

Disclaimer

Department of Water and Environmental Regulation 168 St Georges Terrace Perth Western Australia 6000 Telephone +61 8 6364 7000

Facsimile +61 8 6364 7001

National Relay Service 13 36 77 www.dwer.wa.gov.au

© Government of Western Australia

December 2017

This work is copyright. You may download, display, print and reproduce this material in unaltered form only (retaining this notice) for your personal, non-commercial use or use within your organisation. Apart from any use as permitted under the *Copyright Act 1968*, all other rights are reserved. Requests and inquiries concerning reproduction and rights should be addressed to the Department of Water and Environmental Regulation.

Disclaimer

This document has been published by the Department of Water and Environmental Regulation. Any representation, statement, opinion or advice expressed or implied in this publication is made in good faith and on the basis that the Department of Water and Environmental Regulation and its employees are not liable for any damage or loss whatsoever which may occur as a result of action taken or not taken, as the case may be in respect of any representation, statement, opinion or advice referred to herein. Professional advice should be obtained before applying the information contained in this document to particular circumstances.

This publication is available on our website <u>www.dwer.wa.gov.au</u> or for those with special needs it can be made available in alternative formats such as audio, large print, or braille.

Message from the Minister



The McGowan Labor Government has announced its intention to implement a ban on lightweight single-use plastic bags from 1 July 2018. We have taken this initiative in response to:

- evidence of the negative environmental impacts of these bags;
- strong community support across Western Australia for banning this type of bag;
- the growing trend towards the use of alternatives such as reusable bags and boxes;
- similar bans being successfully introduced in South Australia, Tasmania, the Northern Territory, the Australian Capital Territory and soon to commence in Queensland;
- support from the retail sector for a consistent approach across Australia;
 and
- economic analysis showing no net cost to the economy of a shift to more efficient (robust and reusable) alternatives.

Studies, including those by CSIRO, have found that lightweight single-use plastic bags:

- are easily blown by the wind (from bins, landfill and households) into our streets, waterways and ocean;
- cause the death of marine life;
- enter the food chain, posing a risk to public health;
- do not breakdown in landfill;
- are difficult to direct into recycling processes; and
- consume significant oil and water resources.

Even biodegradable and compostable alternatives harm marine wildlife and persist in landfill.

In November 2017, a survey of Western Australian households found that:

- 84 per cent of respondents support a ban on lightweight single-use plastic bags;
- 85 per cent support including biodegradable and compostable bags in the ban; and
- 54 per cent are already using alternatives to lightweight plastic bags most of the time.

The Government considers that the best way to reduce plastic bags is through a statewide ban that targets lightweight single-use plastic bags. The ban will not impact the use of heavier (reusable) bags, dog waste bags, nappy bags or produce (barrier) bags.

I invite you to respond to this consultation to help Western Australia implement the best possible approach to reducing the number of lightweight single-use bags.

Hon Stephen Dawson MLC Minister for Environment

Contents

Message from the Minister
Consultation on how to reduce the use of lightweight single-use plastic bags
Introduction 8 What is a lightweight single-use plastic bag? 8 Why take action on lightweight single-use plastic bags? 8 Options to reduce lightweight single-use plastic bags. 9 Why include biodegradable, degradable and compostable bags? 14 Plastic bag bans in Australia. 14
Western Australian ban
Preparing for the ban20Retailers20Consumers21Plastic bag suppliers23
Additional consultation questions
Glossary
Appendix 1
References



Consultation on how to reduce the use of lightweight single-use plastic bags

How we will consult

The Department of Water and Environmental Regulation (DWER) is working in partnership with the Boomerang Alliance to engage the community and key stakeholders in discussions about how best to reduce lightweight single-use plastic bags and their impacts on the environment in Western Australia.

The Boomerang Alliance is a partnership between community and environment groups that campaign for better waste outcomes, particularly in relation to plastic waste. The Boomerang Alliance aims to create healthy, pollution free environments by promoting maximum resource efficiency and zero waste. It promotes systemic changes to deliver social, economic and environmental benefits.

This discussion paper seeks feedback on how the Government can reduce the impact of lightweight single-use plastic bags. It focuses on the Government's preferred option which is to implement a statewide ban and seeks your views on the impact of the preferred approach. The paper also provides an opportunity for you to review other options that were considered but not pursued.

The paper considers how retailers and consumers can prepare for the proposed changes. Following the public consultation period, DWER will analyse submissions and make recommendations to the Minister for Environment.

Stakeholder consultation promotes transparency, improves design and ensures risks are identified and managed early. It also allows innovative ideas to be proposed for consideration.

You can provide feedback via an <u>online survey</u> or by a written submission to the Department.

This consultation provides an opportunity for industry and consumers to raise issues, concerns and opportunities about the options and provide estimates of how measures to reduce plastic bags may impact their businesses, personal finances or shopping experience.

By making a submission you are consenting to the submission being treated as a public document. Your name will be published; however, your contact address will be withheld for privacy. If you do not consent to your submission being treated as a public document, you should either mark it as confidential, or specifically identify the parts that you consider confidential, and include an explanation.

Submissions including online survey responses will be collated and summarised in a report following the close of the consultation period.

The Department may request that a non-confidential summary of the material is also given. It is important to note that, even if your submission is treated as confidential by the Department, it may still be disclosed in accordance with the requirements of the <u>Freedom of Information</u> <u>Act 1992</u>, or any other applicable written law.

The Department reserves the right before publishing a submission to delete any content that could be regarded as racially vilifying, derogatory or defamatory to an individual or an organisation.

You can subscribe at www.dwer.wa.gov.au/plastic_bag_ban to receive updates on the ban. News of stakeholder briefings and workshops will also be advertised here.



► Online survey

The online survey may be accessed at www.surveymonkey.com/r/J7TN2W8.

► Written submissions

Written submissions must be received by 5pm (WST) on **Friday 09 March 2018**. No late submissions will be considered.

Written submissions can be lodged by email (preferred) to plasticbagban@dwer.wa.gov.au

Hard copies can be mailed to:

Plastic Bag Ban
Department of Water and
Environmental Regulation
Locked Bag 33
CLOISTERS SQUARE
WA 6850

► For further information:

Email: plasticbagban@dwer.wa.gov.au



Introduction

In 2007, Australian lightweight single-use plastic bag consumption was estimated to be around 3.9 billion, or 184 bags per person. Between 2007 and 2017, lightweight plastic bags were banned in South Australia, Tasmania, the Northern Territory and the Australian Capital Territory.

