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Executive summary

The Department of Water and Environmental Regulation (the department) released an issues paper entitled <u>Let's not draw the short straw – reduce single-use plastics</u> for public consultation on 11 April 2019 for a 13-week period.

The issues paper outlined the environmental and waste stream impacts of 18 common single-use plastic items found in Western Australia (WA) and a range of potential actions that could address these impacts.

Feedback was invited to better understand the community's view on reducing singleuse plastic items to help develop options to better manage their harmful impacts.

A total of 9,464 submissions were received, including:

- 8,378 responses to an online survey
- 55 individually written submissions
- 702 pro forma submissions from an online petition
- 329 people attending community workshops held across Western Australia.

Community feedback

The WA community supports reducing single-use plastics, with over 98 per cent of the 9,464 submissions supporting further action.

Online survey responses, written submissions and feedback from people attending community workshops were analysed, and priority single-use plastics and the community's preferred actions have been determined.

Table A provides an overview of how each single-use plastic was prioritised across each consultation phase. The online survey and workshop rankings of each single-use plastic item were determined according to the frequency each item was ranked in the following categories:

- "high priority" (ranked between 1 and 6)
- "medium priority" (ranked between 7 and 12)
- "low priority" (ranked between 13 and 18).

Written submissions were analysed using a qualitative assessment tool. Many items received at least one "high priority" ranking. Drinking straws and plastic packaging received a "high priority" ranking across all consultation types, and cotton buds with plastic shafts and baby/wet wipes received a "low priority" ranking across all types.

Table A – Single-use plastic priorities according to response type.

Item	Survey	Written	Workshop
Balloon releases	Low	High	High
Balloons	Low	Low	Medium
Barrier/produce bags	Medium	Medium	Medium
Cigarette butts/filters	Low	Medium	High
Cotton buds with plastic shafts	Low	Low	Low
Cutlery, plates, stirrers	Medium	High	Medium
Drinking straws	High	High	High
Fishing gear	Low	Medium	High
Lightweight plastic bags	High	Low	Medium
Lightweight plastic bags combined*	High	High	High
Microbeads	High	Medium	Medium
Plastic beverage containers	High	Medium	Medium
Plastic packaging	High	High	High
Polystyrene	Medium	Low	Low
Prepacked fruit and vegetable	High	Medium	High
Takeaway coffee cups/lids	High	Medium	Low
Takeaway food containers	Medium	Medium	Low
Thicker plastic bags	Low	High	Low
Wet or baby wipes	Low	Low	Low

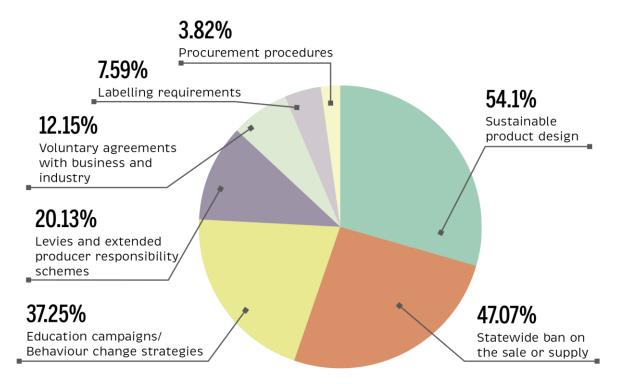
^{*}Data for barrier/produce bags and lightweight plastic bags have been combined

The consultation identified other single-use plastic items of concern including:

- disposable nappies
- household food packaging (cling wrap)
- disposable plastics used in agricultural or industrial settings.

The issues paper presented a range of potential actions available to government. The consultation identified clear community preferences on actions to address single-use plastic impacts. Figure A illustrates the three actions that were preferred:

- designing single-use plastics from more sustainable materials
- banning the supply, sale or use of single-use plastics
- educating the community about single-use plastic impacts and where to find and how to use reusable alternatives.



^{*}As respondents could select multiple options, the final total is greater than 100 per cent.

Figure A – Preferred actions

Next steps

The information from the consultation will be considered by government. Policy options will be guided by the community consultation and evidence-based research on environmental impacts from single-use plastics.

The department thanks all who made a contribution to this consultation process by responding to the online survey, writing a submission and/or attending a workshop.

1 Introduction

Focus on the impacts of single-use plastics has recently been increasing, and this has included action at the international, national, state and local levels.

The department released an issues paper titled *Let's not draw the short straw – reduce single-use plastics* for public consultation from 11 April to 12 July 2019.

The issues paper outlined the environmental and waste stream impacts of single-use plastics, and potential actions that could address these impacts. The issues paper, and further detail on impacts and actions, are available at dwer.wa.gov.au/single-use-plastic-issues-paper.

The consultation process included an invitation to provide a written submission, complete an online survey, participate in a community workshop session, and meetings with some stakeholders. Consultation provides community members with an opportunity to contribute innovative ideas and/or solutions to the issues being presented. Community consultation promotes transparency in the design of government policy and improves program implementation.

This report summarises the information received during the consultation period.

2 Consultation process

Consultation for the *Let's not draw the short straw – reduce single-use plastics* issues paper provided several opportunities for the community to provide their views on ssingle-use plastics. An overview of submissions and analysis methods is presented below. Responses were analysed by department staff and the results are presented in sections 3 to 6 of this report.

2.1 Online survey

An online survey was promoted via the department, local government and community group websites and social media platforms.

Respondents were asked for demographic information, views on single-use plastic impacts, actions taken to avoid specified single-use plastic items, priorities to address single-use plastic impacts and to select preferred actions to reduce their use. (Appendix A — Online survey for the survey questions).

The survey received 8,378 submissions.

2.2 Written submissions

Written submissions were grouped into pro forma submissions and individually written submissions.

Pro forma

Pro forma submissions were sent to the department via an online petition portal from the Sea Shepherd Australia website, with 702 pro forma submissions received. The pro forma text is provided in Appendix B — Pro forma template.

Each submission could be edited, therefore all pro forma submissions were read and assessed.

Individual written submissions

Fifty-five individual written submissions were received.

2.3 Community workshops

Consultation workshops were delivered from May to July 2019. Workshops were held across Western Australia in major population centres, including seven regional and three metropolitan locations. Further workshops were also delivered for the Western Australian Local Government Association (WALGA), the City of Albany and the Ministerial Advisory Council on Disability (MACD). Workshops were also facilitated by Linkwest and delivered to 20 regional Community Resource Centres using its video conference facilities. Details for each workshop are provided in Table 1.

The content delivered for each workshop was consistent and relevant to the information in the issues paper. Attendees were provided with opportunities to express their views on single-use plastics, including a group activity and live polling questions.

The workshops were attended by 329 people. Attendance was not recorded from the WALGA and MACD events.

Group activity

Attendees were placed in groups of three to six people to work through questions relating to single-use plastic items of their choosing. These questions included identifying alternatives for single-use plastic items and the community sectors that may be impacted if the item was reduced. Attendees completed 210 worksheets and presented their information back to the other groups. A copy of the group activity questions is available in Appendix C — Workshop group activity.

Live polls

Community workshops included two live poll questionnaires. Attendees answered questions using electronic devices or printed paper forms before the workshop and following the group activity. The results for each poll were kept anonymous and were compared at the close of the workshop. The live polls were completed by 263 attendees.

Questions included participants indicating their level of concern for single-use plastic impacts or identifying single-use plastic items to be reduced. Questions asked for each poll are presented in Appendix D — Workshop live polling.

Table 1 – Attendance at community workshops held from May to July 2019

Workshop	Attendance	Date
Cockburn	13	20 May
Bunbury	43	23 May
City of Albany	11	28 May
Albany community	19	28 May
Perth	40	4 June
Karratha	18	11 June
Port Hedland	11	13 June
Broome	10	19 June
Kalgoorlie	10	26 June
WALGA	Not recorded	24 June
Linkwest	79	28 June
Geraldton	24	3 July
Joondalup	51	8 July
MACD	Not recorded	25 July

2.4 Stakeholder meetings

Meetings were held with key stakeholders, including Aboriginal groups, local governments, State Government departments, natural resource management groups and community representatives.

Participants in these meetings were encouraged to contribute to the consultation process via the online survey, community workshops and/or by providing a written submission.

2.5 Summary of submissions

A total of 9,464 submissions were received, including attendees of the workshops (Table 2).

Table 2 – Total community response

Form	Total
Online survey	8,378
Written submissions	55
Pro forma submissions	702
Community workshop attendees (recorded)	329
Total	9,464

3 Respondents

A summary of respondent demographic characteristics for each information stream is provided below. Where available, Australian Bureau of Statistics (ABS) information is also provided for comparison.

3.1 Online survey

The online survey asked respondents to provide their gender, age, location of residence, household type and employment status. This demographic information was not collated for other submission streams.

Gender

Seventy-six per cent of online survey respondents identified as female and 21 per cent as male. The online survey submissions by gender are summarised in Table 3.

Table 3 – Online survey gender representation

Gender	Survey responses	ABS comparison
Male	21.28%	50.00%
Female	76.76%	50.00%
Not provided	1.96%	Not available
Total	100.00%	100.00%

Age

The online survey received responses from a mixed age range, presented in Table 4. About 62 per cent of all responses were within the 18-44 age range. Responses from the under-18 and 60-64 age groups were comparatively lower than other age groups.

Table 4 – Online survey age representation

Age	Survey responses	ABS comparison
Under 18	1.23%	23.05%
18-24	11.86%	8.88%
25-29	12.04%	7.34%
30-34	13.54%	7.86%
35-39	12.99%	7.21%
40-44	11.55%	6.58%
45-49	9.57%	6.92%
50-54	7.50%	6.30%
55-59	7.01%	6.10%
60-64	5.05%	5.35%
65 and over	7.28%	14.42%
Rather not say	0.38%	
Total	100.00%	_

Location

Ninety-seven per cent of respondents reside in Western Australia, with 2.5 per cent from other Australian states and territories and 0.5 per cent from overseas. Of Western Australian responses, 80 per cent were from the Perth metropolitan region, and 20 per cent from regional or rural areas. Regional and metropolitan (Greater Perth) representation is presented in Table 5 – Online survey responses regional and metropolitan representation.

Table 5 – Online survey responses regional and metropolitan representation

Region	Survey responses	ABS comparison
Metropolitan	80.50%	78.61%
Regional	19.50%	21.39%
Total	100.00%	100.00%

Household

Over 70 per cent of respondents indicated they were living as a couple at home with or without children.

