



Submission on the NSW Marine Estate Threat and Risk Assessment Draft Report

prepared by

EDO NSW
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About EDO NSW

EDO NSW is a community legal centre specialising in public interest environmental law. We help people who want to protect the environment through law. Our reputation is built on:

Successful environmental outcomes using the law. With over 25 years' experience in environmental law, EDO NSW has a proven track record in achieving positive environmental outcomes for the community.

Broad environmental expertise. EDO NSW is the acknowledged expert when it comes to the law and how it applies to the environment. We help the community to solve environmental issues by providing legal and scientific advice, community legal education and proposals for better laws.

Independent and accessible services. As a non-government and not-for-profit legal centre, our services are provided without fear or favour. Anyone can contact us to get free initial legal advice about an environmental problem, with many of our services targeted at rural and regional communities.

EDO NSW is part of a national network of centres that help to protect the environment through law in their [states](#).

Submitted to:

Submitted online at: <http://www.marine.nsw.gov.au/key-initiatives/threat-and-risk-assessment/threat-and-risk-assessment-tool>

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EDO NSW submission on New South Wales Marine Estate Threat and Risk Assessment Draft Report

EDO NSW welcomes the opportunity to comment on the *New South Wales Marine Estate Threat and Risk Assessment Report: Draft Report (Draft TARA Report)*. We are a community legal centre specialising in public interest environmental law. Our previous law reform submissions relevant to marine management are available on our website.¹

Overall we welcome the Draft TARA Report and associated documents, and acknowledge the extensive work that has been done to assess and prioritise the threats and risks impacting on the marine estate. However we submit that there are a number of flaws in the overall consideration of this information that leads to a prioritisation process that does not adequately highlight long-term and ongoing risks to the marine estate, and is unlikely to ensure appropriate management responses in the next stage of the decision making process. Specifically, we address:

- 1. Objectives for the Environmental TARA**
- 2. Marine Estate Expert Knowledge Panel (MEEKP) Evaluation Process**
- 3. TARA Matrices**
- 4. Method for Calculating Prioritisation Scores**

We appreciate the opportunity to participate in the Draft TARA Report stakeholder engagement workshop, and a previous workshop on the Hawkesbury Shelf Marine Bioregion TARA. This submission involves input from our scientific work that underpins our law reform and policy recommendations.

1. Objectives for the Environmental TARA

According to the Draft TARA Report (Appendix A), the goals and objectives of the Environmental TARA have been designed to be consistent with:

- *the objects and requirements for threat and risk assessment (TARA) in the Marine Estate Management Act 2014 (MEM Act)*
- *the objects of other relevant legislation relating to clean waters, biodiversity and coastal processes as outlined in Attachment 1*
- *the vision for the marine estate outlined in MEMA's Principles Paper*
- *the purpose and objectives of the Hawkesbury Shelf Marine Bioregion project*

Environmental Objective 3 is: *To conserve listed threatened and protected estuarine and marine species*. The objective as it is currently written fails to make an explicit commitment to ensuring the **recovery** of threatened and protected estuarine and marine species, as opposed to maintaining the status quo. When viewed through a lens of seeking to ensure the recovery, rather than simply maintenance of threatened species, it is likely that the risk ranking of a number of stressors will need to change.

¹ See: http://www.edonsw.org.au/coastal_marine_fisheries_management_policy

Similarly, Environmental Objective 2 is: *To conserve estuarine and marine habitats and biotic assemblages, and ensure their ecologically sustainable use.* Conserving current estuarine and marine habitats and biotic assemblages fails to recognise past exploitation and environmental degradation. As discussed below, legacy issues must be better incorporated into the TARA process.

2. Marine Estate Expert Knowledge Panel (MEEKP) Evaluation Process

As noted in our submission to the Hawkesbury Shelf Marine Bioregion TARA,² the TARA approach fails to adequately incorporate key issues such as legacy issues and cumulative impacts. These issues, combined with ‘dealing with uncertainty/absence of information’ and ‘future risk’, have been recognised in the Draft TARA Report as a result of consultation with the Marine Estate Expert Knowledge Panel (MEEKP) Evaluation Process. While we welcome the recognition of these issues, we remain concerned about their inadequate incorporation into the TARA process.