Plastic bags make up a small percentage of the waste and litter streams but they have disproportionate impacts on the environment, particularly marine wildlife. States and territories with plastic bag bans have seen a marked reduction in plastic bag litter (with the exception of the Northern Territory).³

Western Australians used approximately 360 million lightweight plastic bags,⁴ or 140 bags per person in 2017.⁵ An estimated five million bags are littered in Western Australia each year.

What is a lightweight single-use plastic bag?

A lightweight plastic single-use bag is made wholly or in part of plastic, has handles, is usually less than 35 micrometres (or microns, which is one-millionth of a metre) in thickness and is provided by a retailer for the purpose of carrying purchases.

Why take action on lightweight single-use plastic bags?

In Australia and internationally, there is increasing evidence of the cumulative impact that plastic has on soils, waterways, marine environments and fauna.

Under the Commonwealth *Environment Protection* and *Biodiversity Conservation Act 1999*, marine debris is recognised as a 'key threatening process' that 'threatens or may threaten the survival, abundance or evolutionary development of a native species or ecological community'.

Reducing the number of plastic bags used is an important measure to reduce the amount of plastic entering our environment. These bags are designed to be single-use and have an average useful life of 12 minutes – or the time it takes to transport purchased items home from where they are bought.



Options to reduce lightweight single-use plastic bags

The Government has identified five options for the long-term reduction of lightweight single-use plastic bags:



The five options are discussed in Appendix 1. The Government's preferred approach, and the focus of this discussion paper, is option two – a statewide ban on the sale or supply of lightweight single-use plastic bags.

Option two provides a number of advantages over the alternatives.

It is consistent with action to reduce plastic shopping bags in most other Australian states and territories. National consistency benefits Western Australia as it allows us to apply the learnings of other jurisdictions locally. Retailers that operate across Australia also benefit as they can operate within a single regulatory regime.

This option is also consistent with commitments by national retailers Coles, Woolworths and IGA to ban lightweight single-use plastic bags from their stores by 1 July 2018.

Option two does not impose a compulsory cost on consumers, retailers or suppliers. Substantial savings may be possible for retailers when they no longer have to purchase lightweight single-use plastic bags to provide to consumers. Retailers can also save by providing boxes to consumers rather than paying to dispose of them.

Plastic bag suppliers may benefit through switching to higher margin, lower volume alternatives such as reusable bags.

✓ Implementing a lightweight single-use plastic bag ban in Western Australia

Litter

Around 360 million lightweight plastic shopping bags are used annually in Western Australia. While most plastic bags end up in landfill, the Keep Australia Beautiful Council estimates that one to two per cent are littered⁶ – which suggests that almost five million plastic bags enter the Western Australian environment each year.

Not all litter is deliberate. An estimated 47 per cent of wind-borne litter escaping from landfills is plastic, with the majority of this being plastic bags. Lightweight flexible plastics are highly mobile and easily blown from areas on land into waterways and the ocean.

Many plastic bags are used away from the usual supermarket-to-home route. Plastic bag litter is associated with purchases consumed away from home, such as takeaway food and drink. Inappropriate disposal of rubbish away from home can lead to lightweight plastic bags becoming litter in the marine environment.

As well as the impact on wildlife, plastic bags are unsightly in the environment, creating visual pollution.

Impacts on the marine environment



All plastics, including plastic bags, are persistent in the environment. Plastic bags are particularly attractive to marine wildlife as they look similar to jellyfish, a preferred food of seabirds, turtles, sharks,

and fish. Once ingested, a plastic bag does not breakdown and can block the intestinal tract of the animal consuming it, causing the animal to die of starvation. They also fill with air meaning the animal cannot dive to escape collisions or predators. For smaller animals the impact is primarily due to entanglement. Animals become tangled or stuck in plastic bags and drown because they cannot free themselves.

Since 2003, the <u>Commonwealth Environment</u>

<u>Protection and Biodiversity Conservation Act 1999</u>

has listed 'injury and fatality to vertebrate marine life caused by ingestion of, or entanglement in, harmful marine debris' as a key threatening process.⁸

Globally the impact of plastics on the marine environment is significant. It is estimated that one million seabirds and over 100,000 mammals die every year as a result of plastic ingestion or entanglement. The 2014 CSIRO Marine Debris Report found that approximately three-quarters of the rubbish along the Australian coastline was plastic. In coastal and offshore waters, most floating debris is plastic. The density of plastic in oceans ranges from a few thousand pieces of plastic per square kilometre to more than 40,000 pieces of plastic per square kilometre. Debris is more highly concentrated around major cities,9 suggesting that the majority of litter in Australian waters comes from Australian consumers and industries.

Plastics do not biodegrade – they break down into small fragments and create microplastics. As plastics break down into smaller and smaller fragments, they can be ingested by lower order marine animals, which in turn are eaten by larger fish. Persistent organic pollutants found in the ocean adsorb onto plastics and micro-plastics. Concentrations of persistent organic pollutants on microplastic particles are several orders of magnitude higher than the surrounding seawater. If ingested by marine species they present a potential route for these chemicals to enter the human food chain.¹⁰

A Senate inquiry into the threat of marine plastic pollution in Australia and Australian waters found there were few estimates of costs of marine plastic pollution available, and noted the Asia-Pacific Economic Cooperation estimated cost of ocean plastics to the tourism, fishing and shipping industries was \$1.3 billion in our region.¹¹

International, national and business responses to date



In 2003, the Australian Environment Protection and Heritage Council committed to phasing out lightweight, single-use plastic bags by 1 January 2009. It reaffirmed this commitment

in June 2007. In submissions to a Consultation Regulatory Impact Statement in 2007, retailers expressed concern over regulation of plastic bags and the extra time taken at the checkout, and indicated that any option needed to allow retailers to continue to provide their customers with a choice. The introduction of a mandatory charge for plastic bags was considered the most appropriate action at the time.

As states and territories and the Commonwealth were not able to agree on a national approach, there had been no coordinated national approach to plastic bags since 2007. States began implementing their own bans and South Australia was the first to do so in 2009.

