

SENATE SUBMISSION:
NATURE POSITIVE
(ENVIRONMENT
PROTECTION AUSTRALIA)
BILL 2024 [PROVISIONS] AND
RELATED BILLS

*For ENVIRONMENT AND COMMUNICATIONS REFERENCES
COMMITTEE – July 2024*



*John A Gemmill CEO Clean Ocean Foundation
johng@cleanocean.org*

Introduction

Clean Ocean Foundation thanks the committee for the opportunity to submit this information.

Please do not hesitate to contact us for further clarification and to expand on issues canvassed. If more detail is required, we are available to clarify any points in person or to provide further supporting documentation.

The views and comments expressed in this submission are Clean Ocean Foundation's alone, and in no way should be interpreted as those of any other body.

Who is Clean Ocean Foundation?

Clean Ocean Foundation (COF) is a community based environmental charity seeking to stop all forms of ocean and river pollution.

What do we know?

Our body of knowledge has been gained through both collaborative and independent research including our work on the National Outfall Database (NOD). Over the past two decades, we have been recognised as honest brokers supporting communities with concerns related the water sector.

The NOD is an initiative for the National Environment Science Project (NESP)ⁱ which assists decision makers and the wider community to understand the issues related to the impact of outfall discharges on the marine environment and recreational users.

During our work with NOD, we have been required to navigate and negotiate the complex and sometimes highly sensitive bureaucracies comprising the 6 states and the Northern Territory, each with different reporting and regulatory regimes. These bureaucracies oversee the 45 water treatment authorities responsible for 192 coastal outfalls to compile the nation's best perspective of Australia's marine discharges of waste.

In 2021 as part of Emerging Priorities Project (EPP) research project we published a pilot assessment of inland rivers outfalls 254 in NSWⁱⁱ, a preliminary assessment of industrial outfalls and a paper proposing development of a national standard for reporting of outfall discharge dataⁱⁱⁱ.

COF has also learnt much since it began the NOD^{iv} in 2015. We have developed both informal and formal networks within the water industry and communities that interact with it in relation to outfall issues.

We now work with experts and community leaders and under the Australian Water Network (AWN) banner. The network's contribution was acknowledged by Minister Plibersek in her speech at the OZWATER – May 24 conference^v and her subsequent correspondence^{vi} in response to letter calling for action on water reform and ocean pollution.

<https://minister.dcceew.gov.au/plibersek/speeches/speech-ozwater-conference>

<https://www.cleanocean.org/open-letter-to-minister.html>

COF recently collected over 16K^{vii} and 10k^{viii} signatures through two public petitions related PFAS and ocean pollution and water reform. These surveys show the community's appetite for water reform and water recycling if there are environmental benefits to coastal and inland waters.

The need for greater federal government involvement in water reform, and the water industry's current contribution to pollutants in our aquatic environments was further illustrated in early July 2024 at the National General Assembly of the Australian Local Government Association. The motion, which we assisted in formulating, called on the Australian Government to "strengthen environmental initiatives through investment in wastewater recycling and the adoption of a collaborative approach, both as a commitment to environmental sustainability and to foster trust within communities". The motion was passed unanimously.

What do we know?

It is COF's view that the current regulatory system is no longer fit for purpose.

The existing multi-billion-dollar water sector manages the domestic and industrial waste from every town and city in Australia. It has state sanction to dump both licensed and unlicensed (in the case of PFAS and microplastics) contaminated waste into Australian waterways and oceans from 192 coastal and countless inland outfalls. This dumping is free of charge leaving state and territory governments little financial incentive to move rapidly on tightening regulations around this practice.

This situation is further exacerbated by the scandalous situation where state-based statutory authorities are saddled with the onerous and unfair requirement to provide a financial return to support state budgets. At the same time these institutions and agencies are forced to defend continuing with sub-optimal wastewater treatment and disposal in part due to stringent price controls to protect end-users from cost-of-living price hikes.

It is patently unrealistic and unfair to expect states and territories to manage the increasingly complex relationship between our nation's water supply, wastewater recycling, population growth, increasing urbanisation, climate change, international trade as well as growing concerns around the pressure and risks related to pollutants entering our waterways and marine environments without significant regulatory reform and assistance at a national level.