Table 6 – Online response household representation

Household type	Survey responses	ABS comparison
Couple with children at home	39.57%	50.69%
Couple with no children at home	31.15%	22.67%
One parent family	5.25%	11.13%
Other family	4.73%	2.35%
Share house	7.71%	3.41%
Single occupant	11.59%	9.75%
Total	100.00%	

Employment

Employment status is presented in Table 7 – Online survey employment representation. People working full-time represented 46 per cent of respondents. Thirty-three per cent of respondents indicated they had casual or part-time employment.

Table 7 – Online survey employment representation

Employment type	Survey responses	Grouped	ABS comparison
Casual	11.88%	22 1.70/	16.600/
Part-time	21.59%	33.47%	16.69%
Full-time (>35 hours per week)	46.14%	46.14%	34.88%
Home keeper	6.06%	17.36%	48.43%
Not employed/retired	11.30%	17.30%	46.43%
Rather not say	3.02%	Not a	/ailable
Total	100.00%		

3.2 Written submissions

Pro forma

A total of 702 pro forma written submissions were received and the majority (95 per cent) of responses were unchanged (Appendix B — Pro forma template). Of the 5 per cent of pro forma submissions that were changed, 3.2 per cent requested that government make changes to reduce single-use plastics while the other 1.8 per cent made additions to the text.

Individually written

A total of 55 individually written submissions were received. Over half of these were from community members (28) with the remainder being from industry peak bodies, environmental groups, suppliers/manufacturers and government (Table 8 – Written submission demographics).

Table 8 - Written submission demographics

Sector	Total
Community member	28
Industry bodies	9
Environmental groups	8
Supplier/manufacturer	4
Government organisations	4
Retail sector	1
Religious organisation	1
Total	55

3.3 Community workshops

Details of sectors represented were recorded for the 10 community workshops, excluding those provided to the City of Albany, WALGA, MACD and Linkwest.

Sector representation is presented in Table 9 – Sectors represented at the community workshops. Attendees were predominantly community members.

Table 9 – Sectors represented at the community workshops

Sector	Total	
Community member	241	
Environmental groups	18	
Supplier/manufacturer	3	
Government organisations	48	
Retail Sector	11	
Other	8	
Total	329	

3.4 Summary of submissions

A summary of submissions received during consultation from the different sectors is provided in Table 10.

Table 10 – Summary of submissions by sector

Sector	Total
Community member	9,349
Industry bodies	9
Environmental groups	26
Supplier/manufacturer	7
Government organisations	52
Retail sector	12
Other	9
Total	9,464

Key finding: Engagement with manufacturers, suppliers and retailers will be required to maximise engagement with any actions to reduce single-use plastics.

4 Community concern and awareness of single-use plastics

A summary of community concern and support for actions to reduce the use of single-use plastics is presented below.

4.1 Online survey

Overall support

Over 98 per cent of respondents to the online survey support strategies to reduce single-use plastics consumed.

This result is consistent with previous community consultation feedback and independent survey results. In 2018 consultation feedback for the implementation of the lightweight plastic bag ban indicated 94 per cent of respondents supported this plastic-reduction initiative¹. These results are similar to a 2017 independent survey into *Western Australian Household Views on Plastic Waste*² and the 2019 Household Survey where over 90 per cent of respondents indicated concern about environmental issues associated with plastic waste.

Key finding: Community support to reduce single-use plastics is high and building over time. The community would like to see actions taken by the Government to mitigate the impacts of single-use plastics.

Concern for single-use plastic impacts

The level of concern for seven single-use plastic impacts was determined on a scale starting with "very concerned" and ranging to "not at all concerned". Responses for "very concerned" and "somewhat concerned" have been combined to produce "nett concern" (Figure 1).

For each single-use plastic impact, nett concern was greater than 90 per cent except for the category "plastics harm human health" which was marginally lower. All other statements received a lower ranking; however, the majority of respondents indicated they were very concerned.

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¹ Lightweight plastic bag ban consultation summary (2018)

² Boomerang Alliance (2017)

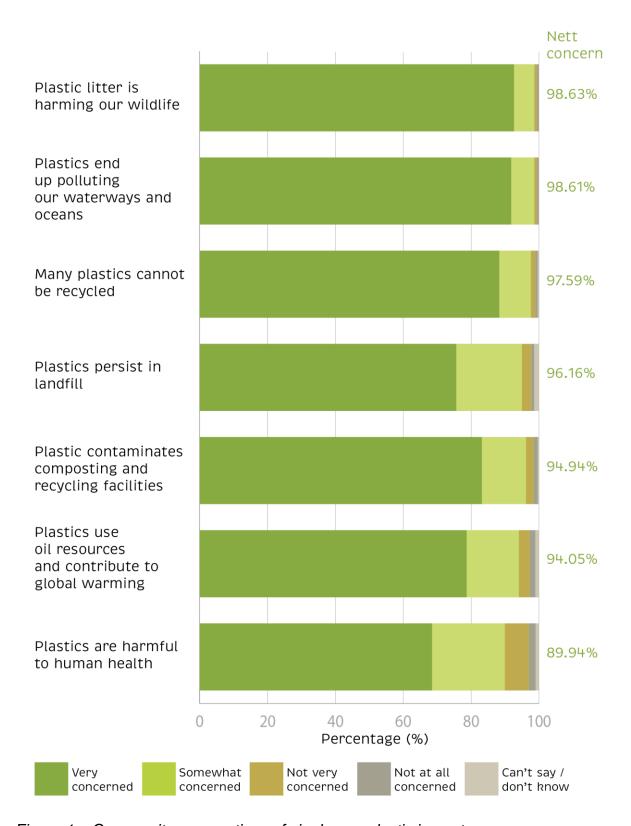


Figure 1 – Community perspectives of single-use plastic impacts

Concurrent with community consultation, the department commissioned an independent survey of householders to determine community sentiment towards single-use plastics³. The survey repeated questions asked in the Boomerang Alliance survey of WA householders in 2017⁴.

Multiple surveys – same results: Results from this consultation and the independent surveys indicated high levels of support for actions to reduce single-use plastics.

Key finding: There is shared concern for the environmental impacts of single-use plastics across the community and all sectors. This aligns with the high support to reduce single-use plastic consumption.

Community behaviour

Current behaviours for eight specific actions involving single-use plastics items were determined (Figure 2). Responses to "almost always" and "most of the time" have been combined to illustrate respondents are displaying "nett avoidance" of single-use plastic items.

For each single-use plastic interaction "almost always" was selected at a higher frequency than other options – indicating respondents are already active in avoiding single-use plastics. The practice of "refusing thicker plastic shopping bags" received both the highest "almost always" response rate (82 per cent) and "nett avoidance" (95 per cent).

For overall nett avoidance five of the eight scenarios received greater than 80 per cent support. These included:

- refusing thicker plastic shopping bags
- avoiding buying plastic bottled beverages
- avoiding fruit and vegetables wrapped in plastic
- refusing straws
- avoiding plastic cutlery, plates and stirrers.

The remaining three scenarios received less than 70 per cent nett avoidance:

- refusing takeaway coffee cups
- looking for personal care products that don't contain microbeads
- looking for personal care products that are not contained in single-use plastic containers.

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³ Kantar (2019)

⁴ Boomerang Alliance (2017)

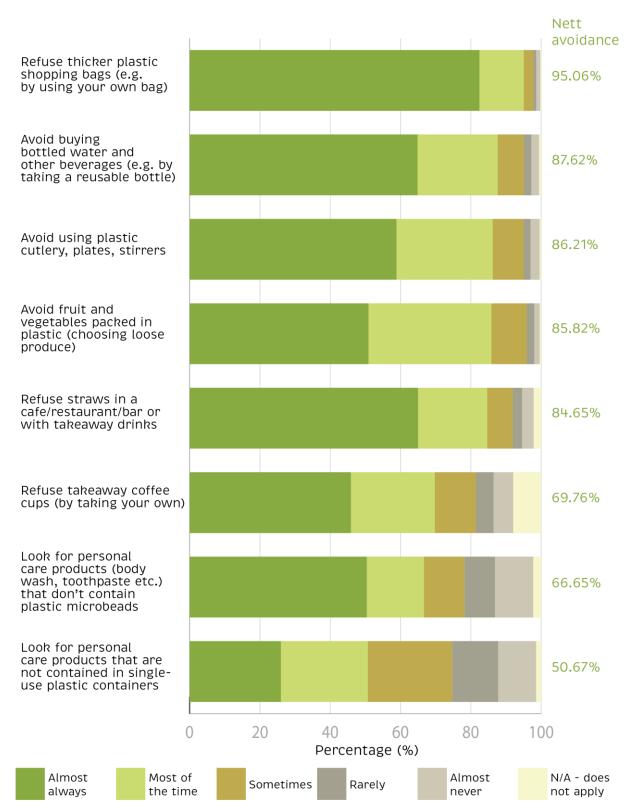


Figure 2 – Avoidance of single-use plastic items

In comparison, the 2017 and 2019 survey results indicated a 5 to 15 per cent lower "almost always" responses for each behaviour. Similarly "nett avoidance" was 10 to 20 per cent lower for each activity. However, overall "nett avoidance" remained

above 70 per cent – except for "refusing straws with café or takeaway drinks" and "refusing takeaway coffee cups" which were greater than 55 per cent.

Key finding: Some single-use plastics are already being avoided by the community.

4.2 Written submissions

Pro forma submissions

The 12 points in the pro forma submissions focused on banning or reducing the number of single-use plastic items. Impacts of single-use plastics on the marine and terrestrial environment and wildlife were identified as key drivers for implementing reduction strategies.

The pro forma submissions also highlighted the public desire for government action.

