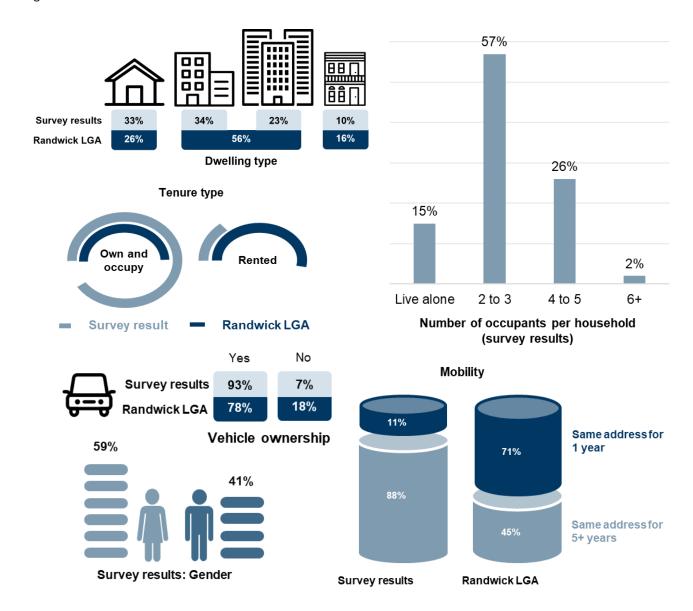


Figure 5.2 Survey participant and demographics

5.3 Engagement findings

The findings from the engagement activities are summarised below, in line with the objectives established at the outset of the project (Section 5.10).

5.3.1 Awareness of illegal dumping and litter

Engagement sought to understand the level of community awareness of the existing illegal dumping and litter services provided by Council.

The survey results indicated there was a relatively high understanding of Council clean-up services available, with majority (95%) of participants who completed the survey indicating they were aware of these services. The Council waste calendar was considered by participants as a successful communication tool for sharing information about Council clean-up services, with 75% of participants indicating that is where they hear about the services.

Illegal dumping and rental properties

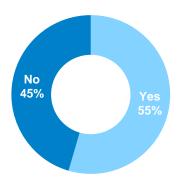
During interviews with two strata managers about the issue, they cited the large proportion of renters in their building could be a contributing factor to the illegal dumping issue, since they are not aware of Council's on call and scheduled clean up services. Renter information packs were cited as a potential solution to sharing information with new tenants about appropriate bulky waste management.

Census data (2016) revealed that 32.1% of residents speak a language other than English at home, suggesting multilingual communications would also be beneficial.

Reporting illegal dumping

Survey results indicated there is less awareness among participants regarding how to report litter or illegal dumping. It shows that for illegal dumping, 45% (141) of participants, and for litter, 75% (233) of participants indicated they do not know how to report offences.





Do you know how to report litter?

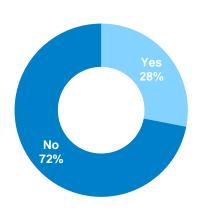


Figure 5.3 Level of awareness on how to report illegal dumping and litter

During an interview with a RID Squad representative, they noted that because Council is quick to collect illegally dumped rubbish in hot spots, it does not give the RID Squad the opportunity to appropriately investigate the incident and publicise to the community that illegal dumping is wrong.

Conclusions

Overall, engagement revealed a relatively high level of understanding of Council services currently in place to manage illegal dumping in Randwick. Survey statistics shows that majority of participants are owner occupiers, rather than renters, suggesting that there is still scope for Council to improve communication with renters to manage illegal dumping within the LGA.

5.3.2 Current usage of illegal dumping and litter services

Engagement discussions also provided clarity on how existing council clean up services (scheduled and on call clean ups), or other waste management services were used by survey participants to manage bulky waste.

On-call clean up service usage

Majority of participants (80%) stated they have booked an on-call council clean up service before. Of the remaining 46 participants who said they had not booked a service, almost half (46%) said they had not needed to, because the scheduled clean-ups were sufficient to meet their needs.

The survey also sought feedback on community experiences when using Council's clean-up service, which yielded largely positive results. Participants largely agreed the clean-up was easy to book, with convenient collection days, and found the rubbish was collected on time. Almost all participants (95%) agreed they would use Council's on call clean up service again Figure 5.4.

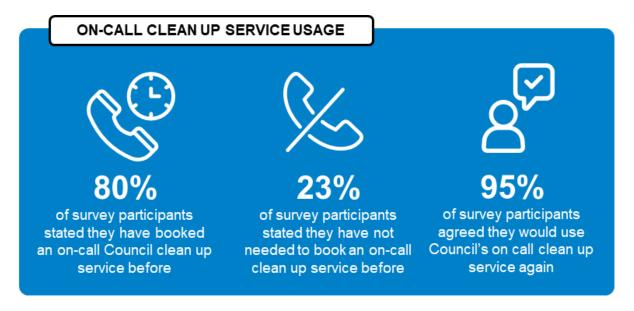


Figure 5.4 On-call clean up service usage (survey results)

During an interview with a Maroubra resident, it was noted that when they see items illegally dumped in the street behind her property, they will book one of their own on-call clean ups for Council to collect.

Interviews with strata managers in both Randwick and Kingsford also revealed they will often attempt to coordinate clean-ups within their buildings, which has helped manage the issue of illegal dumping. One strata manager stated that for multi-unit dwellings, having several on call clean ups can be a hinderance as it means there is constantly rubbish out the front of the property waiting to be collected.

Residents who live in multi-unit dwellings who participated in both the survey and the interviews also stated that it is common practice for people to add their own rubbish to scheduled clean up piles for collection.

Alternative waste disposal options

Survey participants also identified charity bins, online marketplaces, and trade in services as highly used alternative bulky item disposal options, with 76%, 68% and 48% respectively,

stating they have used these methods in the past (Figure 5.5 Alternative waste disposal options (survey results).