Recommendations

Clean Ocean Foundation urges the Senate to insist that the new Federal Environment Protection Authority (EPA) must be empowered to expedite work with state and territories to standardise the licensing, monitoring and reporting requirements of water authorities related to all environmental discharges.

This is an essential first step and is clearly illustrated by the contrast between the current practices in Australia and newly legislated targets in the EU for removal of nutrients and micropollutants (including PFAS and microplastics) from wastewater discharges (Zero Pollution Action Plan^{ixx}).

In the European Union (EU), a federation of 27 independent nations, the level of concern related to these contaminants is so great that they have committed to high levels of treatment. This level of treatment would remove all nutrient and micropollutants from wastewater discharges.

Meanwhile in Australia, one single nation, individual states and territories implement piecemeal criteria for discharge of waste into the ocean and waterways. These criteria vary significantly in large part to suit each state's political priorities.

In practice, for example, this has resulted in none of the state-based EPAs ever being issued license conditions restricting the discharge of PFAS or plastic microfibres from any Australian outfall.

The current approach fails to manage the risk to our health from these pollutants of significant and growing concern. Without reform, the current approach risks the federal government not meeting its commitments to a plastic free pacific, international treaties (for example Minamata Protocol), circular economy goals and international agricultural trade markets.

COF also believes an independent Federal EPA working with states and territories could also provide key assistance in an evidenced based approach to water reform and water recycling. Done well, a national approach to water recycling that also embraces purified recycle water can yield significant benefits both economically and environmentally, including significant reductions in aquatic pollution of Australia's waterways and coastlines.

We strongly urge the Senate to commit Australia to a path for Clean Ocean Clean Water by adopting the following three-point plan in relation to the new Federal EPA.

- 1. That the EPA introduce national standards on wastewater discharge.**
- 2. That interim pollution load caps be set for all Australian outfalls.**
- 3. That national "Zero Pollution" targets, in line with those in the EU, be adopted**

John Gemmill

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CEO Clean Ocean Foundation

Notes

Table 1 Outfalls Australia - NOD 2022

	Regulator	WTA	Outfalls
VIC	EPA Vic	9	19
NSW	EPA NSW	13	35
QLD	Ministry	18	55
WA	EPA WA	1	12
SA	SA EPA	1	10
TAS	EPA Tas	2	47
NT	Ministry	1	14
		45	192

Table 2 Wastewater treatment quality COF Guidelines

Australian Outfalls	Number	Pollutant Load
Primary	9	Extreme
Secondary	108	Very High
Tertiary	61	Moderate
Advanced Tertiary	2	Reduced
Quaternary	0	Zero Pollution
Misc.	12	
	192	

Table 3 -Australia's 192 Coastal Outfalls – NOD 2020/21

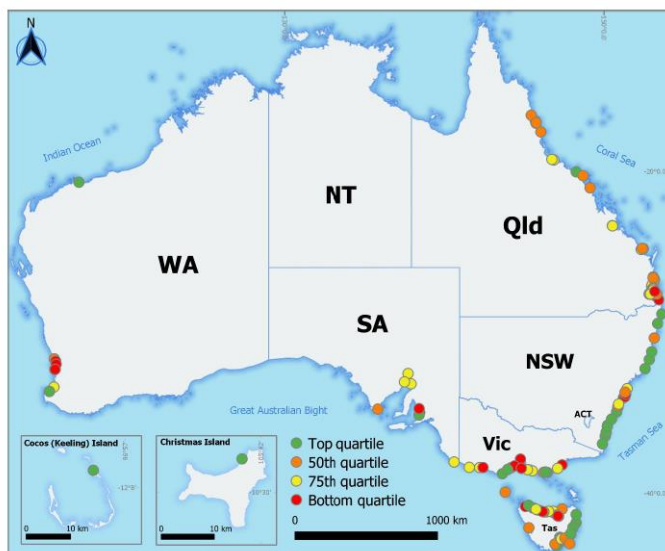


Table 4 Pollutant Loads per Capita - Top 10 NOD Rankings 20/21

Table 4. Total nutrient load per capita discharged by ten highest nutrient load producers from the bottom 25% quartile (2020/2021 FY).