Individual written submissions

The written submissions support the Government addressing the impacts of singleuse plastics:

The ... applauds the State Government for pushing for action to address the impacts of single-use plastics. (Environmental group)

The state government has continued to show its commitment to reducing waste and increasing recycling as seen in a range of initiatives including the 2018 ban on lightweight plastic bags and the proposed three-bin FOGO system for Perth and Peel by 2025. ... commends the government for progressing these initiatives and acknowledges its ongoing efforts in managing what remains a very challenging issue – the consumption and disposal of single-use plastics. (Industry body)

All of the written submissions supported strategies to reduce single-use plastics in WA:

We support the ... initiative to investigate and address the issues of low plastic recycling rates and the impacts of terrestrial and marine litter. (Industry body)

Protecting the environment was the main motivating factor for the majority of the community members and environmental groups:

Plastic pollution, and single-use plastics in particular, pose a threat to both wildlife and the environment. These plastics, because they are designed for single-use also represent a major waste problem and, as they are largely products derived from fossil fuels, contribute to continuing greenhouse gas emission increases. (Environmental group)

The main issue is the longevity of plastic and the fact that it breaks up into micro plastic in a marine or aquatic (and even other) environments and then either entangles or is ingested by wildlife. (Community member)

... single-use plastics are a significant problem in litter and marine pollution. (Supplier/manufacturer)

Economic concerns emerged as the primary focus for industry, suppliers/manufacturers and retail sectors:

... supports DWER's engagement process to identify the best approach to reduce single-use plastics and the promotion of circular economy principles. (Industry body).

4.3 Community workshops

Almost all community workshop attendees supported further actions to reduce the amount of single-use plastics (99.5% of attendees).

Attendees at the community workshops were asked to participate in live polls before and after each event about their level of awareness and concern regarding single-use plastic impacts. For each question, the top two responses were combined to assess a nett result. This information is provided in Figure 3 and Figure 4.

Comparison of the polls before and after the workshops indicated that 16 per cent of attendees reported an increased awareness of single-use plastic impacts by the end of the workshop.

Across all participants "nett concern" was 100 per cent both before and after all workshops.

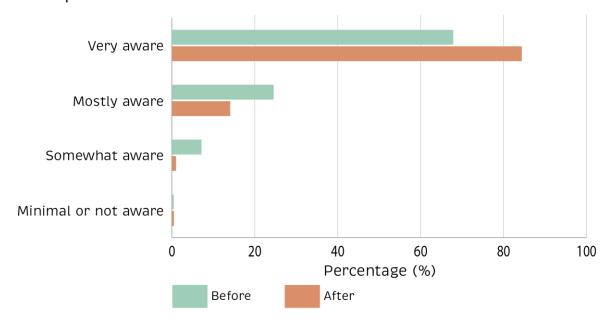


Figure 3 – Community workshop awareness of single-use plastic impacts

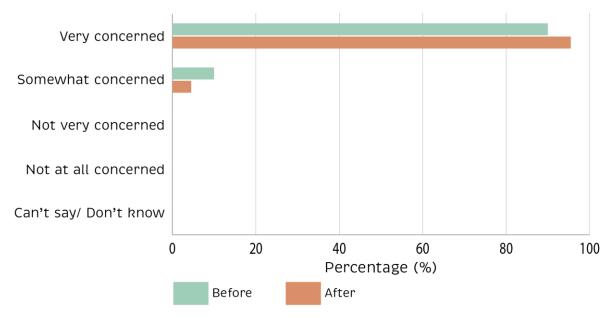


Figure 4 – Community workshop concern for single-use plastic impacts

Key finding: The increase in awareness and concern of single-use plastic impacts after each workshop indicates that education in conjunction with behaviour-change strategies should support the implementation of any policy actions.

4.4 Characteristics summary

Results from the consultation indicate that there is strong community support and awareness for actions to address the impacts of single-use plastics. This was indicated in the results of the online survey, pro forma and written submissions and in the community workshops.

Consultation also indicated that there is a high level of concern and that further education and information can support enhanced community interactions.

The online survey indicated that many community members are already avoiding the use of several single-use plastic items.

5 Priority single-use plastics

5.1 Online survey

Single-use plastic rankings

Respondents ranked the priority of 18 single-use plastic items they would like to be the focus of additional actions. Figure 5 illustrates the rankings of each single-use plastic item according to the frequency each item was ranked in the following categories:

- "high priority" (ranked between 1 and 6)
- "medium priority" (ranked between 7 and 12)
- "low priority" (ranked between 13 and 18).

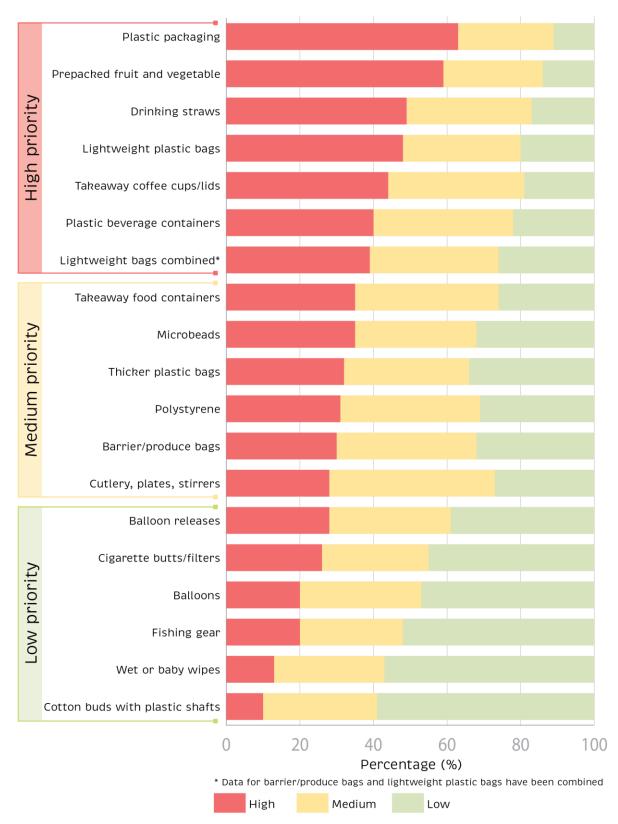


Figure 5 – Online survey priority single-use plastic items ranked and grouped into high, medium and low priority.

Table 11 lists the single-use plastic items selected most frequently as the number one priority. Microbeads and cigarette butts/filters were selected fifth and seventh

respectively. Balloon releases were also selected more frequently as the number one priority than balloons.

Information received during consultation indicated that lightweight plastic bags were often confused with barrier/produce bags. When these two bag types are combined ("lightweight bags combined") they are ranked third as the number one priority plastic item (Table 11) to take action to reduce their use and ranked seventh in the "high" priority category (Figure 5).

Table 11 – Online survey single-use plastic items selected as the number one priority

Single-use plastic Item	Percentage as number one priority	
Plastic packaging	16%	
Prepacked fruit and vegetable	uit and vegetable 12%	
Lightweight plastic bags combined*	11%	
Lightweight plastic bags	9%	
Microbeads	7%	
Drinking straws	6%	
Cigarette butts/filters	5%	
Takeaway coffee cups/lids	5%	
Plastic beverage containers	5%	
Thicker plastic bags	4%	
Balloon releases	4%	
Polystyrene	4%	
Fishing gear	3%	
Takeaway food containers	3%	
Barrier/produce bags	2%	
Balloons	2%	
Cutlery, plates, stirrers	1%	
Wet or baby wipes	1%	
Cotton buds with plastic shafts	0.3%	

^{*} Data for barrier/produce bags and lightweight plastic bags have been combined

The 2019 WA householder survey included 10 single-use plastics with the greatest known environmental impacts. Plastic packaging, takeaway coffee cups and drinking straws ranked similarly to this consultation survey. However, fishing gear, cigarette butts/filters and thicker plastic bags ranked higher in the WA householder survey.

Key finding: Single-use plastics of highest concern were those commonly used by the community on a 'day-to-day' basis. However, some of these items may not pose the same level of impact as items not used daily, such as balloon releases.

Other priority plastics

The online survey asked respondents whether any other single-use plastics should be included as a priority. A total of 4,564 pieces of information were received for this question, with many repeating single-use plastic items from the previous part of the survey (highlighted) – see Table 12.

A significant proportion of responses (694 or 15 per cent) indicated a preference for action to be taken on "all single-use plastic items".

Table 12 – Online survey additional single-use plastic priorities with those items included in the survey highlighted

Single-use plastic Item	Frequency mentioned	
Packaging	16%	
All single-use plastic items	15%	
Cling wrap and zip-lock	6%	
Fruit, meat and vegetable packaging	5%	
Nappies	4%	
Containers - cosmetics	4%	
Plastic beverage containers	4%	
Small kids toys (promotional)	3%	
Toothbrushes and toothpaste	3%	
Hospital waste	3%	
Agricultural and industrial plastic	2%	
Cutlery, plates, stirrers	2%	
Plastic bags - all	2%	

The full list of additional single-use plastics provided in online survey submissions can be found in Appendix E — Online survey additional single-use plastics.

Key finding: Disposable nappies, a single-use plastic item not listed in the issues paper, was highlighted in many submissions as a plastic that should be considered for further action.

5.2 Written submissions

Pro forma submissions

The pro forma submissions were supportive of reduction strategies being introduced for many single-use plastic items including:

- drinking straws
- plastic cutlery (forks, knives, spoons and chopsticks)
- plastic plates
- cotton buds with plastic shafts
- smoking on beaches
- microbeads

- releasing of helium balloons
- polystyrene food and beverage products
- any of the above labelled as biodegradable.

The pro forma submissions also requested a ban on the use of helium to inflate balloons and a ban of the intentional or accidental release of balloons. Additional single-use plastic items discussed included balloon sticks and clips, glitter, sanitary napkins and plastic bait bags.

Written submissions

Written responses were received from varying respondents including community members, industry, non-government and government organisations. Consequently, there was a wide range of responses including requests to ban specific single-use plastic items, while others focused on a whole suite of single-use plastic items with suggested management approaches to minimise their impacts.

The length of written responses ranged from one sentence to a 30-page document. Some of the submissions were asking for immediate actions whilst others were wanting to achieve change over time to allow industry and society time to adapt.

