



Tangaroa Blue Foundation submission for the proposed banning of lightweight plastic shopping bags in Western Australia

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This submission is made on behalf of the Tangaroa Blue Foundation and refers to the WA Department of Water and Environmental Regulation's discussion paper "Implementing a lightweight single-use plastic bag ban in Western Australia". Tangaroa Blue Foundation is a leading marine debris mitigation organisation which coordinates the Australian Marine Debris Initiative (AMD). As part of this initiative, marine debris has been removed from beaches and waterways around Australia since 2004. Every item removed has been logged and entered into the Australian Marine Debris Initiative Database which provides for long term marine debris issues to be identified and monitored.

Over the last 14 years Tangaroa Blue Foundation along with other AMDI partners, have conducted thousands of clean-up events across Australia. These clean-ups have yielded over 10 million items of marine debris captured in the Australian Marine Debris Database. In WA during 2016, this included 4595 plastic bags (2% of everything collected) during clean-up events. This percentage remained consistent at 2% of total debris removed in 2017 (total of 6995 plastic bags), however, plastic film remnants (pieces of bags and wrapping) increased from 10% of all items collected in 2016, to 13% in 2017 (Source: Australian Marine Debris Initiative) highlighting the degradation process of plastic bags in the environment. These statistics alone are alarming and support the action of banning plastic bags.

Tangaroa Blue Foundation is particularly concerned about plastics in the marine environment where they cause harm to wildlife through ingestion, entanglement and loss of habitat. Fragmented and degrading plastic poses a higher risk due to a greater number of species being able to ingest the smaller pieces. When ingested by wildlife, plastic creates the sensation of being full but provides no nutritional value. Eventually the animal will starve, die and decompose leaving behind the plastic it consumed to potentially impact another animal. Additional impacts from plastic ingestion include blockages, perforations to the digestive system, or having potential long-term disease implications¹. Research has shown that plastic also adsorbs toxins from ambient seawater; therefore, it is possible that these toxins will bioaccumulate through the food web, eventually also impacting humans^{2,3}.

In addition to the wildlife impact, plastic bags can cause damage to vessels (blocking water intake pipes and fouling propellers), contribute to blockages in stormwater systems which increase the likelihood of flooding after rain events, affects amenity by being unsightly and can have a negative economic impact by affecting tourism and fishing industries.

The Tangaroa Blue Foundation supports a comprehensive ban on all single-use plastics, including but not limited to single-use plastic bags. Any ban to specifically address plastic use and litter needs a preventative approach. Marine debris is a persistent problem which needs to be addressed at the source.



We strongly support the West Australian Government's proposal to ban the sale and supply of single-use plastic bags through Option 2 (state-wide ban), supplemented by Option 5 (education campaign). Option 3 (levy) is only supported as a secondary option or complementary option for thicker bags. Prevention is better than cure – banning the supply, sale and use of plastic bags is preferred over the stop-gap measure of charging for the product. We are happy with the general concept of the information covered in the discussion paper and will provide comments relating to the issues raised, rather than address specific questions meant for consumers, retailers and suppliers.

Issues raised:

Implementation of a ban, starting 1 July 2018 is achievable and appropriate as it allows entry into a new financial year and is separated from consumer heavy Christmas periods. The sooner these bags are banned the better, but it is important that it is implemented properly and fully understood, to be effective. An education program for both consumers AND retailers should be a key feature prior and during the introduction of a ban. It is vital everyone understands why a ban is being put in place and what alternative practices they should follow. It is important that these education programs are properly funded and have clear targets as well as being backed up with compliance auditing.

The proposed ban should include biodegradable, degradable and compostable bags. As presented by the United Nations Environment Program (UNEP), there is no difference between high density polyethylene (HDPE) and biodegradable bags once in the marine environment and when ingested by wildlife. We also agree that the lack of official definitions of the terms 'biodegradable', 'degradable' and 'compostable' creates confusion for consumers and allows loopholes to be exploited. Labelling an item 'biodegradable' will likely contribute to a rise in littering as these items are wrongly perceived to be not harmful to wildlife. Furthermore, degradable bags pose a further issue, breaking up into small pieces at a much faster rate (compared to regular HDPE) which could translate to increased impacts on the environment compared to regular plastic bags.

The degradation of plastic released into our environment is highlighted in the AMDI Database's plastic film remnant category which is defined as soft plastic pieces that represent less than 50% of an intact item. In 2017, 43,383 plastic film remnants were recorded as opposed to 6995 plastic bags (more than 50% intact). The totals of plastic film remnants far outweigh the plastic bag category and must be included when reporting plastic bag litter levels. Between 2004 and 2017, 100,287 plastic film remnants (pieces of bags, wrap etc.) were collected in Western Australia during clean-up events reported to the AMDI Database. (Source: Australian Marine Debris Initiative).

The lightweight ban should include all bags up to and including 70-microns, similar to those used in department stores, to ensure that retailers don't exploit this as loophole by just increasing their 35-micron plastic shopping bags to 36-microns in thickness.

