



Submission on the Hawkesbury Shelf Marine Bioregion Assessment – Suggested Management Initiatives

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:

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EDO NSW submission on the Hawkesbury Shelf Marine Bioregion Assessment

EDO NSW welcomes the opportunity to comment on the *Hawkesbury Shelf Marine Bioregion Assessment Suggested Management Initiatives Discussion Paper (Discussion Paper)*. The EDO NSW is a community legal centre specialising in public interest environmental law. We support strong and coordinated management of marine bioregions to ensure ecologically sustainable use of marine resources and protection of our unique marine species and ecosystems. We support the intent of identifying risks and threats, and prioritising coordinated management and regulatory responses. Our previous law reform submissions relevant to marine management in NSW are available on our website.¹

This submission addresses the Threat and Risk Assessment (**TARA**) process, the relationship with current legislative processes, and each of the eight suggested management initiatives. Specifically, we address:

1. Key priority – Establishing a Marine Park

2. Threat and Risk Assessment process

Weighting of information

Effect of regulation

Climate change

Communication of threat and risk

Consideration of legacy issues

Cumulative impact

3. Current legislative processes

4. Suggested management initiatives

Initiative 1 - Improving water quality and reducing marine litter

Initiative 2 - On-ground works for healthy coastal habitats and wildlife

Initiative 3 - Marine research to address shipping and fishing knowledge gaps

Initiative 4 - Spatial management for biodiversity conservation and use sharing

Initiative 5 - Improving boating infrastructure

Initiative 6 - Reducing user conflicts in Pittwater

Initiative 7 - Improving accessibility

Initiative 8 - Land use planning for coasts and waterways

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

1. Key priority – Establishing a Marine Park

The highest priority management initiative for Hawkesbury Shelf Marine Bioregion should be the implementation of a large-scale multi-use marine park that provides comprehensive, adequate and representative protection of the marine estate. Such a marine park would address a large number of high and moderate risks and threats, and is the suggested management initiative that is most consistent with the object of the *Marine Estate Management Act 2014*:

(a) to provide for the management of the marine estate of New South Wales consistent with the principles of ecologically sustainable development in a manner that:

(i) promotes a biologically diverse, healthy and productive marine estate, and

(ii) facilitates:

- economic opportunities for the people of New South Wales, including opportunities for regional communities, and*
- the cultural, social and recreational use of the marine estate, and*
- the maintenance of ecosystem integrity, and*
- the use of the marine estate for scientific research and education,*

(b) to promote the co-ordination of the exercise, by public authorities, of functions in relation to the marine estate,

(c) to provide for the declaration and management of a comprehensive system of marine parks and aquatic reserves.

Of the eight suggested management initiatives in the Discussion paper, this is by far the most important. It is discussed further below in relation to application of the TARA process and regarding *Initiative 4: Spatial management for biodiversity conservation and use sharing*.

2. Threat and Risk Assessment process

As noted we support robust and comprehensive risk assessment and the identification of threats across the bioregion.

We note that this is the first time the TARA process has been applied by the Marine Estate Management Authority (**MEMA**). We acknowledge the substantial effort that has gone into developing the TARA. In light of the subjective nature of the final threat and risk allocation, this submission does not provide comment on the detail of the TARA except in relation to a number of features that we believe should be strengthened in any future assessments. We note that the *Hawkesbury Shelf Marine Bioregion Threat and Risk Assessment Report (TARA Report)* also identifies a number of issues for future consideration (p. 57).

Weighting of information

EDO NSW's key concern with the outcomes of the TARA is the way they have been translated into management initiatives. The TARA Report states that "(i)t should be recognised that the TARA and its outputs as outlined in this report are a tool for the

prioritisation of risks for treatment that will be further assessed” (p. iv). Despite this acknowledgement, it is clear that some suggested management initiatives, such as appropriate spatial management, will address significantly more high and moderate risk threats than other activities, yet these activities have not been prioritised. Specifically, spatial marine planning in the form of a network of sanctuary areas and a comprehensive, adequate and representative marine park will address a significant number of stressors creating high or moderate risks and assist in the management of a large number of priority threats. However, this suggested management initiative is given no greater recognition than ‘reducing user conflicts in Pittwater’ which will provide only a localised social benefit. As the TARA process is designed to be the key information gathering and prioritisation tool for future marine estate management, it is important that the recommendations arising from the process adequately reflect the scale and consequence of the threats and risks identified.