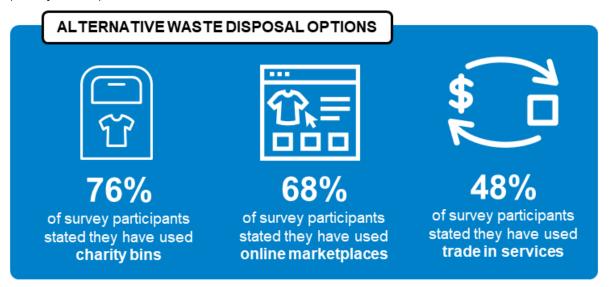


Figure 5.5 Alternative waste disposal options (survey results)

5.3.3 Is there an illegal dumping and litter problem in the Randwick LGA?

Engagement activities sought to understand how the Randwick LGA felt about illegal dumping and litter in their LGA; whether they also thought it was an issue, and how they feel about it.

Illegal dumping

Based on the findings of community engagement, survey and interview participants expressed a similar sentiment in relation to the presence of illegal dumping in their local are. The following key quotes were extracted from the results Community feedback and sentiment towards illegal dumping also indicated it is an issue. With engagement participants stating the presence of illegal dumping:

» It is exhausting to continually look out over rubbish in front of the Malabar National Park! Please help this ongoing problem.«- Community Contributor – Mapping »There is always rubbish here as quick as council clears it away more appears.«Community Contributor – Mapping

[Illegal dumping] makes my local area feel unsafe «- Interview Participant

Using geo-location mapping, community members were able to drop pins to identify areas of concern for both illegal dumping and litter within the Randwick LGA. See Figure 5.8 on page 37 for a map summarising the results of participant mapping. Key findings indicate:

- Locations that saw the largest number of pins indicating an increase in illegal dumping were Matraville, Randwick, Maroubra and Kingsford
- Comments on the interactive map indicated that locations where illegal dumping occurred were on public property (23%), locations where there was a lack of passive surveillance (13%), and high-density residential locations (13%)

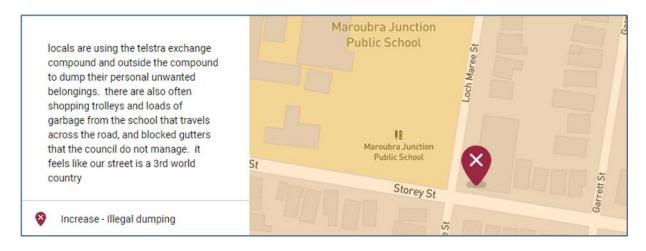


Figure 5.6 Participant mapping and pin drop



Littering

Using geo-location mapping, community members were able to drop pins (Figure 5.8) to identify areas of concern for both illegal dumping and litter within the Randwick LGA. See on page 37 for a map summarising the results of participant mapping. Key findings indicate:

- Littering instances are indicated in public places such as picnic areas, parks, sporting ovals and beaches.
- Of the pins that indicated an increase almost one this (33%) identified the 'waste receptacle' as contributing to the issue.

"So many people walk past this area or use the public transport and discard their rubbish on the ground." - Mapping participant

Participants also cited businesses as being a 'hot spot' for littering, with the bins around take away restaurants not being large enough to capture the litter from customers during busy periods.

Survey participants were asked whether they believed Council provided enough public bins at town centres, beaches, and parks and playgrounds (Figure 5.7).

Does Council provide a sufficient number of bins at:

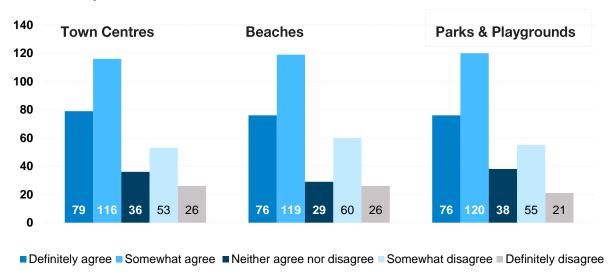
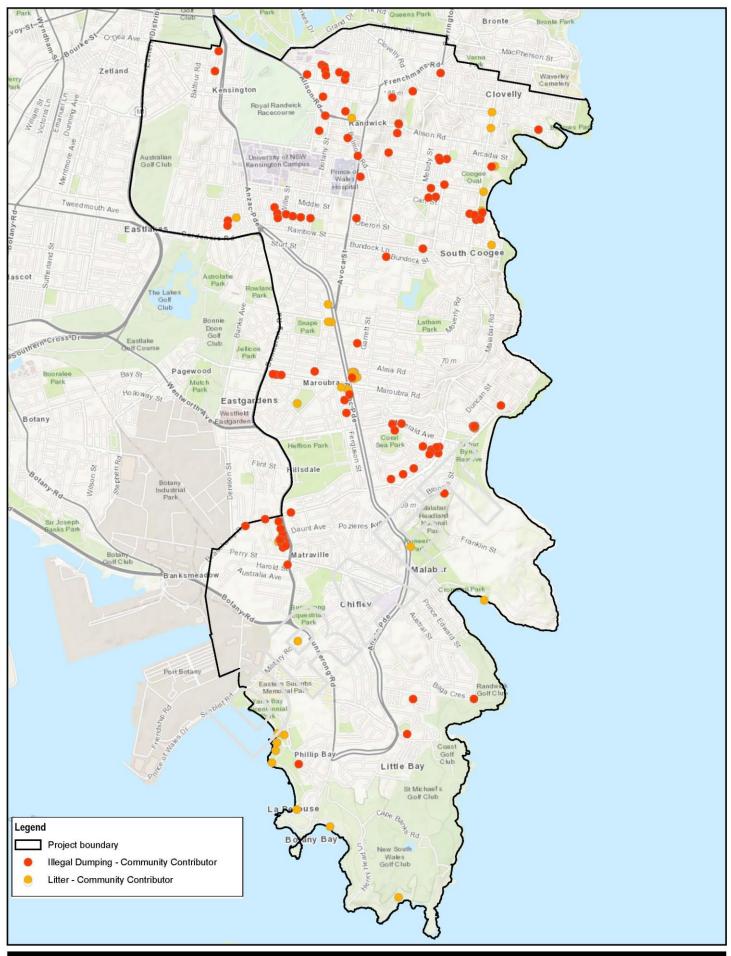


Figure 5.7 Community service feedback - Council bin provision





Kilometres

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 56



Randwick City Council
Litter and Illegal Dumping Management Plan

Hotspot locations - litter and illegal dumping (Community contributions)

Project No. **12563755**Revision No. **A**Date **26/05/2022**

Figure 5.8

5.3.4 What factors contribute to illegal dumping and litter?

Illegal dumping

Survey participants were asked why they think people illegally dump, with the overwhelming response relating to 'laziness' and 'convenience'. The top six responses are highlighted below in Figure 5.9.