Nationally, major retailers agreed to a voluntary Plastic Shopping Bag Code of Practice in 2002 to reduce plastic shopping bag use by 50 per cent. The code operated from 2003 to 2005 and led to a 45 per cent reduction of plastic bags issued by supermarkets at the time. Since the end of the code in 2005, the number of plastic bags used has increased, and continues to rise. Nevertheless, the results of the code demonstrate the effectiveness of intervention strategies (voluntary or mandatory) in affecting behaviour change at the point of sale.

More recently, national retailers Coles, Woolworths and IGA committed to ban lightweight single-use plastic bags from their stores by 1 July 2018, while Bunnings and Aldi have already phased out the use of lightweight single-use plastic bags.

Community support for action on plastic bags



Community support for action on plastic bags has been growing as people increasingly understand the environmental impacts of plastic waste and the need to stop millions

of bags entering the waste stream every year. Public campaigns such as #banthebag and ABC's television show, War on Waste, have raised awareness and generated significant public support for a ban on lightweight single-use plastic bags.

A survey of Western Australian households conducted in November 2017¹² found that:

- 95 per cent of respondents were concerned about the impacts of plastics on waterways, oceans, wildlife and landfill sites;
- 77 per cent used alternatives to lightweight single-use plastic bags at least some of the time;
- 84 per cent supported a ban on lightweight single-use plastic bags; and
- 85 per cent supported extending that ban to include biodegradable and compostable lightweight bags.

Australians have supported action to reduce the impact of plastic bags for some time. A 2008 Victorian survey, conducted as part of a plastic bag levy trial, found that 86 per cent of surveyed customers supported initiatives to reduce plastic bag use. A 2015 New South Wales poll found that 64 per cent of respondents supported a total bag ban in supermarkets and stores.

The community is supportive of government intervention to reduce plastic bag use because bags are:

- given away for free in large numbers, which limits the effectiveness of other options;
- designed as a single-use or disposable product;



- not essential to product integrity;
- littered in large numbers, creating visual and environmental impacts;
- persistent in the environment;
- easily replaced by alternatives; and
- not widely accepted into the kerbside recycling system.¹⁵

A number of Western Australian local governments have moved to ban lightweight, single-use plastic bags under local laws. A survey of local governments by the Western Australian Local Government Association (WALGA) found widespread support for a statewide ban on plastic bags. WALGA has since passed a resolution in support of a Western Australian ban.¹⁶

Economic benefits from a ban on lightweight plastic bags

A recent cost benefit analysis of plastic bag ban options¹⁷ found there was no net economic cost from a switch from lightweight plastic shopping bags to more durable alternatives. This analysis identified there may be:

- savings to the retailer associated with not providing free lightweight single-use plastic bags to consumers;
- costs for consumers and/or retailers associated with providing alternative plastic bags (including heavier plastic bags and reusable bags);
- avoided litter costs; and
- avoided landfill operating costs.¹⁸

The study found the greatest benefit would be derived from a ban on lightweight and heavier plastic bags. Most importantly, the analysis found that there was no net economic cost to such a ban.

The study only considered the direct financial costs of supply and disposal of plastic bags. It did not account for the significant socio-economic benefits of improved outcomes for the natural environment and the potential for economic benefits from eco-tourism opportunities.

The study found consumers that chose to purchase bin liner bags as an alternative may incur some cost. The analysis did not consider the impact of reduced costs to consumers that may occur as a result of lower local government rates.

The recent survey of consumer attitudes in Western Australia found that the vast majority of respondents rated the environmental benefits of banning lightweight single-use plastic bags very highly and nominated multiple acceptable alternatives for household waste.¹⁹

The following questions relate to assumptions about costs after a ban is in place. By answering these questions, you will help us better understand the costs and benefits of a plastic bag ban.

Question for consumers

When lightweight plastic bags are no longer available, how many of the following bags are you likely to buy each year?

- Reusable bags.
- Heavier plastic bags sold by retailers to replace lightweight bags.
- Bin liners.



Questions for local governments and waste facility operators

Can you quantify the costs that will be avoided when the amount of lightweight plastic bags entering the waste stream is reduced and there is less contamination by lightweight plastic bags in recyclables? Are the savings likely to be passed on to ratepayers?

Question for retailers

Please list the likely impacts
(benefits or costs) of the ban on your
business. Are any costs likely to be passed on
to consumers or absorbed?

Implementing a lightweight single-use plastic bag ban in Western Australia

Why include biodegradable, degradable and compostable bags?

The names used for some bio-plastic products available in the Australian plastics market suggest that these products are an environmentally beneficial alternative to traditional plastics. Biodegradable plastics cannot be distinguished from conventional plastics by non-experts and the lack of standardised labelling and regulation on products has led to confusion by consumers, recyclers, composters and local governments. This adversely influences purchases, separation, collection and recovery of bag products. A biodegradable product is one that is capable of being decomposed by bacteria or other living organisms and thereby avoiding pollution.²⁰ However, bags marketed as biodegradable and compostable do not readily break down in the environment or in domestic composting units they require a commercial composting facility in order to fully decompose.

Many lightweight plastic bags are also marketed as degradable or oxo-degradable bags, but these are not biodegradable. Degradable plastic is a term for a polymer that will break down into smaller parts or pieces (to the extent that they are not readily seen), creating microplastic pollution. Oxo-degradable plastic includes conventional plastic that contains an additive to induce breakdown under favourable conditions (such as when oxygen and sunlight are present). Like degradable plastics, these bags create microplastic pollution.

According to the United Nations Environment Programme (UNEP) there is little evidence to suggest that products labelled as biodegradable will significantly decrease the volume of plastic entering the ocean, or the physical and chemical risks that plastics pose to the marine environment.²¹ The Australian Bioplastics Association also stated that "biodegradable plastics were not designed to be a solution for marine litter".²²

While there has been considerable research into biodegradable plastics, studies have shown that there is no significant difference between standard and degradable plastics in the environment or when they are ingested by wildlife.

Given that the impacts on the environment and on wildlife are unlikely to be improved by a switch to degradable plastics or compostable bags, the Western Australian Government is considering including biodegradable, degradable and compostable bags in the ban.



Question

Should biodegradable, degradable and compostable bags be included in the bag ban?

Plastic bag bans in Australia

Maintaining a consistent approach across Australian jurisdictions is important for manufacturers and suppliers of plastic bags, as well as retailers, to minimise the cost of operating under different regulatory regimes.