Similarly, a key part of the process should assess whether suggested management initiatives are likely to address the high and moderate threats and risks. The level of confidence in, and scientific robustness of, initiatives should be an important factor in prioritising actions. In the absence of full scientific data, the precautionary principle should be applied.²

Effect of regulation

EDO NSW supports ongoing efforts to increase efficiency and effectiveness of regulation to ensure environmental protection is maintained and enhanced. Regulatory tools are fundamental to protect the marine environment against the 15 threats identified (p13). We therefore do not agree with categorisation of regulation as a priority threat (p14).

The Discussion Paper as written suggests that one of the highest threats to accessing the social and economic benefits of the bioregion is the effect of regulation. This is nonsensical, as social and economic activities depend on the environmental health of the bioregion that is achieved through application of regulatory environmental protections.

Despite more detailed discussion of this issue in the TARA Report, 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. We note that the Discussion Paper deals with this issue in the section for future consideration and reiterate that the approach used for this TARA is highly inappropriate.

Climate change

EDO NSW supports the recognition of long term threats and the need to respond now to future threats. However evidence suggests that we are already seeing the impacts of climate change, such as rising sea levels and increased sightings of species historically found in warmer marine waters.

² This is consistent with the objects of the *Marine Estate Management Act 2014* that refer to the principles of ecologically sustainable development.

Climate change impacts pose a threat to the marine estate now, for example saltmarsh is highly susceptible to small changes in levels of inundation. The TARA should recognise and respond to the current and ongoing risks posed from climate change and stronger action on climate change should be a whole of government priority.

Communication of threat and risk

A number of the current categories group very dissimilar activities together to generate a single risk profile. While it is possible within the TARA Report to see which of the activities generate the high threats and risk, the key documents likely to be reviewed by the broader community give a misleading impression of the threats and risks to be addressed. For example, recreational activities, which group passive and active recreational activities into a single category, fails to highlight the key environmental, social and economic risks within this category. Further, the suggestion that swimming is responsible for the threats and risks caused by beach meshing fails to distinguish between the recreational activity and a government management activity. Future assessments should separate components of activities with significantly different risk profiles and/or at each stage of reporting demonstrate the different levels of threat and risk associated with different components of the activity.

Consideration of legacy issues

The TARA Report notes the failure of the process to identify how legacy issues impact on current and future threats and risks and the need to prioritise management responses to recognise legacy issues. For example protecting the remaining areas of saltmarsh should have a greater importance given the large historical loss. Better consideration of such legacy issues will be important for future TARAs.

Cumulative impact

The Hawkesbury Shelf Environmental Background Report (p. 104) clearly noted that:

While an assessment of threats can provide an effective tool for prioritisation of further estimation of risk and determination of management responses, it is limited by its simplification of complex ecosystems and ecological processes, the quality of supporting data, scientific uncertainty, and its focus on individual threats in isolation. In particular, in many cases impacts from two or more stressors on marine and coastal systems can additive, synergistic or antagonistic (Crain et al. 2008), hence understanding their interactions is important. In general, accurate prediction of the impacts of multiple stressors becomes more difficult as the number of stressors increases.

There are clear difficulties associated with predicting the outcomes of multiple stressors impacting complex ecosystems, such as those found within the NSW marine estate, including within the Hawkesbury bioregion. By extension, management of individual threats by specific sectors is often inefficient as it generally does not account for interactions among activities or cumulative impacts over space and time. These issues will be more fully considered in

the two forthcoming reports covering Threat and Risk Assessment and Management Options.

Other than including the term in the glossary, the TARA Report appears to give little, if any, consideration to cumulative impacts. This is a significant oversight in the current TARA and needs to be addressed in any future assessments.