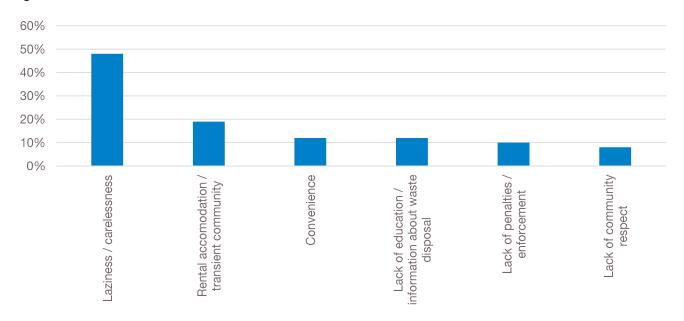


Figure 5.9 Survey responses- why do people illegally dump?

Littering

Survey participants were asked why they think people illegally dump, with the overwhelming response relating to 'laziness'. The top six responses are highlighted in Figure 5.10 below.

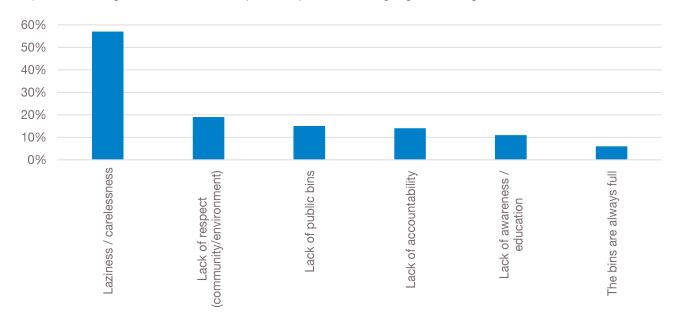


Figure 5.10 Survey responses- why do people litter?

5.3.5 Community solutions

Community mapping identified several opportunities for further improvement to help manage the issue of illegal dumping and litter in the Randwick LGA. These included:







Provision of additional bins

Beautification

Communication and engagement

Participants identified several locations which would benefit from **additional bins to manage excess litter in the summer months** and near public transport:

- "My closest bus stop has ample space for a public rubbish bin but there isn't one, which I believe is leading to increased littering."
- "At peak times the bins here are woefully inadequate for the volume binned resulting in overflowing bins and rubbish blowing into the sea."
- "The area between Fishermans Road at the beach access point and the sewerage plant fence line accumulates litter which does not quite make it into or stay in the bins."

Several community members also cited general amenity of locations contributing to an increase in illegal dumping and litter.

- "Someone left a couch here for weeks until it got picked up. This walkway area could do with some beautifying."
- "The area is a shambles makes illegal dumping worse because people think it is okay."

Interview participants also suggested additional communication measures to increase awareness of illegal dumping for more transient community members including:

- Introduction of 'new resident kits' which outline council help services, and information packs that outline 'what to do when you are moving out' for renters
- Participants found the scheduled clean-up date to be more successful than on call clean
 ups, as residents have the reminder, and they do not have to go to extra effort to book their
 own clean up. This was particularly noted for residents in social housing in Matraville.
- Interview participants also stated that more communication that highlights the impact of illegal dumping and litter on the Council and the environment might encourage more people to do the right thing.

5.4 Co-design workshop session

Following the completion of community engagement, GHD facilitated an in-person co-design workshop session with internal and external stakeholders.

The purpose of the session was to:

- Share the findings of the desktop research and community engagement
- Present key 'challenges' to illegal dumping and litter in the Randwick LGA
- Brainstorm solutions to address these challenges
- Prioritise solutions to guide the development of the IDL management plan.

The two-hour session was attended by key Randwick Council staff, as well as representatives from the NSW Environmental Protection Authority (NSW EPA), and neighbouring Council representatives from the City of Canada Bay.

The co-design workshop was facilitated using a 5-step process, outlined in the figure below Figure 5.11.

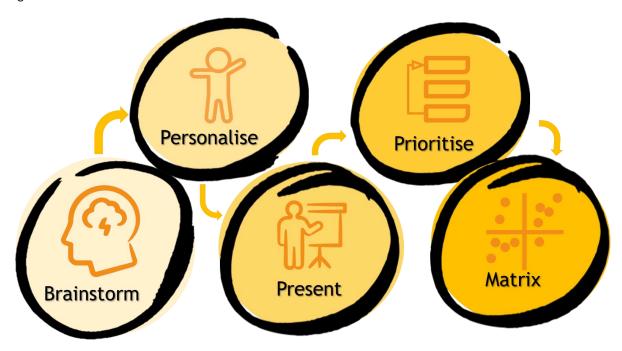


Figure 5.11 Five-step co design process (workshop approach)

5.5 Introducing the challenges

Based on outcomes from desktop reviews and community engagement, three key 'challenges' were identified, as outlined below. These challenges were used as a basis for workshop activities, guiding participants to develop solutions.



Reducing illegal dumping

Reducing illegal dumping in areas with a high proportion of units (MUDs) and multi-lane streets.

- Consider older units with limited existing on-site infrastructure for the temporary storage of bulky household waste, perhaps with more targeted approaches.
- Consolidated approach to scheduled clean ups on a strata basis, rather than an individual property basis.
- Scheduled clean up services (e.g. investigating Cloud / smart IT technologies and systems which can provide real-time data, or software to make collection routes more efficient).



Communicating services

Improving community pride, engagement and understanding of available services

- Consider areas with high resident turnover (highly transient populations such as students).
- Consider areas with poor amenity and maintenance – particularly around UNSW and Matraville/Malabar clusters.
- How can Council challenge current misconceptions and attitudes around the acceptability of illegal dumping or the idea of 'sharing' or 'scavenging' and increasing motivations to use the (legal) clean up services?



