Submission No 88

INQUIRY INTO WASTE AVOIDANCE AND RESOURCE RECOVERY AMENDMENT (PLASTICS REDUCTION) BILL 2021

Organisation: Animal Liberation

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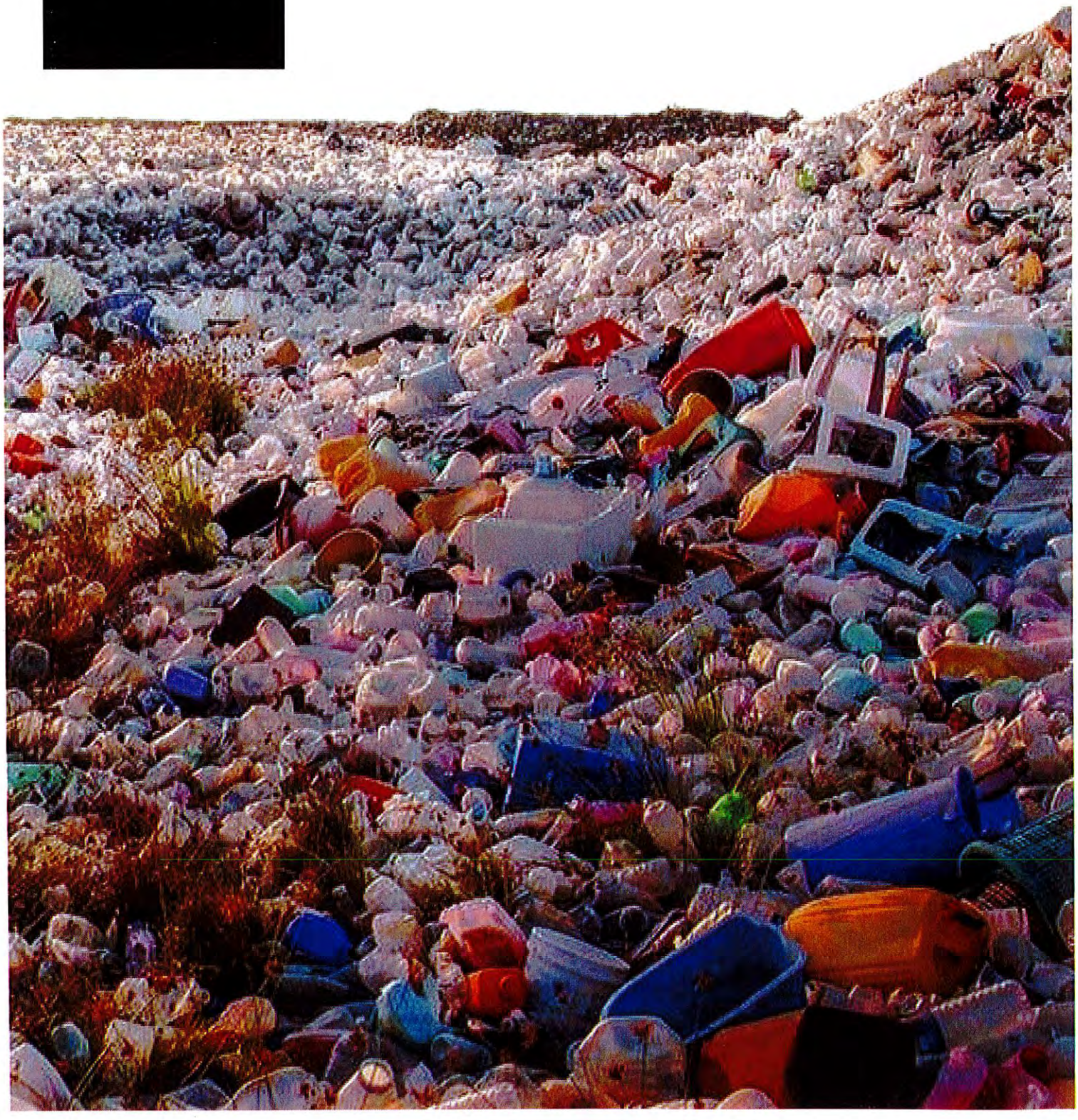
NSW DEPARTMENT OF PLANNING, INDUSTRY AND ENVIRONMENT

WASTE AVOIDANCE & RESOURCE RECOVERY AMENDMENT (PLASTIC REDUCTION) BILL 2021

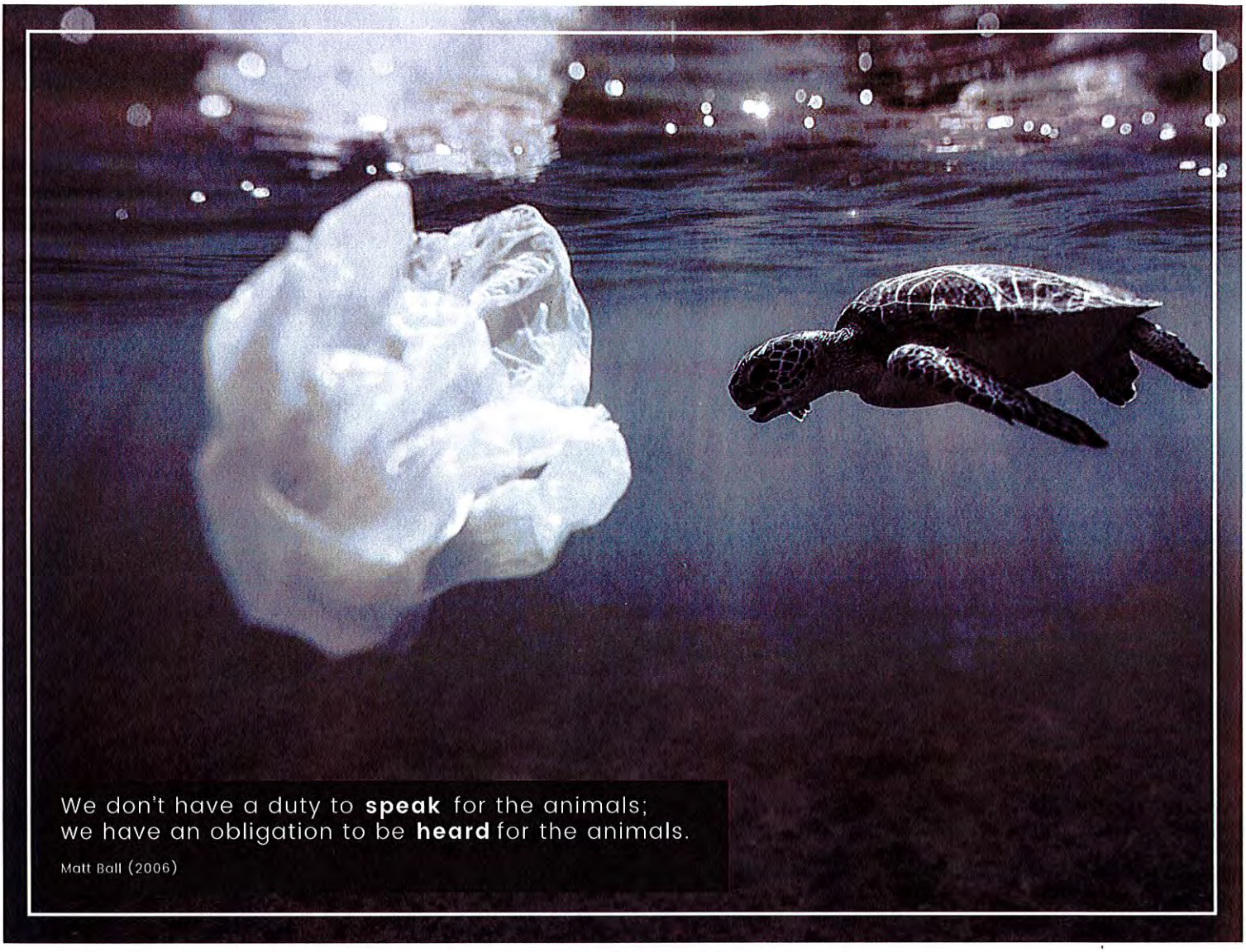
AN ANIMAL LIBERATION SUBMISSION



We acknowledge the Traditional Owners of country throughout Australia and recognise their continuing connection to land, waters and culture.