Priority single-use plastics

Two single-use plastic items were identified for immediate action. The banning of thicker plastic bags was seen as the next logical step; this was supported by community members and environmental groups:

Our group holds the strong view that the larger and thicker "re-usable" plastic bags that can be purchased at supermarkets, or sometimes given out freely at other shopping outlets, also need to be banned or at the very least phased out by a strong awareness campaign about the intractable problems associated with a material that simply doesn't break down in any short or medium time frame. (Environmental group)

... the ban should be extended to thicker bags (Community member)

Even though the single use bag has been banned, I still see a lot of the thicker bags being sold which is probably just as damaging to the environment. Can the government go the next step and ban all plastic bags. (Community member)

The second single-use plastic item identified as requiring immediate action was banning the release of helium balloons. This was raised in many of the written submissions with broad support across different sectors:

... ban the release of balloons and the use of helium to inflate balloons in the WA plastic reduction policy (Industry body)

It is well known that the helium balloons travel huge distances and can land in the ocean where they are problematic in terms of fish ingestion. The use of these should be banned worldwide. They are not a necessity, just a frivolity. (Community member)

... is driving environmentally responsible change and is committed to reducing balloon litter and any potential effects on wildlife by eliminating

the deliberate release of helium balloons. We support fair and effective changes to legislation that will ban the deliberate release of helium balloons in order to prevent littering and reduce environmental impact. (Industry body)

Additionally, several of the submissions supported banning a whole suite of singleuse plastics rather than focusing on single items, particularly for those where alternatives are available:

... ban all single-use plastic items, like straws, plates, and cutlery; as well as takeaway coffee cups and polystyrene containers. (Community member)

We note that other countries are extending their bans to other products. We are supportive of these moves where there are alternatives available – such as straws, disposable cutlery and cotton buds with plastic shafts. (Government organisation)

... phase-out of single-use plastic, non-compostable takeaway items should be supported. It represents the next obvious policy step in addressing plastic pollution. The phase-out list should include coffee cups/lids, straws, stirrers, cutlery, containers, bags. (Industry body)

Many of the submissions were supportive of banning specific single-use plastic items if appropriate phase-in periods are provided for industry and retailers to adapt:

... would be supportive of longer-term Government efforts to eliminate the below single-use products across the state, bearing in mind there needs to be sufficient lead time for industry and retailers to locate/develop and then transition to recyclable or multiple-use alternatives:

- Plastic cotton buds
- Plastic straws
- Oxo-degradable plastics
- Disposable plastic cutlery, stirrers, plates and bowls
- Non-recyclable coloured plastics (including carbon black plastic e.g. some ready meal trays, premium meat trays, some pre-packed fish trays)
- Disposable plastic cups
- Polystyrene
- Multi-pack rings for canned drinks
- Traditional plastic produce bags

(Retailer)

Written submissions allow for more individualised responses, therefore a larger number of single-use plastic items were discussed, including the pollution of fishing gear in the natural environment. Fishing items of concern included fishing line, floats and bait bags and were highlighted as requiring attention:

At places such as around Bicton Baths there is very often fishing gear left on the jetty/walkway – plastic bait bags, fishing lines and hooks together with drink bottles. There is the usual collection of rubbish along the beach. On high tides the pollution can be alarming. (Community member) Fishing line and pieces of hard plastic, polystyrene floats and ropes from craypots are commonly found plastics on local beaches. (Environmental group)

Microplastics impacting on the environment were also identified in the written submissions by community members and environmental groups:

If we are allowing just 2% of the modelled microplastic fibres coming from our laundry to enter the ocean, each week we could be contributing the equivalent of 7,500 plastic bags to our ocean as microplastic fibres. (Community member)

Our final concern regarding plastic that may require government action and regulation soon relates to microbeads and plastic fibres in human clothing that regularly find their way into our waterways and then become part of the "Plastic Soup". (Environmental group)

Concern was raised that the voluntary ban on microbeads is not effective:

Overall our group is very concerned about the use of plastic bags of all types, plastic drinking straws and cups, plastic food packing, microbeads in body care products (the voluntary ban has not worked) and microfibres in clothing. (Environmental group)

Plastic packaging was raised in the written submissions by community members and environmental groups. Community members and environmental groups would like actions taken to ban or minimise plastic packaging:

... overwrapping of products, including plastic pre-packed fresh produce and non-perishable foods with more than one layer of packaging (e.g. boxes with bags inside, boxes wrapped in outer plastic, individually wrapped items inside a larger bag etc.) needs to be addressed seriously at a regulatory level. (Environmental group)

Plastic packaging for fruits & veggies: This should be phased out asap. Consumers must take their own reusable produce bags or buy loose (especially big items). (Community member)

Submissions from the industry body and retail sector acknowledged the important role that plastic and packaging can play in protecting, preserving, storing and transporting products. It was highlighted that without plastic packaging, many products that consumers purchase would not make the journey to the home or store, or survive in good condition long enough to be consumed or used. Suppliers and manufacturers highlighted the importance of packaging in reducing food waste and its contribution to a sustainable industry whilst industry bodies also highlighted the important role plastic packaging plays:

We have reduced our food waste from 60% to 4% through packaging ... In short removing packaging ... would increase Australia's Carbon emissions and contribute more CO₂ to the atmosphere and accelerate climate change. This would be an unintended consequence and not necessarily and [sic] improvement. (Supplier/manufacturer)

Particular account will need to be taken of product safety and security, waste impacts (particularly in relation to food waste), packaging

accessibility, and regulatory requirements (e.g. for health, pharmaceutical and food packaging). These issues present many challenges, solutions to which will take time to develop and implement. (Industry body)

An additional number of other items were raised in written submissions including disposable nappies, dog poo bags, stickers on fruit and individually plastic-wrapped newspapers. These were raised as plastics of concern requiring government action to minimise their use and impacts on the environment.

In addition to the products listed in the Issues Paper ... would also like to suggest that nappies are included. These products frequently contaminate the material collected through the kerbside recycling system, contain non-renewable resources (plastic) and produce methane if landfilled. (Government organisation)

Biodegradable and compostable plastics

Biodegradable and compostable plastics were discussed in several of the written submissions across all community sectors. Biodegradable and compostable plastics have more recently been seen as a way of minimising impacts on the environment. However, several submissions highlighted that biodegradable and compostable plastics can also impact on the environment just as much as other plastics unless disposed of correctly:

We are also concerned about biodegradable, degradable and even compostable bags or single-use plastic items as these present a high risk to the environment in terms of microplastic residues and marine pollution. (Supplier/manufacturer)

The ... recommends that biodegradable plastics be included in any ban on single-use soft plastics. The use of biodegradable plastics does not support the circular economy model and, although less detrimental to terrestrial or marine fauna, still create environmental impacts. (Environmental group)

In 2016, the Chief Scientist of the United Nations Environment Program (UNEP), described reliance on biodegradable plastics as "well-intentioned but wrong" (Vaughan 2016). Empirical evidence indicates that there are no significant differences in the degradation of some biodegradable plastics compared to conventional plastics (Hardin and Pretorius 2017) hence they pose the same threats to human, animal and environmental health. (Community member)

Concern about the use of biodegradable and compostable plastics was supported by other submissions and highlighted the need for education and improved labelling of plastics. Many people are wanting to help minimise the impacts of plastics and so are purchasing biodegradable and compostable as they think they are better for the environment:

I have been buying organic rubbish bags instead of normal plastic ones as these are bio degradable. (Community member)

If a single-use plastic ban eventuates, more products labelled as bioplastics or compostables will inevitably come onto the market

(Vegware and Biopak are two brands I am currently aware of) and I understand those need to go to a commercial composter to be processed effectively, but how many of them actually end up in a process capable of breaking them down? People think that since it's "bio" it will be ok. (Environmental group)

Key finding: There is demand for evidence-based information on compostable, degradable and biodegradable plastic alternatives to prevent unintended environmental and waste stream impacts.

5.3 Community workshops

Group activity

The community workshops provided polls and a group activity for attendees to indicate their priority plastics. The group activity required attendees to provide responses to questions about their chosen priority single-use plastic items. Attendees were asked to provide information on current uses of the item, reusable alternatives, sectors impacted if the item was no longer available, challenges to consider before change and preferred actions to reduce their use. A copy of the group activity questions is available in Appendix C — Workshop group activity.

The single-use plastic items selected in the group activity are presented in Table 13 in order of frequency mentioned across all workshops in regional and metropolitan locations. Balloons, cigarette butts/filters and plastic packaging were the most selected priority plastic items. Prepacked fruit and vegetables, takeaway food containers, drinking straws and coffee cups were also prioritised and align with the results from the online survey (Figure 5). Other single-use plastic items that were discussed but received less overall interest were: cotton buds, glad wrap, nappies, plastic promotional toys, dental products, glitter, and silage wrapper. The full list of items is provided in Appendix F — Workshop group activity items.

Table 13 - Community workshop group activity single-use plastics

Single-use plastic Item	All WA	Regional	Metropolitan
Balloons	10%	9%	15%
Cigarette butts	10%	8%	13%
Plastic packaging	10%	11%	5%
Prepacked fruit and vegetables	8%	6%	11%
Takeaway food containers	8%	9%	3%
Straws	7%	8%	5%
Coffee cups	7%	7%	7%
Cutlery	5%	5%	5%
Fishing gear	5%	4%	7%
Polystyrene	5%	4%	7%
Wet wipes	5%	6%	2%
Beverage containers	4%	5%	0%
Thick plastic bags	3%	3%	2%
Barrier bags	2%	1%	5%

Live polls

Community workshop attendees were asked to select their three priority single-use plastic items both before and after the workshop. These results are provided in Table 14.

Before the workshop, attendees selected plastic packaging, drinking straws, prepacked fruit and vegetables, balloon releases and cigarette filters as priority plastics. Wet wipes and cotton buds ranked low on the list.

After the workshop the ranking of cigarette butts, fishing gear, wet wipes, balloons, and polystyrene all showed significant increases. Plastic packaging was highly selected in the before and after polls.

During consultation it became evident that community members interpreted lightweight plastic bags and barrier/produce bags to be the same thing. Therefore analysis combined lightweight plastic bags and barrier/produce bags for a "lightweight plastic bags combined" subset, this category was the second-highest priority before the workshops and fourth-highest priority after the workshops.