Community pride

Improving community pride (in both residents and visitors) and the understanding of the impacts of littering.

- Managing the trend of significant increases in incidences of littering during the summer months and hot days.
- Tackling particularly problematic litter such as cigarette butts and fast-food packaging.

5.6 Identifying solutions



5.6.1 Brainstorming

Workshop participants were separated into three groups and asked to brainstorm solutions to each of the three challenges identified in Section 5.5.

Participants were given rules for brainstorming, which are designed to encourage a maximum number of ideas without restrictions. These rules include:

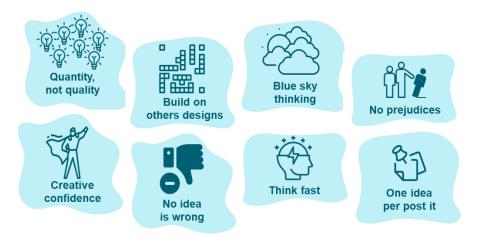


Figure 5.12 Rules for brainstorming (Co-design workshop)



5.6.2 Personalising

Once brainstorming was completed, participants were introduced to three community personas. Participants were then asked to reshape their ideas to better suit their assigned persona. Personas are outlined in the figure below.

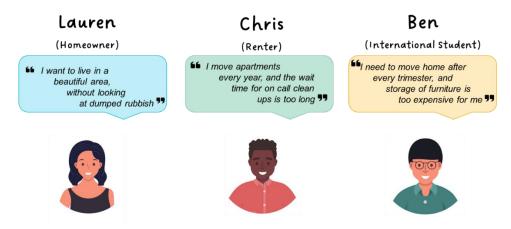


Figure 5.13 Community personas (Co-design workshop)



5.6.3 Present and Prioritise

Participants then presented their solutions to the wider group and made them available for members to vote on their five favourite solutions. The image below shows the voting process.





Figure 5.14 Prioritisation of solutions (Co-design workshop)



5.6.4 Solutions matrix

The top 10 solutions were then subject to a prioritisation matrix.

Using the solutions that had the highest number of votes, each solution was mapped on a 2x2 matrix to determine which solutions will be included in the IDL management plan, which one is require further consideration, and which ones will not be progressed.

The matrix includes two axis which participants defined. The axis determined how each of the solutions would be assessed. Participants selected 'Impact' and 'Innovation'. The image below depicts the 2x2 matrix, with each solution mapped.

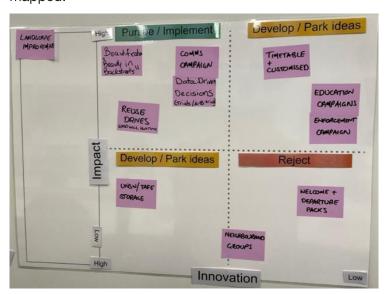


Figure 5.15 Solutions matrix (Co-design workshop)

6. Targets and priority areas

6.1. Targets

This Illegal Dumping and Litter Management Plan has been developed in the context of the wider regional, state, and national policy framework, as detailed in section 4. The existing policy framework predominantly outlines priority areas, but also identifies specific targets for litter. No specific targets are identified for illegal dumping.

The following targets have been adopted for illegal dumping and litter in the Randwick LGA:

- Reduce the annual litter removal incidents by (compared to the 2020/21 baseline):
 - 30% by 2026/27
 - 60% by 2030/31
- Reduce the annual incidents of illegal dumping by:
 - 30% by 2026/27
 - 50% by 2030/31
- Reduce the annual quantity (tonnes) of illegally dumped material collected by (compared to the 2020/21 baseline):
 - 30% by 2026/27
 - 50% by 2030/31

6.2. Priority areas

Based on the findings of the desktop review (Sections 1-4), community engagement (Section 5.1), and the co-design workshop (Section 5.4), five (5) priority areas have been identified to manage the issue of illegal dumping and litter in the Randwick LGA. These priority areas are captured in the proceeding sections. The priority areas are:



Priority area 1

Harnessing the power of education and communication

How can new/ existina communication and engagement programs be better utilised to maximise community member reach, drive collaboration hetween stakeholders and share key information? How can data be better utilised to inform evidence-based decision making for future engagement programs?



Priority area 2

Tackling illegal dumping by building community pride through beautification

How can Council encourage beautification in the community to discourage illegal dumping?



Priority area 3

Supporting our community to do the right thing

How can Council promote a circular economy within the community, thereby minimising waste of the most illegally dumped items: household furniture and clothing?



Priority area 4

Optimising our litter and illegal dumping prevention infrastructure and services

The Randwick LGA is a unique community with a variety of needs. How can Council further refine, optimise and tailor infrastructure and services to better meet community needs and encourage proper bulky waste and litter disposal?



Priority area 5

Improving compliance through enforcement

Research shows that consistent and effective enforcement can help drive behaviour change. How can Council better utilise enforcement measures to further enhance and reinforce each of the priority areas, and build community awareness?

Each priority area is defined based on outcomes of desktop research and engagement, and outlines:

- Recommended actions to be delivered by Council as part of each priority area
- Measures of success to provide clarity on the outcomes of each action

6.2.1. Priority area 1: Harnessing the power of education and communication

Details of the priority area

Demographic research into the Randwick LGA indicated that a high proportion of residents rent and move/relocate on a regular basis. Outcomes from the survey data indicated that property owners are highly engaged with Council waste programs and understand the illegal dumping and litter services offered by Randwick Council. The survey also showed that renters generally tend not fully engage with Council as they do not feel they have a 'stake' in Council programs as they do not 'directly' pay rates.

Desktop research also revealed that items that are often illegally dumped within the LGA are furniture / household items. Illegal dumping often takes place during peak periods coinciding with the end / start of university semesters, and holiday periods. Higher rates of Illegal dumping incidences are also connected with more transient populations within the LGA, who may not have as much awareness of the impact of illegal dumping, or the service available for Randwick LGA residents to manage their household waste more appropriately.