By July 2018, most Australian states and territories will have banned lightweight single-use plastic bags. South Australia, Tasmania, the Northern Territory and the Australian Capital Territory already have plastic bag bans in place, and Queensland will ban lightweight single-use plastic bags from 1 July 2018. The Victorian Government has commenced community consultation for a lightweight single-use shopping bag ban.

The scope of the Western Australian ban will be in line with best practice and made through new regulations under the *Environmental Protection Act 1986*.

Coles, Woolworths and IGA have announced they will remove all lightweight single-use shopping bags, including biodegradable, degradable and compostable bags, from their supermarkets throughout Australia by July 2018, whether or not a plastic bag ban is in place. National retailers Bunnings and Aldi have already phased out lightweight plastic bags.

Northern Territory

Legislation: Environment Protection (Beverage Containers and Plastic Bags)

Act 2011

Applies to retailer: Yes

Min bag thickness: 35 microns **Excludes biodegradable bags?** Yes

The Northern Territory review of the ban was impeded by a lack of pre-ban data but found over 70 per cent of 294 people interviewed supported the ban. Litter collection data indicated a slight decrease in the total amount of plastic bags in the litter stream and that the littering of heavy plastic bags

(not subject to the ban) had remained relatively stable.²⁵

Queensland

Legislation: Waste Reduction and Recycling

Amendment Bill 2017

Applies to retailer: Yes

Min bag thickness: 35 microns **Excludes biodegradable bags?** No

The Queensland ban will be consistent with bans in other states, except that degradable and biodegradable bags will be included in the ban. Western Australia is considering whether to adopt this approach.

ACT

Legislation: Plastic Shopping Bags Ban

Act 2010

Applies to retailer: Yes

Min bag thickness: 35 microns

There have been two reviews of the cent of shoppers indicated they did not



Excludes biodegradable bags? Yes

ACT ban. The most recent review of the ban demonstrated that support increased from 58 to 65 per cent between 2012 and 2014, and 71 per want the ban overturned. Significantly, 68 per cent of people did not want the ban extended to cover all plastic bags.²⁶

Legislation: Plastic Shopping Bags (Waste

Avoidance) Act 2008

Applies to retailer: Yes

Min bag thickness: 35 microns **Excludes biodegradable bags?** Yes

A review of the ban in 2011 found significant community support for the ban (up to 80 per cent) and a 45 per cent reduction in plastic bag litter. More than half of the people interviewed for the review supported extending the ban to heavy and thick plastic bags.23

The increase in bin liner use by households in South Australia after the ban (from 15 per cent to 80 per cent) indicated that community education around plastic alternatives should include the use of bin liners.

Tasmania

Legislation: Plastic Shopping Bags Ban

Act 2013

Applies to retailer: Yes

Min bag thickness: 35 microns **Excludes biodegradable bags?** Yes

Reports of retailers (particularly small businesses) providing slightly thicker single-use plastic bags in response to the ban are the subject of an investigation by the Environmental Protection Authority in Tasmania.²⁴ Providing a plastic bag thicker than 35 microns is allowed under the Tasmanian regulations (and all existing plastic bag ban legislation in Australia).

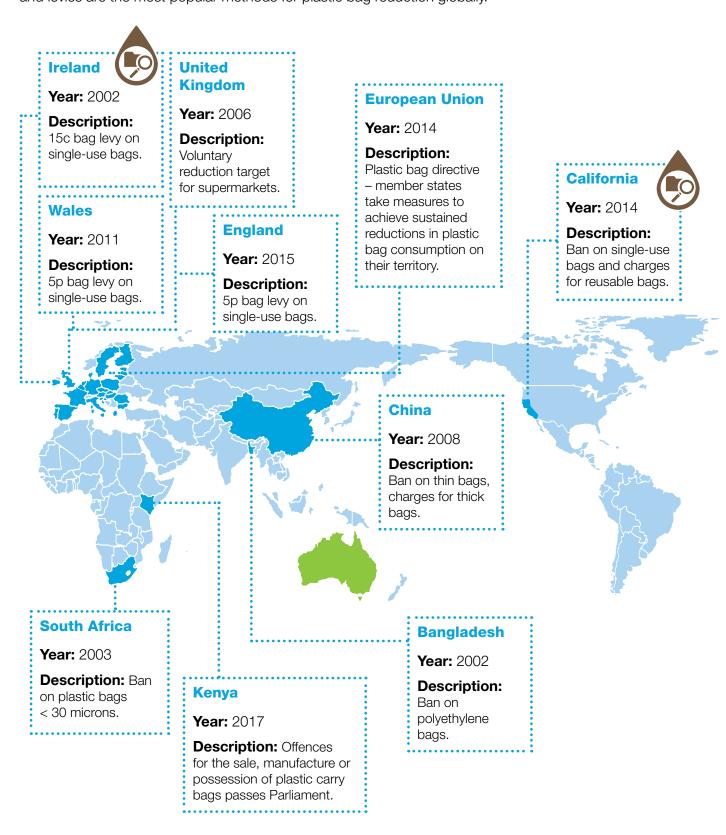
Victoria

The Victorian Government has announced that a lightweight, single-use shopping bag ban will be implemented in Victoria and community consultation has opened. The form of the ban and the date of implementation has not been announced.

■ Implementing a lightweight single-use plastic bag ban in Western Australia ▶

International action on bags

Government-led changes to reduce plastic bag consumption and litter are common internationally. Bans and levies are the most popular methods for plastic bag reduction globally.





Case study: Ireland's plastic bag levy

Ireland imposed a EUR 0.15 (AUD 0.24) levy on single-use plastic bags in 2002 and required that the levy be passed on to the consumer. The levy resulted in a 90 per cent reduction in plastic bag consumption in its first year of operation. Levy funds were directed to an environment fund and raised EUR 9.6 million in 2002.

In 2006, use of single-use plastic bags was found to be increasing as consumers became desensitised to the levy. The levy was increased to EUR 0.22 (AUD 0.35) to ensure the levy remained effective in limiting the consumption of single-use plastic bags.



Case study: California's single-use bag ban

In August 2014, California became the first US state to enact legislation imposing a statewide ban on single-use plastic bags at large retail stores. The Bill also required a 10 cent minimum charge for recycled paper bags, reusable plastic bags, and compostable bags at certain locations. The ban was supposed to take effect in July 2015, but a referendum forced the issue to the ballot for November 2016. The ban passed with 52 per cent of the vote and took effect immediately.