Rank	Outfall	Nitrogen load (kg)	Phosphorus load (kg)	Total nutrient load (kg)	Population (ABS 2021)	Nutrient load/capita (g/C)
140	VIC - Warmambool	165,107	106,276	271,383	35,533	7,637
141	WA - Beenyup	236,486	99,806	336,292	660,000	510
142	SA - Bolivar WWTP	323,925	68,622	392,547	470,000	835
143	QLD - Kawana	333,526	63,456	396,982	157,169	2,526
144	QLD - Luggage Point	296,781	106,505	403,285	807,000	500
145	WA - Woodman Point	422,798	69,233	492,031	760,000	647
146	NSW - North Head	483,215	59,591	542,807	1,358,440	400
147	NSW - Malabar	616,096	73,491	689,587	1,700,000	406
148	VIC - Boags Rock (ETP)	2,401,876	840,535	3,242,411	1,900,000	1,707
149	VIC - Werribee (WTP)	3,372,907	1,296,331	4,669,238	2,400,000	1,946

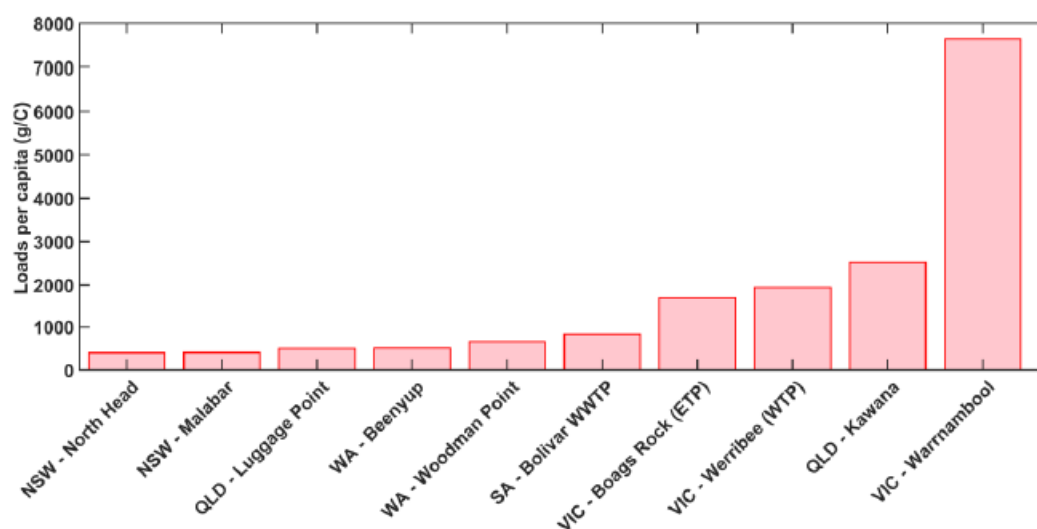


Figure 2. Total nutrient load per capita discharged by ten highest nutrient load producers from the bottom 25% quartile sorted from low (left) to high (right).

Zero Pollution Targets EU Summary ^{xi}

Tertiary (removal of nitrogen and phosphorus by 2039)

Quaternary (a broad spectrum of micropollutants) by 2044

For Waste Water Treatments for population > 150 000 or > 10,000 if area at risk.

Table 5 Australian Local Government Association July 2024 - Motion Passed

Motion number 144.1 Noosa Council QLD

This National General Assembly calls on the Australian Government to strengthen environmental initiatives through investment in wastewater recycling and the adoption of a collaborative approach, both as a commitment to environmental sustainability and to foster trust within communities.

NATIONAL OBJECTIVE

Australia's environmental challenges necessitate a national dialogue on wastewater recycling. This is a matter of paramount national importance as it directly impacts the well-being of our citizens, water security, the preservation of our environment, and the overall sustainability of our nation. The need for a comprehensive and collaborative strategy underscores the urgency of this debate, emphasizing the importance of forging a united front to address this critical issue.