This priority area seeks to maximise the impact of Council's extensive program of community engagement, education, and communication. There are opportunities to harness the existing programs and expand on these to:

- Increase reuse and reduce waste
- Improve the reach of communication materials and education programs
- Target harder to reach, and transient community members
- Empower better engagement approaches using data-driven decisions
- Leverage partnerships with key stakeholders and community leaders.

Recommended actions

Actions to address this priority area have been divided into three focus areas, **Communication**, **Education** and **Governance**. These recommended actions are as follows:

Communication:

- Undertake incentivised mechanisms to capture feedback to understand preferences for engagement for different communities. Feedback will be used to inform a detailed Community and Stakeholder Engagement Strategy specific to Illegal Dumping and Litter. Focus stakeholders should include renters, social housing residents, UNSW students, other community leaders.
- Develop and implement an Illegal dumping and litter Community and Stakeholder
 Engagement Strategy¹ based on stakeholder feedback that outlines:
 - In depth stakeholder mapping and analysis that identifies stakeholder groups, their drivers, and key communication methods
 - Key time periods for communications campaigns for illegal dumping suggest targeting spring cleaning, end of university semesters and the new year
 - Engagement objectives and approach to measurement of outcomes
- Deliver community education and engagement campaigns in line with the Illegal dumping and litter – Community and Stakeholder Engagement Strategy targeting all stakeholders such as residents, renters, body corporate, students, strata managers and building managers. Campaigns should include targeted engagement for younger, more transient residents through targeted social media campaigns (including Facebook and Instagram) that advertise Council's bulky waste management services.
- Undertake an annual review of the Illegal dumping and litter Community and Stakeholder Engagement Strategy to understand how engagement met objectives, and opportunities for further growth or improvement.

Education

Roll out free illegal dumping and litter education resources for school aged students.
 Resources could include:

- Free art and colouring tools
- Student IDL challenge assignments, where ideas to managing illegal dumping or litter are presented to Council for inclusion in future communication strategies
- Communication campaign competitions artworks and slogans are produced by local students for adoption by Council

¹ Note: the **Illegal Dumping and Litter – Community and Stakeholder Engagement Strategy** will be developed to capture several of the activities outlined in this action plan.

- Collation of bulky waste management options other than Council clean up sharing alternative waste management to encourage reuse, resale, or appropriate disposal. Information can be shared on Council's webpage and shared through social media.
- Understanding and sharing the impacts collateral that shares with community, the impact that illegal dumping has on Council in terms of cost, and the environment, and the benefits of reuse. Messaging around enforcement can also be shared here.

Governance

- Building relationships with key stakeholders through establishing an Illegal Dumping and Litter working group, with members from LGA stakeholders including Land and Housing Corporation, real estate agents and UNSW to develop solutions for harder to reach communities.
- Improvement of data capture to better inform communication and education campaigns into the future of the strategy. Communication and engagement to capture the following information:
 - Location and times of responses
 - Demographics who respond / engage
 - Content that was most engaging
 - Gaps in data who has not been reached, or what content is not working?

Measures of success

Measures of success for this priority area are as follows:

- An evidence based, Illegal Dumping and Litter Community and Stakeholder Engagement Strategy has been developed and adopted.
- Increase in **engagement reach** in younger audiences, students, renters, and social housing residents.
- Establishment of an **Illegal Dumping and Litter working group** with a 6-monthly meeting schedule
- Roll-out of at least one student education campaign
- Development of IDL education collateral for use on social media and other communications campaigns
- A review and update of the **Illegal Dumping and Litter Community and Stakeholder Engagement Strategy** has been undertaken based on the learnings from previous activities, and improved data capture.

6.2.2. Priority area 2: Tackling illegal dumping by building community pride through beautification

Details of the priority area

Research on illegal dumping behaviour shows that if an area is untidy, unclean (including other dumped waste or litter being present), rundown or poorly maintained, inadequately lit and/or generally has low amenity, it is more likely to attract illegal dumping. This research finding is supported by observations made in Randwick LGA and feedback received from the community and other stakeholders during our engagement activities.

Opportunity therefore exists to reduce incidences of illegal dumping by increasing community pride in our homes, businesses, streets and public places, through beautification of known hotspot areas (such as laneways and back alleys). Examples of beautification include general cleaning up/tidying, improving lighting, painting and street art, resurfacing or maintenance of driveways, gutters, roads and footpaths, fencing, plantings and landscaping and decorating etc.

Increasing community pride through beautification could be achieved by:

- Working or encouraging residents, businesses and student or community groups to beautify
 their own (or others) dwellings or business and their street or surrounds. For example,
 running a 'clean up your front' event or other similar campaigns or creating special grants
 and/or awards for street beautification in illegal dumping hotspots. There is also opportunity
 to encourage businesses to get involved by sponsoring community-based beautification
 events or grants, and to engage community groups or volunteers to donate their time or
 resources towards beautification events or activities in illegal dumping hot spot areas.
- Introducing Council-funded programs to improve streetscape and amenity in hot spot areas.
 These could be developed in conjunction with other Council plans and programs (such as asset management programs and places and spaces programs) to align resources and funding.

Recommended actions

Actions to address this priority area are as follows:

- Develop and implement a community-based Community Pride Through Beautification Strategy and Action Plan that focuses on ways Council can work with and/or encourage residents, businesses and community groups to beautify illegal dumping hotspot areas
- Review the progress and success of the Community Pride Through Beautification Strategy and Action Plan on an annual basis and update the action plan based on data from the prior years
- Review other existing or planned Council programs to identify opportunities to integrate Council-led beautification works in illegal dumping hot spots and develop a Tackling Illegal Dumping Through Beautification Program of Works
- Progressively roll out the Tackling Illegal Dumping Through Beautification Program of Works
- Review the progress and success of the Tackling Illegal Dumping Through Beautification
 Program of Works on an annual basis and update the program of works based on data from the prior years

Measures of success

Measures of success for this priority area are as follows:

- A Community Pride Through Beautification Strategy and Action Plan has been developed and adopted
- Actions identified in the Community Pride Through Beautification Strategy and Action Plan have been completed in accordance with the timeframes identified
- A Tackling Illegal Dumping Through Beautification Program of Works has been developed and adopted
- The Council-led beautification works identified in the Tackling Illegal Dumping Through Beautification Program of Works has been completed in accordance with the adopted program
- Incidences of illegal dumping in areas where beautification works have been completed are reduced compared to the 2020/21 baseline.