A formal review of the outcomes of the Californian plastic bag ban is not currently available. It has been reported that early litter data shows that plastic bag litter has reduced in the 12 months since the ban was introduced.²⁷



✓ Implementing a lightweight single-use plastic bag ban in Western Australia ▶

Western Australian ban

How would a lightweight single-use plastic bag ban work?

What bags will be banned?

The Western Australian Government intends to ban lightweight single-use plastic bags with handles provided by retailers that have a thickness of 35 microns or less. Consideration is being given to including biodegradable, degradable and compostable bags in the ban.

Who will the ban apply to?

The ban will apply to all retailers. A retailer is proposed to be defined as any person or business that sells goods in trade or commerce. This definition will apply to people or businesses including, but not limited to, supermarkets, corner stores, takeaway food outlets and restaurants, sports stores, department stores, hardware stores, appliance stores, butchers, bakeries, and market vendors.

It will be an offence for a retailer to provide or sell a banned bag.

A retailer will be allowed to sell or supply an alternative to a banned bag.

Bags that will not be banned

Any bags that do not meet the description of a lightweight, plastic shopping bag provided by retailers for the purpose of carrying purchases will not be included in the ban. For example, the following bags will not be banned:

- bin liners:
- dog waste bags;
- nappy bags; and
- barrier or produce bags.

When will the ban be implemented?

The Western Australian plastic bag ban will take effect from 1 July 2018. It will be an offence for retailers to sell or supply a banned bag after this date.

Questions for retailers and plastic bag suppliers

Does the proposed implementation date of 1 July 2018 provide enough time for your business to make the necessary changes to comply with the plastic bag ban? How will your business make the transition?

How will the ban be enforced?

The ban will be enforced through regulations made under the *Environmental Protection Act 1986*.

The proposed regulations will make it an offence for a retailer to provide or sell a banned bag or to provide false or misleading information about a banned bag.

The penalties imposed will be consistent with existing offences under the *Environmental Protection Regulations* 1987.

The Department of Water and Environmental Regulation will administer the new regulations and will be responsible for enforcing the ban provisions.

Question for local governments

Can you foresee any unintended consequences arising as a result of the proposed compliance and enforcement regime?





Which bags will be banned?

Lightweight, single-use plastic bags made of plastic, whether or not the plastic is biodegradable, degradable or compostable, with handles and a thickness of 35 microns or less.





Which bags will NOT be banned?

Barrier bags for unpackaged perishable food such as fruit, vegetables, meat and fish. Bin liners and garbage bags.

Dog waste bags provided by councils at dog parks and beaches. Paper bags or cardboard bags.

Heavier weight single-use department store plastic bags.











Recommended reusable alternatives

Reusable green.



Reusable hessian.



Reusable cooler.





Preparing for the ban

Once the ban is in place on 1 July 2018, plastic bag suppliers, retailers and consumers will all need to adapt to the change. This section covers the type of changes required and some of the options available to prepare and comply with the ban.

Retailers



Retailers will need to consider how they will implement the bag ban on 1 July 2018. Any retailers that routinely provide a lightweight single-use plastic bag to customers

should consider the following actions in the lead-up to the ban:

- Stop ordering bags that will be banned from 1 July 2018 and run-down stocks in the lead-up to the ban.
- Decide whether the business will sell or supply alternative bags.
- Discuss alternatives with suppliers. Your current supplier may be able to provide you with a suitable alternative.
- Decide whether the business will offer alternatives, such as the reuse of cardboard boxes.
- Discuss implementation of the ban with staff, for example how to assist customers who may not know about or support the ban.
- Consider placing signage around the business to inform customers in the lead-up to the ban.

Alternatives to banned bags

There are alternatives to providing customers with a banned bag. Retailers should ensure that any alternatives to lightweight plastic bags are fit for purpose:

Provide or sell an alternative bag

There are a number of alternative bags that will not be subject to the ban. Multiple-use bags made of recycled materials, fabric, and hessian, or heavier woven plastic 'green' bags, are acceptable alternatives to a banned bag. Cooler bags that are designed for re-use are also an alternative.

Reuse boxes

For some retailers, goods are delivered to the business in boxes and these can be reused by customers to carry purchases. Reusing boxes may provide a saving to the business by avoiding the cost of box disposal. Customers can reuse boxes for shopping in future or dispose of them via their household recycling service.

Do not supply a bag

Each retail business should consider the type of goods purchased by their customers. Businesses may find that there is no need for further packaging and may reduce costs by not providing free bags for customers. For example, if takeaway food is already packaged in a single container, there may be no need to put it in a bag when it can be carried away by hand. Similarly, if a product comes packaged in a box, it may not require a bag.

Following the consultation period, information for retailers will be made available on DWER's website at www.dwer.wa.gov.au/plastic_bag_ban. Online resources for retailers will include factsheets, printable posters to notify customers, information about alternative bags, and tools for checkout staff.

Questions for retailers

Do you expect the ban on lightweight plastic bags to change the way you do business? How will the services you provide for customers change? How do you plan to adapt to the ban after 1 July 2018?

Can you identify any unintended impacts (costs or otherwise) that may affect small retailers?

Consumers



Consumers should consider how their shopping behaviours will change after 1 July 2018.

Many households already have reusable shopping bags, but may forget to take them to the shops. After 1 July 2018, retailers may choose to sell reusable bags at the checkout as an alternative. Consumers that purchase groceries online may be charged for the cost of thicker plastic bags provided after the ban is in place.

In order to avoid inconvenience and the need to buy bags after 1 July 2018, consumers should consider the following:

- Check that you have a supply of reusable shopping bags – enough to carry a regular weekly shop.
- If you usually drive to and from the supermarket, consider storing your shopping bags in the car.
- Keep a reusable bag with you in your handbag, backpack or satchel for small purchases on the go.
- Consider how you reuse single-use bags around the home and what you can use instead.
- Recognise that retailers and customer service staff are abiding by the law in not supplying single-use bags.

Questions for consumers

How will your household prepare for the plastic bag ban? Are you likely to use any of the suggestions above or will you do other things? If so, what?

Environmental impacts of alternative bags

In the move away from lightweight single-use plastic shopping bags, there is likely to be

increased use of alternative shopping bags made from a variety of materials. In selecting alternatives to a lightweight single-use plastic shopping bag, it is preferable people make choices that will have a lower environmental impact.²⁸

In making decisions about alternative bags, it is important that the each alternative's lifecycle impacts are considered. A lifecycle analysis considers the environmental impacts associated with all the stages of a product's life from raw material extraction to materials processing, manufacture, distribution, use, disposal or recycling.