KEY ARGUMENTS

1. **Reforms for Safe Implementation:** Implementing comprehensive water regulation reforms ensures the safe deployment of wastewater recycling projects. Transparent reforms and more transparent and informed, evidence-based participation build trust by assuring the public of the safety and reliability of recycled water.
2. **Technological Innovation:** Investing in research for wastewater treatment technologies, especially for 'forever chemicals' like PFAS and other emerging contaminants, demonstrates a commitment to environmental safety and builds trust in the government's ability to address emerging challenges.
3. **PFAS Source Mapping:** Collaborating with environmental agencies to map PFAS contamination sources is essential. Transparent reporting and active management build trust by demonstrating a commitment to protecting wildlife and ecosystems.
4. **Water Recycling Targets:** Advocating for wastewater recycling targets for all outfalls. Clear targets build trust by ensuring a consistent commitment to sustainable water management practices.

Conclusion: Investing in wastewater recycling will strengthen the Australian Government's commitment to environmental sustainability and build trust within communities. Trust is the bedrock upon which sustainable policies stand, and by actively involving citizens and local governments, the government can foster a united front towards a more sustainable and resilient future.

Clean Ocean Foundation History

2000 Clean Ocean Foundation is established as an environmental charity.

2006 After a long campaign, welcomes Victorian government's decision to upgrade Eastern Treatment Plant to discharge Class A+ advanced.

2015 - 2024 (Ongoing) Produces the National Outfall Database annually under auspices of the Federal National Environment Science Program (Marine and Coastal Hub)

2020 – Independently releases National Outfall Upgrade Strategy (NOUS 2030)

^{xii}advocating for a national approach to waste water treatment and water recycling.

2021 – Successfully intervened (VCAT) related to proposed upgrade of Warrnambool Waste Water Treatment approvals process^{xiii}

2022 – Releases national Clean Ocean Clean Water Policy^{xiv}.

2022 – Submission Federal Inquiry into plastic pollution in Australia's oceans and waterways. ^{xv}

2022-3 – Petition Modernise Victoria's Water Policy to allow use of recycled purified water (over 16, 000 signatures)^{xvi}

2023-4 Petition (almost 10,000 signatures) calling for a Federal Parliamentary Inquiry into pollution including micropollutants and microplastics from Australia's 192 outfalls^{xvii}

2024 – Our open letter to Minister Plibersek related to the use of recycled water and its impact on ocean pollution. Due for release Apr 2024^{xviii}

References

- ⁱ <https://www.nespmarinecoastal.edu.au/project/2-4/>
- ⁱⁱ https://nod.org.au/volumes/documents/Rohmana-et-al-C4_M20_Preliminary-River-Outfall-Report_published.pdf
- ⁱⁱⁱ https://nod.org.au/volumes/documents/Gemmill-et-al-C4-Towards-a-national-standard-and-guidelines-for-reporting-wwtp-outfall-data_final.pdf
- ^{iv} <https://nod.org.au/>
- ^v <https://minister.dcceew.gov.au/plibersek/speeches/speech-ozwater-conference>
- ^{vi} <https://www.cleanocean.org/open-letter-to-minister.html>
- ^{vii} <https://www.change.org/cleanoceancleanwater>
- ^{viii} <https://www.change.org/PFASOurShame>
- ^{ix} <https://www.europarl.europa.eu/news/en/press-room/20240408IPR20307/new-eu-rules-to-improve-urban-wastewater-treatment-and-reuse>
- ^x https://environment.ec.europa.eu/strategy/zero-pollution-action-plan_en
- ^{xi} <https://data.consilium.europa.eu/doc/document/ST-7108-2024-INIT/en/pdf>
- ^{xii} <https://www.cleanocean.org/nous-2030.html>
- ^{xiii} <https://www.standard.net.au/story/7478574/fight-to-overturn-epa-sewage-ruling/>
- ^{xiv} <https://www.cleanocean.org/cocw-national.html>
- ^{xv} <https://www.aph.gov.au/DocumentStore.ashx?id=268ea020-2d1a-4579-ab11-3fbdbeca0536&subId=730006>
- ^{xvi} <https://chng.it/Qtb7NggryZ>
- ^{xvii} <https://chng.it/Drp4Kq6Lpk>
- ^{xviii} <https://www.cleanocean.org/open-letter-to-minister.html>