6.2.3. Priority area 3: Supporting our community to do the right thing

Details of the priority area

Council understands the importance and the need to make the transition to a circular economy. Analysis shows that illegally dumped waste frequently contains things like furniture, clothing, appliances and mattresses. In some circumstances, these kinds of items could be suitable for reuse.

Reuse and 'share and repair' are key aspects of the circular economy and can help reduce illegal dumping by preventing items becoming waste in the first place. Reuse is also a fundamental and high-priority element of the waste hierarchy.

There is opportunity for Council to further support our community to do the right thing by creating opportunities for our community to increasing reuse of suitable items (such as furniture, appliances, clothing etc). This could be achieved by developing and running or supporting reuse drives.

Some opportunities that could be implemented, or explored further include:

- Establishing an annual reuse festival, which could be run as part of Council's annual Eco Living Festival, and/or in collaboration with sponsors
- Collaborating with or supporting the University of NSW or other suitable educational institutions to establish reuse drives similar to the University of Wollongong 'Goodwill Hunting' initiative that has been operating successfully for 10 years
- Collaborating with or supporting the University of NSW or other suitable educational
 institutions to establish and manage a 'furniture board' to facilitate reuse of furniture or
 short-term storage solutions for clean and useable household furniture from departing
 students that could be reused by incoming students in the next term
- Providing support to and encouraging community groups / volunteers to get involved in litter
 programs such as Clean Up Australia Day. Support could include providing promotion
 through Councils engagement channels, or collection and disposal of litter picked up on the
 day

The 'Goodwill Hunting' initiative is an annual event that provides University of Wollongong students with free household items to help get them established. It involves donation of specified clean and useable household items (albeit not furniture) on set dates. Volunteers unpack, sort, wash, repair, repurpose and package donated items.

While furniture is not accepted for donation as part of 'Goodwill Hunting' (there is insufficient storage space), the university has a 'furniture board' for students. People that have furniture suitable for donation can take an image of the furniture item/s and email it to the university (along with contact details, suburb and a description of the item and dimensions). Students can then contact the donator directly to arrange pickup. This kind of program could be explored in engagement activities with the University of NSW or other suitable educational institutions.

While litter prevention is preferred, it is still important to engage and support the community in litter clean-up to help to promote a culture of shared responsibility. Council can support litter clean-up programs through promotion and collection and disposal of litter collected by volunteers as part of specific clean-up events.

Recommended actions

Actions to address this priority area are as follows:

 Establish an annual Reuse Festival to promote reuse, share and repair of household items, which may be part of the Eco Living Festival

- Engage with the University of NSW or other suitable educational institutions to collaborate with and/or support the establishment of:
- a 'Goodwill Hunting' style reuse drive for students
- a 'Furniture board' or short-term furniture storage solutions for departing/incoming students
- Actively support and encourage community members and groups to volunteer and be involved in litter programs including Clean Up Australia Day through promotion and collection and disposal of litter picked up by volunteers as part of the events.

Measures of success

Measures of success for this priority area are as follows:

- A Reuse Festival is established and rolled out
- The University of NSW or other suitable educational institutions have been engaged to explore opportunities for collaboration and support or reuse drives or short-term storage solutions
- Council promotes litter programs such as Clean Up Australia Day and provides support to registered participants through collection and disposal of litter picked up as part of the events

6.2.4. Priority area 4: Optimising our illegal dumping and litter prevention infrastructure and services

Details of the priority area

Randwick LGA has some unique characteristics including having:

- a high proportion of multi-unit dwellings / higher density apartment blocks, older style buildings with limited on-site storage space and buildings fronting or backing onto small and narrow laneways
- areas where students or families move in and out relatively frequently, some of which is related to the University of NSW being located within the area, with the start or end of university semesters or years coinciding with increased moving
- relatively low levels of vehicle ownership and therefore reliance on Council provided clean up services to dispose of bulky waste
- areas where people speak languages other than English at home, or are recent overseas arrivals
- many visitors to the area (in particular, the beaches and parklands), with visitors being locals as well as coming from other parts of Sydney, NSW or even overseas particularly during the summer months, in hot weather or holiday periods.

These unique characteristics mean that targeted and tailored approaches to IDL infrastructure and related services are going to be required. While Council already has some customised approaches, there is opportunity to further refine, optimise and tailor our infrastructure and services further, including:

- the scheduled and on-call bulky waste clean up services, such as having different schedules/on-call allowances for:
 - the various dwelling/building types such as newer or older large multi-unit dwellings/flats, detached houses, semi-detached houses etc
 - areas of the LGA with distinct characteristics such as being in close proximity to the University of NSW, areas with high proportions of social housing, areas with higher

- proportions of renters compared to home owners or areas known to have high proportions of more transient populations etc
- the number and locations of public place litter bins and frequencies of collection, particularly targeting:
 - more problematic periods for litter such as during summer and major holidays/long weekends
 - known hotspot locations such as near public transport and takeaway shops.