We acknowledge that this document was written on land stolen from and never ceded by the Gadigal People.

We pay our respects to their Elders past, present and emerging.



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ABOUT ANIMAL LIBERATION

Animal Liberation has worked to permanently improve the lives of all animals for over four decades. We are proud to be Australia's longest serving animal rights organisation. During this time, we have accumulated considerable experience and knowledge relating to issues of animal welfare and animal protection in this country. We have witnessed the growing popular sentiment towards the welfare of animals, combined with a diminishing level of public confidence in current attempts, legislative or otherwise, to protect animals from egregious, undue, or unnecessary harm. Our mission is to permanently improve the lives of all animals through education, action, and outreach.

INTELLECTUAL PROPERTY RIGHTS

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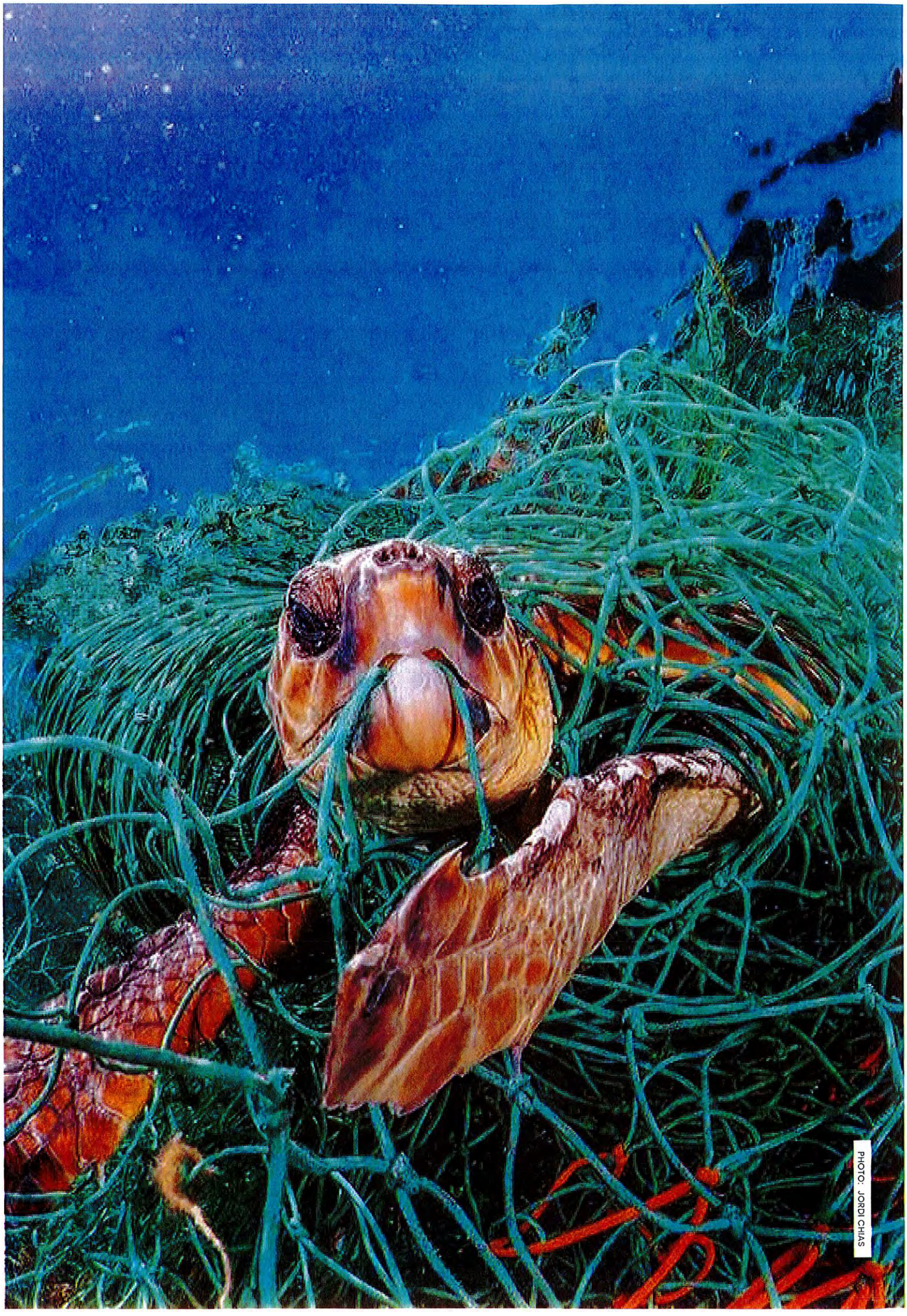


PHOTO: JORDI CHIAS

3 May 2021

Portfolio Committee No. 7 - Planning and Environment
portfoliocommittee7@parliament.nsw.gov.au

Animal Liberation
Compassion without compromise

We present this submission on behalf of Animal Liberation.

Animal Liberation is pleased to lodge a submission in response to NSW Government Portfolio No 7, Planning and Environment's Committee's, Inquiry into the Waste Avoidance and Resource Recovery Amendment (Plastics Reduction) Bill 2021.

We request that it be noted from the outset that the following submission is not intended to provide an exhaustive commentary or assessment in response to the BOS proposed changes. Rather, our submission is intended to provide a general examination and responses to select areas of key concern.

As such, the absence of discussion, consideration or analyses of any particular aspect or component must not be read as or considered to be indicative of consent or acceptance. For the purposes of this submission, Animal Liberation's focus covers aspects that we believe warrant critical attention and response.

We have reviewed the Waste Avoidance and Resource Recovery Amendment (Plastics Reduction) Bill 2021 and related and relevant legislation and documents. Our submission in response to the Bill and additional commentary we believe is relevant and warranted is outlined as follows.

Lisa J. Ryan
Regional campaign co-ordinator

Alex Vince
Campaign director

DISCLOSURE & CONSENT

Animal Liberation confirms its consent to the Committee to publish this submission in full on the Committee's website.

WHAT HAPPENS TO THEM

MATTERS TO THEM

REGAN 1983

PHOTO: JASMINE FÄRLING

1. PREFACE

1.1 Animal Liberation recognises and has continued to raise awareness about the unmitigated damage caused to and suffered by the environment, other-than-human animal species and ecosystems as a result of plastic pollution. Such pollution is adversely impacting the health of our oceans and fresh water catchments and is over-burdening current waste management facilities, including landfill.

1.1.1 Through our advocacy, education and action, Animal Liberation has continued to draw direct links between the risks and impacts faced by other-than-human animals and ecosystems, the broad environment and the sustainable welfare of the human species. We live in a shared environment and the survival of our collective habitat relies on a practical notion and concept of co-existence, inter-dependency, and respect for all beings and natural resources.

1.2 While progress has been achieved with recycling, as consumers we are also generating more waste than ever before. This is increasing pressure on our environment and its capacity to absorb disposed waste and provide a sustainable source for new materials. Animal Liberation supports all ethical and environmentally sound endeavours that encourage government, industries, businesses, communities and consumers to work together to identify opportunities for waste reduction and resource recovery.