3. Current legislative processes

The Discussion Paper notes that the suggested management initiatives take into account existing management and current legislative reforms. EDO NSW is concerned about this premise in light of recent information on a number of these reforms. Two examples regarding current biodiversity and coastal legislation reform processes are discussed below.

The Discussion Paper indicates that reforms proposed to biodiversity and vegetation laws in NSW will address the threat of clearing in riparian areas. While the reform package does propose some investment in private land management, the actual proposed legislation removes many protections and attempts to deregulate vegetation clearing. There will be no requirement to maintain or improve biodiversity, water quality, soil and salinity. Significant clearing will be allowable under self-assessed codes, and everything will be amenable to offsetting. This could include sensitive coastal or riparian vegetation as the proposed offsetting rules do not require 'like for like' offsetting, and there is significant discretion for consent authorities under the proposed system. Details about clearing of urban vegetation in coastal catchments will be dealt with by a SEPP that has not been exhibited. Furthermore, there will be reduced public transparency, and unclear responsibility for who will actually do any compliance and enforcement. In summary, the biodiversity reforms actually pose a threat, rather than address a threat.³

In relation to the proposed coastal reforms, EDO NSW has submitted that the Coastal Management Bill and reform package should be amended in a way that supports 7 key actions as follows:

1. A catchment-based approach to coastal management, supported by appropriate mapping
2. An emphasis on strategic planning and proper assessment of cumulative impacts
3. The creation of 'red flag areas' to protect sensitive coastal environments
4. The acquisition of sensitive coastal areas by the NSW Government
5. Development controls that are in all instances consistent with ESD
6. A new approach to managing sea level rise in NSW
7. Appropriate resourcing to facilitate compliance and enforcement.⁴

While a Bill has now been introduced to NSW parliament, crucial mapping of 4 proposed coastal zones is not yet publically available, so it is difficult to estimate the impacts of development in the coastal use zone and whether environmental assets

³ For further EDO NSW analysis of the proposed NSW Biodiversity reforms, visit: http://www.edonsw.org.au/biodiversity_legislation_review.

⁴ See: EDO NSW *Submission responding to the NSW Coastal Management Reforms*, February 2016, available at: http://www.edonsw.org.au/coastal_marine_fisheries_management_policy.

(such as wetlands) will be adequately buffered and protected under the new system. The outcomes of the reforms could have significant impacts on the marine estate if an integrated, strategic and catchment-based approach is not achieved.⁵

4. Suggested management initiatives

The Discussion Paper sets out eight suggested management initiatives. As an overarching observation, EDO NSW notes that the suggested management initiatives are a combination of new actions and, in many cases, existing actions. While it is beneficial to coordinate actions designed to benefit the marine estate, for many of the actions listed, coordination is already undertaken by other organisations such as the Greater Sydney Local Land Services or bodies such as the Sydney Coastal Councils Group. It should be made clear what new actions are being proposed, what new role MEMA will play in coordination of new and existing actions, and what actions are simply listed to provide a more holistic picture of marine estate management.

Initiative 1 - Improving water quality and reducing marine litter

EDO NSW supports initiatives to reduce litter, marine debris and water pollution from catchment runoff. We have recently conducted analysis of options to address marine plastics pollution in particular.⁶ Our recommendations included: additional regulatory measures to reduce key *sources* of marine plastic pollution, based on best available evidence (e.g. further implementation of container deposit schemes and extending bans on single-use plastic bags); better resourcing and implementation for pollution offences and infrastructure (internalising pollution costs through a *polluter pays* approach); and reviewing the adequacy of oversight of fishing gear and garbage disposal at sea.

Previous NSW Government research and analysis has shown that successful behavioural change programs for litter require compliance activities and demonstrated consequences for those failing to comply.⁷ A critical element therefore of any initiatives in the Hawkesbury Shelf marine bioregion is that they must be supported by enforcement activities.

Initiative 2 - On-ground works for healthy coastal habitats and wildlife

Our comments focus on the reference in the Discussion Paper to rehabilitation and an urban mangroves policy as relevant actions under the initiative.