Table 14 - Community workshop single-use plastic live polling priorities

Single-use plastic Item	Before	After
Plastic packaging	12.00%	12.28%
Lightweight plastic bags combined*	11.10%	7.72%
Drinking straws	9.60%	6.76%
Prepacked fruit and vegetables	8.32%	6.41%
Cigarette filters	6.56%	16.37%
Balloon releases	6.56%	5.52%
Lightweight plastic bags	6.56%	4.27%
Plastic beverage containers	6.40%	3.38%
Microbeads	6.40%	3.20%
Barrier/produce bags	5.92%	4.09%
Cutlery, plates and stirrers	5.44%	3.74%
Takeaway coffee cups/lids	5.44%	3.56%
Balloons	4.16%	6.76%
Takeaway food containers	4.16%	3.20%
Fishing gear	3.84%	8.36%
Polystyrene	3.68%	4.98%
Thicker plastic bags	3.20%	1.96%
Wet/baby wipes	0.96%	3.74%
Cotton bud shafts	0.80%	1.42%

^{*}Data for barrier/produce bags and lightweight plastic bags have been combined

5.4 Priority single-use plastics summary

Consultation feedback indicates there is strong support for actions to reduce the impact of several single-use plastics. Table 15 provides an overview of how each single-use plastic was prioritised across each information stream. Also included are some of the environmental impacts from each, and recent attention and actions to address these impacts from other jurisdictions.

Many plastics received at least one "high priority" ranking. Drinking straws and plastic packaging received a "high priority" ranking for all consultation phases. The only single-use plastic items to receive a "low priority" from all consultation phases were cotton buds with plastic shafts and baby/wet wipes. Consultation also demonstrated that the priorities of single-use plastic items changed as more information was provided or discussed.

Consultation also provided several single-use plastic items that may require future consultation or additional actions to reduce their impacts. The most predominant of these were: disposable nappies, household food packaging (cling wrap), and disposable plastics used in agricultural and industrial settings.

Table 15 – Single-use plastic priority rating for each information stream

Single-use plastic items	Survey	Written	Workshop
Balloon releases	Low	High	High
Balloons	Low	Low	Medium
Barrier/produce bags	Medium	Medium	Medium
Cigarette butts/filters	Low	Medium	High
Cotton buds with plastic shafts	Low	Low	Low
Cutlery, plates, stirrers	Medium	High	Medium
Drinking straws	High	High	High
Fishing gear	Low	Medium	High
Lightweight plastic bags	High	Low	Medium
Lightweight plastic bags combined*	High	High	High
Microbeads	High	Medium	Medium
Plastic beverage containers	High Medium		Medium
Plastic packaging	High High		High
Polystyrene	Medium	Low	Low
Prepacked fruit and vegetable	High	Medium	High
Takeaway coffee cups/lids	High	High Medium	
Takeaway food containers	Medium	Medium	Low
Thicker plastic bags	Low	High	Low
Wet or baby wipes	Low	Low	Low
High	Medium	Low	

^{*}Data for barrier/produce bags and lightweight plastic bags have been combined

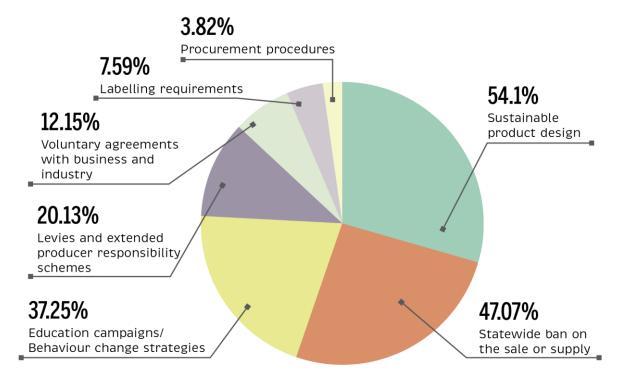
6 Preferred actions

6.1 Online survey

Preferred actions

The online survey asked respondents to select two preferred actions to reduce the impacts of their priority plastics identified in section 5. Actions included education and behaviour-change strategies, labelling requirements, applying levies, extended producer responsibility schemes and improving procurement procedures. Other suggestions included regulatory actions via statewide bans on the sale or supply of specific items, sustainable product design and voluntary agreements with business and industry. Respondents were also asked to provide additional actions and these are presented in the section *Other actions*.

The most commonly recommended actions from the online survey to reduce the selected single-use plastic items were sustainable product design, statewide bans on the sale and supply and education or behaviour-change strategies. The results are provided in Figure 6.



^{*}As respondents could select multiple options, the final total is greater than 100 per cent.

Figure 6 – Online survey preferred policy approach

Statewide bans on the sale and supply, sustainable product design and/or education/behaviour-change campaigns recommended by online survey respondents for the top 10 priority single-use plastic items are listed in Table 16.

Table 16 – Online survey results of 10 top priority plastic items and preferred actions.

Single-use plastic items	Priority rating	Preferred actions
Plastic packaging	1	Sustainable product design Statewide ban
Prepacked fruit and vegetable	2	Statewide ban Sustainable product design
Drinking straws	3	Statewide ban Sustainable product design
Lightweight plastic bags	4	Statewide ban on the sale or supply Sustainable product design
Takeaway coffee cups and lids	5	Sustainable product design Statewide ban Education and behaviour change campaigns
Plastic beverage containers	6	Sustainable product design Statewide ban Education/behaviour change campaigns
Takeaway food containers	7	Sustainable product design Statewide ban Education/behaviour change campaigns
Microbeads	8	Statewide ban Sustainable product design
Thicker plastic bags	9	Statewide ban on the sale or supply Sustainable product design
Polystyrene	10	Statewide ban Sustainable product design
Lightweight plastic bags combined*	7** **Ranked 7th overall	Statewide ban Sustainable product design

^{*}Data for barrier/produce bags and lightweight plastic bags have been combined

Listed in Table 17 are the preferred actions for single-use plastic items that were not listed in the top 10. The full list of all preferred actions is provided in Appendix G – Online survey policy preferences.

Table 17 – Online survey results of the most preferred actions for single-use plastic items not ranked in the top 10 priority plastics.

Single-use plastic items	Priority rating	Preferred Actions
Barrier/produce bags	11	Sustainable product design Statewide ban on the sale or supply
Cutlery, plates and stirrers	12	Sustainable product design Statewide ban
Balloon releases	13	Statewide ban on the sale or supply Education campaigns/behaviour change strategies
Cigarette butts/filters	14	Education campaigns/behaviour change strategies Statewide ban on the sale or supply Sustainable product design
Balloons	15	Sustainable product design Statewide ban on the sale or supply
Fishing gear	16	Sustainable product design Education campaigns/behaviour change strategies
Wet or baby wipes	17	Sustainable product design Education campaigns/behaviour change strategies
Cotton buds with plastic shafts	18	Sustainable product design Statewide ban on the sale or supply

Key finding: Actions to address impacts favour regulatory action and sustainable product design in conjunction with education and behaviour-change campaigns.

Other actions

The online survey asked respondents to suggest additional actions to reduce singleuse plastics and 562 responses were received. Many submissions repeated actions previously provided such as sustainable product design (123), statewide ban on the sale or supply (74), education or behaviour-change strategies (51) and levies and extended producer responsibility schemes (32).

Seventy-four responses noted a need for promotion and increased availability of existing alternatives to single-use plastics, and this included use of incentives and subsidies to encourage their use.

Fifty-four respondents highlighted a need for improved reuse, recycling and plastic collection. Fifty-one responses indicated that extended producer responsibility schemes were preferred without implementation of a levy.

Twenty responses highlighted a need for government to lead actions to reduce single-use plastics regardless of the policy in place. Other responses highlighted other considerations, including increasing financial penalties for littering, greater openness to plastic alternatives, further research into the impacts of plastics and timed phase-out periods if single-use plastics are to be reduced.

6.2 Written submissions

Pro forma submissions

Pro forma responses illustrated that the general community is receptive to government leading action to reduce the impacts of single-use plastics:

The reality is that single use plastics are a mistake we need to leave in the past. Plastics themselves, as well as the inadequate systems for their disposal, are depriving my generation and future generations of a beautiful Earth, and placing our ecosystems (and thereby humanity) in jeopardy. This is hypocrisy if we continue to refuse to take the steps to protect these things. I hope that the West Australian Government gets its priorities straight and implements these changes promptly.

If great states like yours and South Australia put bans in place, hopefully it can have an influence on the rest of the country.

We know it's a big problem and we want our government to be leaders in turning the tide on plastic pollution.

Actions identified to reduce the use and impacts of single-use plastics included regulatory actions (ban/enforcement), education/behaviour-change campaigns and a plastics mitigation roadmap to set clear future targets for reduction. Other suggestions included the establishment of a working group, sustainable design to increase recycling/reuse and clear standardised labelling:

Single-use plastics have got to go. Strong and immediate bans will cause some disgruntlement from loud minorities but will quickly become the normal way of life. That's how single-use shopping bags went. Short term change resistance is a small price to pay for the advantages that flow. WA can lead the way in this.

Statewide bans were identified as the best option to reduce most single-use plastics including:

- cigarette smoking on all WA beaches including on-the-spot fines for offences
- plastic shopping bags, produce/barrier bags
- helium balloon releases and plastic balloon sticks and clips
- single-use plastic straws
- plastic cutlery (forks, knives, spoons and chopsticks)
- plastic plates
- cotton bud sticks made of plastic
- polystyrene food and beverage products
- glitter
- plastic bait bags.

Standardised labelling was preferred for coffee cups, baby or wet wipes, balloons, and sanitary napkins indicating how these products should be disposed of (compostable, recycling or landfill) along with the negative environmental impacts of the product.

Key finding: Submissions indicated a desire for the Government to lead actions to address single-use plastic impacts. Submissions have noted the progress and proactive approaches being taken by the Government so far.

Written submissions

Written submissions suggested a wide range of policy and management approaches with responses being similar to the pro forma submissions, such as regulatory tools (bans and levies), education/behaviour-change programs, plastics mitigation roadmap (setting clear future targets for reduction), sustainability design to increase recycling/reuse, development of recycling facilities and need for clear standardised labelling. A strong theme that emerged from the written submissions was that all community sectors support government action. As one community member commented:

Nothing's too drastic when combatting plastic!

Whilst an Environment Group wrote:

... commends the WA State Government on its initial efforts to address plastic pollution, the community is expecting much more from its elected leaders and Departments.