A lifecycle analysis of shopping bag alternatives prepared for Zero Waste South Australia found that bags that can be reused multiple times were more beneficial than all single use options. A reusable bag made from recycled PET plastic achieved the greatest environmental benefit compared to a standard single-use shopping bag. This was closely followed by a non-woven plastic (polypropylene) 'green' bag.²⁹ The more durable the bag, the more likely it is to be used multiple times which increases its environmental benefit.

From a lifecycle point of view, single use paper bags have high environmental impact. This is partially offset by the use of recycled content, but the high energy costs associated with their production, combined with their single-use, makes them less than ideal as an alternative to single-use plastic bags. The reuse of cardboard boxes is a better alternative than single-use paper bags.

An unintended consequence of a ban on lightweight plastic bags could be that retailers supply heavier weight plastic bags for free.

Questions for retailers

If you intend to supply heavier weight plastic bags for free, would this incur additional costs? Do you intend to pass on any additional costs of providing a heavier weight plastic bag to consumers?

■ Implementing a lightweight single-use plastic bag ban in Western Australia ▶

Accounting for secondary uses of bags

A recent survey of consumers in Western Australia³⁰ shows that single-use plastic shopping bags are reused around the home, especially for the hygienic collection of waste, by 72 per cent of households. The survey also found that households readily identified alternative solutions such as using paper to line bins, washing them out, or storing food scraps in a sealed container. While consumers are keen to reuse the bag, as noted on page 10, landfills are a significant source of litter.

Householders also reuse lightweight plastic bags to collect dog waste, and dispose of household sanitary, incontinence and nappy waste. A number of people receive medical care in their home. Waste from dressings is often wrapped in plastic shopping bags prior to disposal.

Consumers will need to find alternative solutions for these secondary uses after 1 July 2018. Direct replacement, that is purchasing plastic bags in place of the free shopping bags, will have a financial cost. Avoiding these costs will require consumers to think about the most appropriate methods of disposing of their waste.



Bin liners

Although bin liners will not be banned, consumers currently avoid the cost of purchasing bin liners by using plastic shopping bags. There are many types of plastic bags that can be used instead including bread bags, salad bags, and other packaging plastic.

Food waste can be wrapped in newspaper and deposited directly into the outside general waste bin if you do not have a separate organic waste collection or compost bin. Alternatively, kitchen and bathroom bins can be lined with newspaper or paper bags.





Dog waste

Many local governments provide dog waste bags in areas such as parks and beaches. These bags will not be banned and will be available after 1 July 2018. Alternatively, purchase disposable dog waste bags in pet shops. Dog waste should be disposed of in the general waste bin or the organic waste bin if you have access to this service.





Sanitary, ncontinence, nappy waste Nappy and other bags that are purchased for the disposal of this waste will not be included in the proposed ban. Consumers looking for a non-plastic alternative can wrap this waste in newspaper or other types of bags prior to disposal.





The prohibition on the sale or supply of a banned plastic bag only applies to retailers. The ban does not extend to doctors' surgeries or care services in the home. If you require plastic bags to dispose of waste as a result of a medical condition, please discuss your requirements with your doctor or care provider.



If heavier weight plastic bags are used as an alternative to lightweight plastic bags, the amount of plastic in the waste stream may increase. A shift from lightweight to heavyweight plastic bags may increase the costs of waste services provided by local governments.

Plastic bag suppliers

DWER has identified eight Western Australian businesses that import and distribute lightweight single-use plastic bags.

Six of the businesses indicated that they intend to supply alternative bags, such as large brown paper bags, polywoven bags, calico bags and thicker plastic bags, to customers.

Affected businesses indicated they require sufficient notice of the ban commencement date and a clear definition of the bags included in the ban to allow them to make appropriate plans. This will give them time to run-down stock and order supplies of appropriate bags.



Questions for plastic bag suppliers

Can you outline how the plastic bag ban will impact your business? How will your business adapt to the ban and how long do you need in order to be ready to offer alternatives to your customers?



✓ Implementing a lightweight single-use plastic bag ban in Western Australia

Additional consultation questions

1.	Do you support a lightweight single-use plastic bag ban for Western Australia? ☐ Yes ☐ No	4.	How consistently do you use an alternative to lightweight plastic bags (for example, your own bags)? ☐ Almost always
2.	How concerned are you about lightweight single-use plastic bags polluting our waterways harming wildlife, persisting in landfill and consuming resources? Very concerned Somewhat concerned Can't say Not very concerned Not at all concerned		 ☐ Most of the time ☐ Sometimes ☐ Rarely ☐ Almost never ☐ Not applicable/I don't do the grocery shop When lightweight plastic shopping bags are banned, what alternatives would you prefer to use? (mark all boxes that apply) ☐ Paper bags
3.	In the last six months, what methods have you used to carry your shopping home? (mark all boxes that apply) A lightweight plastic bag provided by retailed An alternative (heavy/reusable/paper) bag provided free by retailer Box supplied by retailer Reusable shopping bags (for example, 'green' or calico bags) that you paid for Other (please specify)		 □ Thicker plastic bags that can be reused □ Reusable 'green' bags □ Reusable cotton or calico bags □ Reusing a cardboard box □ Other (please specify)
		6.	Would you support thicker department store bags being included in a ban in the future? ☐ Yes ☐ No

7. How strongly do you support or oppose each of the following options considered to reduce the environmental impacts of lightweight plastic bags?

	Strongly support	Support	Neutral	Oppose	Strongly oppose
Status quo					
Statewide ban on the sale or supply of lightweight single-use plastic bags					
Plastic bag levy					
Voluntary agreements with retailers					
Education campaign					

8. What other plastic pollution should the government, businesses and communities work together to address?

9.	What strategies to address other plastic pollution do you think would be most effective?	>

26

Glossary

Term	Definition
Alternative bag	A shopping bag sold or provided by the retailer to carry purchases that is not a banned bag.
Biodegradable	Capable of being decomposed by bacteria or other living organisms in a suitable environment.
Compost	Decayed organic material that can be added to soil.
Compostable	Able to be composted in a suitable environment. A substance that is compostable can be added to other biodegradable materials and will breakdown into compost.
Degradable	Breaks down or degrades. Degradable plastic bags break down into smaller plastic fragments.
HDPE	High density polyethylene. Most single-use plastic bags are made in whole or in part of HDPE.
Levy	A tax imposed on the sale of a product and passed on to the consumer in order to raise funds, change consumer behaviour, or fund a program.
LDPE	Low density polyethylene. Most heavier 'department store' bags are made in whole or in part of LDPE.
PET	Polyethylene terephthalate. Used to make plastic bottles. Can be recycled to make post-consumer plastic products like bags.
Polypropylene	Similar to PET. Used to make non-woven plastic products like bags.
Retailer	Any person or business that sells goods in trade or commerce.
Secondary use	Use of a plastic shopping bag for something other than carrying purchases, such as disposing of waste.