Regarding the focus on rehabilitation, it is inappropriate to suggest that rehabilitation of coastal wetlands should be dependent on development offset sites. Given the significant historical loss of coastal wetlands in the bioregion, there should be a greater focus on preventing any further loss if we are to genuinely achieve healthy coastal habitats and wildlife. The current biodiversity reforms also provide no

⁵ Ibid.

⁶ EDOs of Australia submission on the threat of marine plastic pollution in Australia and Australian waters, 9 October 2015. Available at: http://www.edonsw.org.au/coastal_marine_fisheries_management_policy

⁷ NSW EPA litter research is available at: <http://www.epa.nsw.gov.au/litter/research.htm>

guarantee that future development of wetland areas will be offset with restoration or rehabilitation of wetland areas.

Mangroves have well-recognised environmental and economic values, both in terms of ecosystem services and storm surge mitigation.⁸ While most of the suggested management initiatives in the Discussion Paper would have a neutral or beneficial effect on the marine estate, the proposed Urban Mangrove Management Policy would lead to significant negative environmental consequences. The proposed action is in stark contrast to the stated aim of initiative 2 of contributing to healthy coastal habitats and wildlife. This proposed policy is the marine equivalent of the 10/50 Bushfire clearing Code that needed to be repealed due to the environmental consequences of allowing private landholders clearing to increase views and property values.⁹ Instead, this initiative should focus on strengthened compliance and detecting illegal clearing of mangroves. Other compliance programs provide useful models, such as the highly successful Regional Illegal Dumping (**RID**) Squads.

Initiative 3 - Marine research to address shipping and fishing knowledge gaps

EDO NSW strongly supports further marine research and believes that this initiative should be expanded to cover a broader range of issues. We note that although this is not currently mentioned in Table 6 of the Discussion Paper, this management initiative does have the potential to help address the issue of bycatch. We agree that there is a significant gap in understanding regarding the impacts of recreational fishing. The TARA Report suggests that declining total participation in recreational fishing has led to a reduction in impact of this activity, but historical research suggests that a small number of recreational fishers take a large proportion of the total recreational catch. For example the NSW Fisheries Survey of Recreational Fishing in New South Wales in 2000/01 found that “in NSW, the range of fishing activity varied from 1 day fishing per person per year to 169 days fishing per person per year”.¹⁰ There is therefore no evidence to support the suggestion that total environmental impacts have reduced.

Initiative 4 - Spatial management for biodiversity conservation and use sharing

The action proposed is to “design a system of targeted marine protected areas/spatial closures based on detailed analysis and community engagement” (p19, 30-34).

EDO NSW strongly supports the concurrent implementation of all options presented under this suggested management initiative. A network of targeted marine sanctuaries and spatial closures should be used to address specific local threats and stressors. A large-scale multi-use marine park is vital to achieve comprehensive, adequate and representative (**CAR**) protection for the bioregion. Importantly, spatial

⁸ See: <https://www.wavespartnership.org/en/knowledge-center/managing-coasts-natural-solutions> and <http://www.worldbank.org/en/news/feature/2016/02/10/nature-as-the-first-line-of-defense-against-floods>

⁹ See: EDO NSW Submission on 10/50 Vegetation Clearing Code of Practice Review, 7 November 2014. Available at: http://www.edonsw.org.au/forestry_clearing_vegetation_trees_policy

¹⁰ Full report is available at: http://www.dpi.nsw.gov.au/__data/assets/pdf_file/0020/171209/Survey-of-Recreational-Fishing-in-New-South-Wales.pdf

planning has been identified as the only mechanism available to respond to climate change stressors (p. 42).

The Discussion Paper identifies that the current system of aquatic reserves and the marine components of national parks in the Hawkesbury Shelf marine bioregion is neither comprehensive, adequate nor representative (p. 33). A key recommendation of the 2012 Independent Scientific Audit of Marine Parks in NSW was to maintain the current system of marine parks and to extend protection to the Hawkesbury Shelf Bioregion. A large-scale, multi-use marine park with a CAR system of marine sanctuaries is an effective way to achieve this recommendation.