The written submissions highlighted the awareness that single-use plastics, their impacts and management actions need to be addressed at a global, as well as national scale:

Plastic pollution is now an identified global and domestic problem ... (Environmental group)

The UN Environment Program has initiated a global response that includes Australia. Member nations of the G20 have made similar commitments to action. (Industry body)

I would like to point out that European countries have reduced plastic use for decades. We are not reinventing the wheel. We need to reduce packaging used. This requires changes by industry and potentially legislative change. (Community member)

Preferred management actions and policies

A wide range of management actions and polices were discussed in the written submissions. Regulatory tools including the banning of selected single-use plastic items, restrictions on usage and levies were identified as approaches the Government needs to undertake:

While initiatives from the community are a positive leap forward, government regulations and programs are crucially vital. (Environmental group)

Regulatory tools are urgently required to reduce the negative impact of all these types of single-use plastic waste as well as balloons, bags (not just bags <30gsm with handles), cigarette butts, disposable cutlery, fishing gear, takeaway containers, microplastics and personal hygiene products. (Community member)

... country-wide levy on virgin plastics to incentivize producers to use recycled plastic in the production of new containers and lids. (Environmental group)

... wishes to congratulate the State Government on its successful implementation of the ban on single-use plastic bags, but now urges that this important move be followed up with a ban that encompasses all non-essential single-use plastic. (Religious organisation)

Other respondents noted that the action required by government needed to utilise a wide range of policies and strategies to ensure the negative impacts of single-use plastics are minimised:

We support the use of other regulatory tools such as levies, extended producer responsibility, labelling and sustainable product design for items that are considered essential (such as barrier packaging for meat and dairy products) or unable to be banned at the state level (such as cigarettes). (Government organisation)

It was further raised that through the use of legislation, banning of single-use plastics would provide equality across business and industry:

By introducing legislation the Government will simply be providing the final additional push that industry need to switch to more sustainable packaging options. This is difficult for a single operator to implement when competing with many other retailers, but if entire territories or states shifts at once, no business is unfairly penalised. (Supplier/manufacturer)

Mitigation roadmap — setting clear future targets for reducing single-use plastics

The need for a systematic and clearly outlined approach to reducing single-use plastics was discussed. Submissions suggested that clear targets and timelines are required to ensure businesses and industry are given time to make the necessary changes:

Where a decision is made to phase out a single-use plastic item, systemic approaches includes ensuring that businesses and consumers have appropriate access to suitable alternatives, and that the alternative items can be appropriately managed at end of life. The timeframes for phasing out items need to take into account time required for businesses to deploy new products and processes, for the establishment and effect of consumer education and behaviour-change programs, and for any necessary infrastructure and recovery systems to be implemented. (Industry body)

Introduce guidelines and new targets for reducing plastic food packaging – this may also hopefully help the survival of smaller businesses such as butchers and fruit markets. (Community member)

Key finding: Implementation would benefit from a roadmap of actions to incrementally address single-use plastic impacts.

Education and behaviour-change strategies

Education and behaviour-change strategies were recommended with a range of topics suggested, including the alternatives to single-use plastics:

An education campaign could support the alternatives; buying reusable bags, put groceries back in trolley and take to vehicle. (Community member)

Community education campaigns are important for addressing behaviour change in specific groups. (Environmental group)

Education about recycling to minimise the impacts of contamination on recycling:

... supports reducing contamination at MRFs as it is critical to making our recycling system effective and sustainable. (Supplier/manufacturer)

Behavioural change programs were also raised as an important way to minimise use and impacts from single-use plastics:

Behavioural change programs are certainly needed, but I believe it should include messages about all our waste generation, and focus on "wiping out waste" as a lifestyle. (Environmental group)

Low recovery rates contribute to single-use plastic pollution as well as other plastic waste pollution requiring proactive strong leadership to implement sustainable behavioural, industrial and waste collection change. (Industry body)

Complementary approaches for business and industry

Other actions included collaborative actions to be undertaken between industry and government:

1. Voluntary action between industry and government:

Cutlery, straws, stirrers and Takeaway food containers and Takeaway coffee cups, lids – Voluntary approaches with business & industry (Industry body)

2. Incentives for industry:

Incentives to the producer for a sustainable product design that is completely recyclable including a tethered lid to allow recovery and recycling not only of the container but the lid (Environmental group)

- 3. Producer responsibility:
 - ... responsibility of producers to reduce the amount of plastic in packaging, increase the amount of recycled plastic content and cover the

cost for collecting the plastic that they include in products and product packaging. These types of policies will have an immediate, lasting and direct environmental benefit. (Community member)

Product Stewardship and Extended Producer Responsibility are specifically included in the Waste Avoidance and Resource Recovery Act. Both approaches require the producer of a product to take responsibly for their product (physical or financial) at end-of-life. No product is placed onto the market unless it comes from a renewable source and there is a clear and easy pathway for that product to be recycled or recovered. Effective Product Stewardship / Extended Producer Responsibility Schemes are one way to achieve this outcome, ensuring producers take either physical or financial responsibly for their products at end-of-life. (Industry body)

4. Sustainable design:

We believe the WA Government should legislate that all single-use carry bags, cups, straws, plates and grocery bags must be recyclable by 1st July 2020. (Supplier/manufacturer)

All fishing material and floats should be made of pre plastic materials such as metal / wood or organic material. (Community member)

5. Plastic Free Places:

This project will support pilot projects that test different approaches to community-based Plastic Free Places programs, and supporting the development of a voluntary code to phase out heavier, single-use plastic bags ... The program will take a systematic and phased approach to addressing supply chain gaps and challenges. (Industry body)

Development of recycling facilities

A key point raised from a range of community sectors in the written submissions was the need to improve or increase infrastructure to allow for better recycling of plastics.

Onshore recycling facility here in WA and across Australia to process used containers into new ones for the same purpose (Environmental group)

WA needs to own its own waste and build a recycling plant in WA. We need a Government to step up and own this problem and build a recycling plant for the future. (Community member)

I believe that in this case, government needs to be involved and offer assistance to enable some recycling start-ups and entrepreneurs to move to the next level of development/production and maintain the momentum that the public awareness has created. (Community member)

Key finding: Plastic-reduction strategies should be supported by improved local recycling facilities and/or markets.

Standardised labelling

Another action identified in the written submissions was the need for standardised labelling because existing labelling of plastics is confusing:

Current labelling is extremely confusing even for those working in waste and recycling. In a similar vein to WALGA's Consistent Communications and the State Government's Waste Sorted program, a simplified national language needs to be legislated for packaging. This would potentially reduce confusion associated with current terms such as biodegradable, degradable and recyclable and would help reduce contamination rates in kerbside commingled recyclables bins. (Government organisation)

Provide clear, unambiguous and standardised labelling which indicates how waste should be disposed (recycling or landfill etc.). I recommend the inclusion of lists of negative effects of packaging next to these symbols (especially plastics going into landfill). (Community member)

A successful labelling scheme is one that requires compulsory participation of all product manufacturers. (Industry body)

Unintended consequences from banning single-use plastics

Finally, although all written submissions were supportive of the need to reduce single-use plastics, several also noted that the government needed to ensure that there were no unintended consequences if they were to implement a ban on selected plastics:

Although single-use plastics is an issue I strongly believe should be addressed, I think to do it as a stand-alone issue is thinking rather narrowly. I believe waste reduction should be looked at as a whole, to ensure we don't just shift one problem to create another. (Community member)

Some people require single-use plastic items within their daily lives and there are no reasonable alternatives. ... is keen to ensure that these people do not feel unfairly judged through law and community perceptions on the use of single-use plastic items. (Government organisation)

It was suggested that the possibility of exemptions to banned plastics may need to be considered for some items and future consultation is required:

Plastic straws: The ... states that reductions to the availability of plastic straws will significantly impact the livelihood and accessibility to products and services for people with a disability. (Government organisation)

The need for an exemption or design of viable alternative for disabled people (an issue raised in the media recently) should be considered. (Environmental group)

... mental health perspectives should be considered for targeted education or action on cigarette butts. Individuals with a mental health condition should be consulted prior to any action or announcement. (Government organisation)

6.3 Community workshops

Community workshop attendees were asked during the group activity to identify preferred actions for the single-use plastic items they selected. These results are presented in Table 18 for the seven single-use plastics selected the most. Statewide bans on the sale or supply of items, and education and behaviour-change strategies received the greatest support. Statewide bans were supported for balloons and balloon releases, drinking straws and coffee cups and lids. Education and behaviour-change strategies were favoured for cigarette butts and filters, prepacked fruit and vegetables, and takeaway food containers. Reusable alternatives were favoured for packaging.

Table 18 – Community workshop preferred actions

Item	Frequency Mentioned	Actions Suggested
	14	Statewide ban on sale and supply
Balloons and balloon releases	8	 Education campaign or behaviour change strategy
	6	Sustainable product design
	9	Education campaign or behaviour change
Cigarette butts	6	strategyStatewide ban on sale and supply
	5	• Levy or tax
	8	Reusable alternativesEducation campaign or behaviour change
Plastic packaging	7	strategy • Legislation. E.g. extended producer
	7	responsibility scheme.
Dropached fruit and vegetables	7	Statewide ban on sale and supply Education campaign or behaviour change.
Prepacked fruit and vegetables	8	 Education campaign or behaviour change strategy
Takeaway food containers	7	Education campaign or behaviour change strategy
Straws	8	Education campaign or behaviour change strategy
	8	Statewide ban on sale and supply
Coffee cups	7	Statewide ban on sale and supply

Community workshops indicated that multiple actions would be required to effectively mitigate the impacts of single-use plastic items and may vary depending on the plastic item.

Key finding: Multi-faceted actions for each single-use plastic item were recommended.

7 Summary

General overview

Many common themes and actions to reduce the impacts of single-use plastics emerged including strong community support for the State Government to lead action to reduce the impact of single-use plastics in Western Australia.

A summary analysis of all submissions, ranking single-use plastic items in order of priority to mitigate their known impacts, is provided in Table 19.

Table 19 also highlights actions being undertaken or considered in other jurisdictions. Actions being undertaken by other jurisdictions are constantly evolving with announcements of implementation strategies occurring with increasing frequency.

Table 19 – Summary of single-use plastic items in order of priority needed for action, to mitigate known environmental impacts and some actions being undertaken by other jurisdictions.