Appendix 1

Options for the reduction of lightweight single-use plastic bags in Western Australia

In deciding to take action on lightweight shopping bags, the Western Australian Government considered a number of policy options. These options include a business as usual or status-quo option; the option to pursue national consistency by banning lightweight plastic bags; the implementation of a plastic bag levy; or to promote voluntary action by retailers. These options are outlined below.



Business as usual

The business as usual approach to lightweight plastic shopping bags means there is no coordinated approach to the growing problem of

plastic bag pollution.

By not responding to the problem of plastic bag pollution, the Western Australian Government risks being out of touch with the significant majority³¹ of people who believe that action must be taken to address the problem of single-use plastics in our environment.

Regardless of Government action, major retailers Coles, Woolworths and IGA have all committed to the removal of lightweight plastic shopping bags from their stores by 1 July 2018. This means that for the majority of the shopping public, lightweight plastic shopping bags will no longer be available at their local supermarket regardless of a Government decision.

This option does not create an incentive for shoppers to reduce their use of lightweight single use shopping bags. The Government does not consider this to be a preferred option because plastic bag consumption continues to rise despite education efforts to reduce their use and, as such, it does not adequately address the significant problem of plastic pollution in the environment.



Statewide ban on lightweight plastic shopping bags

This is the Western Australian Government's preferred approach

to dealing with lightweight shopping bags.

A ban on lightweight plastic shopping bags is consistent with action taken by other Australian states and territories, and has been shown to be effective in other jurisdictions (nationally and internationally). This approach is supported by major retailers which will significantly assist with implementation. Most importantly, the Western Australian community overwhelmingly supports a ban on lightweight plastic shopping bags. A recent survey of Western Australian households found that 84 per cent of people surveyed supported a Government ban on lightweight plastic bags.

Adjustments will be required by plastic bag suppliers, retailers and consumers.

Plastic bag suppliers

These businesses will need to run down current stocks of lightweight plastic bags and inform customers (retailers) of alternatives to usual ordering choices. Plastic bag suppliers have informed the Government of their need to be fully informed of the definition of a banned plastic bag and early notification of ban implementation timing.

▶ ◀ Implementing a lightweight single-use plastic bag ban in Western Australia ▶

Retailers

This option will directly affect retailers who will be prohibited from the sale or supply of lightweight plastic shopping bags from 1 July 2018. There are potentially significant savings available to retailers who will no longer be expected to provide free shopping bags to customers. Alternative shopping bags are likely to cost more and retailers are free to pass these costs on to customers. Customers will not be obliged to purchase a bag from the retailer.

Consumers

Most retail customers keep a supply of reusable plastic shopping bags that can be used instead of lightweight plastic bags. However, significant behaviour change may be necessary for consumers to remember to take their reusable bags with them when shopping and have them ready for occasional or impulse shopping. The purchase of alternative shopping bags (in the event that the consumer forgets to bring reusable bags) will mean additional costs to consumers. However this should diminish over time as new behaviours become normal.

Lightweight plastic bag levy

A plastic bag levy operates as a tax on the sale of a lightweight

plastic bag. This tax is then passed on to the consumer. Levies encourage behaviour change (through increased costs) and raise money that could be used towards Government priorities. The successful Irish plastic bag levy raised over EUR nine million in 2002 and reduced plastic bag consumption by 89 per cent. Unfortunately, evidence indicates that behaviour changes

triggered by a plastic bag levy are not permanent. Consumers start to normalise the additional costs and plastic bag use increases. In 2006, the Irish Government needed to significantly increase the plastic bag levy to maintain its effectiveness.

Introducing plastic bag levy legislation is much more complicated than the introduction of a ban on lightweight plastic bags. There are significant administrative overheads for Government in managing the implementation and ongoing effectiveness of a levy, and these costs would also be borne by retailers. Retailers will increase prices to cover the cost of the levy from customers and the funds collected would be paid to Government.

This option has none of the advantages of national consistency and public support inherent in the proposed ban on lightweight single-use plastic bags, and poses significant implementation costs for retailers and Government.



Voluntary agreements

A national plastic shopping bag voluntary code of practice for retailers operated between 2003 and 2005. The code reduced

shopping bag consumption by 45 per cent during its operation. The code is no longer in effect and shopping bag consumption has increased since 2005.

Voluntary agreements can be effective for those that adopt them, but they are less likely to be adopted by smaller retailers that sell goods used or consumed away from home. Lightweight plastic bags provided for goods consumed away from home are more likely to become litter.

A new voluntary agreement will not reduce the consumption of plastic shopping bags by the same amount as options two or three, and long-term plastic bag reductions are dependent on retailers committing to the code indefinitely.



The voluntary nature of this option places fewer restrictions on retailers and consumers, but is unlikely to result in significant long-term reductions in plastic bag pollution in the environment. The Western Australian Government considers that this option does not meet community expectations to take significant action on plastic bags.



Education campaign

Education campaigns to reduce plastic (and plastic bag) use have been implemented by Governments, non-government

organisations and retailers. These campaigns attempt to change consumer behaviour by:

- increasing awareness of the environmental impact of plastic bags; and
- offering low cost alternatives making alternatives to plastic bags more convenient and lowering the associated cost.

The availability of free lightweight plastic shopping bags at the checkout gives consumers the opportunity to avoid changing their behaviour.

The recent survey of Western Australian households indicated that most people use a reusable bag at least some of the time. This suggests that most people know that using a reusable bag is a more environmentally responsible option. Despite good consumer understanding of the problem, Western Australians continue to use hundreds of millions of shopping bags every year.

Significant ongoing investment would be required to ensure an education campaign resulted in change behaviour by the target audience.