1.3 There is no doubt that plastics pollution is a major growing issue that requires urgent action. Simultaneously, however, our government's continue to ignore other major causes and contributors of pollution that are having an equally catastrophic impact on landscapes, oceans and water catchments.

1.3.1 From a public perspective, it is increasingly difficult for the public to have confidence in Australian governments that continue to largely ignore or deflect scientific data concerning the climate crisis and the primary contributors to global warming. Our governments continue to be reactive and remain combative, electing to debate whether the climate crisis is real, rather than how we can and must address and respond to these substantive and urgent concerns.

1.3.2 Similarly, through the governments own policies and actions we have witnessed a rapid regression and winding back of environmental protections. This has been notably so in NSW. Such policy directions ultimately seek to increase or accomodate intensive animal agriculture,

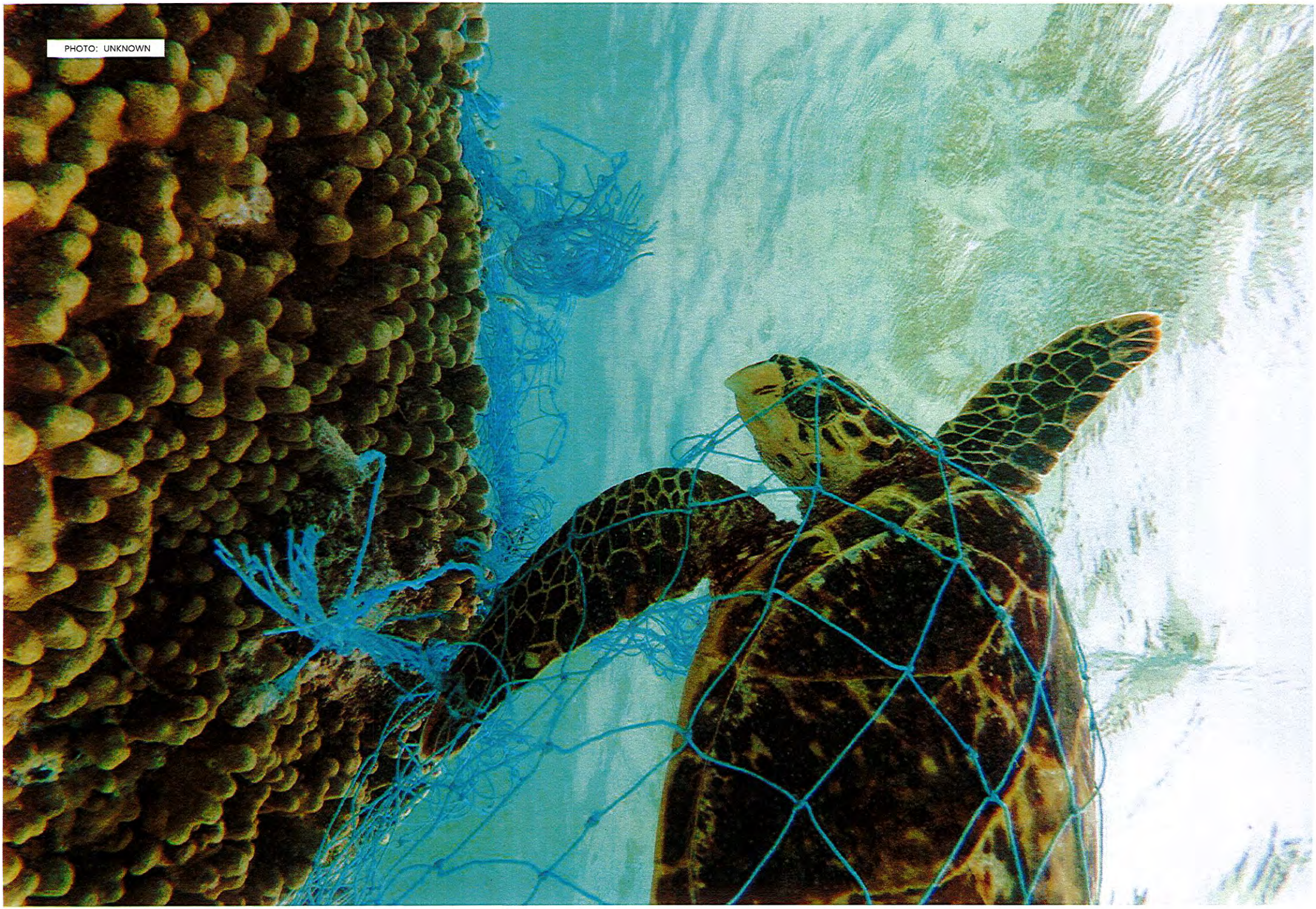
1.3.2 mining and development, despite the known impacts caused by these sectors (Grossi et al. 2019; Lynch et al. 2021). Accordingly, the example demonstrated by government will not be conducive to a willing public acceptance about targets set to reduce single use plastic products. In short, the broader public do not have faith in government rhetoric. This lack of confidence and cynicism in elected representatives is increasing.

1.4 In spite of nearly 1,000 NSW faunal and floral species being at risk of extinction, and the existence of sound scientific data that confirms habitat loss, fragmentation and destruction are the most pressing drivers of extinction, the NSW State Government continues to ignore urgently needed solutions, offering instead peripheral and often meaningless actions which fundamentally support economic self-interest (DPIE n.d.-a; Lenzen et al. 2012; Maxwell et al. 2016; Driscoll et al. 2018).

1.4.1 Many Local Government Councils' have formally declared a climate emergency with the support of their local communities (Bullock and Fuller 2019; Carey 2019; Dion 2019; Falson 2019; Helisma 2019; Keen 2019; Lam 2019; Messenger 2019; Savage 2019; Vale 2019; Tisdell 2021). Yet through government policy and policy direction these same local representatives, our councils, are being stripped of their powers to protect the environment and species who are recognised as endangered and threatened (as demonstrated by "the koala wars") (Davies 2020; Hannam 2020a; Hannam 2020b; Wahlquist and Cox 2020).

1.5 Animal Liberation supports the substantial reduction in the use of single-use plastic products. However, we contend that the management of plastics pollution must accommodate a whole-of-government strategy and corresponding plan. Such a framework must be long-term, environmentally-driven and seek to change behaviour, practices and include public education across local, State and Commonwealth government levels. All governments must lead and champion such changes.

1.5.1 We further contend that a comprehensive plastic pollution reduction plan should be in line with the principles of a circular economy that seeks to apply to plastic – whether virgin or recycled - a value. Such a value may be framed as environmental, economic or social. It must ensure that products or materials are either reused, repaired, remanufactured or - as a last resort - recycled. A circular model builds economic, natural and social capital and must be a key national priority rather than a standalone waste strategy.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2. INTRODUCTION

PLASTIC PRODUCTION, CONSUMPTION AND IMPACTS

2.1 Awareness of the adverse impacts caused by plastic pollution has become increasingly wide-spread and well-known in a relatively short amount of time. Its presence, however, is not a new phenomenon. The dramatic rise in pollution corresponds with the advent of mass plastic production during the 1950s (Lehtiniemi et al. 2018). Once the manufacture of this new, convenient and comparatively indestructible product increased, the impact of its presence and threats soon became clear. Plastic soon became pervasive and was used in a vast array of items, including food packaging, household products and clothing. In 2017, it was estimated that over 8 billion tonnes of plastic had been manufactured since production began in the early 1950s. Of this figure, less than 10% had been recycled and 79% had accumulated in landfills or the environment (Geyer et al. 2017).