Recommended actions

Actions to address this priority area are as follows:

- Undertake a Household Bulky Waste Clean-up Service Review to identify and categorise the key dwelling/buildings or building types and areas which will require revised clean up service approaches
- Develop and roll out a Revised Curated Bulky Waste Clean-up Service Schedule based on the findings of the service review
- Review the progress and success of the Revised Curated Bulky Waste Clean-up Service Schedule 12 months after roll out and annually thereafter, and where required, update the service schedule based on review findings
- Undertake a Public Place Litter Bin Audit and Review to assess locations, numbers, fullness and adequacy of frequency of collection of public place litter bins, including during known problematic period (summer, and or major holidays or long weekends)
- Develop and roll out a Revised and Targeted Public Place Litter Bin Network and Collection Schedule based on the review, which incorporates:
 - A specific plan for summer months
 - A specific plan for major holiday / long weekends
 - A general plan for other times of the year
- Accompany roll out of any revised services or schedules with community education and communications programs
- Review the progress and success of the Revised and Targeted Public Place Litter Bin Network and Collection Schedule 12 months after roll out and annually thereafter, and where required, update the service schedule based on review findings

Measures of success

Measures of success for this priority area are as follows:

- a Household Bulky Waste Clean-up Service Review has been completed
- a Revised Curated Bulky Waste Clean-up Service Schedule has been developed and rolled out
- a Public Place Litter Bin Review has been completed
- a Revised and Targeted Public Place Litter Bin Network and Collection Schedule has been developed and rolled out
- Incidences of illegal dumping are reduced compared to the 2022 baseline
- Litter removal incidences are reduced compared to the 2022 baseline
- Quantities of waste collected from public place litter bins increases while quantities of street cleaning waste reduced compared to the 2020/21 baseline

6.2.5. Priority area 5: Improving compliance through enforcement

Details of the priority area

Research shows that consistent and effective enforcement can help drive behaviour change by reinforcing the consequences of undesired behaviours. Enforcement does this through a number of mechanisms, as outlined in Figure 6.1.

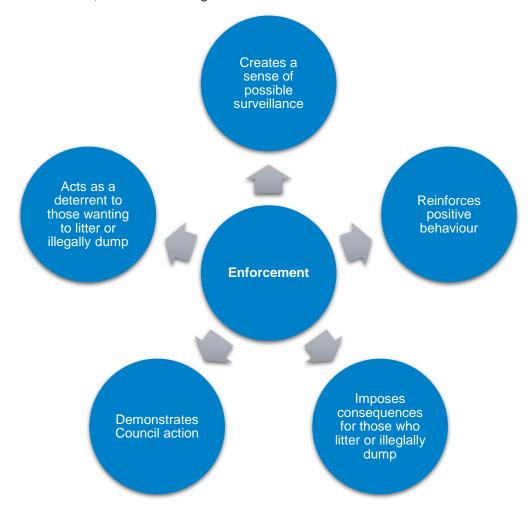


Figure 6.1 Functions of enforcement activities

Councils and other government agencies have the power to investigate and penalise illegal dumpers and litterers. Taking enforcement action as part of an overall plan that includes other actions around education and prevention infrastructure and services can play a key role in reducing illegal dumping and littering.

Council has not historically undertaken specific in-house enforcement activities for littering or illegal dumping. However, it has been a member of the Sydney RID Squad for a number of years. RID Squads were regionally based teams that specialise in combating and preventing illegal dumping. The RID Officers worked for local councils, working across council boundaries to co-ordinate dumping regionally. The squads and programs were co-funded by the EPA and member councils. The Sydney RID Squad investigated illegal dumping incidents and issued littering fines within Randwick LGA. However, the RID Squad program was ad hoc only.

Due to changes in co-funding, the Sydney RID Squad is winding up its operation from 1 July 2023 and the support that was available through this program will not be available in the future. Consequently, Council will need to undertake enforcement activities in-house going forward.

There is a strong need to build organisational capacity for both ongoing illegal dumping and litter enforcement and opportunity to improve enforcement activities. The Illegal Dumping Prevention Strategy 2022-27 Implementation Plan (NSW EPA, 2022c) indicates that the EPA proposes to provide training and support on prevention and enforcement techniques to compliance officers in local government.

Recommended actions

Actions to address this priority area are as follows:

- Undertake a Compliance and Enforcement Activities Review in order to:
 - Better understand the existing roles of Council's enforcement officers and rangers and their capacity for delivering compliance and enforcement activities for illegal dumping and littering
 - Identify opportunities to build in-house capacity for compliance and enforcement around illegal dumping and littering, giving consideration to stronger use of available Council powers, tools and penalties and the current and likely future availability of NSW Government grants and EPA funding, training and support on prevention and enforcement techniques
- Develop and implement a Strategic Compliance and Enforcement Program, based on the compliance and enforcement activities review, which outlines targeted compliance activities to address illegal dumping and littering, and to be implemented in conjunction with the roleout of actions in other priority areas
- Review the progress and success of the Strategic Compliance and Enforcement Program 12 months after roll out and annually thereafter, and where required, update the program based on review findings

Measures of success

Measures of success for this priority area are as follows:

- A Compliance and Enforcement Activities Review has been completed
- A Strategic Compliance and Enforcement Program has been developed and rolled out
- Incidences of illegal dumping are reduced compared to the 2022 baseline
- Litter removal incidences are reduced compared to the 2022 baseline
- Quantities of waste collected from public place litter bins increases while quantities of street cleaning waste reduced compared to the 2020/21 baseline

7. Action plan

The table below (Table 7.1) highlights the key actions required to deliver each of the five priority areas, as well as indicative timeframes.

Table 7.1 Action Plan

	Action	Timeframe
1	Priority 1: Harnessing the power of education and communication	
1.1	An evidence based, Illegal dumping and litter – Community and Stakeholder Engagement Strategy has been developed and adopted.	By 2024
1.2	Deliver annual community engagement and education campaigns that results in an increase in engagement reach in younger audiences, students, renters, and social housing residents.	Starting from 2024 and ongoing
1.3	Establishment of an Illegal dumping and litter working group – with a 6-monthly meeting schedule	By 2024
1.4	Roll-out of at least one community education campaign targeting all stakeholders such as residents, renters, body corporate, students, strata managers and building managers	By 2025 and ongoing
1.5	Development of IDL education collateral for use on social media and other communications campaigns	By 2024
1.6	A review and update of the Illegal Dumping and Litter – Community and Stakeholder Engagement Strategy has been undertaken based on the learnings from previous activities, and improved data capture	By 2027
2	Priority 2: Tackling illegal dumping by building community pride through beautification	
2.1	Develop and implement a community-based Community Pride Through Beautification Strategy and Action Plan that focuses on ways Council can work with and/or encourage residents, businesses and community groups to beautify illegal dumping hotspot areas	By 2024
2.2	Review the progress and success of the Community Pride Through Beautification Strategy and Action Plan on an annual basis and update the action plan based on data from the prior years	By 2027
2.3	Review other existing or planned Council programs to identify opportunities to integrate Council-led beautification works in illegal dumping hot spots and develop a Tackling Illegal Dumping Through Beautification Program of Works	By 2027
2.4	Progressively roll out the Tackling Illegal Dumping Through Beautification Program of Works	Starting from 2024
2.5	Review the progress and success of the Tackling Illegal Dumping Through Beautification Program of Works on an annual basis and update the program of works based on data from the prior years	By 2027
3	Priority 3: Supporting our community to do the right thing	
3.1	Establish an annual Reuse Festival to promote reuse, share and repair of household items, which may be part of the Eco Living Festival	By 2024
3.2	 Engage with the University of NSW or other suitable educational institutions to collaborate with and/or support the establishment of: a 'Goodwill Hunting' style reuse drive for students a 'Furniture board' or short-term furniture storage solutions for departing/incoming students 	By 2024