Ninety per cent of respondents to the survey agreed that more needed to be done to address plastic pollution. An education campaign is unlikely to deliver on the public's expectations to reduce plastic pollution.



References

- 1 Cain, R., Oke, M. Hyder (2008) *Plastic Retail Carry Bag Use, 2006 and 2007 Consumption Hyder Consulting*, Environment Protection and Heritage Council.
- 2 2007 population of Australia was 21,181,000. ABS: www.abs.gov.au/ausstats/abs@.nsf/mf/3239.0.55.001.
- 3 Keep Australia Beautiful (2016) *National Litter Index 2015–2016* National Overview. Available online at: kab.org.au/wp-content/uploads/2016/12/NLI-15-16-Overview-KAB-APC-Nov-16.pdf.
- 4 O'Farrell, K. Envisage Works (2017) Personal communication (email) 27 November.
- 5 2017 population of Western Australia was 2.576 million. ABS: www.abs.gov.au/ausstats/abs@.nsf/mf/3101.0.
- 6 Keep Australia Beautiful Council, (2014). National Litter Index 2013/14.
- 7 Environment Protection and Heritage Council (2002) *Plastic Bags in Australia National Plastic Bags Working Group Report to the National Packaging Covenant Council*. Available online: https://www.nepc.gov.au/system/files/resources/0c513e54-d968-ac04-758b-3b7613af0d07/files/ps-pbag-rpt-npbwg-report-npcc-200212.pdf.
- 8 Department of Environment and Energy (2017) (Draft) *Threat Abatement Plan for the impacts of marine debris on vertebrate marine life*. Australian Government. https://www.environment.gov.au/system/files/consultations/5101e251-39d3-4b07-92b0-c22289f5c437/files/draft-tap-marine-debris-2017.pdf.
- 9 Hardesty, BD, C Wilcox, TJ Lawson, M Lansdell and T van der Velde (2014) *Understanding the effects of marine debris on wildlife. Final Report to Earthwatch Australia*. Available online: publications.csiro.au/rpr/pub?pid=csiro:EP147352.
- 10 Andrady, A. (2011) *Microplastics in the marine environment*. Marine Pollution Bulletin (62) pp1596-1605. Available online: www.sciencedirect.com/science/article/pii/S0025326X11003055.
- 11 The Senate Environment and Communications References Committee (2016) *Toxic tide: the threat of marine plastic*. Commonwealth of Australia. Report Parliament of Australia.
- 12 Boomerang Alliance (2017) Western Australian Households Views on Plastic Waste 2017, Unpublished report prepared for the Department of Water and Environmental Regulation.
- 13 Australian Retailers Association, KPMG (2008) Trial of government and industry charge on plastic bags report of findings.
- Omnipoli report 2015: d3n8a8pro7vhmx.cloudfront.net/boomerangalliance/pages/121/attachments/original/1439341231/plastic_bag_poll.png?1439341231.
- 15 Environment Australia, Nolan ITU (2002) *Plastic Shopping Bags Analysis of Levies and Environmental Impacts*, p 3 Available online: www.environment.gov.au/archive/settlements/publications/waste/plastic-bags/analysis.html.
- 16 WALGA, Media (06 July 2017) Local Government Says: Ban the Bag. Available online at: www.walga.asn.au/News,-Events-and-Publications/Media/Local-Government-Says-Ban-the-Bag.aspx accessed 02 November 2017.
- 17 Marsden Jacobs Associates (2016) *Plastic Bag Ban Options Cost Benefit Analysis*. Report prepared for the Victorian Department of Environment, Land, Water and Planning. Available online at engage.vic.gov.au/application/files/1915/0580/1564/Plastic Bags Ban Options Cost Benefit Analysis Report.pdf.
- 18 As above.
- 19 Boomerang Alliance (2017) Western Australian Households Views on Plastic Waste 2017.
- 20 en.oxforddictionaries.com/definition/biodegradable.

- 21 Kershaw, P.J. (2015) Biodegradable plastics and marine litter misconceptions, concerns and impacts on marine environments. Report produced for the Global Partnership on Marine Litter by the United Nations Environment Programme.
- 22 www.bioplastics.org.au/biodegradable-plastics-not-designed-solution-marine-litter/.
- 23 Aspin, M. (2012) Review of the Plastic Shopping Bags (Waste Avoidance) Act 2008. Report prepared for the Government of South Australia. Available online at: www.zerowaste.sa.gov.au/upload/resource-centre/publications/plastic-bag-phase-out/PBActReview-maspin-Nov2012_2%20-%20final.pdf accessed 3 November 2017.
- 24 Richards, B. (9 July 2017) Concerns about single-use bags prompt review into use of thicker bags at retailers. Online news article available at: https://www.themercury.com.au/news/tasmania/concerns-about-single-use-bags-prompt-review-into-use-of-thicker-bags-at-retailers/news-story/8439ed65472ac35e66de62d57b5ac178 Accessed 31 October 2017.
- Wheeler, M. (2014) Northern Territory Plastic Bags Ban Review. Report prepared for the Northern Territory Government by Rawtec Pty Ltd. Available online at: ntepa.nt.gov.au/ data/assets/pdf file/0008/285038/plastic bag ban review report rawtec.pdf Accessed: 31 October 2017.
- 26 ACT Government (2014) Review of the Plastic Shopping Bags Ban (Report). Available online at: www.environment.act.gov.au/ data/ assets/pdf file/0017/602018/20140407-ESDD BagBan Report 2014 Final.pdf accessed 31 October 2017.
- 27 www.mercurynews.com/2017/11/13/editorial-success-californias-first-in-the-nation-plastic-bag-ban-works/.
- 28 O'Farrell, K. (2009). LCA of shopping bag alternatives. Final report produced for Zero Waste South Australia by Hyder Consulting.
- 29 As above.
- 30 Boomerang Alliance (2017), Western Australian Households Views on Plastic Waste.
- 31 As above.



How to make a submission

► Online survey

Access the online survey at www.surveymonkey.com/r/J7TN2W8.

► Written submissions

Submissions can be lodged by email (preferred) <u>plasticbagban@dwer.wa.gov.au</u>.

Hard copies can be mailed to:

Plastic Bag Ban

Department of Water and Environmental Regulation

Locked Bag 33

CLOISTERS SQUARE

WA 6850

► Closing date

Friday 09 March, 2018 5pm (WST)

► For further information

Telephone: (08) 6364 7000

Email: plasticbagban@dwer.wa.gov.au