	1	Priority rating	3		
Single-use plastic item	Survey	Written	Workshop Polling	Environmental impact	Examples of actions
Balloon releases	Low	High	High	Entanglement and ingestion by wildlife	In 2011 the State of Queensland banned single or multiple balloon releases via legislation. ⁵
Balloons	Low	Low	Medium	Entanglement and ingestion by wildlife	The European Parliament in 2019 banned plastic balloon sticks. ⁶
Barrier/produce bags	Medium	Medium	Medium	Break up into microplastics Entanglement and ingestion by wildlife	In 2019 the Australian Capital Territory Government consulted the community on target single-use plastics including fruit and vegetable produce bags. ⁷
Cigarette butts/filters	Low	Medium	High	Contamination of ecosystems & ingestion by wildlife	Since 2009 some WA local governments including Joondalup ⁸ and Cottesloe have passed local laws banning smoking on beaches to reduce cigarette butt litter.
Cotton buds with plastic shafts	Low	Low	Low	Ingestion by wildlife	The United Kingdom Government announced a ban on the sale of plastic stemmed cotton buds in England from April 2020.9
Cutlery, plates, stirrers	Medium	High	Medium	Break up into microplastics Contamination & ingestion by wildlife	In 2020 the South Australian Government passed legislation to ban cutlery and beverage stirrers. ¹⁰
Drinking straws	High	High	High	Break up into microplastics Contamination & ingestion by wildlife	In 2020 the State Governments of Queensland ¹¹ and South Australia ¹² progressed proposed bans on plastic drinking straws.

⁵ www.qld.gov.au/ data/assets/pdf_file/0028/67852/balloon-factsheet.pdf

⁶ www.europarl.europa.eu/news/en/press-room/20190321IPR32111/parliament-seals-ban-on-throwaway-plastics-by-2021

⁷ www.cmtedd.act.gov.au/open_government/inform/act_government_media_releases/chris-steel-mla-media-releases/2019/canberra-calls-for-ban-on-single-use-plastics

^{8 &}lt;u>www.perthnow.com.au/news/wa/not-a-single-fine-on-tough-smoking-ban-laws-ng-8ce60bafdc80c00f25cbf4b27310fd15</u>

⁹ www.gov.uk/government/consultations/single-use-plastic-banning-the-distribution-andor-sale-of-plastic-straws-stirrers-and-plastic-stemmed-cotton-buds-in-england

¹⁰ www.premier.sa.gov.au/news/media-releases/news/single-use-plastics-bill-passes-parliament

¹¹ www.qld.gov.au/environment/pollution/management/waste/recovery/reduction/plastic-pollution/single-use-plastic-products-ban

www.premier.sa.gov.au/news/media-releases/news/single-use-plastics-bill-passes-parliament

	1	Priority rating			
Single-use plastic item	Survey	Written	Workshop Polling	Environmental impact	Examples of actions
Fishing gear	Low Medium		High	Entanglement and ingestion by wildlife	The Norwegian Government conducts an annual collection and survey of lost nets to monitor wildlife impact and volume. 13
Lightweight plastic bags	High	Low	Medium	Break up into microplastics Contamination, entanglement & ingestion by wildlife	A ban on the sale or supply of lightweight plastics bags was introduced in Western Australia in 2018.
Microbeads	High	Medium	Medium	Absorb toxins and potential to enter the marine food chain Ingestion by wildlife	The Australian Government is working with industry on a voluntary phase-out of microbeads from personal care and cosmetic products. ¹⁴
Plastic beverage containers	High	Medium	Medium	Break up into microplastics Contamination, entanglement & ingestion by wildlife	In 2019 the State of California passed legislation requiring plastic beverage containers meet targets for post-consumer plastic content ¹⁵ . Western Australia has introduced a container deposit scheme in October 2020.
Plastic packaging	High	High	High	Break up into microplastics Contamination, entanglement & ingestion by wildlife	The United Kingdom's Plastic Pact begun in 2018, where the Government, councils, businesses and industry are working on meeting packaging redesign, reuse and recycling targets for packaging ¹⁶ .
Polystyrene	Medium	Low	Low	Contamination & ingestion by wildlife	In 2019 the South Australian Government released a plan to phase out polystyrene cups and food containers ¹⁷ .

 ¹³ cnogear.org/news/english/the-northernmost-retrieval-survey-has-ended
 14 www.environment.gov.au/protection/waste-resource-recovery/plastics-and-packaging/plastic-microbeads
 15 www.natlawreview.com/article/california-s-ambitious-plastics-bill-stalls-minimum-recyclable-content-requirements
 16 www.wrap.org.uk/sites/files/wrap/The-UK-Plastics-Pact-Roadmap-v2.pdf
 17 www.greenindustries.sa.gov.au/priorities/plastics

	Priority rating		g		
Single-use plastic item	Survey	Written	Workshop Polling	Environmental impact	Examples of actions
Prepacked fruit and vegetable	High	Medium	High	Break up into microplastics Entanglement, ingestion & contamination	Foodstuffs, a New Zealand supermarket chain and signatory to the NZ Plastic Packaging Declaration, has launched its project 'food in the nude', displaying fruit and vegetables without packaging. 18
Takeaway coffee cups/lids	High	Medium	Low	Break up into microplastics Contamination, entanglement & ingestion by wildlife	The European Parliament has announced plans to require labeling highlighting environmental hazards of incorrect disposal. ¹⁹
Takeaway food containers	Medium	Medium	Low	Break up into microplastics Contamination & ingestion by wildlife	In 2019 the South Australian Government launched Plastic Free Precincts program to transition away from disposable foodware. ²⁰
Thicker plastic bags	Low	High	Low	Break up into microplastics Contamination, entanglement & ingestion by wildlife	Jordan ²¹ , Yemen ¹⁷ and Kenya ¹⁷ have banned most thicker plastic bags.
Wet or baby wipes	Low	Low	Low	Blockage in waste treatment facilities Contamination & ingestion by wildlife	The European Parliament has announced plans to require labeling highlighting environmental hazards of incorrect disposal. No other actions currently address wet or baby wipes. ²²

¹⁸ NZ Herald 'Nude' shopping next big trend <u>www.nzherald.co.nz/sponsored-stories/news/article.cfm?c_id=1503708&objectid=12188111</u>

¹⁹ European Parliament News (27/3/2019) Parliament seals ban on throwaway plastics by 2021 www.europarl.europa.eu/news/en/press-

room/20190321IPR32111/parliament-seals-ban-on-throwaway-plastics-by-2021

www.greenindustries.sa.gov.au/plastic-free-precincts

20 Www.greenindustries.sa.gov.au/plastic-free-precincts

21 UNEP (2018) Legal Limits on Single-Use Plastics and Microplastics: A global review of National Laws and Regulations wedocs.unep.org/bitstream/handle/20.500.11822/27113/plastics_limits.pdf

²² European Parliament News (27/3/2019) Parliament seals ban on throwaway plastics by 2021 www.europarl.europa.eu/news/en/press-2 room/20190321IPR32111/parliament-seals-ban-on-throwaway-plastics-by-2021

Key findings

The high number and comprehensiveness of submissions have enabled key findings to be presented with confidence. The community is aware of and supports further actions to reduce the use of single-use plastics and mitigate their well-understood and emerging impacts.

The key findings from the public consultation are listed below.

Government action supported

- Government action to reduce the impacts of single-use plastics is strongly supported, and this is consistent across the community and other sectors.
- Submissions indicated a desire for government to lead actions to address single-use plastic impacts. Submissions have noted the progress and proactive approaches being taken by the Government so far.

Community awareness and sentiment

- Community concern for action on single-use plastics reduction focuses on a need to address the environmental impacts.
- Some single-use plastics are already being avoided by the community.
- Submissions noted the effects of reducing particular single-use plastic items on some groups within the community and this needs to be considered.
- Single-use plastics of highest concern were those commonly used by the community on a "day-to-day" basis; however, some of these items may not pose the same level of impact as items not used daily, such as balloons.
- Disposable nappies, which are single-use plastic items not listed in the issues paper, were highlighted in many submissions as a plastic that should be considered for further action.
- Awareness and concern for single-use plastic impacts can be influenced by education.

Recommended actions

- Multifaced actions for each single-use plastic item were recommended.
- Actions to address impacts favour regulatory action and sustainable product design in conjunction with education and behaviour-change campaigns. The success of the lightweight bag ban demonstrates the importance of community education campaigns being informed by subject-specific behaviour-change strategies.
- Implementation of actions would benefit from a roadmap to incrementally address single-use plastic impacts.

- Action on single-use plastics should consider the strategies being developed and implemented by other jurisdictions to minimise the impacts of single-use plastic items having the greatest environmental impacts.
- Plastic-reduction strategies should be supported by improved local recycling facilities and/or markets.

Understanding of alternatives

 There is demand for evidence-based information on compostable, degradable and biodegradable plastic alternatives to prevent unintended environmental and waste stream impacts.

Future consultation

 Engagement with manufacturers, suppliers and retailers will be required to maximise engagement with any actions to reduce single-use plastics.

Next steps

The department will present preferred options to reduce single-use plastics to government for consideration.

The management options will be guided by the outcomes of community consultation and evidence-based research.

Additional information will also be used to determine the impact, achievability and support for actions, including a representative survey of Perth metropolitan and regional areas that independently measured community sentiment and understanding of issues with single-use plastics. Key learnings from evaluation into the effectiveness of the lightweight plastic bag ban will also inform next steps, as will independent research to better understand the impacts of degradable, biodegradable and compostable plastics.

The department is also undertaking a review of plastic-reduction strategies being implemented by local, state and international jurisdictions to learn from other best practice approaches to mitigate the environmental and waste stream impacts of single-use plastics.

Actions to reduce the use of single-use plastics may include introducing legislative instruments, such as:

- statewide bans or levies
- promoting voluntary plastic-reduction strategies
- implementing community education and behaviour-change campaigns
- a combination of all of these.

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Appendices

Appendix A — Online survey

Demographic questions:

- What is the postcode for the suburb you live in?
- What age group are you in?
- What is your gender?
- Which of the following best describes your household?
- Are you currently in paid employment at all, part-time or full-time?