2.1.1 Estimates suggest that a staggering 91% still isn't recycled and remains in landfills or litters the environment (Parker 2018). Worldwide, over 300 million tonnes of plastic waste is produced each year (IUCN 2018). Half of the items contained within this figure are designed to be used once and then discarded (Lindwall 2020). These "single-use plastics" ('SUPs') are a symptom of a "throwaway society" (Chen et al. 2021). Over 8 million tonnes enters the worlds oceans every year, making up 80% of all marine debris from surface waters to deep-sea sediments (Hardesty and Wilcox 2015; Jambeck et al. 2015; Fastenberg 2019; IUCN 2018). Approximately three-quarters of the refuse found along the Australian coast is plastic (CSIRO n.d.).

2.2 The Australian Government's National Plastics Plan 2021 identified a series of alarming figures (Commonwealth of Australia 2021). These figures include:

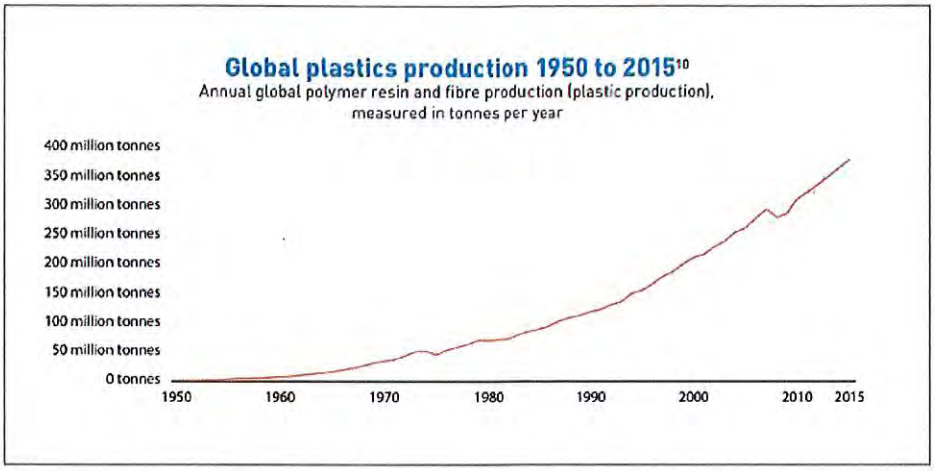
2.2.1 Australians used 3.5 million tonnes of plastics in 2018-19 (of which approximately 60% was imported).

2.2.2 One million tonnes of Australia's annual plastic use is single-use.

2.2.3 84% of plastic used is sent to landfill - only 13% is recycled.

2.2.4 Approximately 130,000 tonnes of plastic is added to Australia's marine environments every year.

2.2.5 Australians use approximately 70 billion pieces of soft plastics, such as food wrappers, each year.



SOURCE: Australian Government's National Plastics Plan 2021

PLASTIC: ECOLOGICAL AND ANIMAL WELFARE IMPACTS

2.3 Since their manufacture and subsequent ubiquity plastic products - and particularly SUPs - can be found in almost any environment (Herberz et al. 2020). SUPs have a range of ecological footprints, including the relatively benign impact on aesthetic value and the considerably more severe threats to the health and welfare of many organisms.

MARINE IMPACTS

2.4 In ocean environments, plastic impacts the marine ecosystem, human health and local economies (Thompson et al. 2009; Xanthos and Walker 2017). Plastic pollution is considered a "major threat" to marine wildlife and ecosystems, with estimates suggesting that in some areas concentrations are as high as 580,000 pieces per square kilometre (Wilcox et al. 2015; Senko et al. 2020; Thushari and Senevirathna 2020). Plastic weighing hundreds of thousands of tonnes is floating in the world's oceans, largely due to improper, careless or inappropriate disposal systems (Eriksen et al. 2014). Examples of the threats posed by plastic pollution is outlined below. This section, however, must not be considered to contain an exhaustive or complete account of these threats. Rather, it is a small sample included for the Committee's consideration.

2.4.1 Due to the rate and quantity of plastic pollution present in the world's oceans, many species of marine fauna have been identified as impacted (Schuyler et al. 2013). In

2.4.1 Australian waters, two of the highest concentrations occur in northern NSW and the Sydney region (Ceccarelli 2009).

SEABIRDS

2.5 A significant amount of data concerning birds and plastic is derived from studies of seabirds. WWF-Australia believe that this is due to increasing media interest in the presence of plastic in the ocean (WWF-Australia 2018).

2.5.1 According to UNESCO, "plastic debris causes the deaths of more than a million seabirds every year" (UNESCO 2017). Worldwide, it is estimated that at up to 90% of all seabirds ingest plastic refuse (Anon. 2015; Blakemore 2015; Izadi 2015; Parker 2015; Wilcox et al. 2015). Ingestion can result in death by perforation (i.e., internal rupturing) or impaction of the organs (Roman et al. 2019). The latter can result in death via starvation (Pierce et al. 2004).

ABOVE: Albatross found deceased after ingesting items contained within the "plastic soup" of the Pacific Ocean. Photo: Chris Jordan.

2.5.2 Though the majority of research has focused on mortality rates, studies have shown that survivors encounter "significant health troubles", including impaired kidney functions, high cholesterol levels, reduced body mass, wing length and bill strength (Lavers et al. 2019; Leahy 2019).

2.5.3 Sublethal effects may also influence population development and dynamics (Krishnan et al. 1993; van Franeker and SNS Fulmar Study Group 2011; Briggs 2020). Such threats are compounding those such species already face. Petrels, such as albatrosses, are the most threatened bird globally and the species suffering the highest incidence of refuse ingestion (Roman et al. 2019).

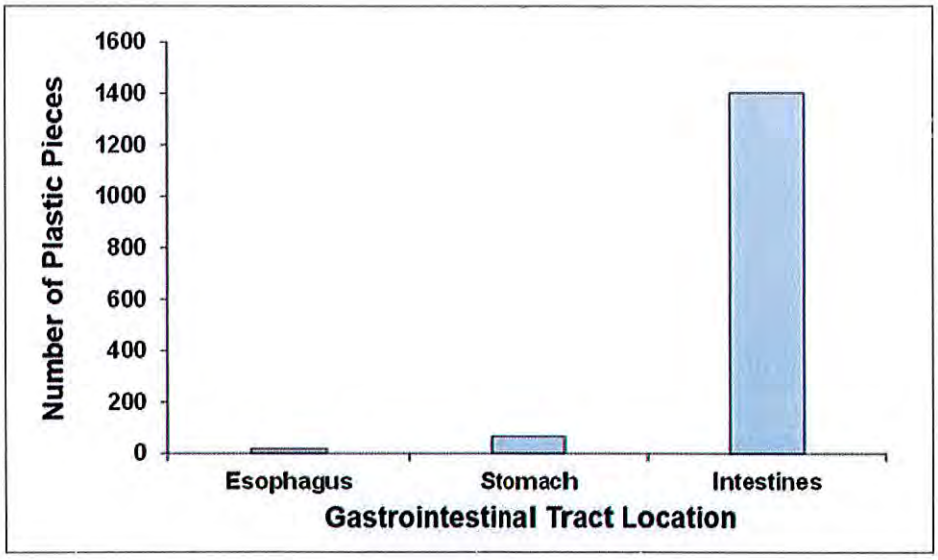
2.6 Australian studies have found that nearly 50% of short-tailed shearwaters have plastic in their gut (CSIRO n.d.; Acampora et al. 2014). Though this species is considered to be among the most numerous Australian seabird, their recent failure to arrive at breeding grounds for two consecutive years has raised significant concerns, with one expert citing the extinction of the once-ubiquitous north American passenger pigeon as "a cautionary tale" (Birdlife Australia n.d.; Miles 2020).