The Draft TARA Report is clear that future management decisions will be based on the TARA priorities. While the Draft TARA Report recognises there will need to be additional consideration of the matters identified by the MEEKP Evaluation Process, it is highly likely that these matters will be inadequately considered if they are not better incorporated into the TARA. We submit that the failure to adequately incorporate these issues means the prioritisation process significantly understates the threats and risks arising from certain activities, particularly those leading to reductions in the abundance of species and trophic levels. This in turn is likely to lead to a failure to prioritise future management measures to reduce these threats and risks – most obviously the failure to prioritise the establishment of a comprehensive, adequate and representative (CAR) system of marine parks, including significant no-take or sanctuary zones.

3. TARA Matrices

Environmental Assets

The Draft TARA Report acknowledges that:

some variations of activities, such as different commercial and recreational fishing techniques, are assessed separately to ensure the detail of activity is retained and useful for future management assessment. However, if all fishing effort was combined this would increase the priority of the overall activity. This has implications for cumulative impacts on shared resources, such as fish stocks.

Despite this statement, cumulative effect is not included in the prioritisation process. As discussed above, this failure to assess the true impact of the activity of fishing is likely to lead to undervaluing future management measures to reduce the threats and risks that arise from this activity.

² Available at: http://www.edonsw.org.au/coastal_marine_fisheries_management_policy

Social and Economic Benefits

We also note that despite 'climate change' and the 'reductions in abundances of species and trophic levels' being the only two stressors identified as having high risks to social and economic benefits, 'reductions in abundances of species and trophic levels' is only ranked at number 7 in the priority threats for the Statewide TARA for Social and Economic Benefits. This is clearly an inappropriate reflection of the risk posed, particularly given the high level of uncertainty associated with scientific knowledge for many other social and economic issues.

General Observations

It is clear from the detail of the TARA matrices that Environmental Assets face significantly more 'high' risks than Social and Economic Benefits. Despite this, the Priority Threats for Environmental Assets and Social and Economic Benefits appear to be given equal consideration. This creates a risk that future management priorities will not be adequately focussed on high risks to marine estate.

More broadly we note that while the Draft TARA Report purports to be focussed on threats and risks over the next 20 years, there seems to be a significant failure to recognise the proposed increase of urban and regional development outside of the Central region. A number of measures, such as stormwater and foreshore development are ranked as low outside the Central region, despite the significant risk that these threats will create increase in the North and South region over the next 20 years. It does not appear that the risk from these threats was adequately considered for future timeframes.

Specific Rankings

We have not conducted a comprehensive review of the rankings assigned to each stressor. However, we do provide comment on a number of rankings that indicate the more general concerns we have raised and where we believe that an inappropriate ranking may lead to future inappropriate management decisions.

- *Estuaries – Mangroves – Recreation and tourism – Boating and boating infrastructure*: the low ranking here illustrates the failure to acknowledge legacy issues, in this case where extensive mangroves have been cleared, both legally and illegally, to allow recreational access to, or views of, waterways.
- *Estuaries and Coastal and marine waters – Fish assemblages – Climate change*: we recognise the advantages of using fish assemblages in the TARA process to “allow a more effective assessment of risk from the stressors relating to the harvest and bycatch of fish species and trophic levels independent of the dominant habitat they are associated with”. However limiting the impacts of fish assemblages to harvest and bycatch mean significant impacts that do not involve direct take, such as those arising from climate change, are not adequately recognised. The consideration of fish assemblages should be expanded to include all stressors that impact on fish population fitness.
- *Estuaries and Coastal and Marine waters – Species and communities protected under FMA – Recreational fishing – Shore based line and trap fishing and Boat*

based line and trap fishing: the current low rankings under-estimate the impact on black rod cod generally and shore birds in the south. In Coastal and Marine waters, the extensive evidence of hooking and associated mortality, suggests the current ranking under-estimates impacts on grey nurse sharks. Further, marine charter fishing is known to include take of overfished species and requires a higher ranking.

