

Risk Analysis for Marine Debris Impacts on Wildlife

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• OCEANS AND ATMOSPHERE www.csiro.au





Roadmap

Overview of Australia's national MD program

Risk Analysis Approaches we are taking to:



Understand exposure 1a. Seabirds & ingestion 2b. Turtles & entanglement (won't show)



Translate exposure into impact 2a. Measuring fitness effects on seabirds 2b. Expert elicitation and waste

Where does it come from?

- Beachgoers
- Storm sewers
- Commercial & recreations vessels
- Industrial facilities

- Landfill
- Waste disposal activities
- Offshore industrial activities

Land and Sea based sources





It's everywhere, all the time, increasing

How much is there?



TOP 10 DEBRIS ITEMS

Item 2	20 Year Total
Cigarettes and Cigarette Filters	12,848,255
Caps/Lids	4,186,593
Cups/Plates/Utensils	3,575,209
Bags	3,346,666
Food Wrappers and Containers	3,318,729
Beverage Bottles (Glass)	2,329,142
Beverage Cans	2,293,559
Beverage Bottles (Plastic)) 1,965,210
Straws/Stirrers	1,960,122
Rope	925,301
Total	36,748,786
Source: www.oceanconservancy.org/ICC	

~ 8.4 M metric tonnes goes in per year
~ 51 trillion particles in the ocean
~ 115M pieces on Au Coast – 5.2 per person!

Plastic entering the oceans