	Action	Timeframe
3.3	Actively support and encourage community members and groups to volunteer and be involved in litter programs including Clean Up Australia Day through promotion and collection and disposal of litter picked up by volunteers as part of the events	By 2024
4	Priority 4: Optimising our illegal dumping and litter prevention infrastructure and services	
4.1	Undertake a Household Bulky Waste Clean-up Service Review to identify and categorise the key dwelling/buildings or building types and areas which will require revised clean up service approaches	By 2024
4.2	Develop and roll out a Revised Curated Bulky Waste Clean-up Service Schedule based on the findings of Action Item 4.1	Starting from 2024
4.3	Review the progress and success of the Revised Curated Bulky Waste Clean-up Service Schedule 12 months after roll out and annually thereafter, and where required, update the service schedule based on review findings	Starting from 2025, ongoing
4.4	Undertake a Public Place Litter Bin Audit and Review to assess locations, numbers, fullness and adequacy of frequency of collection of public place litter bins, including during known problematic period (summer, and or major holidays or long weekends)	By 2024
4.5	Develop and roll out a Revised and Targeted Public Place Litter Bin Network and Collection Schedule based on Action Item 4.4, which incorporates:	By 2025
	A specific plan for summer months	
	A specific plan for major holiday / long weekends	
	A general plan for other times of the year	
4.6	Review the progress and success of the Revised and Targeted Public Place Litter Bin Network and Collection Schedule 12 months after roll out and annually thereafter, and where required, update the service schedule based on review findings	Starting from 2025, ongoing
5	Priority 5: Improving compliance through enforcement	
5.1	Undertake a Compliance and Enforcement Activities Review in order to:	By 2024
	 Better understand the existing roles of Council's enforcement officers and rangers and their capacity for delivering compliance and enforcement activities for illegal dumping and littering 	
	 identify opportunities to build in-house capacity for compliance and enforcement around illegal dumping and littering, giving consideration to stronger use of available Council powers, tools and penalties and the current and likely future availability of NSW Government grants and EPA funding, training and support on prevention and enforcement techniques 	
5.2	Develop and implement a Strategic Compliance and Enforcement Program , based on the compliance and enforcement activities review, which outlines targeted compliance activities to address illegal dumping and littering, and to be implemented in conjunction with the role-out of actions in other priority areas	Starting from 2024
5.3	Review the progress and success of the Strategic Compliance and Enforcement Program 12 months after roll out and annually thereafter, and where required, update the program based on review findings	Starting from 2025, ongoing

8. References/ Glossary

8.1. References

- Commonwealth of Australia. (2018). *National Waste Policy Less Waste, More Resources.*Commonwealth of Australia.
- Commonwealth of Australia. (2019). *National Waste Policy Action Plan.* Commonwealth of Australia.
- Department of Planning, Industry and Environment. (2021a). *NSW Waste and Sustainable Materials Strategy 2041*. Sydney: Department of Planning, Industry and Environment.
- Department of Planning, Industry and Environment. (2021b). *New South Wales Plastics Action Plan.* Sydney: NSW Government.
- KMH Environmental. (2011). Waste and Sustainability Improvement Payment An Integrated Plan to Manage Litter and Illegal Dumping. Sydney: Randwick City Council.
- NSW EPA. (2014). *NSW Waste Avoidance and Resource Recovery Strategy 2014-2021*. Sydney South: Environment Protection Authority.
- NSW EPA. (2019). NSW Circular Economy Policy Statement: Too Good to Waste. Sydney: NSW Environment Protection Authority.
- NSW EPA. (2022a). *NSW Litter Prevention Strategy 2022-30.* Sydney: NSW Environment Protection Authority.
- NSW EPA. (2022b). *NSW Illegal Dumping Strategy 2022-27.* Sydney: NSW Environment Protection Authority.
- NSW EPA. (2022c, December). *Illegal Dumping Prevention Strategy 2022-2027 Implementation Plan*. Retrieved from https://www.epa.nsw.gov.au/your-environment/illegal-dumping/illegal-dumping-prevention-strategy/implementation-plan
- Randwick City Council. (2011). *Illegal Dumping and LItter Management Plan.* Randwick: Randwick City Council.
- Randwick City Council. (2017). *Waste Management Strategy 2017-2030.* Sydney: Randwick City Council.
- SSROC. (2018). Regional Waste Avoidance and Resource Recovery Strategy. SSROC.

8.2. Glossary

Abbreviation	Definition
Council	Randwick City Council
DCP	Development Control Plan
EPA	Environmental Protection Authority
FYE	Financial year ending
GHD	GHD Pty Ltd
GIS	Geographic Information System
The Plan	Illegal Dumping and Litter Management Plan
IDL	Illegal dumping and litter
LGA	Local Government Area
MUD	Multi-unit dwelling
POEO Act	Protection of the Environment Operations Act 1997
PPO	Public Place Officer
RID	Regional Illegal Dumping
SA4	Statistical Area 4

Abbreviation	Definition
SUD	Single-unit dwelling
UNSW	University of New South Wales
WARR Strategy	NSW Waste Avoidance and Resource Recovery 2014 – 21 Strategy
Waste Regulation	Protection of the Environment Operations (Waste) Regulation 2005