Lightweight plastic bags also end up in landfill. This is the largest single point source for littered plastic bags and windborne plastic litter and contributes to the significant number of plastic bags retrieved from the environment in Western Australia by volunteers. Alternatives to thicker bags, such as



consumers using their own bags or boxes, must be encouraged. The best way to do this is to ban thicker bags as well.

Tangaroa Blue Foundation fully supports this proposed ban of lightweight plastic bags but recommends this as a first stage of a total phase-out of single-use plastics, including plastic straws, plastic cutlery, plastic cups and coffee cups lined with plastic.

Questions

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

- Status quo – **Strongly oppose**
- State-wide ban on the sale or supply of lightweight single- use plastic bags – **Strongly support**
- Plastic bag levy – **Not preferred, but conditionally support**
- Voluntary agreements with retailers – **Strongly oppose**
- Education campaign – **Strongly support**

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

Specifically, the Western Australian Government should:

- Rollout a complete ban of all single-use plastics. Single-use plastics represent a major source of pollution in Western Australia and throughout the world. These items are used for a few minutes but persist in landfill and in the environment for centuries, impacting environment health, waste management systems and drainage systems, which will only be exacerbated with population increases. This all has economic impacts with rising costs associated with waste management and environmental remediation.
- Add bait bags and heavier LDPE bags to the proposed ban. Bait bags are used adjacent to the marine environment, and if not managed by the user, can easily enter the environment. In the past 14 years 11,762 bait and tackle bags have been removed through the Australian Marine Debris Initiative highlighting a need for action on this issue.
- Address the release of helium balloons, and the use of balloons in places where there is a likelihood of them escaping into the environment.

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

- Continue building the campaign and strategy concerning discarded fishing equipment, specifically tackle and fishing line. As in the case of bait bags, this source of debris often is associated with activities adjacent to water bodies and present an easy transference into



the marine and freshwater environment. Further, recreational fishing is an expanding activity across the state. Since 2004, fishing equipment including fishing line represents 43,743 items collected in the AMDI Database.

- Strongly encourage the WA plastics and logistics industries to adopt the Operation Clean Sweep program (www.opcleansweep.org.au) which aims for zero plastic resin pellet loss into the environment from industry sources. The loss of plastic resin pellets has environmental impacts through ingestion by wildlife, but also results in financial loss to the companies through resource loss, increased occupational health and safety risks and potential regulatory fines for industrial pollution.
- Invest in microplastic research, mitigation and impacts. Microplastics are increasingly recognised as a threat to the environment, wildlife and human health, and span a range of items including fibres (e.g. from clothes, rope, cigarette butts etc.), film, pellets, beads and scrubs. We encourage the WA State Government to strongly support the Federal Government's plan to ban microbeads in scrubs by July 2018 if the industry has not been able to self-regulate the use of this item in products that are literally washed down the sink into the ocean. We also strongly support research to develop washing machine filters that can capture microfibres when clothes are washed.
- Investigate claimed 'disposable' and 'flushable' plastic items. These include polystyrene cups and plates, straws, plastic food-ware, assorted plastic packaging and food trays, and wet wipes. Convenient and fast represents the take-away food culture in Australia, and the world. Food and drink items are generally sold in throwaway packaging. Straw reduction campaigns have recently seen wider coverage and could easily be promoted through local government. Ideally all food packaging should be looked at for future ban or policy considerations. Even banning words that confuse consumers such as 'disposable' and 'flushable' may assist in driving trends that reduce single-use plastic consumption.
- Retailers should be encouraged, even incentivised to use alternatives to plastics. Great success has come from this approach through programs like Responsible Cafes, where consumers were given discounts for bringing their own reusable takeaway coffee cups to cafes.
- A behaviour change strategy that educates members of the public on simple and achievable ways to reduce their single-use plastic use, including support for programs like Plastic Free July. Provide information on costs associated with litter/waste in relation to rates and taxes; financial support for organisations conducting clean-up events and Source Reduction Plans as well as creating minimum standards on waste levels for those organisations receiving government funding e.g. grants/tenders/schools and all government departments.



- An overarching strategy that links community clean-up effort to where it is needed most, and how to mitigate it at the source, including the need for consistent data collection methodology through the Australian Marine Debris Database for all clean-up activities.
- Clear jurisdictional boundaries on what issues are dealt with at federal, state and local government levels to ensure pollution/litter and marine debris issues can be raised and escalated in the appropriate arenas. This will ensure issues aren't left unaddressed e.g. illegal dumping, plastic resin pellet pollution.

As outlined in this submission Tangaroa Blue Foundation believes a ban on lightweight single-use plastic bags will have a significant positive effect on the marine environment and is an achievable and reasonable requirement to place on retailers and consumers based on research, data and evidence that has been presented. A plastic bag ban should however only be a first step and should be strengthened by further programs and policies including a Container Deposit Scheme and strategies to reduce the use of single-use plastics as a whole.

References:

1. Poeta et al. 2017
2. Engler 2012, Rochman et al. 2015