- *Estuaries – Climate change (20 years)*: Climate change research consistently shows that real-world impacts are tracking along predicted worst case scenarios. Given this, a precautionary approach suggests that most climate change rankings, particularly those for altered ocean currents and nutrient inputs and altered storms etc, should be higher than minimal in the 20 year timeframe.
- *Coastal and Marine Waters – Beaches and Rocky Shores – Recreational fishing – Hand gathering*: the low ranking in the Central region is insufficient given the recognition in recent years of the need to establish intertidal protected areas and closures to protect species such as cunjevoi from overharvesting. These risks compound the threat arising from climate change for these areas and this should be better accounted for when considering the impact of climate change on Social and Economic Benefits.
- *Coastal and Marine Waters – Rocky Shores – Climate change (50 years)*: we note that a number of the rankings are incorrectly represented in the risk matrix. The rankings provided in Appendix C are more appropriate.
- *Coastal and Marine Waters – Fish assemblages - Ocean Trawl*: Given the significant recommendations from the 2007 Ocean Trawl Fisheries Management Strategy that have not yet been implemented, a low ranking for the Central is insufficient.
- *Coastal and Marine Waters – Species and communities protected under FMA and Species protected under TSCA – Shark meshing of swimming beaches*: rankings in the North should be increased to high given the recent introduction of shark meshing in this area.³
- *Coastal and Marine Waters – Mining and extractive industries*: there are currently a number of proposals for mining and extractive industries in NSW waters but the rankings given are N/A. If the TARA is to consider impacts for the next 20 years, the future risk of these proposals should be assessed.
- *Enjoyment – Consumptive use (extracting) – inadequate, inefficient regulation, over-regulation (agencies)*: as noted in our submission to the Hawkesbury Shelf Marine Bioregion TARA, EDO NSW supports ongoing efforts to increase efficiency and effectiveness of regulation where environmental protection is maintained and enhanced. However, we maintain our view that the suggestion that environmental regulation is a threat to the marine estate is highly inappropriate. Regulation underpins all management actions and is fundamental to effective management of the marine estate.
- *Litter, solid waste, marine debris and micro plastics*: this threat is recognised as a threat to Social and Economic Benefits, but is not specifically recognised as a threat to Environmental Assets. This is despite there being mounting evidence of

³ See also EDOs of Australia submission to the Inquiry into shark mitigation and deterrent measures, March 2017, available at: http://www.edonsw.org.au/coastal_marine_fisheries_management_policy.

the significant impacts on the marine environment and marine biodiversity – for example regarding marine plastics pollution.⁴

4. Method for Calculating Prioritisation Scores

While we support a scoring process that emphasises the need to respond to high and moderate risks, the fact that a number of key threats are currently outside the risk matrix process means the Draft TARA Report creates a list of priorities that do not appropriately reflect real world threats.

In addition, while we recognise that management responses will need to be different for different fishing activities, separating these activities within the risk matrix leads to under-estimating the total impact of fishing on the marine estate and downplays the importance of responding to this threat.

We also note that there are significantly more high and moderate risk threats to the Environmental Assets compared to Social and Economic Benefits yet the two areas appear to be given equal consideration in finalising the Statewide priority list.

Consequently, the Draft TARA outputs may have limited usefulness in prioritising threats for subsequent steps of the MEMA decision making process. A revised prioritisation process that fully accounts for legacy issues, cumulative impacts, uncertainty/ absence of information and future risk should be developed.

Conclusion

In conclusion, we welcome the NSW Government's efforts to develop a transparent, scientifically based assessment of the threats and risks impacting on the NSW marine estate. The Draft TARA Report may assist in identifying threats and prioritising management actions to address those individual threats. However, the decision making framework within the prioritisation process of this assessment creates a risk that future management decisions will not adequately reflect scientifically established best practice marine management principles. That is, it may prioritise certain individual management actions for specific threats rather than embracing the primary action needed to address a range of threats, including establishing a CAR network of marine parks, with significant areas of no-take or sanctuary zones.

⁴ For further evidence regarding the impacts of marine plastics pollution see: EDOs of Australia submission on the threat of marine plastic pollution in Australia and Australian waters, 9 October 2015, and the inquiry report available at: http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Communications/Marine_plastics.