Extensive NSW Government research has demonstrated strong community support for marine parks and marine sanctuaries and that the establishment of marine parks is consistent with maintaining and enhancing economic and social benefits in the relevant bioregion.¹¹ Moreton Bay Marine Park in Queensland and Port Phillip Heads Marine National Park in Melbourne demonstrate that marine sanctuaries can successfully co-exist with major urban centres and commercial harbours. As noted above, we believe the highest priority management initiative for Hawkesbury Shelf Marine Bioregion should be the implementation of a large-scale multi-use marine park that provides comprehensive, adequate and representative protection of the marine estate.

Initiative 5 - Improving boating infrastructure

EDO NSW supports developing more environmentally friendly boating infrastructure but is concerned that the initiative designed to reduce red tape for low-risk boating infrastructure fails to identify the minimum environmental standards that must be maintained. The fact that Boating and Boating Infrastructure has been identified as a high or moderate risk for seagrass, beach and mudflats, shallow and soft sediments, estuarine waters, rocky shores, subtidal reefs, pelagic assemblages and species and populations protected under the *Fisheries Management Act 1994* and the *Threatened Species Conservation Act 1995* highlights the need for appropriate regulation for these activities.

Initiative 6 - Reducing user conflicts in Pittwater

The inclusion of this initiative raises questions about the prioritisation process used. While reducing user conflicts in Pittwater is a desirable outcome, it is difficult to see how, in a resource constrained environment, this initiative was prioritised.

Initiative 7 - Improving accessibility

As noted in our submission on *Reforming the Aboriginal Culture and Heritage System in NSW*, it has been our clear position and the position of our Aboriginal clients that Aboriginal people must have a greater role and power in the

¹¹ See for example NSW Marine Parks Authority 2009, Solitary Islands Marine Park: zoning plan review report. Available at: <http://www.mpa.nsw.gov.au/pdf/SolitaryIslands-ReviewReport.pdf> and NSW Marine Parks Authority 2008, Jervis Bay Marine Park Community Survey Final Report. Available at: <http://www.mpa.nsw.gov.au/pdf/jbmq-community-survey-2008.pdf>

determination and protection of their own culture and heritage.¹² Feedback from our clients clearly indicates that Aboriginal people feel disempowered when impacts on their culture and heritage are decided by a third party, and when legal assessment processes in practice result in their knowledge being considered secondary to the non-Aboriginal survey and analysis of their heritage. Any work on this initiative should be integrated with the broader reforms on the Aboriginal Culture and Heritage System in NSW.¹³

Initiative 8 - Land use planning for coasts and waterways.

This initiative refers to reviewing foreshore land use planning “to deliver a range of benefits, cut red tape and improve environmental outcomes” (p21). Specifically it proposes including reviewing the Sydney Harbour Regional Environmental Plan and relevant SEPPs.

As noted above, EDO NSW has commented recently on coastal management under SEPPs, planning and coastal legislation.¹⁴ The development of a new SEPP under the coastal reforms will be relevant (depending on exclusions in the Bill), and review of Sydney-specific SEPPs is timely. However, in our experience “cutting red tape” and “improving environmental outcomes” can be competing objectives, and an intent to streamline regulations can lower environmental standards, as noted above in relation to the deregulation of clearing under the NSW biodiversity reforms. Further detail needs to be provided on how the relevant land use planning instruments will be amended.

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Yours sincerely,
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¹² Available at: http://www.edonsw.org.au/aboriginal_communities_policy

¹³ A copy of the full submission is available at:
http://d3n8a8pro7vhmx.cloudfront.net/edonsw/pages/1351/attachments/original/1395987368/120328_Aboriginal_Cultural_Heritage_Reforms_-_NSW_Discussion_Paper_-_EDO_NSW_Submission_.pdf?1395987368

¹⁴ Relevant submissions are available at:
http://www.edonsw.org.au/coastal_marine_fisheries_management_policy