2.6.1 The ubiquity of plastic pollution means that in some environments it is used by seabirds to build their nests (see below). The use of netting or other plastics have been identified as potential threats to the survival of chicks who may not be able to feed or get entangled (Prendergast 2019).

ABOVE: An osprey chick in a nest constructed out of plastic pollution on the Abrolhos Islands. Photo: Chris Surman.

2.7 Marine and coastal environments contain different types of subsystems (e.g., coral reefs and seagrasses) that accomodate a complex network of biodiversity, ranging from relatively primitive species (e.g., horseshoe crabs) to more advanced mammalian species (e.g., dolphins) (Thushari and Senevirathna 2020). The entire marine environment is a vast body of water that covers over 70% of the earth (Steffen et al. 2018). For some time, anthropogenic activities have contributed to a range of adverse impacts on coastal and marine ecosystems (Adams 2005; Richmond 2015). However, compared with other types of debris, such as glass, cloth, paper, metal or rubber, plastic is persistent due to its unique characteristics (Rosevelt et al. 2013). Along with seabirds, sea turtles and marine mammals are at high risk of entanglement and ingestion by plastic pollution (Gall and Thompson 2015).

2.7.1 Approximately one-third of marine turtles worldwide are estimated to have ingested pollution and most items consumed are plastic products (Schuyler et al. 2013). Sublethal effects, similar to those outlined in subsection 2.2.1 above, can be associated with toxic compounds found in plastics (Oehlmann et al. 2009). These may have cumulative impacts on development or population dynamics (Wilcox et al. 2018; Eastman et al. 2020; Clause et al. 2021).



SOURCE: Eastman et al. (2020)

2.7.2 Plastic debris and fishing gear also represent a significant threat to turtle populations. This may involve entanglement with lost or abandoned fishing equipment (see image above) resulting in fatal lesions or amputation (if victims are located, treated and considered viable for post-release) (Barreiros and Raykov 2014).

MICROPLASTICS

2.8 Microplastics are particles less than 5mm in length and are highly dispersive (Horton and Barnes 2020). Their existence within the environment has been known since the early 1970s (Buchanan 1971; Carpenter and Smith 1972). However, over recent years the geographical range, persistence of contamination and ecological implications of microplastics has become increasingly concerning (Thompson et al. 2004; Thompson 2015; Horton and Barnes 2020).

2.8.1 Microplastic accumulation causes complications for individuals and ecosystems and is increasing as its density rises in all oceans worldwide (Thompson et al. 2009). Recent estimates suggest that particles of microplastic may outnumber zooplankton, an essential component of the marine ecosystem (Carrington 2020). In a similar manner to the way in which larger organisms become entangled in plastic pollution (e.g., sea turtle entanglement in plastic bags), microplastics can cause the entanglement or impose physical obstacles to zooplankton (Ziajahromi et al. 2017).

2.8.2 As plastics are "comprised of a cocktail of different chemicals" that may contain toxic properties, microplastics pose similar threats to those outlined above (Rochman et al. 2019; Zimmermann et al. 2019). Though studies generally indicate that microplastics may not be inherently toxic with acute exposure, others have suggested that sublethal harm may pose "knock-on effects for ecosystems, potentially leading to trophic cascades" (i.e., a side-effect whereby the reduction or removal of a species in an ecosystem triggers ecological imbalances) (Ripple et al. 2016; Galloway et al. 2017; Botterell et al. 2019).

PLASTIC POLLUTION MANAGEMENT

2.9 While policy is a functional lever to address the problems associated with plastic pollution, many have been enacted with these intentions yet few have shown to be effective at preventing the entry of more plastic into oceans (Rochman et al. 2013; Gall and Thompson 2015; Xanthos and Walker 2017).

2.10 Historically, responses to pollution has traditionally been informed by the mechanics of the current socioeconomic system. In such a

2.10 linear economy (i.e., one in which companies or corporations manufacture products that are purchased, used and disposed of by consumers), such policies are enacted in order to minimise or further control their use or dispersal not in order to systemically alter the processes preceding it (Garcés-Ayerbe et al. 2019). However, due to the scale and nature of the impacts caused by plastic pollution, systemic change to the traditional model is needed. International reference to transitions towards a circular economy (i.e., one in which resources are redeployed and reused with waste flows reenergised into inputs for further production) suggest that there are avenues amenable to achieving the goals enshrined in sustainability principles (Geissdoerfer et al. 2017).

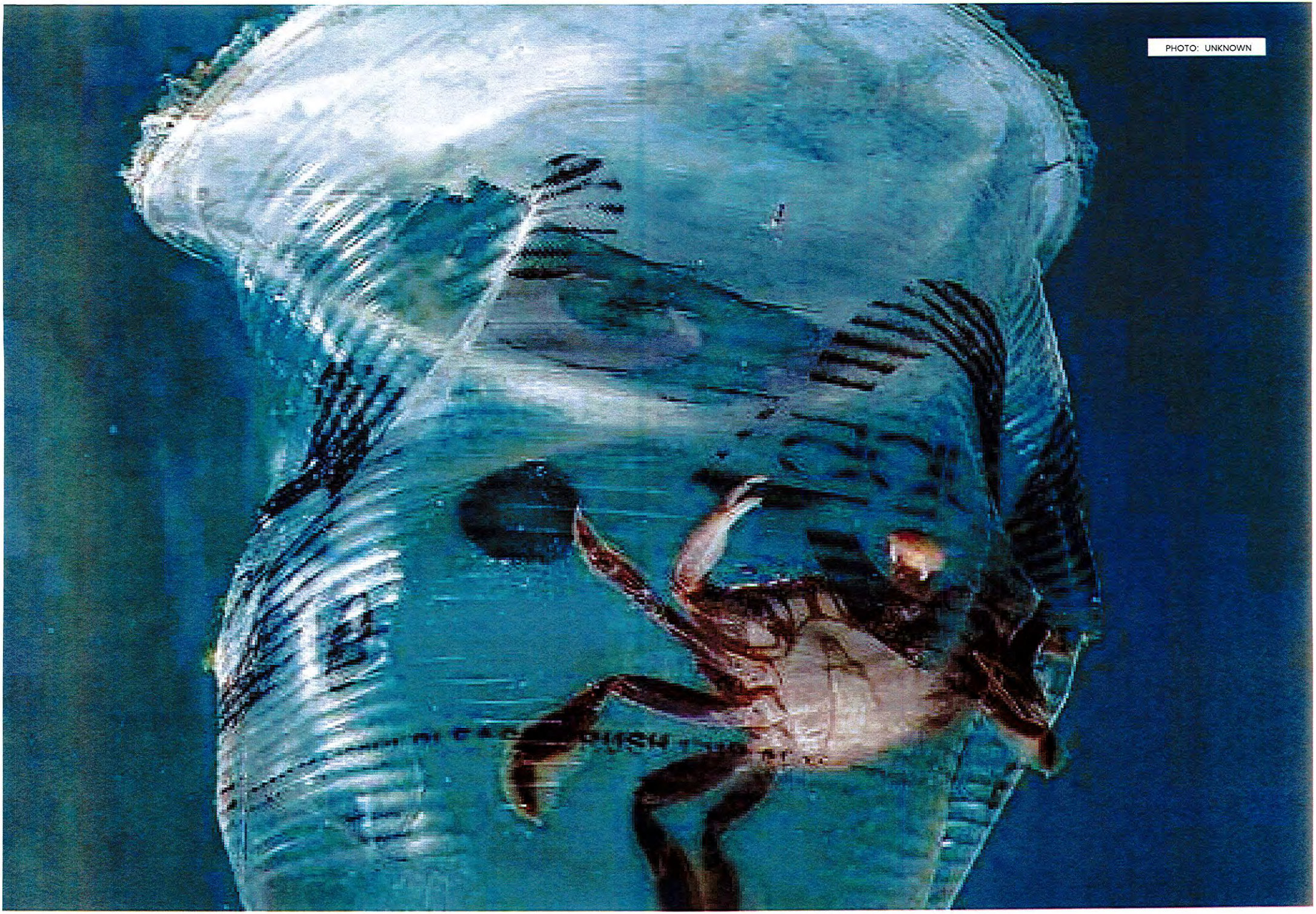
2.10.1 In the National Circular Economy Roadmap for Plastics, Glass, Paper and Tyres published in 2020 by the CSIRO, it is acknowledged that "Australia can learn from other countries that have already embarked on introducing circular economy policies and initiatives" (Schandl et al 2020). Elsewhere, the benefits of transitioning to a circular economy have been identified: improvements on resource security, decreasing import dependency, less environmental impact, opportunities for economic growth and innovation and sustainable consumer behaviour and job opportunities (European Environment Agency 2016).

