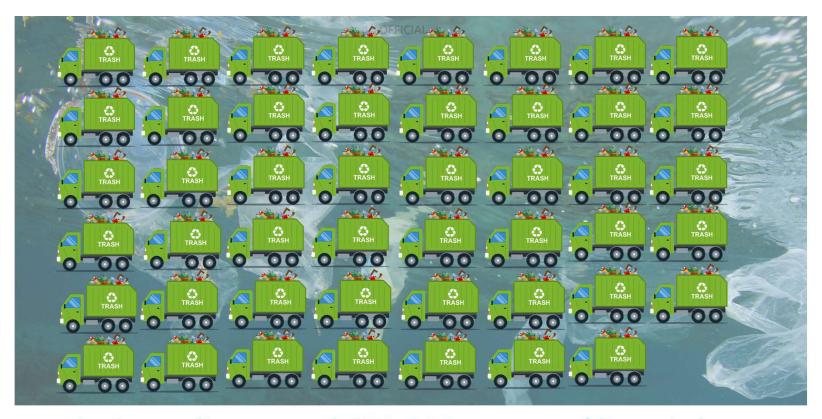


Thirty two
percent – the
average
functionality of
GPTs in
Australia

Justine Barrett Lead Stormtrooper CSIRO, Hobart





In Australia, around 170,000 tonnes of litter is lost to the oceans each year, predominantly from stormwater outlets.



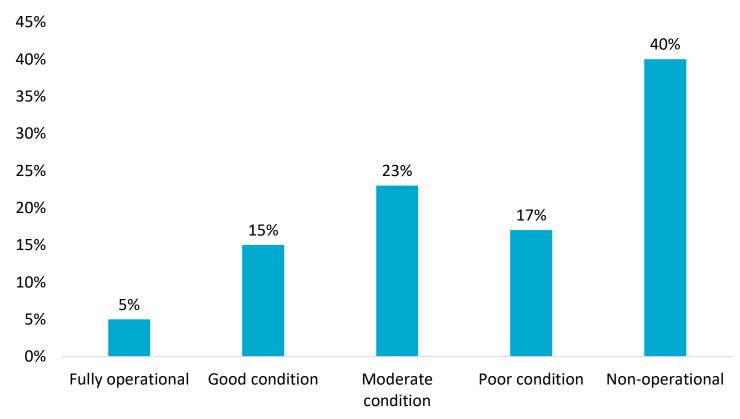
OFFICIAL

Gross Pollutant Traps (GPTs)





Condition of GPTs in Australia



Condition rating assigned to GPTs (n = 1,269)



OFFICIAL

We need to do better!











Is it illegal to not maintain GPTs?

NSW Protection of the Environment Operations Act 1997

It is illegal for a "substance to leak, spill or otherwise escape... in a manner that harms or is likely to harm the environment" and/or pollution of waters

Individual = Up to \$2 million Corporation = Up to \$10 million



Up to 7 years imprisonment





Barriers preventing GPT maintenance



Lack of resources (e.g., funding, staff, equipment, specific information about GPTs)



Lack of consequences for not maintaining GPTs



GPT maintenance is a low priority within LGAs



Lack of understanding of the need to maintain GPTs



Lack of clear and aligned stormwater policies outlining GPT maintenance



1. Lack of resources

Challenges

• Money for installation of GPTs but not maintenance.

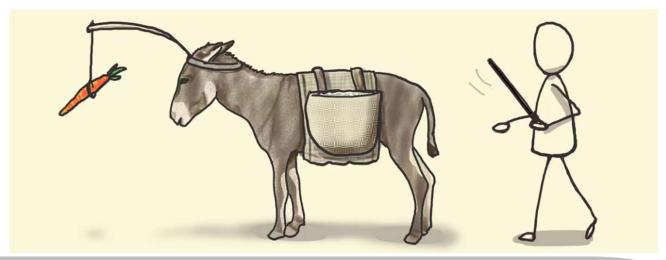
- Ideally, nationwide funding model.
- Stormwater levy in municipality rates.
- More awareness of maintenance costs.
- Stricter conditions/fees for developers handing over the maintenance responsibilities of GPTs to councils



2. Lack of consequences

Challenges

• No established pathway for consequences





3. GPT maintenance is a low priority

Challenges

- Stormwater treatment is hidden (physically and metaphorically) low priority
- Competing issues within a municipality

- Increasing awareness
 - Internally (budget requirements)
 - External (public pressure)





4. Lack of understanding of the need to maintain GPTs

Challenges

• Knowledge gaps among stormwater professionals

- Shared knowledge industry responsibility
- Community of practice
- Formalised training





5. Lack of clear and aligned policies

Challenges

- Fragmented policies
- It is hard to make improvements when each jurisdiction is different (state and local government)

- Nation-wide GPT standards mandating effective maintenance
- Alignment of best practice





Council guidelines

Improved functionality of GPTs if

- Following manufacturer's guidelines for maintenance
- Follow a maintenance schedule

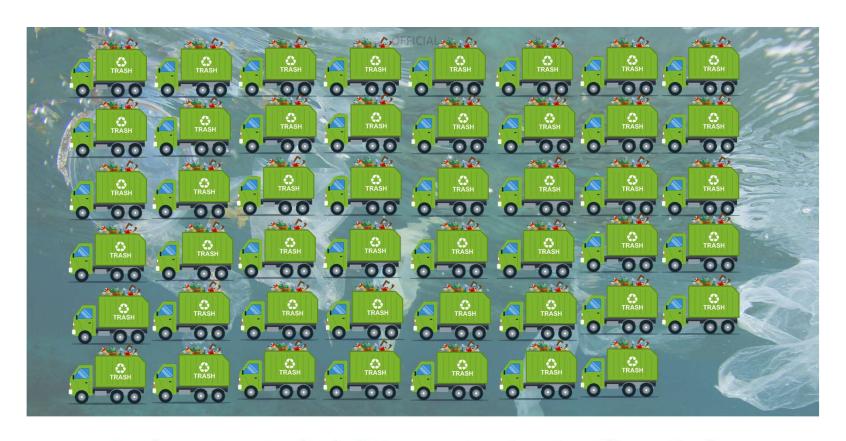
Around **1/4** of councils don't have a register of stormwater treatment assets.



Improvements in Justine-land

- GPT pollution level sensors (Matter)
 - WA, SA, VIC, TAS, NSW, QLD
- Model to estimate litter quantities =>
 - Installation: selecting device size
 - Maintenance: scheduling based on local factors (potential for real-time monitoring)
- National hub of GPT pollution data (Matter)
- Al model for detecting floating litter in waterways
- Analysis of policy gaps (national and state)
- Advocacy and industry collaboration





Reduce Australia's litter outputs significantly by ensuring all stormwater litter is trapped.



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Stormwater NSW



Franc conference



Stormwater Australia



SQID Taskforce