Questions about single-use plastics

- How concerned are you about each of the following issues with single-use plastics?
 - Plastics end up polluting our waterways and oceans
 - Plastic litter is harming our wildlife
 - Many plastics cannot be recycled
 - Plastic contaminates composting and recycling facilities
 - Plastics persist in landfill
 - Plastics use oil resources and contribute to global warming
 - Plastics are harmful to human health
- Do you support reducing the amount of single-use plastics we consume?
- For each of the choices below, please tell us how consistently you choose alternatives to single-use plastics:
 - Refuse thicker plastic shopping bags (e.g. by using your own bag)
 - Avoid buying bottled water and other beverages (e.g. by taking a reusable bottle)
 - Avoid fruit and vegetables packed in plastic (choosing loose produce)
 - Refuse straws in a café/restaurant/bar or with takeaway drinks
 - Refuse take-away coffee cups (by taking your own)
 - Look for personal care products (body wash, toothpaste etc.) that don't contain plastic microbeads
 - Look for personal care products that are not contained in single-use plastic containers
 - Avoid using plastic cutlery, plates, stirrers

- Please prioritise your top 10 single-use plastics that should be the focus of additional action to reduce their negative impacts (with 1 being the first priority or most important)
 - Balloon releases
 - Balloons
 - Barrier/produce bags
 - Cigarette butts/filters
 - Cotton buds with plastic shafts
 - Cutlery, plates, stirrers
 - Drinking straws
 - Fishing gear
 - Lightweight plastic bags
 - Microbeads
 - Plastic beverage containers
 - Plastic packaging
 - Polystyrene
 - Prepacked fruit and vegetable
 - Takeaway coffee cups/lids
 - Takeaway food containers
 - Thicker plastic bags
 - Wet or baby wipes
- Do you consider any other single-use plastics a priority?
- A number of options are available to reduce single-use plastics. These include introducing bans; levies; voluntary plastic-reduction strategies; community education. For each of your priority single-use plastics, please indicate your top two options to reduce impacts.

Appendix B — Pro forma template

Information required

- First name
- Last name
- Email address
- Mobile phone (optional)

Email body (editable)

Dear Manager,

We provide this submission urging the Western Australian Government to adopt ambitious directives against single-use plastics that are responsible for polluting our rivers and oceans, impacting marine wildlife, ecosystems and even the food we consume.

I urge you to recommend the following to ensure there is a step change at the State Government level which addresses the prevalence and increasing impacts of singleuse plastics in Western Australia.

- 1. Implement market restrictions (ban) on cigarette smoking on all WA beaches including on the spot fines for offences.
- 2. Implement market restrictions (ban) on plastic shopping bags, produce / barrier bags (fruit and vegetable bags), including:
 - Increasing the current ban on lightweight plastic bags (HDPE 35 microns thickness) to single-use plastics bags up to 70 microns.
 - Bag bans should apply to all wholesalers, importers, retailers and hospitality outlets who provide these products to their customers both in shop and online, including all small businesses.
- 3. Implement a ban on intentional and mass helium balloon releases and plastic balloon sticks and clips. Make amendments to the Litter Act 1979 (WA) to reflect that a litter offence occurs from the act of intentionally releasing a balloon (not when it lands), including on the spot fines for offenders.
- 4. Implement market restrictions (ban) single-use plastic straws, plastic cutlery (forks, knives, spoons and chopsticks), plastic plates, cotton bud sticks made of plastic, polystyrene food and beverage products and glitter including those labelled biodegradable.
- 5. Implement market restriction (ban) on the sale and manufacture of microbeads, often found in personal care products.
- Introduce clear targets for the reduction of the excessive plastic food packaging for fruit and vegetables and convenience foods sold in retail stores and online outlets.
- 7. Introduce clear, unambiguous and standardised labelling which indicates how waste should be disposed (compostable / recycling and method / landfill), the negative environmental impact of the product, and the presence of any plastics in the products. Such products would include coffee cups, baby/wet wipes, balloons and sanitary napkins. Any changes to labelling should be supported by educational program.
- 8. Facilitating investment in infrastructure and initiatives to support increasing the number of public water bubbler / water stations to reduce prevalence of single-use plastic water bottles in the environment.

- 9. Implement market restrictions (ban) on plastic bait bags.
- 10. Provide educational signage in multiple languages at known recreational fishing hotspots on the environmental impacts of plastic, particularly related to fishing gear.
- 11. Increase signage at popular beaches highlighting the impacts of plastics in our oceans, encouraging beach-goers to take their rubbish home or face fines.
- 12. Establish a Ministerial Reference Group on Plastics to identify and provide advice on alternative single-use products, innovation and benchmark practices. Representatives to include community and environmental groups, government, retailers and industry.

Thank you.

Appendix C — Workshop group activity

Questions for each single-use plastic selected

- How do people use this item?
- What alternatives could people use in place of this item?
- What challenges could people have if this item was no longer available?
- Which sectors of the community could be affected the most if this item was no longer available?
- What support would the most affected groups need to adapt to these changes?
- What are your preferred options to reduce the use of this item?

Appendix D — Workshop live polling

Pre-workshop poll questions

- What postcode do you live in?
- Have you seen plastic litter locally? If so, where?
- Are alternatives to single-use plastics available locally?
- How aware are you of the impacts of single-use plastics?
- Do you support reducing the amount of single-use plastics we consume?
- How consistently do/will you choose alternatives to single-use plastics?
- Which of the following plastics should be the highest priority? (Select 3)
 - Single-use plastics listed mirror those included in the Let's not draw the short straw – reduce single-use plastics issues paper.
- Please provide any additional comments below ...

Post-workshop poll questions

- How aware are you of the impacts of single-use plastics?
- Do you support reducing the amount of single-use plastics we consume?
- How consistently do/will you choose alternatives to single-use plastics?
- Which of the following plastics should be the highest priority? (Select 3)
 - Single-use plastics listed mirror those included in the Let's not draw the short straw – reduce single-use plastics issues paper.
- Please provide any additional comments below ...

$\begin{array}{lll} \mbox{Appendix E} - \mbox{Online survey additional single-use} \\ \mbox{plastics} \end{array}$

Item	Frequency mentioned
Cling wrap and zip-lock	6.44%
Nappies	4.95%
Containers - cosmetics	4.62%
Small kids toys (promotional)	3.70%
Toothbrushes and toothpaste	3.05%
Hospital waste	3.00%
Agricultural and industrial plastic	2.26%
Plastic bags - all	1.95%
Condoms and sanitary products	1.91%
Bottle caps and rings	1.80%
Plastic bags - bin	1.53%
Polyester in clothing	1.49%
Wrapper - lolly and lollipop sticks	1.40%
Sticky tape, stickers, and labels	1.27%
Coffee pods or tea bags	1.07%
Stationary	1.05%
Bubble wrap	1.01%
Bread bag clips	0.96%
Glitter/confetti	0.81%
Small sauce packages (e.g. soy sauce)	0.74%
Gloves	0.72%
Plastic bags - pet/animal	0.68%
Soft plastics - general	0.68%
Gardening items	0.61%
Plastic bags - bread	0.59%
Styrofoam	0.57%
Electronics	0.48%
Coat hangers and pegs	0.37%
Disposable razors	0.35%
Synthetic grass	0.33%
Cable ties	0.31%
Receipts, tickets, cash	0.20%
Sponges	0.13%
Polyvinyl chloride (PVC)	0.07%
Tupperware	0.04%
Utensils (e.g. washing powder scoop)	0.04%

$\label{eq:continuous_problem} \textbf{Appendix} \ \textbf{F} - \textbf{Workshop group activity items}$

Single-use plastic Item	All WA	Regional	Metropolitan
Balloons	10%	9%	15%
Cigarette butts	10%	8%	13%
Plastic packaging	10%	11%	5%
Prepacked fruit and vegetables	8%	6%	11%
Takeaway food containers	8%	9%	3%
Straws	7%	8%	5%
Coffee cups	7%	7%	7%
Cutlery	5%	5%	5%
Fishing gear	5%	4%	7%
Polystyrene	5%	4%	7%
Wet wipes	5%	6%	2%
Beverage containers	4%	5%	0%
Thick plastic bags	3%	3%	2%
Barrier bags	2%	1%	5%
Microbeads	2%	2%	3%
Cotton buds	1%	1%	2%
Plastic bags	1%	2%	0%
Glad wrap	1%	1%	2%
Nappies	1%	1%	2%
Plastic containers	1%	1%	2%
Promo plastic toys	1%	1%	0%
Compostable plastics	0%	0%	2%
Dental products	0%	0%	2%
Dog poo bags	0%	1%	0%
Glitter	0%	0%	2%
Pens (texta)	0%	1%	0%
Reverse circulation bags	0%	1%	0%
Silage wrappers	0%	1%	0%
Water bottles	0%	1%	0%

Appendix G — Online survey policy preferences

Item	Education campaigns / Behaviour change strategies	Labelling requirements	Levies and extended producer responsibility schemes	Procurement procedures	State-wide ban on the sale or supply	Sustainable product design	Voluntary agreements with business and industry
Balloon releases	54.32%	8.34%	11.33%	3.62%	54.11%	33.15%	9.86%
Balloons	54.09%	12.82%	13.18%	2.57%	28.57%	59.70%	9.37%
Barrier/produce bags	33.38%	4.68%	19.23%	3.95%	49.16%	53.23%	16.16%
Cigarette butts/filters	41.23%	10.86%	35.20%	3.98%	40.59%	39.50%	8.23%
Cotton buds with plastic shafts	29.14%	9.91%	15.65%	3.61%	37.36%	71.54%	9.64%
Cutlery, plates, stirrers	33.04%	5.60%	15.95%	3.67%	45.86%	67.46%	12.06%
Drinking straws	29.18%	3.50%	11.30%	2.48%	66.43%	57.70%	9.42%
Fishing gear	57.37%	13.17%	22.96%	5.38%	10.85%	60.29%	17.03%
Lightweight plastic bags	29.01%	3.01%	17.63%	3.15%	77.50%	37.41%	7.74%
Microbeads	26.43%	13.08%	20.06%	3.10%	73.72%	31.59%	8.23%
Plastic beverage containers	36.97%	6.96%	26.00%	4.72%	41.10%	59.89%	12.96%
Plastic packaging	30.62%	6.12%	28.26%	4.78%	46.51%	57.46%	15.50%
Polystyrene	24.17%	6.41%	27.22%	5.55%	56.66%	46.35%	13.61%
Prepacked fruit and vegetable	31.31%	4.36%	20.84%	3.78%	62.10%	44.03%	17.32%
Takeaway coffee cups/lids	39.85%	5.13%	19.77%	3.44%	43.21%	63.78%	14.60%
Takeaway food containers	36.50%	5.42%	21.24%	4.13%	34.08%	70.58%	16.83%
Thicker plastic bags	35.82%	4.85%	20.40%	3.69%	56.15%	47.53%	11.76%
Wet or baby wipes	48.54%	12.69%	16.29%	3.19%	22.54%	72.45%	8.38%

Most selected Second most selected Third most selected

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