2.10.2 Some international examples, such as the EU directive that introduces a market restriction on single-use plastic items, includes initiatives to extend producer responsibility and raise awareness (European Commission 2018a; European Commission 2018b). Studies, however, have suggested that the available evidence base used as a rationale for market restriction is flawed in several ways. For example, it ignores the methane emissions produced by biodegradable products when landfilled (which is where up to a third of waste in the EU terminates) (Herberz et al. 2020). It does, however, frame such a directive in terms of working towards a circular economy (i.e., one that transcends the linear model outlined in subsection 2.10 above).

2.11 While acknowledgement of the issues is important, the strategies and plans that are operationalised must be transparently and publicly scrutinised.

2.11.1 For example, while bans on single-use items (such as plastic bags) are laudable in principle, the practicalities that often accompany these reveal their deficiencies. Similarly, studies assessing the net outcome of such initiatives have shown negligible outcomes, One study, for instance, found that a single-use plastics ban in the European Union ('EU') could decrease marine pollution by

2.11.1 5.5% or 0.06% globally while increasing emissions contributing to marine aquatic toxicity by 1.4% (Herberz et al. 2020). Similarly, proposals to incinerate waste neglect to account for the substantial amounts of carbon dioxide that are produced during the process (Bell and Bremmer 2013; Lee et al. 2018). This method is being less intensively utilised in the UE under the guiding principles of a circular economy.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3. STATUS, HISTORY & BACKGROUND

3.1 In 2020 the NSW State Government released a discussion paper announcing its intent to seek feedback on tackling the use of plastics and reducing waste, including a ban on single-use plastic bags. NSW Environment Minister Matt Kean, confirmed that "we know other states have already done this but the difference with our paper is that it's whole-of-government [and] whole-of-plastics", maintaining that the plan would outline a clear pathway to "reduce single-use, unnecessary and problematic plastics in NSW" and set the stage for the "phase-out of priority single-use plastics". This would involve "tripling the proportion of plastic recycled by 2030, reducing plastic litter by a quarter and making our state a leader in plastics research and development" (Smith 2020).

3.1.1 Meanwhile NSW Labor's environment spokeswoman, Kate Washington, said the government had blocked several attempts by the Opposition to introduce legislation to ban bags, maintaining that "the government scuttled Labor's most recent push to ban single-use plastic bags, which had already passed the upper house, in favour of waiting to release its discussion paper" before stating that "the cycle of inaction will drag on and just like that the Berejiklian government will have wasted another year failing to act on plastic pollution" (Smith 2020).

3.1.2 Commercially, several supermarket giants, including Woolworths and Coles, had voluntarily phased out single-use bags in favour of reusable ones in their NSW stores in 2018 (Zhou 2018a). Despite several changes to these policies and public backlash, media reports citing statistics obtained from the National Retail Association suggested that the ban "has prevented the introduction of an estimated 1.5 billion bags into the environment"(Anon. 2018; Mortimer and Russell-Bennett 2018; Zhou 2018b; Flanagan 2019). Harris Farm also stopped supplying them and instead offers consumers alternatives, such as paper bags or boxes (Hannam 2018).

3.1.3 During the reading of the Bill, in reference to the "throwaway culture" referred to elsewhere in this submission, Cate Faehrmann maintained that a SUP plastic bag is often used "for an average of 12 minutes" and will subsequently go on to "spend the next 1,000 years in landfill or in our oceans". Animal Liberation supports the spirit of the bill and appreciates the opportunity to provide the following commentary for the Committee's consideration.

PHOTO: UNKNOWN

4. RESPONSE TO THE BILL

4.1 Animal Liberation supports the substantial reduction in the use of single use plastic products, however we contend that the management of plastics pollution must accommodate a whole-of-government strategy and plan. This plan must be long-term, driven by sound and independent science and seek to positively change behaviour. It should, as other international equivalents have done, include public education across local, State and Commonwealth government levels. Fundamentally, all governments must lead and champion such changes.

4.2 We further contend that a comprehensive plastic pollution reduction plan should be in line with the principles of a circular economy that seeks to apply - whether virgin or recycled plastic - a value (environmental, economic or social). It should also ensure that products or materials are either reused, repaired, remanufactured, or - as a last resort - recycled. A circular model that builds economic, natural and social capital must be a key national priority and serve as a model that will benefit all Australians into the future, rather than a standalone and ultimately ineffective waste strategy.

4.3 Animal Liberation also supports the broad intent and objectives of the proposed Bill, including support for the establishment of a Plastics Reduction Commission, in principle and on the basis this is not another government-appointed or controlled panel merely doing the bidding for flawed government policy and policy direction. Rather, it must allow and accomodate meaningful and objective representation for the environment, animals and the NSW public.

OTHER

4.4 Animal Liberation recognises and fully concurs that there is an urgent need for governments' to address and respond to the broad issues around plastics pollution and that addressing single-use plastics is a practical starting-point that should yield environmental benefits. However, there are a number of other insidious pollutants that are contaminating our oceans, freshwater catchments, land surfaces and, indeed, plundering our natural resources. We believe that these are equally deserving of urgent attention. Animal Liberation contends these other pollutants and the urgent need to protect our precious natural resources also warrants the Committee's attention for consideration during their informed deliberations.

INDUSTRIAL & INTENSIVE AGRICULTURE

4.5 There can be no denying that the impacts of intensive animal agriculture are increasingly damaging or otherwise polluting our landscapes, oceans and fresh water catchments. Similarly, these operations thereby impact upon all who depend on these habitats for survival. Further, the drain on natural resources from the increasing industrialisation of intensive animal agriculture, including land use and water use, is at breaking point.

4.5.1 Australia is one of the driest continents on the planet and our overuse of water in intensive animal agriculture is one of many emerging threats to our environment including fauna and flora (Nicholls and Wong 1990). As many of these operations are based in the few fertile areas of the country, Animal Liberation is increasingly concerned about ongoing land clearing, the extraction and use of both groundwater and surface water, in addition to the accompanying pollution damaging our water resources - both marine and fresh water (Anderson et al. 2009; Head et al. 2014). We note that the threats and issues resulting from the ongoing exploitation of surface water, and the lack of security and safety with community drinking water have been well canvased through various reviews and reports.

4.6 In September 2020, the Auditor-General for New South Wales, Margaret Crawford, released a report examining whether the Department of Planning, Industry and Environment ('DPIE') had effectively supported planning for or funding of town water infrastructure in regional NSW. A number of alarming key observations and finding were identified during the audit and included but was not limited to the following: "Safe and reliable water and sewer services are essential for community health and wellbeing, environmental protection, and economic productivity". The same report concluded:

4.6.1 The DPIE has not effectively supported or overseen town water infrastructure planning in regional NSW since at least 2014. It has also lacked a strategic, evidence-based approach to target investments in town water infrastructure.

4.6.2 In 2019, during intense drought, around ten (10) regional New South Wales cities or towns were close to 'zero' water and others had six to 12 months of supply. In some towns, water quality was declared unsafe.

4.6.3 The department had a lack of internal procedures, records and data.

4.6.4 The department did not design or implement a strategic approach for targeting town water infrastructure investment through its $1 billion Safe and Secure Water Program ('SSWP').

4.6.5 The department also lacks systems for integrated project monitoring and program evaluation to determine the contribution of its investments to improved town water outcomes for communities.

4.6.6 The department does not have strategic water plans in place at state and regional levels: a key objective of these is to improve town water for regional communities.

4.7 What is less known, is the current and emerging threat to Australia's declining groundwater tables and resources. Australia's groundwater resources support communities, industries and the environment across the country. With our highly variable surface water supply, groundwater resources are critical for many Australian communities and industries. Indeed, in some cases, groundwater is the only reliable water supply available to support towns, agriculture and the resources sector. Many streams and rivers are also supported by the availability of groundwater.

4.7.1 Water is a critical issue and especially in NSW where water security issues have been greatly exacerbated by climate change and the ongoing plundering of this precious and shared resource. Researchers at Macquarie University have recently undertaken modelling which suggests that Australia's desert centre will spread outwards by 2070, well into the Murray-Darling Basin and Riverina farmlands. The modelling concluded a potentially "dire picture" for the Murrumbidgee River indicating that without intervention, it could stop flowing permanently into the Murray River, 50 years from now.

4.7.2 Today, unprecedented pressure is on our groundwater from climate change, agricultural development, mining, gas extraction and urbanisation. We must ensure that the best available science is used to inform decision-making, and this science provides solid understanding of groundwater processes, timescales and impacts. Reports have warned that due to its value and extensive use, studies indicating declining supplies should be taken "very seriously" (Eamus 2015).

4.7.3 While copious, yet unknown[1] volumes of water are being used to feed animals for food and fibre (many of whom are slaughtered at a juvenile age) or is used to nurture crops that are also used to support animal agriculture, the environment, native fauna and flora and many rural communities go without. Indeed, some rural communities are forced to pay for - and truck in - drinking water.

4.7.4 The pollution to our oceans from the intensive and industrialised animal agriculture including the intensive farming of fish and especially salmon farming is significant. We note with concern that the NSW Waste Avoidance and Resource Recovery Strategy 2014–21 failed to include any reference to the substantial waste generated by industrialised intensive animal agribusinesses, and indeed it is likely that government does not have an accurate understanding, let alone evidence about the significance of this waste volume across NSW, and the environmental devastation it is continuing to cause, and the increasing risks and impacts to public health.

RIGHT TO FARM LEGISLATION & THE RIGHT TO HARM

4.8 By 1992, every state in the US had a right to farm law (Centner 2006). Though the laws varied widely in specifics, the intent and overall goal has been to protect farmers (or, more accurately, large-scale intensive producers from so-called "nuisance lawsuits" brought about by neighbours) (Reinert 1998). Today, right to farm ('RTF') laws have been increasingly weaponised against rural communities. The same scenario has continued to play out across Australia, including in NSW

4.8.1 Rather than allotting public funding to preferentially and inequitably support industrialised animal agribusiness, elected officials and policymakers should be implementing environmental and public health regulations. This should include supporting sustainable, healthy and planet-friendly alternatives in line with community expectations and changing consumer needs and demands.

ANIMAL WASTE

1 Animal Liberation has attempted to obtain information from NSW Water and the Natural Access Resource Regulator ('NRAR') to confirm a) the total volume of water being used by intensive animal agribusinesses through the extraction of surface and bore water licensing and b) the monitoring regime including breaches, and prosecutions.

4.9 While data across Australia is difficult to access, across the US the amount of waste produced by livestock in intensive facilities is difficult to fathom. Livestock manure, unlike human waste, is not treated before it is disposed of. The untreated manure emits airborne chemicals and fumes. When runoff occurs, dangerous pollutants enter our waterways. The US Environmental Protection Agency ('US EPA') has the authority to regulate concentrated animal feeding operation ('CAFO') waste, but has yielded to pressure from the meat and livestock industry, largely shifting its regulatory responsibility to the states.

4.9.1 In 2012, a US report confirmed that animals held in the largest operations produced 369 million tonnes of manure - almost 13 times more waste than that of the entire US population (Foodprint 2021). While human waste is treated in municipal sewer systems and subject to strict regulation, animal waste is stored in open ponds (called "lagoons")[2] or pits and is applied as untreated fertiliser to landscapes (often at a rate that exceeds what the land is capable of absorbing). The spreading of animal waste can also cause environmental heavy metal contamination from metals used in feed, including copper, zinc and lead. The mixture in lagoons consists not only of animal excrement but of bedding waste, antibiotic residues, cleaning solutions and other chemicals, and sometimes dead animals.

4.9.2 Additional problems with animal waste collecting in the massive lagoons is that the waste breaks down and forms ammonia gas. This then breeds bacteria that combine with other pollutants in the air and form nitric acid. The nitric acid builds up in the atmosphere and then returns to the surface of the earth as acidic rain, harming soil, forest habitats and water ecosystems.

PESTICIDES, CHEMICALS AND POISONS USED IN LETHAL CONTROL

4.10 In recent years much of the east coast of Australia has been severely impacted by flooding, much of it catastrophic. Across NSW successive 1080 baiting programs on land and from air have continued to increase in volume, scale and frequency (DPI 2020). The most recent 1080 baiting program in NSW was undertaken by the publicly-funded National Parks and Wildlife Service ('NPWS') and billed as "the agency's largest ever 1080 baiting program", covering an area in length approximately the size of Russia (Townend 2021).

2 Most lagoons are lined only with clay and can leak, allowing the waste to seep into groundwater. The excess can and does also run off and ends up in nearly all streams and rivers and the high content of nitrogen and other nutrients in manure runoff results in dead zones in downstream water catchments, where an overgrowth of algae consumes oxygen needed to support other life. During flooding events such as experienced recently across NSW, this scenario is greatly exacerbated.

4.10.1 We believe that government authorities and agencies are well aware that this cruel and indiscriminate poison kills more than "target" species - they in fact deliberately and intentionally use 1080 poison in Tasmania to kill native species and in many jurisdictions it is used to kill native dingoes (cynically referred to as "wild dogs") (Cairns 2020). Similarly, the government is aware that an increasing number of companion animals are dying a slow and painful death frequently witnessed by their human family - a death which traumatises humans because it is horrific to witness. Animal Liberation is increasingly receiving contact from these distressed members of the public, documenting these incidents and reporting their occurrence to the Australian Pesticides and Veterinary Medicines Authority ('APVMA').

4.10.2 Alarmingly, as a poison in the same class as other notorious chemicals like arsenic and cyanide, 1080 is included on a short list of substances the Commonwealth Government considers a threat to national security (Commonwealth of Australia 2016). Other nations and their security agencies, including the U.S. Army Medical Research Institute of Chemical Defense, continue to study its potential use as a weapon of mass destruction (McCranor et al. 2019)

4.11 Tragically public money is being invested into these heinous programs that continue to fail, cause unmitigated animal suffering and unknown environmental harm. Of significant concern is the fact that the use of public money is frequently under the guise of 'environmental protection' (such as bushfire recovery programs), when such programs are lethal animal control programs designed to suit farmers, producers and the NSW Government's deeply misguided and flawed economic policies and biodiversity policy direction.

4.11.1 Australia is one of the last remaining countries to use 1080 poison because our governments' rely on the fact that 1080 poison does kill and it's cheap. Our governments' refuse to undertake evidenced studies to examine the enormous toll the ongoing use of this indiscriminate poison is having on native species, companion animals, ecosystems and our water catchments.

4.11.2 In March this year, 61 sheep were found dead after knocking over and eating a drum of 1080 bait on a property north of Bordertown on the Limestone Coast in South Australia (Anon. 2021a). Reports indicated that the landholder failed to dispose of the baits (Anon. 2021b).

4.11.2 Animal Liberation believes, given the extensive and wilful use of 1080 poison across Australia and notably in NSW, and the evidence that poisoning can occur from secondary and third contact, it is only a matter of time before we tragically witness a human fatality.

4.12 During the most recent extensive flooding across NSW, numerous reports of the damage includes reports of houses, sheds, caravans, cars and farm animals being washed away and ending up a great distance from their original location. Accepting that vast quantities of 1080 exist, either in storage on farms or already distributed across NSW, we must also accept that during these recent floods an unknown but extensive amount of 1080 has been further spread across NSW properties, into sea or freshwater water catchments, including drinking catchments.

4.12.1 As an urgent matter of public and environmental health it is imperative that the NSW Government undertake an urgent investigation into the use and spread of 1080 poison.

MINING

4.13 Australia is abundant with the sun, a natural resource and yet government policy and policy direction continues to promote and support mining. The 'Dark Side of the Boom' report, released by the Australia Institute in April 2017, painted a dire picture about operating, suspended, closed, rehabilitated and abandoned mine sites across Australia and the potential clean-up liabilities estimated to be in the billions of dollars to taxpayers (Campbell et al. 2017). According media reports, the NSW Auditor General had also previously examined the risks posed by disused mines in 2011, and concluded the derelict mine program "may represent the largest category of contamination liability for the NSW Government."

4.13.1 Australia has around 60,000 abandoned mine sites (Anon. 2017). Of these, between 112 to 410 are in NSW (including 85 to 109 which remain active and 123 in suspended operations). Alarmingly, the Australia Institute and the responsible NSW division for resources and energy was only able to show one (1) site that was being successfully rehabilitated and not a single example of an open-cut mine being successfully rehabilitated (despite there being 45 open-cut voids in NSW) (Campbell et al. 2017). The lack of available information is of concern. However, of significantly more concern is the lack of clean-up these highly toxic and environmentally damaging sites have undergone, with no intervention by government.

4.13.2 The 2017 report attempted to analyse what was happening to operating, suspended, closed, rehabilitated, or abandoned mine sites across the state. Animal Liberation fully concurs with one of the report's authors, Rod Campbell, who said that the lack of any concrete example of open-cut rehabilitation cast doubt on the effectiveness of future clean-ups. "I mean it sends a terrible message, because what the industry says is, 'Well, none of our big open-cut mines are ready to close,' so there's no example of it happening because we've just kept expanding and expanding them" (Campbell et al. 2017).

PHOTO: UNKNOWN

5. RECOMMENDATIONS

5.1 The following recommendations relate to the intent and objectives of the Waste Avoidance and Resource Recovery Amendment (Plastics Reduction) Bill 2021, and more broadly to a more whole-of-government approach which will better protect our natural resources in a more strategic manner. We recommend:

R1 That the Portfolio No 7 Committee review and consider submissions that formed part of the Senate Environment and Communications Legislation Committee - Inquiry into the Product Stewardship Amendment (Packaging and Plastics) Bill 2019 as part of their plastic reduction deliberations.

R2 That any comprehensive plastic pollution reduction plan should be in line with the principles of a circular economy.

R3 That in addition to the proposed setting of targets contained in the Bill, the NSW State Government and Commonwealth Government should embrace a regional leadership role adopting ambitious directives against single-use plastics that are responsible for polluting our rivers and oceans, impacting marine wildlife, ecosystems and even the resources we consume.

R4 Where legitimate reasons for the manufacturing, selling or distribution of single-use plastics exists - and alternatives are not currently readily available or accessible, such as those for people with a disability or with specific medical conditions who need those items to be able to eat or drink safely, independently and comfortably - a specific exemption will ensure that such items remain available for those who need them.

R5 That the proposed plastics reduction commission will also play a crucial role in investigating non-plastic alternatives for people in situations of disability and/or specific medical condition.

R6 That a regime of regulatory monitoring and public reporting on 1) the total volume of water extraction and 2) monitoring and testing of all marine and fresh water catchments be established and undertaken.

R7 That no additional water extraction license approvals are offered without a mandatory assessment of the environmental risks and impacts. These should also be open to feedback via a public consultation process.

R8 That a state-wide ban on water mining by private and commercial industries be established.

R9 That the Committee consider the 11 point plan proposed by the Boomerang Alliance, including the introduction of a state ban on lightweight plastic shopping bags, action on personal care products (e.g., plastic stemmed cotton buds, wipes, all products containing microbeads, etc.), strengthening regulations and policing around deliberate helium balloon releases, supporting a national program to remove disposable butts from cigarettes, the introduction of packaging labels, regulatory action by the EPA concerning nurdle (plastic pellet) pollution, incentivising government procurement policies and incentivise business procurement for recycled content in products, introducing new collection and processing infrastructure for Food Organics and Garden Organics ('FOGO') collection, investment in new infrastructure development that will support full resource recovery of used plastics and support of research to examine the extent and impact of plastic pollution on the environment and wildlife.

PHOTO: UNKNOWN

6. SUMMARY AND CONCLUSION

6.1 Our environmental protection and native species protection laws at State and Commonwealth levels are broken and are not meeting their intended or stated purpose(s). These laws continue to fail the environment. For all government's rhetoric, it is government's own failings - manifest in deliberate and wilful policy direction - that pose the greatest threats to NSW fauna and flora, habitat and their very survival. Native species populations will continue to rapidly decline while government operates in a 'business as usual' approach, ignoring the urgent warnings and evidence, and reducing protections with ineffective, inadequate or repealed legislation.

6.1.1 Contradictory policy settings included in NSW laws mean that laws aimed at conserving biodiversity and maintaining the diversity and quality of ecosystems are undermined by other legislation that facilitates forestry, agricultural activities and developments, including mining operations.

6.2 Animal Liberation urges Portfolio Committee No. 7 to strongly and unanimously endorse and support the intent and objections outlined in the Waste Avoidance and Resource Recovery Amendment (Plastics Reduction) Bill 2021 to ensure the survival and protection of all NSW fauna and flora, our oceans, fresh water catchments, our broad shared and inter-connected environment, all other-than-human species and the health and prosperity of humanity.


PHOTO: UNKNOWN

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Biodiversity Conservation (Savings and Transitional) Regulation 2017

Coastal Management Act 2016

Contaminated Land Management Act 1997

Energy and Utilities Administration Act 1987

Environmentally Hazardous Chemicals Act 1985

Environmental Planning and Assessment Act 1979

Environmental Trust Act 1998

Fisheries Management Act 1994

Forestry Act 2012

Local Government Act 1993

Local Government (General) Regulation 2005

Marine Estate Management Act 2014.

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National Parks and Wildlife Act 1974

National Parks and Wildlife Regulation 2019

Native Vegetation Act 2003

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Ozone Protection Act 1989

Pesticides Act 1999

Protection of the Environment Administration Act 1991

Protection of the Environment Operations Act 1997

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